# RAINBOW MUNICIPAL WATER DISTRICT <br> Tuesday, March 28, 2017 <br> Open Session - Time: 1:00 p.m. 

THE PURPOSE OF THE REGULAR BOARD MEETING IS TO DISCUSS THE ATTACHED AGENDA
District Office 3707 Old Highway $395 \quad$ Fallbrook, CA 92028

## Board Agenda Policies

Board of Directors Meeting Schedule Regular Board meetings are normally scheduled for the $4^{\text {th }}$ Tuesday of the month with Open Session discussions starting time certain at 1:00 p.m.

Breaks It is the intent of the Board to take a ten minute break every hour and one-half during the meeting.
Public Input on Specific Agenda Items and those items not on the Agenda, Except Public Hearings Any person of the public desiring to speak shall fill out a "Speaker's Slip", encouraging them to state their name, though not mandatory. Such person shall be allowed to speak during public comment time and has the option of speaking once on any agenda item when it is being discussed. Speaking time shall generally be limited to three minutes, unless a longer period is permitted by the Board President.

Public Items for the Board of Directors' agenda must be submitted in writing and received by the District office no later than 10 business days prior to a regular Board of Directors' Meeting.

Agenda Posting and Materials Agendas for all regular Board of Directors' meetings are posted at least seventy-two hours prior to the meeting on bulletin boards outside the entrance gate and the main entrance door of the District, 3707 Old Highway 395, Fallbrook, California 92028. The agendas and all background material may also be inspected at the District Office.

You may also visit us at www.rainbowmwd.com.
Time Certain Agenda items identified as "time certain" indicate the item will not be heard prior to the time indicated.

Board meetings will be recorded on CD's as a secretarial aid. If you wish to listen to the recordings, they will be available after the draft minutes of the meeting have been prepared. There is no charge associated with copies of CD's. Recordings will be until the minutes of such meeting are approved. Copies of public records are available as a service to the public; a charge of $\$ .10$ per page up to 99 pages will be collected and $\$ .14$ per page for 100 pages or more.

If you have special needs because of a disability which makes it difficult for you to participate in the meeting or you require assistance or auxiliary aids to participate in the meeting, please contact the District Secretary, (760) 728-1178, by at least noon on the Friday preceding the meeting. The District will attempt to make arrangements to accommodate your disability.
(*) $^{*}$ - Asterisk indicates a report is attached.

Notice is hereby given that the Rainbow Municipal Water District Board of Directors will hold Open Session at 1:00 p.m. Tuesday, March 28, 2017, at the District Office located at 3707 Old Highway 395, Fallbrook, CA 92028. At any time during the session, the Board of Directors Meeting may adjourn to Closed Session to consider litigation or to discuss with legal counsel matters within the attorney client privilege.

## AGENDA

## 1. CALL TO ORDER

## 2. PLEDGE OF ALLEGIANCE

3. $\qquad$ Hamilton $\qquad$ Gasca $\qquad$ Mack $\qquad$ Stewart $\qquad$
4. ADDITIONS/DELETIONSIAMENDMENTS TO THE AGENDA (Government Code §54954.2)
5. ORAL/WRITTEN COMMUNICATIONS FROM THE PUBLIC OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD REGARDING ITEMS NOT ON THIS AGENDA (Government Code § 54954.2).
Under Oral Communications, any person wishing to address the Board on matters not on this agenda should indicate their desire to speak by filling out and submitting a "Speaker's Slip" to the Board Secretary before the meeting begins. No action will be taken on any oral communications item since such item does not appear on this Agenda, unless the Board of Directors makes a determination that an emergency exists or that the need to take action on the item arose subsequent to posting of the Agenda (Government Code §54954.2). Speaking time shall generally be limited to three minutes, unless a longer period is permitted by the Board President.
*6. APPROVAL OF MINUTES
A. February 28, 2017 - Regular Board Meeting

## 7. BOARD OF DIRECTORS' COMMENTS/REPORTS

Directors' comments are comments by Directors concerning District business, which may be of interest to the Board. This is placed on the agenda to enable individual Board members to convey information to the Board and to the public. There is to be no discussion or action taken by the Board of Directors unless the item is noticed as part of the meeting agenda.
A. President's Report (Director Brazier)
B. Representative Report (Appointed Representative)

1. SDCWA
A. "MWD's Fiscal Practices and the Impact on Southern California Ratepayers"
2. CSDA
3. LAFCO
4. San Luis Rey Watershed Council
5. Santa Margarita Watershed Council
C. Meeting, Workshop, Committee, Seminar, Etc. Reports by Directors (AB1234)
D. Directors Comments
E. Legal Counsel Comments
6. Attorney Report: Public Records Act (501668-0002)
*8. COMMITTEE REPORTS (Approved Minutes have been attached for reference only.)
A. Budget and Finance Committee
7. February 14,2017 Minutes
(*) - Asterisk indicates a report is attached. $_{\text {. }}$

## 2.

B. Communications Committee

1. February 6, 2017 Minutes
C. Engineering Committee
2. February 1,2017 Minutes

## BOARD ACTION ITEMS

*9. CONSIDER APPROVAL OF A MASTER SALES AGREEMENT WITH ITRON INC FOR THE PROCUREMENT OF ADVANCED METERING INFRASTRUCTURE (AMI) METER READING HARDWARE, SOFTWARE, AND IMPLEMENTATION SERVICES FOR A PILOT PROJECT TO DEMONSTRATE FEASIBILITY OF AN AMI SYSTEM THAT WOULD OPERATE USING SAN DIEGO GAS AND ELECTRIC'S METER NETWORK
(This item will consider approval of a contract with Itron to perform a pilot study on a new meter reading technology that has the potential to greatly simplify the process of bringing Advanced Metering Infrastructure (AMI) to the District. AMI will allow our customers to see their consumption in near real time so that they can monitor their water use. The system will use SDG\&E's wireless network to deliver data to the District rather than the traditional method of installing dozens of 60' tall towers to collect data. The process has significant financial and operational benefits and the District will be among the first nationwide to use this process.)

## 10. CONSIDER ESTABLISHMENT OF BOARD OF DIRECTORS AD-HOC COMMITTEE FOR THE PURPOSE OF FACILITATING LABOR NEGOTIATION PROCESS

(Negotiations are currently underway for revising the Memorandum of Understandings for each of the three employee bargaining units at the District. Staff is recommending that the Board appoint two members to an AdHoc Committee that can provide guidance to management negotiators in between Board meetings to help streamline the process and allow the Ad-Hoc Committee members to update the full Board at each Board meeting during Closed Session.)
*11. DISCUSSION AND POSSIBLE ACTION TO AWARD A PROFESSIONAL SERVICES CONTRACT FOR THE DEVELOPMENT OF A CONDITION ASSESSMENT PROGRAM FOR WATER FACILITIES
(The Condition Assessment program consists of analyzing existing District data, interviewing Operations on condition of system, expanding assessment to conditions of various fittings, valves and laterals, and taking advantage of instances we have pipe exposed to gather data that will all come together to develop a long-term rehabilitation program.)

## *12. DISCUSSION AND POSSIBLE ACTION TO APPROVE PURCHASE OF KNOTTWOOD WAY

 PRESSURE REGULATING STATION(Purchasing a pressure regulation station will loop a waterline between two pressure zones in order to begin fabrication in time for a contractor to install the pressure station and waterline in conjunction with the construction of the Knottwood Way bridge.)
*13. DISCUSSION AND POSSIBLE ACTION TO AWARD A PROFESSIONAL SERVICES CONTRACT TO PROVIDE DESIGN SERVICES FOR THE ROBERT A. WEESE FILTRATION PLANT INTERCONNECT
(The Board will consider awarding a contract for design improvements that include connection piping, meter device, foundation and installation of a prefabricated pump station with electrical to the site. The Weese interconnect will provide water to the District during annual SDCWA shutdowns and the potential to purchase water from the City of Oceanside when there is excess capacity.)
*14. DISCUSSION AND POSSIBLE ACTION TO APPROVE ORDINANCE NO. 17-02 AMENDING AND UPDATING ADMINISTRATIVE CODE TITLE 6 - ENGINEERING, TITLE 8 - WATER AND TITLE 9 - SEWER
(Proposed Administrative Code changes include moving engineering related sections out of Title 8 and Title 9 into Title 6. Other revisions include clarifications on practices of the District, wording consistencies, and removing redundancies.)
$\left(^{*}\right)$ - Asterisk indicates a report is attached.
*15. CONSIDER A PROFESSIONAL SERVICES AGREEMENT WITH INFOSEND, INC., FOR DOCUMENT PRINTING AND MAILING SERVICES OF UTILITY BILLS
(RMWD entered into a contract with DataProse, Inc. in June 2008 to process, print and mail utility invoices to the District's ratepayers. Staff decided to review the contract with DataProse since the agreement has been place for over eight years, and to evaluate other vendors on their services and pricing. This item is to provide the Board with an opportunity to review a proposal submitted by InfoSend, Inc. and make a determination as to the overall best value to the District.)
*16. APPROVAL OF RESOLUTION NO. 17-11 ESTABLISHING CHECK SIGNING AUTHORITY
(The purpose of this Resolution is to establish check signing responsibilities and designate authorized signers of checks due to changes in Board Members.)
*17. DISCUSSION AND POSSIBLE ACTION TO APPROVE RESOLUTION NO. 17-10 AUTHORIZING THE GENERAL MANAGER OR DESIGNEES TO EXECUTE STATE OFFICE OF EMERGENCY SERVICES AND/OR FEDERAL EMERGENCY DOCUMENTS AND RELEVANT PERMIT APPLICATIONS FOR PRESENT AND FUTURE DISASTER RELIEF APPLICATIONS
(In order to apply for reimbursement from the California State Office of Emergency Services, the District's governing body must authorize a designated representative to execute documents related to present and future disaster relief application.)
18. DICUSSION AND POSSIBLE ACTION REGARDING RMWD BOARD MEMBERS AND GENERAL MANAGER ATTENDING THE CSDA SPECIAL DISTRICT LEADERSHIP ACADEMY IN JULY 2017
(This item is to provide the Board with an opportunity to discuss how they wish to work toward achieving the District of Distinction Accreditation.)
*19. CALIFORNIA SPECIAL DISTRICTS ASSOCIATIONS (CSDA) CALL FOR NOMINATIONS SEAT C
(The Elections and Bylaws Committee is looking for Independent Special District Board Members or their General Managers who are interested in leading the direction of the California Special Districts Association for the 2018-2020 term. This item is to give the RMWD Board an opportunity to consider nominations for the CSDA Board Members for Seat C.)

## BOARD INFORMATION ITEMS

## *20. QUARTERLY STRATEGIC PLAN OBJECTIVES AND GOALS UPDATE <br> (The Board of Directors will review the progress that the District is making on these Objectives on a regular basis to ensure that the District remains on track to achieve these Objectives.)

*21. RECEIVE AND FILE INFORMATION AND FINANCIAL ITEMS FOR FEBRUARY/MARCH 2017
A. General Manager Comments

1. Meetings, Conferences and Seminar Calendar
B. Communications
2. Ratepayer Letters
3. Staff Training Reports
C. Operations Comments
4. Operations Report
D. Engineering Comments
5. Engineering Report
E. Customer Service Comments
6. Customer Service Report
F. Human Resource \& Safety Comments
7. Human Resources Report
G. Finance Manager Comments
8. Interim Financial Statement
(*) $^{*}$ - Asterisk indicates a report is attached.
9. Credit Card Breakdown
10. Directors' Expense
11. Check Register
12. Water Sales Summary
13. RMWD Sewer Equivalent Dwelling Units (EDU's) Status
14. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT REGULAR BOARD MEETING
15. ADJOURNMENT - To Tuesday, April 25, 2017 at 1:00 p.m.

## ATTEST TO POSTING:



(*) $^{( }$- Asterisk indicates a report is attached.

## MINUTES OF THE REGULAR BOARD MEETING OF THE BOARD OF DIRECTORS OF THE RAINBOW MUNICIPAL WATER DISTRICT FEBRUARY 28, 2017

1. CALL TO ORDER - The Regular Meeting of the Board of Directors of the Rainbow Municipal Water District on February 28, 2017 was called to order by President Brazier at 11:03 a.m. in the Board Room of the District, 3707 Old Highway 395, Fallbrook, CA 92028. President Brazier presiding.
2. ROLL CALL

Present: Director Brazier, Director Hamilton, Director Mack, Director Stewart
(Director Stewart arrived at 11:03 a.m.)
Also Present: General Manager Kennedy, Legal Counsel Smith, Executive Assistant Washburn, Administrative Analyst Gray, Associate Engineer Powers, Engineering Manager Kirkpatrick, Finance Manager Martinez, Human Resources Manager Harp, Operations Manager Milner, Superintendent Walker, Superintendent Zuniga, Crew Leader Diaz.

Absent: None
No members of the public were present before Open Session. Eight members of the public were present for Open Session.

## 3. ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)

Mr. Kennedy announced there would be the addition of an emergency item to consider approval of a resolution with a finding of a public health and safety emergency related to the Moose Creek pipeline. He noted the pier got knocked out from underneath the pipeline due to the rains and the pipe itself was dented thereby causing a break in the main pipeline.

It was noted this item would be added as Item \#25A.

## 4. ORAL/WRITTEN COMMUNICATIONS FROM THE PUBLIC OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD REGARDING CLOSED SESSION AGENDA ITEMS (Government Code § 54954.2).

There were no comments.
The meeting adjourned to Closed Session at 11:05 a.m.
(*) $^{*}$ - Asterisk indicates a report is attached.
A. Conference with Labor Negotiators (Government Code §54957.6 and §54957)

Agency Designated Representatives
Tom Kennedy
Karleen Harp
Discussions regarding labor negotiations for:
Rainbow Employee Association
Rainbow Association of Supervisor and Confidential Employees
Rainbow Exempt Employees
B. Conference with Legal Counsel-Anticipated Litigation (Government Code §54956.9(d)(2))

> - One Matter

## The meeting reconvened at 1:02 p.m.

## 6. REPORT ON POTENTIAL ACTION FROM CLOSED SESSION

Legal Counsel reported the Board met in Closed Session conferencing with labor negotiators pursuant to Government Code Sections 54957.6 and 54957 and there was no reportable action. He noted Closed Session with resume Closed Session discussion at the conclusion of the Open Session.

## Discussion returned from Item \#27.

Legal Counsel reported the Board met in Closed Session conferencing with Legal Counsel anticipated litigation pursuant to Government Code Sections 54956.9(d)(2). He noted the Board discussed this matter and there was no reportable action.

Legal Counsel reported the Board resumed Closed Session conference with labor negotiators pursuant to Government Code Section 54957.6 and 54957 and there was no reportable action.

## Discussion returned to Item \#28.

Time Certain: 1:00 p.m.

## 7. PLEDGE OF ALLEGIANCE

## Discussion went to Item \#10.

## 8. REPEAT REPORT ON POTENTIAL ACTION FROM CLOSED SESSION

This item was addressed under Item \#6.
9. REPEAT ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)

President Brazier stated Item \#25A was added to the agenda as an emergency item regarding the Moosa Crest pipeline.
$\left(^{*}\right)$ - Asterisk indicates a report is attached.
10. ORAL/WRITTEN COMMUNICATIONS FROM THE PUBLIC OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD REGARDING ITEMS NOT ON THIS AGENDA (Government Code § 54954.2).

There were no oral or written communications from the public.
11. ANNIVERSARY ACKNOWLEDGEMENT
A. Wayne Nault (10 Years)

Mr. Kennedy recognized Wayne Nault as one of the Crew Leader on the Construction and Maintenance crew. He noted Mr. Nault came to RMWD from SDG\&E and he was now one of the crew members out in the middle of the night when leaks take place making sure everything gets put back together correctly. He presented Mr. Nault with a plaque and check in recognition of his tenure.

## *12. APPROVAL OF MINUTES

A. January 24, 2017 - Regular Board Meeting

Director Stewart pointed out under Item \#5, the word "not" should be removed.

## Motion:

## To approve the minutes as amended.

Action: Approve, Moved by Director Hamilton, Seconded by Director Mack.
Vote: Motion carried by unanimous vote (Summary: Ayes=4).

Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart.

## *13. BOARD OF DIRECTORS' COMMENTS/REPORTS

Directors' comments are comments by Directors concerning District business, which may be of interest to the Board. This is placed on the agenda to enable individual Board members to convey information to the Board and to the public. There is to be no discussion or action taken by the Board of Directors unless the item is noticed as part of the meeting agenda.
A. President's Report (Director Brazier)

No report given.
B. Representative Report (Appointed Representative)

1. SDCWA
A. Summary of Board Meeting January 26, 2017

Mr. Kennedy referenced the handout provided providing a description of the Metropolitan Water District (MWD) lawsuit and how the matter was at the Appellate Level and should it prevail what amount RMWD could receive which was approximately $\$ 7$ Million. He provided a brief background on how the lawsuit came about.

Mr. Kennedy pointed out the projections provided on the back of the handout noting if SDCWA wins the lawsuit with MWD, by fiscal year 2020, there would be a savings of approximately $\$ 2.1$ Million in costs that go straight to MWD every year.
2. CSDA

Mr. Kennedy reported on the February 16, 2017 which was his first meeting as the Chapter President and the speaker was Scott Barnett of the Little Hoover Commission. He explained the Little Hoover Commission was set up at the statewide level to evaluate effectiveness of governance and how Mr. Barnett has unique ideas about special districts in that there are too many, wasteful, and not transparent enough and all special districts should have a "sunset clause" with a public vote to determine which districts should remain in place. He mentioned some of the questions and concerns raised by some of the local special districts at the meeting. Discussion ensued regarding some of the feedback from the meeting attendees.

Mr. Kennedy announced he passed the Special District Administrator Exam and will receive the certification at the next CSDA meeting.
3. LAFCO

Mr. Kennedy noted there was nothing to report from the recent Special District Advisory Committee meeting.

## 4. San Luis Rey Watershed Council

Director Stewart reported he was unable to attend the meeting.
5. Santa Margarita Watershed Council

Director Hayden reported there was a new court appointed Watermaster and that the meetings will be moved to Rancho Water District until further notice. He mentioned another issue discussed was the Federal Reserve Water Rights for the Indian tribes.
C. Meeting, Workshop, Committee, Seminar, Etc. Reports by Directors (AB1234)

Director Mack reported on the recent Council of Water Utilities meeting where there was some new stuff coming out ACWA would like the local agencies to support. Mr. Kennedy explained what some of these items were and why ACWA was seeking support.

## D. Directors Comments

Director Hayden stated he picked up from the California San Diego County Farm Bureau Association Newsletter that the State of California Senate and Assembly combined to introduce 2,495 Bills in time for the January 23, 2017 submission deadline and how there were two Bills of interest. He noted AB1369 would require the Department of Water Researchers to identify the current statewide water storage capacity prepared and implementation plan on or before January 1,2019 to achieve an expansion of statewide water storage capacity and AB1442 would redirect high-speed rail bonds to an unspecified water project.

Director Stewart commented on how his small community of 34 attached single family homes has repaved their streets in April 2016 and how since that time the water system has experienced seven major main line water breaks. He asked if RMWD's operations and maintenance department could see if there are any preventative measures that could be used short of taking up and replacing the entire system to assist in avoiding additional breaks in the future. He talked about the extensive processes that take place involving RMWD staff when these breaks happen which are very costly to RMWD. Mr. Kennedy reported there will be a Condition Assessment Program contract presented to the Board for consideration at the next Board meeting which will address these exact types of matters.
E. Legal Counsel Comments

1. Attorney Report: Brown Act Update (150152-0005)

Legal Counsel summarized his written report provided on the Brown Act Update regarding superficial descriptions on meeting agendas. He mentioned RMWD does very well at providing agenda item information on its agendas.

## *14. COMMITTEE REPORTS (Approved Minutes have been attached for reference only.)

A. Budget and Finance Committee

1. January 10,2017 Minutes

Mr. Stitle reported RMWD may be faced with replacing its accounting system. Mr. Kennedy explained there may be a need to find a software system with more flexibility to meet the needs of the District and how staff will be researching this matter further.
B. Communications Committee

1. January 9,2017 Minutes

Mrs. Gray reported the committee has been working on possibly attending the Avocado Festival, members attended the Fallbrook Chamber of Commerce event, and will continue to work on the possible renaming some of RMWD's facilities as well as the imported water return flow project.
C. Engineering Committee

1. January 4, 2017 Minutes

Mrs. Kirkpatrick noted the committee was working on some Administrative Code changes which will be brought to the Board for consideration in the near future. She noted there was discussion on multiple meters on the same parcel, right-of-way management, and capacity fee updates.

## BOARD ACTION ITEMS

## *15. DISCUSSION AND POSSIBLE SELECTION OF DIVISION THREE DIRECTOR AND APPROVAL OF RESOLUTION NO. 17-05, A RESOLUTION APPOINTING AS DIRECTOR OF DIVISION THREE OF THE RAINBOW MUNICIPAL WATER DISTRICT

President Brazier pointed out should RMWD Board not make an appointment at this meeting, the County Board of Supervisors will appoint someone on the District's behalf.

Cristal Punaro introduced herself to the Board noting she was relatively new to the area and how her background is primarily in finance including working with employee benefits. She stated her primary interest was to serve the community by being involved in the water district. She concluded by noting she has been reading up on RMWD.

James Fergus noted he was a 30-year RMWD ratepayer retired from community development including dealing with raw land through entitlements such as RMWD. He stated he enjoys the water business and has the time to serve on this Board. He mentioned he has experience in the public sector keeping organizations in a risk-free position.

Miguel Gasca talked about his background in civil engineering as well as his career in the aerospace industry for the Air Force and other government agencies mostly on the infrastructure side. He stated he and his wife moved to the area after completing school and how he started up a consulting firm. He commended the Board and District for all the fantastic things that have been done. He mentioned he has read all the minutes back to 2012 and would like to continue his research by reviewing other documents not currently available on line. He said he would be delighted to provide the Board with support if they so choose. He concluded by noting his familiarity with both water and wastewater considerations.

Director Stewart said he would like seat all three candidates as they are all very impressive. He expressed gratitude to each candidate for their interest and encouraged those not selected to become active with the District by serving on any one of the three committees.

Legal Counsel confirmed there was no statutory requirement for the method of selection; therefore, it was completely up to the Board of Directors how they would like to proceed.

Director Stewart said based on the fairly new makeup of the current Board, it may be helpful to have someone with municipal board experience fill this vacancy at this juncture. He reiterated he could not be more thrilled with the quality of the all three interested candidates.

President Brazier encouraged the candidates to not give up as this Board and District is ever evolving. She pointed out the committees make recommendations to the Board; therefore, they would have a voice serving on such in that the Board are very good at listening to comments from attendees as well as the committee memberships.

## Motion:

## Appoint Miguel Gas as the Division 3 representative.

Action: Approve, Moved by Director Stewart, Seconded by Director Hamilton.
Vote: Motion carried by unanimous vote (summary: Ayes = 4).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart.
Mr. Kennedy administered the Oath of Office for Miguel Gasca. Director Gasca was immediately seated on the Board of Directors.
*16. ADOPT RESOLUTION NO. 17-07 FIXING THE TIME AND PLACE OF HEARING AND MEETING ON PROPOSED WATER AVAILABILITY CHARGES FOR IMPROVEMENT

Roxanne Shepherd explained this was an annual levy on each parcel. She noted Resolution No. 17-07 initiates the process with final action scheduled to be taken on May 23, 2017 at the RMWD regular Board meeting.

## Motion:

Adopt Resolution No. 17-01.
Action: Approve, Moved by Director Stewart, Seconded by Director Mack.
Vote: Motion carried by unanimous vote (summary: Ayes $=5$ ).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.

## *17. DISCUSSION AND POSSIBLE ACTION TO CHANGE THE STATUS OF INACTIVE SERVICE ACCOUNTS TO ACTIVE TO BE IN COMPLIANCE WITH PROPOSITION 218

Mr. Kennedy explained after having a situation brought to the District's attention regarding an inactive meter due to the Rice Canyon Fire, staff researched all inactive accounts to determine whether they should be made active. He stated before changing inactive accounts to active, staff would like Board approval prior to making any changes.

Mrs. Martinez mentioned 29 inactive accounts have been identified and of those 23 have service immediately available. She stated should the Board adopt Staff Recommendation Option 1, these 23 accounts will be notified with a sixty-day notice providing those customers with the same options made available last year to other inactive accounts.

She explained the remaining six accounts have paid their capacity fees; however, they are not connected to the lateral and are not receiving any water services. She stated should those customers decide to connect their meters, they would need to go through the proper procedures.

Director Mack suggested staff send a letter to the remaining six customers reminding them the meters have been purchased and find out if they are interested in connecting to the system.

## Motion:

To adopt Staff Recommendation 1 - Authorize and direct the General Manager to move forward in pursuing charging the 23 inactive accounts the monthly fixed fees that have water service "immediately available". Prior to doing so, staff will contact each potentially affected property owner in writing of the intent of the District and give 60 days' advanced notice of the initiation of the monthly fixed fees. We will also attempt contact by telephone where valid numbers are available. Advise the property owners the option to downsize to lessen the monthly fixed fee or abandon the meter if they choose not to incur a monthly fix fee - with the proviso RMWD notify the six properties who have no current lateral to the property of their status.

Action: Approve, Moved by Director Stewart, Seconded by Director Mack.
$\left(^{*}\right)$ - Asterisk indicates a report is attached.

Vote: Motion carried by unanimous vote (summary: Ayes = 5).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.
*18. DISCUSSION AND POSSIBLE ACTION TO APPROVE APPRAISAL OF THE WATER AND WASTEWATER SYSTEMS OWNED BY RAINBOW MUNICIPAL WATER DISTRICT

Mr. Kennedy recalled Willdan Financial Services was contracted to produce the appraisal as part of the capacity study to assist RMWD with accurately assess the actual value of its system. He noted the total valuation was approximately $\$ 440$ Million. He explained should the Board approve this report it will be taken to the District auditors for review and then be incorporated into RMWD's future financial statements and balance sheet.

Mr. Kennedy noted there are depreciation impacts; however, these are some of the things staff will work through with the Budget and Finance Committee to make determinations. He pointed out this study will be helpful should the District ever need to enter into debt management in the future in terms of grants and other programs.

Director Mack asked if this document needed to be filed with the State. Mrs. Martinez explained RMWD files a financial report with the State once adjustments are made and it is accepted by the auditors for fiscal year reporting.

Director Stewart talked about the importance of properly stating the District value noting without such RMWD will have a difficult time determining how much money to set aside in reserves at any given time. He applauded the fact this study was conducted and thanked the Engineering Committee for their work on this project.

## Motion:

Staff Recommendation Option 1 - Approve the July 13, 2016 Appraisal Report by Willdan Financial Services.

Action: Approve, Moved by Director Hamilton, Seconded by Director Mack.
Vote: Motion carried by unanimous vote (summary: Ayes = 5).

Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.

## *19. DISCUSSION AND POSSIBLE ACTION TO APPROVE PURCHASE OF PROPERTY FOR THE POTENTIAL LIFT STATION 1A SITE

Mrs. Kirkpatrick noted as part of RMWD's Capital Improvement Program (CIP), Lift Station 1 was in design right now for upsizing the lift station and the surrounding pipelines for ultimate flow. She noted RMWD was currently in design with Kennedy Jenks. She explained part of this project was to upsize the sewer siphon which would involve a deeper siphon under Camino Del Rey which was not a good alternative for RMWD as determined by the wastewater staff as well as the Engineering Committee. She said to move the sewer siphon, a site would need to be found on which to locate a pump station to pump wastewater through the area. Mr. Kennedy added why construction in the current area would be virtually impossible due to the location of the existing manhole.
(*) - Asterisk indicates a report is attached.

Mrs. Kirkpatrick explained the project would split existing Lift Station 1 into Lift Station 1A and Lift Station 1B. She noted this item was specifically for the Lift Station 1A site and how after looking at several potential sites, it was recommended the new site be located at the lot for sale adjacent to the shopping center where the Post Office and Ringers Cocktail Lounge located in Bonsall.

Discussion ensued regarding the other site locations.
Mrs. Kirkpatrick explained this item was solely for the purchase of the land. She noted CEQA has been completed for the purchase should the design of Lift Station 1 moves forward. She noted the proposed land was currently owned by Larry Lushanko.

Director Hamilton inquired about Option 2 being a possibility for recovering purchasing costs. Discussion ensued.

Mr. Kennedy mentioned the land appraised for less than the initial asking price.
Director Mack inquired as to whether the area residents would oppose the lift station being located near their homes. Mr. Kennedy explained when built correctly, there would be minimal impact to the residents. Director Stewart pointed out the Board spent time researching each of the alternative sites as well as all the options.

Mr. Zuniga talked about how the proposed new facility and location would benefit RMWD staff in the event of an emergency. Mr. Kennedy noted new facility would look more appealing as opposed to those lift stations constructed in the past.

## Motion:

To approve Option 1 - Authorize General Manager to execute purchase agreement with the Lushanko Family 2001 Trust for APN 126-452-01 for a total of \$740,000.

## Action: Approve, Moved by Director Hamilton, Seconded by Director Stewart.

Vote: Motion carried by unanimous vote (summary: Ayes = 5).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.

## *20. DISCUSSION AND POSSIBLE ACTION TO APPROVE CONTRACT CHANGE ORDER FOR INSPECTION SERVICES FOR THE HORSE CREEK RIDGE DEVELOPMENT

Mrs. Kirkpatrick announced Horse Creek Ridge was currently in the process of grading as well as installing sewer lines. She noted this item was to approve a contract change order with one of RMWD's added inspection services consultant, Hoch Consulting, so their firm would be specifically inspecting the Horse Creek Ridge development to include sewer pipeline, water pipelines, the lift station located on Pankey Road.

Mr. Kennedy pointed out his authority was limited to a certain amount and that any change orders over $\$ 50,000$ must come back to the Board for consideration and approval. He noted Hoch utilized qualified individuals who have done good work for the District; therefore, staff was seeking an extension to the current contract to include inspection services as opposed to going out for a new procurement.

Director Mack asked how the developer pays for the inspection services. Mr. Kennedy stated the developer has already provided RMWD with a deposit and that the goal was to ensure the ratepayers do not pay for these services.

## Motion:

## Approve Staff Recommendation Option 1 - Authorize General Manager to execute change order for As-Needed Inspection Services contract with Hoch Consulting not to exceed \$279,220.50.

## Action: Approve, Moved by Director Stewart, Seconded by Director Hamilton.

Vote: Motion carried by unanimous vote (summary: Ayes = 5).

Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.

## *21. FISCAL YEAR 2016-17 MID-YEAR BUDGET REVIEW AND BUDGET ADJUSTMENTS

Mr. Kennedy noted this was something not done in the past; however, it should be recurring each year going forward.

Mrs. Martinez explained staff went through an extensive mid-year review of the actual budget projections to make some modest adjustments. She said due to the conservative approach in the budget, the adjustments are minimal. She referenced the breakdown list provided in the agenda packet as she explained each of the proposed adjustments.

Mrs. Martinez briefly updated the Board on the audit noting although it was late, she updated the Board on some unaudited numbers.

Mr. Kennedy explained RMWD was looking better until the weather changed. He noted if the turn of events in the weather were included in the rate setting process, the outcome would have been better. He said all RMWD can do right now is hold the line, remain responsible, and continually monitor the situation.

Discussion ensued regarding what steps would be taken should the wet weather continue.
Director Stewart stated he was pleased with having this mid-year budget review and the opportunity to make any necessary adjustments. Director Hamilton suggested offering a rate increase at one time as opposed to making several small adjustments over a period of time in order to lessen customer disapproval.

Mrs. Martinez confirmed any money shifted would not impact the areas from which it was taken.

## Motion:

Adopt Staff Recommendation Option 1 - Approve Amended Budget FY 2016-17 as provided in Exhibit A with a Net Neutral Fiscal Impact.

Action: Approve, Moved by Director Stewart, Seconded by Director Hamilton.

Vote: Motion carried by unanimous vote (summary: Ayes = 5).

Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.

*22. CONSIDER ADOPTION OF RESOLUTION NO. 17-09 (1) AUTHORIZING THE CALIFORNIA STATEWIDE COMMUNITIES DEVELOPMENT AUTHORITY (THE "AUTHORITY") TO FORM A COMMUNITY FACILITIES DISTRICT WITHIN THE TERRITORIAL LIMITS OF THE RAINBOW MUNICIPAL WATER DISTRICT TO FINANCE CERTAIN PUBLIC IMPROVEMENTS AND DEVELOPMENT IMPACT FEES; (2) EMBODYING A JOINT COMMUNITY FACILITIES AGREEMENT SETTING FORTH THE TERMS AND CONDITIONS OF THE COMMUNITY FACILITIES DISTRICT FINANCING; (3) APPROVING AN ACQUISITION AGREEMENT BETWEEN THE DISTRICT AND THE DEVELOPER; AND (4) AUTHORIZING STAFF TO COOPERATE WITH THE AUTHORITY AND ITS CONSULTANTS IN CONNECTION THEREWITH

Mr. Kennedy pointed out staff was seeking action on four items related to this matter as noted in Resolution No.17-09. He explained since RMWD joined CSCDA, District staff and attorneys have been working with CSCDA staff on the contracts. He said he was confident after working through the documents with the assistance of RMWD legal counsel. He noted any additional items that may arise will be brought to the Board for consideration.

It was noted the bond would be funded sometime next year once the signature value requirements are met.

President Brazier stated she was philosophically opposed to Mello Roos. She stated after intense research she found the purpose at the time Mello Roos was established in 1982 was to enable individuals who might not be able to get the money from the money market to finance and encourage development. She said she found it unfair for someone wanting to make money to put the cost to make that money on the people who are pay for the product. She said based on what she has ascertained, D.R. Horton would make a great deal of money not having to get their own money out of the money market. She expressed concern the $\$ 2.75$ million would not be funded by D.R. Horton, but rather by RMWD's future ratepayers.

Mr . Kennedy pointed out there was an additional item related to this matter for Board consideration coming up next on this agenda. He explained there were rationales to say Mello Roos is bad; however, there is a benefit to the RMWD ratepayers as a whole relative to this development that will get them closer to what should have been paid for sewer capacity had the purchases been made at a later date.

President Brazier recommended this Board adjust RMWD's current policies to ensure that carrying multi-generational agreements does not happen in the future.

President Brazier stated beside her philosophical disagreement with the Mello Roos concept, it is well known Mello Roos is not popular with most home buyers. She noted the only other District in the County that has Mello Roos was Borrego Water District that was initiated in 1982 and since that time they have defaulted a third time and are now in the middle of another refinance. She stressed there was no guarantee that people will not be paying forever or anything because things happen.

Mr. Kennedy pointed out the CSCDA agreement for the bond issuance and actual indebtedness on the properties, the properties take on the sole responsibility for repaying of the bonds through their property tax. President Brazier stated this where RMWD would receive $\$ 2.75$ million from.

President Brazier expressed concern that in agenda Item \#23 it states D.R. Horton has no responsibility should things go array and those funds do not get paid. Mr. Kennedy explained D.R. Horton has no obligation to increase their sewer capacity fee and RMWD had no obligation to join the CSCDA to facilitate this Mello Roos; therefore, it is a quid pro quo agreement to where in exchange for them bringing the capacity fees closer to what RMWD expected to receive, the District agreed to move forward in this direction. He added RMWD did not have any leverage in the District's agreement telling D.R. Horton to give RMWD $\$ 2.75$ million, but this opportunity allowed for the District to use some leverage in order to receive these monies.

Mr. Kennedy recalled when this matter was discussed with the Board at their meeting last month, the Board directed him to try to negotiate RMWD receiving more money. He stated during those discussions, D.R. Horton was very clear that from a marketing perspective they cannot put too much Mello Roos on the property because they would not sell the house.

Sunit Patel, representing D.R. Horton, noted there was a requirement to disclose the CFD special taxes. He pointed out there was already a CFD on this project with the County for maintenance and how this CFD would be in addition to the one already in place. He stated there are CFD's that have historically have had trouble; however, there are not any modern day CFD's that have defaulted due to protections that have been put in place to prevent them from failing. He talked about several protections and obligations added over the last decades that have advancements in the way this type of financing is structured. He continued by explaining some of the protection measures and the steps involved with each so that people do not just default.

Discussion ensued.
President Brazier asked should this not go through what would happen. Kurt Hubbell with D.R. Horton explained why this was nothing more than a financing function and should there not be a CFD, D.R. Horton will proceed with funding and building everything and in turn sell the homes for higher cost. He stated the other option would be to use this CFD financing mechanism which saves some money on the financing, thus allowing the homes to be sold for a lower price point. He stressed they were very sensitive with their buyers and the special tax threshold on the taxes. He noted the average price of a home currently projected for this development was approximately $\$ 400,000$. He explained the project will no longer have attached homes, but rather single family detached homes on multi-family lots which will make for the most affordable housing in San Diego County.

Director Mack said even if RMWD does not do a CFD, the developer will use alternative financing options which in turn will mean RMWD would not collect the $\$ 2.75$ million. He talked about how San Marcos has been very successful with creating a CFD in that the properties are very nice and well maintained. He said he found this matter to be a win-win for RMWD and its ratepayers.

President Brazier clarified she was not challenging the properties to be established, but rather the process and whether RMWD was setting itself up for having this happen repeatedly in the future in that it would be the only option.

Director Gasca inquired as to the valuation of the infrastructure improvements. Mr. Kennedy replied $\$ 13$ Million between capacity fees and pipelines, lift stations, etc. Director Gasca asked for the percentage increase in valuation for the District. Mr. Kennedy stated $\$ 13.5$ Million was the amount looking to be funded through the acquisition agreement. It was confirmed $\$ 8$ Million is the increase in infrastructure valuation and the remainder was in capacity fees.

Mr. Kennedy confirmed it would be a 30-year assessment. Discussion followed.

## Motion:

To approve Resolution No. 17-09 to include the four items in the title as well as authorize the General Manager to execute Second Amendment to Amended and Restated Sewer Service Agreement with Passerelle and D.R. Horton provided under agenda Item \#22A.

Action: Approve, Moved by Director Stewart, Seconded by Director Mack.
Vote: Motion passed (summary: Ayes = 4, Noes = 1, Abstain = 0).
Ayes: Director Hamilton, Director Mack, Director Stewart, Director Gasca.
Noes: Director Brazier.

## *22A. DISCUSSION AND POSSIBLE ACTION REGARDING EXECUTION OF THE SECOND AMENDMENT TO AMENDED AND RESTATED SEWER SERVICE AGREEMENT BETWEEN RAINBOW MUNICIPAL WATER DISTRICT, PASSERELLE AND D.R. HORTON

This item was addressed and voted on under Item \#22.
*23. DISCUSSION AND POSSIBLE ACTION TO APPROVE RESOLUTION NO. 17-06 NOMINATING CANDIDATE(S) TO THE ACWA JPIA EXECUTIVE COMMITTEE

Mr. Kennedy noted RMWD does not qualify to be on the Board of Directors; however, there are other agencies seeking concurring support for candidates they have nominated. He provided a brief background on the nominated candidates for Board consideration.

Motion:
To approve Resolution No. 17-06 supporting the nomination of Mr. Drake and Mr. Dorey, respectively, Action: Approve, Moved by Director Gasca, Seconded by Director Mack.

Vote: Motion carried by unanimous vote (summary: Ayes $=5$ ).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.
*24. DISCUSSION AND POSSIBLE ACTION TO APPROVE RESOLUTION NO. 17-08 NOMINATING CANDIDATE(S) TO THE SPECIAL RISK MANAGEMENT AUTHORITY (SDRMA) BOARD OF DIRECTORS

Discussion ensued regarding what it would entail to serve on the Board of Directors as well as how it would benefit RMWD to have a Director serve.

There was no action taken.
$\left(^{*}\right)$ - Asterisk indicates a report is attached.

## 25. DISCUSSION AND POSSIBLE ACTION TO APPROVE AN RMWD AWARD PROGRAM FOR THE 2017 SAN DIEGO CHAPTER CALIFORNIA SPECIAL DISTRICTS ASSOCIATION PUBLIC OUTREACH PROGRAM

Mr. Kennedy stated as part of CSDA, an annual video contest program was implemented for local high schools that has a $\$ 1,000$ prize with half going to the school and half to the student. He said he was asking the Board to add incentive to the local high school video contest by including an additional prize such as a Go Pro to add to the prize pool to be awarded to the winner. He noted the prize would be purchased through already accumulated American Express points and would not be a direct cost to the District.

## Motion:

Approve Option 1 - Approve supporting the 2017 San Diego CSDA Chapter Public Outreach Program by offering additional incentives to the video contest prize pool.

## Action: Approve, Moved by Director Brazier, Seconded by Director Hamilton.

Vote: Motion carried by unanimous vote (summary: Ayes = 5).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.
25A. DISCUSSION AND POSSIBLE ACTION TO APPROVE RESOLUTION NO. 17-10, FINDING OF PUBLIC HEALTH AND SAFETY EMERGENCY AND APPROVING REPLACEMENT OF THE MOOSA CREST PIPELINE

This was an emergency item added per Item \#3.
Mr. Kennedy explained in 1960 RMWD installed a pipeline across Moosa Creek just west of the 15 freeway. During an unusually heavy rain event on February $27^{\text {th }}$, the storm swollen creek carried huge quantities of water and debris and severed the 16 " pipeline. This pipeline had been damaged from a storm on January $20^{\text {th }}$ but did not fail and the more recent damage occurred as staff was preparing to replace a damaged support pier. Mrs. Kirkpatrick presented photos that showed the condition of the pipeline before and after the more recent rainstorm of the pipeline under consideration. Mr. Kennedy said after consulting with Tory Walker about what had transpired, Mr. Walker explained how the channel was being scoured due to excess flows related to the construction of the 15 freeway.

Discussion ensued regarding the timeframe for the project to be completed. Legal Counsel stated it needed to be completed as quickly as reasonably practical to mitigate the situation. Mr. Kennedy assured the Board staff would be working diligently to get this project completed as soon as possible.

## Motion:

Approve Staff Recommendation Option 1 - Approve Resolution 17-10, finding the Moosa Crest Pipeline replacement project and emergency so the General Manager can proceed with replacement of the pipeline per Section 1.04 Emergency Authority and increase emergency authority to a not to exceed amount of $\$ 500,000$.

## Action: Approve, Moved by Director Stewart, Seconded by Director Gasca.

Vote: Motion carried by unanimous vote (summary: Ayes = 5).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.
*26. RECEIVE AND FILE INFORMATION AND FINANCIAL ITEMS FOR NOVEMBER/DECEMBER 2016 AND JANUARY 2017
A. General Manager Comments

1. Meetings, Conferences and Seminar Calendar
B. Operations Comments
2. Operations Report
C. Engineering Comments
3. Engineering Report
D. Human Resource \& Safety Comments 1. Human Resources Report
E. Customer Service Comments
4. Customer Service Report
F. Finance Manager Comments
5. Credit Card Breakdown
6. Directors' Expense
7. Check Register
8. Water Sales Summary
9. RMWD Sewer Equivalent Dwelling Units (EDU's) Status

Mr. Kennedy referenced the article published in Land and Water Magazine provided under separate cover to the Board and how it mentions Morro Reservoir.

## Motion:

To receive and file the information and financial items.
Action: Approve, Moved by Director Hamilton, Seconded by Director Stewart.
Vote: Motion carried by unanimous vote (summary: Ayes $=4$ ).
Ayes: Director Brazier, Director Hamilton, Director Mack, Director Stewart, Director Gasca.

## 27. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT REGULAR BOARD MEETING

It was noted the condition assessment, capacity fees including preventing future funding gaps be on the next agenda.

The meeting adjourned to Closed Session at 3:53 p.m.
The meeting reconvened at 5:51 p.m.
Discussion returned to Item \#6.
(*) - Asterisk indicates a report is attached.

DRAFT
28. ADJOURNMENT - To Tuesday, March 28, 2017 at 1:00 p.m.

The meeting was adjourned with a motion made by Director Hamilton and seconded by Director Mack to a regular meeting on March 28, 2017 at 1:00 p.m.

The meeting was adjourned at 5:52 p.m.

Helene Brazier, Board President

Dawn M. Washburn, Board Secretary

# MWD's Fiscal Practices and the Impact on Southern California Ratepayers 

Member Agency Managers Meeting March 14, 2017

Dennis A. Cushman, Assistant General Manager
San Diego County Water Authority

## Concerns with MWD's Current

 Fiscal Practices- No Long Range Finance Plan
- Rate increases
- Ratepayer overcharges
- Overspending
- Unplanned borrowing


## MWD's Last Long-Range Financial Plan

 was 2004

Woter Authority
Data Source: MWD

MWD's Sales have Sharply Declined MWD Sales
${ }^{2,600,000}$ (Actuals 2000-2016 and Projected 2017-2018)


## MWD Has Doubled Rates Over Past Decade



## MWD Overcharged Ratepayers by \$847 Million (2012-15)



## MWD's $\$ 847$ Million in Ratepayer Overcharges by MWD Member Agency



## MWD's \$189 Million in Ratepayer Overcharges by Water Authority Member Agencies

| Member Agency | Share of MWD Overcharges ${ }^{(1)}$ |
| :--- | ---: |
| Carlsbad M.W.D. | M, |
| Del Mar, City of | 46,089 |
| Escondido, City of | $7,523,022$ |
| Fallbrook P.U.D. | $3,521,540$ |
| Helix W.D. | $12,617,903$ |
| Lakeside W.D. | $1,505,413$ |
| National City, City of | 823,493 |
| Oceanside, City of | $10,176,806$ |
| Olivenhain M.W.D. | $8,826,351$ |
| Otay W.D. | $13,700,149$ |
| Padre Dam M.W.D. | $4,813,200$ |
| Pendleton M.C.B. | 21,442 |
| Poway, City of | $5,074,416$ |
| Rainbow M.W.D. | $5,108,280$ |
| Ramona M.W.D. | $2,231,165$ |
| Rincon Del Diablo M.W.D. | $2,689,245$ |
| San Diego, City of | $76,840,785$ |
| San Dieguito W.D. | $1,649,028$ |
| Santa Fe I.D. | $3,333,163$ |
| South Bay I.D. | $2,880,780$ |
| Vallecitos W.D. | $6,792,902$ |
| Valley Center M.W.D. | $4,017,474$ |
| Vista I.D. | $6,893,404$ |
| Yuima M.W.D. | 140,490 |
| Totals | $188,978,871$ |
|  |  |

[^0]MWD Overspent Its Budget by $\$ 1.2$ Billion (2013-16)


## MWD Has Authorized $\$ 900$ million in Unplanned Borrowing

## MWD Depletes Cash Reserves; Borrows $\$ 300$ Million to Meet Minimum Reserve Requirement



## Despite Declining Water Sales, MWD Plans to Spend Billions on New Projects

- \$17+ billion Twin Tunnels project
- Has pledged to pay one-fourth or more
- No other California water agency has committed to pay
- $\$ 2.7+$ billion L.A. Country Sanitation Districts' Carson Recycled Water Project
- Project and its supplies (168,000 AF annually) not included in IRP or any MWD long-range water resources plan
- Hundreds of millions of dollars to "update and modernize" Mexico's infrastructure (Kightlinger, 2/21 Planning Report) - Never disclosed to MWD board and not in IRP or UWMP
- MWD has no commitment from any of its member agencies to pay for these projects


## MWD's Rates Have Been Ruled Illegal and Unconstitutional

- Nov. 18, 2015 : San Francisco Superior Court Judge Curtis E.A. Karnow ruled MWD's 2011-15 rates:
- Violate California Constitution Article XIIIC (Proposition 26)
- Violate California Wheeling Statutes - Water transportation law
- Government Code Section 54999.7(a)

- Limiting rates to cost-of-service
- Common law rules limiting rates to cost of service
- MWD continues to set rates using same formula ruled illegal by the Court
- This is the shaky foundation of all current spending


## MWD Litigation: What's at Stake for San Diego County?



- MWD overcharges estimated at more than $\$ 537$ million over 8 years; up to $\$ 7.4$ billion dollars over 45 years

- Water rights equivalent to \$1B seawater desal project in Carlsbad


## What's at Stake for Water Authority's Member Agencies

|  | Four Years: 2011-2014 | Eight Years: 2011-2018 |
| :---: | :---: | :---: |
| Member Agency | Overcharge Net Allocable to Member Agencies ${ }^{(1)}$ | Overcharge Net Allocable to Member Agencies ${ }^{(1)}$ |
| Carlsbad M.W.D. | \$10,128,399.74 | \$20,426,226 |
| Del Mar, City of | 644,181 | 1,307,820 |
| Escondido, City of | 10,392,151 | 21,415,356 |
| Fallbrook P.U.D. | 4,864,585 | 9,761,687 |
| Helix W.D. | 17,430,118 | 35,910,410 |
| Lakeside W.D. | 2,079,548 | 3,999,546 |
| National City, City of | 1,137,557 | 2,790,852 |
| Oceanside, City of | 14,058,034 | 28,513,173 |
| Olivenhain M.W.D. | 12,192,543 | 24,461,646 |
| Otay W.D. | 18,925,110 | 38,124,478 |
| Padre Dam M.W.D. | \$6,648,857 | \$13,187,178 |
| Pendleton M.C.B. | 29,619 | 120,455 |
| Poway, City of | 7,009,697 | 13,731,196 |
| Rainbow M.W.D. | 7,056,475 | 14,013,650 |
| Ramona M.W.D. | 3,082,086 | 6,108,185 |
| Rincon Del Diablo M.W.D. | 3,714,870 | 7,356,609 |
| San Diego, City of | 106,146,313 | 221,186,562 |
| San Dieguito W.D. | 2,277,933 | 5,099,947 |
| Santa Fe I.D. | 4,604,365 | 9,656,040 |
| South Bay I.D. | 3,979,451 | 10,209,210 |
| Vallecitos W.D. | 9,383,579 | 18,740,595 |
| Valley Center M.W.D. | 5,549,657 | 10,870,961 |
| Vista I.D. | 9,522,410 | 19,735,330 |
| Yuima M.W.D. | 194,070 | 654,624 |
| Totals | \$261,051,606.60 | \$537,381,736 |

## Annual Savings Value of Rate Case Victory

 Result of Lawful Rates at MWD Going ForwardEstimated Annual Savings in 2020 Based upon Proportional Share of Municipal \& Industrial Deliveries:

$$
\$ 81,291,763
$$

2020 value is $\$ 197$ per acre-foot, computed based upon average member agency purchases 2011-16

| Member Agency | Estimated Annual Savings Value from Rate Litigation Victory |
| :---: | :---: |
| Carlsbad M.W.D. | \$3,097,088 |
| Del Mar, City of | 199,266 |
| Escondido, City of | 3,202,873 |
| Fallbrook P.U.D. | 1,484,586 |
| Helix W.D. | 5,359,825 |
| Lakeside W.D. | 605,093 |
| National City, City of | 428,914 |
| Oceanside, City of | 4,328,319 |
| Olivenhain M.W.D. | 3,702,413 |
| Otay W.D. | 5,781,550 |
| Padre Dam M.W.D. | \$2,000,878 |
| Pendleton M.C.B. | 19,013 |
| Poway, City of | 2,069,598 |
| Rainbow M.W.D. | 2,137,211 |
| Ramona M.W.D. | 922,408 |
| Rincon Del Diablo M.W.D. | 1,111,428 |
| San Diego, City of | 33,506,994 |
| San Dieguito W.D. | 758,331 |
| Santa Fe I.D. | 1,433,159 |
| South Bay I.D. | 1,583,249 |
| Vallecitos W.D. | 2,842,005 |
| Valley Center M.W.D. | 1,651,787 |
| Vista I.D. | 2,966,823 |
| Yuima M.W.D. | 98,951 |
| Totals | \$81,291,763 |

## MWD's Unsustainable Fiscal Practices

 Pose Serious Risks to Ratepayers- Despite its declining sales, ratepayers in MWD's 26 member agencies will bear the entire cost of MWD current and future spending
- In addition to commodity rates, MWD has other tools to obtain revenues from its member agencies to pay its bills
- Fixed charges, including capacity charges, availability of service charges
- Imposition of benefit assessment charge
- Property taxes
- MWD has suspended its statutory property tax limitation in each of the past four years (2013-2016)
- Plans to continue doing so
- (See MWD Act Section 124.5)


## Expanded Information Effort

- Water Authority expanding informational effort beyond San Diego County
- Engage public officials, civic and opinion leaders throughout MWD's service area
- Get answers to the questions the Water Authority's MWD Delegates have been asking at MWD
- Bring about changes in MWD's practices so that it is accountable and sustainable
- Require transparency in MWD's business practices and decision-making
- Ultimately, resolve disputes and be part of a sustainable MWD


## Support Water Authority Efforts

- Asking member agencies and cities to:
- Support the Water Authority's pending rate litigation and any future litigation to recover illegal rates
- Keep apprised of MWD activities that impact our region's ratepayers
- Utilize opportunities to share information with community members
- Engage other elected officials throughout Southern California in a dialogue regarding concerns with MWD's fiscal affairs
- Consider adopting resolution or letter of support


## Document and Data Sources

- Data used throughout this presentation comes directly from MWD
- Links to source documents can be found at www.MWDFacts.com/behind-the-numbers


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 MemorandumTO: Rainbow Municipal Water District

FROM: Alfred Smith
DATE: March 28, 2017
RE: Attorney Report: Public Records Act 501668-0002

## I. INTRODUCTION.

This attorney report provides an update on a recent California Public Records Act ("CPRA") decision from the California Supreme Court. On March 2, 2017, in a major development impacting all public entities subject to the CPRA (California Government Code § 6250 et seq.), the California Supreme Court unanimously held that public officers' and employees' communications on personal devices and nongovernmental accounts concerning "the conduct of public business," are public records. As such, they are subject to disclosure in response to a CPRA request, unless a specific statutory exemption applies. (City of San Jose et al. v. Superior Court of Santa Clara County, Mar. 2, 2017, S218066 ("San Jose case")). Such devices, include, but are not limited to, personal cell phones, personal computers, and personal email accounts.

## II. BACKGROUND.

## A. The CPRA

The CPRA was passed in 1968, prior to the widespread use of mobile and electronic communications. The Supreme Court's opinion emphasized the broad public right to access information concerning the operation of state and local governments. In 2004, Proposition 59 added the following language to the California Constitution: "The people have the right of access to information concerning the conduct of the people's business, and, therefore,...the writings of public officials and agencies shall be open to public scrutiny." Cal. Const., art. I, § 3(b)(1).

However, the Court also recognized that privacy is important, and public access does not "supersede or modify existing privacy rights." Ultimately, the Court concluded
that by instituting procedural safeguards, the privacy rights of public employees could be sufficiently protected while still allowing the public access to communications made for the purpose of conducting public business, even if they were made on a private account.

The CPRA "creates 'a presumptive right of access to any record created or maintained by a public agency that relates in any way to the business of the public agency.'" (City of San Jose, at 4; quoting Sander v. State Bar of California, 58 Cal. 4th 300, 323 (2013)). Additionally, there is strong public policy in favor of interpreting the law to increase public access to information concerning the government's operations and decision making.

## B. The San Jose Case.

The San Jose case arose out of a records request to the City of San Jose asking for emails or text messages on private electronic devices of the Mayor, City Council and members of staff, regarding City matters. The request asked for "any and all voicemails, emails, or text messages sent or received on private electronic devices" used by the mayor, councilmembers and city staff regarding "any matters concerning the City of San Jose." The City rejected the request because under the CPRA, the City did not "prepare, own, use, or retain" messages from those private devices.

The requester then filed an action for declaratory relief in the Superior Court. The requester was successful in obtaining summary judgment determining that the City should have produced the records. The Public Records Act defines "public records" to include those of a "local agency." The Superior Court concluded that the City acted through its individual officers and employees, who should therefore be included within the meaning of "agency." (Cal. Govt. Code, § 6250 et seq.).

The City, its mayor and council members filed a mandate petition in the Court of Appeal, seeking to overturn the Superior Court ruling. A writ procedure was necessary, because the ruling could not be "appealed" under a part of the CPRA meant to expedite decisions on these matters, appeal being a slower process.

The Sixth District Court of Appeal reversed the trial court. The Court of Appeal held that public agencies are not required to disclose communications from officials' private cell phones and e-mail accounts under the CPRA. The appellate court further held that public agencies have no duty to search officials' and employees' private devices and accounts in response to a CPRA request.

Page 3

## III. COURT'S ANALYSIS.

The California Supreme Court emphasized the broad public right to access information concerning the operation of state and local governments, contrasted against an individual's constitutional right of privacy, while recognizing the changing mode of common electronic communication since the CPRA's original enactment.

In reaching its holding, the Supreme Court observed: "In today's environment, not all employment-related activity occurs during a conventional workday, or in an employer-maintained workplace." The Court contrasted the context in which the Legislature first enacted the CPRA in which the distinction between "writings" subject to the disclosure were "fairly formal and focused on the business at hand," and the present. "Today, these tangible, if laborious writing methods have been enhanced by electronic communication. Email, text messaging and other electronic platforms, permit writings to be prepared, exchanged, and stored more quickly and easily."

However, the Court commented: "the ease and immediacy of electronic communication has encouraged a commonplace tendency to share fleeting thoughts and random bits of information, with varying degrees of import, often to broad audiences." As a result, "the line between an official communication and an electronic aside is now sometimes blurred."

Nevertheless, the Court maintained that the relatively broad statutory definition of a public record under the CPRA did not support the lower court of appeals' conclusion that communications from private devices were exempt from CPRA disclosure. Instead the appellate court analyzed the following statutory predicates for CPRA coverage and reached the opposite conclusion. The four aspects of a public record include the following: "It is (1) a writing, (2) with content relating to the conduct of the public's business, which is (3) prepared by, or (4) owned, used, or retained by any state or local agency."

As to the first element, the Court reached the already commonly understood conclusion that emails, text messages, and other electronic platforms are "writings" under the CPRA. The second element raised more difficult issues because, as the Court noted: "The overall structure of the CPRA, with its many exemptions, makes clear that not everything written by a public employee is subject to review and disclosure." After reciting examples of writings that would "likely not be a public record," such as an email to a spouse "complaining 'my coworker is an idiot," the Court clarified that to qualify as a public record under the CPRA "a writing must relate in some substantive way to the conduct of the public's business." Though this standard is "broad," it "is not so elastic as to include every piece of information the public may find interesting. Communications that are primarily personal, containing no more than incidental mentions of agency business, generally will not constitute public records."

Defendant City of San Jose's primary statutorily-based challenge to the extension of the CPRA to communications on private devices, and thus another focus of the Court's opinion, addressed the third and fourth elements of CPRA coverage requiring that the writing be "prepared, owned, used, or retained by any state or local agency." The Court focused on the disjunctive term "or," and noted that "in focusing its attention on the 'owned, used, or retained by,' aspect of the 'public records' definition," the analysis "ignores the 'prepared by' aspect." Instead, the Court concluded that because agencies operate through their officers and employees who will have "prepared" the records that relate to the conduct of public business, they are subject to CPRA disclosure if they are in the "agency's actual or constructive possession. Documents otherwise meeting CPRA's definition of 'public records' do not lose this status because they are located in an employee's personal account. The statute's clear purpose is to prevent an agency from evading its disclosure duty by transferring custody of a record to a private holder and then arguing the record falls outside CPRA because it is no longer in the agency's possession." A document's status as public or confidential does not turn on the arbitrary circumstance of where the document is located. Specifically, the Court stated: "a city employee's communications related to the conduct of public business do not cease to be public records just because they were sent or received using a personal account."

Thus, the Court refused to adopt a categorical exclusion of documents from CPRA's definition of "public records" merely because they exist on personal accounts. "If public officials could evade the law simply by clicking into a different email account, or communicating through a personal device, sensitive information could routinely evade public scrutiny." Acknowledging individual privacy concerns, the Court noted that they should be addressed on a "case-by-case basis," and described certain existing statutory exemptions of "certain types of preliminary drafts, notes and memoranda (§6254, subd. (a)), personal financial data ( $§ 6254$, subd. (n), personnel and medical files (§6254, subd. (c)), and material protected by evidentiary privileges (§6254, subd. (k))."

Finally, the Court commented that the CPRA already includes a catchall exemption that allows withholding records if the public interest in withholding "clearly outweighs" the public interest in disclosure, permitting a "balance between the public's interest in disclosure and the individual's privacy interest."

## IV. CONCLUSION.

The Supreme Court noted the complexity and time-sensitivity in responding to CPRA requests, and provided several suggestions to agencies on how to respond to CPRA requests while balancing individual privacy. The Court stated that when responding to a CPRA request, the "agency's first step should be to communicate the request to the employees in question. The agency may then reasonably rely on these
employees to search their own personal files, accounts, and devices for responsive materials."

The Court further provided that agencies may also adopt policies that will reduce the likelihood of public records being held in employees' private accounts, such as requiring all employees to use or copy their government accounts for "all communications touching on public business."

The Court further noted that federal courts applying the Freedom of Information Act ("FOIA") have "approved of individual employees conducting their own searches and segregating public records from personal records, so long as the employees have been properly trained in how to distinguish between the two."

The Court endorsed the Washington Supreme Court's recent adoption of this procedure under its state public records law: "holding that employees who withhold personal records from their employer must submit an affidavit with facts sufficient to show the information is not a 'public record' under the PRA. So long as the affidavits give the requester and the trial court a sufficient factual basis to determine that withheld material is indeed nonresponsive, the agency has performed an adequate search under the PRA."

Ultimately, the Court concluded: "We do not hold that any particular search method is required or necessarily adequate. We mention these alternatives to offer guidance on remand and to explain why privacy concerns do not require categorical exclusion of documents from personal account from CPRA's 'public records' definition."

The Supreme Court's decision places more burdens on public agencies than required by prior case law. Nonetheless, the Supreme Court's decision leaves to the discretion of individual agencies which policies and procedures to adopt to comply with the CPRA. Among the policies cited with approval by the Court include:
(1) Contacting affected employees when the request comes in, and allowing the employees to search their own personal devices;
(2) Providing training to employees so they understand how to properly segregate public records from personal records when conducting CPRA searches;
(3) Requiring employees who withhold personal records from their employer to submit an affidavit with facts sufficient to show the information is not a public record; and
(4) Requiring all employees to use or copy their government accounts for all communications relating to public business.

## AESIAES

Memorandum
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# MINUTES OF THE BUDGET AND FINANCE COMMITTEE MEETING OF THE RAINBOW MUNICIPAL WATER DISTRICT <br> FEBRUARY 14, 2017 

1. CALL TO ORDER: The Budget \& Finance Committee meeting of the Rainbow Municipal Water District was called to order by Chairperson Stitle on February 14, 2017 in the Board Room of the District Office at 3707 Old Highway 395, Fallbrook, CA 92028 at 1:02 p.m. Chairperson Stitle presiding.
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL:

Present: Member Stitle, Member Ross, Member Moss, Alternate Martinez.
Also Present: General Manager Kennedy, Executive Assistant Washburn, Engineering Manager Kirkpatrick, Accounting Specialist Rubio.

Absent: Member Hensley, Member Clyde, Administrative Analyst Gray.
Two members of the public were present.

## 4. SEATING OF ALTERNATES

Mrs. Martinez was seated as an alternate for this meeting.
5. ADDITIONS/DELETIONSIAMENDMENTS TO THE AGENDA (Government Code §54954.2)

There were no changes to the agenda.

## 6. PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA (Limit 3 Minutes)

There were no comments.

## COMMITTEE ACTION ITEMS

## 7. COMMITTEE MEMBER COMMENTS

There were no comments.

## *8. APPROVAL OF MINUTES

A. January 10, 2017

It was noted the title for Associate Engineer Powers needed to be corrected in the roll call.

## Motion:

## To approve the minutes as revised.

Vote: Motion carried by unanimous vote (summary: Ayes = 4).
Ayes: Member Stitle, Member Ross, Member Moss, Alternate Martinez.

## 9. REVIEW CAPACITY FEE STUDY

Mr. Kennedy reported the study was not yet complete; however, staff wanted to review the information with the Committee in a quick presentation.

## 10. REVIEW ADMINISTRATIVE CODE SECTIONS 5.03.080 AND 5.03.220

Mr. Kennedy recalled part of the discussion at the last meeting included having a cash reserve report prepared for this meeting.

Discussion ensued regarding RMWD's capability to produce investment reports noted in the current investment policies. It was determined the current District investment policies were sufficient and did not need to be altered at this time.

## 11. REVIEW THE FOLLOWING:

A. Income Statement
B. Balance Sheet
C. Cash Flow

Mrs. Martinez announced RMWD received the Distinguished Budget Presentation Award.
Discussion ensued regarding the new billing software and possible changes.
Discussion took place regarding water sales being impacted by the recent rainy weather including the drop in the cumulative budget.

## 12. DEVELOPER UPDATE

Mrs. Kirkpatrick referenced handouts provided to the committee. She pointed out the Bonsall condominiums and Polo Club EDU's have been pushed out due to delays in development.

Mrs. Kirkpatrick provided an update on the developments printed in red on the handout.
Discussion ensued regarding Golf Green Estates and Ocean Breeze developments.

## 13. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED BUDGET AND FINANCE COMMITTEE MEETING

It was noted the Capacity Fee Study, the audit, and discussion regarding establishing depreciation values need to be on the next agenda.

## 14. ADJOURNMENT

Motion:
Action: Adjourn, Moved by Member Ross, Seconded by Member Moss.
Vote: Motion carried by unanimous roll call vote (summary: Ayes = 4).
Ayes: Member Stitle, Member Ross, Member Moss, Alternate Martinez.

> Harry Stitle, Committee Chairperson

Dawn M. Washburn, Board Secretary

## MINUTES OF THE COMMUNICATIONS COMMITTEE MEETING OF THE RAINBOW MUNICIPAL WATER DISTRICT <br> FEBRUARY 6, 2017

1. CALL TO ORDER - The Communications Committee Meeting of the Rainbow Municipal Water District on February 6, 2017 was called to order by Chairperson Daily at 3:31 p.m. in the Board Room of the District, 3707 Old Highway 395, Fallbrook, CA 92028. Chairperson Daily, presiding.

## 2. PLEDGE OF ALLEGIANCE

3. ROLL CALL:

Present: Member Daily, Member Kurnik, Member Kirby, Member Hamilton
Absent: None
Also Present: Alternate Gray, General Manager Kennedy.
No members of the public were present.

## 4. SEATING OF ALTERNATES

It was noted Alternate Gray would not need to be seated at this meeting.
5. ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)

There were no changes to the agenda.

## 6. PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA

Mr. Daily mentioned the award presented to Ms. Washburn was given out at the Employee Recognition Banquet. He pointed out since there was a typo on the award, a new one was made to replace the original.

## COMMITTEE ACTION ITEMS

*7. APPROVAL OF MINUTES
A. January 9, 2017

## Motion:

To approve the minutes as stated.
Action: Approve, Moved by Member Hamilton, Seconded by Member Kirby.
Vote: Motion carried by unanimous vote (summary: Ayes = 4)
Ayes: Member Daily, Member Kirby, Member Hamilton, Member Kurnik.

## 8. PROJECT NAMING BRAINSTORMING SESSION

Mr. Kennedy explained this was to discuss naming the "water reuse/reclamation and recovering imported return flow" project. Discussion ensued regarding possible name choices that will be discussed again at a future committee meeting.

## 9. DISCUSSION REGARDING NON-PROFIT SENIOR CARE SERVICES

Mr. Kennedy solicited the committee for their input regarding how RMWD may want to address communicating the availability of these senior care services. Discussion ensued.

It was decided a policy be put in place for these types of situations and then possibly contact the provider to discuss the services and training process in greater detail.

## 10. FALLBROOK CHAMBER COMMERCE EVENT UPDATE

Mrs. Gray provided an update on the Avocado Festival noting RMWD's deposit was accepted; however, confirmation would not be known until thirty days out from the date of the festival. She mentioned she was doing research on materials to hand out to the public at this event as well as other events in the future.

Mrs. Kirby stated the networking at the commerce event was great; however, she was surprised there was not more general public present.

## 11. DISCUSSION REGARDING PURCHASING EVENT MATERIALS

This item was partially discussed under Item \#10.
Mr. Kennedy suggested coming up with some ideas for a banner for community events. Mrs. Kirby recommended teaming up with a nursery and possibly handing out succulents which would draw public attention.

Mr. Daily suggested having large pictures of District projects or facilities displayed.
Mrs. Kurnik recommended having an interactive model.

## 12. 2017 AVOCADO FESTIVAL UPDATE

Mrs. Gray provided an update under Item \#10.
It was noted the festival is scheduled for April 23, 2017; therefore, preparing for a booth would need to become a priority at this time in order to be ready should RMWD receive approval to have a booth at the festival.

## 13. COMMUNICATIONS PLAN/TOPICS

Mr. Kennedy stated there were no updates.

## 14. REVIEW AND ANALYSIS OF RMWD RELATED MEDIA STORIES

Discussion ensued regarding the drought being declared over in San Diego County.

## 15. COMMITTEE MEMBER COMMENTS

There were no comments.
16. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED COMMUNICATIONS COMMITTEE MEETING

It was noted the Avocado Festival, the project naming and the senior services should be on the next meeting's agenda.
17. ADJOURNMENT

The meeting was adjourned with a motion by Member Kirby, Seconded by Member Kurnik.

The meeting adjourned at 4:37 p.m.

Mike Daily, Committee Chairperson
Dawn M. Washburn, Board Secretary

# MINUTES OF THE ENGINEERING SERVICES COMMITTEE MEETING OF THE RAINBOW MUNICIPAL WATER DISTRICT <br> FEBRUARY 1, 2017 

1. CALL TO ORDER - The Engineering Services Committee Meeting of the Rainbow Municipal Water District on February 1, 2017 was called to order by Chairperson Prince at 3:00 p.m. in the Board Room of the District, 3707 Old Highway 395, Fallbrook, CA 92028. Chairperson Prince, presiding.

## 2. PLEDGE OF ALLEGIANCE

3. ROLL CALL:

Present: Member Prince, Member Stitle, Member Taufer, Member Brazier, Member Kirby, Member Ratican, Member Robertson, Alternate Marnett.

Also Present: General Manager Kennedy, Engineering Manager Kirkpatrick, Associate Engineer Powers, Eng. Tech. Rubio.

Members of the public present: None.
4. SEATING OF ALTERNATES

There were no changes.
5. ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)

There were no changes.
6. PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA

Mr. Robertson asked for an update regarding the drought restrictions. Mr. Kennedy responded last week the San Diego County Water Authority Board of Directors voted to officially declare an end to the drought.

## COMMITTEE ACTION ITEMS

## *7. APPROVAL OF MINUTES

A. January 4, 2017

## Motion:

Accept the January 4, 2017 minutes.
Action: Approve, Moved by Member Brazier, Seconded by Member Stitle.
Vote: $\quad$ Motion passed vote (summary: Ayes = 6, Noes = 0, Abstain =1).

Ayes: Member Prince, Member Stitle, Member Brazier, Member Kirby, Member Ratican, Member Robertson.

## Abstained: Member Taufer.

## 8. DISCUSSION AND POSSIBLE ACTION AMENDING AND UPDATING ADMINISTRATIVE CODE CHAPTERS 6, 8, AND 9

Mr. Kennedy said the Administrative Code includes a Title 6 - Engineering Chapter that has been empty. He explained there were engineering topics scattered throughout the Administrative Code and Mrs. Kirkpatrick worked to consolidate all the engineering topics into Title 6 - Engineering.

Mrs. Kirkpatrick went over the handouts of the Draft Administrative Code Chapters 6, 8 and 9, which contained revisions and clarifications. She asked the Engineering Committee to review the handouts and provide input at the next month's meeting. Discussion ensued.

Mr. Marnett referred to Section 8.06.040 Booster Pumps stating he was in violation of the 25 psi requirement, due to only being able to obtain a pressure of 23 psi at his property. Mr. Kennedy responded since there were pumps that could handle lower pressures, the wording could be revised to remove the exact pressure. He suggested changing it to read when the low pressure drops below a safe operating level for the pump it should be designed to shutoff.

Mr. Kennedy referred to Section 8.19 .030 regarding water theft. He noted a minimum violation fine would be added. He would also verify that the Administrative Code included violation fees for illegal sewage dumping

## 9. DISCUSSION REGARDING MULTIPLE METERS ON SAME PARCEL

Mr. Kennedy said at the last Board Meeting a customer requested a variance from the Administrative Code Section 8.06.010 - Service Connections. He explained the customer was requesting to install multiple meters on the same parcel, which was not permitted. He mentioned the Board of Directors approved the customer's request, although directed staff to develop policy guidelines for future requests. He pointed out that by allowing customers to install multiple meters on one parcel could cause future problems for the District. Discussion ensued.

Mrs. Kirkpatrick said guidelines could be added to this Service Connection Section to provide clarification. Mr. Kennedy added special requests would be addressed by the Board.

## 10. DISCUSSION REGARDING RIGHT OF WAY MANAGEMENT

Mr. Kennedy said at the last Board Meeting a customer requested the District move the waterline from behind her property. He said the customer complained of District staff accessing the easement on her property to maintain District water and other services. He pointed out that the waterline was addressed in the CIP to be replaced, although the customer would not accept the District's explanation of easement rights and future replacement of the waterline based on the CIP. Discussion ensued.

Mr. Kennedy said Mrs. Kirkpatrick would be preparing a right of way management program. He pointed out the District needs to actively manage and protect the assets, which would require a dedicated staff member to manage, due to the large number of easements. Discussion ensued.

He noted that Mrs. Kirkpatrick would be researching the easements on the customer's property. Discussion ensued.

## 11. CAPACITY FEE UPDATE

Mr. Kennedy said Raftelis Financial Consultants were hired to review the capacity fees developed by Willdan Financial. He explained Willdan Financial were not able to understand the relationship between the District's capacity of future water rates, which would be used to capture over usage by the customers and have them pay their fair share. He pointed out Raftelis Financial developed the District's water rates and their expertise in this area would assist in making sure the District's goals are achieved legally. Discussion ensued.

## 12. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED ENGINEERING SERVICES COMMITTEE MEETING

The following items were suggested for the next scheduled Committee Meeting:

- Admin Code Changes
- AMI
- ABM Meter Testing
- Pump Station Design Standards

13. ADJOURNMENT

The meeting adjourned at 5:10 p.m.

[^1]
## BOARD OF DIRECTORS

March 28, 2017


#### Abstract

SUBJECT CONSIDER APPROVAL OF A MASTER SALES AGREEMENT WITH ITRON INC FOR THE PROCUREMENT OF ADVANCED METERING INFRASTRUCTURE (AMI) METER READING HARDWARE, SOFTWARE, AND IMPLEMENTATION SERVICES FOR A PILOT PROJECT TO DEMONSTRATE FEASIBILITY OF AN AMI SYSTEM THAT WOULD OPERATE USING SAN DIEGO GAS AND ELECTRIC'S METER NETWORK


## BACKGROUND

Until several years ago, all water meters at RMWD were read by hand, with meter readers walking and driving routes each month and recording water consumption. Over the last several years about $75 \%$ of the meters have been converted to a drive-by Automated Meter Reading (AMR) system. In an AMR system, a meter reader collects consumption data using data loggers that report consumption from the meter to a truck mounted radio. He or she drives around and picks up read data very quickly as compared to manual reads, thus reducing labor costs. AMR systems deliver the same one read per month as manual reads. About 25\% of the District is still read by hand.

Over the last five years, the meter reading industry has been shifting from AMR to Advanced Metering Infrastructure (AMI). AMI systems distinguish themselves from AMR because they collect and transmit much more data. Rather than one meter read per month, AMI systems use radio based endpoints to record the meter reads at intervals as short as every 15 minutes and report that data back to the office up to several times per day. These systems can monitor for leaks in customer lines that show up as constant consumption during nighttime hours when usage should be zero. This will allow us to alert customers to leaks so that they can take appropriate action.

Having more consumption data will also allow the District to begin the process of establishing District Metered Areas (DMAs). DMAs are carefully defined areas of the distribution system where we carefully measure the inflow water to a DMA and then record the consumption at the customer meters. These values are compared to make sure that water loss is not occurring through either leaks in pipelines or inaccuracy in meters. Water loss costs the District between $\$ 1$ Million and $\$ 2$ Million per year and DMAs are a primary method of identifying areas where additional work is needed either on pipelines or meters.

AMI systems also operate using fixed base radio collectors. Towers need to be erected to collect data from many meters with each tower able to collect thousands of meters. Tower placement is critical and our topography makes radio propagation difficult. Each tower is expensive to install and maintain over time and comes with visual impacts to neighbors. Towers need to be 60 feet tall to work correctly. This is a significant issue for AMI deployment in our area.

During the Strategic Planning process, the completion of an AMI feasibility study was identified as a key objective of Strategic Focus Area Five: Customer Service. District staff has met with every major, and even a few minor, supplier of AMI hardware and software to identify the most cost effective products on the market. Vendors included Itron, Sensus, Neptune, Mega-Net, Verizon, Suez Group, and T2

Technologies. Several propagation studies were performed to estimate how many towers would be needed and the results were not promising.

The lowest number of towers is expected to be between 15 and 20 towers to get $99 \%$ coverage of meters, but the highest estimate was 80 towers. Verizon's solution did not include District owned towers, but their proposed system uses a radio network that may not be in service past 2021.

Once the number of towers exceeds 15 or so, the cost effectiveness of this system comes into question. In addition, the environmental and permitting process to erect many towers make systems that use a large number of towers potentially infeasible.

As we were working through these options, our current AMR vendor, Itron, approached us about a new technology that would require no towers for the District. As a point of comparison, Itron had estimated that with their older technology, an AMI system would require over 50 towers. Their new technology, called Open Way Riva had the ability to communicate with SDG\&E's electric meters and fixed based system that is already in place for the electric and gas systems. Itron supplies over 1.3 million meters to SDG\&E and each of these has an AMI connection to SDG\&E's network.

In this approach, our water meters would send a signal to the nearest SDG\&E pole mounted collector. If one was not nearby, the technology will allow water meters to create a mesh network to pass the data along from meter to meter until they get to a pole mounted collector. While it is not the primary method of collecting data, the technology will even allow our water meter to "talk" to the electric meter to send the data along. If SDG\&E has no radio collectors in the area, the system can even send the data along the power lines.

## DESCRIPTION

Over the last year, District staff and legal counsel have worked through two agreements. The first was with SDG\&E in which detailed negotiations took place on how this sort of system would work. In this agreement (attached), SDG\&E allows us to use their network for the purpose of the pilot testing. SDG\&E was very up front with us during the negotiation process and was careful to make sure that we kept a larger deployment in mind should the pilot succeed. We did not want to have to renegotiate the contract terms if and when we moved to full scale. While the Board and Board Committees were appraised of the process of negotiations, since this pilot test contract was well within the GM approval authority, there was no specific action required by the Board to approve the contract.

The contract with Itron took several months of sometimes excruciating negotiations to reach the current state. The primary driver of the negotiations from our side was a warranty provision that protects our ratepayers in the event of large scale failure of this newer technology. When operating complex systems, there is always some non-zero risk of failure that we must accept. The standard warranty provisions from Itron warrant the performance of the product and allows for free replacement during the first ten years followed by an additional ten year pro-rated warranty.

While these sorts of warranty terms are fine for "normal" failure rates, once the failure rate goes up the cost of our labor to drive out and replace endpoints, both in real dollars and opportunity cost, begins to become rather large. For instance, if the pilot works and we eventually install nearly 8000 endpoints and some manufacturing or software defect renders half of them unusable, we would have hundreds of thousands of dollars in labor costs to replace them. Like many manufacturers who limit their liability to the marginal unit manufacturing cost of the replaced endpoint, Itron did not want to provide warranty terms that included labor costs should failure rates exceed a given threshold. This was a material term of any warranty that we would accept.

After lengthy back and forth discussions and negotiations, Itron finally agreed that should more than 4\% of all endpoints fail in any given 12 month period, Itron will pay the District $\$ 15$ for each endpoint above that threshold to cover some of our labor expenses to perform the replacement - in addition to providing a replacement endpoint. This warranty labor cost coverage extends for ten years from the date of
installation. To our knowledge, this is the first time Itron has ever agreed to such terms with any customer. We had initially asked for more than $\$ 15$ but that was as high as Itron was willing to go. If we do see large scale replacements, it is expected that our crews can replace several per hour, so the $\$ 15$ per endpoint should cover the majority of our labor associated with replacement.

The contract with Itron includes costs that exceed the GM approval authority. While the costs for the endpoints is well within the GM's approval authority, the setup costs are not. This is also a point of contention that as of the writing of this Action Letter we are working with SDG\&E and Itron to resolve. We are purchasing 300 endpoints for about $\$ 22,000$ but are paying a setup and services cost of over $\$ 90,000$. The setup cost is a one time fee that will cover the entire deployment, so no additional costs would be required should the pilot succeed and the full scale project move forward. Itron's main negotiator has held firm on this issue to date but discussions are continuing.

## POLICYISTRATEGIC PLAN KEY FOCUS AREA

Strategic Focus Area One: Water Resources - AMI systems aid in conservation efforts and water loss management which reduces our dependence on imported water

Strategic Focus Area Two: Asset Management - AMI systems will aid in the deployment of District Metered Areas which will allow us to identify leaks in our system and schedule asset rehabilitation.

Strategic Focus Area Five: Customer Service - AMI systems will provide much greater detail to customers about their consumption habits and allow us to spot costly leaks to help reduce high water bills due to customer leaks.

## BOARD OPTIONS/FISCAL IMPACTS

Funds for the AMI project were included in the 2016-2017 budget. As the Board is aware, we are also working with another firm, ABM, on an innovative meter replacement project that should result in increased revenue from sales lost through inaccurate meters. This study is currently underway, but early indications are that a full scale deployment of an AMI system could be financed through these increased revenues. With that said, the current five-year capital spending plan includes funds to implement the project without the ABM financing system should that not prove feasible.

Staff presents the following Board options:

1. Approve the contract with Itron as presented.
2. Suggest revisions to the Itron contract and direct staff to renegotiate the contract.
3. Reject the contract and the SDG\&E AMI system entirely.

## STAFF RECOMMENDATION

## Staff recommends Options 1 or 2.



## MASTER SALES AGREEMENT TERMS AND CONDITIONS

This Master Sales Agreement (the "Agreement") is made and entered into as of March 10, 2017 (the "Effective Date") by and between Itron, Inc., a Washington corporation with a principal place of business at 2111 N. Molter Road, Liberty Lake, Washington 99019 ("Itron"), and Rainbow Municipal Water District, a California Municipal Water District formed pursuant to the Municipal Water District Law of 1911("Customer"). Itron and Customer are individually referred to herein as a "Party" and are collectively referred to as the "Parties."

1. Scope. This Agreement sets forth the terms governing all Technology \& Services Addenda, and attachments thereto, under this Agreement. The attached Transaction Summary identifies which Addenda are made a part of this Agreement.
2. Technology \& Services Addenda. Technology \& Services Addenda may set forth additional terms and conditions applicable to specific products and services purchased by Customer. In the event of a conflict between this Agreement and an Addendum, the Addendum will control to the extent necessary to resolve the conflict.
3. Purchase Orders. All purchase orders will be governed by the terms of this Agreement. Preprinted terms on a purchase order will be null and void, and no contingency, addition, or conflicting term contained on any purchase order will be binding upon Itron.

## 4. Fees, Taxes, and Payment.

4.1. Fees. Fees will be specified in a pricing summary made a part of this Agreement. Itron reserves the right to modify the pricing summary from time-to-time during the term of this Agreement upon thirty (30) days' prior written notice to Customer for any new purchase orders.
4.2. Taxes. Prices and charges for products and services are exclusive of taxes, levies, duties and similar governmental assessments ("Taxes"), all of which are the responsibility of Customer to pay. Customer is responsible for paying all Taxes applicable to transactions. If Itron has the legal obligation to pay or collect Taxes for which Customer is ultimately responsible, the appropriate amount shall be invoiced to and paid by Customer, unless Customer provides a valid tax exemption certificate or direct pay permit authorized by the appropriate taxing authority. Itron is solely responsible for taxes assessable against Itron based on its income, property and employees.
4.3. Payment. All purchase orders are subject to credit approval. Payment is due net thirty (30) days from the date of invoice. All payments shall be made in US currency. Late payments shall accrue interest from the due date at the rate of $1.0 \%$ of the outstanding balance per month, or the maximum rate permitted by law, whichever is less, until the date paid, and Itron may condition future renewals and purchase orders on payment terms shorter than thirty (30) days. Upon written notice to Customer that payment is past due and owing, provided as described in section 5.2, Customer shall either remit the requested payment within five (5) days of receipt of such written notice, or shall be considered in breach of this Agreement.

## 5. Term and Termination.

5.1. Term. The term of this Agreement begins on the Effective Date and continues for a period of five (5) years and shall automatically renew for one (1) year periods -not to exceed three (3) automatic renewals, totaling a maximum of three (3) years from the date that this Agreement expires- unless either Party provides ninety (90) days' prior written notice to the other Party of its intent not to renew prior to the applicable expiration date.

[^2]5.2. Termination for Cause. Other than Customer's nonpayment, which shall constitute a breach of this Agreement if full payment is not received within five (5) days of written notice, either Party may terminate this Agreement by providing the other Party with written notice, as described herein, if the other Party (i) becomes insolvent, executes a general assignment for the benefit of creditors or becomes subject to bankruptcy or receivership proceedings; (ii) breaches its obligations related to the other Party's confidential information; or (iii) commits a material breach of this Agreement that remains uncured for thirty (30) days following delivery of written notice of such breach (including, but not necessarily limited to, a statement of the facts relating to the breach or default, the provisions of this Agreement that are in breach or default and the action required to cure the breach or default). Any written notice provided pursuant to this section shall be provided to the person and in the manner specified in Section 4.3 as the contact person for each Party. A written notice of breach shall also constitute a notice to cure and shall specify that the Party who is in breach has thirty (30) days from the date that the notice to cure is received to rectify the breach.

## 6. Confidentiality.

6.1. Definitions. (A) "Confidential Information" means (1) this Agreement and the discussions, negotiations and proposals related to this Agreement and (2) information, whether provided directly or indirectly from the other Party in writing, orally, by electronic or other data transmission or in any other form or media or obtained through on-site visits at Itron or Customer facilities and whether furnished or made available before or after the date of this Agreement, that is confidential, proprietary or otherwise not generally available to the public. Confidential Information does not include information that is: (a) rightfully known to the receiving Party before negotiations leading up to this Agreement; (b) independently developed by the receiving Party without relying on the disclosing Party's Confidential Information; (c) part of the public domain or is lawfully obtained by the receiving Party from a third party not under an obligation of confidentiality; or (d) free of confidentiality restrictions by agreement of the disclosing party. (B) "Receiving Party" means the Party receiving Confidential Information. (C) "Disclosing Party" means the Party disclosing Confidential Information to the other Party. (D) Nothing in this section or elsewhere in this Agreement shall prevent or impede Customer's adherence to its obligations arising under either State or Federal law, including, but not limited to, disclosure requirements of the California Public Records Act.
6.2. Obligations. The Receiving Party will keep Confidential Information of the Disclosing Party strictly confidential and will not disclose it to any third party during the term of this Agreement and for a period of three (3) years after termination or expiration of this Agreement. This section shall not apply to Confidential Information subject to disclosure under the California Pulic Records Act. Customer shall invoke any exemption to disclosure that properly applies to the Confidential Information, but in no case shall Customer violate its public disclosure obligations under State or Federal law. Itron shall have the right to object to the disclosure of Confidential Information, or to file an action in the appropriate court of law to prevent the disclosure of Confidential Information. If Customer believes that a Public Records Act request implicates Confidential Information, Customer shall provide written notice to Itron of that fact and shall identify the Confidential Information that Customer believes is subject to disclosure a minimum of fifteen (15) days before disclosing any such Confidential information.
6.3. Permitted Disclosure. The Receiving Party may disclose Confidential Information to its affiliates, agents, contractors, and legal representatives, but only if they have a need to know and an obligation to protect the Disclosing Party's Confidential Information that is at least as restrictive as the confidentiality provisions of this Agreement.
6.4. Return of Confidential Information. The Receiving Party will destroy or return the Disclosing

Party's Confidential Information within fourteen (14) days after receipt of the Disclosing Party's written request to do so. With the exception of Customer Data (as defined in Section 7), the Receiving Party may retain a copy of Confidential Information as part of archival records (including backup systems) the Receiving Party keeps in the ordinary course of business, or if required by law or regulation; provided however, that any Confidential Information so retained will continue to be Confidential Information pursuant to the terms of this Agreement and the Receiving Party will continue to be bound by the terms of this Agreement with respect to such Confidential Information.

## 7. Privacy.

7.1. General. If, in the course of providing any services, Itron has or obtains, to any extent and for any reason, any access to Customer Data, then the terms and conditions of this Section 7 will apply.
7.2. Definition of Customer Data. "Customer Data" means any information about existing or prospective customers that Itron acquires, develops, or derives in the course of fulfilling its obligations under this Agreement. Customer Data may include, without limitation, any personally identifying information relating to an existing or prospective customer, or any other information that, either individually or when combined with other information could be used to derive information specific to a particular customer or prospective customer, which information is not generally available to the public and which Itron acquires or derives in carrying out its obligations under this Agreement. Customer Data includes, but is not limited to, information regarding a User's identity social security number, telephone number, credit card number, e-mail address, account information, service purchase and usage information.
7.3. Use of Customer Data. Itron may only collect, access, use, maintain, or disclose Customer Data to fulfill its obligations under this Agreement. Customer exclusively owns all Customer Data and Itron agrees to return, or at the election of Customer, destroy (and confirm in writing the destruction) all Customer Data upon the termination or expiration of this Agreement, or earlier if requested to do so in writing by Customer.
7.4. Reservation of Rights to Customer. Subject to the limited rights granted by Customer hereunder, Itron acquires no right, title, or interest from Customer, or its licensors under this Agreement, in or to Customer Data, including any Intellectual Property (defined below) rights in that Customer Data.
7.5. Safeguards. Itron will employ administrative, physical, and technical safeguards that are reasonably designed to prevent unauthorized collection, access, disclosure, and use of Customer Data while in its custody ("Safeguards"). The Safeguards Itron employs must: (1) meet, at a minimum, industry practice; and (2) be reasonably designed to ensure that only Itron personnel with a need to know the Customer Data have access to it. Itron will promptly notify Customer of any known breach of any Safeguards, and Itron and Customer will cooperate to investigate and remedy any such breach and any related dispute, inquiry, or claim.
7.6. Miscellaneous. This Section 7 supplements Section 6 ("Confidentiality"), and the provisions of this Section 7 control if they conflict with Section 6 ("Confidentiality"). A breach of any Customer Data provision may result in irreparable harm to Customer, for which monetary damages may not provide a sufficient remedy, and for which Customer may seek both monetary damages and equitable relief.
8. Publicity. Other than pursuant to a lawful request under the California Public Records Act, or through the normal publication of this agreement in the Board of Director Agenda Packet prepared and required for approval of this Agreement, neither Party shall disclose, advertise, or publish the detailed terms and conditions of this Agreement without the prior written consent of the other Party. Any press release or publication regarding this Agreement or deliverables under it are presumed by the Parties to contain Confidential Information and is subject to prior review and written approval of the Parties. Both

Parties agree that this Agreement constitutes a Public Record under California Law.

## 9. Warranties.

9.1. Services \& Deliverables Warranties. Express warranties for products and services (the "Express Warranties") will be stated in the applicable Addenda for the period stated therein (the "Express Warranty Period").
9.2. CERTAIN WARRANTY EXCLUSIONS. THE WARRANTIES UNDER THIS AGREEMENT AND THE ADDENDA DO NOT COVER PROBLEMS CAUSED BY EXTERNAL CAUSES, INCLUDING ACCIDENTS, ACTS OF VANDALISM, ABUSE, MISUSE, INADEQUATE MAINTENANCE, UNKNOWN OR UNFORESEEN ELECTROMAGNETIC DISTURBANCES ON THE NETWORK, PROBLEMS WITH ELECTRICAL POWER, OR WITH THE QUALITY OF THE WATER, THE ENERGY OR THE NETWORK, ACTS OF GOD, SERVICE (INCLUDING INSTALLATION OR DE-INSTALLATION) NOT PERFORMED OR AUTHORIZED BY ITRON.
9.3. DISCLAIMER OF WARRANTIES. WARRANTIES UNDER THIS AGREEMENT, TOGETHER WITH ALL EXPRESS WARRANTIES CONTAINED IN ANY ADDENDUM, STATEMENT OF WORK, OR OTHERWISE INCORPORATED IN THIS AGREEMENT, CONSTITUTE AND EXPRESS THE ENTIRE STATEMENT OF THE PARTIES WITH RESPECT TO WARRANTIES. THE PARTIES DISCLAIM ALL EXPRESS OR IMPLIED WARRANTIES, CONDITIONS OR REPRESENTATIONS INCLUDING, WITHOUT LIMITATION, (I) WARRANTIES OF TITLE AND AGAINST INFRINGEMENT AND (II) WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE. TO THE EXTENT ANY IMPLIED WARRANTY CANNOT BE EXCLUDED, SUCH WARRANTY IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD.
10. Insurance. During the term of this Agreement, Itron will maintain the following minimum levels of insurance (i) workers' compensation insurance for Itron employees equal to applicable statutory limits and an employer's liability policy in an amount not less than $\$ 1,000,000.00$; (ii) an occurrence form commercial general liability policy or policies in an amount not less than $\$ 1,000,000$ per occurrence and $\$ 2,000,000.00$ aggregate; (iii) an automobile liability policy or policies in an amount not less than $\$ 1,000,000.00$ combined single limit; and (iv) a professional liability policy or policies insuring against liability for errors and omissions covering professional activities contemplated under this Agreement in an amount not less than $\$ 1,000,000.00$. Upon written request, Itron will provide Certificates of Insurance evidencing the coverage described in this Section.

## 11. Limitation of Liability.

11.1. NO CONSEQUENTIAL DAMAGES. NEITHER PARTY WILL BE LIABLE HEREUNDER TO THE OTHER PARTY FOR CONSEQUENTIAL, INDIRECT OR PUNITIVE DAMAGES (INCLUDING LOST PROFITS OR SAVINGS) FOR ANY CAUSE OF ACTION, WHETHER IN CONTRACT, TORT OR OTHERWISE, EVEN IF THE PARTY WAS OR SHOULD HAVE BEEN AWARE OF THE POSSIBILITY OF THESE DAMAGES, EXCEPT THAT THE FOREGOING WILL NOT RESTRICT A PARTY'S ABILITY TO RECOVER ACTUAL DAMAGES FOR BREACH OF THIS AGREEMENT, INCLUDING THE COSTS OF OBTAINING REPLACEMENT SERVICES AND DELIVERABLES COMPLYING WITH THE TERMS OF THIS AGREEMENT.

## 12. Indemnification Against Third Party Claims.

12.1. General Claims. Itron agrees to defend Customer and Customer's successors and assigns, officers, directors, employees, representatives, and agents ("Customer Indemnitees") from and against any and all third-party claims, demands, suits, actions, causes of action, of any kind whatsoever (together a "Claim"),
and Itron will indemnify and hold harmless Customer Indemnitees from and against all damages, losses, costs and/or expenses (including legal fees and disbursements) awarded against Customer in any such Claim, or those costs and damages agreed to by Itron in a monetary settlement of such Claim, to the extent such claim results from damages to persons or real or tangible property, bodily injury or death caused by Itron's negligence or misconduct (including that of its employees, agents, and contractors) arises in connection with this Agreement.
12.2. Infringement Claims. Itron shall defend the Customer Indemnitees from and against any and all claims, demands, suits, actions, causes of action, of any kind whatsoever, for damages, losses, costs and/or expenses (including legal fees and disbursements) by a third party to the extent resulting from any allegation that any Itron Deliverables and/or Services constitute a direct infringement, violation or misappropriation of any such third party's Intellectual Property rights. The foregoing does not apply to products that are not manufactured by Itron or to software licensed by third parties.
12.3. Conditions to Infringement Claim Defense. Itron's infringement defense obligations under Section 12.2 are conditioned on Customer's agreement that if the applicable product or service becomes, or in Itron's opinion is likely to become, the subject of such a claim, Itron will have the right, at Itron's sole option and expense, either to procure the right for Customer to continue using the affected product or service or to replace or modify the same so that it becomes non-infringing. Such replacements or modifications will be functionally equivalent to the replaced product or service. If the foregoing alternatives are not available on terms that are commercially reasonable in Itron's sole judgment, Itron shall have the right to require Customer to cease using the affected product or service in which case Itron will refund to Customer the depreciated value of the affected product or the unused portion of the service, as the case may be. An alternative shall not be considered commercially unreasonable if it can be provided to Customer within $10 \%$ of the cost of the procurement and supply of Itron's infringing Deliverable and/or Services.
12.4. Exclusions to Infringement Claim Defense. Itron shall have no obligation under this Agreement to the extent any claim of infringement or misappropriation results from: (i) use of a product or service, other than as permitted under this Agreement or as intended by Itron, if the infringement would not have occurred but for such use; (ii) use of any product or service in combination with any other product, equipment, software or data, if the infringement would not have occurred but for such combination; (iii) any use of any release of a software or any firmware other than the most current release made available to Customer, (iv) any claim based on Customer's use of a product after Itron has informed Customer of modifications or changes to the product required to avoid such claims and offered to implement those modification or changes, if such claim would have been avoided or mitigated by the implementation of Itron's suggestions, (v) any modification to a product made by a person other than Itron or an authorized representative of Itron, or (vi) compliance by Itron with specifications or instructions supplied by Customer. Itron shall not be liable hereunder for enhanced or punitive damages that could have been avoided or reduced by actions within the control of Customer.
12.5. Conditions to Defense. As a condition to Itron's defense obligations under this Agreement, Customer will provide Itron with prompt written notice of the claim, permit Itron to control the defense, settlement, adjustment or compromise of the claim and provide Itron with reasonable assistance in connection with such defense; however, Itron shall not consent to any judgment or settlement of the foregoing, that creates an obligation on any Customer Indemnitee without first obtaining such indemnitee's prior written consent. Customer may employ counsel at its own expense to assist it with respect to any such claim.

### 12.6. THIRD PARTY CLAIM DISCLAIMER. THIS SECTION CONSTITUTES ITRON'S SOLE AND EXCLUSIVE OBLIGATION WITH RESPECT TO THIRD PARTY CLAIMS BROUGHT AGAINST CUSTOMER.

## 13. Intellectual Property.

13.1. Definition. "Intellectual Property" means intellectual and industrial property rights, and moral rights or similar or analogous proprietary rights, pertaining to a particular invention, work of authorship, symbol or other mark or designation indicative of source or quality, or other particular item of tangible or intangible property, arising under statutory or common law or by contract, in the United States or another country that recognizes such rights, whether or not perfected, now existing or hereafter filed, issued, or acquired, including: (i) patent rights associated with an invention and processes (including business processes), methods and apparatuses entailed by such invention (including, as applicable, the rights to make, use, sell, offer to sell, import , or have made, and the rights to file and prosecute patent applications and provisional patent applications); (ii) rights associated with works of authorship, including copyrights and mask work rights (including the rights to copy, adapt, distribute, display, perform, and create derivative works); (iii) rights relating to the protection of trade secrets and confidential information (including the rights to use and disclose); (iv) trademarks, service marks, trade dress, trade names, and design patent rights (including the right to goodwill appertaining thereto); (v) moral rights; and (vi) other rights analogous, similar, or comparable to those described by the foregoing clauses (i) through (v), and other proprietary rights relating to intangible property (including licensing rights and shop rights).
13.2. Reservation of Intellectual Property Rights. Itron reserves all rights, title and interest in and to all of its Intellectual Property. Customer reserves all rights, title and interest in and to all of its Intellectual Property.
13.3. Suggestions. Itron shall have a royalty-free, worldwide, irrevocable, perpetual license to use and incorporate into its products and services any suggestions, enhancement requests, recommendations or other feedback provided by Customer, so long as those suggestions, enhancement requests, recommendations, or other feedback do not include Customer's Confidential Informaiton or Customer Data.

## 14. Change Requests \& Change Orders.

14.1. Request. Customer may at any time, and from time to time, propose changes to Itron Deliverables and/or Services or request that Itron perform additional services for Customer (each a "Change Request"). Within a reasonable period after receiving a written Change Request from Customer, Itron will prepare and submit a written proposal in the form of a statement of work to Customer that: (i) if applicable, assesses the expected impact of the Change Request on any Itron Deliverables and/or Services being provided at the time of the request; (ii) defines and describes how Itron would fulfill or satisfy the Change Request, and describes any additional Itron Deliverables and/or Services to be provided by Itron in reasonable detail; (iii) sets forth pricing, specifications, implementation plans and time schedules, with appropriate milestone and completion dates, anticipated by Itron in connection with fulfilling the Change Request; (iv) contains proposed completion and acceptance criteria; and (v) sets forth any other information required by this Agreement and any Technology \& Services Addendum.
14.2. Response. If Itron timely submits a response to the Change Request, the Parties will attempt in good faith to negotiate a mutually acceptable resolution. Mutually agreed upon Change Requests will take the form of a written order (each a "Change Order"). Following the issuance of any Change Request and during any negotiation, Itron will continue to provide the existing Itron Deliverables and/or Services, unless otherwise agreed to by Itron and Customer in writing.
14.3. Failure to Respond to Change Request. If Itron fails to respond to Customer's Change Request within five (5) business days, the Change Request will be deemed to be rejected.
14.4. Authorized Approvals. No Change Order will be binding upon Customer or Itron unless executed
and delivered by an authorized signatory of both parties. All Change Orders and all statements of work under a Change Order will be governed by the terms and conditions of this Agreement and the applicable Technology \& Services Addendum.

## 15. Dispute Resolution.

15.1. Dispute Resolution Procedure. The Parties will resolve any dispute between the Parties regarding the interpretation of this Agreement or Itron's performance using the procedures in this Section.
15.1.1. Either Party may give the other Party written notice of any dispute not resolved in the normal course of business. Upon delivery of the notice, each of the Parties will appoint a designated representative who does not devote substantially all of his or her time to performance under this Master Solution Agreement and who, in the case of Customer, will be the General Manager, and in the case of Itron, a director (or more senior corporate officer), to meet for the purpose of resolving the dispute.
15.1.2. The representatives will discuss the problem and negotiate in good faith to resolve the dispute promptly and without the necessity of any formal proceeding. If either Party intends to have an attorney attend a meeting, it will notify the other Party at leastseven (7) business days before the meeting to enable the other Party to also be accompanied by an attorney. All negotiations pursuant to this Section are confidential and will be treated as compromise and settlement negotiations for purposes of evidentiary rules.
15.1.3. If the disputed matter has not been resolved by the designated representatives within thirty (30) business days after delivery of the written notice by one Party to the other, or such longer period as agreed to in writing by the Parties, each Party will have the right to commence any legal proceeding as permitted by law.
15.2. Agreements in writing. No agreement achieved under this dispute resolution process will be binding on either Party unless set forth in a writing executed by both Parties by duly authorized signatories.
15.3. No Termination or Suspension of Services. During the pendency of any dispute, Itron will not interrupt or delay the provision of Services, disable any Deliverable in whole or in part, or perform any other action that prevents, slows down, or reduces in any way the provision of Services or Customer's ability to conduct its business, unless Customer agrees in writing or terminates this Master Solution Agreement.
15.4. Injunctive relief. Neither Party will be obligated to follow the procedures set forth in this Section when seeking injunctive relief.

## 16. Miscellaneous.

16.1. Entire Agreement. This Agreement, the various Technology and Services Addenda, and any attachments thereto constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede all previous agreements pertaining to such subject matter. All prior agreements, representations, warranties, statements, negotiations, understandings, and undertakings are superseded hereby and Customer represents and acknowledges that it has not relied on any representation or warranty other than those explicitly set forth in this Agreement in connection with its execution of this Agreement. Neither Party shall be bound by terms and conditions imprinted on or embedded in purchase orders, order acknowledgments, statements of work not expressly made a part hereof or other communications between the Parties.
16.2. Waivers. No delay or failure to require performance of any provision of this Agreement shall constitute a waiver of that provision. No waiver granted under this Agreement as to any one provision herein shall constitute a subsequent waiver of such provision or of any other provision herein, nor shall it constitute the waiver of any performance other than the actual performance specifically waived.
16.3. No Assignment. This Agreement is personal to each Party, and none of the rights of a Party hereunder shall be sold, transferred, assigned or sublicensed by a Party; provided, however, that upon written notice to Customer, Itron shall have the right to assign, by contract or by operation of law, any or all of its rights and obligations under this Agreement to a Itron Affiliate without any requirement that Itron seek or obtain the approval of Customer. "Itron Affiliate" means an entity controlled by or under common control with Itron.
16.4. Captions; Section Numbers. Article, section and paragraph numbers and captions are provided for convenience of reference and do not constitute a part of this Agreement. Any references to a particular Section of this Agreement will be deemed to include reference to any and all subsections thereof.
16.5. Neither Party Deemed Drafter. Despite the possibility that one Party or its representatives may have prepared the initial draft of this Agreement or any provision or played a greater role in the preparation of subsequent drafts, the parties agree that neither of them will be deemed the drafter of this Agreement and that, in construing this Agreement, no provision hereof will be construed in favor of one Party on the ground that such provision was drafted by the other.
16.6. Expenses. Each Party will be responsible for, and will pay, all expenses paid or incurred by it in connection with the planning, negotiation, and consummation of this Agreement.
16.7. Anti-Corruption. Customer has not received or been offered any illegal or improper bribe, kickback, payment, gift, or thing of value from an Itron employee or agent in connection with this Agreement. Reasonable gifts and entertainment provided in the ordinary course of business do not violate the above restriction. If Customer learns of any violation of the above restriction, it will use reasonable efforts to promptly notify Itron's Law Department via the contact information in the notices section.
16.8. Relationship of the Parties. The Parties are independent contractors for all purposes and at all times. This Agreement does not create a partnership, franchise, joint venture, agency, fiduciary, or employment relationship between the Parties. Itron has the responsibility for, and control over, the methods and details of performing services and providing products under this Agreement. Itron will provide all tools, materials, training, hiring, supervision, work policies and procedures, and be responsible for the compensation, discipline and termination of Itron personnel. Neither Party has any authority to act on behalf of, or to bind the other to any obligation.
16.9. Compliance with Law. Itron and Customer will at all times perform their respective obligations under this Agreement in compliance in all material respects with all applicable, domestic, state, and local laws and regulations of all applicable foreign and domestic jurisdictions, and in such a manner as not to cause the other to be in material violation of any applicable laws or regulations including any applicable requirements of any foreign, domestic, state, or local authority regulating health, safety, employment, the environment, consumer protection, security, exportation, information services, or telecommunications.
16.10. Governing Law. This Agreement and performance hereunder will be governed by and construed in accordance with the laws of the State of Washington without reference to their conflicts of law principles or the United Nations Convention on Contracts for the Sale of Goods.
16.11. Forum Selection. The Parties agree that all actions and proceedings arising out of or related to this Agreement, except as necessary to enforce indemnity or defense obligations, will be brought only in in the United States District Court for the Eastern District of Washington. The Parties hereby consent to such
venue and to the jurisdiction of such courts over the subject matter of such proceeding and themselves.

### 16.12. Jury Trial Waiver.

### 16.12.1. EACH PARTY WAIVES ITS RIGHT TO A JURY TRIAL IN ANY COURT ACTION ARISING AMONG THE PARTIES UNDER THIS AGREEMENT OR OTHERWISE RELATED TO THIS AGREEMENT, WHETHER MADE BY CLAIM, COUNTERCLAIM, OR OTHERWISE.

16.12.2. If the jury waiver is held to be unenforceable, the Parties agree to binding arbitration for any dispute arising out of this Agreement or any claim arising under any federal, state or local statutes, laws, or regulations. The arbitration will be conducted in accordance with the arbitration rules promulgated under the CPR Institute for Dispute Resolution's ("CPR") Rules for NonAdministered Arbitration of Business Disputes then prevailing. To the extent that the provisions of this Agreement and the prevailing rules of CPR conflict, the provisions of this Agreement will govern. The arbitrator(s) will be required to furnish, promptly upon conclusion of the arbitration, a written decision, setting out the reasons for the decision. The arbitration decision will be final and binding on the parties, and the decision may be enforced by either Party in any court of competent jurisdiction. Each Party will bear its own expenses and an equal share of the expenses of the third arbitrator and the fees, if any, of the CPR.
16.12.3. The Parties' agreement to waive their right to a jury trial will be binding on their respective successors and assignees.
16.13. Notices. Except as otherwise specified in this Agreement, all notices, permissions and approvals hereunder shall be in writing and shall be deemed to have been given upon: (i) personal delivery, (ii) the second business day after mailing, (iii) the second business day after sending by overnight delivery, (iv) the second business day after sending by confirmed facsimile, or (iv), except for legal notices, the first business day after sending by email. All legal notices shall be clearly identified as such. All notices required by this Agreement shall be provided by U.S. Mail to:

Tom Kennedy<br>General Manager<br>Rainbow Municipal Water District<br>3707 Old Highway 395<br>Fallbrook, CA 92028<br>E-mail: tkennedy@rainbowmwd.com<br>Itron Law Department - North America<br>Itron, Inc.<br>2111 N. Molter Rd.<br>Liberty Lake, WA 99019

A duplicate copy of any notices provided pursuant to the requirements of this Agreement may also be provided via email, provided that such notice shall not be effective until the earlier of (a) the second business day after sending via mail, or (b) the second business day after sending overnight delivery.
16.14. Severability. If any provision of this Agreement or its applications to particular circumstances is determined by a court of competent jurisdiction to be invalid or unenforceable, that provision (or its application to those circumstances) will be deemed stricken and the remainder of this Agreement (and the application of that provision to other circumstances) will continue in full force and effect insofar as it remains a workable instrument to accomplish the intent and purposes of the parties; the parties will replace
the severed provision with the provision that will come closest to reflecting the intention of the parties underlying the severed provision but that will be valid, legal, and enforceable.
16.15. Force Majeure. Neither Party shall be liable for any delay or failure in performance due to events outside the defaulting Party's reasonable control, including without limitation acts of God, earthquake, labor disputes, industry wide shortages of supplies, actions of governmental entities, riots, war, terrorism, fire, epidemics, or delays of common carriers or other circumstances beyond its reasonable control. The obligations and rights of the defaulting Party shall be extended for a period equal to the period during which such event prevented such Party's performance.
16.16. No Third Party Rights. This Agreement is entered into only for the benefit of Customer and Itron and no other person or entity shall have the right to enforce any of its terms.
16.17.Authorization. Each Party represents and warrants that the signing, delivery and performance of this Agreement has been properly authorized. Each Party further represents and warrants that the individual signing on the Party's behalf is properly authorized to do so.
16.18.Counterparts. This Agreement may be executed by facsimile or scan and in counterparts, which taken together shall form one legal instrument.
[Signature Page Follows]

## SIGNATURE PAGE

TO
MASTER SALES AGREEMENT
TERMS AND CONDITIONS

## AGREED:

## Itron, Inc.

| Signature |
| :--- |
| Printed Name |
| Title |
| Date |

## Customer

Signature
Printed Name
Title
Date

## TRANSACTION SUMMARY <br> TO <br> MASTER SALES AGREEMENT

| Technology \& Services Addendum to Master Sales Agreement |  |  |  |
| :--- | :---: | :---: | :---: |
| 1. Equipment Purchase \& Warranty Schedule Addendum | $\boxtimes$ |  |  |
| 2. Software License Addendum | $\square$ |  |  |
| 3. Maintenance \& Support Services Addendum | $\square$ |  |  |
| 4. Installation/Implementation Services Addendum | $\boxtimes$ |  |  |
| 5. Cloud Infrastructure Service Addendum | $\square$ |  |  |
| 6. Software-as-a-Service Addendum | $\boxtimes$ |  |  |
| 7. Managed Services Addendum | $\square$ |  |  |
| 8. Managed Services In-Field Maintenance Option | $\square$ |  |  |

## Pricing Summary (Attached)

BMR\# 11542-16 Ver 1 Oct dated October 31, 2016

| Additional Attachments (if applicable) |
| :--- |
| Excessive Failure Rate Attachment to Equipment Purchase \& Warranty Schedule Addendum |
|  |
|  |

Software-as-a-Service Term / Managed Services Term / Cloud Infrastructure Service Term
Minimum 3-Year Term Commitment Required; Minimum Monthly Fee Required
$\square$ Other: Click here to enter text. Years
[Important Note Regarding Minimum Commitment: If Customer terminates the service for convenience prior to the expiration of the minimum commitment period, services fees for the balance of minimum commitment period will be owed by Customer and must be paid within 30 days after the effective date of termination.]
[Renewal: The initial services term will renew automatically without requirement of notice for additional 1-year periods - not to exceed three renewal periods - until either party provides 90-days prior written notice of intent not to renew.]

## Additional Support Services (if applicable)

In addition to standard Maintenance \& Support Services:
$\square$ Advanced Services
[Note: Requires attachment of Advanced Services Addendum.]

| Identification of Licensed Software (if applicable) |
| :--- |
| Application Name |
| Click here to enter text. |
| License Term |
| $\square$ Perpetual <br> $\square$ Fixed Term (Click here to enter text. Years) <br> ( $\square$ Check if fixed term license requires purchase of software maintenance and support services for term <br> of license) |
| License Type |
| $\square$ Tier Limitation (Maximum Usage: Click here to enter text.) |
| $\square$ Other (Description: Click here to enter text. ) (Maximum Usage: Click here to enter text.) |
| Cloud Infrastructure |
| ( $\square$ Check if Cloud Infrastructure Service Option has been selected for this software application.) |

## TECHNOLOGY \& SERVICES ADDENDUM - Equipment Purchase \& Warranty Schedule -

1. Ordering of Equipment. During the term of the Agreement, Customer shall order quantities of equipment by issuing a purchase order to Itron, with a requested ship date agreeable to both Parties - in each case specifying the type and quantity of equipment, the shipment destination and the requested ship date.
2. Firmware. The purchase of equipment manufactured by Itron includes a perpetual, irrevocable license to use and execute any software embedded in the equipment. The license to any software embedded in third party equipment purchased by Customer through Itron shall be between Customer and the manufacturer of such third party equipment.
3. Equipment Invoicing. Itron will invoice Customer for equipment upon shipment.
4. Ordering Lead Time \& Ship Date. The required lead time for equipment manufactured by Itron shall be ninety (90) days between the date Itron receives the purchase order and the ship date, unless (a) otherwise provided in an agreed-upon purchase order, or (b) Itron has notified Customer in advance that a different lead time is required for specific Itron equipment. The required lead time for third party equipment shall be the applicable third party manufacturer's then-current, standard lead time. Itron shall have no obligation to accept any requested ship date that is sooner than the required lead time.
5. Order Cancellation \& Rescheduling. Unless otherwise provided in an agreed-upon purchase order, a purchase order for equipment may not be canceled or rescheduled by Customer.
6. Forecasts. Itron may condition the ninety (90) day order lead time or such other lead time required by Itron under Section 4 ("Ordering Lead Time \& Ship Date") upon Customer providing binding forecasts, at intervals requested by Itron, of Customer's equipment demand.

## 7. Delivery \& Risk of Loss.

7.1 Delivery. Itron shall cause the equipment to be delivered to Customer (or Customer's authorized agent) at customer's expense in accordance with the purchase order and by the specified ship date, provided that all purchase order content and lead time requirements have been met.
7.2 Title and Risk of Loss. Title to equipment and risk of loss or damage will transfer to Customer on the ship date, with the exception that title and risk of loss will transfer to Customer upon delivery where the ship-to location is in Canada.
8. Documentation. Itron shall make its standard product documentation available via download. Itron will provide Customer with download instructions.
9. Inspection by Customer. Customer shall inspect a shipment within a reasonable period of time after receiving shipment - and in all events no longer than seven (7) days - to confirm that the items delivered are the equipment ordered and that the quantity received is the same as the quantity ordered.

## 10. Limited Equipment Warranty.

10.1. Limited Warranty. Itron warrants to Customer that the Itron-manufactured equipment will be free from defects in materials and workmanship and will conform to the applicable specifications for a period of one (1) year from the date of shipment, unless otherwise stated in the attached warranty schedule for Itron-manufactured equipment. For avoidance of doubt, component parts of Itron-manufactured
equipment that are provided by third-party manufacturers and developers - and which are integrated into Itron-manufactured equipment - are covered by this Section 10 warranty.

### 10.2. Repair or Replacement.

10.2.1. Itron reserves the option to repair or replace the Itron-manufactured equipment after Customer has returned non-conforming Itron-manufactured equipment under warranty properly packaged and prepaid to a repair facility designated by Itron in accordance with Itron's then-current RMA procedures (which will be provided to Customer). Itron's warranty under this Section, does not include freight to the Itron designated facilities; however, it does include return freight to Customer's location in the event that the returned unit of Itron-manufactured equipment is determined to be faulty and under warranty.
10.2.2. Labor costs associated with removal or reinstallation of failed equipment at Customer locations, after the initial deployment of equipment, is not included in Itron's warranty under this Section.
10.3. Warranty on Repaired or Replaced Equipment. Repaired and replacement Itron-manufactured equipment will be warranted for the remainder of the original warranty period set forth above, or six (6) months from repair or replacement, whichever is longer.
11. Exclusions to Warranty on Itron-Manufactured Equipment. The above Section 10 warranty on Itron-manufactured equipment does not cover damage due to external causes, including accident, abuse, misuse, inadequate maintenance, problems with electrical power, acts of God; service (including installation or de-installation) not performed or authorized by Itron; usage not in accordance with product instructions or in a configuration not approved by Itron;; and problems caused by use of parts and components that are not supplied by Itron. The warranty provided herein shall be void if the equipment is modified in a way not authorized in writing by Itron.
12. Excessive Failures. The Excessive Failure Rate Attachment to this Addendum describes the Parties' obligations in the event of suspected and actual excessive failures of Itron Equipment, and is hereby incorporated into this Addendum as though set forth in full herein.

## [Warranty Schedule Follows]

## Itron Equipment Warranty Schedule To <br> Supplemental Equipment Purchase Terms

| Product | Warranty Terms |
| :--- | :--- |
| 200W series water endpoints |  |
| including battery) |  | \(\left.\begin{array}{l}Standard Warranty: Full warranty consistent with the warranty <br>

terms in the Agreement for the first 5 years from shipment. <br>
Optional Extended Warranty (if purchased by Customer): <br>
For warranty claims in years 6 through 10, Itron's sole obligation <br>
will be to provide Customer with a discount on replacement product <br>
equal to 100 percent of its then-current list price for the replacement <br>
product. <br>
For warranty claims in years 11 through 15, Itron's sole obligation <br>
will be to provide Customer with a discount on replacement product <br>
equal to 50 percent of its then-current list price for the replacement <br>
product. <br>
For warranty claims in years 16 through 20, Itron's sole obligation <br>
will be to provide Customer with a discount on replacement product <br>
equal to 25 percent of its then-current list price for the replacement <br>
product. <br>
The warranty on Itron water endpoints shall be void if the endpoint\end{array}\right\}\)

|  | For warranty claims in years 11 through 15, Itron's sole obligation <br> will be to provide Customer with a discount on replacement product <br> equal to 50 percent of its then-current list price for the replacement <br> product. <br> For warranty claims in years 16 through 20, Itron's sole obligation <br> will be to provide Customer with a discount on replacement product <br> equal to 25 percent of its then-current list price for the replacement <br> product. |
| :--- | :--- |
| Upgraded handhelds or <br> Mobile Collectors | 90 days from shipment. |

# Excessive Failure Rate Attachment <br> To Equipment Purchase \& Warranty Schedule Addendum 

1. Scope. The terms described in this attachment apply when Itron End Point Equipment that is under warranty and installed in Customer's service territory experience Warranty Failures indicating an Excessive Failure Trend or indicating that an Excessive Failure Threshold has been reached.

### 1.1 Identification of Itron End Point Equipment.

Itron End Point Equipment: Itron OpenWay Riva Water Module - Pit
2. Warranty Failures. A piece of End Point Equipment is classified as a Warranty Failure only after proper ERT Troubleshooting and Investigation, as defined in Itron's manual, have been completed and documented using Itron's approved procedures, which shall be made available to Customer.
3. Excessive Failure Period. The parties' obligations under this attachment begin on the date of the first delivery of End Point Equipment and continue for a period of 10 years (the "Excessive Failure Period").
4. Action Required in the Event of a Suspected Excessive Failure Trend. The term "Excessive Failure Trend," as used herein, means the percentage of Itron End Point Equipment installed in Customer's service territory experiencing a Warranty Failure during any given 12month period during the Excessive Failure Period. The Excessive Failure Trend Percentage is as follows.

## Excessive Failure Trend Percentage: 2\%

If Customer has reason to believe that Itron Endpoint Equipment is experiencing or likely to experience an Excessive Failure Trend, Customer must notify Itron in writing. Itron will then investigate and perform a root cause analysis of the Warranty Failures. Itron will provide Customer with a written report of its findings along with a recommended course of action to address Warranty Failures.

If Itron determines that Warranty Failures are greater than the Excessive Failure Threshold (defined below), then the terms of Section 5 will apply; otherwise, Warranty Failures will be treated under Itron's standard warranty procedures for Itron Equipment.

## 5. Actions Required if Excessive Failure Threshold Met.

The term "Excessive Failure Threshold" means that Itron End Point Equipment installed in the Customer's service territory are experiencing an actual Warranty Failure rate of $4 \%$ or greater.

If Itron's investigation and root cause analysis under Section 4 determine that that (a) Customer's network is operating correctly and under the proper operations and maintenance control as defined by the user's guide, and (b) that the Excessive Failure Threshold had been exceeded, then in addition to Itron's obligations under its standard Itron Equipment warranty, Itron will provide field labor or reimburse Customer for field labor - up to the Field Service Fee amount to install, uninstall, replace, or repair the Itron End Point Equipment in Customer's service territory that are experiencing the Warranty Failures. The Field Service Fee amount shall be $\$ 15$ per unit of Itron End Point Equipment experiencing a Warranty Failure.
Liberty Lake, WA 99019
fax: $866-787-6910$
mw.itron.com
www.itron.com

| Item | Category | Description | Qty | Unit Price | Extended Price | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Endpoints and Network Infrastructure |  |  |  |  |  |  |
| 1 | Endpoint | OpenWay Riva Water Module-Pit | 300 | \$72.00 | \$21,600.00 |  |
| 2 | Endpoint Accessories | OpenWay Riva Through Lid Mount Kit | 300 | \$3.00 | \$900.00 |  |
|  |  | Endpoints and Network Infrastruc |  |  | \$22,500.00 |  |

## Professional Services, Installation Services, and One Time Fees

| 3 | Services | Project Management Services | $\$ 68,460.00$ |
| :--- | :--- | :--- | ---: |
| 4 | Expenses | Travel and Expenses | $(2-3)$ |
| 5 | One Time Fee | OpenWay Operations Center SAAS Setup | $(2-3)$ |
| 6 | One Time Fee | Itron Analytics SAAS Setup | $\$ 13,000.00$ |
|  |  | $\$ 4,333.33$ |  |
|  | Professional Services, Installation Services and One Time Fee Total | $\$ 93,293.33$ |  |

## Notes and Assumptions

(1) Purchase of and Field installation for Field Area Routers (CGR) is the responsibility of SDG\&E.
(2) Professional Services price is based on a 6 month project duration. Itron will create a formal Scope of Work and confirm the Professional Services quoted; a more detailed discussion of project requirements will be conducted with the city.

Itron is responsible for network installation. Customer is responsible for ERT installation. Customer will be responsible for any ongoing lease fees for third-party sites. The actual agreement for placement of the equipment will be between Customer and the third-party owner.
(3) Customer is responsible to provide Master Data Interface configuration information in the defined XML file format. Any charges from the customer's billing vendor to develop the CSV are the responsibility of the customer.
(4) Taxes and freight are not included. Prices are in US dollars. Prices are valid for 90 days.

## Ifrom

2111 N. Molter Rd.
Liberty Lake, WA 99019 BMR\# 11542-16 Ver1 Oct
fax: 866-787-6910
unwiltron.com
Category Description
Quantity Notes

Software as a Service (SaaS)

| Annual Services | OpenWay Operations Center |
| :--- | :--- |
| Annual Services | Itron Analytics Software |

Software as a Service (SaaS) Year 1


## Notes and Assumptions

(1) Software as a Service (SaaS) is based on the total number of Endpoints.

Software as a Services (SaaS) offering that includes software license, software maintenance, IT Administration, IT infrastructure, and backhaul communication fees.
(2) SaaS for OpenWay Operations Center is configured to support Itron's minimum of 2,500 Endpoints for up to 400 days of storage.
(3) SaaS for Itron Analytics is configured to support Itron's minimum of 5,000 Endpoints and 5 years storage of 60 minute interval data.
(4) SaaS is offered for a minimum term of 12 months and will be invoiced annually.

On an annual basis, the Itron Cloud Services Team will assess how many endpoints are being managed by the system. If the endpoint count exceeds the contracted amount by $>5 \%$, Itron will provide client revised pricing.
(5) SaaS for OpenWay Operations Center is configured to support 8,000 Endpoints for up to 400 days of storage.
(6) SaaS for Itron Analytics is configured to support 8,000 Endpoints and 5 years storage of 60 minute interval data.
(7) Utility to perform CGR monitoring and troubleshooting and interrogation monitoring, scheduling and troubleshooting. Utility to perform meter exceptions.
Includes backhaul from CGR to head end. Backhaul charges are based on a system design ratio of 2000 meter to 1 CGR. If the ratio is significantly reduced, additional backhaul charges may apply.
Itron to perform server administration, database administration, local area network administration, monitoring software administration. Includes one production environment only. Additional environments such as Disaster Recovery and Test environments can be quote as options.

# AGREEMENT BETWEEN SOUTHERN SAN DIEGO GAS \& ELECTRIC COMPANY AND THE RAINBOW MUNICIPAL WATER DISTRICT REGARDING PILOT PROGRAM FOR TESTING OF SMART METER INFRASTRUCTURE FACILITIES FOR WATER METER READING SERVICES 

This Agreement between San Diego Gas \& Electric Company ("SDG\&E") and the Rainbow Municipal Water District ("RMWD") Regarding Pilot Program for Testing of Itron Smart Meters for Water Metering Services ("Agreement") is entered into as of<br>$\qquad$<br>$\qquad$<br>$\qquad$ ("Effective Date").

WHEREAS, SDG\&E is an investor-owned public utility that provides energy service through electric meters and natural gas meters to residents in San Diego and Southern Orange Counties;

WHEREAS, SDG\&E has been duly authorized by the California Public Utilities Commission to implement its Smart Meter Program ("Smart Meter Program") and to enter into this Agreement.

WHEREAS, Pursuant to the Smart Meter Program, SDG\&E has installed Itron, Inc. ("Itron") Smart Meters ("Smart Meters") that produce digital electric and gas usage data capable of being transmitted wirelessly.

WHEREAS SDG\&E's Smart Meters wirelessly transmit electric and gas usage data to various network communication devices ("Network Devices") installed on poles, streetlights within public rights-of-way, and other structures, which then transmit the data to a Head End unit, comprised of software and hardware used to store and process such electric and gas usage data ("Head End"), located within an SDG\&E facility for processing (the Network Devices and the Head End, together with their appurtenant antennas and other equipment necessary or convenient for their operation are collectively referred to herein as the "Smart Meter Network").

WHEREAS, SDG\&E's Smart Meter Network may also be capable of successfully receiving data from non-SDG\&E water metering and leak detection devices, such as digital
devices owned by RMWD for leak detection and water usage metering ("Smart Water Devices"), and thereafter deliver the data to a head end owned or contracted for by RMWD;

WHEREAS, RMWD and SDG\&E desire to evaluate whether SDG\&E's Network Devices are capable of transmitting data from RMWD's Smart Water Devices to RMWD's head end; and

WHEREAS, RMWD desires to enter into this Agreement that outlines a joint pilot program designed to test the efficacy of using SDG\&E's Smart Meter Network for RMWD's water meter reading activities (the "Pilot Program"), in accordance with the terms, conditions and other considerations set forth herein.

NOW, THEREFORE, in consideration of the covenants set forth below, the parties agree as follows:

1. System Use License: SDG\&E hereby grants to RMWD and RMWD hereby accepts a revocable license to transmit, from up to three-hundred (300) RMWD Smart Water Devices, digital water meter usage (the "Permitted Use") only through SDG\&E's Smart Meter Network, subject to the terms and conditions contained herein. For reference purposes only, a simplified network architecture diagram is attached as Appendix "A" (incorporated herein by its reference). SDG\&E makes no representation, covenant, warranty or promise that the Smart Meter Network is fit for the Permitted Use, and RMWD is not relying on any such representation, covenant, warranty or promise. Nothing contained in this Agreement shall be deemed or construed to create the relationship of principal and agent or of partnership or of joint-venture or of any association whatsoever between RMWD and SDG\&E. SDG\&E shall be under no obligation or requirement to expand any of its Smart Meter Network to accommodate RMWD's Permitted Use. Notwithstanding the foregoing, any expansion or improvement of the Smart Meter Network requested by RMWD may be considered by SDG\&E. RMWD, at its sole cost and expense, shall be solely responsible for the installation of all equipment necessary in association with this Agreement and shall be responsible for securing any agreement or permit necessary from, and paying any fees imposed by, other parties, municipalities or otherwise for its Permitted Use. SDG\&E, at
its sole cost and expense, however, shall be responsible for the installation of any additional take-out points and shall secure any required permit.
2. Pilot Program Development: Beginning on the Effective Date, the parties, acting in good faith shall undertake certain Pilot Program activities described to be undertaken by SDG\&E in conjunction with water utilities by CPUC Decision 16-06-010 [D.16-06-010] dated June 9, 2016, incorporated fully herein. Indicators of feasibility that will be evaluated shall include, but not be limited to, impacts to SDG\&E's system integrity and performance resulting from RMWD's use, network management impacts, and the transaction costs for the respective parties. Notwithstanding anything to the contrary contained herein, RMWD shall be responsible for any programing work necessary for RMWD's Permitted Use ("Work"), and such Work shall be undertaken at RMWD's sole cost and expense.
3. Term: The term of the Agreement shall commence on the Effective Date and shall terminate on the "Termination Date" which shall be the earlier of: (i) One (1) year from the date of the first Smart Water Device installation by RMWD, or (ii) June 30, 2018. RMWD shall provide written notice to SDG\&E of the date which the first water metering device is installed. The parties acknowledge that this Agreement does not entitle the parties to any subsequent agreement, for any reason whatsoever, regardless of the use or expenditures either party has made pursuant to or in accordance with this Agreement.
4. Consideration: RMWD shall pay to SDG\&E the non-refundable sum of one dollar (\$1.00) ("System Use Fee") upon the Effective Date. The Pilot Program will be reviewed to establish appropriate costs and fees in the event the Pilot Program determines that a follow up joint program is feasible. Any follow up agreement may contain significantly disparate fees, depending upon the information gathered as part of the Pilot Program.
5. Physical Access to Smart Meter Network: RMWD shall not have any routine or regular physical access to SDG\&E's Smart Meter Network components, nor shall it be
allowed to add any network devices to SDG\&Es Smart Meter Network or interface any equipment to SDG\&E's Smart Meter Network without the express written consent of SDG\&E. However, if RMWD determines that circumstances require that it gain physical access to the Smart Meter Network, it shall request, in accordance with Article 14 of this Agreement, such access from SDG\&E, which SDG\&E may provide in its sole and absolute discretion.

If RMWD or SDG\&E believe an additional piece of network equipment is necessary in order to complete the Pilot Program, it shall notify the other party in accordance with Article 14 of this Agreement. Such additional network equipment shall only be installed per mutual written agreement of both parties. The cost associated with the installation and purchase of the equipment would be borne by SDG\&E, as well as any attachment, access, and permitting fees. SDG\&E shall own said additional network equipment.
6. No Disruption of SDG\&E Smart Meter Network: RMWD shall not undertake, or cause to be undertaken, its Permitted Use in a manner that causes any interference with SDG\&E's use of the Smart Meter Network. RMWD shall be responsible for preventing and resolving any technical interference problems caused by RMWD's Permitted Use, and shall be responsible for coordination of work to avoid any such interference with SDG\&E's use of the Smart Meter Network at its sole cost and expense.
7. SDG\&E Not Responsible for any Interference or Disruptions: RMWD acknowledges that its use of SDG\&E's Smart Meter Network is on a continual "as-is" basis. SDG\&E shall not be responsible for any interference with RMWD's Permitted Use, including any interference caused by outages of any kind to SDG\&Es Smart Meter Network, regardless of whether the outages are caused by SDG\&E or the result of activities undertaken or failed to be undertaken by SDG\&E, even if such outage or failures result in the temporary or permanent interference to RMWD's Permitted Use, or damage to any RMWD software or hardware used as part of the Permitted Use. This Agreement does not require SDG\&E to maintain its Smart Meter Network to any particular standard of operation.
8. Insurance: During the term of this Agreement and for a 60 day period thereafter, RMWD shall maintain insurance in accordance with the requirements and amounts set forth in Appendix " B " attached hereto and incorporated herein by this reference.
9. Indemnification: To the fullest extent permitted by law, RMWD shall indemnify, hold harmless and defend, SDG\&E, its parent companies and their respective officers, directors, employees and agents from and against any and all liabilities, claims, losses, obligations, damages, fines, civil penalties, judgments, costs, expenses of any kind or nature including, but not limited to, interest, court costs, and reasonable attorney fees, to the extent arising out of the negligence or intentional misconduct of RMWD or its officers, directors, employees or agents' acts or omissions in breach of this Agreement or negligent or intentional wrongful acts or omissions in connection with this Agreement ("Claim"), except to the extent such Claim arises from the sole negligence or willful misconduct of SDG\&E, its officers, directors, employees or agents.

The duty to indemnify described herein includes, but is not limited to, injury to or death of any person and damages to or destruction of any property, real or personal. The obligations under this section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits paid or payable under any workers' compensation acts, disability benefits acts or employee benefit laws or regulations or any policies of insurance. The indemnification obligations of this section shall survive termination, completion or expiration of this Agreement.
10. Termination of Pilot Program: Notwithstanding the Termination Date set forth in Section 3 above, this Agreement may be terminated by either SDG\&E or RMWD, at any time, for any reason, upon fifteen (15) days written notice. If the Permitted Use interferes with or restricts SDG\&E's ability to provide gas and electric service to its customers, SDG\&E may terminate this Agreement immediately. Obligations under Article 8 and Article 9 of this Agreement survive termination.
11. Non-Possessory Interest: SDG\&E retains full possession of the Smart Meter Network and RMWD will not acquire any interest temporary, permanent, irrevocable, possessory or otherwise by reason of this Agreement, or by the exercise of the Permitted Use herein. RMWD acknowledges that it makes no claim to any such interest.
12. No Waiver: No waiver by SDG\&E of any provision herein shall be deemed a waiver of any other provision hereof. SDG\&E's consent or approval to any act shall not be deemed to render unnecessary the obtaining of SDG\&E's consent to or approval of any subsequent act by RMWD.
13. Attorney's Fees: In the event of any action, suit or proceeding against the other related to this Agreement, the successful party in each action, suit or proceeding shall be entitled to recover from the other party reasonable attorney's fees incurred.
14. Notices: All notices, demands, requests, consents or other communications that this Agreement contemplates or authorizes, or requires or permits either party to give to the other, shall be in writing and shall be personally delivered or mailed or sent by reputable overnight courier, such as FedEx, to the respective party as follows:

## TO RMWD:

Tom Kennedy, General Manager
Rainbow Municipal Water District
3707 Old Highway 395
Fallbrook, CA 92028
TO SDG\&E:

## Jerry D Stewart, Smart Meter Operations Manager

San Diego Gas and Electric
9305 Lightwave Ave (SD1164)
San Diego, CA 92123
Either party may change its address by notice to the other party as provided herein.
Communications shall be deemed to have been given and received on the first to occur of
(i) actual receipt at the offices of the party to whom the communication is to be sent, as designated above, or (ii) three working days following the deposit in the United States

Mail of registered or certified mail, postage prepaid, return receipt requested, or with reputable overnight courier, such as FedEx, addressed to the offices of the party to whom the communication is to be sent, as designated above.
15. Compliance with Laws: RMWD's Permitted Use and all activities undertaken pursuant to this Agreement shall be in accordance with the laws of the United States of America, the State of California and in accordance with all applicable rules and regulations and ordinances of any jurisdiction with authority hereunder.
16. Governing Law: The rights and obligations of the parties under this Agreement will be governed in all respects by the laws of the United States and the State of California, without regard to conflicts of laws principles that would require the application of the laws of any other jurisdiction.
17. Jurisdiction: Each party hereto hereby submits to the sole and exclusive jurisdiction of any state or federal court sitting in San Diego County, California in any action or proceeding arising out of or relating to this Agreement, and hereby agrees that all claims in respect of any such action or proceeding may be heard and determined in such California state court or, to the extent permitted by law, in such federal court. Each party hereto hereby irrevocably waives, to the fullest extent it may effectively do so, the defense of an inconvenient forum to the maintenance of such action or proceeding.
18. Entire Agreement: This Agreement (including all Appendices attached hereto) is the final expression of, and contains the entire agreement between, the parties with respect to the subject matter hereof and supersedes all prior understandings with respect thereto.
19. Effectiveness of Agreement: This Agreement may not be modified, changed, supplemented or terminated, nor may any obligations hereunder be waived, except by written instrument signed by the party to be charged or by its agent duly authorized in writing or as otherwise expressly permitted herein.
20. Counterparts: This Agreement may be executed in one or more counterparts, each of which shall be an original, and all of which together shall constitute a single instrument. The parties do not intend to confer any benefit hereunder on any person, firm or corporation other than the parties hereto.

RMWD and SDG\&E hereby agree to the terms and conditions set forth above on the date first written above.


SAN DIEGO GAS \& ELECTRIC COMPANY
By: $\qquad$
Name: $\qquad$

Title: $\qquad$

APPENDIX A


## APPENDIX B

## 1. INSURANCE.

1.1 Insurance requirements are set forth as follows, but shall not in any way limit the amount or scope of liability of RMWD under this Agreement. The following constitutes the minimum insurance and requirements relating thereto:
1.1.1 On or before the effective date of this Agreement, and thereafter during its term, RMWD shall provide SDG\&E with current certificates of insurance and applicable endorsements, executed by a duly authorized representative of each insurer, as evidence of all insurance policies required under this Appendix B. No insurance policy may be canceled, materially revised, or subject to non-renewal without at least thirty (30) days prior written notice being given to SDG\&E. Insurance shall be maintained without lapse in coverage during the term of this Agreement.
1.1.2 SDG\&E, and its parent Sempra Energy, and its subsidiaries, affiliates and their respective officers, directors, employees, agents, representatives, successors and assigns shall be named as an additional insured for policies listed below in 1.2.1, 1.2.2, 1.2.3, and 1.2.4. Commercial General Liability insurance listed in 1.2 . 1 shall provide a severability of interest or cross-liability clause.
1.1.3 The required policies, and any of RMWD's policies providing coverage excess of the required policies, shall provide that the coverage is primary for all purposes and RMWD shall not seek any contribution from any insurance or self-insurance maintained by SDG\&E.
1.1.4 All required policies of insurance shall be written by companies having an A.M. Best rating of "A-, VII" or better, or equivalent.
1.1.5 RMWD shall be solely responsible for any deductible or self-insured retention on insurance required hereunder this Agreement.
1.2 At all times during this Agreement, RMWD shall provide and maintain, at RMWD's expense, the following types of insurance:
1.2.1 Commercial General Liability Insurance: RMWD shall maintain an occurrence form commercial general liability policy or policies, insuring against liability arising from bodily injury, property damage, products/operations completed, personal and advertising injury, independent contractors liability, products and completed operations and contractual liability. Such coverage shall be in an amount of not less than $\$ 5,000,000.00$ (Five Million Dollars) per occurrence. If the policy or policies contain an aggregate limit, the aggregate limit shall be no less than twice the per occurrence limit.
1.2.2 Automobile Liability Insurance: RMWD shall maintain an automobile liability policy or policies insuring against liability for damages because of bodily injury, death, or damage to property, (including loss of use thereof), and occurring in any way related to the use, loading or unloading of any of RMWD 's automobiles (including owned, nonowned, leased, rented and/or hired vehicles). Such coverage shall be in an amount of not less than $\$ 1,000,000.00$ (One Million Dollars) combined single limit.
1.2.3 Workers Compensation Insurance: In accordance with the laws of the California, RMWD shall maintain in force workers compensation insurance for all of its employees. If applicable, RMWD shall obtain U.S. Longshoremens and Harbor Workers
compensation insurance, separately, or as an endorsement to workers compensation insurance. RMWD shall also maintain employer's liability coverage in an amount of not less than $\$ 1,000,000.00$ per accident and per employee for disease. In lieu of such insurance, RMWD may maintain a self-insurance program meeting the requirements of the State(s) in which the Services shall be performed along with the required employer's liability insurance.

## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

CONSIDER ESTABLISHMENT OF BOARD OF DIRECTORS AD-HOC COMMITTEE FOR THE PURPOSE OF FACILITATING LABOR NEGOTIATION PROCESS

## DESCRIPTION

As the Board is aware, negotiations are currently underway for revising the Memorandum of Understandings for each of the three employee bargaining units at the District. As part of this process, there may be times where consultation with the Board on small matters is needed. Since we only have three more scheduled full Board meetings before the expiration of the MOUs, staff is recommending that the Board appoint two members to an Ad-Hoc Committee that can provide guidance to management negotiators in between Board meetings. We anticipate that this will streamline the process and allow the Ad-Hoc Committee members to update the full Board at each Board meeting during Closed Session.

## POLICY

Strategic Focus Area Four: Employee Development

## BOARD OPTIONS/FISCAL IMPACTS

There is no specific fiscal impact to this action, although should the Ad-Hoc Committee allow for a speedier negotiation process it will save on staff time.

## STAFF RECOMMENDATION

## Staff supports direction



## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT <br> DISCUSSION AND POSSIBLE ACTION TO AWARD A PROFESSIONAL SERVICES CONTRACT FOR THE DEVELOPMENT OF A CONDITION ASSESSMENT PROGRAM FOR WATER FACILITIES

## BACKGROUND

The District maintains and operates over 315 miles of pipelines and other infrastructure assets valued at approximately $\$ 396$ million. The need for a condition assessment program has been identified in both the District's Strategic Plan as well as the Capital Improvement Plan. As the District, like other similar agencies, is facing aging infrastructure, effective asset management requires us to develop long term rehabilitation programs. Condition assessments are tools for the District to make planning decisions for pipeline rehabilitation projects that are essential for efficient operation of the system.

District staff has previously completed a GIS-based condition assessment study that gave a somewhat generic view of asset conditions. To create a proper condition assessment program, we need to expand the assessment to conditions of various fittings, valves and laterals and establish the framework for ongoing data collection on asset condition. Field data collection is essential to get actual conditions of pipelines. Our current plan is to create a program where we take advantage of instances where the District has pipelines down for repairs to collect appropriate data. We want to create as large a data set as possible to support rehabilitation decisions.

The desktop GIS-based condition assessment focused on pipeline age, material, and leak history to make determinations on the likelihood of failure (LOF) and ground slope, pipe size, and number of services for the consequence of failure (COF). This pipeline risk analysis developed a business risk estimate (BRE) for each asset and a recommended a timeframe for replacement depending on the value. Unfortunately, our experience has been that failures are not generally related solely to age and material, but are more frequently related to construction practices and the condition of joints and fittings. This project will take the analysis deeper into various appurtenances attached to the pipelines and quantify the root causes of failures and get a better understanding of our system.

## DESCRIPTION

District staff prepared a Request for Proposals to solicit proposals and select the most qualified consultant with expertise in condition assessments. The District received proposals from five firms: Kennedy/Jenks Consultants, Pure Technologies, Water Systems Consulting, HDR and IEC. Staff met with each firm regarding the project. A proposal review and consultant selection panel comprised of staff and two volunteers from the Engineering Services Committee reviewed the proposals and scored each section of the proposal. Each section is weighted differently depending on its importance and the firms are ranked individually by staff. Based on the content of the proposals staff and two members of the Engineering Services Committee finds HDR the most qualified firm to assist the District in this project. HDR's proposal is attached. HDR has submitted a proposed fee of $\$ 99,297$ for the project.

## POLICYISTRATEGIC PLAN KEY FOCUS AREA

Strategic Focus Area Two: Asset Management - Well organized asset management process to plan for, prioritize and fund maintenance, replacement, expansion and rehabilitation of District infrastructure, facilities and equipment.

- Document asset condition through continuous condition assessment
- Develop long-term asset rehabilitation schedules


## BOARD OPTIONS/FISCAL IMPACTS

This project is included in the District's 2016/2017 CIP budget.

1. Authorize General Manager to enter negotiations with HDR and execute a professional services contract for a price not-to-exceed \$99,297.
2. Direct staff to develop other alternatives.

## STAFF RECOMMENDATION

Staff recommends Option 1.


January 31, 2017
Rainbow Municipal Water District
Engineering Department
3707 Old Highway 395
Fallbrook, CA 92028
Attn: RMWD Engineering Department (D. Rubio)

## Subject: Professional Services Proposal for Condition Assessment of Water Facilities

Dear Selection Committee:
Rainbow Municipal Water District (District) plans to expand its water facilities condition assessment program to improve the framework for data collection and establish a prioritized assessment and renewal program that allows staff to focus resources where they are needed most. The HDR team will work alongside your staff to develop the foundation for future programs and key capital-funding decisions. HDR's local team, comprised of nationally recognized condition assessment experts, will incorporate lessons learned from around the country to benefit the District's stakeholders and ratepayers.

In choosing the HDR team to lead this effort, the District will realize the following key benefits:

1. Data-Driven Decision Making. The District has over 1,100 useful asset failure records, pertinent reports, and significant institutional knowledge. HDR will listen, mine, document, and translate this information to quantify the root causes of failure. Once a firm understanding of system deterioration is developed, HDR will collaborate with District staff in developing data-driven renewal strategies that can be effectively communicated to key stakeholders (Staff, Engineering Committee, Board of Directors, Ratepayers, and Regulators).
2. A Right-Sized, Sustainable, Staff-Owned Program. Our goal is to develop a right-sized program for the District that is transparent, defensible, and cost-effective. HDR is unbiased with respect to condition assessment methodology and technology solutions; we focus on what program best suits the needs of the District, balancing costs with level-of-service goals to provide the best value. Through collaboration with all District staff - including Engineering, Operations, Finance, GIS and IT - we will deliver a dynamic program that can be easily updated and carried forward by District staff.
3. A Nationally Recognized, Locally Based Project Manager. Our renowned Project Manager, Dave Spencer - lead author of numerous Water Research Foundation studies on pipe renewal programs and a North San Diego County resident - is a hands-on manager and will work closely with your staff to develop a program tailored to meet your needs.

We are excited about this opportunity to collaborate with you and your staff to deliver a professional and comprehensive condition assessment program. If you have any questions or need additional information, please contact Dave Spencer at 858.712.8308 or david.r.spencer@hdrinc.com.

Sincerely,

HDR Engineering, Inc.


Kip D. Field, PE
Vice President


8690 Balboa Avenue, Suite 200 San Diego, CA 92123-1502 $\mathbf{T}(858) 712-8400 \quad \mathbf{F}(858) 712-8333$

## 01. Executive Summary

HDR proposes to work with Rainbow Municipal Water District to develop a program for collection and analysis of condition assessment data. Our goal is to lay the foundation for a data-driven assessment and renewal program for the District that is transparent, sustainable, and cost-effective.

## Our Approach

The foundation of our proposal relies on direct communication between our team of industry experts and your staff. Throughout this project, we will listen,
utilities around the country to develop and implement practical and effective water facility condition assessment programs (as shown on the map below). Dave is actively engaged in evaluating several emerging conditionassessment technologies including acoustic testing, nondestructive examinations, and is a contributing author for American Water Works Association (AWWA) M77: Condition Assessment of Water Mains. He is a technical lead for Water Research Foundation (WRF) studies on condition assessment for metallic and asbestos concrete pipe. And, this national expert just happens to live less than two miles from your service area! mine, document, and translate this information to quantify the root causes of failure. We will share recommendations and lessons learned, collaborate on the appropriate solution for the District, and support you in communicating and implementing those solutions to stakeholders in a clear, practical, and strategic manner.

We propose conducting the scope of work defined in the RFP in 5 steps. This approach consolidates and streamlines our efforts to efficiently and cost- effectively deliver comprehensive results within your proposed timeline.


Dave Spencer will leverage his national and local water facility condition assessment experience to benefit Rainbow MWD.

Dave's core team, Eric Scherch (asset manager/risk modeling) and Brien Clark (cathodic protection), are also locally based and have worked on similar projects in San Diego County for City of Vista, Vista Irrigation District, City of Carlsbad, Otay Water District, and Padre Dam MWD, as well as Rainbow MWD. In 2010, Brien conducted condition assessment of the District's North Feeder Pipeline. Brien's experience with the District's system and challenges will help our team customize a condition assessment and cathodic protection program based on your unique operating framework.


Our proposed Project Manager, Dave Spencer, has specialized in utility and asset management services at HDR for more than 11 years. He has worked with

## Key Issues and Benefits

Based on our experience and discussion with District staff, we have identified a number of key issues that might occur on this project. The table below summarizes these issues, our approach to address each challenge, and the benefits of our approach to District staff and ratepayers.

| KEY ISSUE | HDR A PPROACH | BENEFIT |
| :--- | :--- | :--- | :--- |
| Data quality, <br> accessibility, and <br> use for condition <br> assessment can <br> be problematic. | District staff have collected data on over 1,100 breaks since the mid- <br> 1990s. Most of this data is embedded in a comments field and the quality/consistency <br> is unknown. HDR will interview District staff to understand deterioration issues and <br> how to interpret existing data. HDR will cleanse historical data, associate it to assets, <br> and perform statistical analyses to verify District staff intuition. With this approach, we <br> can make prudent decisions immediately, rather than waiting several years to collect <br> additional data. (See Steps 1 and 2 of our Approach) | Use of existing <br> data to make <br> prudent decisions <br> now. |
| Proactive <br> direct condition <br> assessment to <br> capture data can <br> be costly. | Direct condition assessment of buried infrastructure can be expensive. Our approach will <br> focus on maximizing the value of opportunities when the pipe is exposed, such as break <br> response and new service tap installation. HDR will develop protocols so that staff has <br> the appropriate tools, training, and documentation methods when opportunities arise. <br> The protocols will vary by asset type, material type (AC verses steel), and event type. For <br> example, a metallic main break may provide an opportunity to attach an anode or perform <br> video inspection to identify internal corrosion issues. HDR is not affiliated with any <br> particular technology and therefore will provide unbiased condition assessment guidance <br> based on our research and lessons learned from other utilities. (See Steps 2 through 4 of <br> our Approach) | Cost-effective <br> use of <br> opportunity <br> events to capture <br> data using <br> protocols that <br> meet District |
| needs. |  |  |

## Contents

## Cover Letter

01 Executive Summary
02 Identification of Prime Consultant and Subconsultants

03 Approach and Scope of Services
04 Project Manager and
Team Qualifications
05 Experience and Past 15 Performance

The following Sections are included under Separate Sealed Cover

06 Proposed Total Professional Fee and Fee Schedules

07 Exceptions to this RFP

Appendix: Resumes

## 02. Company Information

Founded one hundred years ago in 1917, HDR has grown to a staff of nearly 10,000 employee-owners with 225 offices in the United States. With 600+ professional staff in California - 200 of whom specialize in water and wastewater services - we are ready to serve you.

In San Diego County alone, we have 91 employees. Our core team members are based in HDR's Balboa Avenue office which is just 35 minutes from the District's office; minimizing travel time and facilitating face-to-face meetings, especially on short notice.


## 03. Approach and Scope of Services

Our proposed team has worked together on numerous projects in the past, and as such, we have a well organized and efficient approach. With us, you will develop a condition assessment and renewal program that is:

- Staff Owned
- Transparent and Defensible
- Tailored to District Needs and Budgets

Our approach is based on your RFP and the information we have gathered from our work with the District. If selected, we will work closely with your staff to further
refine the approach to align it with your goals, so that we focus on your greatest needs and priorities.

The steps, schedule, and deliverables to execute this approach are summarized below. The remainder of this section describes each step in more detail. The project schedule has been developed to include scheduled Engineering Committee meetings so they understand the program direction and can provide input at key decision points.

## Schedule

We have assembled a team with a demonstrated ability to successfully deliver similar projects on aggressive schedules.

| Project Initiation and Project Management | Mar | Apr | May | June | July | Aug |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assumed Notice to Proceed | $\square$ |  |  |  |  |  |
| Initial Data Request and Kick-off Meeting | $\square$ |  |  |  |  |  |
| Project Management (Task 100) |  |  |  |  |  |  |
| Project Steps and Key Deliverables |  |  |  |  |  |  |
| 1. Data Collection and Clean-up (Task 200, 300) |  |  |  |  |  |  |
| 2. Measure Deterioration (Task 300) |  |  |  |  |  |  |
| 3. Develop Risk Model (Task 500) |  |  |  |  |  |  |
| 4. Establish Condition Assessment and Management Program (Tasks 400, 600, 700) |  |  |  |  |  |  |
| Deliverable - Technical Memoranda |  |  |  |  |  |  |
| 5. Establish Sustainable Budgets for Maintenance, Inspection, Renewal (Tasks 800, 900, 1000) |  |  |  |  |  |  |
| Deliverables - Summary Report and Assessment Model |  |  |  |  |  |  |
| Presentation of Results - Engineering Committee or Board of Directors |  |  | - |  | $\square$ | ■ |
| Optional Tasks |  |  |  |  |  |  |
| Optional Tasks - Implementation Plan and Implementation Support |  |  |  |  |  |  |
| Optional Deliverable - Implementation Plan |  |  |  |  |  |  |
| Optional Deliverable - Training |  |  |  |  |  | $\square$ |

## Schedule Legend

## $\square$ Schedule

QA/QC Review

- Draft

District Review

- Final


## Step 1. Data Collection \& Clean-up (Tasks 200 and 300)

Because the performance of pipelines, valves, hydrants, services, and other assets vary significantly from utility to utility, leveraging your data will increase confidence in the results. Understanding data limitations, developing sound assumptions, and conducting data clean-up are critical to delivering a condition assessment and renewal program that works for the District now and in the future.

This step includes reviewing readily available data sources such as breaks, condition assessment studies, spatial GIS information, operation and maintenance data, facility reports, renewal records, corrosion and cathodic protection data, and other information to determine gaps and identify data clean-up needs. Data clean-up includes removing duplicates, associating data to specific assets, incorporating assumptions to close gaps, and staging data for analysis. District staff have collected data on over 1,100 breaks (location, date, asset type, cause, repair cost) since the mid-1990s. However, most of that data
is embedded in a comments field and the data quality is not known. During this step, we will be listening to staff to understand aging infrastructure issues (e.g. joint mortar, corrosion, fitting failures, heavy maintenance), deterioration drivers (e.g. slope, pressure, soil type, moisture levels), critical infrastructure, and how to interpret and cleanse existing data.


## Step 2. Measure Deterioration (Task 300)

This step will leverage cleansed District data to verify District institutional knowledge regarding the drivers, causes, and frequency of failures. The purpose of this step is to better understand broad infrastructure performance trends associated with District assets that will be used to estimate useful life, size sustainable budgets (maintenance, condition assessment, corrosion protection, and renewal), assess possible break mitigation strategies, prioritize investments, and optimize renewal specifications based on cost and useful-life expectations.

HDR's approach includes developing an understanding of risk factors based on the District's unique operations, geography, system, and stakeholders. This will include spatial evaluation of break density and correlation with institutional knowledge regarding the cause of breaks. For example, the figure to the right leverages existing District break data through 2013 (excluding breaks on valves, hydrants, dig-ins, and hits). Areas in red show higher break densities and areas in green show portions of the system with lower break densities.


HDR developed this failure density map from District data, which will help us validate and quantify institutional knowledge of hot spots in the District.

Our approach measures deterioration as a function of age and break rate (i.e., annual breaks per 100 miles for pipes). The graphic to the right shows that the performance of asbestos cement pipe in the East Bay Municipal Utility District is highly dependent on the pressure the pipe is exposed to over time. During the first 25 years, pressure has no discernible impact on performance. However, as these pipes continue to age, the impact of higher pressure is felt, with pipes subjected to higher pressures deteriorating faster and having a shorter life. Understanding and quantifying the root cause of failures in the District will support the development of highly confident and prudent decision making.


Our research indicates that, while negligible over the first 25 years of life, the impact of higher pressures eventually leads to higher break rates and shorter useful lives for asbestos cement pipe.

## Step 3. Develop Risk Model (Task 500)

The analysis performed in Step 2 will be used to quantify a relative risk scoring methodology. The intent of the relative risk score is to define a consistent, transparent, and defensible approach for prioritizing projects. The relative risk score is not intended to replace the need for planning staff to evaluate the extent and/or priority of particular projects; rather, it is meant to focus your resources and streamline the process of project identification, justification, and approval. The relative risk model will be built so that it can be integrated into


Risk maps quickly convey information to decision-makers regarding which areas have pipes that are more likely to fail.

## Step 4. Establish Condition Assessment and Management Program (Tasks 400, 600, 700)

In this step, we will collaborate with the District to establish a condition assessment program and cathodic protection implementation plan. This will include refining data collection practices (e.g. data, photos, internal video, sample testing) to align with the AWWA component analysis during opportunity events such as break response and new service tap installation, as well as more sophisticated condition assessment when necessary. During development of such a program, it is important to define how condition data will be used to identify and justify prudent investments in cathodic protection and infrastructure renewal. District GIS records indicate that the predominant pipe materials are steel ( $68 \%$ of system length), ductile iron (21\%), and asbestos cement (10\%). For these pipe materials, HDR's team has literally "written the book(s)" on effective condition assessment and management practices. We will leverage the latest industry research and the District's knowledge of the system's operational context to define condition assessment policies, standards, and procedures so that you can make prudent investment decisions.


District institutional knowledge suggests that internal corrosion due to defective CML at some joints is a primary concern. In our experience, this issue is typically the result of poor installation practices. While most of the pipe is protected by CML that is applied in the factory where quality is tightly controlled, CML at the joints is often mixed and applied in the field after the pipe is laid which can result in significant variations in the quality and longevity of the CML.

Based on the break density map in Step 2, we investigated the area just north of the intersection of Highway 76 and South Mission Road. The map below shows this area with District pipes symbolized by unique construction project (each project is a unique color).

The District provided break records from the mid-1990s through 2013 (red stars). A 930' stretch of CML steel pipe was installed by a contractor in 1981 on Lake Sycamore Drive. The pipe has broken five times (excluding a sixth break which occurred on a service line). Four of the five breaks occurred in the last seven years of data collection.


District break data suggests that a 930' project on Lake Sycamore Drive may have a CML construction quality issue at the joints.

The proximity to the lake could be a factor in accelerated external deterioration. However, crew comments indicate that deterioration at the joints was observed. This and the fact that other pipes in the area of similar material are approximately five to 20 years older, yet have not experienced a break, may indicate that internal corrosion due to poor construction methods on this project is the culprit. In this case, the District's condition assessment program may call for compiling readily available data
(e.g. record drawings, break photos) and meeting with knowledgeable field staff to determine if internal or external corrosion is the culprit. If a definitive answer can be determined, the decision making guideline may recommend an action (e.g. replace, re-line, proactive mainline anodes, proactive service anodes). If the answer is not definitive, additional condition assessment such as a proactive internal CCTV of this construction project may be recommended to identify a prudent risk mitigation action.

## Step 5. Establish and Communicate Sustainable Budgets for Maintenance, Inspection, and Renewal (Task 800, 900, and 1000)

Utilities have found that the application of so-called "industry standard useful life data" can be counterproductive because they often exaggerate budget needs to the point where utilities revert to historic investment levels that are not sufficient to sustain long-term service level goals. Our approach will leverage your data and District staff input to measure how quickly your infrastructure is deteriorating, the impact of cathodic protection and renewal projects on service levels, and will help you find the right investment level
for your utility. Our goal is to strike the appropriate balance between the cost-of-service and the level-of-service goals.

Depending on the quantity of data available, a failure model (e.g. Weibull, LEYP, break forecasting) will be selected and used to quantify how various levels of investment will impact service levels. For example, the images below show the model output of one investment scenario for a large utility in the western U.S. This


Our analytical tools will enable you to communicate the impact of various investment levels to decision makers in terms of cost, service level, sustainability, and staffing levels.
scenario models the investment needed to sustain service levels at the AWWA recommended level of approximately 15 over the next 40 years while infrastructure ages and deteriorates. The graph in the bottom left (previous page) shows that investment levels would have to increase 83\% over the next 40 years (from $\$ 30 \mathrm{M} /$ year to $\$ 55 \mathrm{M} /$ year) to sustain current service levels (break rate $=13.0$ ). The graph in the top right (previous page) shows that at the current rate of replacement, it would take approximately 253 years to replace every pipe currently in the system. In 40 years, this investment scenario estimates this replacement cycle would decrease approximately $26 \%$ (to 188 years) because the increase in replacement is higher than the forecasted system growth rate. The graph in the bottom right (previous page) shows that under this scenario, the annual number of breaks is forecasted to increase by $62 \%$ (from 912 per year to 1,478 per year). If this scenario is selected, this information could be used by the utility to quantify the number and timing of additional break-response resources necessary.

Investment levels will be placed in the context of national, regional, and local benchmarking to illustrate how the District's current performance levels and service levels compare. This information will be pulled from HDR's distribution system performance database which includes over 350 records from around the country (including many utilities in southern California). Ultimately, our approach will result in transparent, defensible, and reasonable aging-infrastructure budget scenarios that District staff can own and communicate to political stakeholders who will decide the appropriate level of investment.

HDR will document the District's program in a Summary Report and GIS data. HDR will work with District staff in presenting the progress and outcomes of this project to District Staff, the Engineering Committee, and the Board of Directors.

## Optional Tasks. Implementation Plan and Implementation Support

HDR's approach outlined in Steps 1 through 5 will lead to a staff-owned program that could continue with the development of an implementation plan. Development of an Implementation Plan is a value-added optional task that will lead to long-term program success.

The implementation plan incorporates opportunities and program recommendations by District staff and HDR. Those opportunities are then grouped into initiatives that provide justification for resource needs. A sustainable implementation plan aims to balance those opportunities with cost and resource constraints.


## District Staff Input

HDR will listen, document, and translate various District staff perspectives so staff understand each other's perspectives, and collaborate on the appropriate solution for the District.

Examples of recommendations that may be considered in the development of the implementation plan include:

- Identifying "pain points" in existing business processes, such as valve maintenance and renewal.
- Identifying future business process needs.
- Setting up a periodic process and key indicators to evaluate system performance, failures, and the risk model.

HDR's implementation support includes training, handson instruction, and handouts for ongoing use and staff ownership of the risk model.

The risk model is planned for use with existing IT systems. If the District identifies that new software is needed for the risk model, HDR will also provide software evaluation support.

## Project Management (Task 100)

Our project management approach is built on trust, a clear definition of shared goals, and the mutual understanding of the necessary steps to achieve those goals and exceed your expectations.

Committing to Rainbow MWD. Dave Spencer is excited to commit to being the Project Manager on this important project. The timeline for the project dovetails perfectly with current and future project commitments. He would not take on this role if his capacity to perform were in any way compromised by other projects.

Managing the Team. Dave has assembled a team that maximizes the use of our highly experienced in-house staff, and Dave has personal experience working with each of these team members on similar local projects. He trusts this team explicitly to develop the quality of work HDR is accustomed to delivering to each and every client. We are bound together by a commitment to be a true partner to the District on this project and beyond.

Managing the Project. At the start of any project, HDR requires the project manager to prepare a Project Control

Plan (PCP). This PCP is a living document that defines the project management and control protocols to be used throughout the life of the project. As Project Manager, Dave will prepare and maintain the PCP, which includes the purpose and goals of the project, the scope of work and deliverables, the work plan and staffing assignments, budget and schedule milestones, contact information and communication plan, as well as quality control check points and assignments.

Dave will prepare monthly status reports in association with the monthly invoices to define the physical progress made compared to budget and schedule (earned value), to list any action items outstanding, and to detail any anticipated upcoming challenges. HDR's Business Intelligence tools integrate scope of work activities with schedule, resources, and budget details. The tools provide our project management team a vivid picture of accomplishments, work in progress, milestones, and future activities, and allows us to quickly and easily communicate with you. They also allow our team to identify variances and plan corrective actions to maintain schedule and budget targets.

## Quality Management

HDR will prepare a project-specific Quality Assurance/ Quality Control (QA/QC) plan that adheres to the District's current design standards, regulations, policies, and procedures.

Our responsibilities for quality include all levels of HDR personnel-from our Chief Executive Officer to senior management to the project team. Responsibilities are documented in our procedures, defining how HDR delivers products and services to you. With more than 30 years of experience, Dan Ellison will be the Quality Manager for this project.

Our process promotes prevention rather than detection; being proactive rather than reactive. We promote professional service delivery though quality assurance, quality control, technical procedures, and best practices that span four phases of project delivery: development and initiation, planning, execution, and close-out.

With internal audits and meetings to discuss lessons learned on competed projects, HDR regularly updates its QA/QC procedures. Our culture of continual improvement provides our clients with confidence that products and services are delivered efficiently and effectively.

## 04. Project Manager and Team Qualifications

## The HDR Team delivers transparent, defensible, and staff-owned water system asset-management programs.

Taking on this important project requires a team that has worked together successfully, understands the local issues, and has the experience to deliver integrated documents that chart the course for a sustainable future. The HDR Team was built to deliver just that!

- Project Manager Dave Spencer will lead this team and be the primary contact with the District.
- Asset Manager Eric Scherch will perform data reviews; coordinate workshops; and support analysis, technical memoranda, and risk model development.
- Cathodic Protection Lead Brien Clark will provide cathodic protection analysis and planning, Weibull failure modeling analysis, and expert guidance on condition assessment implementation.
- Project Principal Jennifer Duffy will provide project oversight and act as a liaison with District staff, should any issues arise.
- Quality Manager Dan Ellison will provide project deliverables in accordance with HDR's rigorous Quality Management Program.

Eric and Brien have worked with Dave on similar projects including cutting-edge research and projects in water system condition assessment, renewal, and risk modeling.

We will work seamlessly to capitalize on our individual areas of expertise and bring that information together in development of a condition assessment, cathodic protection, and renewal program that is reasonable, costeffective, and defensible. This work will be performed in our San Diego office entirely by HDR staff, which saves the District time and money normally associated with coordination and management of subconsultants.

This team is excited and committed to seeing this project through to the end. No changes to our team will be made without prior notification and approval by the District. Our current workloads are such that the core team will be available to start immediately and devote at least 40 percent of our time to your project. Our national leaders are based here in San Diego. We don't need to travel to coordinate at a moment's notice, saving the District time and money.

Project Manager
Comer Kirkpatrick, PE


## Key Project Personnel

The following pages provide brief descriptions of our key project personnel's qualifications. A two-page resume for each of our proposed team members is included in the Appendix.


Dave's similar project experience:
Comprehensive Sewer Management Plan - Vista, CA. Asset Management Lead

2016 Potable Water Master Plan Update and On-Call Corrosion Engineering Services • Vista Irrigation District, CA.
Asset Management Lead
Water Facilities Master Plan Update • City of Lincoln, NE. Technical Lead
Project 4471: Leveraging Data from Non-Destructive Examinations to Help Select Ferrous Watermains for Renewal - Water Research Foundation. Technical Lead

## Dave Spencer, PE $\int^{0}$ Project Manager

6I am passionate about empowering utilities and their staff to leverage data to drive their condition assessment and renewal programs. I'm excited to work with the District to develop a staff-owned program and deliver the tools, analyses, and programs that will fulfill your unique vision for the District's potable water system. I commit to leveraging my experience on Water Research Foundation projects and similar water system projects in Vista and Lincoln to make sound recommendations and collaborate with the District to deliver this formative step in the future of the District's asset management program."
"Wow! The work Dave and the team are doing is incredible and so very important to JCW's forward progress. Thank you for continuing to fulfill our vision!" - Susan D. Pekarek (Chief Engineer at Johnson County)

Why Dave? His experience leading prioritization programs for large and small utilities equips him to deliver a process that is right-sized for the District.

Dave Spencer is a registered civil engineer in the State of California, and a resident of San Diego County.

More than 60,000 miles of pipelines in the U.S. have benefitted from Dave's assetmanagement programs. These are practical, results-oriented programs for aging water, recycled water, and wastewater infrastructure. He efficiently tailors a program to match the client's size and objectives, and is adept in interacting with all levels of a utility organization from field staff to management.

Assessing metallic and asbestos cement watermains, which make up ~99\% of the District's system, is one of Dave's specialties. He was a contributing author and technical lead for the Water Research Foundation (WRF) asbestos concrete pipe report and served in a similar role for WRF's metallic pipe report. His technical expertise will augment his planning and managerial skills.

Dave is currently engaged in the evaluation of several emerging condition-assessment technologies including acoustic testing, nondestructive examinations, an AWWA Manual of Practice, and other WRF projects. He has specialized in utility and asset management services at HDR for more than 11 years.

Proficient in ESRI and Microsoft analytical tools, Dave has supported many highperforming utilities in building and refining asset management practices including the Cities of San Diego, Poway, Vista, Phoenix, and Honolulu; Vista Irrigation District; Los Angeles Bureau of Sanitation; Johnson County Wastewater; and Seattle Public Utilities.


Eric's similar project experience:
Comprehensive Sewer Management Plan - Vista, CA. Asset Management Support
2016 Potable Water Master Plan
Update and On-Call Corrosion
Engineering Services - Vista Irrigation District, CA.
Asset Management Support
Project 4471: Leveraging Data from Non-Destructive Examinations to Help Select Ferrous Watermains for Renewal - Water Research Foundation. Analyst

## Eric Scherch, PE $\smile$ Asset Manager/Risk Modeling

¢During our workshops on the CSMP project, Eric is very engaging with staff members and seems to always ask well-thought-out questions about the engineering and operations of the sewer utility. His questions are very targeted and help the City of Vista reach its goal of a staff-owned asset management program. Understanding an agency's work process is very difficult but Eric quickly came up to speed on our operations, and has made recommendations that are appropriate for an agency with our staffing levels and number of assets." - Elmer Alex (Principal Engineer for the City of Vista)

Why Eric? Eric has the unique ability to engage staff and understand both engineering and operations, which results in programs that staff can support.

Eric develops, plans and implements asset management programs throughout the U.S. Specialties include statistically significant condition assessment and renewal forecasting for water and wastewater systems, and regulatory driven asset management and litigation support for wastewater. Eric focuses on operations and maintenance, condition assessment, risk modeling, aging infrastructure renewal forecasting, information systems development, regulatory reporting, staffing analyses, and work planning. Eric has served as a technical lead for clients such as Orange County Sanitation District, City of Vista, City of San Diego, Winston-Salem, West Basin Municipal Water District, San Antonio Water Systems, Seattle Public Utilities, Winston-Salem, and Eugene Water \& Electric Board.


Brien's similar
project experience:
North Feeder Pipeline Evaluation Rainbow MWD, Fallbrook, CA. Project Manager/Engineer
Tri-Agencies Pipeline Investigation

- San Diego County Water

Authority, CA. Project Engineer/ Field Engineer
Water Facilities Master Plan Update - City of Lincoln, NE. Weibull Failure Modeling
Project 4471: Leveraging Data from Non-Destructive Examinations to Help Select Ferrous Watermains for Renewal - Water Research Foundation. Modeling

## Brien Clark, PE § Cathodic Protection

©In conducting cathodic protection and condition assessment work throughout the U.S., I have seen catastrophic results from pipe failure. The work HDR is doing to help utilities assess risk and circumvent serious damage to life and property is very important to me. I am looking forward to helping the District implement a program that is defensible and sustainable well into the future."

Why Brien? Brien performed direct corrosion assessments of the District's North Feeder Pipeline, and will leverage this experience to identify and justify prudent investments in cathodic protection.

Brien will provide valuable input on cathodic protection and condition assessment strategies and implementation. As part of the direct corrosion assessment of the District's North Feeder Pipeline, Brien evaluated assessment data and provided detailed recommendations for cathodic protection and future monitoring. He will also perform Weibull Failure Modeling of the District's pipe to better understand pipe deterioration, as part of the risk modeling.

Brien was a technical lead on several WRF projects and is experienced in performing condition assessments, external direct assessments, failure analyses, soil corrosivity studies, water aggressivity studies, cathodic protection surveys, cathodic protection/ corrosion control designs, and construction checkouts. Brien is certified by NACE International as a cathodic protection specialist and technologist, and in cathodic protection interference. He is also certified as a Corrosion Prevention Field Technician and for Abnormal Operating Conditions in Field Operations by the National Center for Construction Education and Research.


Dan's similar project experience:
Comprehensive Sewer Management Plan • Vista, CA. Quality Control
2016 Potable Water Master Plan Update and On-Call Corrosion Engineering Services - Vista Irrigation District, CA. Quality Control
Project 4471: Leveraging Data from Non-Destructive Examinations to Help Select Ferrous Watermains for Renewal - Water Research Foundation. Project Manager


Jennifer's similar project experience:
Comprehensive Sewer Management Plan • Vista, CA. Project Manager

2016 Potable Water Master Plan Update and On-Call Corrosion Engineering Services - Vista Irrigation District, CA.
Project Manager
Cathodic Protection Program Improvements - City of Carlsbad, CA. Project Principal
Corrosion Protection On-Call Contract • Otay Water District, CA.
Project Principal

## Dan Ellison $\mathbb{V}^{2}$ Quality Manager

๘Dan developed an innovative procedure that minimized catastrophic failures and allowed for the replacement of only weaker pipe portions, which reduced failures at a much lower cost. The program, which had been cut due to budget issues, is being reinstituted as a result of recent failures. I would without hesitation recommend Dan's services to you for pipeline rehabilitation issues." - Gerald A. (Jerry) Gewe (Retired Assistant General Manager for Los Angeles Department of Water and Power)

## Why Dan? Dan provides innovative ideas and input throughout the project process to improve overall condition assessment program quality.

Dan has gained national and international recognition as an expert on pipe assessment, rehabilitation, and trenchless construction, having authored several books on the subject. He is the founding Chair of the Water Main Condition Assessment Committee of AWWA and is the former Chair of the Water Main Rehabilitation Committee.

Dan has written eight different books for the Water Research Foundation and has helped develop infrastructure management programs for utilities all across the U.S.

## Jennifer Duffy, PE

66
Having worked with Dave and his team in preparing asset management strategies for many local master plans, I am excited about bringing this expertise to Rainbow MWD. Dave has an uncanny ability to synthesize the desires and ideas from diverse groups within an organization to meet the needs of all. As project principal, I will provide my support in helping him deliver that talent and expertise to the District." - Jennifer Duffy (HDR Project Principal)

## Why Jennifer? Jennifer's understanding of local issues and extensive planning experience results in sustainable programs.

Jennifer has more than 30 years of civil and environmental engineering experience in the San Diego region, including an impressive background in water and recycled water master planning and design, sewer master planning and alignment studies, pipeline and pump station design, environmental permitting, water supply analysis, and hydrologic studies.

In her most recent Master Plan projects, condition assessment and asset management have become increasingly important components and as such, Jennifer has incorporated those elements into her master planning approach. She recognizes that, as water conservation and drought conditions have reduced water use throughout Southern California, growth issues have become secondary to facility condition assessment. Prioritization and prolonging the life of our critical infrastructure has become paramount. Jennifer offers her expertise in infrastructure planning and decision making to this HDR team of experts.

## 05. Experience and Past Performance

The HDR team has implemented practical assetmanagement programs encompassing over $\$ 100$ billion worth of potable water, recycled water, and sewer infrastructure. Through independent organizations (USEPA, WRF, and ASCE), our team has led internationally renowned research into the cost-effectiveness of emerging technologies so that our clients can benefit from those technologies where appropriate. While our expertise is internationally renowned, these experts live
and have extensive experience in southern California (including Otay, Rainbow, Vista, San Diego, and Los Angeles). We will leverage our experience with utilities that have faced similar challenges for successful project implementation at the District.

Examples of our project team's experience on similar work over the last 10 years is depicted in the table below. Complete project descriptions are included on the following pages for the three projects in bold text.

We bring experience to every piece of your scope of work. Our locally based, national experts will deliver a right-sized, defensible plan.



Owner Contact:
Frank Blaha
Senior Account Manager WRF
303.347.6244

Project Budget:
Initial: \$300,000
Final: \$475,000 (due to expanded scope and 2 additional sponsors)

Project Schedule
Initial: 12 months
Final: 36 months (delays were at the request of the sponsors)

## Water Research Foundation | WRF 4471: Leveraging Data from Non-Destructive Examinations to Help Select Ferrous Water Mains for Renewal

Under a tailored collaboration effort, HDR recently completed WRF Project 4471 with project sponsors Los Angeles Department of Water and Power (LADWP), Seattle Public Utilities, Fairfax Water, Denver Water, and DC Water. The goal of the project is to leverage current NDE (Non-destructive Examination) technology to help determine when select ferrous water mains should be renewed. Traditionally, water utilities relied on pipeline leak and break data to determine when pipeline renewal was needed. In recent years, several devices have been introduced that can find structural defects or pinpoint leaks. However, the cost of using these tools can be relatively expensive and the results can be varied. The project included the testing of five different inspection technologies side-by-side on cast iron main in Los Angeles. Technologies included:

- Push-in video/audio probe (Wachs Water Service)
- In-pipe remote field electromagnetic scanning
- Acoustic velocity pipe wall analysis (Echologics)
- External scanning with broadband electromagnetic tool (Rock Solid)
- Internal scanning with broadband electromagnetic tool (Rock Solid)

Following data collection of the technologies, portions of the mains were exhumed, visually inspected, photographed and cataloged as to its actual condition, including taking corrosion pit and wall thickness measurements, and compared to the NDE technology inspection results. Initial results showed that $75 \%$ of the main had no appreciable corrosion. Only a portion of unlined pipe dating to 1933 needed to be replaced.

Beginning in May 2015, HDR applied the technologies on mains within the five sponsoring utilities (LA, Seattle, Denver, Fairfax, and DC). In the final phase of the project, the benefits of the testing were assessed by comparing the projected life expectancies of mains, both with and without the field test data. The differences in confidence provided by the various models were also assessed.

## Project Staff and Roles:

Dan Ellison - Project Manager
Dave Spencer - Technical Lead
Brien Clark - Modeling
Eric Scherch - Analyst


## Owner Contact:

Randy Whitmann Vista Irrigation District 760.597.3187

Elmer Alex
Principal Engineer
City of Vista
760.643.5416

## Project Budget:

Vista Irrigation District
Initial: \$80,000
Final: On budget
City of Vista
Initial: \$205,000
Final: On budget
Project Schedule
Vista Irrigation District
Initial: 4 months
Final: On schedule for completion in March 2017

City of Vista
Initial: 11 months
Final: On schedule for completion in April 2017


Vista, CA protection systems.

## Vista Water and Sewer Condition Assessment

Vista Irrigation District | 2016 Potable Water Master Plan Update and On-Call Corrison Engineering Services City of Vista | 2016 Comprehensive Sewer Management Plan

HDR was selected by Vista Irrigation District (VID) to prepare an update to their 2000 Potable Water Master Plan. As part of that Master Plan, condition assessment of the District's reservoirs and pipelines is being conducted, as well as prioritization of rehabilitation and replacement projects. HDR has assisted VID on corrosion control issues for more than 15 years. Our On-Call involvement has included investigations to determine the causes of corrosion failures and designing numerous cathodic protection systems to mitigate future corrosion, preparation of standard specifications and drawings, development of a District Operation and Maintenance Corrosion Manual, and training of VID personnel to conduct holiday inspections and to install and test cathodic

HDR was also selected by the City of Vista to prepare a Comprehensive Sewer Management Plan. Included in the plan is a Sewer Master Plan update, Asset Management Plan, Rate Study, and Program EIR. The asset management program and plan includes asset management training, evaluation of the GIS/Cityworks/Pipelogix/hydraulic model asset registers and closing gaps in the registers. The program identifies likelihood and consequence of failure for asset risk, asset replacement costs, asset renewal prioritization, evaluation of levels of service and associated levels of investment, asset renewal forecasting scenarios, and identification of asset management software.

Workshops with City operations staff on practices and Standard Operating Procedures (SOPs) were conducted and the results of asset management analysis and asset information were coordinated with GIS or appropriate staff for inclusion in suitable systems. A continuous improvement plan is being developed that includes analysis of existing business processes and systems, and identification of prioritized opportunities for improvement of policies, processes, and systems. In conjunction with the City of Vista staff, HDR presented the condition assessment approach and interim findings to the Clean Water Environment Association, San Diego Chapter in October 2016.

## Project Staff and Roles:

Jennifer Duffy - Project Manager
Dave Spencer - Asset Manager
Eric Scherch - Asset Management Support
Rick Viehl - Corrosion Protection Engineer
Aria Heraypur - Project Engineer
Dan Ellison - Quality Control


## Owner Contact:

Steve Owen
Supt. of Water Distribution
402.441.5925

## Project Budget:

Initial: \$60,000
Final: \$60,000

## Project Schedule

Initial: 4 months
Final: 4 months

## Lincoln Water Systems | Water Facilities Master Plan

 Update, Lincoln, NEHDR supported Lincoln Water Systems (LWS) staff in determining renewal needs, communicating needs to stakeholders, and justifying appropriate rates. The LWS distribution system consists of approximately 1,200 miles of water mains ranging in size from 4-inch to 60-inch. The system is predominantly cast iron, ductile iron, and PVC, and was on average 42 years old. The oldest mains in the system were installed in the late 1800s. As part of the LWS's master plan update, HDR evaluated and made recommendations to refine LWS's approach for managing aging infrastructure. An automated pipe grouping process was used to identify groups of pipes that could be hydraulically isolated through valves, dead ends, and service connections. This served as an initial approximation of the extents for useful life estimation, project identification, and project prioritization. HDR cleaned LWS data, measured deterioration and developed a risk model and decision logic to support balanced budgets and investments.

## Project Staff and Roles:

Dave Spencer - Asset Manager
Brien Clark - Weibull Failure Modeling
Dan Ellison - Quality Control

## Lessons Learned

The table below outlines typical challenges our proposed staff have experienced in past projects and our methodology used to overcome these challenges. We look forward to bringing the benefit of our experience to the District.

## CHALLENGES

METHOD TO OVERCOME
WE'VE DONE THIS BEFORE

## Asset Grouping

Pipes are typically divided into small lengths at diameter changes, material changes, install date changes, valves, tees/crosses, bends, and other attributes. This classification is useful for some decision making (e.g., hydraulic modeling, cohort analysis, attribute data management). However, it is not beneficial for infrastructure useful life determination and renewal decision making, because it is not cost effective to renew infrastructure in such small units.

## Identifying Level of Service

Identification of desired service levels that reasonably and cost-effectively meet the needs of the utility.

Aggregate these short pipe sections into more meaningful groupings, so asset specific information can be determined, such as break count, survival modeling (i.e., the date when particular assets "failed"), useful life, renewal budget, probability of failure, consequence of failure, project identification and prioritization.

HDR is experienced in cleaning up data from a number of utilities around the country with different data-collection practices. We have helped Vista, CA; Phoenix, AZ; Honolulu, HI; Los Angeles DPW, CA; Calgary, Canada; East Bay MUD, CA; Westminster, CO; Eugene, OR; Buena Park, CA; Sacramento, CA

Model future breaks and the impact of various renewal investment levels on the cost and level of service provided. Work with District staff to determine the appropriate balance for your customers. Leverage benchmarking data from similar utilities in the region to verify this balance.

Risk Factor Development
The impact of risk factors can change dramatically from utility to utility. System specific quantification of the impact various factors have on deterioration rates can be elusive. This can lead to subjective risk assessment criteria and weighting.

Our approach quantifies the impacts of the readily available risk factors in your system.

HDR has helped utilities identify desired service levels in Vista, CA; Lincoln, NE; Phoenix, AZ; Honolulu, KI; East Bay MUD, CA; Westminster, CO; Eugene, OR; Olathe, KS

We have successfully developed right-sized and sustainable risk models for utilities in
Vista, CA; Otay, CA; Zone 7, CA; West Basin WD, CA; Lincoln, NE; Phoenix, AZ; Honolulu, HI; East Bay MUD, CA; Westminster CO; Eugene, OR

Appendix: Resumes


## EDUCATION

BS, Civil Engineering, California Polytechnic State
University, San Luis Obispo

## REGISTRATIONS

Registered Civil Engineer, California,\#66885

## David Spencer, PE

Project Manager

David Spencer developed and implemented condition assessment and renewal programs encompassing over 60,000 miles of pipelines in the U.S. David specializes in developing and implementing practical results-oriented programs for aging water, recycled water, and wastewater infrastructure. He is adept in interacting with all levels of a utility organization from field staff to management. David is currently engaged in the evaluation of several emerging condition assessmenttechnologies including acoustic testing, non-destructive examinations, an ASCE Manual of Practice, and other Water Research Foundation projects. Proficient in ESRI and Microsoft analytical tools, David has supported many high performing utilities in building and refining asset management practices including the Cities of San Diego, Poway, Vista, Phoenix and Honolulu, Vista Irrigation District, Los Angeles Bureau of Sanitation, Johnson County Wastewater, and Seattle Public Utilities.

## RELEVANT EXPERIENCE

Water Research Foundation, WRF 4471, Leveraging Data from NonDestructive Examinations to Help Select Ferrous Water Mains for Renewal, Denver, CO. The goal of the project is to leverage current NDE (Non-destructive Examination) technology to help determine when select ferrous water mains should be renewed. Traditionally, water utilities relied on pipeline leak and break data to determine when pipeline renewal was needed. In recent years, several devices have been introduced that can find structural defects or pinpoint leaks. However, the cost of using these tools can be relatively expensive and the results can be varied. To date, the project has included the testing of five different inspection technologies side-byside on cast iron main in Los Angeles.

Answers to Challenging Infrastructure Management Questions - Water Research Foundation (WRF), Denver, CO. David authored the asset management chapter of this research project which seeks to integrate and summarize industry research in an understandable manner. Using a question and answer format, the asset management chapter answers "How long will mypipes last?", "When should a pipe be replaced?", "What is the appropriate level of service for water mains repair rates?", and "How do I select pipes for assessment and renewal".

City of Lincoln, NE, Lincoln Water Facilities Master Plan, Lincoln, NE David developed a condition and asset management framework for system renewal. The project included a review of the city's water capacity requirements, supply availability, treatment capacity and future regulatory requirements, distribution system analysis, development of a water main replacement program, asset management program, and development of a final report.

Vista Irrigation District, City of Vista, CA
HDR was selected by Vista Irrigation District (VID) to prepare an update to their 2000 Potable Water Master Plan. As part of that Master Plan, condition assessment of the District's reservoirs and pipelines is being conducted and prioritization of rehabilitation and replacement projects. David is leading the condition assessment and renewal prioritization components of the project which includes assessing and cleansing existing data, quantifying deterioration, identifying investmentscenarios compared with level of service, and incorporating results into the master plan.

2016 Comprehensive Sewer Management Plan, City of Vista, CA. David is developing an asset management program and plan that will close gaps in the
asset registers for GIS/Cityworks/Pipelogix/hydraulic model. David will identify likelihood and consequence of failure for asset risk, replacement costs, renewal prioritization, and evaluation of levels of service and associated levels of investment. David will conduct workshops with operations staff on best practices and SOPs. The results of assetmanagement analysis and asset information will be coordinated with GIS staff for inclusion in appropriate systems and the identification of assetmanagement software. A continuous improvement plan will be developed that includes analysis of existing business processes and systems and identification of prioritized opportunities for improvement for policies, processes and systems.

City of Poway, Utilities Operational Effectiveness Study (UOES), Poway, CA. Project Manager who reviewed operational activities for the potable water, wastewater operations, and recycled water, then assessed their organizational efficiency and effectiveness to prepare an operational effectiveness report with competitive levels for (O\&M) of the system with recommended cost savings and improvementstrategies. Worked closely with the city's public works department's utilities manager and key representatives from labor, management and employees.

WRF 4480, Development of an Effective Asbestos Cement Distribution Pipe Management Strategy for Utilities, Denver, CO. David participated on this research project that involved developing an effective strategy for management of utility as bestos cement (AC) pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and cost analysis. Project involved analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.

Water Distribution Asset Management Plan Development, Phoenix, AZ. The City of Phoenix owns and operates approximately 7,000 miles of distribution systems wants to refine its asset management plan for water distribution and transmission mains. David, as the technical lead, provided an overall program assessment which included: data clean-up and analysis, development of long term renewal investmentlevels, development of near-term renewal project identification and prioritization procedures, and knowledge transfer to City staff to support more efficient and effective data driven decision making.

City of Westminster, Westminster Distribution System Renewal Program Prioritization and Modeling, Denver, CO. Evaluated the water distribution system and prioritized water main repair and replacement projects based on a number of criteria. A risk analysis and prioritization factors matrix was established and was used to develop an optimized pipe and valve replacement capital improvement program (CIP). Role: Asset Management Lead

Asset Management Plan, Otay Water District, Otay, CA. Prepared a districtwide asset management plan as the framework for district staff to implement the ongoing condition assessment and associated service life estimates for all of the fixed assets. The project included the development of asset criticality criteria, condition assessment rating and ranking criteria, and asset valuation methodology that serve as the basis for future rates and bond financing.

Asset Management Program Update - Zone 7 Water Agency, Alameda, CA. Developed Zone 7's asset management program policies and framework including: an information system roadmap, inspection and condition assessment procedures, and repair, rehabilitation and replacement decision making processes for mechanical equipment and pipelines. Implemented a condition assessment program to support development of a near-term rehabilitation and replacement budget.


## EDUCATION

BE，Civil Engineering，Duke University

## REGISTRATIONS

Registered Civil Engineer， California \＃74238

## PROFESSIONAL <br> MEMBERSHIPS

American Society of Civil Engineers（ASCE），San Diego，Member

Engineers WithoutBorders USA，San Diego，Project Advisor

## Eric Scherch，PE

## Asset Manager／Risk Modeling

Eric Scherch has more than 10 years of experience developing，planning，and implementing assetmanagement programs throughout the U．S．His expertise lies in developing statisticallysignificant condition assessment and renewal forecasting for water and wastewater including development of risk models．Eric focuses on risk analysis，operations and maintenance，condition assessment，aging infrastructure renewal forecasting，program alternative evaluation，information systems development，regulatory reporting，staffing analyses，and work planning． Eric has served as a technical lead for clients such as Orange County Sanitation District，City of Vista，City of San Diego，West Basin Municipal Water District，San Antonio Water Systems，City and County of Honolulu，Seattle Public Utilities， Winston－Salem，and Eugene Water \＆Electric Board．

## RELEVANT EXPERIENCE

2016 Comprehensive Sewer Management Plan，City of Vista，CA．Asset Management Support．Responsible for the development of the risk model，asset management planning and renewal forecasting including workshops with operations，engineering and GIS staff．The program includes identifying likelihood and consequence of failure for asset risk，assetreplacement costs，asset renewal prioritization，evaluation of levels of service and associated levels of investment， asset renewal forecasting scenarios and identification of asset management software for risk and renewal forecasting．Includes development condition assessment program recommendations and development of a staff owned program．

Vista Irrigation District，City of Vista，CA．HDR was selected by Vista Irrigation District（VD）to prepare an update to their 2000 Potable Water Master Plan．As part of that Master Plan，condition assessment of the District＇s reservoirs and pipelines is being conducted and prioritization of rehabilitation and replacement projects．Eric is providing technical support for the condition assessment and renewal prioritization components of the project which includes assessing and cleansing existing data，quantifying deterioration，identifying investment scenarios compared with level of service，and incorporating results into the master plan．

Water Research Foundation，WRF 4471，Leveraging Data from Non－ Destructive Examinations to Help Select Ferrous Water Mains for Renewal， Denver，CO．Analyst．The objective of this project is to demonstrate that NDE can be used cost effectively on some mains，and the results can be used to infer the condition of similar mains．Tailored Collaboration partners：DC Water，Denver Water，Los Angeles Department of Water and Power，Fairfax Water，and Seattle Public Utilities．

Water Distribution Asset Management Plan Development，Phoenix，AZ． Modeler and Analyst．The City of Phoenixowns and operates approximately 7，000 miles of distribution systems wants to refine its asset management plan for water distribution and transmission mains．HDR provided an overall program assessment which included：data clean－up and analysis，development of long term renewal investment levels，development of near－term renewal project identification and prioritization procedures，and knowledge transfer to City staff to support more efficient and effective data driven decision making．

Water Distribution Study，Eugene，OR．Data Analysis and Risk Modeling．HDR assisted the Eugene Water \＆Electric Board（EWEB）complete a water distribution
study for two water districts which receive their retail water service. The objective of the study was to estimate a reasonable annual budget or level of investment (funding) for the districts to effectively maintain their distribution system over the long-term and to meet service goals. Two methodologies were used to assess Service Life Planning using this data: (i) Asset Class Performance Analysis; and (ii) Weibull Failure Rate Analysis. An informal regional utility survey was also conducted to compare the findings from the analysis. HDR worked with EWEB staff to train them in the use of the data-driven model used in the service life analysis.

Condition Assessment Program Support Quick Start Task, Winston-Salem, NC. Eric was the technical Lead for the Condition Assessment Program Support quick start task for the Collection System Improvement Program Manager Services for City/County Utilities Commission in Winston-Salem, NC. Eric lead workshops to determine Near-Term condition assessmentwork based on risk and worked with staff to determine goals, technologies, data collection needs, and schedules the first two years of the Program. The approach included a statistical sampling methodologyfor assessment that included determining appropriate sample sizes for each asset class, field data collection, QAQC, rehabilitation and replacement forecast analys is, and an implementation plan.

Clark County Water Reclamation District, 5-Year Plan for Asset Management Service, Las Vegas, NV. Supported development of Asset Management Policy and Framework and the Asset Management Program Implementation Roadmap for approximately 2,000 miles of gravity sewer system. Services included working collaboratively with stakeholders to develop a 5 -year roadmap with level of effort that organized key initiatives according to the framework into categories including asset registry, condition assessment, remaining useful life, life-cycle and replacement costs, levels of service, business risk, optimization of operations and maintenance investment, optimize capital investment, and funding strategy. Example initiatives include adding process and instrumentation diagrams to the CMMS to establish a direct link to SCADA, semi-automated work order generation for condition assessment, develop replacement planning model for long-term renewal forecasting, and integrate asset management program key performance indicators into a dashboard or reporting workflow.

West Basin Municipal Water District, Asset Management Consulting Services, Los Angeles, CA. Provided asset management consulting services for the District's unique operations, which include treating wastewater to five different levels of recycled water quality for industrial, municipal, and public customers. Services included working collaboratively with stake holders to develop asset management program, asset management framework, and opportunities for improvement in the following focus areas: Asset Databases; Inspection and Condition Assessment; Rehabilitation and Replacement; Financial Planning; Operations and Maintenance; Inventory Management; Information Technology, and Asset ManagementStrategies. Opportunities for improvementwere organized into an implementation plan with level of effort forecasts and schedules. Supported a pilot implementation of asset management processes and opportunities for improvementidentified in the implementation plan and supported implementation of asset management software.


## EDUCATION

BS, Chemical Engineering, California Polytechnic University, Pomona

## REGISTRATIONS

Professional Chemical Engineer, California \#6291

Professional Chemical Engineer, Arizona \#48417

Professional Chemical
Engineer, Idaho\#15476
Professional Chemical Engineer, New Mexico \#21879

NACE International Cathodic Protection
TechnologistCP-3\#17978
Cathodic Protection
Specialist CP-4 \#17978
Cathodic Protection Interference

## NCCER

Corrosion Prevention Field Technician 1

Abnormal Operating
Conditions - Field Ops

## PROFESSIONAL <br> MEMBERSHIPS

NACE International
American Institute of Chemical Engineers (AIChE)

American Concrete Institute (ACI)
American Water Works
Association (AWWA)

## Brien Clark, PE

Cathodic Protection Lead

Brien Clark will provide valuable input on cathodic protection and condition assessmentstrategies and implementation. As part of the direct corrosion assessment of the District's North Feeder Pipeline, Brien evaluated assessment data and provided detailed recommendations for cathodic protection and future monitoring. He will also perform Weibull Failure Modeling of the District's pipe to better understand pipe deterioration, as part of the risk modeling.
Brien was a technical lead on several WRF projects and is experienced in performing condition assessments, external direct assessments, failure analyses, soil corrosivity studies, water aggressivity studies, cathodic protection surveys, cathodic protection/corrosion control designs, and construction checkouts. Brien is certified by NACE International as a cathodic protection specialist and technologist, and in cathodic protection interference. He is also certified as a Corrosion Prevention Field Technician and for Abnormal Operating Conditions in Field Operations by the National Center for Construction Education and Research.

## RELEVANT EXPERIENCE

Rainbow Municipal Water District, North Feeder Pipeline Evaluation, Fallbrook, CA. Project Manager/Project Engineer. A corrosion investigation was performed to determine the likely failure mode of the North Feeder pipeline. It was believed that the failure may have been related to the presence of cathodic protection on a high pressure gas line running near the waterline. HDR performed in-situ and laboratory soil corrosivity testing, cell-to-cell close interval surveys with the foreign rectifier de-energized, and pipeline excavation to perform external direct assessments. The direct assessments documented the condition of the pipeline and determined if stray current was involved in the failure and recommendations were made for cathodic protection.

Cedar Street Pipeline Corrosion Direct Assessment, Ontario, CA. Project Engineer/Project Manager. HDR conducted an emergency failure analysis and external corrosion direct assessment of a 14-inch CML\&TW spiral welded steel pipe. The analys is included examination of the pipe surface, pipe-to-soil potential measurement, electrical continuity testing, soil sample collection and laboratory soil corrosivity testing. Brien conducted the field testing, analyzed the data, and provided all the test data to the client with full explanation.

Inland Empire Utilities District, Recycled Water Pipeline 930 Zone Water Pipeline, Chino, CA. Corrosion Protection Technical Reviewer. Corrosion control pre-design, design, and construction support services was provided for approximately 12,500 feet of 30 -inch diameter ductile iron pipe and cement mortar coated steel pipe, and a 5 MG water reservoir. Cathodic protection was designed for both the piping and the reservoir. Brien was a technical reviewer for the cathodic protection calculations, drawings, and specifications.

Eastern Municipal Water District, Domenigoni 24-Inch Pipeline Corrosion Assessment, Perris, CA. Project Manager/Project Engineer. HDR performed a condition assessment of the Domenigoni pipeline, a critical 21- and 24-inch transmission main approximately 12,000 lineal feet in length, for EMWD. The purpose of the investigation was to assess the piping from a corrosion standpoint for its continued failure-free operation. Brien performed a full document review, conducted a soil corrosivity study, electrical continuity testing, cathodic protection stray current investigation, a pipe-to-soil potential survey, electrical isolation testing, cell-to-cell close interval survey (CIS), and excavated the pipeline at three (3) locations to perform external corrosion direct assessments.

Watermain Breakage Reduction Study/Asset Management Plan, Phoenix, AZ. Failure modeler. Performed the Weibull failure modeling analysis used to determine forecasted break rates by pipe attributes. HDR renewed and analyzed the City's 25 -year break history to help quantify the impact of the City's prior investmentin distribution system replacement and optimize the future investment required to achieve targeted break rates. Geospatial analysis of the City's prior breaks and readilyavailable operating data quantified the impact on long-term pipe performance of intrinsic properties such as material and age, and extrinsic properties such as soils and operating pressure. The resulting curves allow City staff to better target its future main replacement program on higher risk pipe and avoid wasting money on pipe with a high expected remaining useful life.

City of Lincoln, Lincoln Water Facilities Master Plan, Lincoln, NE Weibull Failure Modeling. Performed an asset management analysis as part of the preparation of the water facilities master plan. The project included a review of the city's water capacity requirements, supply availability, treatment capacity and future regulatory requirements, distribution system analysis, development of a water main replacement program, asset management program, and development of a final report. Development of a condition and assetmanagement framework for system renewal.

City of Sacramento Department of Utilities, AC Pipe Evaluation and Soil Corrosivity Testing Report, Sacramento, CA. Project Manager/QC Reviewer. The City of Sacramento Department of Utilities (City) encountered numerous premature failures on their extensive asbestos cement pipe (ACP) water distribution system. As the on-call corrosion engineering consultant, HDR Engineering, Inc. (HDR) was tasked with determining the anticipated remaining life of several ACP sections and investigating if there were commonalities regarding the failures. Several ACP samples were provided to perform condition assessment and failure analys is of coupons. Soil samples at the coupon sites were provided for soil corrosivity testing. System water aggressivity was studied. A detailed desktop and laboratory study was performed to determine the degree of deterioration and to draw conclusions on the root cause of failures.

San Diego County Water Authority (SDCWA), Tri-Agencies Pipeline Investigation, San Diego County, CA. Project Engineer/Field Engineer. Spurred by a pipeline leak, an investigation along the alignment of the Tri-Agencies Pipeline (TAP) was conducted. The potable water pipeline is co-owned by SDCWA, Vista Irrigation District, City of Oceanside, and Carlsbad Municipal Water District. SDCWA's portion of the pipeline is approximately 22,300 feet of 30 - to 42inch diameter rod-wrapped concrete cylinder pipe (AWWA C303). Tests performed included electromagnetic conductivity, field soil resistivity, laboratory soil analysis, and linear polarization resistance (LPR) corrosion rate testing. An analysis of soil resistivity, corrosion initiation modeling, similitude (Romanoff) analysis, and LPR testing was performed. Recommendations included locations for direction assessment as part of the continuing condition assessment.

Water Research Foundation, Development of an Effective Asbestos Cement Distribution Pipe Management Strategy for Utilities, Report 4480, Oakland, CA. Weibull Failure Modeling. The objective of this research project is to develop an effective strategy for management of utility asbestos cement (AC) pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and costanalysis. Performed analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.


## EDUCATION

Bachelor of Science, Civil Engineering, Tufts University

## REGISTRATIONS

Professional Engineer, Arizona \#52005

Professional Engineer, California \#40648

PROFESSIONAL MEMBERSHIPS
WateReuse Association, San Diego Chapter, PastPresidentand Technical Program Co-Chair for the 2017 California Symposium in San Diego

ASCE Pipeline and Environmental Group, San Diego Chapter 2016-17 Chair

## Jennifer Duffy, PE

## Project Principal

Jennifer Duffy has more than 30 years of civil and environmental engineering experience in the San Diego region, including an impressive background in water and recycled water master planning and design, sewer master planning and alignmentstudies, pipeline and pump station design, environmental permitting, water supplyanalysis, and hydrologic studies.

In her most recent Master Plan projects, condition assessment and asset management have become increasinglyimportant components and as such, Jennifer has incorporated those elements into her master planning approach. She recognizes that, as water conservation and drought conditions have reduced water use throughout Southern California, growth issues have become secondaryto facility condition assessment. Prioritization and prolonging the life of our critical infrastructure has become paramount. Jennifer offers her expertise in infrastructure planning and decision making to this HDR team of experts.

2016 Potable Water Master Plan Update, Vista Irrigation District, Vista, CA. Project Manager for the condition and capacity assessment of the potable water distribution system, including extensive analysis of pipeline and reservoir condition assessment and prioritization of rehabilitation and replacement projects.

2016 Comprehensive Sewer Management Plan, City of Vista, CA. Project Manager. In addition to updating the hydraulic model and providing capacity assessment, this project includes an asset management plan that will close gaps in the asset registers for GIS/Cityworks/Pipelogix/hydraulic model. HDR will identify likelihood and consequence of failure for assetrisk, replacement costs, renewal prioritization, and evaluation of levels of service and associated levels of investment. The results of assetmanagement analysis and assetinformation will be coordinated with GIS staff for inclusion in appropriate systems and the identification of assetmanagement software. A continuous improvement plan will be developed that includes analysis of existing business processes and systems and identification of prioritized opportunities for improvement for policies, processes and systems.

Cathodic Protection Program Improvements, City of Carlsbad Utilities Department, Carlsbad, CA. ProjectPrincipal. HDR prepared an assessment of the City's potable water cathodic protection system through record drawing review, soil corrosivity evaluations, surface electrochemical pipe-to-soil potential evaluations, field verification of electrical continuity and isolation of existing piping systems and developed a work plan and Basis of Design report for recommended improvements. Jennifer has provided overall quality assurance on this project.

Corrosion Protection On-Call Contract, Otay Water District, Spring Valley, CA. Project Principal. HDR was re-selected for the current on-call services contract to prepare an annual report, database management and cathodic protection surveys of potable water facilities. Jennifer has provided overall quality assurance on this project.

Water Master Plan, Carlsbad Municipal Water District, Carlsbad, CA. Assistant Project Manager responsible for development of potable water master plan as Carlsbad integrates desalinated water into its water supplyportfolio. Responsible for evaluating regulatory issues affecting the potable water system, coordinating with the city's recycled water master plan efforts, developing a capital improvement program (CIP). NOTE: Jennifer has been selected as the Project Manager for the

## 2017 Update of this Master Plan and a new Asset Management Plan, planned to begin in February 2017.

Fort Hunter Liggett Water and Sewer Master Plan, US Army Corp of Engineers, Jolon, CA. Technical Project Manager for the condition and capacity assessment of the water and sewer infrastructure systems supporting the Fort Hunter Liggett Army Training Base outside of Monterey, California. Managed the site survey, closed-circuittelevision (CCTV) inspection, and development of hydraulic models to evaluate current condition and capacity of the systems and their ability to accommodate future expansion plans associated with the Installation Development Master Plan.

Water and Recycled Water Master Plan and Wastewater Master Plan, City of Escondido, Escondido, CA. Project Manager. Project manager for the development of a water, wastewater and recycled water master plan to update the city's current planning documents to incorporate new and emerging conditions that affect water demands, supplyand delivery within the city, and meetregulatory deadlines. Both plans tookinto account the city's downtown redevelopment plans and the impact on the existing infrastructure systems. Delivered a comprehensive analysis of the existing systems, facility condition assessment and project prioritization, documenting required improvements to accommodate build-out conditions and developing a capital improvement program.

Water, Wastewater, Recycled Water and Water Conservation Master Plan, Vallecitos Water District, San Marcos, CA. Project Manager. The master plan evaluated the presentand future service area and established a CIP to meet the demand for potable and sewer collection systems. The master plan incorporated new opportunities for desalinated water and expansion of sales of recycled water outside of the district. Phased capital improvement projects associated with district's water and sewer infrastructure needs.

Water Facilities Master Plan and Atlas Map Update, Rincon del Diablo Municipal Water District, Escondido, CA. AssistantProject Manager. This master plan addressed not only the traditional "pipes, pumps, and tanks" master planning effort, but takes a broader view of alternative water supplies and risk reliabilityanalysis. During the project, Jennifer evaluated and documented existing conditions and the capacity of existing potable and recycled water systems, reviewed water demand impacts of future development in accordance with adopted land use plans, evaluated current design criteria, updated the GIS-linked potable water hydraulic model, and recommended prioritized system improvements.

Shadowridge Water Reclamation Facility Revitalization Feasibility Study, City of Vista, CA. Assistant Project Manager responsible for the assessment of revamping a mothballed conventional wastewater treatment facility to accommodate 1 or 2 mgd membrane bioreactor reclamation facility. Participated in site assessmentand costanalysis of proposed infrastructure required to revitalize the site.


## EDUCATION

MBA, Finance, University of Southern CA

BS, Civil Engineering, University of Utah

BA, English Language \& Literature (English, University of Utah

## REGISTRATIONS

Registered Civil Engineer, California \#39298

## Dan Ellison, PE

## Quality Manager

Dan Ellison has gained national and international recognition as an expert on pipe assessment, rehabilitation, and trenchless construction, having authored several books on the subject. He is the former Chair of the Water Main Rehabilitation Committee of AWWA.

Dan has managed groups with more than 40 employees, and programs with annual budgets up to $\$ 40$ million. Projects have ranged from record-setting trenchless river crossings, to published research, to power plant retrofits, even a fish ladder. This diversity of projects, along with superior management skills of people and programs make Dan tremendously flexible and creative.

## RELEVANT EXPERIENCE

LADWP, Pipeline Rehabilitation Program, Los Angeles, CA. Program Manager for $\$ 36$ million annual program that upgraded water mains and trunk lines, primarilythrough the cementmortarlining method. During Mr. Ellison's tenure, the program set new production and efficiency records, while making numerous improvements in customer service. Slip lining and pipe bursting methods were introduced. Oversaw both the design and construction management for more than 3 million feet of pipeline rehabilitation costing over $\$ 100$ million. Directly managed up to 43 people performing this and other functions. Completed over 30 projects involving contracts, which averaged between $\$ 1.5$ and $\$ 2.5$ million. Approximately 18 contracts were completed annually, with 12 projects underwayat any time. Pipe sizes ranges from 4 inches to 60 inches.

LADWP, Trunk Line Testing Program, Los Angeles, CA. Devised methodology and established program for testing and rehabilitation of large-diameter riveted and welded steel pipelines. Prior to this program, plans were underway to replace 144miles of large-diameter, pre-1940 pipe. Pipe sizes ranged from 20 inches to 84 inches. Pipe materials included rivet steel and welded steel. All were originally installed without cement mortar lining and with minimal external coatings. This program demonstrated that 90 percent of the trunk lines were not as risk of catastrophic failure and could remain in service, with periodic testing, cathodic protection, and other rehabilitation. This program saved the LADWP literally hundreds of millions of dollars.

WRF 4480, Development of an Effective Asbestos Cement Distribution Pipe Management Strategy for Utilities, Denver, CO. The objective of this research project is to develop an effective strategy for management of utility asbestos cement (AC) pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and cost analysis. Performed analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.

Water Research Foundation, WRF 4471, Leveraging Data from NonDestructive Examinations to Help Select Ferrous Water Mains for Renewal, Denver, CO. Principal Investigator. The objective of this project is to demonstrate that NDE can be used costeffectively on some mains, and the results can be used to infer the condition of similar mains. Tailored Collaboration partners: DC Water, Denver Water, Los Angeles Department of Water and Power, Fairfax Water, and Seattle Public Utilities.

Water Research Foundation, WRF 4473, The Assess-and-Fix Approach: Using Non-Destructive Evaluations to Help Select Pipe Renewal Methods, Denver, CO. This project (1) developed an analytical approach and guidelines for
selecting pipe rehabilitation methods, based on full non-destructive examination (NDE) scans of a castiron or ductile iron water main; and (2) showed how an NDE tool can be used economically, as part of a rehabilitation project, to optimize the rehabilitation.

Eugene Water \& Electric Board, Water Distribution System Assessment, Eugene, OR. Technical Advisor. Helped develop defensible statistical analysis used to determine the life expectancies of different pipeline asset classes. Used historical repair records, information regarding pipe materials, and published reports from the Water Research Foundation and other sources for an unbiased assessment needed to support annexation of two smaller districts.

## Publications

Principal author of 7 books for the Water Research Foundation on asset management, condition assessment, and pipeline rehabilitation:

- Distribution Infrastructure Management: Answers to Common Questions (2001)
- Investigation of Pipe Cleaning Methods (2003)
- No-Dig and Low-Dig Service Connections Following Water Main Rehabilitation (2007)
- Global Review of Spray-On Structural Lining Technologies (2010)
- Answers to Challenging Infrastructure Management Questions (2014)
- The Assess-and-Fix Approach: Using NDE to Help Select Pipe Renewal Methods (2015)
- Development of an Effective Management Strategy for Asbestos Cement Pipe (2015)
- Contributor to Water Research Foundation Report: Failure of Prestressed Concrete Cylinder Pipe (2008)



## EDUCATION

BS, Electrical Engineering, Penn State University, PA

## REGISTRATIONS

Professional Corrosion
Engineer, California \#C1034
Cathodic Protection
Specialist, NACE
International \#9230

## Richard E. Veihl, PE

## Cathodic Protection

Rick Veihl is a senior cathodic protection and corrosion expert for HDR. He has more than 33 years of extensive experience in the identification and remediation of corrosion in various areas including water tanks, water pipelines, water treatment, lift stations, oil and gas facilities, waste water treatment plants and pipelines, transit rail systems and related infrastructures. Typical projects have included CP system designs, construction support, and troubleshooting as well as facility assessments and corrosion related failure investigations.

## RELEVANT EXPERIENCE

Vista Irrigation District, On-Call Corrosion Engineering Services, Vista, CA. Project Manager. Rick has been involved with the District regarding corrosion control issues for more than 15 years. He has maintained an "on-call" relationship with the district for any corrosion issues. His involvement has included investigations to determine the causes of corrosion failures and designing numerous cathodic protection systems to mitigate future corrosion. He has also evaluated and mitigated corrosive conditions on VID structures caused by stray current from foreign pipelines which cross through the District. Rick has written and updated standard specifications and drawings to be installed along with their structures and extend their structures life, prepared a District Operation and Maintenance Corrosion Manual, and trained District personnel to conduct holiday inspections and install and test cathodic protection systems. He has also provided the District with on-site inspection services during the installation of cathodic protection systems.

Cathodic Protection Program Improvements, City of Carlsbad Utilities Department, Carlsbad, CA. Project Manager. Rick prepared an assessment of the City's potable water cathodic protection system through record drawing review, soil corrosivity evaluations, surface electrochemical pipe-to-soil potential evaluations, field verification of electrical continuity and isolation of existing piping systems. Developed a work plan and Basis of Design report for recommended improvements.

San Diego County Water Authority, Capital Improvement Program, Support Services for Corrosion Engineer \& Corrosion Technician, San Diego County, CA. Project Engineer. HDR supplied construction support, design support for various projects. These projects included the: Oceanside 6 \& Vista 11 \& Rainbow 12 Flow Control Facility Cathodic Protection (CP) Project, which included conducting various field tests and measurements at the various site to determine the type and size of the recommended cathodic protection system; Otay 11 \& SD 19 Flow Control Facility, which included the acquisition of materials, contractor, on site inspection, engineering changes, and assist in final check-out; San Vicente Tunnel - West Shaft Pipeline CP Construction, which included the acquisition of materials, well permits, contractor, on site inspection, engineering changes, and assist in final check-out.
Recently, Rick assumed the role of Corrosion Engineer for the Authority. HDR supplied San Diego County Water Authority (SDCWA) with a full-time on-site corrosion engineer and one engineering technician. The services provided included corrosion consultation for materials and coatings, training of SDCWA personnel, conducting an annual cathodic protection and corrosion monitoring survey for over 51 -miles of parallel large diameter tape wrapped steel, cementmortar coated steel, and pre-stressed concrete cylinder pipe, witnessing and performing construction checkouts, developing SDCWA's corrosion control manual
and standard corrosion guide drawings, conducting stray current studies, conducting electromagnetic conductivity surveys, designing cathodic protection, conducting internal pipe inspections, the use of non-intrusive test methods to locate discontinuous pipe joints in post-tensioned concrete cylinder pipelines, identifying and correcting problematic areas with SDCWA's cathodic protection systems and maintaining SDCWA's corrosion database.

Since taking this position he has assisted SDCWApersonnel with CP related testing, inspection, and troubleshooting at the Twin Oaks Valley Water Treatment Plant and San Vicente Dam Projects.

Padre Dam Municipal Water District, On-Call Engineering Services, San Diego County, CA. Project Manager. Rick provided corrosion engineering services to Padre Dam Municipal Water District which included baseline surveys, testing and analyzing cathodic protection systems, designing cathodic protection systems as well as special corrosion control projects. Cathodic protection designs included water reservoirs, distribution pipelines and a 36 -inch diameter water transmission main. Testing included stray current interference testing, cathodic protection activation and periodic pipe-to-soil potential measurements.

Southern Nevada Water Authority, Stages I \& II Lateral Condition Assessment, Las Vegas, NV. Project Engineer on mains ranging in diameters of 16 to 120 inches. Pipeline materials include reinforced concrete pressure (RCP) pipe; PCCP, steel-cylinder type; concrete pressure pipe (CPP), bar-wrapped, steel-cylinder type; cement-mortar lined and coated (CML\&C) welded steel pipe (WSP); and asbestos-cement pressure (ACP) pipe.

Rick conducts and oversees the conduction of field testing such as cathodic protection surveys, troubleshooting, pin braze test stations and joint bonds, and dielectric insulator testing. He reviews and analyzes the reduced data for all of the above testing data. Based upon the data, Rick is able to make recommendations for further testing, installation of test stations, and direct assessments. He is responsible for writing final reports with recommendations to the client.


## EDUCATION

BS, Civil Engineering, University of Nevada, Las Vegas

## REGISTRATIONS

NASSCO PACP, MACP, \& LACP Certified

Confined Space Certified

PROFESSIONAL MEMBERSHIPS<br>American Society of Civil Engineers (ASCE)<br>National Society of Professional Engineers (NSPE)

## Aria Heraypur, EIT <br> Project Engineer

Aria Heraypur is a civil engineer with three years of experience. She has been involved with planning, assessment and construction of water and wastewater facilities projects. Aria has also worked on numerous asset management and planning projects ranging from water and sanitary sewer systems and condition assessment to supervisory control and data acquisition (SCADA). She is certified by the National Association of Sewer Companies (NASSCO) for condition assessment and has prepared technical memorandums detailing defects and recommendations. She has also adeptlymanaged sub consultants and contractors for various projects. She has experience in collaborating with contractors and government agencies for both utility coordination and various right of way and encroachment permit applications.

## RELEVANT EXPERIENCE

2016 Water Master Plan, Condition Assessment, Vista Irrigation District, Vista, CA. Staff Engineer participating in condition assessment of District's reservoirs and site appurtenances. Aria was responsible for preparing a technical memorandum summarizing findings and recommendations.

2016 Sewer Master Plan Update, Asset Management Plan, Rate Study, and Program EIR, City of Vista, CA. Staff Engineer contributing to the development of a sewer master plan and asset management plan. Aria assisted in identifying likelihood and consequence of failure for asset risk, asset replacement costs, asset renewal prioritization, evaluation of levels of service and associated levels of investment, asset renewal forecasting scenarios and identification of asset management software. Workshops with operations staff on practices and SOPs were conducted and the results of asset management analysis and asset information were coordinated with GIS staff or appropriate staff for inclusion in appropriate systems. A continuous improvement plan was developed that analyzes existing business processes and systems and prioritizes identified opportunities for improvement of policies, processes and systems.

US Army Corp of Engineers, Fort Hunter Liggett Water and Sewer Master Plan, Jolon, CA. Staff Engineer. The U.S. Army Garrison Fort Hunter Liggett, Calif., provides training for combat supportand combat service supportunits of the Army Reserve. Fort Hunter Liggett (FHL) is the largest installation in the Army Reserve, with more than 165,000 acres of unencroached mountains, valleys, rivers, plains, and forests. FHL is undergoing efforts to improve infrastructure capacity to increase daily population from approximately 1,000 persons to 10,000 persons daily. Aria assessed water demands, evaluated sewer system condition assessment (CCTV) findings, assisted with the development of the hydraulic model and development of Capital Improvement projects. She also evaluated FHL's water and sanitary sewer systems to identify shortcomings and capital improvements necessary for the Installation's continued growth.

City of San Diego Public Utilities Department, SCADA Master Plan, San Diego, CA. Staff Engineer. HDR developed a SCADA Master Plan to provide a vision for the future state of the SCADADCS systems to meet the goals and objective of the City and ensure consistencyin the implementation of SCADADCS systems across the Department. A primary goal of this SCADADCS Master Plan project develops a 5 -year implementation plan with high level budgetary cost estimates for the recommended automation improvements for raw water, potable water and recycled water systems. Aria assisted with collection and evaluation of
documentation, on site interviews and site visits with City staff, and preparation of technical documentation to include in the Master Plan.

San Antonio Water System, Sanitary Sewer Overflow Reduction Program, Program Management Services, San Antonio, TX. Staff Engineer. In July 2013, the U.S. Environmental Protection Agency (EPA) issued a Consent Decree requiring the San Antonio Water System (SAWS) to reduce overflows from its sanitary sewer system. SAWS retained HDR as the Program Manager on the \$1 billion SSO Reduction Program. As Program Manager, HDR is working with SAWS to meet all compliance requirements, including extensive condition and capacity assessment of the existing system. This work includes developing program-wide strategies for condition and capacity assessment, performance measurement, risk management, and CIP project definition.

Clark County Water Reclamation District, Clark County Collection System Program Management Services, Las Vegas, NV. Staff Engineer. HDR's services included contracting of inspection services, training for Districtstaff and contractors on standardized programs, an odor control master plan with specific recommendation on odor control measures and practices, evaluating pretreatment program processes and procedures, evaluating Underground Service Alert (USA) processes and procedures, developing process for pump station equipment renewal, and performing lift station condition assessment for bypass pumping.

Clark County Water Reclamation District, CCWRD Central Plant Biofilter Rehabilitation, NV. Staff Engineer. Assessment and rehabilitation design for five (5) bark-media biofilter sites at the District's central wastewater treatment plant, varying in airflow capacity from 14,000 to $80,000 \mathrm{cfm}$. Assessment elements included: foul air duct CCTV inspections, drainage system analysis, bark media and odor evaluation, irrigation system review, biofilter linings evaluation, vault structural needs, and review of valves and biofilter maintenance operations.


## EDUCATION

MA, Geography, San Diego State University

BS, Environmental Sciences/Studies, East China Normal University

## REGISTRATIONS

Certified GIS Professional,
California \#00057433

## PROFESSIONAL MEMBERSHIPS

 Urban and Regional Information Systems Association (URISA), Sothern California, BoardMember, 2003-2015

## Yuying Li, GISP <br> GIS Programming

Yuying Li is a Senior GIS Analyst/Programer in HDR's San Diego office. She has over 13 years of GIS consulting and software development and customization experience. Yuying has extensive knowledge of GIS data modeling, geodatabase design/development, modelbuilder, spatial analysis, and mapping. Yuying is also well versed in programming and database management, which she has applied to several customized desktop and web-based GIS applications using ASP.net, HTML, C\#, ArcObject, and Javascript. She has also developed multiple mobile applications to facilitate field data collection.

## RELEVANT EXPERIENGE

City of Buena Park, Water Pipelines Criticality Assessment, Buena Park, CA. Lead GIS developer. Yuying used GIS modelbuilder to develop the criticality assessment models for AC pipes, Metallic pipes and all water pipes based on the criticality factors determined by the project team. Each pipeline is evaluated and scored for potential breaks. Then pipes are grouped for O\&M purposed.

Irvine Ranch Water District, Embedded Energy Plan, Irvine, CA. Lead GIS developer. Navigant Consulting, Inc. in conjunction with HDR Engineering Inc. was selected to support the IRWD's need to develop an Embedded Energy Plan. As part of the delivery, Yuying developed a customized GIS tool (Embedded Energy Management Tool) to allow users to visualize energy consumption for 10 different system components, such as water distribution, water supply (non-potable and potable), recycled water treatment, etc. and perform conservation and surcharge analysis. The tool was delivered as an ArcGIS extension for easy deployment and user friendly interface.

Port of Long Beach Stormwater Master Plan, Long Beach, CA. As the lead GIS Analyst, Ms. Li developed geodatabase to maintain condition assessment data from 50 miles of storm drains, manholes, and catch basins field inspection data. Yuying also automated process to import the manhole data for field inspection reports. CCTV data were also incorporated in GIS to identify the segments with appropriate CCTV videos. The information, such as survey status and schedule, then are shared with the Client via a web based application. The inspection and assessment data was used by the modeling engineers to determine deficiencies in the storm drain system, and to recommend capital improvements to minimize flooding.

City of Los Angeles, Sidewalk Repair Program, Los Angles, CA. GIS Programmer. Working with department of public works engineers, Yuying designed and developed sidewalk assessment mobile application to allow field crews to collect sidewalk repair information, such as geographic location, trees removal, utility interference, etc. The data are dynamicallypost-processed to apply assessment rules for additional information required for contracting. The data then are incorporated in the sidewalk repair database.

San Diego Association of Governments (SANDAG), GIS Enhancements for Regional Forecasting Models, San Diego County, CA. GIS Programmer. The
purpose of the project is to reengineer their legacyGIS system and take advantage of new GIS technology that will improve performance. SANDAG has been on the forefront of GIS technology for several decades. During the early 1990s SANDAG began integrating its GIS with regional travel forecasting models. This integration resulted in a robust system built using the leading GIS platform at the time. This project will upgrade and improve the current GIS framework for managing data for the SANDAG regional planning models. As the regional planning agency, SANDAG develops and implements transportation and land use models to support project planning and policy decision making for the San Diego region.

San Diego Data Processing Corp., PS Tools Upgrade and MDUs, San Diego, CA HDR will upgrade the existing PS Tools software to help SDMWWD meet its immediate legal and business objectives. HDR provide all programming and many of the database services required for the project. Ms. Li helped upgrade the Planner Scheduler (PS) Tools, Sanitary Sewer Overflow Tracking Database, and Spill Finder Tool systems to use Oracle and ArcGIS 10.1 and change WWCD's maintenance management work processes to implement off-the-shelf handheld MDUs.

City and County of .Honolulu Department of Environmental Services, Wastewater Program Management, Honolulu, HI. As part of a United States Environmental Protection Agency Consent Decree, the City and County of Honolulu developed a program to systematically identify deficient collection system pipelines and rehabilitate and replace 144 miles by June 2020. Yuying provided technical support to maintain the relevant data in geodatabase and serve the information via Esri ArcGIS server for spatial data mapping and analysis on the project SharePoint website.

## Metropolitan Water Dist of Southern CA, Metropolitan Water District v. Campus

 Crusade for Christ, Los Angeles, CA. GIS Analyst. Ms. Li gathered GIS data from the city and county, reviewed the GIS data, mapped the data for environmental constraints analysis. The Metropolitan Water District of Southern California (MWD) retained HDR for expert witness services in the MWD / Campus Crusade for Christ project. In order to constructa pipeline to provide water to part of it's customer base, it was necessaryfor MWD to acquire various properties owned by Campus Crusade for Christ and Del Rosa Mutual Water Company.Department of Water Resources, Task Order 6-GIS Support. Yuying is one of the lead GIS analysts to support Bay Delta Conservation Plan EIR/EIS. She developed a Access based Survey scheduling tool that facilitates field survey planning, scheduling and tracking that implement manyrules, such as parcel access, neighbor parcels, surveyor availability, etc. Yuying also developed and customized ArcGIS server WebADF web application for project engineers and subconsultants to visualize the engineer design and compare among different alternatives. A customized web application is also developed specific for water quality analysis using ArcGIS server Flex API. The web tool exposes a web service that consumes and queries the water quality model export data that reside on the server in Excel format and allow the users to query the information combining several parameters and perform the analysis. She is also developing and managing file and SDE-based geodatabases to support mapping and analyses.


## BOARD OF DIRECTORS

March 28, 2017

SUBJECT
DISCUSSION AND POSSIBLE ACTION TO APPROVE PURCHASE OF KNOTTWOOD WAY PRESSURE REGULATING STATION

## BACKGROUND

As part of the District's Capital Improvement Plan, the District would like to increase system reliability by pressure management and looping. This includes installing pressure regulation stations (PRS) in areas of high pressure to decrease pressures to manageable levels. High pressure areas are prone to an increased frequency of pipe breaks and lower pipeline life expectancy. Looping water systems also increases system reliability by having water feed from different areas, which minimizes the number of customers affected during shutdowns. Looped waterlines allow water to flow continuously and improves water quality.

## DESCRIPTION

Knottwood Way which is located off Gird Road, has two dead end pipelines from two different pressure zones (Pala Mesa Tank and Morro Reservoir) that terminate on either side of a tributary. See attached exhibit. As part of the final requirements of the Sycamore Ranch development, the developer must build a bridge on Knottwood Way to connect the road. The Knottwood Way project would loop these two waterlines through the bridge and install a PRS. For the timing to work out with the developer the District must purchase the PRS in advance so it can be fabricated and shipped in time for a contractor to install before the bridge and paving is complete. Typical fabrication time for the PRS is 3.5 to 4 months. This item is only for the purchase of the PRS. The District plans to award the bid for the construction of the Knottwood Way waterline loop and PRS at a future Board meeting.

Previously, contractors would order parts and build the pressure reducing station in the field per the District's standard drawing. This requires more time for a District inspector to review the workmanship of the contractor, parts being used and pressure testing of the station. The District has had some complaints regarding the aesthetics of the above ground station which is enclosed within a fence and has a large footprint.

Enclosed is a proposal from Engineering Fluid Inc. (EFI) for a pre-fabricated PRS. A pre-fabricated PRS allows for quality control within a factory setting and the piping is all factory epoxy coated. The station is pressure checked and certified as well, eliminating the pressure check in the field. The District has reviewed plans and materials to come up with a standard PRS which can be installed in different locations around the District. This type of PRS has been successfully installed at the Olive Hill Development, Golf Green Estates and Lake Vista Terrace and is currently being used and maintained by District staff. Since the whole station comes pre-fabricated, it takes less time to install and requires only the main inlet and outlet piping to be tied into the existing water system. Another benefit from the standardized station is that operators would be familiar maintaining the station and parts can be stocked in the warehouse to be used at any station. The "dog house" enclosure secures the pressure station and has been accepted to be located inside developments because of its smaller footprint and less invasive
look. The proposal and sample drawings are enclosed with a picture of an existing station that was installed with the Olive Hill Estates Development.

Approval of the PRS purchase is appropriate as a sole source contract, as EFI is a uniquely qualified, responsible vendor with unique expertise considering the prior experience from existing PRS installed in the District, history and understanding of the District's standards, operations and manufacturer requirements. Under such circumstances, utilizing further District resources and funds to collect additional bids would be incongruous and would not result in an advantage to the District or the ratepayers.

## POLICYISTRATEGIC PLAN KEY FOCUS AREA

Strategic Focus Area Two: Asset Management: System reliability through pressure management.

## BOARD OPTIONS/FISCAL IMPACTS

This project is included in the District's 2016/2017 CIP budget.

1. Authorize General Manager to purchase pressure reducing station from Engineering Fluid Inc. for \$59,273.00
2. Direct staff to look at other options for pressure reducing stations.

## STAFF RECOMMENDATION

## Staff recommends Option 1.




PROPOSAL NUMBER: 93349-14193-1
TO: Rainbow Municipal Water District
3707 Old Highway 395
Fallbrook, CA 92028
Attn: Ms. Sherry Kirkpatrick

BID DATE: December 14,2016
ENGINEER: Rainbow Municipal Water District Rainbow, CA

PROJECT LOC.: San Diego County, CA
PROJECT TITLE: Knottwood Way PRS

## EQUIPMENT PROPOSAL

## PRESSURE REDUCING STATION

Manufacture and deliver one (1) factory-built Pressure Reducing Station complete with the following components:

- Size 8" Diameter Main Inlet and Outlet/3" Relief Outlet;
- One (1) Size 6" Cla-Val Model 90G-01BCSYKCKX-X101-X141 Pressure Reducing Valve with Stainless Steel Trim, Epoxy Coating (Holiday Free), X101 Valve Position Indicator and X141 Pressure Gauge;
- One (1) Size $2^{\prime \prime}$ Cla-Val Model 90G-01BCSYKCKX-X101-X141 Pressure Reducing Valve with Stainless Steel Trim, Epoxy Coating (Holiday Free), X101 Valve Position Indicator and X141 Pressure Gauge;
- One (1) Size 3" 50G-01BSKCKD-X101-X141 Pressure Relief Valve with Stainless Steel Trim, Epoxy Coating (Holiday Free), X101 Valve Position Indicator and X141 Pressure Gauge and Dura-Kleen Stem;
- Two (2) Size 6" AVK Series 65 Non-Rising Stem Gate Valve;
- One (1) Size 3" AVK Series 65 Non-Rising Stem Gate Valve;
- Two (2) Size 2.5" AVK Series 65 Non-Rising Stem Gate Valve;
- One (1) Size $1^{\prime \prime}$ Vent-O-Mat RBX Series air release valve;
- Two (2) size $1^{\prime \prime}$ ball valves after each reducing valve and before the isolation gate valve;
- Sample Tap and Hose Bib with Anti-Siphon Valve;
- Two (2) Pressure Gauges - Stainless Steel;
- All Assembled, Tested and Painted (Sherwin Williams Macropoxy - Tan) in a double Fiberglass/Steel Tub Enclosure;
- Fusion Bonded Epoxy Interior Coated Steel Pipe;
- Three (3) magnesium anodes;

Estimated Weight: $\qquad$ 5,000 \# Unit Net Cost $\$ 59,273.00$

## NOTES AND CLARIFICATIONS

1. This proposal does not include preparatory job-site work, off-loading, anchoring or installation of the station, any external equipment, mechanical field pipe or connectors, anchor components, or supply or termination of field power or control wiring.
2. This proposal includes delivery $\operatorname{FOB}$ jobsite on the nearest passable road to the final placement location or to a transfer location. The site of off-loading is to be determined solely at the discretion of the delivering individual, who will base the decision on current site conditions. Responsibility for the equipment will remain with EFI during transport; F.O.B. transfer location. The crane and any necessary rigging are the responsibility of the installing Contractor.
3. The proposed station includes custom anchor clips. Anchor bolts and nuts are by the Installing Contractor.
4. This proposal offers Schedule 40, PVC conduit (with rigid steel conduit for the service entrance.) . The proposed wiring is THHN/MTW.
5. Proposed suction and discharge piping will terminate with a flange 1' below the station floor. Installing Contractor is responsible for connection at this point.
6. The sale price includes complete, engineering submittals and one (1) lot Operation \& Maintenance Manuals with Parts List.
7. This proposal includes one (1) trip and one (1) total man day for manufacturer's field start-up service with instructions. Additional days \& travel, if required due to factors outside this scope, will be billed at EFI's onsite/travel rate: $\$ 1,500 /$ day plus travel.
8. This proposal includes Parts and Labor Warranty for a period of a one (1) year after factory start-up service, otherwise as described in the Conditions of Sale.

Submittal Delivery: 2-3 Weeks after order - Manufacture Completion: $14^{*}$ Weeks After Receipt of Approval. EFI WILL SHIP THE EQUIPMENT TO THE JOB SITE WITHIN 7 TO 10 DAYS AFTER MANUFACTURE.

* Standard delivery has been quoted. Improved delivery may be available for this equipment.

PLEASE NOTE: To reduce the cost of freight impact for a single station shipping from Illinois to California, EFI has anticipated this station will ship with at least one other station. Therefore a delay in delivery may occur. If delivery is critical, EFI can offer an expedited shipping cost.

## PAYMENT TERMS

The price is firm if order is placed within 30 days from date of proposal and providing release to fabricate and ship "when ready" is given within 90 days. Changes in net cost will be included in the remaining payments on a prorated basis. Applicable taxes will be added in each payment. A $1.5 \%$ per month late charge will be applied to past due accounts. Any alternate terms or requests for such should be addressed prior to the bid.
Payment Terms for Secured Orders: For purchasers with a Good Payment History with EFI and evidence of an acceptable payment bond indemnifying EFI is presented within 15 days of the order:

EFI will invoice $100 \%$ upon completion of manufacturing. Net 30 days.
$90 \%$ - due 30 days after equipment manufacture is complete, ready for shipment AND prior to Start-up Services;
$5 \%$ - Upon successful Start-up Services, not to exceed 60 days after invoice/equipment manufacture;
5\% - Upon delivery of O\&M manuals.

Monthly Progress Billing to be included with Monthly Pay Request (if acceptable) : Terms of payment will be Net 30 days subject to $1.5 \%$ per month late charge for past due accounts. Invoicing will be monthly, based upon the percentage of work completed during the billing period, and will be submitted to the Purchaser each month by an agreed upon date. The invoiced amount will reflect the value of the percentage of completion accomplished during the billing period for each of five (5) categories: Engineering/Submittals, Receipt of Materials, Fabrication, Delivery, and Start-up. EFI will determine the percentage of completion accomplished for each month. The Purchaser may require substantiation, which will be limited to photocopies of material packing slips and photographs of station fabrication unless additional charges are accepted. The Purchaser or their agent may visit the EFI factory at their expense for substantiation. Shipment will not be made unless account is current.

## Milestone Progress Payments for Unsecured Orders:

The Billing Schedule for projects without protection indemnifying EFI against loss is as follows:
$20 \%$ - due 10 days after receipt of order;
$40 \%$ - due 10 days after approval of submittals;
$35 \%$ - due 30 days after equipment manufacture is complete, ready for shipment AND prior to Start-up Services;
$5 \%$ - Upon acceptance of EFI supplied equipment, not to exceed 45 days after delivery. O\&M manuals will not be supplied until account is paid in full.

Discounted Pre-payment: In lieu of the terms stated above, EFI offers a $2 \%$ reduction of net cost for full payment received within 10 calendar days of receipt of order. Discounted partial pre-payments may be available.

For additional information contact our local representative: Mr. Dale Huntington
Huntington and Associates
15333 Woods Valley Road, Valley Center, CA 92082
(760) 751-2278 | FAX: (760) 751-5452
dhuntington@aol.com

Unless otherwise stated, quoted price(s) do not include taxes, bonds, fees, or permits. The price as proposed herein is based on and is expressly conditional upon acceptance of the stated terms on this proposal, including the payment terms. Any change or modification of these terms may result in a corresponding change to the quoted price. If alternate terms are preferred, and they are agreeable to EFI, a cost adjustment may be required for the added costs \& liabilities. Some requested revisions of terms may not be acceptable. Any alternate terms or requests for such should be addressed prior to the bid.

| Subtotal........................ \$59,273.00 |  |
| :---: | :---: |
| Taxes ...... | . Not included |
| Total ....... |  |

## EFI'S OFFER OF PRODUCT OR SERVICE IS EXPRESSLY CONDITIONED ON PURCHASER'S ACCEPTANCE OF THE TERMS HEREIN AND THE CONDITIONS OF SALE ACCOMPANYING THIS PROPOSAL. ACCEPTANCE CONSTITUTES ACKNOWLEDGEMENT OF TERMS.

Accepted, Contingent Upon Contract Award and Receipt of Submittal Approval this $\qquad$ day of $\qquad$ 20 $\qquad$ Date Issued: December 14, 2016

Company Name

Authorized Signature

By
Name and Title

ENGINEERED FLUID, INC.
Prepared by:


Kevin Cates, Western Regional Manager

## CONDITIONS OF SALE

## ALL PROPOSALS ARE BASED ON, AND ALL PRODUCTS ARE SOLD ON THE FOLLOWING TERMS, CONDITIONS AND PROCEDURES. TERMS STATED ON THE PRECEDING PAGES SUPERSEDE TERMS AND CONDITION STATED IN THE CONDITIONS OF SALE:

## 1. DEFINITIONS -

1.1 "Seller" shall mean Engineered Fluid, Inc (EFI), a Delaware corporation.
1.2 "Purchaser" shall mean the person or entity listed on the Order Acknowledgement, and any subsidiary or affiliate of such person or entity receiving the Product under the Contract.
1.3 "Parties" shall mean the Seller and Purchase, collectively.
1.4 "Product" shall mean the good(s) or service supplied pursuant to the Order Acknowledgement.
1.5 "Contract" shall mean the agreement between the Parties consisting exclusively of the Order acknowledgment (including its Terms and Conditions of Sale) together with the terms of any written supply agreement signed by both Parties related to the sale of Product to Purchaser and any price quotation of Seller, In the event of conflict between a term appearing the price quotation of Seller and the term appearing in the Order Acknowledgement, the Order Acknowledgement shall govern.
2. Engineered Fluid, Inc. is an equipment manufacturer and is not, nor is to be considered a sub-contractor; as such any contractual requirements the Purchaser may have with a Third Party under a separate contract shall not be considered part of this Contract. Efl's offer is strictly expressed herein Transfer of this Contract to a Third Party is not permitted without the approval of the Parties.
3. TERMS - Payment Terms for Secured Order, which may be stated on the face of this quotation are subject to approval of credit and/or proof of a bond enforce against loss. Otherwise, Progress Payment Terms detailed on the face shall apply. All payments due hereunder to Seller shall be paid to Seller in United States Dollars. Retainage of money due is not permitted. Account must be current, including late charges, before start-up is performed.
4. DELIVERY - The apparatus covered by this proposal and any parts thereof shall be delivered to the Purchaser, f.o.b. the project site, or nearest passable road. Deliveries of the various units of this order may be made as completed.
5. DELIVERY TIME - The quoted delivery stated herein is Seller's best estimate when issued and begins on the date all necessary information is received to properly manufacture the apparatus in its final desired state. While Seller will diligently attempt to meet this date, it shall not be liable for any delay in shipment from any cause whatsoever and Purchaser agrees not to make any such claim.
Notwithstanding anything to the contrary herein, title to and right to possession of the Product shall remain with Seller and Seller shall retain a security interest in the Product (or goods into which the Product is incorporated by Purchaser) and any proceeds of the Purchaser's sale of the Product in the ordinary course of Purchaser's business until any and all payments due from Purchaser to Seller pursuant to the Contract shall have been made. Lien Waivers will only be issued on the direct portion that has been paid to the Seller.
This equipment will ship to the job site within 7 to 10 days after fabrication is complete. If EFI is required to hold finished equipment for longer than thirty ( 30 ) days, storage fees will be assessed at the rate of $1 \%$ of the sale price per month to cover insurance, trailer rental and maintenance of the station while it is in storage. It shall be the Purchaser's responsibility to notify EFI thirty (30) days prior to anticipated delivery if a delay in receipt of equipment is anticipated.
6. TAXES - No federal, state, local, GST/HST or any applicable taxes that may be imposed on this transaction have been included in the prices quoted unless specifically stated on the proposal face. All applicable taxes are to be paid by the Purchaser.
7. INSURANCE - EFI carries General Liability Insurance, Automobile Liability, Workers Compensation Insurance, Professional Liability and Pollution Liability. A copy of our certificate is available upon request. Unless otherwise stated herein, additional insurance is not included in the proposed price.
8. WARRANTY - Unless otherwise stated above, EFI warrants, to the original user, each product of its manufacture to be free from defects in material and workmanship for the period, whichever comes first, of twelve (12) months from the date of successful start-up, not to exceed eighteen (18) months from notice of manufacturer completion, provided the product is properly installed, maintained and operated under normal conditions according to the manufacturer's instructions.
The obligation of EFI under this warranty is limited to correction without charge any part or parts thereof which shall upon examination disclose to the manufacturer's satisfaction to have been originally defective. Correction of such defects by repair or replacement shall constitute fulfillment of all obligations by EFI. EFI shall not be liable for loss, damage or expense directly or indirectly from the use of its products or from any other cause.
Any products, components or parts not purchased by EFI are excluded from this warranty. No start-up services on these components are included in this proposal. Expenses incurred by EFI attributable to the misapplication or malfunction of components not supplied by EFI will be the responsibility of the Purchaser.

The warranty of any products, components or parts provided by EFI, but controlled by equipment/programs provided by others is limited to the original manufacturer's warranty.
This warranty is conditional and does not apply to any of the following items:
a) Items that must be replaced because of normal usage such as pump seals, packing, grease, oil, light bulbs, etc.
b) Items that have been started up by person not authorized by EFI or that have been altered or repaired out-side of the manufacturer's factory, without written authorization from EFI.
c) Products that are not started, checked and adjusted by an authorized EFI technician within eighteen (18) months from the date of shipment, unless special written instructions have been requested and received from EFI.
The product is subject to no expressed, implied or statutory warranty other than herein set forth, and no agent, representative or distributor of EFI has any authority to alter the terms of this warranty.
9. CANCELLATION - Purchaser agrees to reimburse to EFI all costs incurred and associated with sale and cancellation of order. Charges will include, but not be limited to, submittal design and assembly, procurement of material, manufacturing labor, (i) restocking charges, and (ii)shipping and handling of material and an additional amount equal to $10 \%$ of the aggregate amount reimbursed pursuant to subsections (i) and (ii) above as a cancellation processing fee.
10. ACCEPTANCE - Acceptance of this proposal whether by a separate purchase order or by other means shall constitute an acknowledgment of the quotation as written and an acceptance of the terms and conditions thereof. Any positive written response to this proposal shall be considered as an acceptance thereof. Acceptance of any terms, provision or conditions in conflict with those stated herein shall be so stated in writing by an officer of EFI. The acceptance of any goods or merchandise shipped to Purchaser as described herein shall constitute an agreement by the Purchaser to all the terms and conditions hereof.
11. REMEDIES - Purchaser's exclusive remedy for damaged or defective product is replacement of nonconforming product or payment of an amount not to exceed the purchase price of the product for which damages are claimed at the Seller's option. Purchaser shall have no right to set-off, to withhold payment or to make a reduction in price. Purchaser's remedy of replacement or refund is available only if nonconformance was not caused by Purchaser or by accident, fire or other hazard.
12. GOVERNING LAW - This transaction shall be governed by, interpreted and enforced in accordance with the laws of the State of Illinois. Where applicable, the United Nations Convention on Contracts for the International Sale of Goods shall govern.
13. DISPUTE RESOLUTION - Any and all lawsuits arising out of the terms and conditions of this agreement or concerning the goods sold hereunder shall be instituted and litigated in the Circuit Court of the Fourth Judicial Circuit, Marion County, Illinois and in no other forum unless the parties mutually agree in writing to a different forum. Accordingly, the parties to this transaction submit to the jurisdiction of the Circuit Court of the Fourth Judicial Circuit, Marion County, Illinois with respect to any dispute or disagreement having to do with, or arising out of, this contract or the performance by either party hereunder.
14. COSTS AND ATTORNEY'S FEES - In the event that Purchaser shall fail to comply with any of the terms and conditions hereof, then Purchaser shall reimburse EFI for all attorney's fees and court costs which may be paid, or incurred, by EFI in an effort to enforce the terms and conditions hereof or to obtain damages on account of the breach hereof by Purchaser.



Pressure Reducing Station at Olive Hill Estates


Pressure Reducing Station Open

AINBOW
Municipal Water District

## SUBJECT <br> DISCUSSION AND POSSIBLE ACTION TO AWARD A PROFESSIONAL SERVICES CONTRACT TO PROVIDE DESIGN SERVICES FOR THE ROBERT A. WEESE FILTRATION PLANT INTERCONNECT

## BACKGROUND

The Weese Filtration Plant is in the southern portion of the District on Silverleaf Lane in Vista. The City of Oceanside purchases imported raw water from the San Diego County Water Authority (SDCWA) and treats it at the Weese Filtration Plant. Every year during SDCWA treated water shutdowns, the District rents and sets up a temporary pump near our Gopher Canyon Tank and works with Oceanside to change operation valves to boost pressure so the District can pump water from the Weese Treatment Plant into our Tank. This serves as significant source of water for the zone during SDCWA shutdowns.

The District would like to construct permanent facilities that will tie into the Weese Filtration Plant and provide the District water during shutdowns. The permanent facilities would eliminate the labor and costs required to set up a temporary pump every year and streamline the water exchange process with the City of Oceanside. The total costs to rent, set up, monitor, maintain, and fuel the temporary pump each year vary depending on water demand, but range between $\$ 10,000$ to $\$ 20,000$. Fuel tanks are stored adjacent to the site in secondary containment, however there is the potential risk of spillage with storing fuel on site and having to refill the storage from time to time.

In addition, in our discussions with the City of Oceanside, there is the potential for the City to sell the District treated water during periods of time when they have excess capacity in the plant. This pump station would allow us to negotiate a contract that would feature a lower cost for treatment than what we pay to SDCWA currently. The exact amount of excess capacity available at any given time is heavily weather dependent, but it is estimated that between 2000 and 4000 Acre Feet per year could be made available. While no specific terms have been reached at this time, a reasonable discount on treatment services would be well in excess of $\$ 25 / \mathrm{AF}$, so the annual cost savings from this arrangement would be considerable.

The intent of the design services will be to prepare a full set of plans and specifications suitable for bidding by a public agency. The improvements will include connection piping, a recommended meter device, foundation and installation for a prefabricated pump station and electrical to the site. A pump station of this type typically costs in the range of $\$ 300,000$ to $\$ 400,000$ to construct. Between the emergency use and the potential treated water costs savings, it is anticipated that the return on this investment would be very reasonable. Prior to approval of any construction expenditures, staff will negotiate the terms of an excess treated water agreement with the City of Oceanside that will define the return on investment. The design work is required to provide engineering details needed to complete the contract negotiations.

## DESCRIPTION

The District conducted a search and issued a Request for Proposals on February 1, 2017. One firm, IEC, responded with a proposal by February 22, 2017. Staff reviewed the proposal and evaluated it based on the executive summary, project description, identification of the consultant, project organization and experience, past performance, firms local experience, and creative alternatives. The staff evaluation found
that IEC is experienced and qualified to perform the work, staff selected IEC for this project with a Not-ToExceed project design cost of $\$ 186,272$.

## POLICYISTRATEGIC PLAN KEY FOCUS AREA

Strategic Focus Area One: Water Resources. The connection to the Weese Filtration Plant will give RMWD a permanent solution to water supply issues during the SDCWA treated water shutdowns. Also, it will diversify our water supply by adding the possibility of importing treated water from Oceanside during normal operation.

## BOARD OPTIONSIFISCAL IMPACTS

The project is included in the District's CIP budget, with $\$ 1,200,000$ total in expenditures expected in years 2016-2018.

1) Authorize staff to award a Professional services contract to IEC to provide design services for the Robert A. Wees Filtration Plant Interconnect not to exceed \$186,272.
2) Provide other direction to staff.

## STAFF RECOMMENDATION

## Staff recommends Option 1.



Sherry Kirkpatrick
Engineering Manager


## RRAINBOW <br> Municifal Water District <br> PROPOSAL TO PROVIDE <br> DESIGN SERVICES FOR THE <br> ROBERT A. WEESE FILTRATION PLANT INTERCONNECT

FEBRUARY 22, 2017


Ms. Delia Rubio
Rainbow Municipal Water District
3707 Old Highway 395
Fallbrook, CA 92028

## Reference: Proposal to Provide Design Services for the Robert A. Weese Filtration Plant Interconnect

Dear Ms. Rubio:

The Rainbow Municipal Water District (District) has as its primary objective for the Robert A. Weese Filtration Plant Interconnect project, design and ultimately construction of permanent facilities that will interconnect the Weese Filtration Plant with District's system providing the District with treated water during SDCWA aqueduct shutdowns and possibly for even during normal operations. Infrastructure Engineering Corporation (IEC) is a San Diego County based firm with the all the skills and experience necessary to meet the objectives of the District.

Key highlights of our proposal include:

- Understanding of the District and Work: IEC has performed multiple projects for both the District and the City of Oceanside, and is familiar with staff and procedures of both agencies. We understand the District's system having performed hydraulic modeling of the distribution system. Plus, we know the operation of the Weese Filtration Plant and have discussed this project with District staff as well as with Robert Gutierrez, Oceanside's Water Utilities Manager. Additionally, IEC has recent design experience on projects utilizing EFI pre-packaged pump stations, as proposed for this project.
- Highly Experienced and Capable Project Manager: Our Project Manager, Mr. Rick Kennedy, PE, is a recognized water facilities design expert. Rick brings unmatched technical skills to the project and provides highly responsive client service. Rick will lead our project team and be the District's primary contact from the start of the project through completion.
- Commitment to deliver upon the District's expectations: We understand this is an important project for the District. IEC, as a locally based firm, is fully committed to delivering an outstanding project. The District will have the full commitment and attention of our firm and subconsultants from start to finish.

The IEC team is enthusiastic about serving the District on this project. We look forward to discussing this project further with you.


Richard H. Kennedy, PE Senior Project Manager

## Executive Summary

The Rainbow Municipal Water District (District) currently imports 100\% of its water from treated water sources through the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (MWD). SDCWA schedules yearly shutdowns of their aqueducts for maintenance which may cause the District to lose supply connections temporarily. The District sets up temporary pumps throughout the District to move water from one zone to the other in such cases. There is currently potential to work with the City of Oceanside (Oceanside) to arrange for the receipt of treated water, during SDCWA shutdowns, from the their Robert A. Weese Filtration Plant (Weese Filtration Plant) located in the southern portion of the District on Silverleaf Lane in Vista. Currently during aqueduct shutdowns, the District sets up a temporary pump near the District's Gopher Canyon Tank and works with Oceanside's plant operators to align operations so the District can pump water from the Weese Filtration Plant into the Tank.

The primary objective of the project is to construct permanent facilities that will interconnect the Weese Filtration Plant with District's system providing the District water during shutdowns and possibly for even for normal operations. A schematic of the basic elements of the project is shown below.

## SCHEMATIC OF THE ROBERT A. WEESE FILTRATION PLANT INTERCONNECT PROJECT



In order to accomplish the project objective the following engineering effort will be performed:

1. Coordinate with the City of Oceanside and the District to determine which of two potential site sites is the best location for interconnect and associated pump station. One of sites is located at the District's Gopher Canyon Tank parcel and the other is located on the Weese Filtration Plant site. Preliminary evaluation suggests the Weese Filtration Plant site, while having the disadvantage of not being owned by the District, offers superior hydraulics and ease of operation and is favored by both District and Oceanside staff. A preliminary design report will completed shortly after notice to proceed to present facts, pros and cons, to obtain consensuses.
2. Design inter-connection piping, flow meter, concrete foundation for a pre-fabricated pump station, and electrical service to support the project. Civil, structural and electric engineering as well as survey and potholing will be necessary to complete the project.
3. Coordinate the design with pre-engineered pump station manufacturer. The maximum and minimum flows of the interconnect will be determined by the District and Oceanside coming to a mutually agreed upon arrangement. IEC together with the pre-engineered pump station manufacturer, EFI, will combine their expertise to derive a pump station design that is practical meeting all the established design criteria, easy to service and maintain, and provide the District with great value.
4. Provide management of the project, lead and attend meetings with the District, its Engineering Committee and Board of Directors, provide a basis of design report along with $30 \%$ design drawings, prepare $60 \%$ and $90 \%$ complete submit packages with estimated construction costs, and final Mylar drawings, specifications and construction cost estimate in preparation for bidding.

## Your Team

The project will be led by Mr. Rick Kennedy, PE, who will be responsible for overall project management and administration of the project including deliverable quality, monitoring of the scope of work, schedule, budget, and reporting progress to the District. Mr. Kennedy will be supported by highly qualified staff and Subconsultants as depicted in the organizational chart to the right.

The team has come up with some creative ideas including: 1.) utilizing a bunker style pre-engineered pump station embedded in the slope of otherwise unusable portion of property on the Weese Filtration Plant site; 2.) rather than using a single common meter outside of the pump station, add a separate flow meter on the discharge of each pump which locates them within the confines of the pump station providing better accessibility and less cost; 3.) potentially reduce the number of pumps required by increasing the turndown ratio from the
 common $4: 1$ to about 10:1 utilizing recirculation at lower flowrates; and 4.) to assure good flow control, given the unusual hydraulics of the project where suction pressures sometime can exceed discharge pressures, utilize meters and flow control and check valves downstream of each pump to control the flowrate and VFDs on the pumps to maintain a constant set pressure upstream of meters.

The IEC team is unique having performed multiple projects for both the District and Oceanside following each's standards. We understand the operation of the Weese Filtration Plant and have discussed this project with District staff as well as with Robert Gutierrez, Oceanside's Water Utilities Manager. IEC has recent design experience on projects utilizing EFI pre-packaged pump stations. Your Project Manager Rick Kennedy, who lives in Bonsall and is a District customer, allows him to respond promptly and in-person whenever necessary.

## Project Description

## Background, Objective of the Project, and How IEC Will Accomplish the Work

The Rainbow Municipal Water District (District) currently receives $100 \%$ of its water supplies from treated water sources through the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (MWD). Every year, the SDCWA schedules shutdowns of their aqueducts for maintenance that may cause the District to lose supply connections temporarily. The District must then set up temporary pumps throughout the District to move water from one zone to the other. There is currently potential to work with the City of Oceanside (Oceanside) to arrange for the receipt of treated water, during SDCWA shutdowns, from the their Robert A. Weese Filtration Plant (Weese Filtration Plant) located in the southern portion of the District on Silverleaf Lane in Vista. Currently during aqueduct shutdowns, the District sets up a temporary pump near the District's Gopher Canyon Tank and works with Oceanside's plant operators to align operations so the District can pump water from the Weese Filtration Plant into the Tank. The primary objective of the project is to construct permanent facilities that will interconnect the Weese Filtration Plant with District's system providing the District water during shutdowns and possibly for even for normal operations. In order to accomplish the objective the following have to be performed: 1.) coordinate with the City of Oceanside to determine location of inter-connections and pump station, 2.) design inter-connection piping, flow meter, concrete foundation for a pre-fabricated pump station, and electrical service, 3) coordinate the prepackaged pump station design with manufacturer, and 4.) provide specific services and deliverables.

## Coordinate with the City of Oceanside to Determine Location of Inter-Connections and Pump Station

 Based on a site visit conducted with District staff, the RFP, and our understanding of the City of Oceanside's Weese Filtration Plant and system there are two locations for the pump station and inter-connections. One location is the on District property at the Gopher Canyon tank site. The other is on the Weese Filtration Plant site). Both District and Oceanside staff at this time seem to favor the Weese Filtration Plant site. At this very preliminary level the advantages/disadvantages of each of the sites are provided below:
## Gopher Canyon Tank Site Advantages/Disadvantages

## Advantages

- Pump station and inter-connections are on District property
- Potentially less discharge piping required


## Disadvantages

- Extended effort for Oceanside's staff to facilitate operation of the proposed pump station: The 24-inch treated water pipeline adjacent to the Gopher Canyon Tank is usually not in service requiring manual operation of valves and field settings by plant personnel for pump station operation.
- Greater capital cost necessary to maintain suction pressure to the proposed pump station: The 24 -inch treated water pipeline does not run full requiring a weir box or a specially designed pump station at additional cost to assure the pump station suction.


## Weese Filltration Plant Site Advantages/Disadvantages

## Advantages

- Oceanside plant staff easily facilitate operation of the proposed pump station: The suction line of the proposed pump station would connect to an existing exposed 30 -inch treated water line extending from the Weese Filtration Plant chlorine contact tank. Oceanside staff virtually would not have to touch a valve to accommodate operation of the pump station.
- Increases the likelihood of Oceanside providing water to the District beyond just during SDCWA aqueduct shutdown periods: The proposed pump station could provide a balancing mechanism to maintain constant flow through the Weese Filtration Plant. The SDCWA Regulatory Structure volume is only 3 million gallons requiring bypassing when demand suddenly drops.


## Disadvantages

- Pump station and inter-connection are not on District property requiring greater coordination with Oceanside
- Potentially a greater amount of discharge piping may be required approximately 200 feet.


## Inter-Connection Piping, Flow Meter, Concrete Foundation for a Pre-Fabricated Pump Station, and Electrical Service

Piping material will be evaluated within the basis of design report. Pipeline alignments and all connections will be given due diligence with consideration to constructability, accessibility, operations, maintenance and traffic. The inter-connection, if on the plant site will likely have to be a "hot-tap" type connection. The type of flow meter to be used will be evaluated with a recommendation based on consensus with the District, Oceanside, and IEC. Preference is given typically to having flow meters installed within the pump station rather than in a vault, but conditions and practicality often dictate. Pros and cons of the concrete foundation being designed by the engineering consultant versus the pre-packaged pump station manufacture will be evaluated within the BODR. Electrical service will be coordinated and designed in conjunction with SDG\&E and the prepackaged pump station manufacturer.

## Prepackaged Pump Station

EFI is a premier manufacturer of prepackaged pump stations and is preferred by the District. IEC will fully discuss, in the BODR, alternative methods of incorporating EFI into the project, including pre-purchase, pre-negotiated price, or other mechanism. The design flowrate range will be established between the District and Oceanside, with assistance from IEC. It is likely that a wide flowrate range would be looked upon favorably by Oceanside providing them with more flexibility in maintaining constant flow through the Weese Filtration Plant, and potentially more water going to the District. With the flowrate range established IEC will perform the necessary hydraulic evaluations and prepare control strategies for the pump station and coordinate the overall design of the pump station with EFI. As part of the preliminary design, discussion of whether the pump station should be freestanding (for the Gopher Canyon Tank site), or buried or bunker style (potentially favorable for the Weese Filtration Plant site) will be presented. Incorporation of arc flash requirements will implemented by EFI.

## IEC Services and Deliverables

## Task 100 - Project Management and Information Collection

Provide overall project management including contract administration, and budget and schedule tracking, kick-off and progress meetings and controls and provide internal quality control and quality assurance procedures. We will prepare and submit with each invoice a written report to fully address the progress of work on each task and to identify any areas of concern regarding project design execution and design delivery schedule.

## Task 200 - Meetings / Site Visits / Research / BODR

Review existing facilities and drawings of the District and the City of Oceanside. Review the preliminary prefabricated pump station drawings. Attend a minimum of 7 meetings with the District ( 3 at the District, 1 with the Engineering Committee, 1 with the Board of Directors, and 2 with the City of Oceanside). Present a summary of two alternatives for the project and overview of the BODR with costs and recommendations.

## Task 300 - Design Phase/Coordination

Prepare the following: 1.) $30 \%$ Basis of Design Report (BODR) including possible pipeline locations, two possible alternatives for receiving water during SDCWA shutdowns from the Weese Filtration Plant, rough-draft bid documents (technical specifications and full and half-size engineering drawings), discussion on project siting and site layout, and proposed construction staging, soil conditions, permits, and environmental concerns if any. (Submit 2 sets of full size, 3 sets of half-size and one electronic copy on CD in PDFpdf format); 2.) $60 \%$ detailed bid documents, technical specifications and full/half size engineering drawings submitted to the District (Submit 2 sets of full size, 3 sets of half-size and one electronic copy on CD in pdf format); 3 .) $90 \%$ detailed bid documents, technical specifications and engineering drawings submitted to the District (Submit 2 sets of full size, 3 sets of half-size and one electronic copy on CD in pdf format); 4.) Final detailed bid documents, technical specifications, engineering drawings and final construction cost estimate submitted to the District (Submit 3 copies) including Mylar copies of all drawing sheets, a hard copy of the specifications, and an electronic format of all documents on CD. Each final sheet in the plan set shall be prepared, sealed and signed by the person currently licensed in California for the specific design discipline indicated on the sheet. The CD shall include all original documents in Word, Excel, AutoCAD and/or JPG format and a complete design package ready for printing in two Adobe Acrobat format (pdf) files, one for specifications and one for drawings. Each submittal, the $30 \%$, the $60 \%$ and the $90 \%$ shall have an Opinion of Probable Construction Cost provided with the submittal consistent with Estimate Classes 3, 2 and 1, respectively, pursuant to the American Association of Cost Estimators (AACE). A Final Engineer's Estimate corresponding to the final design shall be completed in a form consistent with the project's Bid Schedule and be submitted with the final submittal. IEC will adhere to Industry Standards/Specifications, the District's 2016 Standard/Specifications, and District's 2016 Master Plan. The District provides the front end contract documents.

## IEC is Uniquely Qualified

IEC has performed multiple projects for both the District and Oceanside and are familiar with District staff and procedures. We understand the operation of the Weese Filtration Plant and have discussed this project with District staff as well as with Robert Guitirrez, Oceanside's Water Utilities. IEC has recent design experience on projects utilizing EFI pre-packaged pump stations coordinating design features with Dale Huntington, representative of EFI, and Kevin Cates owner and president of EFI. IEC has been involved in the most recent large construction project at the Weese Filtration Plant performing potholing in Silverleaf Lane and know the locations of utilities. Our Project Manager, Rick Kennedy, living in Bonsall and a District customer, allows him to respond promptly and in-person whenever necessary.

## Identification of Prime Consultant

$\left.\begin{array}{ll}\text { Legal Name \& Address of Firm: } & \begin{array}{l}\text { Infrastructure Engineering Corporation } \\ \text { 14271 Danielson Street } \\ \text { Poway, CA 92064 }\end{array} \\ \text { T 858.413.2400 / F 858.413.2440 }\end{array}\right\}$

## Identification of Sub Consultants

| Legal Name \& Address of Firm: | Moraes, Pham, and Associates 2131 Palomar Airport Road, Suite 120 Carlsbad, CA 92011 |
| :---: | :---: |
| Contact: | Tracy A. Adams, PE - Principal 2131 Palomar Airport Road, Suite 120 <br> Carlsbad, CA 92011 <br> T 760.437.7177 x115 |
| Total Staff: | 8 |
| Job Title | Number of Staff |
| Principal Electrical Engineer | 4 |
| Electrical Designer | 3 |
| Business Administrator | 1 |
| Legal Name \& Address of Firm: | Kelsey Structural 8320 Lake Ashwood Avenue San Diego, CA 92119 |
| Contact: | Guy Kelsey, SE - Principal 8320 Lake Ashwood Avenue <br> San Diego, CA 92119 <br> T 619.920.1262 |
| Total Staff: | 3 |
| Job Title | Number of Staff |
| Structural, Principal | 1 |
| Project Manager | 1 |
| Senior CAD Technician | 1 |
| Legal Name \& Address of Firm: | Aguirre \& Associates 8363 Center Drive, Suite 5A La Mesa, CA 91942 |
| Contact: | Mickey Aguirre, PE - President 8363 Center Drive, Suite 5A <br> La Mesa, CA 91942 <br> 619.464.6978 x31 |
| Total Staff: | 8 |
| Job Tifle | Number of Staff |
| Surveying and Mapping | 8 |



# Project Organization \& Experience of the Team 

## Project Organization

The project will be led by Mr. Rick Kennedy, PE, who will be responsible for overall project management, deliverables, and quality, and will serve as the District's contact for the project. Mr. Kennedy will be supported by highly qualified staff and subconsultants.

To the right is the organizational chart, which depicts the project team members and their roles as part of the District's Robert A. Weese Filtration Plant Interconnect Project. Resumes have been provided at the end of this section. Assigned personnel will not be substituted without District approval.

## Project Manager - Rick Kennedy, PE <br> (Oceanside Office)

Rick Kennedy, PE, will be serving as your Project Manager, and working out of the local Oceanside project design center. Rick is a highly accomplished and
 a hands on project manager with 38 years of industry experience as a project manager/design manager for large and small municipal water pumping stations, flow control facilities, water storage reservoirs, and water treatment plants including conventional, IPR, and seawater desalination. He possesses a track record of leading designs for nationally recognized projects including the City of San Diego's Alvarado Water Treatment Plant and the Carlsbad Desalination Plant. Most recently, he served as the Project Manager for the Fallbrook Public Utilities District's (FPUD) Conjunctive Use Project Facilities. Project improvements included several miles of 24 -inch CML\&C steel pipe, three treatment related pump stations and a remote 8 mgd pump station, and a 4 MG steel water storage tank. On the smaller end of the scale, Mr. Kennedy is now completing the design of a 325 gpm EFI pre-packaged booster pump station and a half mile of 18 -inch and 8 - inch water main for the Eastern Municipal Water District. Mr. Kennedy will personally report to the District for this project and direct our project team.

## Principal-in-Charge - Rob Weber, PE <br> (Poway Office)

Rob Weber, PE has 26 years of civil engineering and project management experience on a variety of municipal and public works water infrastructure projects. Specific project experience includes recycled water conveyance pipelines; reservoirs and tanks, and water/recycled water pump stations. Mr. Weber was the Project Manager for the District's Pala Mesa Tank project and is thoroughly familiar with design standards, techniques and analytical methods, bid specifications, and cost estimating. His experience extends beyond civil engineering to include securing required project permits, fostering cooperative interagency approvals, and gaining community project acceptance.

## Design Engineer - Ross Maxwell, PE, QSD

(Poway Office)
Ross Maxwell, PE, QSD has experience on a number of water pump station projects including the District's Pump Station No. 1. He is highly versed in the use of AutoCAD and Civil 3D for pipeline plan and profile development and has prepared plans, specifications, and cost estimates for various public works projects. His experience includes Leucadia Wastewater District's La Costa Pump Station Rehabilitation Project and Fallbrook Public Utilities District's Santa Margarita Conjunctive Use Project.

## Design Engineer - Andrew Wiese, PE, QSD

(Poway Office)
Andrew Wiese, PE, QSD has 6 years of experience on a wide variety of projects, including water and recycled water pump stations. He assisted with the design of Olivenhain Municipal Water District's pre-engineered, bunker style 1,500 gpm EFI pump station as a part of the Village Park Recycled Water Facilities project and served as the Design Engineer for two pump stations, each at $5,600 \mathrm{gpm}$, as part of the Santa Margarita Conjunctive Use Project Facilities for Fallbrook Public Utilities District.

## Electrical/Instrumentation Subconsultant - Moraes, Pham, \& Associates

Tracy Adams, PE has more than 20 years of application and design engineering experience in industrial controls and power management. His experience includes designing control panels, instrument selection, and network design primarily in the water/wastewater industry. Moraes/Pham \& Associates experience includes: Eastern Municipal Water District - Post Road Hydro-Pneumatic Booster Pump Station, Fallbrook Public Utilities DistrictSanta Margarita Conjunctive use Project, Leucadia Wastewater District - Wastewater Pump Stations Rehabilitation and Irvine Ranch Water District - Santiago Canyon Booster Pump Station Generator Project.

## Structural Subconsultant - Kelsey Structural

Guy Kelsey PE, SE has over 10 years of experience in structural engineering, designing both new and retrofit projects for various types of structures including water/wastewater, commercial, infrastructure, and military. Mr. Kelsey has performed extensive seismic evaluation and condition assessments for existing buildings, water/ wastewater structures, water storage facilities, and infrastructure throughout southern California.

## Potholing Subconsultant - Aguirre \& Associates

Mickey Aguirre, PE has over 40 years of experience in managing, directing and performing civil engineering and land surveying tasks. His experience includes 10 years in the municipal sector prior to founding Aguirre \& Associates in 1986. Both municipal and private survey and mapping experience includes a broad range of projects, including transit and mass transit, public works, residential, commercial churches, schools and other institutional project. Mr . Aguirre has extensive experience providing potholing services on water and wastewater projects.

## Experience of the Team

Mr. Kennedy led this same team on the Fallbrook Santa Margarita Conjunctive Use Project and the EMWD Post Road Booster Pump Station Project with the exception of Guy Kelsey PE, SE who has worked with other IEC staff on other projects, and comes highly recommended.

## Project Management Approach

Rick's project management approach is designed to accomplish two ends: 1.) Ensure vigilant and proactive management of budget, schedule, and work quality; and 2.) Avoid surprises while providing the District with an on-time product of the highest quality and value.

Goals are achieved by utilizing proven project management procedures, as listed below, and diligently executing those procedures with our $100 \%$ commitment to listen actively and understand the District's goals and objectives.

- Develop a comprehensive Scope of Services and fee based on the District's goals
- Develop a detailed design schedule
- Identify lines of communication and points of contact between IEC and District team members

| 5 |  | Provide quick execution of the Professional Services Agreement <br> Implement the QA/QC plan <br> Work closely with the District's project manager and staff Hold weekly internal progress meetings to review project status and issu |
| :---: | :---: | :---: |

- Implement weekly communication to keep District Project Manager informed of project progress and status
- Reserve key team members availability to assist District staff as necessary
- Hold regularly scheduled internal progress meetings to review project progress and schedule, budget


## Project Schedule

With notice to proceed on March 28, 2017 the following describes actions to will occur in order to meet the District's schedule goals listed below:

1. Submit Preliminary Design Report on May 16, 2017 ( 7 weeks from NTP - IEC to target 5 weeks)

- Review Documents
- Prepare agenda and conduct kickoff meeting with team, District and Oceanside
- Prepare and submit Draft PDR
- Receive Comments
- Prepare and submit Final PDR

2. Submit 30\% Basis of Design Report on June 13, 2017 (11 weeks from NTP - IEC to start at week 2)

- Start BODR and drawings
- Establish hydraulics by 4th week
- Coordinate with EFI
- Proceed with design development
- Compile standard Specs
- Complete Cost estimate

3. Attend Engineering Committee on July 5, 2017 ( 14 weeks from NTP - IEC to target 12 weeks)

- Prepare power point and board

4. Meet with the Board of Directors on July 25, 2017 ( 17 weeks from NTP)
5. Submit $60 \%$ Design Development Documents on August 1, 2017 (18 weeks from NTP)

- Receive and incorporate District Comments
- Proceed with design development

6. Submit 90\% Design Development Documents on August 29, 2017(22 weeks from NTP)

- Receive and incorporate District Comments
- Proceed with design development

7. Submit Final Bid Documents on September 19, 2017 ( 25 weeks from NTP)

Expediting the schedule would be possible, but would require decisions regarding the pump station design made very early in the design process.

## IEC's Capacity to Perform the Work

We have the staff and resources immediately available to perform the work as described.

# Richard H. Kennedy, PE <br> Senior Project Manager 

## Professional Registration

Registered Professional Engineer
California No. M18710
Certified Construction Documents Technologist (CDT)

## Education

California Polytechnic State University, San Luis Obispo B.S. Mechanical Engineering, 1975

## Affiliations

American Water Works Association

California Water Pollution Control Association

Water Environment Federation

## Health \& Safety Training

Ergonomics
Heath \& Safety Training for Project Management

## Project Awards <br> AWTP Ozone-

ASCE National 2013 Civil Engineering Achievement Award
ACEC National 2011
Recognition Award
ASCE California 2011
Outstanding Water Treatment Project
ACEC California 2011
Engineering Excellence Award
AWPA San Diego 2011 Project of the Year Award Project
ASCE San Diego 2010 Project of
the Year Award Project
AWTP Flocculation and Sedimentation BasinsASCE San Diego 2007 Award of Excellence

## Qualifications

Much of Mr. Kennedy's 39 year career has been devoted to the management of the design of water treatment plant projects. Recent projects include the City of San Diego's Miramar Water Treatment Plant Clearwells Project ( 215 mgd - ongoing), KSD Joint Venture's (for Poseidon Water) Carlsbad Desalination DBO Project ( 50 mgd - in construction), the San Diego County Water Authority's DBO Twin Oaks Valley Water Treatment Plant (owner's agent for this 100 mgd plant), and the ASCE 2013 Outstanding Civil Engineering Award winner - City of San Diego's Alvarado Water Filtration Plant Project ( 200 mgd ).

## Project Experience

Post Road Hydropneumatic Booster Pump Station, Eastern Municipal Water District - Project Manager for the pre-design and final design of a booster pump station, hydropneumatic tank, and associated suction and distribution pipeline to alleviate low pressure conditions in the westerly higher elevation areas of the Eastern Municipal Water District's Good Hope II (1832) Pressure Zone. Effort included: 1.) hydraulic distribution system modeling; 2.) evaluation of two alignment alternatives; 3.) preparation of a preliminary design report and evaluation of two pre-engineered 300 gpm pump and hydro-pneumatic tank layouts; and 4.) provided final design documents.

Santa Margarita Conjunctive Use Project Facilities, Fallbrook Public Utilities District (FPUD) - Project Manager for the design of treatment facilities. The treatment train included iron and manganese removal with a side stream treated with RO membranes remixed to create a product water to match the water quality of FPUD's imported water. The product water was pumped directly in the distribution systems. Distribution system improvements included two miles of 24 -inch CML\&C steel pipe, a remote 8 mgd pump station and 4 MG steel water storage tank.

Pump Station SD17/FCF SD22, City of San Diego - Project Manager. Pump Station SD17 consisted of six constant speed vertical turbine pumps delivering $42,000 \mathrm{gpm}$, with a total of 3,600-horsepower; three pumps were rated at 3,400 gpm each and the other three rated at $10,500 \mathrm{gpm}$ each, and two parallel venture meters were used to measure flow. Flow Control Facility SD22 included a 36 -inch sleeve valve and accompanying venture meter rated at 42,000 gpm.

Ozonated Settled Water Pump Station, City of San Diego: Project Manager for a $140,000 \mathrm{gpm}$ ozonated settled water pump station.

Trask Reservoir Site Water Improvement Project, City of Garden Grove - Project Manager for construction of a new 9,000 gpm pumping station, utilizing two natural-gas-powered engine-driven $2,250 \mathrm{gpm}$ three stage vertical turbine pumps (150-HP each), and a 600-gpm motor-driven four stage vertical turbine pump (50-HP).

Lake Murray Pump Station, City of San Diego - Project Manager for 59,000 gpm pump station which consisted of three $450-\mathrm{HP}$ and 2 two-speed $200-\mathrm{HP}$ pumps can-mounted vertical turbine pumps, an allowance for future expansion by adding an additional can with suction piping plus pump discharge connection for another 450-HP pump.

Resume

## Robert S. Weber, PE <br> Principal-in-Charge

## Professional Registration

Registered Professional Engineer
California No. C59312
New York No. 073187
Idaho No. 12930

## Education

State University of New York at Buffalo
B.S. Civil Engineering, 1990

## Professional Affiliations

American Society of Civil Engineers

American Water Works Association

California Rural Water Association

Consulting Engineers and Land Surveyors of California

## Awards

Gano Reservoir and Unit X
Pipelines - CELSOC
4S Ranch Water Reclamation Facility, Plant ' A ' and ' B ' Modifications - APWA

## Qualifications

Mr. Weber has 25 years of civil engineering and project management experience on a variety of municipal and public works water, wastewater, and recycled water projects. Specific project experience includes conveyance pipelines; reservoirs and tanks, water pump stations, and sewer lift stations. He has also successfully managed several as-needed services contracts for municipalities and water/wastewater utilities. Mr. Weber is thoroughly familiar with design standards, techniques and analytical methods, bid specifications, and cost estimating. His experience extends beyond civil engineering to include securing required project permits, fostering cooperative interagency approvals, and gaining community project acceptance.

Mr. Weber's project success based on his ability to understand the client's needs and objectives and translate them into actions during execution of the project. He prides himself in involving the client in the project, and ensuring the technical staff understands the critical issues of the project. His engineering decisions and designs are based on careful considerations of project needs and specific site characteristics. His dedication to quality effectively manages project risks and controls construction and operational costs.

## Project Experience

| PUMP STATIONS |  |  |
| :---: | :---: | :---: |
| Tenaja Pump Station | 6,300 gpm | Rancho California Water District |
| Batiquitos Pump Station Rehabilitation | 40 MGD | Leucadia Wastewater District |
| North Bay Pump Station Preliminary Design | 3,500 gpm | Lake Arrowhead Community Services District |
| Graham Pump Station | $10,000 \mathrm{gpm} /$ variable frequency drives | City of Mountain View |
| Bandstand Lift Station | 500 gpm in beach front park | City of Oceanside |
| Lake San Marcos Lift Station Electrical Upgrades | Variable frequency drive | Vallecitos Water District |
| Pump Station 18 | 650 gpm on beach | City of San Diego |
| Pump Station 19 | 265 gpm 2 story subterranean | City of San Diego |
| 944 Pump Station | $7,000 \mathrm{gpm} /$ variable frequency drives | Otay Water District |
| South Lake Pump Station | 2,000 gpm | Vallecitos Water District |
| Wulff Pump Station | $1,500 \mathrm{gpm} /$ demolish existing station | Vallecitos Water District |
| Deer Springs Pump Station | 2,600 gpm | Vallecitos Water District |
| Sewer Pump Station 50 | Low flow diversion system | City of San Diego |
| Via Ambiente Sewer Pump Station | 553 gpm | Olivenhain Municipal Water District |
| Diamond Valley No. 1 Booster Station Demolition | Demolish existing station | Eastern Municipal Water District |

## Ross Maxwell, PE, QSD

## Project Engineer

## Professional Registration

Registered Professional Engineer
California C82681

## Education

San Diego State University
B.S. Civil Engineering, 2010

## Certifications

Qualified SWPPP Developer
(QSD) Certification \#C82681

## Affiliations

American Society of Civil Engineers

## Qualifications

Mr. Maxwell has 8 years of experience on a number of water and wastewater projects including pipelines and water facilities. He is highly versed in the use of AutoCAD and Civil 3D for pipeline plan and profile development and has prepared plans, specifications and cost estimates for various public works projects.

## Project Experience

Santa Margarita Conjunctive Use Project Facilities, Fallbrook Public Utilities District (FPUD) - Design Engineer for the design of treatment facilities associated with an agreement between FPUD and the federal government that settled a century long dispute over water rights of the Santa Margarita River. The agreement included Camp Pendleton providing approximately 8 mgd of ground water to FPUD, actual flowrates being dependent on the month of the year and rainfall of the previous year, that was high in iron, manganese, and TDS. The treatment train included 8 mgd of iron and manganese utilizing greensand media within six $12^{\prime}$ diameter and $30^{\prime}$ long pressure vessels. A side stream treated with RO membranes was remixed to create a product water to match the water quality of FPUD's imported water. The product water was pumped directly in the distribution systems. Distribution system improvements included two miles of 24 -inch CML\&C steel pipe, a remote 8 mgd pump station and 6 MG steel water storage tank. Project services included: 1.) distribution system modeling, 2.) establishment of water quality goals, 3.) evaluation of potential process treatment trains and configurations, 4.) preliminary design, 5.) final design, 6.) design service during construction phases, 7.) public outreach, and 8.) permitting assistance.

Fluoridation at Santa Teresa Water Treatment Plant, Santa Clara Valley Water District - Design Engineer for routed chemical piping from new fluoride metering pipe area to injection point at East and West Filter Gallery locations. Routed double containment piping through congested pipe trench, across existing filters and along gallery wall to existing injection location. The design at the injection point included routing chemical piping in congested location which required leak detection sensor piping and new specification of a new Hastelloy injection quill. Additional services included design of an HVAC system for the fluoride metering pipe area.

Morro Reservoir Chloramine Injection System, Rainbow Municipal Water District Design Engineer for the design of a chloramine injection system on the $36^{\prime \prime}$ inlet/ outlet to Morro Reservoir. This project involves the design of renovations to an existing storage building to be used as a chemical storage and metering facility, design of a static mixing system and design of all necessary appurtenances for a fully working chloramines injection system.

# Andrew Wiese, PE, QSD <br> Design Engineer 

## Professional Registration

Registered Professional Engineer
California C84111

## Education

Loyola Marymount University B.S. Civil Engineering, 2011

## Certifications

Qualified SWPPP Developer
(QSD) Certification \#C84111

## Software

AutoCAD
Civil 3D
Building Systems Design
Risa 3D

## Qualifications

Andrew has five years of civil engineering and design experience. He has focused on the design of pump stations, pipelines and treatment facilities for water and wastewater applications. Andrew is proficient at hydraulic modeling of pumps and pump selection as well as valve rangeability calculations and valve selection. He is completely familiar with Hydraulic Institute standards and regulatory requirements.

## Project Experience

Post Road Hydropneumatic Booster Pump Station \& Transmission Pipelines, Eastern Municipal Water District - Design Engineer of Preliminary Design Report (PDR), Plans, Specifications and Estimate (PS\&E) for a 275 gallon-per-minute (gpm) pre-fabricated booster pump station, site grading and piping, connections to existing pipelines, 2400 feet of 18 -inch steel pipe in Post Road, 3200 feet of 8 -inch polyvinyl chloride (PVC) pipe in Ellis Avenue, pressure regulators for 155 existing water service connections, and 4 above grade check valve stations through-out the District's Good Hope II Pressure Zone. Andrew provided hydraulic analyses for the new booster pump station, including the development of variable frequency drive envelopes to ensure that the selected pumps met the District's needs. Assisted with design coordination with EFI, the pre-engineered pump station manufacturer.

Village Park Recycled Water Facilities, Olivenhain Municipal Water District - Design Engineer for alternatives evaluation, PDR, and PS\&E for design of 35,500 feet of $4^{\prime \prime}-12^{\prime \prime}$ PVC and fusible PVC pipe, an 1,800 gpm pump station (using a pre-engineered bunker type semi-buried station), flow metering facilities, potable make-up water system with flow control and air-gap, and modifications for conversion of existing 1.0 million-gallon (MG) water tank to recycled water operation. The pipelines are located in busy thoroughfares, residential streets and fronting schools and businesses. Services included extensive utility agency and City of Encinitas coordination and hydraulic analysis of operational interface between OMWD and San Elijo Joint Powers Authority recycled water systems.

Santa Margarita River Conjunctive Use Project, Fallbrook Public Utilities District Design Lead of the preliminary and final design for the Gheen Site, which consists of a 5600 gpm pump station, site demolition, grading, piping and bid alternative 4 MG welded steel reservoir. The pump station building design features skylights for pump removal and an electrical room for variable speed control. In addition to serving as lead for the Gheen site, Andrew provided calculations, drawings and contributed to specifications for the 8 million-gallon-per-day (MGD) water treatment plant that is included in the project design scope.

Secondary Connection Project Basis of Design Report, Padre Dam Municipal Water District - Assistant writer of the hydrology study and contributor to other technical memoranda for the 12 MGD water delivery system comprised of flow control facility, 1.75 MG pre-stressed concrete reservoir, 6,400 feet of 24 -inch pipe, pump station, power and control systems, site improvements, drainage, and associated appurtenances. A critical part of the project included the evaluation of alternative alignments for the 24 -inch pipeline.

# Gary Rush, PLS <br> Project Surveyor 

## Professional Registration

Registered Land Surveyor
California L6983
Arizona 32794

## Education

San Diego State University B.A. Mathematics, minor in Psychology, 1978

## Affiliations

California Land Surveyors
Association

## Software

TDS Survey Pro and Foresight
Trimble Geomatics, Pathfinder
ArcView GIS and DCSE Mapplet
AutoCAD Land Desktop

Microsoft Excel, Word, Outlook

Qualifications
As a professional land surveyor for IEC, Mr. Rush is responsible for our company-wide survey activities. Tasks include both office and field survey: topographic surveys for design, boundary surveys and property line staking, legal document preparation, construction staking and base map composition in AutoCAD Civil 3D. Prior to IEC, Mr. Rush was the Survey Supervisor for a local Water District. He worked on topographic and control surveys for the design and construction of dozens of capital improvement projects. The projects included above-ground reservoirs up to 20 million gallons, pump stations, transmission mains, sewer lift stations and force mains. He worked with project engineers and private surveyors to provide design surveys and mapping for public infrastructure projects, pothole surveys, and as-built surveys. He oversaw the USA Dig Alert program for the District. The locations of underground facilities were marked out for residential and commercial construction projects prior to any excavation. The construction of the South Bay Expressway (SR 125 toll road) and I-905 freeway construction required the relocation of major agency pipelines connected to reservoirs and aqueducts. Additionally, he is experienced in the preparation of legal descriptions for new right-of-way acquisition, quit claims and boundary adjustments and plats.

## Project Experience

Design Survey

- South Oceanside Water Line, City of Oceanside
- Oceanside Boulevard Sewer Lift Station Replacement, City of Oceanside
- Santa Margarita Conjunctive Use Project, Fallbrook Public Utilities District
- Lawrence Lane Pipeline \& Ash Street Bypass, Rincon del Diablo Municipal Water District
- (Via de la Valle) Recycled Water Line, City of Solana Beach
- So. Side Operations Building, Olivenhain Municipal Water District
- Village Park Recycled Water Pipeline, Olivenhain Municipal Water District
- Group 3 Pressure Reducing Station \& Government Road Pipeline, Santa Fe Irrigation District
- AB Line and Meyers Siphon, Vista Irrigation District
- La Costa Avenue Recycled Water Pipeline, City of Carlsbad
- Olivenhain Trunk Sewer Improvements, City of Encinitas
- Rock Springs Sewer Project, Vallecitos Water District
- Recycled Water Pipeline Extension - Phase 1, City of Solana Beach
- Group 2 Pipeline Replacement Project, Santa Fe Irrigation District
- La Costa Pump Station Rehabilitation, Leucadia Wastewater District
- La Costa Recycled Water Pipeline, City of Carlsbad
- Tenaja Pump Station, Rancho California Water District
- Jones Road Sewer Extension, City of Oceanside
- Homelands Tank and Pipeline Replacement, Helix Water District
- San Diego Recycled Water Connection No. 2, Olivenhain Municipal Water District
- East Feeder Pipeline Replacement, Rincon del Diablo Municipal Water District
- West Feeder Pipeline Replacement, Rincon del Diablo Municipal Water District
- Post Road Tank, Eastern Municipal Water District
- Salter Road Tank, Eastern Municipal Water District
- Warren Reservoirs No. 1 and 2, Rancho California Water District
- Warren Transmission Main, Rancho California Water District


## Tracy Adams, PE (\#E19832, \#M33672) <br> Principal Electrical Engineer/Project Manager

Mr. Adams has more than 20 years of application and design engineering experience in electrical engineering and industrial controls. His initial experience was designing shipboard control systems and power management systems. He has worked for system integrators/electrical contractors doing application engineering for industrial control systems for water treatment. His experience includes designing control panels, instrument selection, and network design. He also worked as a design engineer in the water/wastewater market developing power and control drawings to Customer's requirements and writing project specifications. Relevant project experience includes the following:

## Santa Fe Irrigation District

- Group 1PRS and Valve Replacement Project (2011)


## San Dieguito Water District

- SCADA Upgrade (2003)

City of San Diego

- Coastal Low Flow Storm Drain Diversions (1999)
- Black Mountain Road Pipelines (2002)
- Point Loma Grit Aeration (2007)


## City of Corona

- WRF 1 Upgrades (2002)
- SCADA Assessment (2010)
- WRF 2 PLC Upgrade (2011)

City of Carlsbad

- Knots Lane Sewer Lift Station (1998)
- Cannon Road Sewer Lift Station (2004)
- SCADA Assessment (2010)

Yorba Linda Water District

- Highland Reservoir Replacement (2009)

Vallecitos Water District

- Villages at La Costa (2005)

Olivenhain Municipal Water District

- 4S Ranch WWTP Upgrade (2000)
- 4G/Zorro Subnet Upgrade (2005)

Pala Casino

- Lift Station No. 2 Upgrade (2002)

Helix Water District

- Los Coches PS (2007)

Rancho California Water District

- VDC Recovery Wells (1998)


## Pfizer R\&D La Jolla

- Campus Power Management System (2006)


## San Diego County Water Authority

- Twin Oaks Valley Water Treatment Plant (2006)


## South Orange County Water Authority

- Plant 3A SCADA Improvements (2010)

San Elijo Joint Powers Authority

- Escondido Outfall Pipe Connection (2002)
- Eden Gardens PS (2009)

Mesa Consolidated Water District

- SCADA Upgrade (2009)

Darwin Community Services District

- Water Treatment Facility Upgrade (2011)


## San Luis Obispo County

- Salinas Dam Booster PS Upgrade (2010)


## City of Redlands

- Water Department SCADA Upgrade (2012)


## City of San Bernardino

- WRP MCC-CO Replacement (2011)


## City of San Capistrano

- Terminal Reservoir No. 3 (2004)


## City of Calexico

- Water Filtration Plant Expansion (2001)
- Raw Water Reservoir (2007)

City of Ramona

- Tertiary Filter Plant (1999)


## Education

Georgia Institute of Technology, BS Mechanical Engineering, 1982

## Professional Organizations

American Society of Mechanical Engineers

## Kelsey Structural Resumes

Guy Kelsey, PE, SE<br>Principal Structural Engineer

Mr. Kelsey has over 9 years of experience in structural engineering, designing both new and retrofit projects for various types of structures

Education/Professional Registration
B.S., Structural Engineering, 2008, UCSD
M.S., Structural Engineering, 2012, UCSD

Civil Engineer in California, 2011, No. 77675
Structural Engineer in California, 2014, No. 6099 including military, commercial, infrastructure, and water/wastewater. Mr.

KELSEY
StrLuctural

Kelsey has performed extensive seismic analysis, evaluation and condition assessments for existing buildings, infrastructure, military and water/wastewater structures throughout California. He has a passion for creative engineering design while providing efficient, cost-effective solutions for his clients.

## Relevant Project Experience

Rainbow Municipal Water District Pump Station \#1 Natural Gas Motor Replacement, Fallbrook, CA - Mr. Kelsey is providing the structural design for the replacement of natural gas engines with electric motors at an existing CMU pump station. The project will require the design of the concrete foundation for a prefabricated steel structure and various concrete equipment pads on site. The foundations consist of concrete slabs-on-grade with turned down footings around the perimeter with necessary concrete pedestal and pad supports for all equipment.

Vista Irrigation District, AB Line and Meyer's Siphon, Vista, CA - Mr. Kelsey provided the structural design for a below grade reinforced concrete transition structure connecting an existing open channel pipe to a new 36 "diameter steel siphon pipe. The structure was designed to withstand thrust forces and consider the differential soil lateral pressures due to its location on a slope. The design was based on the 2013 California Building Code and included environmental factors for liquid containing structures per ACl 350-06.

Gafner Advanced Water Treatment Plant Improvements Project, Leucadia, CA - Mr. Kelsey provided the structural design for improvements at an existing water treatment plant for rectangular reinforced concrete water retaining tanks and buildings such as clear wells, chlorine contact tanks, reactor/clarifiers, and filter structures. The project consisted of a condition assessment and report, structural repair drawings, and cost estimates for repairs to multiple structures. The design included the replacement of structural steel beam supports for existing pumps, and the design of new steel supports for new pumps and mixers, concrete surface and crack repair, and steel corrosion repair details.

City of San Diego North City Conveyance System, San Diego, CA - Mr. Kelsey is providing part of the structural design for the NCCS project as SLBE subconsultant. The design includes a pipeline utility bridge spanning 100' over an existing railway under the existing Miramar Road concrete bridge. And a new dechlorination facility consisting of a CMU building to protect (2) chemical tanks, and the design of multiple concrete below grade metering vaults and retaining walls.

Seismic Walkthrough at Meadowlark Water Reclamation Facility Chlorine Storage Building, Carlsbad, CA - Mr. Kelsey performed the structural site visit of an existing chlorine storage building for Vallecitos Water District (VWD) as part of the California Accidental Release Prevention (CaIARP) regulations, in order to observe the condition of the existing chlorine building equipment supports and anchorage with respect to resisting seismic forces. Based on the site visit findings and in order to satisfy the CaIARP regulations, Kelsey Structural performed a seismic retrofit upgrade to the chlorine tank storage racks.

Carlsbad Desalination Plant, Carlsbad, CA - Mr. Kelsey provided the structural design/build of the intake pump station and suck back tank for the Carlsbad Desalination project. Both structures consisted of reinforced concrete. The intake pump station is buried more than $40^{\prime}$ below grade and is required to withstand large and complex thrust loading from up to $72^{\prime \prime}$ diameter pipes, sea water buoyancy pressures, and was designed to accommodate liquefiable soils below the structure.

| Rainbow Municipal Water District |
| :--- | :--- |
| Design Services for the Robert A. Weese Filtration Plant Interconnect |

Matt Stone, PE, SE<br>Project Manager

Mr. Stone is a currently licensed California SE with over seven years of project management and structural design work encompassing

Education/Professional Registration
B.S., Structural Engineering, 2008, UCSD
M.S., Structural Engineering, 2009, UCSD

Civil Engineer in California, 2011, No. 78488
Structural Engineer in California, 2014, No. 6183 water/wastewater, military, and infrastructure projects. He has performed many complex structural and seismic analysis projects for new and existing buildings, water/wastewater structures, and infrastructure facilities throughout California utilizing the latest design standards and philosophies. His work has included the preparation of structural drawings, specifications, and calculation packages, project coordination and management, technical report writing, cost estimating, and construction support services.

## Relevant Project Experience

Rainbow Municipal Water District Pump Station \#1 Natural Gas Motor Replacement, Fallbrook, CA - Mr. Stone is serving as Project Manager, providing the structural design for the replacement of natural gas engines with electric motors at an existing CMU pump station. The project will require the design of the concrete foundation for a prefabricated steel structure and various concrete equipment pads on site. The foundations consist of concrete slabs-on-grade with turned down footings around the perimeter with necessary concrete pedestal and pad supports for all equipment.

Carlsbad Desalination Plant, Carlsbad CA - Mr. Stone provided the design/build services of the Reverse Osmosis/Administration (RO) Building, screen wall system, and multiple concrete water retaining structures of the 50.0 MGD Carlsbad Desalination Plant. The RO Building consisted of a multi-story, steel braced frame structure with complex mechanical equipment anchorage, long-span steel framing, and the need for consideration of the highly corrosive environment from the salt water desalination process.
City of Oceanside, Reservoirs Structural Analysis, Oceanside, CA - Mr. Stone served as the Project Engineer providing structural analysis and report recommendations for 12 reservoirs in the City of Oceanside's potable water distribution system. The 12 reservoirs consisted of 11 prestressed concrete and one welded steel reservoir with a combined water capacity of 50.5 MG. The reservoir structural analysis included plan review, site investigations, and calculations per current code requirements to determine the structural deficiencies of each reservoir.

Western Riverside Tertiary Treatment Plant Expansion, Corona, CA - Mr. Stone served as the Lead Structural Engineer for the design of over 20 structures at the Western Riverside Tertiary Treatment Plant Expansion in Corona, CA. Structures designed included new and retrofit special masonry shear wall structures, reinforced concrete structures and rectangular concrete water retaining structures. Work included structural and seismic design, preparation of design drawings, specifications, and calculations, and construction support services for the duration of the project.

Camp Pendleton P-1043 North Regional Tertiary Treatment Plant (NRTTP) - Mr. Stone provided structural design of the new expansion to the 4 MG North Regional Tertiary Treatment Plant (NRTTP) and related conveyance facilities as part of a design/build project. Mr. Stone performed structural design and detailing for over 15 structures including the 3 -story irregular concrete shear wall Headworks structure, concrete tanks, basins, and containment areas, and a LEED certified masonry shear wall and steel OMF Administration Building.

City of San Diego, Pump Station No. 64 Leak Repair Project, San Diego, CA - Mr. Stone served as the Project Engineer for the emergency repair of existing vaults and thrust support structures and provided structural calculations for new and repaired structures following the collapse of an existing vault structure. The project consisted of a new concrete vault structure for the rerouting of the existing force main pipe and the structural modifications of two existing vault structures.

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# Mickey Aguirre, PE - Survey Project Manager 

## Education

* 1974 BS Civil Engineering, Stanford University
* 1975 MS Civil Engineering, Stanford University

Professional License

* 1977 Professional Engineer in Civil Engineering (California) No. 27648

Professional Associations

* Member, American Public Works Association
* Member, International Right-of-W ay Association

Mr. Aguirre has over 40 years of experience in managing, directing and performing civil engineering and land surveying tasks. His experience includes 10 years in the municipal sector prior to founding Aguirre \& Associates in 1986. Both municipal and private survey and mapping experience includes a broad range of projects, including transit and mass transit, public works, residential, commercial churches, schools and other institutional project. Mr. Aguirre has extensive surveying and mapping experience with water and wastewater projects.

## Project Experience

## La Mesa Sewer Improvements Phase IV <br> La Mesa, CA

* Aguirre and Associates was the survey and mapping subconsultant to the City of La Mesa for approximately 5,800 linear feet of existing sewer pipeline repair and replacement design. Mr. Aguirre was the Project Manager responsible for overall survey coordination, managing the delivery of the aerial mapping of the pipeline alignments, the survey and mapping of existing right-of-way and property boundaries, and the preparation of right-of-way acquisition documents as required.
Contact:: Hamed Hashemian, City of La Mesa (619) 667-1153
Survey Budget: \$24,015


## San Diego County Water Authority On-Call Surveys

San Diego County, CA

* Aguirre and Associates is the survey and mapping consultant to the San Diego County Water Authority (SDCWA) for as-needed survey and mapping tasks. Mr. Aguirre is the Contract Manager responsible for overall survey task order management and scheduling of task order survey work. Mr. Aguirre also performs various office support tasks such as the preparation of right-of-way documents as required.
Contact: Marvin Sylakouski, San Diego County Water Authority (858) 522-6907

Survey Budget: \$100,000

## Buena Outfall Force Main Phase III

Vista, CA

* Aguirre \& Associates was survey and mapping consultant to the City of Vista for this force main realignment project. Mr. Aguirre is the Project Manager responsible for overall survey, mapping and right-of-way engineering coordination, the analysis and procedure for establishing existing right-of-way and property boundaries, the utility and miscellaneous design surveys and mapping as requested by the design engineer.
Contact:: Steve Jepsen, City of Vista (760) 726-1340 1323
Survey Budget: $\$ 37,440$


## Vista Ductile Iron Pipe Force Main

Vista, CA

* AGUIRRE \& ASSOCIATES was the surveying, mapping and right-of-way subconsultant to the City of Vista for Engineering Design Services for the Ductile Iron Pipe (DIP) Force Main Project. Mr. Aguirre was Project Manager responsible for setting and surveying aerial mapping control, performing right-of-way surveys to establish the location of street and easement rights-of-way, performing utilities surveys within the project limits, and dipping and detailing sewer manholes. Additional duties also include preparation of construction or permanent easement right-of-way acquisition documents.

$$
\text { Contact:: Steve Jepsen, City of Vista (760) } 726-1340 \times 1323
$$

Survey Budget. \$14,865

Aguirre \& Associates * 8363 Center Drive, Ste. 5A La Mesa, CA 91942
Tel: (619) 464-6978 Fax: (619) 464-7203 www.aguirre-inc.com

## Experience \& Past Performance, Including Cost \& Schedule Control

[^4]
## Post Road Booster Pump Station

| AGENCY: | Eastern Municipal Water District | Client Contact: | Leslie Parada, PE |
| :---: | :---: | :---: | :---: |
|  | 2270 Trumble Road | PHONE: | 951.928.3777 |
|  | Perris, CA 92570 | E-MAIL: | paradal@emwd.org |
|  |  |  | Proposed: \$255,000 |
| PROJECT DATES: | August 2015 - Present | PRoject design budget: | Final: \$255,000 |
|  | Budgeted: 12 months |  | Estimated: \$3.7 million |
| DESIGN Schedule: | Actual: 12 months | CONSTRUCTION COSTS: | Actual: \$ N/A |

To alleviate low pressure conditions in the westerly higher elevation areas of the Eastern Municipal Water District's (District's) Good Hope II (1832) Pressure Zone, the District determined that an interim EFI manufactured Hydro-Pneumatic BPS and a new pressure zone would be desirable. Attributes of the new pressure zone include: an interim BPS, a closed system (i.e. there will not be a new atmospheric tank connected to the zone), connection to the existing Ellis tank and 1832 zone by means of a check valve to maintain existing fire flow capacity, and service provided to a limited number of customers primarily in the area of Santa Rosa Mine Road, Post Road, Ellis Avenue and possibly other streets such as Steel Peak in the vicinity.

IEC performed hydraulic and civil engineering work to define the pressure, flow and geographic area associated with the new zone and the alignment of new pipeline and design details of the pre-engineered booster pump station. The gradient was determined to be 1910 feet with a flow of 275 gallons per minute (GPM). It was further determined that four new check valve stations would be necessary to sustain fire flows in the new zone.

## Key Project Components \& Issues

- Hydraulic Modeling
- Booster pump station siting, internal layout, evaluation of the need for a hydropneumatic tank
- VFD versus constant speed pumps
- Pump recirculation to increase the effective flow range of the pumps
- One half mile of new 8 -inch diameter PVC pipe
- $3 / 8$ of a mile of 18 -inch CML\&C pipe
- Installation of pressure regulators at service connections as necessary
- Construction cost estimate
- Safety design review meetings
- Instrumentation control meetings


## Village Park Recycled Water Project

| Agencr: | Olivenhain Municipal Water District 1966 Olivenhain Road <br> Encinitas, CA 92024 | CIIENT CONTACT: <br> PHONE: <br> E-MAlL: | George Briest, PE <br> 760.632.4640 <br> gbriest@olivenhain.com |
| :---: | :---: | :---: | :---: |
| Project dates: | Design: October 2013 - December 2014 | Project design budget: | Proposed: \$422,273 |
|  | Construction Support: March 2015 - April 2017 (est.) |  | Final: \$745,810 ** |
| Design Schedule: | Budgeted: 12 months (Design) | CONSTRUCTION COSTS: | Estimated: \$9,402,000 |
|  | Actual: 15 months (Design **) |  | Actual: \$9,319,000 (low bid) |

** During the course of the project, the District significantly expanded the scope of the project and increased the project design fee. Despite the added work, accelerated design efforts by IEC enabled completion of the project design with only a small extension of the design schedule.

In order to offset the use of potable water for irrigation, the Olivenhain Municipal Water District (District) is expanding their delivery of recycled water to customers in the City of Encinitas, primarily in the residential area called Village Park. The expanded system will serve landscaping and greenbelts in several residential areas with homeowner associations, schools and a golf course. The District will be purchasing recycled water from the neighboring San Elijo Joint Powers Authority (SEJPA) and the water will be delivered to the District's existing Wiegand Tank via a new transmission pipe. Major elements of the project are:

- Convert the Wiegand Tank, a 1 MG potable water storage facility, to recycled water storage. This includes modifying the existing inlet-outlet piping to add flow control valves and flow meters, and adding valves and piping to provide for the delivery of potable make-up water into the tank via an air-gap.
- 3,100 feet of $12^{\prime \prime}$ transmission pipeline to convey recycled water from SEJPA to the Wiegand Tank.
- 29,000 feet of $6^{\prime \prime}-12^{\prime \prime}$ recycled water pipeline located primarily along public streets to convey recycled water to the Village Park areas.
- A bunker type, partially buried pre-engineered pump station comprised of variable speed pumps to deliver up to $1,200 \mathrm{gpm}$ to the Village Park system.

IEC tasks on the project have encompassed a full array of planning and design services:

- Distribution system planning including hydraulic analyses of proposed recycled water system to evaluate and select the preferred piping alignments and pump station location.
- Benefit-cost analysis to determine extent of distribution piping that maximizes delivery of recycled water to existing customers for the available District funds.
- Preparation of Preliminary Design Report summarizing the results of the alternatives investigations and describing the recommended project configuration.
- Support for project coordination with City of Encinitas and District's acquisition of Coastal Develop Permit, preparation of IS/MND, and outreach efforts.
- Coordination between District and SEJPA regarding system hydraulics and integrated operational requirements.
- Preparation of construction contract documents encompassing surveying/mapping, geotechnical investigations, and plans, specifications and estimates for the combined District and SEJPA facilities.

A custom EFI pump station was used for this project.

## Gheen Site Pump Station

| Agency: | Fallbrook Public Utility District | Client Contact: | Jack Bebee |
| :---: | :---: | :---: | :---: |
|  | 990 E Mission Road | PHONE: | 760.728.1125 |
|  | Fallbrook, CA 92028 | E-MAIL: | jackb@fpud.com |
| Project dates: | 2016 - Present | Project Design budget: | Proposed: \$250,000 |
|  |  |  | Final: \$250,000 |
| Design Schedule: | Budgeted: 8 months (part of a larger project) | CONSTRUCTION COSTS: | Estimated: \$1,400,000 (not yet bid) |
|  | Actual: 8 months - 100\% complete |  | Actual: \$N/A |

This pump station was part of the larger Santa Margarita River Conjunctive Use Project. The pump station, when conditions warrant, pumps treated water from the Gheen pressure zone to the Red Mountain zone. The design includes two 4 mgd pumps with variable frequency drive motors, 400 horsepower each. Pumps are vertical turbine type mounted in pump cans and housed within a block building utilizing special acoustical reduction panels and doors for noise suppression due the proximity to residences. The building includes an electric room with a window, providing viewing access, in between it and the pump room. The pump room has space for the discharge meter and includes a roll door and sky lights to facilitate equipment maintenance. The design utilizes cement mortar lined and coated steel pipe for the 16 -inch pump discharge header and 24 -inch suction header.

## Experience \& Past Performance, Including Cost \& Schedule Control Project Manager Rick Kennedy, PE's Personal Experience

## Lake Murray Pump Station at the Alvarado Water Treatment Plant

| Agency: | City of San Diego | Culent Contact: | Iraj Asgharzadeh, PE* |
| :---: | :---: | :---: | :---: |
|  | Engineering \& Capital Projects Department | PHONE: | 619.930.3455 |
|  | Water \& Wastewater Division | E-MAIL: | iraj60@att.net |
|  | 525 B Street, Suite 750, MS 908A |  | *Retired Associate Civil Engineer from City of San Diego |
|  | San Diego, CA 92101 |  |  |
| Project dates: | 2002 | Project Design budget: | Proposed: \$600,000 |
|  |  |  | Final: \$600,000 |
| Design Schedule: | Budgeted: 9 months | CONSTRUCTION COSTS: | Estimated: \$4.5 million |
|  | Actual: 9 months |  | Actual: \$4.0 million |

ARCADIS designed the 85 mgd Lake Murray Pump Station to provide raw water from Lake Murray to the head of the Alvarado WTP. The Lake Murray Pump Station consists of can-mounted vertical turbine pumps. Three 450 HP pumps and 2 two speed 200 HP pumps were provided. The overall approach utilizing multiple sized pumps in combination with smaller 2 two speed pumps allows the facility to meet a wide range of flows using constant speed pumps to reduce both cost and operational complexity. Allowance for future expansion of the pump station was provided by adding an additional can with suction piping plus pump discharge connection for another 450 HP pump. Approximately 2,500 feet of buried 42 -inch CML\&C steel discharge piping was run across the breath of the Alvarado Water Treatment Plant site. The project included demolition of the then existing Lake Murray Pump Station, providing a temporary floating pump station in Lake Murray to accommodate construction and plant operations, a new 42 -inch below grade venturi meter vault, all new electrical and controls including fiber optics and control integration. The pump station was constructed without a building to conserve costs.

## Relevant Features

Detailed pump selection and hydraulics, flow metering part of project, vehicle access, discharge connection coordination, associated electrical design, maintenance and access to pumps, site drainage, remote telemetry control, control configuration designed to City standards.

## IEC's Local Experience

IEC has worked with the District on the following projects:

- Pump Station \#1 Natural Gas Motor Replacements
- Pala Mesa Tank
- Palomar College Horse Creek Waterline
- Morro Reservoir Chloramine Injection System
- Flow Monitoring
- Morro Reservoir Services During Construction
- As-Needed Staff Extension Services
- Sewer Flow Correlation Study


Pala Mesa Tank Sife and
6 MG Storage Tank Project
Pump Station \#1 Natural
Gas Motor Replacements

Design Services for the Robert A. Weese Filtration Plant Interconnect

## Creative Alternatives

## Bunker Style Pre-Engineered Pump Station

Utilizing a bunker style pre-engineered pump station embedded in the slope of otherwise unusable portion of property on the Weese Filtration Plant site as depicted in the rendering below.


## Flow Meter Location

An alternative to an above ground flow meter run or a meter installed in an underground vault, flow meters could be installed on each of the pump discharge greatly reducing the overall straight run length (the signals totaled to get the cumulative station flow) increasing the opportunity for installing the meters within the pump station. An alternative analysis will be provided within the Basis of Design Report (BODR) to determine best and most cost effective approach.

## Configuration of the Pump Station

Once the flow range of the pump station and extent of its use is agreed upon between the District and Oceanside, assisted by IEC, configuration options will be evaluated. Assuming a wide flowrate range and a total of two pumps as shown in the RFP, the turndown of a pump station using VFD's alone would typically be 4:1. IEC working with EFI on the Post Road Booster Pump Station for EMWD developed a pump station with a turndown of 10:1. This was accomplished two larger duty pumps with VFDs and control valves that allow for controlled recirculation (discharge to suction flow) at very low flow conditions. On this project we believe we can maintain the two pump configuration and provide a 10:1 turndown if desirable. Advantages/disadvantages and details this type of approach will be provided within the Basis of Design Report (BODR).

## Pump Station Control

This project presents some hydraulic challenges because the suction pressure and the discharge pressure vary due changes in water surface elevation on Oceanside's side and also within the Gopher Canyon tank, plus friction losses due related to flow. An estimated TDH range of the pumps is between -15 feet (water would flow by gravity) to about +45 feet. The pump station will have be controlled based on flow requiring the use of flow control valve(s) downstream of the flow meter(s). If a wide flowrate range for the proposed pump station is determined to have cost and operational advantages, the addition of VFD's to maintain a discharge pressure upstream of the flow meter(s) will be evaluated within the Basis of Design Report (BODR).

[^5]
## Exceptions to this RFP

Infrastructure Engineering Corporation takes no exceptions to the RFP, including the Consultant Services Agreement.

## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

DISCUSSION AND POSSIBLE ACTION TO APPROVE ORDINANCE NO. 17-02 AMENDING AND UPDATING ADMINISTRATIVE CODE TITLE 6 - ENGINEERING, TITLE 8 - WATER AND TITLE 9 SEWER

## DESCRIPTION

This item is to provide an opportunity for the Board to discuss updating and reorganizing Administrative Code Title 6 - Engineering, Title 8 - Water and Title 9 -Sewer. Currently Title 6 - Engineering is empty. When the new Administrative Code structure was adopted by the Board in 2006, Title 6 was left as a placeholder for a future consolidation of engineering related sections that are currently scattered in other areas of the Admin Code. The proposed draft changes include moving engineering related sections out of Title 8 and Title 9 into Title 6.

In addition to the movement of various engineering related items that are included in Title 8 and Title 9 into Title 6, additional modifications to Title 8 and 9 are being made for clarification, wording consistency, and to remove redundancies. These changes include a new $\$ 500$ fine for relocating a temporary construction meter (8.03.030.5), a minimum $\$ 500$ fine for water theft (8.19.030), and the removal of an annual certification of private booster pump cut off switch requirement (8.06.040). Further, for new customers, we recommend adding a requirement to record a notification document on the property if the pressure is above 150 psi or below 20 psi, so the owner and subsequent owner is aware of the water pressure received at the property (8.21.010).

The draft changes have been brought to the Engineering Services Committee on multiple occasions for review and comment. The committee provided comments that were incorporated and the committee recommended approval of these changes. The proposed changes have been drafted and attached for Board reference and consideration. Included are the changes in redline and the final draft version of the revised sections. The redline version shows changes in red. Existing sections that were moved into engineering are shown in red since the content in the Engineering section is new. Additions are shown as underlined and deletions are shown as strikeout.

Staff would like to thank the members of the Engineering Services Committee who spent a good deal of time giving thoughtful input through this process. As you can see from the redline document, the changes are voluminous and detailed. A good deal of staff time went into the effort as well, but we are confident that the increased clarity of the Admin Code will help both staff, our customers, and the development community understand and implement our policies and codes.

## POLICYISTRATEGIC PLAN FOCUS AREA

Administrative Code Title 6 - Engineering
Administrative Code Title 8 - Water
Administrative Code Title 9 - Sewer
Strategic Focus Areas: Asset Management, Customer Service and Communication

1. Approve Ordinance No. 17-02 amending and updating administrative code as attached for Title 6, Title 8 and Title 9.
2. Approve Ordinance No. 17-02 with revisions.

## STAFF RECOMMENDATION

Staff recommends Option 1.


Ordinance No. 17-02
Ordinance of the Board of Directors of the Rainbow Municipal Water District
Amending the Administrative Code
Title 6 Engineering, Title 8 Water and Title 9 Sewer
WHEREAS, the Rainbow Municipal Water District has, from time to time, adopted various rules and regulations for the operation of the District; and

WHEREAS, certain of those rules and regulations require updating to reflect best practices, as well as changes in applicable laws; and

WHEREAS, the Board of Directors has determined that changes in the rules or regulations of the District shall occur solely by amendment to the Administrative Code;

NOW, THEREFORE,
BE IT ORDAINED by the Board of Directors of Rainbow Municipal Water District as follows:

1. The following rules and regulations of the District, collected are hereby adopted and shall be incorporated into the Administrative Code, consisting of:
```
Title 6 Engineering
Sections
6.01.010 Engineering Department Role
6.02.010 Master Plan (moved from Title 9)
6.02.020 System Reliability (moved from Title 8)
6.03.010 California Environmental Quality Act (moved from Title 8)
6.01.010 Specifications (moved from Title 8)
6.05.010 General (moved from Title 8)
6.05.020 Procedure (moved from Title 8)
6.05.030 Sewer Policy (moved from Title 9)
6.05.040 Easements (moved from Title 8)
6.06.010 Parcel Maps (moved from Title 8)
6.07.010 Construction of Facilities (moved from Title 8)
6.07.020 Acceptance of Facilities (moved from Title 8)
6.08.010 Other Facilities (moved from Title 8)
6.08.20 Enlargement (moved from Title 8)
6.09.010 Inspection(moved from Title 8)
```


## Title 8 Water

8.02.290 Engineering Manager
8.03.030.5 Construction
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8.06.030 Backflow Devices

# 8.06.040 Booster Pumps <br> 8.06.050 Ownership <br> 8.11.030.1 Application <br> 8.11.030.2 Capacity Charge for Increasing Meter Size <br> 8.11.030.3 Reduction of Meter Size <br> 8.11.030.4 Exchange of Meter for Multiple Small Meters <br> 8.11.030.5 Fire Service Meters <br> 8.11.030.06 Meter Relocation <br> 8.11.030.9 San Diego County Water Authority Capacity Charges <br> 8.11.030.10 Removal of Water Meter <br> 8.19.030 Water Theft <br> 8.21.010 Pressure 

2. The General Manager is hereby directed to update the Administrative Code to reflect the approval of these rules and regulations, and to assign or reassign the numbering of the Administrative Code as necessary to codify these rules and regulations as amended.
3. This ordinance shall take effect immediately upon its adoption on this $28^{\text {th }}$ day of March, 2017.

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST:
Helene Brazier, Board President

Dawn Washburn, Board Secretary

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Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHrmwd-
blStore031BoardFilestBoard SecretarylAdministrative Code Working FilelBoard Admin Code 2005-20061Board Admin Gode TABLE OF CONTENTS 2005-2006 update.docl\Approved Ordinance 05-07\18-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07\VAmended and Updated 11-17-06 per Ordinance 06-09IVAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 07161VAmended and Updated 6-24-08 per Ordinance 08-081VAmended and Updated 7-22-08 per Ordinance 0809IVAmended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 1302\VAmended and Updated 7-23-13 per Ordinance 13-06\IAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07\IAmended and Updated 11-18-14 per Ordinance 14-09 and 14-101VAmended and Updated 1-27-15 per Ordinance 15-01\WAmended and Updated 2-24-15 per Ordinance 15-02<br>Amended and Updated 12-15-15 per Ordinance 15-09\VAmended and Updated 1-26-16 per Ordinance 16-01\Amended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per
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Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHrmwd-
blStore03lBoardFilestBoard Secretary/Administrative Code Working FiletBoard Admin Gode 2005-20061Board Admin Code TABLE OF CONTENTS 2005-2006 update.doclIApproved Ordinance 05-07\18-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07\VAmended and Updated 11-17-06 per Ordinance 06-09IIAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 08091VAmended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 1302IIAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07<br>Amended and Updated 11-18-14 per Ordinance 14-09 and 14-10\IAmended and Updated 1-27-15 per Ordinance 15-01\IAmended and Updated 2-24-15 per Ordinance 15-02IVAmended and Updated 12-15-15 per Ordinance 15-09IVAmended and Updated 1-26-16 per Ordinance 16-01<br>Amended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per
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Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHrmwd-
blStore031BoardFilestBoard Secretary/Administrative Gode Working FilelBoard Admin Code 2005-20061Board Admin Code TABLE OF CONTENTS 2005-2006 update.doclIApproved Ordinance 05-07\18-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07\VAmended and Updated 11-17-06 per Ordinance 06-09IVAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 08091VAmended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 1302IVAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308\VAmended and Updated 10-28-14 per Ordinance 14-07<br>Amended and Updated 11-18-14 per Ordinance 14-09 and 14-101VAmended and Updated 1-27-15 per Ordinance 15-01\VAmended and Updated 2-24-15 per Ordinance 15-02\VAmended and Updated 12-15-15 per Ordinance 15-09\VAmended and Updated 1-26-16 per Ordinance 16-01<br>Amended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05IVAmended and Updated 6-28-16 per Ordinance 16-11IIDRAFT
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Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHrmwd
blStore031BoardFilestBoard SecretarylAdministrative Gode Working FilelBoard Admin Code 2005-20061Beard Admin Code TABLE OF CONTENTS 2005-2006 update.doclIApproved Ordinance 05-07\18-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07<br>Amended and Updated 11-17-06 per Ordinance 06-0911Amended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 08091VAmended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 13021VAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07\VAmended and Updated 11-18-14 per Ordinance 14-09 and 14-10\VAmended and Updated 1-27-15 per Ordinance 15-01\VAmended and Updated 2-24-15 per Ordinance 15-02\VAmended and Updated 12-15-15 per Ordinance 15-091VAmended and Updated 1-26-16 per Ordinance 16-01\AMmended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05\VAmended and Updated 6-28-16 per Ordinance 16-11IIDRAFT
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Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHrmwd-
blStore031BoardFilestBoard SecretaryAdministrative Gode Working FilelBoard Admin Code 2005-20061Board Admin Gode TABLE OF GONTENTS 2005-2006 update.docllapproved Ordinance 05-07\18-3-05IIAmended and Updated 8-18-06 per Ordinance 06-07\VAmended and Updated 11-17-06 per Ordinance 06-09IVAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 08091VAmended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 1302\VAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07\IAmended and Updated 11-18-14 per Ordinance 14-09 and 14-101VAmended and Updated 1-27-15 per Ordinance 15-01\VAmended and Updated 2-24-15 per Ordinance 15-02lWamended and Updated 12-15-15 per Ordinance 15-09<br>Amended and Updated 1-26-16 per Ordinance 16-01\IAmended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05IVAmended and Updated 6-28-16 per Ordinance 16-11\IDRAFT
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Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. doctHrmwd-
blStore031BoardFilestBoard SecretarylAdministrative Code Working FiletBoard Admin Gode 2005-20061Board Admin Code TABLE OF CONTENTS 2005-2006 update.doc\IApproved Ordinance 05-07\18-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07IVAmended and Updated 11-17-06 per Ordinance 06-09IVAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05\VAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 08091 Amended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 1302IVAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07\VAmended and Updated 11-18-14 per Ordinance 14-09 and 14-10lVAmended and Updated 1-27-15 per Ordinance 15-01\VAmended and Updated 2-24-15 per Ordinance 15-02<br>Amended and Updated 12-15-15 per Ordinance 15-09<br>Amended and Updated 1-26-16 per Ordinance 16-01<br>Amended and Updated 2-23-16 per Ordinance 16-03I\Amended and Updated 3-22-16 per Ordinance 16-05\IAmended and Updated 6-28-16 per Ordinance 16-11\IDRAFT
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Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update.docHrmwd-
blStore031BoardFilestBoard Secretary\Administrative Gode Working FilelBoard Admin Gode 2005-20061Board Admin Code TABLE OF CONTENTS 2005-2006 update.do6IVApproved Ordinance 05-07II8-3-05IIAmended and Updated 8-18-06 per Ordinance 06-07\VAmended and Updated 11-17-06 per Ordinance 06-09IVAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05<br>Amended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08\VAmended and Updated 7-22-08 per Ordinance 0809IVAmended and Updated 12-06-11 per Ordinance 11-06IWAmended and Updated 2-26-13 per Ordinance 1302IIAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 13081VAmended and Updated 10-28-14 per Ordinance 14-07\IAmended and Updated 11-18-14 per Ordinance 14-09 and 14-101\Amended and Updated 1-27-15 per Ordinance 15-01\IAmended and Updated 2-24-15 per Ordinance 15-02\IAmended and Updated 12-15-15 per Ordinance 15-09IVAmended and Updated 1-26-16 per Ordinance 16-01\AAmended and Updated 2-23-16 per Ordinance 16-03<br>Amended and Updated 3-22-16 per Ordinance 16-05IIAmended and Updated 6-28-16 per Ordinance 16-11IIDRAFT

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| $\mathbf{6 . 0 1}$ Engineering Department Role <br> $\mathbf{6 . 0 2}$ Master Plan <br> 6.03 California Environmental Quality Act <br> 6.04 Specifications <br> 6.05 Water and Sewer Line Extensions <br> 6.06 Parcel Maps <br> 6.07 Construction of Water and Sewer Facilities <br> 6.08 Reimbursement <br> 6.09 Inspection |  |

Sections
6.01.010

Engineering Department Role

## Section 6.01.010

Engineering Department Role
The Engineering Department is responsible for the management and execution of the Capital Improvement Program for water and sewer. The Engineering Department also manages development services, which include plan checking and inspection to ensure infrastructure is designed and installed per District standards.

## Sections

6.028.38.010 Master PlanSystem Reliability
6.02.020 System Reliability

## Section 6.02.010 <br> Sewer-Master Plan

The District has prepared a sewer-master plan setting forth the sewerage-facilities contemplated for construction within the District. The master plan may be modified from time to time. The District may refuse to supply sewer-service if the proposal does not comply with the District's master plan. The District may condition approval of sewerservice upon the construction, by the owner; applicant or customer, of those facilities needed to serve the property and such other facilities as may be required by District.

Section 6.028.38.0210
System Reliability
The DistrictRainbow Municipal Water District is to provide water system looping wherever possible and practical. This policy is a direct result of the agricultural history of the District's water system, and the District's need to increase overall system reliability for its growing domestic water supply role. Therefore, each new pipeline in the water system shall be evaluated, and if possible and practical, the new line will be required to be looped with adjacent infrastructure. This policy shall apply to all new pipelines of at least $8^{\prime \prime}$ size

It is the policy of the District that developers construct water infrastructure necessary to provide water supply to their proposed developments. Therefore, it will be the responsibility of the developer to consult with the Engineering Manager or his/her designee Bistrict engineering staff for an evaluation of each pipeline to determine the need for system looping and other system reliability issues. It will be the responsibility of the developer to construct the looped pipeline, as a condition of the District's acceptance of the facilities for water service by the District.

Sections<br>6.038.27.010 California Environmental Quality Act

## Section 6.038.27.010 <br> California Environmental Quality Act

All persons proposing construction of water or sewer systems, or any facility requiring approval by the District, shall conform to the requirements adopted from time to time by the District in conformance with the California Environmental Quality Act (CEQA).

## Sections

6.048.22.010

## Specifications

## Section 6.048.22.010

## Specifications

The Standard Specifications and Drawings for the District are adopted by the Board of Directors. These specifications may be modified from time to time. The specifications establish standards for work, materials and construction procedures for improvement to water and sanitary sewer systems. The Standard Specifications and Drawings for the District are available at the District offices and on the District website.

It is the policy of the District that all water and sewer facilities constructed by third parties in anticipation that title to said facilities will ultimately be transferred to the District under the policies and standards of the District shall conform to the most current standard specifications of the District.

Sections<br>6.058.24.010 General<br>6.058.24.020 Procedure<br>8.24.030 Reimbursement<br>6.05.030 Sewer Policy<br>6.05.040 Easements

## Section 6.058.24.010 General

The District may accept, maintain and operate pipelines constructed by others in accordance with District requirements. The Applicant-must construct, at his or her sole expense, must construct the necessary facilities required to serve the Applicant's property, subdivision development, or parcel map splits, and all other property which the District will determine should be served by common facilities as specified by the Engineering Manager. Meters will be furnished and installed by the District at rates set by current schedules established by the Board. The Applicant shall obtain all easements required for construction and submit them to the District for approval and recordation.

## Section 6.058.24.020 <br> Procedure

For design and construction guidelines of water and sewer line extensions, refer to the most current standard specifications of the District.
6.05.020.1 The Applicant shall have plans prepared by a registered civil engineer and reviewed for accuracy and constructability cheoked-by the District.
6.058.24.020.24 The Applicant shall submit to the District a complete package of plans and project documents (as stated in the current standard specifications) accompanied with the required deposit in an amount established by the General Manager to cover engineering fees. File with the District, on forms furnished by the District, an application for permission to construct facilities.
6.05.020.3 On District's acceptance of plans, the Applicant may proceed with construction once all contract requirements are fulfilled (as stated in the standard specifications) and submit the required deposit in an amount established by the General Manager to cover inspection fees plus any additional deposit to cover cost of work or materials to be furnished by the District as part of the project.
8.24.020.2 Deposit with the District an amount established by the General Manager to cover engineering fees and inspection.
8.24.020.3 The Applicant shall have plans prepared by a registered eivil engineer and checked by the District. On District's acceptance of plans, Applicant may proceed with construction.
6.05.020.4 Line extensions approved by the District and not completed within a twoyear period after date of approval must be resubmitted for reconsideration by the District. Resubmitted plans shall be revised to reflect current District policies at the time of resubmittal. At the time of such resubmittal, additional deposit may be required by the Applicant to cover engineering fees.
8.24.020.4 No connection shall be made to any facilities until the service area agreement, if any, has been signed by the Applicant and the facilities have been accepted by the Board of Directors.
8.24.020.5 Line extensions approved by the District and not completed within a two-year period after date of approval must be resubmitted for reconsideration by the District. Resubmitted plans shall be revised to reflect current District policies at the time of resubmittat.
6.058.24.020.56 After completion of the work, in accordance with District requirements, and prior to acceptance by the Board, the Applicant shall deliver to the District a properly executed Deed of Conveyance transferring all interest and title of such systems, free of liens, to the District.

## Section 8.24.030

Reimbursement
8.24.030.1 Any parcel not presently receiving water and abutting the water main extension, which can receive service through the facilities and which did not contribute to the cost of the original facilities, shall pay an extension connection fee to the District prior to any connections being made.


#### Abstract

8.24.030.2 The extension connection fee shall be equivalent to the proportionate, prorated per acre cost of the pipeline, as originally constructed. This fee, without interest, will be paid to the original Applicant, or his designee, if collected within ten (10) years of the date of the service area agreement signed by the Applicant and the District at time of construction. Thereafter the fee will be collected and retained by the District. 8.24.030.3 The extension connection fee shall be in addition to the normal capacity fees required to establish water service.


## Section 6.05.030 9.14.010 <br> Sewer Policy

The intention of this section is (1) to provide guidelines for staff in approving and reviewing development plans, sewer line extensions, building permits, sewer system connections, etc.; and (2) to provide reasonable, predictable guidelines for property owners.
6.05.030.19.14.010.1 Goals
6.05.030.1.19.14.010.1.1

Provide an adequate system for serving all users and potential users within the District in an orderly, efficient and economical manner.
6.05.030.1.29.14.010.1.2 Provide a system which allows for efficient and economical maintenance.
6.05.030.1.39.14.010.1.3 Provide a system which has easy, efficient access to the District facilities, such as cleanouts and manholes.
6.05.030.1.49.14.010.1.4__ Provide a reliable, safe and sanitary collection system.

### 6.05.030.29.14.010.2 Provisions

The District's basic requirement is that no private sewer lateral shall be allowed to cross a property line or (if in a public street) across the extension of a property line. The provisions of this policy apply to any new applicant or property owner who seeks to extend or modify the District facilities or to connect to the District's collection system.
6.05.030.2.19.14.010.2.4 A private lateral may be allowed across property lines in private easements to serve a single-family residence, provided no more than one parcel would be served by a public sewer line, either in the present or in the future. The District may require copies of such easements.
6.05.030.2.29.14.010.2.2_ No more than one property may be served by a single lateral. Multiple connections must be by public sewer line.
6.05.030.2.39.14.010.2.3 Sewer laterals between the sewer main and the edge of a public right-of-way or the District easement, if not already existing, shall be installed by the owner, at the owner's sole expense as specified by the District, and shall remain the property of the District.
6.05.030.2.49.14.010.2.4__ Maintenance and cleaning of laterals outside of public right-of-ways or District sewer easements-shall be the sole responsibility of the property owner. The District shall be responsible for cleaning the lateral within right of way or district sewer easement.
6.05.030.2.59.14.010.2.5 The District has no obligation to provide sewer by other than gravity flow. Private sewer pumps, if required, shall be installed, maintained and operated by the property owner.
6.05.030.2.69.14.010.2.6 Multi-Unit projects with a Home Owner's Association may be served with private on-site sewer collection systems with the written approval of the District.
6.05.030.2.79.14.010.2.7 The private road easements for public road purposes are considered to be public streets for the purposes of this policy. Private sewer line extensions ("laterals") are not allowed in these easements.
6.05.030.2.89.14.010.2.8

Public sewer lines shall be designed to serve off-site property within the District, where practical. Should improvements, excessive pipe sizes, or excessive depths be required which solely benefit off-site property, the District may assume the additional cost. The District may establish a reimbursement agreement to recover its contribution from off-site properties which benefit from improvement or excessive sizes or depths.
6.05.030.2.99.14.010.2.9 An applicant or property owner who installs off-site public sewer lines may enter into a reimbursement agreement to recover the costs of the off-site improvements, if approved by the District, in its sole discretion. The District shall establish the form and conditions of this agreement from time to time.
6.05.030.2.109.14.010.2.10 The District recognized the covenant of improvements placed on minor land divisions by the County of San Diego. The District will agree to remove covenants when the terms of the covenant are met.
6.05.030.2.119.14.010.2.11 _ The District normally requires only those easements, which are necessary for the immediate
construction and long term maintenance of pipelines. The District may require additional easements for future use.

## Section 6.05.040

## Easements

Applicant,-Owner or Customer shall provide all sites and rights-of-way for required water and sewer system facilities acceptable to the District and necessary to protect the District against the possible future cost of relocating or reconstructing such facilities by reason ofdue to future public or private improvements, including grading and the alteration of drainage or discharge of surface, ground or flood waters.

Applicants shall grant the District an easement which will allow to the District to install, maintain, operate, repair, enlarge and remove any service connection or facilities of the District if the service connections are not located upon an existing District easement or within the public right of way.

## Sections

6.068.26.010 Parcel Maps

## Section 6.068.26.010

## Parcel Maps

6.068.26.010.1 A water distribution system serving each parcel created by a parcel map split when principal use will be a building site, shall be required as a condition of the District's certification of water availability.
6.068-26.020.2 Parcel map splits creating parcels essentially for agricultural use may receive the District's certification of water availability, subject to construction of a water system to serve any parcel for which service is requested prior to granting service thereto.

## Sections

6.078.32.010 Construction of Facilities-to-Serve Applicant
6.07.020 Acceptance of Facilities

The Applicant, Owner or Customer at his expense shall provide water system facilities reasonably necessary to extend or improve the District water system to provide service to Gustomers. The District has adopted "Standard Specifications for the Construction of Water and Sewer Facilities" establishing minimum standards for facilities of the District, a copy of which is available at the offices of the District. Applisant, Owner or Gustomer shall provide all sites and rights-of-way for required water system facilities acceptable to the District and necessary to protect the District against the possible future cost of relocating or reconstructing such facilities by reason of future public or private improvements, including grading and the alteration of drainage or discharge of surface, ground or flood waters.
Plans and specifications for construction of water or sewer facilities shall be approved by the District in advance of construction. All construction shall be subject to inspection by the District. If for any reason the District deems it necessary to delay or stop work on any water or sewer facilities to be installed or constructed, a stop order issued by the General Manager shall be issued and delivered to the representative of the Applicant on the job. Work shall cease in an orderly manner with proper safety measures and protection for materials, equipment, property and other phases of the job. Work shall not be resumed until issuance of another order to proceed. The General Manager shall determine time of connection by an Applicant, Owner or Customer or other person.

## Section 6.07.020

## Acceptance of Facilities

The General Manager shall accept water, sewer and other facilities on behalf of the District after proper design, approval, construction, inspection and compliance with all requirements of the District's rules and regulations and specifications, including acquisition of sites and rights-ofway. Upon such acceptance, all such facilities and appurtenances become the property of the District. The District shall request the Applicant, Owner or Customer to execute a bill of sale or other satisfactory conveyance of the facilities to the District, including, where proper, lien releases. The District shall require a title report establishing that the facilities, sites and easements are free and clear from all liens and encumbrances. All sites and easements shall be in a form acceptable to the District and not subject to outstanding obligations to relocate such facilities or any deeds of trust, except in instances where such is determined to be in the best interests of the District. The Applicant, Owner or Customer shall hold the District harmless from all liens, claims or stop notices that may be filed in regard to the construction and shall guarantee the workmanship and materials of the facilities for a period of one year from their acceptance by the District. A longer guarantee period may be required by the District. Upon acceptance, the District will assume responsibility for providing water and sewer service to individual lots within such development.

[^11]
## Sections

6.088.33.010 Other Facilities
6.08 .020 Enlargement
6.088.33.0320 Reimbursement Agreements
8.33.030 Construction of Facilities
8.33.040 Acceptance of Facilities

Where lands outside of an area described in the application for service are susceptible to service from facilities common to those required for the property described in the application, the District may require Applicant--Owner or Customer to advance the cost of the construction of other water distribution, sewer systems or other facilities, including, but not by way of limitation, pumping facilities and treatment capacity, either within or outside the area, larger than the size determined by the District to be required for providing adequate service to the property described in the application.

Section 6.08.020
Enlargement
When the District requires the construction of facilities in excess of the minimum size needed to meet requirements of the properties the facilities are designed to serve, and in excess of the minimum requirements of these Rules and Regulations, the Applicant will be responsible for all costs and may be reimbursed under Ordinance 57 dated March 28, 1966.

Section 6.088.33.0320 Reimbursement Agreements

If additional or enlarged facilities are required-pursuant to Section 8.35.010, the District will contract with the Applicant,-Owner or Customer for reimbursement on a pro rated basis of the difference between the cost of the facilities required by the District and the cost of the facilities which otherwise would be required to provide adequate service to the property described in the application for sService. The terms, extent and provisions of such reimbursement agreement shall be determined by the District in its discretion. In no event shall interest be paid on any such amounts. The period of time in which reimbursement will be made will be determined by the District depending upon the amount to be advanced by an Applicant, Owner or Customer in addition to other normal charges, the probability of receipt of payment and of the then anticipated course of development of the particular portion of the District in which the facilities are proposed to be constructed. The amount so advanced for facilities available to lands outside the area described in the application for service shall be taken into account when development occurs for which such facilities are constructed, and the District shall have the right to impose and charge additional capacity and connection charges and other costs, if necessary, to cause equitable reimbursement in such instances.

Any parcel not presently receiving water and abutting the water main extension, which can receive service through the facilities and which did not contribute to the cost of the original facilities, shall pay an extension connection fee to the District prior to any connections being made per the Reimbursement Agreement(s).

[^12]
## Section 8.33.030 Construction of Facilities

Plans and specifications for construction of water facilities shall be approved by the District in advance of construction. All construction shall be subject to inspection by the District. If for any reason the District deems it necessary to delay or stop work on any water facilities to be installed or constructed, a stop order issued by the General Manager shall be issued and delivered to the representative of the Applicant on the job. Work shall-cease in an-orderly manner with proper safety measures and protection for materials, equipment, property and other phases of the job. Work shall not be resumed until issuance of another order to proceed. The General Manager shall determine time of connection by an Applicant, Owner or Customer or other person.

[^13]
## Section 8.33.040

## Acceptance of Facilities

The General Manager shall accept water and other facilities on behalf of the District after proper design, approval, construction, inspection and compliance with all requirements of the District's rules and regulations and specifications, including acquisition of sites and rights-of-way. Upon such acceptance, all such facilities and apputenances become the property of the District. The District shall request the Applicant, Owner or Customer to execute a bill of sale or other satisfactory conveyance of the facilities to the District, including, where proper, lien releases. The District shall require a title report establishing that the facilities, sites and easements are free and clear from all liens and encumbrances. All sites and easements shall be in a form acceptable to the District and not subject to outstanding obligations to relocate such facilities of any deeds of trust, except in instances where such is determined to be in the best interests of the District. The Applicant, Owher or Gustomer shall hold the District harmless from all liens, claims or stop notices that may be filed in regard to the-construction and shall guarantee the workmanship and materials of the facilities for a period of one year from their acceptance by the District. A longer guarantee period may be required by the District. Upon acceptance, the District will assume responsibility for providing water service to individual lots within such development.
\Irmwd-b\Store02\DriveC\Data\Drive-E $\backslash$ ADMINISTRATIVE CODE\Drafts Not Approved $/$ New Engineering Section 6\Reimbursement 6.08.docW:\BOARD\Board Secretary\Administrative Code Working File\Board Admin Code 2005-2006 Water Policy Ordinance 14-07<br>10-28-14<br>DRAFT

## Sections

6.09.010 Inspection

## Section 6.09.010 <br> Inspection

The Applicant shall notify the Engineering Department to schedule timely inspection as per the District's current Standards and Specifications. The Engineering Manager or his/her designee shall inspect the water and sewer facility construction to insure compliance with current standard specifications and District policies.

Chapter 8.02
DEFINITIONS
Sections
8.02.010 Abut District Line
8.02.020 Active Park and School Ground Areas
8.02.030 Agricultural Purposes
8.02.040 Air-Gap
8.02.050 Applicant
8.02.060 Approved
8.02.070 Auxiliary Water Supply
8.02.080 Backflow
8.02.090 Backflow Preventer
8.02.100 Backpressure
8.02.110 Backsiphonage
8.02.120 Blow-Off
8.02.130 Board of Directors
8.02.140 Certified Backflow Tester
8.02.150 Conservation Offset
8.02.160 Construction Meter
8.02.170 Construction Purposes
8.02.180 Contamination
8.02.190 Control
8.02.200 Cross-Connection
8.02.210 Cross-Connection Control by Containment
8.02.220 Customer
8.02.230 Customer System
8.02.240 Degree of Hazard
8.02.250 Distribution Main
8.02.260 Distribution System
8.02.270 District
8.02.280 District Engineer
8.02.2890 Domestic and Municipal Purposes
8.02.290 Engineering Manager
8.02.310 Engineer
8.02.3020 Fire Protection
8.02.3130 General Manager
8.02.3240 Greywater
8.02.3350 Health Hazard
8.02.3460 Industrial Fluids System
8.02.3570 Industrial Waste
8.02.3 $\underline{6} 80$ Industrial Waste Treatment Plant or Facility
8.02.37440 Meter
8.02.38420 Micro Irrigation Systems/Equipment
8.02.39430 Nonpotable Water
8.02.4040 Payment Date
8.02.4150 Persons
8.02.4260 Plan Check \& Inspection
8.02.4370 Plumbing Hazard
8.02.4480 Pollution
8.02.4590 Pollution Hazard
8.02.46500 Potable Water
8.02.47510 Potable Water Service Connection
8.02.520 Pre-Treatment
8.02.48530 Premises
8.02.49540 Presentation or Date of Presentation
8.02.5050 Property Owner or Owner
8.02.5160 Public Health Agency
8.02.5270 Reclaimed Water
8.02.5380 Recreational and Ornamental Lakes and Ponds
8.02.5490 Reduced Pressure Principle Device (RP)
8.02.55600 Reduced Pressure Principle-Detector Backflow Assembly (RPDA)
8.02.56610 Remote Meters
8.02. 57620 Rules and Regulations
8.02.58630 Schedules, Tariffs or Lists
8.02.59640 Sealed Meter
8.02.6050 Secondary Water Main
8.02.6160 Security Deposit
8.02.6270 Surcharge
8.02.6380 System Hazard
8.02.6490 Temporary Customer
8.02 .700 Temporary Meter
8.02.65710 Termination of Service
8.02.66720 Title 17
8.02.67730 Transmission
8.02. 68740 Units of Measurement
8.02.69750 Used Water
8.02.7060 Water Capacity Fee
8.02.7170 Water Distribution System
8.02.7릉 Water Source
8.02.7390 Water Supervisor
8.02.74800 Water System

The definitions in this sub-section shall be used to interpret this Section, unless otherwise apparent from the context.

Section 8.02.010

## Abut District Line

Abut District Line: Parcels abut a District line where they are crossed by a District line, or where a line runs along the boundary of a parcel in an easement or other right of way.

## Section 8.02.020

Active Park and School Ground Areas
Active Park and School Ground Areas: Areas designated by public agencies and private schools for specific sporting and recreational activities and areas traditionally used for active play or recreation where turf is an integral part of the activity.

## Section 8.02.030

Agricultural Purposes
Agricultural Purposes: The growing or raising, in conformity with recognized practices of farming, for the purposes of commerce, trade, or industry, or for use by public educational or correctional institutions, of agricultural, horticultural, or floricultural products. Such products shall be for human consumption, for the market, or for the feeding of fowl or livestock. Products are to be grown or raised on a parcel of land having an area of not less than one acre utilized exclusively for such purposes.

## Section 8.02.040

Air-Gap
Air-Gap: A means of backflow prevention utilizing the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of said vessel.

Section 8.02.050
Applicant
Applicant: Any person, firm, corporation, association or agency that applies for water service from the District.

## Section 8.02.060

## Approved

Approved: Accepted by the District as meeting an applicable specification stated or cited in this chapter or as suitable for the proposed use except as otherwise provided in this Article 8.

## Section 8.02.070

## Auxiliary Water Supply

Auxiliary Water Supply. Any water supply available to a Customer, other than the District's system. These auxiliary source of supply may include water from other purveyor's public potable water supply or any natural source(s) such as a well, spring, river, stream, harbor, etc., or used waters or industrial fluids. These supplies constitute a water source over which the District does not have control. There is a risk that they may be polluted, contaminated, or objectionable.

## Section 8.02.080

Backflow
Backflow: The undesirable reversal of water flow or mixtures of water and other liquids, gases or other substances into the Districts distribution pipes of water from any source or sources other than its intended source.

## Section 8.02.090

Backflow Preventer
Backflow Preventer. A device or means designed to prevent backflow or backsiphonage.
Section 8.02.100
Backpressure
Backpressure: Any elevation of pressure in the downstream piping system (by pump, elevation of piping, or steam and/or air pressure) above the supply pressure at the point of consideration, which would cause, or tend to cause, a reversal of the normal direction of flow.

## Section 8.02.110 <br> Backsiphonage

Backsiphonage: The flow of water (or other liquids, mixtures or substances) into the District system from any source other than its intended source, caused by the sudden reduction of pressure in the District system.

## Section 8.02.120

Blow-Off
Blow-Off: A District facility which is used to drain water mains for purposes of repair and maintenance.

## Section 8.02.130 <br> Board of Directors

Board or Board of Directors: The governing board of the District, consisting of five (5) elected representatives.

Section 8.02.140
Certified Backflow Tester
Certified Backflow Tester. A person who has proven his / her ability to test backflow prevention assemblies to the satisfaction of the District and the San Diego County Department of Environmental Health.

## Section 8.02.150 <br> Conservation Offset

Conservation Offset: The implementation of proven conservation techniques which, when installed, will result in a reduction equal to demand of the proposed use. Calculation of demand and saving shall be performed or verified by the Engineering ManagerDistrict Engineer based upon non-drought conditions.

## Section 8.02.160

Construction Meter
Construction Meter. A meter attached to a fire hydrant or other appurtenance and used for construction purposes in incremental periods of six months or less.

Section 8.02.170
Construction Purposes
Construction Purposes: A temporary service that is facilitated through a fire hydrant or a blowoff for construction purposes; such as construction of a dwelling, or grading of land or other purpose where water is not needed permanently. Construction meters may not be used for agricultural purposes.

## Section 8.02.180

## Contamination

Contamination the impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates a potential hazard to public health.

## Section 8.02.190

Control
Control: The right and power over the sanitary quality of water.
Section 8.02.200
Cross-Connection
Cross-Connection: Any physical connection, or arrangement of piping or fixtures, between two otherwise separate piping systems, one of which contains potable water and the other of which contains nonpotable water, industrial fluids, or fluids of questionable safety, through which, or because of which, backflow may occur into the District's system.

## Section 8.02.210 <br> Cross-Connection Control by Containment

Cross-Connection Control by Containment: The installation of an approved backflow prevention device in any Customer system at the water service connection.

## Section 8.02.220

Customer
Customer: The person in whose name water service is furnished, as evidenced by the signature on the application or request for water service. In the absence of a signed application, the receipt and payment of bills regularly issued in that person's name shall suffice, regardless of the identity of the actual user of the service. The water bill shall be the responsibility of the person in whose name the meter service is held. In the event the water service is in the name of a renter or lessee, the ultimate responsibility for the bill shall be in the legal Owner or Owners of the property, as shown on the County Assessor's Tax Roll. The District requires a signed application by both Tenant and Owner when property is a rental.

## Section 8.02.230

Customer System
Customer System: The Customer systems consist of all water components beyond the metered water service connections owned by the Customer.

## Section 8.02.240

Degree of Hazard
Degree of Hazard: The term derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the District system.

Section 8.02.250
Distribution Main
Distribution Main: A pipeline with the primary intent to distribute water to Customers through laterals installed on the pipeline.

## Section 8.02.260

Distribution System
Distribution System: The distribution system shall include the water delivery system from the source to the Customer systems.

Section 8.02.270
District
District: The Rainbow Municipal Water District.

[^14]Section 8.02.280
Engineering ManagerDistrict Engineer
Engineoring ManagerDistrict Engineor. A duly qualified, registered, professional engineer authorized to act on behalf of the District.

## Section 8.02.2890

Domestic and Municipal Purposes
Domestic and Municipal Purposes: The use of water for residential, public, commercial, industrial, and recreational purposes served by the District, but not including water used for agricultural purposes.

Section 8.02.290
Engineering Manager
Engineering Manager: A duly qualified, registered, professional engineer authorized to act on behalf of the District.

Section 8.02.310
Engineer
Engineor. A duly qualified, registered, professionat engineer authorized to act on behalf of the District.

Section 8.02.3020
Fire Protection
Fire Protection: Actions or facilities for prevention or suppression of fires as directed by the fire Marshal or Fire Prevention officer with jurisdiction over the local area involved.

## Section 8.02.3130

General Manager
General Manager: The General Manager of the District or designee authorized by the Board or the General Manager to act in his/her behalf.

Section 8.02.3240

## Greywater

Greywater. Household wastewater other than toilet water, i.e., water from the laundry, shower, tub, bathroom and kitchen sinks.

Section 8.02.3250
Health Hazard
Health Hazard: Any condition, device or practice in the District system, or its operation, which in the judgment of the District may create a danger to the health and well-being of any water Customer.

## Section 8.02.3460 <br> Industrial Fluids System

Industrial Fluids System: Any system containing a fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollution or plumbing hazard if introduced into the District system.

## Section 8.02.3570 <br> Industrial Waste

Industrial Waste: Any liquid or solid waste substance, other than domestic sewage, from any producing, manufacturing, or processing operation of any nature.

## Section 8.02.3680 <br> Industrial Waste Treatment Plant or Facility

Industrial Waste Treatment Plant or Facility: Any works or devices for the treatment of industrial waste prior to its discharge into the District sewer facilities.

Section 8.02. 37410
Meter
Meter: Any device registering the flow or the amount of water passing through a service connection.

## Section 8.02.38420

## Micro Irrigation Systems/Equipment

Micro Irrigation Systems/Equipment: Low pressure, low volume methods of water application. These devices include drip emitters, T-tape, micro sprayers, minisprinklers, twirlers, and spaghetti tubing. Pop-up sprinklers are not considered low volume, low pressure irrigation systems/equipment.

## Section 8.02.39430 Nonpotable Water

Nonpotable Water. Water which does not meet state and federal standards for safe drinking water and is not safe for human consumption.

## Section 8.02.4040 <br> Payment Date

Payment Date: The date on which payment is received in the District offices or approved payment location, from a Customer in funds which can be deposited into a normal bank. The postmark date of a payment mailed to the District is not considered the payment date. Payments received after the close of business at the offices of the District will be considered to have been received on the next business day.

## Section 8.02.4150

## Persons

\Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Definitions 8.02 .doc $\backslash$ Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \ \ D R A F T$

Persons: Any individual, firm, association, organization, business trust or company.

## Section 8.02.4260

## Plan Check \& Inspection

Plan Check \& Inspection Deposit: Monies provided to the District by the Applicant at the time of submission of improvement plans for the District's approval. The amount of deposit shall be determined by the General Manager and shall cover all costs related to the project.

## Section 8.02.4370

Plumbing Hazard
Plumbing Hazard: Any cross connection in a Customer plumbing system that has not been properly protected by an air-gap separation or backflow prevention.

## Section 8.02.4480

Pollution
Pollution: The presence of any foreign substance (organic, inorganic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water.

Section 8.02.4590

## Pollution Hazard

Pollution Hazard: An actual or potential threat to the physical properties of the District system, including water quality, which would constitute a nuisance or be aesthetically objectionable or could cause damage to the District system.

Section 8.02.46500

## Potable Water

Potable Water: Water which meets state and federal safe drinking water standards.

## Section 8.02.47540

## Potable Water Service Connection

Potable Water Service Connection: The terminal end of a service connection from the District water system (that is where the District relinquishes control over the water at its point of delivery to the Customer system), being the downstream end of the meter. Service connections shall also include water service connections from a fire hydrant and all other temporary or emergency water service connections.

## Section 8.02 .520

Pre-Treatment
Pre-treatment: Treatment which the District may require a Customer to perform prior to discharge of sewage into the Distriet's sewer system to protect the sower system, including the Oseanside Wastewater Treatment plant, or to ensure compliance with state and federal discharge limits, requirements or permit conditions.

[^15]
## Section 8.02.48530

## Premises

Premises: The integral property or area, including the improvements to which water service is (or will be) provided. Premises shall be limited to a single parcel.

Section 8.02.49540
Presentation or Date of Presentation
Presentation or "Date of Presentation": The date on which bills for water service to any Customer are deposited in the United States mail, postage prepaid, to his/her address as it appears upon the records of the District or delivered personally to a Customer.

## Section 8.02.5050 <br> Property Owner or Owner

Property Owner or Owner: The holder of legal title to property receiving water service, contract purchaser, or lessee under a lease with any unexpired term of more than one (1) year, to be held jointly with the lessee and the holder of the title.

Section 8.02.5160
Public Health Agency
Public Health Agency: The State of California Water Resources Control Board.
Section 8.02.5270
Reclaimed Water
Reclaimed Water. Water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or controlled use that would not otherwise occur. Reclaimed water shall comply with Title 22 of the California Code of Regulations as well as regulations from the County of San Diego Department of Environmental Health.

Section 8.02.5380
Recreational and Ornamental Lakes and Ponds
Recreational and Ornamental Lakes and Ponds: Bodies of water which are not swimming pools, water storage reservoirs for potable water or irrigation purposes, or pools which maintain rare plant or animal species.

## Section 8.02.5490

Reduced Pressure Principle Device (RP)
Reduced Pressure Principle Device (RP): A backflow prevention device consisting of an assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, tightly closing shut-off valves on either side of the check valves, plus properly located test cocks for the testing of the check and relief valves. The entire assembly shall meet the design and performance specifications and approval of a recognized and approved testing agency for backflow prevention assemblies. The device shall operate to maintain the pressure in the zone between the two check valves at a
level less than the pressure of the inlet device. At cessation of normal flow the pressure between the two check valves shall be less than the pressure at the inlet of the device. In case of leakage of either of the check valves, the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves by discharging to the atmosphere. When the inlet pressure is two pounds per square inch or less, the relief valve shall open to the atmosphere. To be approved, these devices must be readily accessible for inline maintenance and testing and be installed in a location where no part of the device will be submerged.

Section 8.02.55600
Reduced Pressure Principle-Detector Backflow Assembly (RPDA)
Reduced Pressure Principle-Detector Backflow Assembly (RPDA): A specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register for only very low rates of flow up to 3 GPM and shall show a registration for all rates of flow.

## Section 8.02.56640

## Remote Meters

Remote Meters: Service connections which may be provided to parcels which do not abut a District water main.

Section 8.02.57620
Rules and Regulations
Rules and Regulations: The entire body of effective rates, tolls, rentals, charges, ordinances, rules and regulations, collectively of the District.

Section 8.02. 58630
Schedules, Tariffs or Lists
Schedules, Tariffs or Lists: Water rates, service connection charges, capacity fees or other charges for water service, materials, equipment and labor furnished by the District, as approved by the Board of Directors.

## Section 8.02.59640 Sealed Meter

Sealed Meter: Any meter in which the District has closed and sealed the service connection valve on the District side of the meter.

## Section 8.02.6050

Secondary Water Main
Secondary Water Main: Extensions of primary distribution mains constructed and dedicated to the District by a developer or property Owner.

## Section 8.02.6160

## Security Deposit

Security Deposit: Monies required to be deposited with the District for the purpose of guaranteeing payment of utility bills rendered for water or sewer service.

## Section 8.02.6270

Surcharge
Surcharge: A charge imposed by the District for the provision of a special service not normally provided by the District, such as situations involving unusual quantity or quality requirements.

## Section 8.02.6380

System Hazard
System Hazard: An actual or potential threat of severe damage to the physical properties of the water system or of pollution or contamination which would have an adverse effect on the quality of the potable water in the District system.

## Section 8.02.6490

Temporary Customer
Temporary Customer: Any Customer for whom a temporary service connection has been approved by the District.

Section 8.02 .700
Temporary Meter
Jomporary Metor. a meter used to provide service for the construction of a dwelling, issued prior to the installation of a permanent meter.

Section 8.02. 65710
Termination of Service
Termination of Service: Discontinuance of water service either by the District or as requested by the Customer.

Section 8.02.66720
Title 17
Title 17: California Code of Regulations, Title 17, Public Health Regulations relating to crossconnection.

Section 8.02.67730
Transmission
Transmission Main: A pipeline with the primary intent to transport water from the source to distribution mains. The installation of service laterals is restricted on transmission mains.

Section 8.02.68740
Units of Measurement
Units of Measurement: A unit of 100 cubic feet, equivalent to 748 gallons, is the volume by which water is metered and billed by the District.

## Section 8.02.69750 Used Water

Used Water. Any water supplied by the District from the District system to a Customer after it has passed through the metered water service connection and is no longer under the control of the District.

Section 8.02.7응
Water Capacity Fee
Water Capacity Fee: A charge imposed by the District for obtaining water service or service capacity.

Section 8.02.7170
Water Distribution System
Water Distribution System: Individually or collectively any water facilities financed, constructed and dedicated to the District by an Applicant, Owner or Customer or which are the result of local initiative and financing in tracts and subdivisions, as well as non-commercial or industrial developments, which have been accepted by the District.

Section 8.02.7280
Water Source
Water Source: The water source shall include all components of the facilities utilized in the production, treatment, storage and delivery of water to the distribution system.

## Section 8.02.7390

Water Supervisor
Water Supervisor: In industrial or commercial application, a water supervisor will be designated by the District. An individual designated as water supervisor will be responsible for keeping abreast of cross-connection regulations and maintenance of commercial and industrial water systems to prevent cross-connection or other sanitary effects from occurring on these types of water systems.

Section 8.02.74800
Water System
Water System: The water system consists of the source and the distribution system under the control of the District, including the water meter, which is owned by the District.

## Section 8.03.010 <br> Service Area

The Rules and Regulations pertain to water service to land or improvements (or both) lying within the boundaries of the District unless otherwise stated. The District's primary obligation is to provide water service to persons within its boundaries subject to the availability of facilities, capacity and supply to provide such services.

## Section 8.03.020 <br> General

8.03.020.1 The District will furnish water service throughout its corporate area under the general conditions outlined in these rules and regulations. To be eligible to receive service, the parcel to be served must abut a District easement or road right-of-way in which a District water main is installed, except where a remote meter has been approved per District Administrative Code.
8.03.020.2 The District will endeavor to supply water in sufficient quantities and at adequate pressures to meet the needs and requirements of all Applicants and Customers. This service will be furnished under the District's rate schedules according to the class, character or type of service offered by the District. The classifications are as follows:

1. Regular
2. Construction/Temporary
3. Fire Service

Section 8.03.030
Character of Service
Water users will be billed at the rates established by the Board of Directors for the following types of service:

1. Single Family Residential
2. Multi-Family Residential
3. Commercial
4. Institutional
5. Construction
6. Agricultural with Residence
7. Agricultural without Residence
8. TSAWR Domestic
9. TSAWR Commercial

### 8.03.030.1 Single Family Residential

Service under this character is applicable to single-family dwellings and duplexes. A duplex is a house of single structure consisting of two separate family dwellings.

[^16]
### 8.03.030.2 Multi-Family Residential

Service under this character is applicable to multi-family dwellings of three or more units.

### 8.03.030.3 Commercial

Service under this character is applicable to commercial enterprises including, but not limited to, retail stores, markets, hotels, clinics, storage warehouses, churches, nursing homes, businesses and professional offices.

### 8.03.030.4 Institutional

Service under this character is applicable to institutional establishments dedicated to public service including, but not limited to, school, university, hospital, prison, or government Facility. Applicable to publicly owned establishments.

### 8.03.030.5 Construction

Service under this character is applicable to temporary water service that is facilitated through a fire hydrant, blow-off, or other appurtenance selected at the sole discretion of the District for construction purposes; such as construction of a dwelling, or grading of land or other purpose where water is not needed permanently. Relocation is performed by District staff only. Should a contractor perform relocation, a $\$ 500.00$ fine will be charged to customer's account.

### 8.03.030.6 Agricultural with Residence

Service under this character is applicable to residences with associated water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02.030 of the Administrative Code. Applicant must also have a domestic structure on the property. Water usage will be billed on a tiered rate.

### 8.03.030.7 Agricultural without Residence

Service under this character will have no residential use. Applicable to water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02.030 of the Administrative Code.

### 8.03.030.8 TSAWR (Transitional Special Agricultural Water Rate) Domestic

Service under this character is applicable to residences with associated water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02 .030 of the Administrative Code. Water usage will be billed on a tiered rate. The San Diego County Water Authority (SDCWA) Transitional Special Agricultural Water Rate Program (TSAWR) provides discounted wholesale supply pricing for qualified retail agricultural customers (TSAWR customers) within its service area. The supply pricing differential results from the TSAWR customers not paying the additional costs associated with the SDCWA developed supplemental supplies, including but not limited to the Imperial Irrigation District Transfer Supply, the All American and Coachella Canal Lining प|rmwd-b\Store02\DriveClDatalDrive-E\ADMINISTRATIVE CODE\Drafts Not ApprovedUUpdated Water Policy $8 \backslash$ Area Served 8.03 .docHImwd-b\Store03\BoardFiles\Board Secretary\Administrative Code Working FilelBoard Admin Code 2005-2006 Water Policy\Area Served 8.03.doe<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by
 by Ordinance $16-05 \backslash$ DRAFT

Supply, the Carlsbad Seawater Desalination Supply, and the SDCWA Storage Charge. In exchange for a reduced wholesale cost of water, TSAWR customers receive a lower level of retail supply and must be prepared to reduce consumption when, by the amount, and for the period of time as determined necessary by the SDCWA. In electing to participate in the TSAWR, the District is subject to the TSAWR implementation policies adopted by the SDCWA. The Customer must file a Certification and Acknowledgement Form with the District. Copies of said requirements are available in the District Office. It is the obligation of the Customer to apply for and demonstrate eligibility of Customer's use for participation in the special program prior to receiving this discounted class of service. Customer must affirmatively accept the condition that service may be interrupted during water supply shortages before others classes of service are interrupted.

### 8.03.030.9 TSAWR (Transitional Special Agricultural Water Rate) Commercial

Service under this character is applicable to water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02 .030 of the Administrative Code. The San Diego County Water Authority (SDCWA) Transitional Special Agricultural Water Rate Program (TSAWR) provides discounted wholesale supply pricing for qualified retail agricultural customers (TSAWR customers) within its service area. The supply pricing differential results from the TSAWR customers not paying the additional costs associated with the SDCWA developed supplemental supplies, including but not limited to the Imperial Irrigation District Transfer Supply, the All American and Coachella Canal Lining Supply, the Carlsbad Seawater Desalination Supply, and the SDCWA Storage Charge. In exchange for a reduced wholesale cost of water, TSAWR customers receive a lower level of retail supply and must be prepared to reduce consumption when, by the amount, and for the period of time as determined necessary by the SDCWA. In electing to participate in the TSAWR, the District is subject to the TSAWR implementation policies adopted by the SDCWA. The Customer must file a Certification and Acknowledgement Form with the District. Copies of said requirements are available in the District Office. It is the obligation of the Customer to apply for and demonstrate eligibility of Customer's use for participation in the special program prior to receiving this discounted class of service. Customer must affirmatively accept the condition that service may be interrupted during water supply shortages before others classes of service are interrupted.

### 8.03.040 <br> Character of Service Change

Water users are billed by their designation of Character of Service. Election to change Character of Service by the customer can be requested once a calendar year. The customer must demonstrate that the property meets the definition prescribed in Administrative Code Section 8.03.030 Character of Service for proposed change. Character of Service proposed changes are subject to the approval of the General Manager and/or Finance Manager.

[^17]
## Section 8.04.010

## Board of Director's Approval

Any Request for installation or acceptance of water facilities to serve four (4) or more parcels shall be subject to Board approval.

## Section 8.04.020 <br> Application for Regular Water Service

Effective November 1, 2014, all new water service accounts shall be established and held in the legal (record) Owner's name as shown on the San Diego County Assessor's Tax Roll.

Each Applicant for water service must sign and file in the District's Office, on a form provided by the District, an application for New Water Service Request (NWSR) which will set forth:
8.04.020.1 Proof of Ownership of the parcel to be served
8.04.020.2 The name, address and telephone number of the Applicant.
8.04.020.3 A description of the parcel to be served by said application (the description of which shall be satisfactory to the District's General Manager.)
8.04.020.4 An Agreement on the part of the Applicant to abide by the Rules and Regulations of the District, as amended from time to time, signed by the property Owner
8.04.020.5 An agreement on the part of the Applicant that water delivered through the connection will be used only on the property described in the application.
8.04.020.6 The date on which Applicant desires service.
8.04.020.7 If the Applicant's property does not adjoin the District right-of-way, the Applicant must provide proof of an easement that may be utilized by the Applicant to bring his/her water line to the District's right of way.
8.04.020.8 If a meter is being purchased on behalf of the legal Owner by another individual, written authorization to do so shall be provided.

### 8.04.021

Notwithstanding the forgoing, at the District's discretion, a tenant or lessee of property may request water service for a property, provided a completed and signed application for water service is submitted to the District by the Owner of the identified property in accordance with Section 8.04.020. The application shall also include: (i) a statement by the Owner that he or she authorizes water service for the identified property; (ii) the signature of the tenant or lessee stating that he or she will be the party responsible for making monthly payments to the District for water services delivered to the identified property; and (iii) an acknowledgement by the

[^18]Owner that he or she accepts liability for any delinquent or unpaid water charges associated with the identified property, including any penalties and interest related thereto. Such acknowledgment shall be renewed in writing by the Owner or Customer at any change in tenancy at the subject property; however, a failure by the Owner or Customer to renew this acknowledgment in writing shall not excuse the Owner or Customer from any liability associated with delinquent or unpaid water charges, including any penalties or interest related thereto, associated with the District's water service to the property.

### 8.04.022

If account holder is the legal (record) Owner of service property as shown on the San Diego County Assessor's Tax Roll, and has become delinquent on account where service is scheduled to be terminated the non-owner residential occupant(s) may establish water service directly. The non-owner residential occupant(s) will not be required to pay the delinquent bill maintained under the legal Owner. In order to establish service in the non-owner residential occupant(s) name, security deposit equal to twice the estimated average periodic bill will be required. The security deposit will be returned to the depositor two (2) years after the last lock-off for nonpayment, if the depositor has maintained a timely paid, delinquent free account record during the two-year period, or when the account is paid in full on termination of service, whichever occurs first. Acceptable methods of the security deposit are cash, check, money order, cashier's check, and District accepted payment cards only. No interest shall be paid on any deposit.

### 8.04.023

During the transfer of residential property ownership from one owner to another, the current owner of a property may request that the District discontinue service and transfer the service to the proposed subsequent owner in a limited term temporary service agreement. In order to establish residential service in the proposed owner's name, the account for the current owner must be current. In addition, the proposed owner must provide a security deposit equal to twice the estimated average periodic bill.

The proposed owner will enter into a written agreement with the District related to the temporary service of water and the term of this temporary service will be 45 days. The proposed owner shall submit information to the District at the close of escrow that conforms to the requirements of Section 8.04.020 of this Administrative Code. Failure to provide this information within the given time limit will result in the termination of water service to the property. Applicants may request one additional extension to this agreement in extraordinary circumstances, but the approval of any extension will be at the sole discretion of the General Manager.

The security deposit will be returned to the depositor, or credited to their account after proof of ownership is provided to the District as long as the depositor has maintained a timely paid, delinquent free account record during the temporary service period. The security deposit can be cash or cashier's check. No interest shall be paid on any deposit.

[^19]
## Section 8.04.030

## Application for a Remote Meter

The District may approve applications for water service to parcels which do not abut a District water main. As a condition of service, if the parcel abuts a future line extension as identified in the District's Master Plan, the remote meter Applicant may be required to contribute an estimated prorated cost for a future line extension or meet other terms and conditions established by the Board.
8.04.030.1 Remote meters shall be granted only when the Ddistrict determines that:

- $\quad$ A line extension for fire flow or looping is not required, and

All parcels are subdivided to their smallest size as determined by the District Engineer, and

- Under no circumstances shall more than three (3) parcels receive remote service within an area requiring a future line extension, and
Approval from the fire department with jurisdiction in the area for the remote meter, and
- Proof of private easement for the private lateral is provided.
8.04.030.2 At the time of application Applicant shall execute a Remote Water Service Agreement and shall furnish a copy of all recorded easements granting the right to the property Owner of the parcel to be served to install and maintain a private water line from the District main to the Applicant's parcel. Before installation of the remote meter, easements must be staked by a licensed land surveyor.


## Section 8.04.040 <br> Application for Construction Water Service

8.04.040.1 Each Applicant for temporary water service (construction meter) shall sign and file in the District's Office an application setting forth information which the District may reasonably require and pay the following:

- The application shall be accompanied by an established refundable deposit against unpaid water use.
- A monthly service charge will be applied for the period of time the meter is available for Applicant's use.
- Once all fees and deposits have been provided the District will install a construction meter at a location of the District's choosing within two business days of the date of the deposit.
8.04.040.2 The Applicant may request relocation of a construction meter to another location for an established charge.
8.04.040.3 Billing will be monthly and include an operation and maintenance fixed fee, plus the charge for the water used during the billing period.
8.04.040.4 Installation or Relocation of a cGonstruction mMeter shall be done by District employees only. There is a fee and at least a two business dayz4-hr. notice to

[^20]request this service.
8.04.040.5 Applicant shall not use water service in a manner which causes sudden pressure surges that may cause damage to the District's water system.
8.04.040.6 Construction meters are available for a maximum period of 6 months. Extensions may be granted for additional six month periods at the discretion of the District EngineerEngineering Manager.
8.04.040.7 Applicants shall comply with all rules and regulations of the District. Applicants agree to pay for any damage or loss of District facilities resulting from such use.

## Section 8.04.050 <br> Changes in Premises Served

Customers making any material change in the size, character of service or extent of their water systems or their operations, shall immediately give the District written notice of the extent and nature of such change.

Section 8.04 .060
Easements
Applicants shall grant the District an easement which will allow to the District to install, maintain, operate, repair, enlarge and remove any service connection or facilities of the District if the service connections are not losated upon an existing District easement or within the public right of way.

## Section 8.06.010 <br> Service Connections

The District reserves the right to approve the size, number and location of all service connections. No more than one service connection may be extended to any single parcel without the consent of the District. The District will inspect all new installations. Only authorized employees or contractors of the District may change, repair, replace or remove service connections and meters. All meter registers shall be sealed by the District at the time of installation, and no seal shall be broken or altered except by the District's authorized employee or agent.

## Section 8.06.020 <br> Cross-Connections

A cross-connection is unprotected connection between any part of the District's potable water supply system and a source or system which potentially contains water or a substance not approved for human consumption. By-pass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur, shall be considered to be cross-connections.

Cross-connections are to be avoided. Whenever any cross-connection exists, the District's water supply shall be protected at the Customer's expense against backflow by the installation of approved protective backflow devices as specified by this code, the Health and Safety Code of the State of California, and all rules and regulations adopted by any other regulatory body having jurisdiction.

## Section 8.06.030 <br> Backflow Devices

Whenever backflow protection is necessary on a water supply line entering a Customer's premises, or when more than one domestic or irrigation service connection supplies water to a single premises, water supply lines from the District's mains entering such premises, buildings or structures shall be protected by an approved backflow device, regardless of the use of the additional water supply lines. Installation and maintenance of approved backflow devices are the responsibility of the Customer. Under requirements of the Title 17, any Customer property that has any potential hazards, such as a fertilizer injection system or private wells, must have an approved backflow device installed immediately downstream of the water meter in accordance with Section 8.20. This device shall be tested yearly to determine it is functioning satisfactorily. Testing must be performed by a person possessing a valid Certificate of Competence issued by the San Diego County Connection Control Certification Program. A list of Certified Testers is available upon request.

[^21]When a Customer chooses to install a booster pump on the service to any premises, such pump shall be equipped with a low pressure cut-off switch designed to shut off the pump when the pressure drops below a safe operating levelon the inlet side is 25 p.s.i. gauge or lower. Any booster pump installed by a Customer must be approved by the District Engineer prior to installation. Appropriate backflow protection will be required. It shall be the duty of the Customer to maintain the cut-off device in proper working order,-and to certify to the District at least once a year that the device is operable; however, a failure by the Customer to annually certify that the device is operable shall not excuse the Customer from any liability associated with damages to District property, or delinquent or unpaid water charges, including any penalties or interest related thereto, associated with the District's water service to the property.

Low-pressure cut-off device certification shall be by a person deemed competent by the District.

## Section 8.06.050 <br> Ownership

All service connections, meters or measuring devices, mains and appurtenances connected to the District's distribution system shall become the property of the District after installation and final inspection, and shall be operated and maintained by the District. Dedication of such mains and appurtenances to the District shall be made, in a form acceptable for recording, prior to commencement of service through any new system. No Customer shall have the right to tamper with any part of said meter or recording device. The District may immediately shut off the water and apply a penalty fee for of any Customer violating this rule.

## Section 8.06.060 <br> Maintenance

8.06.060.1 The District will be responsible for the maintenance and repair of the service connection from the main line up to and including the meter. The Customer is responsible for maintenance and repair of the service connection beyond the meter. District costs for repairs that are the result of the Customer's negligence in the operation of the Customer's water distribution system shall be billed to and paid by the Customer.
8.06.060.2 The Customer shall, at all times, keep the meter box in place and in good repair, free of dirt and debris, and see that the surrounding area is reasonably clear to permit access and protect the meter. Noncompliance may result in the District's cleaning the area and billing the cost of such cleaning to the Owner.
8.06.060.3 The District will, at all reasonable times, have the right of access to a Customer's premises for any purpose normally connected with the furnishing of water service as a condition of Customer's water service. The District shall have the right to remove any and all property owned by the District on the Customer's premises upon the termination of service.
8.06.060.4 The District will not be responsible for any loss or damage caused by any act of a Customer or his representatives when installing, maintaining or operating the Customer's water system.

Chapter 8.11
CONNECTION AND METER CHARGES

## Sections

8.11.010404 Fees and Charges
8.11.020 Transfer of Meter
8.11.030 Water Capacity Charge
8.11.030.1 Application
8.11.030.2 Capacity Charge for Increasing Meter Size
8.11.030.3 Reduction in Meter Size
8.11.030.4 Exchange of Meter for Multiple Smaller Meters
8.11.030.5 Fire Service Meters
8.11.030.6 Meter Relocation
8.11.030.7 Transfer of Capacity Charges or Meters
8.11.030.87 Reimbursement of Capacity Charges
8.11.030.98 San Diego County Water Authority (SDCWA) Capacity Charges
8.11.030.109 Removal of Water Meter

Service will be commenced after submittal of an application and on payment to the District of the applicable fees, charges, and deposits as set forth in this Section.

## Section 8.11.010

Fees and Charges
At the time an Applicant files an application for a service connection and as a condition of District's acceptance of said application, the Applicant shall pay to the District the amount in established, current published fee schedule. If said application is for a connection to District facilities constructed as provided under this policy or to other line extensions or facilities being acquired by the District under an agreement that requires the District to make an additional charge for said connection, then the Applicant shall also pay to the District such sum as the District is obligated to pay under the agreement for acquisition of said facilities.

## Section 8.11.020 <br> Transfer of Meter

No installation or meter charge will be billed upon the change of Ownership or property unless the service is changed. If, at any time, conditions require a larger size or different type of meter than already installed, the Customer shall pay the current meter and service installation charge for the new connection (less a credit to be determined by the District) and any additional capacity charges. If the meter being transferred does not conform to these Rules and Regulations, it shall be changed to conform at the time of transfer.

## Section 8.11.030 <br> Water Capacity Charge

### 8.11.030.1 Application

8.11.030.1.2 A water capacity charge shall be paid at the time of the District's approval of an application for a permanent water service. Customer must hire a contractor to install water service per District's standards. AnySuch capacity charges shall be in addition to the-charges made-for the actual cost of labor and materials necessary to make the physical connection to the water system by the contractor.
8.11.030.1.2 The capacity charge shall be based on the potential water demands which the Applicant can derive from the District's system and shall be established and adjusted by the Board of Directors from time to time. Funds collected by the District from the capacity charge shall be utilized for capital of facilities used to supply water service within the District.

### 8.11.030.2 Capacity Charge for Increasing Meter Size

If a property owner water user wishes to increase the size of a water meter serving his/her property and the District determines that such a larger sized meter is appropriate, the difference between the current capacity charge of the new meter and the current capacity charge of the existing meter to be replaced shall be the total capacity charge to
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8\Connection and Meter Charges 8.11.docHrmwd-b\Store03\BoardFiles\Board Secretary $\backslash$ Administrative Code Working FilelBoard Admin Code 2005-20061Water PolicylConnection and Meter Charges 8.11.doc<br>Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \backslash A m e n d e d ~ a n d ~ A p p r o v e d ~ b y ~ O r d i n a n c e ~ 16-~$ $05 \backslash \backslash 3-22-16 \backslash \backslash \mathrm{DRAFT}$
be collected. In the event property owner replaces a smaller meter with a larger meter, they must abandon the existing smaller meter lateral. Additional administrative and inspection fees shall apply.

### 8.11.030.3 Reduction in Meter Size

Reduction of meter size is subject to District approval. Property owner must complete all required District forms. No capacity charge shall be imposed upon and no credit or refund shall be made to a property ownerwater usef replacing an existing water meter with a meter of smaller size, whether or not any capacity charge was in effect for the larger meter when it was obtained. The difference in capacity between the larger and smaller meter is lost. If the reduction is approved, customer account must be current.

### 8.11.030.4 Exchange of Meter for Multiple Smaller Meters

Owners of parcels presently receiving water service through a District meter that subdivide their property and apply to exchange their original meter for smaller meters to new legal parcels will be given a credit toward the new capacity charges for the new meters. This credit is equal to the amount of capacity for the meter being replaced at the current capacity charge rate for that meter size. Meters must be downsized and installed concurrently in order to receive credit. Additional administrative inspection fee shall apply.

### 8.11.030.5 Fire Service Meters

No capacity charge shall be imposed upon a property ownerwater user for a water meter obtained and used solely for fire protection purposes. Should it be later determined that other water uses are being made from a fire service meter, the then appropriate capacity charge shall be immediately due and payable or service shall be immediately discontinued.

### 8.11.03.06 Meter Relocation

Meters shall not be relocated to other parcels of land within the District unless the parcels are abutting and owned by the same Owner. Owner must hire a private contractor with an A license to abandon the existing meter lateral and install a new meter lateral per District Standards. Owner must pay appropriate inspection fees to the District. Relocation of meters is subject to the approval of General Manager.

### 8.11.030.76 Transfer of Capacity Charges or Meters

Neither capacity charges nor meters shall be transferable to other parcels of land within the District unless the parcels are abutting and owned by the same Owner. Transfer of capacity charges or meters are subject to the approval of the General Manager.

### 8.11.030. 87 Reimbursement of Capacity Charges

Once the water meter for which capacity charges have been paid has been installed in the District's water system and inspected and accepted by the District, no portion of the capacity charges paid for that meter shall be reimbursable.

### 8.11.030.98 San Diego County Water Authority (SDCWA) Capacity Charges

$\lfloor$ rmwd-b\Store02\DriveC\Data\Drive-E $\backslash$ ADMINISTRATIVE CODE\Drafts_Not Approved $\backslash$ Updated Water Policy 8\Connection and Meter Charges 8.11.docHrmwd-b\Store03\BoardFilesไBeard Seeretary 4 Administrative Code Working File\Board Admin Code 2005-20061Water PolicylConnection and Meter Charges 8.11.doel\Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>Amended and Approved by Ordinance 16-

As required by Section 5.9 of the County Water Authority Act, the District as a member agency of the San Diego County Water Authority shall collect and remit to the Authority the capacity charges imposed by the Authority. The Ordinance of the Authority in effect at the time that a water meter is obtained from the District shall govern the amount of the charge, the persons liable therefore, and the procedures to be followed. The District shall not provide a water meter to a property ownerwater user until the property ownerwater user_has paid to the District the applicable capacity charge of the Authority.

### 8.11.030.109 <br> Removal of Water Meter

If the Owner of vacant property being serviced no longer requires service and wants a meter removed permanently, the Customer must provide a written request to the District. In addition, the Owner must enter into a Memorandum of Understanding with the District that outlines the terms of the removal of the water meter, including the forfeiture of capacity rights in the system. The District will seal the meter service and remove the meter. The Engineering Department will determine whether the meter lateral will or will not be removed. Per Section 8.11.030.7 no portion of the capacity charges paid for that meter shall be reimbursable. If the Owner requires a meter to serve the property in the future the owner must pay all appropriate fees and capacity fees associated with the purchase of a new water meter at the time of the request. Customer account must be current before removal of water meter.

## Section 8.19.010 By-Pass

No by-pass, cross-connection or other connection between the meter and the District's mains, or directly to the District's mains, shall be made, installed or maintained by any unauthorized individual.

Section 8.19.020

## Tampering

Tampering with, injuring in any way District facilities, or changing the adjustment on any meter register is prohibited. The District may immediately shut off the water of any Customer violating this rule.

Notwithstanding anything set forth in these Policies, the valve installed on the discharge side of the meter or service connection is the Customer's responsibility to operate and maintain. However, the Customer shall not remove the valve from the installation.

## Section 8.19.030

Water Theft
Any individual found stealing water from District facilities may be reported to appropriate authorities and a written notice stating the nature of the violation including any associated fines will be mailed to the offender. District will determine all fines based on the extent of the violation with a minimum of $\$ 500$.

PRESSURE

## Sections

| 8.213.010 Pressure

## Section 8.213.010 Pressure

At the time a meter application is first receivedis first installed, the District will inform each Customer as to the expected range of pressures at which water maybe delivered to the Customer. The Customer shall have the sole responsibility of installing pressure regulators to reduce the water pressure of water served by the District to that pressure desired by the Customer. All pressure regulators hereinafter acquired by a Customer shall be at the Customer's expense and shall be installed on the Customer's side of the meter by the Customer, or by his duly authorized agent. Customers in areas with pressure greater than 150 psi must sign a high water pressure agreement that is recorded on the property. Customers in areas with pressure less than 20 psi must sign a low water pressure agreement that is recorded on the property. The Customer shall have the sole responsibility of installing a booster bump to deliver water to their property.

[^22]Sections<br>8.229.010 Schedules, Tariffs or Lists

## Section 8.229.010

## Schedules, Tariffs or Lists

The Board of Directors, by motion or resolution may approve one or more schedules, tariffs or lists, setting forth the water rates, service connection charges, or other charges to be made by the District for water service or for property and labor furnished by the District, which shall agree with and not conflict with the Ordinances of the District. Said schedules, tariffs or lists become appendices to these Rules and Regulations and shall go into effect on the date set at their adoption by the Board, and shall establish the charges to be paid by the Customer to the District.

# Chapter 8.2330 <br> ACCESS TO PREMISES 

## Sections

| 8.2330.010 Access to Premises

Section 8.2330.010
Access to Premises
Inspectors, supervisors, and employees of the District, whose duty it may be to enter upon private premises to make inspection, examination, and tests of pipes, fixtures, or attachments used in connection with the water supply, shall be provided with credentials to identify them as authorized agents of the District. Any authorized employee of the District shall, upon presentation of his credentials, have access at all reasonable hours to any premises supplied with water for the purpose of making an inspection, examination or tests of the entire water system upon said premises. In case any authorized employee is refused admittance to any premises, of being admitted is hindered or prevented from making such inspection, examination, or tests, the District may discontinue water service to said premises after giving twenty-four (24) hours notice to the Owner or occupant of said premises of the intention to do so.

GENERAL

## Sections

8.2434.010 Waiver or Modification
8.2431.020 Amendment
8.2431.030 Availability

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## Section 8.2431.010

## Waiver or Modification

No officer, agent or employee of the District has any authority to alter, change, amend, waive or add to any of these Rules and Regulations.

Section 8.2431.020
Amendment
These Rules and Regulations may be repealed and amended, or new rules and regulations adopted, at the pleasure of the Board of Directors.

Section 8.2431.030
Availability
These Rules and Regulations shall be available in the office of the District and, at any time any application for service is received by the District, a copy of said Rules and Regulations shall be delivered to said Applicant, and said Applicant acknowledges receipt thereof in signing the application for service.

## Chapter 8.2534 <br> INSPECTION

## Sections <br> 8.2534.010 Inspection

## Section 8.2534.010 <br> Inspection

The General Manager or his/her designee shall have the right to enter upon the Customer's premises during reasonable hours for the purpose of inspecting the Customer's water system to insure compliance with these rules and regulations, including the provision that all cross connections are properly protected.

## Sections

8.2635.010 Severability

## Section 8.2635.010

Severability
If any section, subsection, sentence, clause or phrase of these rules and regulations is for any reason held to be invalid or unconstitutional, such decision shall not affect the remaining portions of these rules and regulations if the remaining portions can be reasonably interpreted to carry out the intent of the Board. In such instances, the Board declares that it would have passed these rules and regulations without the invalid or unconstitutional section, subsection, clause or phrase thereof.

## Chapter 8.2736

## PENALTIES

## Sections

| 8.2736.010 Penalties

Section 8.2736 .010
Penalties
Any person, firm, corporation, association or agency found to be violating any provision of these rules and regulations shall be served by the District with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. This provision is in addition to and not by way of derogation of any other remedies or procedures available to the District by law, regulation or pursuant to any of the provisions of these rules and regulations.

## Sections

8.2837.010 Judicial Review

## Section 8.2837.010

 Judicial ReviewJudicial review of any decision of the District, its Board, General Manager or employee may be pursuant to Section 1094.5 of the California Code of Civil Procedure only if a petition for a writ of mandate is filed within the time limits specified in Section 1094.6 of the California Code of Civil Procedure.

## Sections

8.2939.010 Water Conservation Requirements
8.2939.020 Indoor Fixtures and Appliances
8.2939.030 Landscape Requirements
8.2939 .040 Local Supply Use Requirements
8.2939.050 Compliance with Other Regulations

## Section 8.2939.010

Water Conservation Requirements
Conservation and local supply use requirements of this section apply to all new residential and commercial developments or redevelopments. The landscape requirements also apply to any re-landscaping that is subject to review by the District and/or the County of San Diego.

## Section 8.2939.020

Indoor Fixtures and Appliances

- All water fixtures and appliances installed must be high-efficiency. "High-efficiency" means fixtures and appliances that comply with the most efficient specifications under the EPA WaterSense or Energy Star programs, as in effect at the time of installation commences.

Section 8.2939 .030
Landscape Requirements
8.2939.030.1 All landscapes must be designed and managed consistent with requirements of the County of San Diego and/or local agency having jurisdiction within which the property is located.
8.2939.030.2 Any covenants, Conditions, and Restrictions (CC\&Rs) pertaining to a new subdivision/development shall not limit or prohibit the use and maintenance of low water use plant materials and the use of artificial turf, and shall require property owners to design and maintain their landscapes consistent with the County's, or applicable local agency having jurisdiction, regulations.
8.2939.030.3 Dedicated irrigation meters shall be installed in:

- All parks and common areas with 5,000 square feet or more of irrigated landscape
- Commercial sites with 5,000 square feet or more of irrigated landscape
8.2939.030.4 In compliance with the District's Administrative Code Article pressure regulators must be installed when and where appropriate to maximize the life expectancy and efficiency of the irrigation system.
8.2939.030.5 New commercial development must install separate, dual-distribution systems for potable and recycled water. Residential development must install recycled water lines to irrigated common areas.


## Section 8.2939.040

Local Supply Use Requirements
It is the policy of the District that other local sources of water, such as reclaimed water and groundwater, shall be used within its jurisdiction to reduce the demand for imported potable water for any appropriate use when it is economically, financially and technically feasible and consistent with legal requirements preservation of public health, safety and welfare and the environment.

Section 8.2939 .050
Compliance with Other Regulations
The requirements of this Section shall not be interpreted in any way to limit the owner's obligation to comply with any other applicable federal, state, or local laws and regulations.

Chapter 9.01
GENERAL PROVISIONS

## Sections

| 9.01 .010 | Policy |
| :--- | :--- |
| 9.01 .020 | Limitations on Powers to Serve |
| 9.01 .030 | Sewer Master Plan |

## Section 9.01.010 <br> Policy

The general policy of the District is to furnish sewer service to properties within its boundaries, provided it has facilities, capacity, funds and financing for the providing of such service and it is reasonably able to do so. The District does not make land use or zoning decisions. Such decisions are the responsibility of other units of government.

## Section 9.01.020

## Limitations on Powers to Serve

The District is a public agency formed pursuant to the Municipal Water District Law of 1911, as amended. It is subject to the provisions of that law, as well as other state and federal statues, such as the California Environmental Quality Act, and state and federal regulations, such as those issued by the Environmental Protection Agency and the Regional Water Quality Control Board. The providing of sewer service by the District is subject to all applicable laws and regulations. Any District agreement or commitment to serve is subject to, and subordinated to, any future such lawful conditions.

## Section 9.01.030

Sewer Master Plan
The District has prepared a sewer master plan setting forth the sewerage facilities contemplated for construction within the District. The master plan may be modified from time to time. The District may refuse to supply sewer service if the proposal does not comply with the District's master plan. The District may condition approval of sewer service upon the construction, by the owner; applicant or customer, of those facilities needed to serve the property and such other facilities as may be required by District.

## Sections <br> 9.145.010 Policy

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The District shall implement the provisions of this chapter in conjunction with adopted policies, Ordinances, Resolutions and standards. If greater improvements are required in any case, The District shall require those greater improvements.

## Sections

9.156.010 Policy

## Section 9.156.010

## Policy

Any person desiring to challenge any provision of this chapter must submit the grounds for challenge with supporting authority in writing, to the Board of Directors of the District for consideration. Failure to do so shall be grounds to bar any subsequent suit on the grounds of failure to exhaust administrative remedies.

Sections<br>9.176.010 Enforcement Authority<br>9.176.020 Disconnection of Facilities<br>9.176 .030<br>Notice<br>9.176.040 Emergency Termination<br>9.176 .050 Alternative Surcharge<br>9.176.060 Resumption of Service

## Section 9.176 .010 Enforcement Authority

The General Manager is charged with the duty of enforcing the provisions of this chapter and the rules and regulations herein provided.

## Section 9.176.020 <br> Disconnection of Facilities

The General Manager may recommend to the Board of Directors revocation or suspension of the permit issued to any person in the event of a violation by the permittee of any provision of any applicable state, federal or local law or this chapter or any of the rules and regulations adopted in the manner provided for herein. Following notice and a hearing before the Board of Directors, the District may disconnect from the public sewer and sewer connection, main line sewer, or other facility which is constructed, connected or used without a permit, or constructed, connected or used contrary to any of the provisions of any applicable state, federal or local law or this chapter or the rules and regulations adopted as provided for herein. When a premises has been disconnected, it shall not be reconnected until the violation for which it was disconnected has ceased or been remedied and a reasonable charge for such disconnection and reconnection, as established by the General Manager, has been paid. If the General Manager determines that the violation is creating an emergency endangering the public health, safety or welfare, the General Manager may temporarily suspend or revoke the permit pending notice and a hearing before the Board of Directors of the District.

## Section 9.176 .030 <br> Notice

The General Manager shall give not less than ten days notice of intention to recommend disconnection of a premises or to suspend or revoke a permit, stating the reasons therefore, and may grant a reasonable time for elimination of the violation; provided, however, that if the General Manager determines that the danger is imminent, and such action is necessary for the immediate protection of the health, safety or welfare of persons or property, or for the protection of the sewer system, any premises may be temporarily disconnected and service terminated concurrently with the giving of such notice, pending notice and a hearing before the Board of Directors of the District. Notice shall be given to the occupant of the premises, if any, and to the owner of record of the property as shown upon the last equalized assessment roll of the County of San Diego by United States mail, registered or certified, return receipt requested, postage prepaid and by posting such notice on the premises.

## Section 9.176 .040 <br> Emergency Termination

In an emergency situation, as determined by the General Manager, service may be terminated on an interim basis by the General Manager for a period up to 30 days from the date of such decision by the General Manager.

[^23]As an alternative to termination, the District may establish a surcharge on the continuation of sewer service by the District for a reasonable time until such time as the applicant, owner or customer has taken action to comply with all the District's service requirements. The amount of any such surcharge shall be established by the District in its reasonable discretion.

## Section 9.176 .060

Resumption of Service
Any request to re-establish service subsequent to termination of sewer service by the District shall be in the manner prescribed for initially obtaining service from the District, and may include the collection of a security deposit and other terms and conditions to assure compliance with the District's rules and regulations. The amount, manner and terms shall be as determined by the General Manager.

## Sections

9.178.010 Policy

Section 9.178.010
Policy
Any person violating any provision of this chapter or any rule or regulation adopted as herein provided shall be liable for all damage to the sewer system incurred as a result of such violation and for any increase in the cost of maintenance or repair resulting from such violation.

## Sections

9.189.010 Policy

## Section 9.189.010 <br> Policy

When any fee or charge imposed by this chapter or any other fee Resolution or Ordinance becomes delinquent, the General Manager is authorized to disconnect the property from the District's sewerage system. Prior to such disconnection, at least ten days' written notice shall be given to the occupant and to the owner of record of the property by United States mail and by posting the notice on the property. The property shall be disconnected upon expiration of the ten days unless the occupant has provided the General Manager with a letter from a medical doctor licensed in California indicating that termination of service will aggravate an existing medical condition of the occupant. When a property has been disconnected it shall not be reconnected until all delinquent fees and charges have been paid together with a reasonable charge for such disconnection and reconnection as established by the General Manager plus the penalties provided herein.

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Chapter 6.01

## ENGINEERING DEPARTMENT ROLE

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6.01.010

## Engineering Department Role

## Section 6.01.010 <br> Engineering Department Role

The Engineering Department is responsible for the management and execution of the Capital Improvement Program for water and sewer. The Engineering Department also manages development services, which include plan checking and inspection to ensure infrastructure is designed and installed per District standards.

## Sections

6.02.010

Master Plan
6.02.020 System Reliability

## Section 6.02.010 <br> Master Plan

The District has prepared a master plan setting forth the facilities contemplated for construction within the District. The master plan may be modified from time to time. The District may refuse to supply service if the proposal does not comply with the District's master plan. The District may condition approval of service upon the construction, by the owner; applicant or customer, of those facilities needed to serve the property and such other facilities as may be required by District.

## Section 6.02.020 <br> System Reliability

The District is to provide water system looping wherever possible and practical. This policy is a direct result of the agricultural history of the District's water system, and the District's need to increase overall system reliability for its growing domestic water supply role. Therefore, each new pipeline in the water system shall be evaluated, and if possible and practical, the new line will be required to be looped with adjacent infrastructure.

It is the policy of the District that developers construct water infrastructure necessary to provide water supply to their proposed developments. Therefore, it will be the responsibility of the developer to consult with the Engineering Manager or his/her designee staff for an evaluation of each pipeline to determine the need for system looping and other system reliability issues. It will be the responsibility of the developer to construct the looped pipeline, as a condition of the District's acceptance of the facilities for water service by the District.

[^28]
# Chapter 6.03 <br> CALIFORNIA ENVIRONMENTAL QUALITY ACT 

Sections<br>6.03.010 California Environmental Quality Act

## Section 6.03.010 <br> California Environmental Quality Act

All persons proposing construction of water or sewer systems, or any facility requiring approval by the District, shall conform to the requirements adopted from time to time by the District in conformance with the California Environmental Quality Act (CEQA).

## SPECIFICATIONS

## Sections

6.04.010

## Specifications

## Section 6.04.010

Specifications
The Standard Specifications and Drawings for the District are adopted by the Board of Directors. These specifications may be modified from time to time. The specifications establish standards for work, materials and construction procedures for improvement to water and sanitary sewer systems. The Standard Specifications and Drawings for the District are available at the District offices and on the District website.

It is the policy of the District that all water and sewer facilities constructed by third parties in anticipation that title to said facilities will ultimately be transferred to the District under the policies and standards of the District shall conform to the most current standard specifications of the District.

## Sections

6.05.010 General
6.05.020 Procedure
6.05.030 Sewer Policy
6.05.040 Easements

## Section 6.05.010 <br> General

The District may accept, maintain and operate pipelines constructed by others in accordance with District requirements. The Applicant, at his or her sole expense, must construct the necessary facilities required to serve the Applicant's property, subdivision development, or parcel map splits, and all other property which the District will determine should be served by common facilities as specified by the Engineering Manager. Meters will be furnished and installed by the District at rates set by current schedules established by the Board. The Applicant shall obtain all easements required for construction and submit them to the District for approval and recordation.

## Section 6.05.020

Procedure
For design and construction guidelines of water and sewer line extensions, refer to the most current standard specifications of the District.
6.05.020.1 The Applicant shall have plans prepared by a registered civil engineer and reviewed for accuracy and constructability by the District.
6.05.020.2 The Applicant shall submit to the District a complete package of plans and project documents (as stated in the current standard specifications) accompanied with the required deposit in an amount established by the General Manager to cover engineering fees.
6.05.020.3 On District's acceptance of plans, the Applicant may proceed with construction once all contract requirements are fulfilled (as stated in the standard specifications) and submit the required deposit in an amount established by the General Manager to cover inspection fees plus any additional deposit to cover cost of work or materials to be furnished by the District as part of the project.
6.05.020.4 Line extensions approved by the District and not completed within a twoyear period after date of approval must be resubmitted for reconsideration by the District. Resubmitted plans shall be revised to reflect current District policies at the time of resubmittal. At the time of such resubmittal, additional deposit may be required by the Applicant to cover engineering fees.
6.05.020.5 After completion of the work, in accordance with District requirements, and prior to acceptance by the Board, the Applicant shall deliver to the District a properly executed Deed of Conveyance transferring all interest and title of such systems, free of liens, to the District.

Section 6.05.030
Sewer Policy
The intention of this section is (1) to provide guidelines for staff in approving and reviewing development plans, sewer line extensions, building permits, sewer system connections, etc.; and (2) to provide reasonable, predictable guidelines for property owners.
6.05.030.1.1 Provide an adequate system for serving all users and potential users within the District in an orderly, efficient and economical manner.
6.05.030.1.2 Provide a system which allows for efficient and economical maintenance.
6.05.030.1.3 Provide a system which has easy, efficient access to the District facilities, such as cleanouts and manholes.
6.05.030.1.4 Provide a reliable, safe and sanitary collection system.

### 6.05.030.2 Provisions

The District's basic requirement is that no private sewer lateral shall be allowed to cross a property line or (if in a public street) across the extension of a property line. The provisions of this policy apply to any new applicant or property owner who seeks to extend or modify the District facilities or to connect to the District's collection system.
6.05.030.2.1 A private lateral may be allowed across property lines in private easements to serve a single-family residence, provided no more than one parcel would be served by a public sewer line, either in the present or in the future. The District may require copies of such easements.
6.05.030.2.2 No more than one property may be served by a single lateral. Multiple connections must be by public sewer line.
6.05.030.2.3 Sewer laterals between the sewer main and the edge of a public right-of-way or the District easement, if not already existing, shall be installed by the owner, at the owner's sole expense as specified by the District.
6.05.030.2.4 Maintenance and cleaning of laterals shall be the sole responsibility of the property owner. The District shall be responsible for cleaning the lateral within right of way or district sewer easement.
6.05.030.2.5 The District has no obligation to provide sewer by other than gravity flow. Private sewer pumps, if required, shall be installed, maintained and operated by the property owner.
6.05.030.2.6 Multi-Unit projects with a Home Owner's Association may be served with private on-site sewer collection systems with the written approval of the District.
6.05.030.2.7 The private road easements for public road purposes are considered to be public streets for the purposes of this policy. Private sewer line extensions ("laterals") are not allowed in these easements.
6.05.030.2.8 Public sewer lines shall be designed to serve offsite property within the District, where practical. Should improvements, excessive pipe sizes, or excessive depths be required which solely benefit off-site property, the District may assume the additional cost. The District may establish a reimbursement agreement to recover its contribution from off-site properties which benefit from improvement or excessive sizes or depths.
6.05.030.2.9 An applicant or property owner who installs off-site public sewer lines may enter into a reimbursement agreement to recover the costs of the off-site improvements, if approved by the District, in its sole discretion. The District shall establish the form and conditions of this agreement from time to time.
6.05.030.2.10 The District recognized the covenant of improvements placed on minor land divisions by the County of San Diego. The District will agree to remove covenants when the terms of the covenant are met.
6.05.030.2.11 The District normally requires only those easements, which are necessary for the immediate construction and long term maintenance of pipelines. The District may require additional easements for future use.

Section 6.05.040
Easements
Applicant shall provide all sites and rights-of-way for required water and sewer system facilities acceptable to the District and necessary to protect the District against the possible future cost of relocating or reconstructing such facilities due to future public or private improvements, including grading and the alteration of drainage or discharge of surface, ground or flood waters.

Applicants shall grant the District an easement which will allow to the District to install, maintain, operate, repair, enlarge and remove any service connection or facilities of the District if the service connections are not located upon an existing District easement or within the public right of way.

## Sections

6.06.010

## Parcel Maps

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## Section 6.06.010

## Parcel Maps

6.06.010.1 A water distribution system serving each parcel created by a parcel map split when principal use will be a building site, shall be required as a condition of the District's certification of water availability.
6.06.020.2 Parcel map splits creating parcels essentially for agricultural use may receive the District's certification of water availability, subject to construction of a water system to serve any parcel for which service is requested prior to granting service thereto.

## CONSTRUCTION OF WATER AND SEWER FACILITIES

## Sections

6.07.010
6.07.020

Construction of Facilities Acceptance of Facilities

## Section 6.07.010 <br> Construction of Facilities

Plans and specifications for construction of water or sewer facilities shall be approved by the District in advance of construction. All construction shall be subject to inspection by the District. If for any reason the District deems it necessary to delay or stop work on any water or sewer facilities to be installed or constructed, a stop order issued by the General Manager shall be issued and delivered to the representative of the Applicant on the job. Work shall cease in an orderly manner with proper safety measures and protection for materials, equipment, property and other phases of the job. Work shall not be resumed until issuance of another order to proceed. The General Manager shall determine time of connection by an Applicant, Owner or Customer or other person.

## Section 6.07.020 <br> Acceptance of Facilities

The General Manager shall accept water, sewer and other facilities on behalf of the District after proper design, approval, construction, inspection and compliance with all requirements of the District's rules and regulations and specifications, including acquisition of sites and rights-ofway. Upon such acceptance, all such facilities and appurtenances become the property of the District. The District shall request the Applicant, Owner or Customer to execute a bill of sale or other satisfactory conveyance of the facilities to the District, including, where proper, lien releases. The District shall require a title report establishing that the facilities, sites and easements are free and clear from all liens and encumbrances. All sites and easements shall be in a form acceptable to the District and not subject to outstanding obligations to relocate such facilities or any deeds of trust, except in instances where such is determined to be in the best interests of the District. The Applicant, Owner or Customer shall hold the District harmless from all liens, claims or stop notices that may be filed in regard to the construction and shall guarantee the workmanship and materials of the facilities for a period of one year from their acceptance by the District. A longer guarantee period may be required by the District. Upon acceptance, the District will assume responsibility for providing water and sewer service to individual lots within such development.

[^29]
# Chapter 6.08 <br> REIMBURSEMENT 

## Sections

6.08.010 Other Facilities
6.08.020
6.08.030 Reimbursement Agreements

Section 6.08.010
Other Facilities
Where lands outside of an area described in the application for service are susceptible to service from facilities common to those required for the property described in the application, the District may require Applicant to advance the cost of the construction of other water distribution, sewer systems or other facilities, including, but not by way of limitation, pumping facilities and treatment capacity, either within or outside the area, larger than the size determined by the District to be required for providing adequate service to the property described in the application.

## Section 6.08.020

## Enlargement

When the District requires the construction of facilities in excess of the minimum size needed to meet requirements of the properties the facilities are designed to serve, and in excess of the minimum requirements of these Rules and Regulations, the Applicant will be responsible for all costs and may be reimbursed under Ordinance 57 dated March 28, 1966.

## Section 6.08.030

## Reimbursement Agreements

If additional or enlarged facilities are required, the District will contract with the Applicant for reimbursement on a pro rated basis of the difference between the cost of the facilities required by the District and the cost of the facilities which otherwise would be required to provide adequate service to the property described in the application for service. The terms, extent and provisions of such reimbursement agreement shall be determined by the District in its discretion. In no event shall interest be paid on any such amounts. The amount so advanced for facilities available to lands outside the area described in the application for service shall be taken into account when development occurs for which such facilities are constructed, and the District shall have the right to impose and charge additional capacity and connection charges and other costs, if necessary, to cause equitable reimbursement in such instances.

Any parcel not presently receiving water and abutting the water main extension, which can receive service through the facilities and which did not contribute to the cost of the original facilities, shall pay an extension connection fee to the District prior to any connections being made per the Reimbursement Agreement(s).

## Sections <br> 6.09.010 Inspection

## Section 6.09.010 Inspection

The Applicant shall notify the Engineering Department to schedule timely inspection as per the District's current Standards and Specifications. The Engineering Manager or his/her designee shall inspect the water and sewer facility construction to insure compliance with current standard specifications and District policies.

Sections
8.02.010
8.02.020
8.02.030
8.02.040
8.02.050
8.02.060
8.02.070 Auxiliary Water Supply
8.02.080 Backflow
8.02.090 Backflow Preventer
8.02.100 Backpressure
8.02.110 Backsiphonage
8.02.120 Blow-Off
8.02.130 Board of Directors
8.02.140 Certified Backflow Tester
8.02.150 Conservation Offset
8.02.160 Construction Meter
8.02.170 Construction Purposes
8.02.180 Contamination
8.02.190 Control
8.02.200 Cross-Connection
8.02.210 Cross-Connection Control by Containment
8.02.220 Customer
8.02.230 Customer System
8.02.240 Degree of Hazard
8.02.250 Distribution Main
8.02.260 Distribution System
8.02.270 District
8.02.280 Domestic and Municipal Purposes
8.02.290 Engineering Manager
8.02.300 Fire Protection
8.02.310 General Manager
8.02.320 Greywater
8.02.330 Health Hazard
8.02.340 Industrial Fluids System
8.02.350 Industrial Waste
8.02.360 Industrial Waste Treatment Plant or Facility
8.02.370 Meter
8.02.380 Micro Irrigation Systems/Equipment
8.02.390 Nonpotable Water
8.02.400 Payment Date
8.02.410 Persons
8.02.420 Plan Check \& Inspection
8.02.430 Plumbing Hazard
8.02.440 Pollution
8.02.450 Pollution Hazard
8.02.460 Potable Water
8.02.470 Potable Water Service Connection
8.02.480 Premises
8.02.490 Presentation or Date of Presentation
8.02.500 Property Owner or Owner

[^30]| 8.02 .510 | Public Health Agency |
| :--- | :--- |
| 8.02 .520 | Reclaimed Water |
| 8.02 .530 | Recreational and Ornamental Lakes and Ponds |
| 8.02 .540 | Reduced Pressure Principle Device (RP) |
| 8.02 .550 | Reduced Pressure Principle-Detector Backflow Assembly (RPDA) |
| 8.02 .560 | Remote Meters |
| 8.02 .570 | Rules and Regulations |
| 8.02 .580 | Schedules, Tariffs or Lists |
| 8.02 .590 | Sealed Meter |
| 8.02 .600 | Secondary Water Main |
| 8.02 .610 | Security Deposit |
| 8.02 .620 | Surcharge |
| 8.02 .630 | System Hazard |
| 8.02 .640 | Temporary Customer |
| 8.02 .650 | Termination of Service |
| 8.02 .660 | Title 17 |
| 8.02 .670 | Transmission |
| 8.02 .680 | Units of Measurement |
| 8.02 .690 | Used Water |
| 8.02 .700 | Water Capacity Fee |
| 8.02 .710 | Water Distribution System |
| 8.02 .720 | Water Source |
| 8.02 .730 | Water Supervisor |
| 8.02 .740 | Water System |

The definitions in this sub-section shall be used to interpret this Section, unless otherwise apparent from the context.

## Section 8.02.010

Abut District Line
Abut District Line: Parcels abut a District line where they are crossed by a District line, or where a line runs along the boundary of a parcel in an easement or other right of way.

## Section 8.02.020

Active Park and School Ground Areas
Active Park and School Ground Areas: Areas designated by public agencies and private schools for specific sporting and recreational activities and areas traditionally used for active play or recreation where turf is an integral part of the activity.

## Section 8.02.030 <br> Agricultural Purposes

Agricultural Purposes: The growing or raising, in conformity with recognized practices of farming, for the purposes of commerce, trade, or industry, or for use by public educational or correctional institutions, of agricultural, horticultural, or floricultural products. Such products shall be for human consumption, for the market, or for the feeding of fowl or livestock. Products are to be grown or raised on a parcel of land having an area of not less than one acre utilized exclusively for such purposes.

## Section 8.02.040

Air-Gap
Air-Gap: A means of backflow prevention utilizing the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of said vessel.

## Section 8.02.050

## Applicant

Applicant: Any person, firm, corporation, association or agency that applies for water service from the District.

## Section 8.02.060

Approved
Approved: Accepted by the District as meeting an applicable specification stated or cited in this chapter or as suitable for the proposed use except as otherwise provided in this Article 8.

[^31]
## Section 8.02.070

## Auxiliary Water Supply

Auxiliary Water Supply: Any water supply available to a Customer, other than the District's system. These auxiliary source of supply may include water from other purveyor's public potable water supply or any natural source(s) such as a well, spring, river, stream, harbor, etc., or used waters or industrial fluids. These supplies constitute a water source over which the District does not have control. There is a risk that they may be polluted, contaminated, or objectionable.

## Section 8.02.080

## Backflow

Backflow: The undesirable reversal of water flow or mixtures of water and other liquids, gases or other substances into the Districts distribution pipes of water from any source or sources other than its intended source.

## Section 8.02.090 <br> Backflow Preventer

Backflow Preventer. A device or means designed to prevent backflow or backsiphonage.
Section 8.02.100
Backpressure
Backpressure: Any elevation of pressure in the downstream piping system (by pump, elevation of piping, or steam and/or air pressure) above the supply pressure at the point of consideration, which would cause, or tend to cause, a reversal of the normal direction of flow.

## Section 8.02.110

## Backsiphonage

Backsiphonage: The flow of water (or other liquids, mixtures or substances) into the District system from any source other than its intended source, caused by the sudden reduction of pressure in the District system.

## Section 8.02.120

Blow-Off
Blow-Off: A District facility which is used to drain water mains for purposes of repair and maintenance.

## Section 8.02.130

## Board of Directors

Board or Board of Directors: The governing board of the District, consisting of five (5) elected representatives.

## Section 8.02.140

## Certified Backflow Tester

Certified Backflow Tester. A person who has proven his / her ability to test backflow prevention assemblies to the satisfaction of the District and the San Diego County Department of Environmental Health.

## Section 8.02.150

Conservation Offset
Conservation Offset: The implementation of proven conservation techniques which, when installed, will result in a reduction equal to demand of the proposed use. Calculation of demand and saving shall be performed or verified by the Engineering Manager based upon non-drought conditions.

## Section 8.02.160

Construction Meter
Construction Meter. A meter attached to a fire hydrant or other appurtenance and used for construction purposes in incremental periods of six months or less.

## Section 8.02.170 <br> Construction Purposes

Construction Purposes: A temporary service that is facilitated through a fire hydrant or a blowoff for construction purposes; such as construction of a dwelling, or grading of land or other purpose where water is not needed permanently. Construction meters may not be used for agricultural purposes.

## Section 8.02.180 <br> Contamination

Contamination the impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates a potential hazard to public health.

## Section 8.02.190

Control
Control: The right and power over the sanitary quality of water.
Section 8.02.200
Cross-Connection
Cross-Connection: Any physical connection, or arrangement of piping or fixtures, between two otherwise separate piping systems, one of which contains potable water and the other of which contains nonpotable water, industrial fluids, or fluids of questionable safety, through which, or because of which, backflow may occur into the District's system.

[^32]
## Section 8.02.210

## Cross-Connection Control by Containment

Cross-Connection Control by Containment: The installation of an approved backflow prevention device in any Customer system at the water service connection.

## Section 8.02.220

Customer
Customer: The person in whose name water service is furnished, as evidenced by the signature on the application or request for water service. In the absence of a signed application, the receipt and payment of bills regularly issued in that person's name shall suffice, regardless of the identity of the actual user of the service. The water bill shall be the responsibility of the person in whose name the meter service is held. In the event the water service is in the name of a renter or lessee, the ultimate responsibility for the bill shall be in the legal Owner or Owners of the property, as shown on the County Assessor's Tax Roll. The District requires a signed application by both Tenant and Owner when property is a rental.

## Section 8.02.230 <br> Customer System

Customer System: The Customer systems consist of all water components beyond the metered water service connections owned by the Customer.

## Section 8.02.240 <br> Degree of Hazard

Degree of Hazard: The term derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the District system.

Section 8.02.250
Distribution Main
Distribution Main: A pipeline with the primary intent to distribute water to Customers through laterals installed on the pipeline.

## Section 8.02.260

Distribution System
Distribution System: The distribution system shall include the water delivery system from the source to the Customer systems.

Section 8.02.270
District
District: The Rainbow Municipal Water District.

## Section 8.02.280

## Domestic and Municipal Purposes

Domestic and Municipal Purposes: The use of water for residential, public, commercial, industrial, and recreational purposes served by the District, but not including water used for agricultural purposes.

## Section 8.02.290

## Engineering Manager

Engineering Manager: A duly qualified, registered, professional engineer authorized to act on behalf of the District.

Section 8.02.300
Fire Protection
Fire Protection: Actions or facilities for prevention or suppression of fires as directed by the fire Marshal or Fire Prevention officer with jurisdiction over the local area involved.

Section 8.02.310
General Manager
General Manager: The General Manager of the District or designee authorized by the Board or the General Manager to act in his/her behalf.

## Section 8.02.320 <br> Greywater

Greywater. Household wastewater other than toilet water, i.e., water from the laundry, shower, tub, bathroom and kitchen sinks.

## Section 8.02.320 <br> Health Hazard

Health Hazard: Any condition, device or practice in the District system, or its operation, which in the judgment of the District may create a danger to the health and well-being of any water Customer.

## Section 8.02.340

## Industrial Fluids System

Industrial Fluids System: Any system containing a fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollution or plumbing hazard if introduced into the District system.

[^33]
## Section 8.02.350 <br> Industrial Waste

Industrial Waste: Any liquid or solid waste substance, other than domestic sewage, from any producing, manufacturing, or processing operation of any nature.

## Section 8.02.360 <br> Industrial Waste Treatment Plant or Facility

Industrial Waste Treatment Plant or Facility: Any works or devices for the treatment of industrial waste prior to its discharge into the District sewer facilities.

## Section 8.02.370 <br> Meter

Meter: Any device registering the flow or the amount of water passing through a service connection.

## Section 8.02.380

## Micro Irrigation Systems/Equipment

Micro Irrigation Systems/Equipment: Low pressure, low volume methods of water application. These devices include drip emitters, T-tape, micro sprayers, minisprinklers, twirlers, and spaghetti tubing. Pop-up sprinklers are not considered low volume, low pressure irrigation systems/equipment.

Section 8.02.390
Nonpotable Water
Nonpotable Water. Water which does not meet state and federal standards for safe drinking water and is not safe for human consumption.

## Section 8.02.400

Payment Date
Payment Date: The date on which payment is received in the District offices or approved payment location, from a Customer in funds which can be deposited into a normal bank. The postmark date of a payment mailed to the District is not considered the payment date. Payments received after the close of business at the offices of the District will be considered to have been received on the next business day.

## Section 8.02.410

## Persons

Persons: Any individual, firm, association, organization, business trust or company.

[^34]
## Section 8.02.420

## Plan Check \& Inspection

Plan Check \& Inspection Deposit: Monies provided to the District by the Applicant at the time of submission of improvement plans for the District's approval. The amount of deposit shall be determined by the General Manager and shall cover all costs related to the project.

## Section 8.02.430

Plumbing Hazard
Plumbing Hazard: Any cross connection in a Customer plumbing system that has not been properly protected by an air-gap separation or backflow prevention.

## Section 8.02.440

## Pollution

Pollution: The presence of any foreign substance (organic, inorganic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water.

## Section 8.02.450 <br> Pollution Hazard

Pollution Hazard: An actual or potential threat to the physical properties of the District system, including water quality, which would constitute a nuisance or be aesthetically objectionable or could cause damage to the District system.

## Section 8.02.460 <br> Potable Water

Potable Water: Water which meets state and federal safe drinking water standards.

## Section 8.02.470

## Potable Water Service Connection

Potable Water Service Connection: The terminal end of a service connection from the District water system (that is where the District relinquishes control over the water at its point of delivery to the Customer system), being the downstream end of the meter. Service connections shall also include water service connections from a fire hydrant and all other temporary or emergency water service connections.

## Section 8.02.480

## Premises

Premises: The integral property or area, including the improvements to which water service is (or will be) provided. Premises shall be limited to a single parcel.

Section 8.02.490
Presentation or Date of Presentation
Presentation or "Date of Presentation": The date on which bills for water service to any Customer are deposited in the United States mail, postage prepaid, to his/her address as it appears upon the records of the District or delivered personally to a Customer.

## Section 8.02.500

Property Owner or Owner
Property Owner or Owner: The holder of legal title to property receiving water service, contract purchaser, or lessee under a lease with any unexpired term of more than one (1) year, to be held jointly with the lessee and the holder of the title.

## Section 8.02.510

Public Health Agency
Public Health Agency: The State of California Water Resources Control Board.
Section 8.02.520
Reclaimed Water
Reclaimed Water. Water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or controlled use that would not otherwise occur. Reclaimed water shall comply with Title 22 of the California Code of Regulations as well as regulations from the County of San Diego Department of Environmental Health.

## Section 8.02.530

Recreational and Ornamental Lakes and Ponds
Recreational and Ornamental Lakes and Ponds: Bodies of water which are not swimming pools, water storage reservoirs for potable water or irrigation purposes, or pools which maintain rare plant or animal species.

Section 8.02.540
Reduced Pressure Principle Device (RP)
Reduced Pressure Principle Device (RP): A backflow prevention device consisting of an assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, tightly closing shut-off valves on either side of the check valves, plus properly located test cocks for the testing of the check and relief valves. The entire assembly shall meet the design and performance specifications and approval of a recognized and approved testing agency for backflow prevention assemblies. The device shall operate to maintain the pressure in the zone between the two check valves at a level less than the pressure of the inlet device. At cessation of normal flow the pressure between the two check valves shall be less than the pressure at the inlet of the device. In case of leakage of either of the check valves, the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves by discharging to the atmosphere. When the inlet pressure is two pounds per square inch or less, the relief valve shall open to the atmosphere. To be approved, these devices must be readily accessible for inline maintenance and testing and be installed in a location where no part of the device will be submerged.
Ilrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Definitions 8.02 .doc<br>Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash$ Approved by Ordinance $14-07 \backslash \backslash 10-28$-14<br>DRAFT

Section 8.02.550
Reduced Pressure Principle-Detector Backflow Assembly (RPDA)
Reduced Pressure Principle-Detector Backflow Assembly (RPDA): A specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register for only very low rates of flow up to 3 GPM and shall show a registration for all rates of flow.

## Section 8.02.560

Remote Meters
Remote Meters: Service connections which may be provided to parcels which do not abut a District water main.

## Section 8.02.570

## Rules and Regulations

Rules and Regulations: The entire body of effective rates, tolls, rentals, charges, ordinances, rules and regulations, collectively of the District.

## Section 8.02.580

Schedules, Tariffs or Lists
Schedules, Tariffs or Lists: Water rates, service connection charges, capacity fees or other charges for water service, materials, equipment and labor furnished by the District, as approved by the Board of Directors.

## Section 8.02.590

Sealed Meter
Sealed Meter: Any meter in which the District has closed and sealed the service connection valve on the District side of the meter.

Section 8.02.600
Secondary Water Main
Secondary Water Main: Extensions of primary distribution mains constructed and dedicated to the District by a developer or property Owner.

Section 8.02.610
Security Deposit
Security Deposit: Monies required to be deposited with the District for the purpose of guaranteeing payment of utility bills rendered for water or sewer service.

[^35]
## Section 8.02.620

## Surcharge

Surcharge: A charge imposed by the District for the provision of a special service not normally provided by the District, such as situations involving unusual quantity or quality requirements.

Section 8.02.630
System Hazard
System Hazard: An actual or potential threat of severe damage to the physical properties of the water system or of pollution or contamination which would have an adverse effect on the quality of the potable water in the District system.

## Section 8.02.640 <br> Temporary Customer

Temporary Customer: Any Customer for whom a temporary service connection has been approved by the District.

## Section 8.02.650

Termination of Service
Termination of Service: Discontinuance of water service either by the District or as requested by the Customer.

## Section 8.02.660

## Title 17

Title 17: California Code of Regulations, Title 17, Public Health Regulations relating to crossconnection.

## Section 8.02.670

Transmission
Transmission Main: A pipeline with the primary intent to transport water from the source to distribution mains. The installation of service laterals is restricted on transmission mains.

Section 8.02.680
Units of Measurement
Units of Measurement: A unit of 100 cubic feet, equivalent to 748 gallons, is the volume by which water is metered and billed by the District.

## Section 8.02.690

## Used Water

Used Water. Any water supplied by the District from the District system to a Customer after it has passed through the metered water service connection and is no longer under the control of the District.

[^36]
## Section 8.02.700 <br> Water Capacity Fee

Water Capacity Fee: A charge imposed by the District for obtaining water service or service capacity.

Section 8.02.710
Water Distribution System
Water Distribution System: Individually or collectively any water facilities financed, constructed and dedicated to the District by an Applicant, Owner or Customer or which are the result of local initiative and financing in tracts and subdivisions, as well as non-commercial or industrial developments, which have been accepted by the District.

## Section 8.02.720 <br> Water Source

Water Source: The water source shall include all components of the facilities utilized in the production, treatment, storage and delivery of water to the distribution system.

## Section 8.02.730 <br> Water Supervisor

Water Supervisor: In industrial or commercial application, a water supervisor will be designated by the District. An individual designated as water supervisor will be responsible for keeping abreast of cross-connection regulations and maintenance of commercial and industrial water systems to prevent cross-connection or other sanitary effects from occurring on these types of water systems.

## Section 8.02.740 <br> Water System

Water System: The water system consists of the source and the distribution system under the control of the District, including the water meter, which is owned by the District.

[^37]
## Section 8.03.010 <br> Service Area

The Rules and Regulations pertain to water service to land or improvements (or both) lying within the boundaries of the District unless otherwise stated. The District's primary obligation is to provide water service to persons within its boundaries subject to the availability of facilities, capacity and supply to provide such services.

## Section 8.03.020

## General

8.03.020.1 The District will furnish water service throughout its corporate area under the general conditions outlined in these rules and regulations. To be eligible to receive service, the parcel to be served must abut a District easement or road right-of-way in which a District water main is installed, except where a remote meter has been approved per District Administrative Code.
8.03.020.2 The District will endeavor to supply water in sufficient quantities and at adequate pressures to meet the needs and requirements of all Applicants and Customers. This service will be furnished under the District's rate schedules according to the class, character or type of service offered by the District. The classifications are as follows:

1. Regular
2. Construction/Temporary
3. Fire Service

## Section 8.03.030

Character of Service
Water users will be billed at the rates established by the Board of Directors for the following types of service:

1. Single Family Residential
2. Multi-Family Residential
3. Commercial
4. Institutional
5. Construction
6. Agricultural with Residence
7. Agricultural without Residence
8. TSAWR Domestic
9. TSAWR Commercial

### 8.03.030.1 Single Family Residential

Service under this character is applicable to single-family dwellings and duplexes. A duplex is a house of single structure consisting of two separate family dwellings.

### 8.03.030.2 Multi-Family Residential

Service under this character is applicable to multi-family dwellings of three or more units.

### 8.03.030.3 Commercial

Service under this character is applicable to commercial enterprises including, but not limited to, retail stores, markets, hotels, clinics, storage warehouses, churches, nursing homes, businesses and professional offices.

### 8.03.030.4 Institutional

Service under this character is applicable to institutional establishments dedicated to public service including, but not limited to, school, university, hospital, prison, or government Facility. Applicable to publicly owned establishments.

### 8.03.030.5 Construction

Service under this character is applicable to temporary water service that is facilitated through a fire hydrant, blow-off, or other appurtenance selected at the sole discretion of the District for construction purposes; such as construction of a dwelling, or grading of land or other purpose where water is not needed permanently. Relocation is performed by District staff only. Should a contractor perform relocation, a $\$ 500.00$ fine will be charged to customer's account.

### 8.03.030.6 Agricultural with Residence

Service under this character is applicable to residences with associated water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02.030 of the Administrative Code. Applicant must also have a domestic structure on the property. Water usage will be billed on a tiered rate.

### 8.03.030.7 Agricultural without Residence

Service under this character will have no residential use. Applicable to water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02.030 of the Administrative Code.

### 8.03.030.8 TSAWR (Transitional Special Agricultural Water Rate) Domestic

Service under this character is applicable to residences with associated water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02 .030 of the Administrative Code. Water usage will be billed on a tiered rate. The San Diego County Water Authority (SDCWA) Transitional Special Agricultural Water Rate Program (TSAWR) provides discounted wholesale supply pricing for qualified retail agricultural customers (TSAWR customers) within its service area. The supply pricing differential results from the TSAWR customers not paying the additional costs associated with the SDCWA developed supplemental supplies, including but not limited to the Imperial Irrigation District Transfer Supply, the All American and Coachella Canal Lining Supply, the Carlsbad Seawater Desalination Supply, and the SDCWA Storage Charge. In
exchange for a reduced wholesale cost of water, TSAWR customers receive a lower level of retail supply and must be prepared to reduce consumption when, by the amount, and for the period of time as determined necessary by the SDCWA. In electing to participate in the TSAWR, the District is subject to the TSAWR implementation policies adopted by the SDCWA. The Customer must file a Certification and Acknowledgement Form with the District. Copies of said requirements are available in the District Office. It is the obligation of the Customer to apply for and demonstrate eligibility of Customer's use for participation in the special program prior to receiving this discounted class of service. Customer must affirmatively accept the condition that service may be interrupted during water supply shortages before others classes of service are interrupted.

### 8.03.030.9 TSAWR (Transitional Special Agricultural Water Rate) Commercial

Service under this character is applicable to water used by ranches, nurseries, flower growers, and any endeavor accepted as an agricultural service as defined by Section 8.02 .030 of the Administrative Code. The San Diego County Water Authority (SDCWA) Transitional Special Agricultural Water Rate Program (TSAWR) provides discounted wholesale supply pricing for qualified retail agricultural customers (TSAWR customers) within its service area. The supply pricing differential results from the TSAWR customers not paying the additional costs associated with the SDCWA developed supplemental supplies, including but not limited to the Imperial Irrigation District Transfer Supply, the All American and Coachella Canal Lining Supply, the Carlsbad Seawater Desalination Supply, and the SDCWA Storage Charge. In exchange for a reduced wholesale cost of water, TSAWR customers receive a lower level of retail supply and must be prepared to reduce consumption when, by the amount, and for the period of time as determined necessary by the SDCWA. In electing to participate in the TSAWR, the District is subject to the TSAWR implementation policies adopted by the SDCWA. The Customer must file a Certification and Acknowledgement Form with the District. Copies of said requirements are available in the District Office. It is the obligation of the Customer to apply for and demonstrate eligibility of Customer's use for participation in the special program prior to receiving this discounted class of service. Customer must affirmatively accept the condition that service may be interrupted during water supply shortages before others classes of service are interrupted.

### 8.03.040

## Character of Service Change

Water users are billed by their designation of Character of Service. Election to change Character of Service by the customer can be requested once a calendar year. The customer must demonstrate that the property meets the definition prescribed in Administrative Code Section 8.03.030 Character of Service for proposed change. Character of Service proposed changes are subject to the approval of the General Manager and/or Finance Manager.

[^38]
## Section 8.04.010 <br> Board of Director's Approval

Any Request for installation or acceptance of water facilities to serve four (4) or more parcels shall be subject to Board approval.

## Section 8.04.020 <br> Application for Regular Water Service

Effective November 1, 2014, all new water service accounts shall be established and held in the legal (record) Owner's name as shown on the San Diego County Assessor's Tax Roll.

Each Applicant for water service must sign and file in the District's Office, on a form provided by the District, an application for New Water Service Request (NWSR) which will set forth:
8.04.020.1 Proof of Ownership of the parcel to be served
8.04.020.2 The name, address and telephone number of the Applicant.
8.04.020.3 A description of the parcel to be served by said application (the description of which shall be satisfactory to the District's General Manager.)
8.04.020.4 An Agreement on the part of the Applicant to abide by the Rules and Regulations of the District, as amended from time to time, signed by the property Owner
8.04.020.5 An agreement on the part of the Applicant that water delivered through the connection will be used only on the property described in the application.
8.04.020.6 The date on which Applicant desires service.
8.04.020.7 If the Applicant's property does not adjoin the District right-of-way, the Applicant must provide proof of an easement that may be utilized by the Applicant to bring his/her water line to the District's right of way.
8.04.020.8 If a meter is being purchased on behalf of the legal Owner by another individual, written authorization to do so shall be provided.

### 8.04.021

Notwithstanding the forgoing, at the District's discretion, a tenant or lessee of property may request water service for a property, provided a completed and signed application for water service is submitted to the District by the Owner of the identified property in accordance with Section 8.04.020. The application shall also include: (i) a statement by the Owner that he or she authorizes water service for the identified property; (ii) the signature of the tenant or lessee stating that he or she will be the party responsible for making monthly payments to the District for water services delivered to the identified property; and (iii) an acknowledgement by the

[^39]Owner that he or she accepts liability for any delinquent or unpaid water charges associated with the identified property, including any penalties and interest related thereto. Such acknowledgment shall be renewed in writing by the Owner or Customer at any change in tenancy at the subject property; however, a failure by the Owner or Customer to renew this acknowledgment in writing shall not excuse the Owner or Customer from any liability associated with delinquent or unpaid water charges, including any penalties or interest related thereto, associated with the District's water service to the property.

### 8.04.022

If account holder is the legal (record) Owner of service property as shown on the San Diego County Assessor's Tax Roll, and has become delinquent on account where service is scheduled to be terminated the non-owner residential occupant(s) may establish water service directly. The non-owner residential occupant(s) will not be required to pay the delinquent bill maintained under the legal Owner. In order to establish service in the non-owner residential occupant(s) name, security deposit equal to twice the estimated average periodic bill will be required. The security deposit will be returned to the depositor two (2) years after the last lock-off for nonpayment, if the depositor has maintained a timely paid, delinquent free account record during the two-year period, or when the account is paid in full on termination of service, whichever occurs first. Acceptable methods of the security deposit are cash, check, money order, cashier's check, and District accepted payment cards only. No interest shall be paid on any deposit.

### 8.04.023

During the transfer of residential property ownership from one owner to another, the current owner of a property may request that the District discontinue service and transfer the service to the proposed subsequent owner in a limited term temporary service agreement. In order to establish residential service in the proposed owner's name, the account for the current owner must be current. In addition, the proposed owner must provide a security deposit equal to twice the estimated average periodic bill.

The proposed owner will enter into a written agreement with the District related to the temporary service of water and the term of this temporary service will be 45 days. The proposed owner shall submit information to the District at the close of escrow that conforms to the requirements of Section 8.04.020 of this Administrative Code. Failure to provide this information within the given time limit will result in the termination of water service to the property. Applicants may request one additional extension to this agreement in extraordinary circumstances, but the approval of any extension will be at the sole discretion of the General Manager.

The security deposit will be returned to the depositor, or credited to their account after proof of ownership is provided to the District as long as the depositor has maintained a timely paid, delinquent free account record during the temporary service period. The security deposit can be cash or cashier's check. No interest shall be paid on any deposit.

[^40]
## Section 8.04.030

Application for a Remote Meter
The District may approve applications for water service to parcels which do not abut a District water main. As a condition of service, if the parcel abuts a future line extension as identified in the District's Master Plan, the remote meter Applicant may be required to contribute an estimated prorated cost for a future line extension or meet other terms and conditions established by the Board.
8.04.030.1 Remote meters shall be granted only when the District determines that:

- A line extension for fire flow or looping is not required, and
- Under no circumstances shall more than three (3) parcels receive remote service within an area requiring a future line extension, and
Approval from the fire department with jurisdiction in the area for the remote meter, and
- Proof of private easement for the private lateral is provided.
8.04.030.2 At the time of application Applicant shall execute a Remote Water Service Agreement and shall furnish a copy of all recorded easements granting the right to the property Owner of the parcel to be served to install and maintain a private water line from the District main to the Applicant's parcel. Before installation of the remote meter, easements must be staked by a licensed land surveyor.


## Section 8.04.040

Application for Construction Water Service
8.04.040.1 Each Applicant for temporary water service (construction meter) shall sign and file in the District's Office an application setting forth information which the District may reasonably require and pay the following:

- The application shall be accompanied by an established refundable deposit against unpaid water use.
- A monthly service charge will be applied for the period of time the meter is available for Applicant's use.
- Once all fees and deposits have been provided the District will install a construction meter at a location of the District's choosing within two business days of the date of the deposit.
8.04.040.2 The Applicant may request relocation of a construction meter to another location for an established charge.
8.04.040.3 Billing will be monthly and include an operation and maintenance fixed fee, plus the charge for the water used during the billing period.
8.04.040.4 Installation or Relocation of a construction meter shall be done by District employees only. There is a fee and at least a two business day notice to request this service.

[^41]8.04.040.5 Applicant shall not use water service in a manner which causes sudden pressure surges that may cause damage to the District's water system.
8.04.040.6 Construction meters are available for a maximum period of 6 months. Extensions may be granted for additional six month periods at the discretion of the Engineering Manager.
8.04.040.7 Applicants shall comply with all rules and regulations of the District. Applicants agree to pay for any damage or loss of District facilities resulting from such use.

## Section 8.04.050

## Changes in Premises Served

Customers making any material change in the size, character of service or extent of their water systems or their operations, shall immediately give the District written notice of the extent and nature of such change.

## Section 8.06.010

Service Connections
The District reserves the right to approve the size, number and location of all service connections. No more than one service connection may be extended to any single parcel without the consent of the District. The District will inspect all new installations. Only authorized employees or contractors of the District may change, repair, replace or remove service connections and meters. All meter registers shall be sealed by the District at the time of installation, and no seal shall be broken or altered except by the District's authorized employee or agent.

## Section 8.06.020

Cross-Connections
A cross-connection is unprotected connection between any part of the District's potable water supply system and a source or system which potentially contains water or a substance not approved for human consumption. By-pass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur, shall be considered to be cross-connections.

Cross-connections are to be avoided. Whenever any cross-connection exists, the District's water supply shall be protected at the Customer's expense against backflow by the installation of approved protective backflow devices as specified by this code, the Health and Safety Code of the State of California, and all rules and regulations adopted by any other regulatory body having jurisdiction.

## Section 8.06.030 <br> Backflow Devices

Whenever backflow protection is necessary on a water supply line entering a Customer's premises, or when more than one domestic or irrigation service connection supplies water to a single premises, water supply lines from the District's mains entering such premises, buildings or structures shall be protected by an approved backflow device, regardless of the use of the additional water supply lines. Installation and maintenance of approved backflow devices are the responsibility of the Customer. Under requirements of the Title 17, any Customer property that has any potential hazards, such as a fertilizer injection system or private wells, must have an approved backflow device installed immediately downstream of the water meter in accordance with Section 8.20. This device shall be tested yearly to determine it is functioning satisfactorily. Testing must be performed by a person possessing a valid Certificate of Competence issued by the San Diego County Connection Control Certification Program.

[^42]Section 8.06.040
Booster Pumps
When a Customer chooses to install a booster pump on the service to any premises, such pump shall be equipped with a low pressure cut-off switch designed to shut off the pump when the pressure drops below a safe operating level. Appropriate backflow protection will be required. It shall be the duty of the Customer to maintain the cut-off device in proper working order

Low-pressure cut-off device certification shall be by a person deemed competent by the District.

## Section 8.06.050

Ownership
All service connections, meters or measuring devices, mains and appurtenances connected to the District's distribution system shall become the property of the District after installation and final inspection, and shall be operated and maintained by the District. Dedication of such mains and appurtenances to the District shall be made, in a form acceptable for recording, prior to commencement of service through any new system. No Customer shall have the right to tamper with any part of said meter or recording device. The District may immediately shut off the water and apply a penalty fee for any Customer violating this rule.

## Section 8.06.060 <br> Maintenance

8.06.060.1 The District will be responsible for the maintenance and repair of the service connection from the main line up to and including the meter. The Customer is responsible for maintenance and repair of the service connection beyond the meter. District costs for repairs that are the result of the Customer's negligence in the operation of the Customer's water distribution system shall be billed to and paid by the Customer.
8.06.060.2 The Customer shall, at all times, keep the meter box in place and in good repair, free of dirt and debris, and see that the surrounding area is reasonably clear to permit access and protect the meter. Noncompliance may result in the District's cleaning the area and billing the cost of such cleaning to the Owner.
8.06.060.3 The District will, at all reasonable times, have the right of access to a Customer's premises for any purpose normally connected with the furnishing of water service as a condition of Customer's water service. The District shall have the right to remove any and all property owned by the District on the Customer's premises upon the termination of service.
8.06.060.4 The District will not be responsible for any loss or damage caused by any act of a Customer or his representatives when installing, maintaining or operating the Customer's water system.

[^43]
## Chapter 8.11

CONNECTION AND METER CHARGES
Sections
8.11.010 Fees and Charges
8.11.020 Transfer of Meter
8.11.030 Water Capacity Charge
8.11.030.1 Application
8.11.030.2 Capacity Charge for Increasing Meter Size
8.11.030.3 Reduction in Meter Size
8.11.030.4 Exchange of Meter for Multiple Smaller Meters
8.11.030.5 Fire Service Meters
8.11.030.6 Meter Relocation
8.11.030.7 Transfer of Capacity Charges or Meters
8.11.030.8 Reimbursement of Capacity Charges
8.11.030.9 San Diego County Water Authority (SDCWA) Capacity Charges
8.11.030.10 Removal of Water Meter

Service will be commenced after submittal of an application and on payment to the District of the applicable fees, charges, and deposits as set forth in this Section.

## Section 8.11.010 <br> Fees and Charges

At the time an Applicant files an application for a service connection and as a condition of District's acceptance of said application, the Applicant shall pay to the District the amount in established, current published fee schedule. If said application is for a connection to District facilities constructed as provided under this policy or to other line extensions or facilities being acquired by the District under an agreement that requires the District to make an additional charge for said connection, then the Applicant shall also pay to the District such sum as the District is obligated to pay under the agreement for acquisition of said facilities.

## Section 8.11.020 <br> Transfer of Meter

No installation or meter charge will be billed upon the change of Ownership or property unless the service is changed. If, at any time, conditions require a larger size or different type of meter than already installed, the Customer shall pay the current meter and service installation charge for the new connection (less a credit to be determined by the District) and any additional capacity charges. If the meter being transferred does not conform to these Rules and Regulations, it shall be changed to conform at the time of transfer.

## Section 8.11.030 <br> Water Capacity Charge

### 8.11.030.1 Application

8.11.030.1.2 A water capacity charge shall be paid at the time of the District's approval of an application for a permanent water service. Customer must hire a contractor to install water service per District's standards. Any capacity charges shall be in addition to charges for the actual cost of labor and materials necessary to make the physical connection to the water system by the contractor.
8.11.030.1.2 The capacity charge shall be based on the potential water demands which the Applicant can derive from the District's system and shall be established and adjusted by the Board of Directors from time to time. Funds collected by the District from the capacity charge shall be utilized for capital of facilities used to supply water service within the District.

[^44]
### 8.11.030.2 Capacity Charge for Increasing Meter Size

If a property owner wishes to increase the size of a water meter serving his/her property and the District determines that such a larger sized meter is appropriate, the difference between the current capacity charge of the new meter and the current capacity charge of the existing meter to be replaced shall be the total capacity charge to be collected. In the event property owner replaces a smaller meter with a larger meter, they must abandon the existing smaller meter lateral. Additional administrative and inspection fees shall apply.

### 8.11.030.3 Reduction in Meter Size

Reduction of meter size is subject to District approval. Property owner must complete all required District forms. No capacity charge shall be imposed upon and no credit or refund shall be made to a property owner replacing an existing water meter with a meter of smaller size, whether or not any capacity charge was in effect for the larger meter when it was obtained. The difference in capacity between the larger and smaller meter is lost. If the reduction is approved, customer account must be current.

### 8.11.030.4 Exchange of Meter for Multiple Smaller Meters

Owners of parcels presently receiving water service through a District meter that subdivide their property and apply to exchange their original meter for smaller meters to new legal parcels will be given a credit toward the new capacity charges for the new meters. This credit is equal to the amount of capacity for the meter being replaced at the current capacity charge rate for that meter size. Meters must be downsized and installed concurrently in order to receive credit. Additional administrative inspection fee shall apply.

### 8.11.030.5 Fire Service Meters

No capacity charge shall be imposed upon a property owner for a water meter obtained and used solely for fire protection purposes. Should it be later determined that other water uses are being made from a fire service meter, the then appropriate capacity charge shall be immediately due and payable or service shall be immediately discontinued.

### 8.11.03.06 Meter Relocation

Meters shall not be relocated to other parcels of land within the District unless the parcels are abutting and owned by the same Owner. Owner must hire a private contractor with an A license to abandon the existing meter lateral and install a new meter lateral per District Standards. Owner must pay appropriate inspection fees to the District. Relocation of meters is subject to the approval of General Manager.

[^45]
### 8.11.030.7 Transfer of Capacity Charges or Meters

Neither capacity charges nor meters shall be transferable to other parcels of land within the District unless the parcels are abutting and owned by the same Owner. Transfer of capacity charges or meters are subject to the approval of the General Manager.

### 8.11.030.8 Reimbursement of Capacity Charges

Once the water meter for which capacity charges have been paid has been installed in the District's water system and inspected and accepted by the District, no portion of the capacity charges paid for that meter shall be reimbursable.

### 8.11.030.9 San Diego County Water Authority (SDCWA) Capacity Charges

As required by Section 5.9 of the County Water Authority Act, the District as a member agency of the San Diego County Water Authority shall collect and remit to the Authority the capacity charges imposed by the Authority. The Ordinance of the Authority in effect at the time that a water meter is obtained from the District shall govern the amount of the charge, the persons liable therefore, and the procedures to be followed. The District shall not provide a water meter to a property owner until the property owner has paid to the District the applicable capacity charge of the Authority.

### 8.11.030.10 <br> Removal of Water Meter

If the Owner of vacant property being serviced no longer requires service and wants a meter removed permanently, the Customer must provide a written request to the District. In addition, the Owner must enter into a Memorandum of Understanding with the District that outlines the terms of the removal of the water meter, including the forfeiture of capacity rights in the system. The District will seal the meter service and remove the meter. The Engineering Department will determine whether the meter lateral will or will not be removed. Per Section 8.11.030.7 no portion of the capacity charges paid for that meter shall be reimbursable. If the Owner requires a meter to serve the property in the future the owner must pay all appropriate fees and capacity fees associated with the purchase of a new water meter at the time of the request. Customer account must be current before removal of water meter.

## Section 8.19.010 <br> By-Pass

No by-pass, cross-connection or other connection between the meter and the District's mains, or directly to the District's mains, shall be made, installed or maintained by any unauthorized individual.

## Section 8.19.020

Tampering
Tampering with, injuring in any way District facilities, or changing the adjustment on any meter register is prohibited. The District may immediately shut off the water of any Customer violating this rule.

Notwithstanding anything set forth in these Policies, the valve installed on the discharge side of the meter or service connection is the Customer's responsibility to operate and maintain. However, the Customer shall not remove the valve from the installation.

## Section 8.19.030

Water Theft
Any individual found stealing water from District facilities may be reported to appropriate authorities and a written notice stating the nature of the violation including any associated fines will be mailed to the offender. District will determine all fines based on the extent of the violation with a minimum of $\$ 500$.

[^46]
## Sections

8.21.010 Pressure

## Section 8.21.010

Pressure
At the time a meter application is first received, the District will inform each Customer as to the expected range of pressures at which water maybe delivered to the Customer. The Customer shall have the sole responsibility of installing pressure regulators to reduce the water pressure of water served by the District to that pressure desired by the Customer. All pressure regulators hereinafter acquired by a Customer shall be at the Customer's expense and shall be installed on the Customer's side of the meter by the Customer, or by his duly authorized agent. Customers in areas with pressure greater than 150 psi must sign a high water pressure agreement that is recorded on the property. Customers in areas with pressure less than 20 psi must sign a low water pressure agreement that is recorded on the property. The Customer shall have the sole responsibility of installing a booster bump to deliver water to their property.

## Sections

8.22.010 Schedules, Tariffs or Lists

## Section 8.22.010

## Schedules, Tariffs or Lists

The Board of Directors, by motion or resolution may approve one or more schedules, tariffs or lists, setting forth the water rates, service connection charges, or other charges to be made by the District for water service or for property and labor furnished by the District, which shall agree with and not conflict with the Ordinances of the District. Said schedules, tariffs or lists become appendices to these Rules and Regulations and shall go into effect on the date set at their adoption by the Board, and shall establish the charges to be paid by the Customer to the District.

[^47]
# Chapter 8.23 <br> ACCESS TO PREMISES 

## Sections <br> 8.23.010 Access to Premises

Section 8.23.010
Access to Premises
Inspectors, supervisors, and employees of the District, whose duty it may be to enter upon private premises to make inspection, examination, and tests of pipes, fixtures, or attachments used in connection with the water supply, shall be provided with credentials to identify them as authorized agents of the District. Any authorized employee of the District shall, upon presentation of his credentials, have access at all reasonable hours to any premises supplied with water for the purpose of making an inspection, examination or tests of the entire water system upon said premises. In case any authorized employee is refused admittance to any premises, of being admitted is hindered or prevented from making such inspection, examination, or tests, the District may discontinue water service to said premises after giving twenty-four (24) hours notice to the Owner or occupant of said premises of the intention to do so.

## Chapter 8.24

GENERAL

## Sections

8.24.010 Waiver or Modification
8.24.020 Amendment
8.24.030 Availability

## Section 8.24.010 <br> Waiver or Modification

No officer, agent or employee of the District has any authority to alter, change, amend, waive or add to any of these Rules and Regulations.

## Section 8.24.020

Amendment
These Rules and Regulations may be repealed and amended, or new rules and regulations adopted, at the pleasure of the Board of Directors.

Section 8.24.030
Availability
These Rules and Regulations shall be available in the office of the District and, at any time any application for service is received by the District, a copy of said Rules and Regulations shall be delivered to said Applicant, and said Applicant acknowledges receipt thereof in signing the application for service.

## Chapter 8.25

INSPECTION

## Sections

8.25.010 Inspection

## Section 8.25.010

Inspection
The General Manager or his/her designee shall have the right to enter upon the Customer's premises during reasonable hours for the purpose of inspecting the Customer's water system to insure compliance with these rules and regulations, including the provision that all cross connections are properly protected.

## Sections

8.26.010 Severability

## Section 8.26.010

## Severability

If any section, subsection, sentence, clause or phrase of these rules and regulations is for any reason held to be invalid or unconstitutional, such decision shall not affect the remaining portions of these rules and regulations if the remaining portions can be reasonably interpreted to carry out the intent of the Board. In such instances, the Board declares that it would have passed these rules and regulations without the invalid or unconstitutional section, subsection, clause or phrase thereof.

## PENALTIES

## Sections

8.27.010 Penalties

## Section 8.27.010 <br> Penalties

Any person, firm, corporation, association or agency found to be violating any provision of these rules and regulations shall be served by the District with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. This provision is in addition to and not by way of derogation of any other remedies or procedures available to the District by law, regulation or pursuant to any of the provisions of these rules and regulations.

[^48]$8 \backslash$ Penalties 8.27 .doc $\backslash \backslash A p p r o v e d ~ O r d i n a n c e ~ 05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \backslash D R A F T ~$

## Sections <br> 8.28.010 Judicial Review

## Section 8.28.010

 Judicial ReviewJudicial review of any decision of the District, its Board, General Manager or employee may be pursuant to Section 1094.5 of the California Code of Civil Procedure only if a petition for a writ of mandate is filed within the time limits specified in Section 1094.6 of the California Code of Civil Procedure.

# Chapter 8.29 <br> WATER CONSERVATION REQUIREMENTS 

Sections
8.29.010 Water Conservation Requirements
8.29.020
8.29.030 Indoor Fixtures and Appliances
82.040 Landscape Requirements
8.29.040 Local Supply Use Requirements
8.29.050 Compliance with Other Regulations

## Section 8.29.010 <br> Water Conservation Requirements

Conservation and local supply use requirements of this section apply to all new residential and commercial developments or redevelopments. The landscape requirements also apply to any re-landscaping that is subject to review by the District and/or the County of San Diego.

## Section 8.29.020

## Indoor Fixtures and Appliances

- All water fixtures and appliances installed must be high-efficiency. "High-efficiency" means fixtures and appliances that comply with the most efficient specifications under the EPA WaterSense or Energy Star programs, as in effect at the time of installation commences.


## Section 8.29.030

## Landscape Requirements

8.29.030.1 All landscapes must be designed and managed consistent with requirements of the County of San Diego and/or local agency having jurisdiction within which the property is located.
8.29.030.2 Any covenants, Conditions, and Restrictions (CC\&Rs) pertaining to a new subdivision/development shall not limit or prohibit the use and maintenance of low water use plant materials and the use of artificial turf, and shall require property owners to design and maintain their landscapes consistent with the County's, or applicable local agency having jurisdiction, regulations.
8.29.030.3 Dedicated irrigation meters shall be installed in:

- All parks and common areas with 5,000 square feet or more of irrigated landscape
- Commercial sites with 5,000 square feet or more of irrigated landscape
8.29.030.4 In compliance with the District's Administrative Code Article pressure regulators must be installed when and where appropriate to maximize the life expectancy and efficiency of the irrigation system.
8.29.030.5 New commercial development must install separate, dual-distribution systems for potable and recycled water. Residential development must install recycled water lines to irrigated common areas.
\lrmwd-b\Store02\DriveC\DatalDrive-E\ADMINISTRATIVE CODELDrafts_Not Approved\Updated Water Policy 81 Water Conservation 8.29.doc <br>Added and Approved 11-18-14<br>Ordinance No. 14-09<br>DRAFT


## Section 8.29.040

## Local Supply Use Requirements

It is the policy of the District that other local sources of water, such as reclaimed water and groundwater, shall be used within its jurisdiction to reduce the demand for imported potable water for any appropriate use when it is economically, financially and technically feasible and consistent with legal requirements preservation of public health, safety and welfare and the environment.

Section 8.29.050

## Compliance with Other Regulations

The requirements of this Section shall not be interpreted in any way to limit the owner's obligation to comply with any other applicable federal, state, or local laws and regulations.

# Chapter 9.01 <br> GENERAL PROVISIONS 

## Sections

9.01.010 Policy
9.01.020 Limitations on Powers to Serve

## Section 9.01.010

Policy
The general policy of the District is to furnish sewer service to properties within its boundaries, provided it has facilities, capacity, funds and financing for the providing of such service and it is reasonably able to do so. The District does not make land use or zoning decisions. Such decisions are the responsibility of other units of government.

Section 9.01.020

## Limitations on Powers to Serve

The District is a public agency formed pursuant to the Municipal Water District Law of 1911, as amended. It is subject to the provisions of that law, as well as other state and federal statues, such as the California Environmental Quality Act, and state and federal regulations, such as those issued by the Environmental Protection Agency and the Regional Water Quality Control Board. The providing of sewer service by the District is subject to all applicable laws and regulations. Any District agreement or commitment to serve is subject to, and subordinated to, any future such lawful conditions.

## Sections

9.14.010 Policy

## Section 9.14.010 <br> Policy

The District shall implement the provisions of this chapter in conjunction with adopted policies, Ordinances, Resolutions and standards. If greater improvements are required in any case, The District shall require those greater improvements.

## Sections

9.15.010 Policy

## Section 9.15.010 <br> Policy

Any person desiring to challenge any provision of this chapter must submit the grounds for challenge with supporting authority in writing, to the Board of Directors of the District for consideration. Failure to do so shall be grounds to bar any subsequent suit on the grounds of failure to exhaust administrative remedies.

Sections<br>9.16.010 Enforcement Authority<br>9.16.020 Disconnection of Facilities<br>9.16 .030<br>Notice<br>9.16 .040<br>9.16.050<br>Emergency Termination<br>9.16.060<br>Alternative Surcharge<br>Resumption of Service

## Section 9.16.010 <br> Enforcement Authority

The General Manager is charged with the duty of enforcing the provisions of this chapter and the rules and regulations herein provided.

## Section 9.16.020 <br> Disconnection of Facilities

The General Manager may recommend to the Board of Directors revocation or suspension of the permit issued to any person in the event of a violation by the permittee of any provision of any applicable state, federal or local law or this chapter or any of the rules and regulations adopted in the manner provided for herein. Following notice and a hearing before the Board of Directors, the District may disconnect from the public sewer and sewer connection, main line sewer, or other facility which is constructed, connected or used without a permit, or constructed, connected or used contrary to any of the provisions of any applicable state, federal or local law or this chapter or the rules and regulations adopted as provided for herein. When a premises has been disconnected, it shall not be reconnected until the violation for which it was disconnected has ceased or been remedied and a reasonable charge for such disconnection and reconnection, as established by the General Manager, has been paid. If the General Manager determines that the violation is creating an emergency endangering the public health, safety or welfare, the General Manager may temporarily suspend or revoke the permit pending notice and a hearing before the Board of Directors of the District.

## Section 9.16.030 <br> Notice

The General Manager shall give not less than ten days notice of intention to recommend disconnection of a premises or to suspend or revoke a permit, stating the reasons therefore, and may grant a reasonable time for elimination of the violation; provided, however, that if the General Manager determines that the danger is imminent, and such action is necessary for the immediate protection of the health, safety or welfare of persons or property, or for the protection of the sewer system, any premises may be temporarily disconnected and service terminated concurrently with the giving of such notice, pending notice and a hearing before the Board of Directors of the District. Notice shall be given to the occupant of the premises, if any, and to the owner of record of the property as shown upon the last equalized assessment roll of the County of San Diego by United States mail, registered or certified, return receipt requested, postage prepaid and by posting such notice on the premises.

## Section 9.16.040

Emergency Termination

In an emergency situation, as determined by the General Manager, service may be terminated on an interim basis by the General Manager for a period up to 30 days from the date of such decision by the General Manager.

[^49]
## Section 9.16.050 <br> Alternative Surcharge

As an alternative to termination, the District may establish a surcharge on the continuation of sewer service by the District for a reasonable time until such time as the applicant, owner or customer has taken action to comply with all the District's service requirements. The amount of any such surcharge shall be established by the District in its reasonable discretion.

## Section 9.16.060 <br> Resumption of Service

Any request to re-establish service subsequent to termination of sewer service by the District shall be in the manner prescribed for initially obtaining service from the District, and may include the collection of a security deposit and other terms and conditions to assure compliance with the District's rules and regulations. The amount, manner and terms shall be as determined by the General Manager.

## Chapter 9.17

VIOLATION-RESPONSIBILITY FOR LOSS OR DAMAGE

## Sections

9.17.010 Policy

Section 9.17.010
Policy
Any person violating any provision of this chapter or any rule or regulation adopted as herein provided shall be liable for all damage to the sewer system incurred as a result of such violation and for any increase in the cost of maintenance or repair resulting from such violation.

## Sections

9.18.010 Policy

## Section 9.18.010 <br> Policy

When any fee or charge imposed by this chapter or any other fee Resolution or Ordinance becomes delinquent, the General Manager is authorized to disconnect the property from the District's sewerage system. Prior to such disconnection, at least ten days' written notice shall be given to the occupant and to the owner of record of the property by United States mail and by posting the notice on the property. The property shall be disconnected upon expiration of the ten days unless the occupant has provided the General Manager with a letter from a medical doctor licensed in California indicating that termination of service will aggravate an existing medical condition of the occupant. When a property has been disconnected it shall not be reconnected until all delinquent fees and charges have been paid together with a reasonable charge for such disconnection and reconnection as established by the General Manager plus the penalties provided herein.

## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

CONSIDER A PROFESSIONAL SERVICES AGREEMENT WITH INFOSEND, INC., FOR DOCUMENT PRINTING AND MAILING SERVICES OF UTILITY BILLS

## BACKGROUND

Each month Customer Service department generates approximately 7,800 utility bills each month from the District's Utility Customer Information System database. In the past, bill statements were produced and mailed using in house staff and folding equipment. This process was very labor intensive and this service has been outsourced for a long time.

Rainbow Municipal Water District entered into a contract with DataProse, Inc. in June 2008 to process, print and mail utility invoices to the District's ratepayers. Billing information is transmitted electronically to DataProse, Inc. who prints the utility bill statements, inserts the statements into envelopes along with District's furnished informational inserts, seals the envelopes, applies first class postage and delivers the completed utility bill to the Post Office for mailing. DataProse, Inc. furnishes all printing, processing, and paper for the utility billing statements and envelopes for mailing and customer payments. First class postage costs are pass through fees dependent on current United States Postal Service rates. Presently, mail is being printed and mailed from DataProse's office located in Texas.

Staff decided to review the contract with Dataprose since the agreement has been in place for over eight years, and to evaluate other vendors on their services and pricing. A particular concern was the travel time for the bills which are mailed from Texas as this can lead to small delays in the receipt of the bills by our customers. A few of the neighboring water agencies are using Infosend, Inc. for their printing and mailing of billing statements. Infosend, Inc. submitted a proposal and below is the comparison of some of the fees between the two vendors.

| Fee Analysis |  |  |
| :--- | ---: | ---: |
| Vendor |  |  |
| Service | DataProse | InfoSend |
| Paper Bill | $\$ 0.1175$ | $\$ 0.105$ |
| NCOALink | $\$ 0.50$ | $\$ 0.30$ |
| Search \& ViewBill (archiving) | $\$ 0.015$ | $\$ 0.01$ |

The proposal submitted by InfoSend, Inc. was determined to offer the overall best value to the District. Infosend, Inc. is known in the industry and has proven to be a very reliable source of mail services based off referrals received from other agencies. Their set prices did come in at a lower cost, our expectations is the mail delivery times should improve as it will be processed in Anaheim, CA rather than in Texas. Also in discussions is proposals for revising the District's current utility bill layout to incorporate additional graphs and data to communicate conservation goals to our ratepayers at a later date. The District will not lose any control over its billing process and will be able to archive the bill documents for a greater period of time than currently.

The contract with Infosend, Inc. term and conditions state that the contract initial term shall be for a period of three years, and have renewal periods of an additional year. On February 28, 2017, staff notified DataProse of its desire to allow the existing agreement to expire on June $1^{\text {st }}, 2017$. Presently, mail is being printed and mailed from DataProse's office located in Texas.

## POLICY ISTRATEGIC PLAN KEY FOCUS AREA

Strategic Focus Area Five: Customer Service - RMWD provides reliable, quality water and water reclamation to our customers. The District also provides top quality customer service by meeting customer needs, being responsive, providing timely communication and being financially responsible.

## BOARD OPTIONS/FISCAL IMPACTS

There will be recognized savings in utilizing Infosend, Inc. by the cost per bill statement decreasing by .0125 , additionally other miscellaneous fees decreased as well.

## STAFF RECOMMENDATION

Staff recommends that the Board of Directors:

1. Authorize the General Manager to execute an agreement in a form approved by the District's Counsel with Infosend, Inc. for the printing and mailing of the District's Utility Bills.
2. Take such additional, related, action that may be desirable.
3. Do nothing and have Staff research other options.

## ATTACHMENTS

Infosend, Inc. Service Agreement

| ViAn |  |
| :--- | :--- |
| Vanessa Martinez <br> Finance Manager | $03 / 28 / 2017$ |

## InfoSend Service Agreement

This Agreement entered into as of $\qquad$ in Anaheim, California, by and between InfoSend, Inc. having its main office at 4240 E. La Palma Ave, Anaheim, California 92807 and Rainbow Municipal Water District, "Client" having its main office at: 3707 Old Highway 395, Fallbrook CA, 92028. InfoSend's primary phone number is (714) 993-2690.

## Section 1. Term of Agreement

The "Initial Term" of this Agreement shall be a period of thirty-six (36) months. Subsequent twelve (12) month "Renewal Periods" Term shall automatically commence upon the expiration of any term (Initial Term or Renewal Period) unless either party shall:

- Execute a mutually agreeable Agreement Amendment prior to the expiration of the current term that documents a different mutually agreeable renewal period length.
- Give written notice of non-renewal at least sixty (60) days prior to the end of the current term. The party giving non-renewal notice can indicate if it prefers for the contract to be terminated at the end of the current term or for it to continue on a month-to-month basis if mutually agreeable to the other party. This notice must be sent in writing via certified mail, FedEx, UPS, all with delivery signature requested to cancel the automatic renewal of the Agreement for Renewal Period should a mutually agreeable Agreement Amendment not be signed before the end of the current term.

This Agreement automatically terminates any prior contracts, terms or agreements previously executed between InfoSend and Client to cover the same services contained in this Agreement, unless specifically referenced herein.

## Section 2. InfoSend Services

Subject to the terms and conditions of this Agreement, InfoSend will provide to Client, and Client will purchase from InfoSend, the services listed in Exhibit A ("Scope of Primary Services") to this Agreement for the pricing set forth in Exhibit B ("InfoSend Fees"). In the event Client requires other consulting, installation, development and/or customization services, InfoSend shall perform and Client shall purchase such services in accordance with the provisions of Exhibit C ("Professional Services") of this Agreement.

Section 3. Termination
This Agreement and any future amendments to the Agreement may be terminated for cause as follows:
(a) If either party breaches any material term or condition of this Agreement, other than for Client's failure to pay and other than a failure to perform due to the causes described in Section 8, "Force Majeure," and fails either to substantially cure breach within thirty (30) days after receiving written notice specifying the breach, or, for those breaches which cannot reasonably be cured within thirty (30) days, to promptly commence curing such breach and thereafter proceed with all due diligence to substantially cure such breach, then the party not in breach may, by giving written notice to the breaching party, terminate this Agreement in its entirety, or as it pertains to a particular Product, Deliverable, Service or Professional Service, as of a date specified in such notice of termination. All of the obligations of the parties contained in this Agreement, except for Client's obligation to pay fees, shall be deemed to have been performed in an acceptable manner unless the party not in breach provides the breaching party with written notice as stated above within sixty (60) days of the event giving rise to the breach.
(b) If Client fails to pay when due any payables owed hereunder within thirty (30) days of receiving written notice of such failure to pay thereof, InfoSend may, at InfoSend's option, terminate this Agreement in its entirety or only as it pertains to a particular Product, Deliverable, Service or Professional Service, by giving written notice to Client, as of a date specified in such termination notice.
(c) In the event that either party hereto becomes or is declared insolvent or bankrupt, is the subject of any proceedings related to its liquidation, insolvency or for the appointment of a receiver or similar officer for it,
$\qquad$ InfoSend Initial
makes an assignment for the benefit of all or substantially all of its creditors, or enters into an agreement for the composition, extension or readjustment of all or substantially all of its obligations, then the other party hereto may, by giving written notice thereof to such party, terminate this Agreement as of the date specified in such notice of termination.

Upon termination of this Agreement or any portion hereof for any reason, all rights granted to Client under this Agreement with respect to terminated Products, Deliverables, Services and Professional Services, will cease and Client will promptly pay to InfoSend any and all charges due, including but not limited to payables that are due pursuant to this Agreement, the Discontinuance Fee set forth in Section 4 below and accrued finance charges; however, Client shall not be responsible for paying the Discontinuance Fee if this Agreement is terminated by InfoSend other than as a result of Client's breach of its obligations hereunder or is terminated by Client pursuant to Paragraph 3(a).

## Section 4. Discontinuance Fee

The parties have mutually agreed upon the Fees for the Services to be provided hereunder based upon certain assumed volumes, and the Term of this Agreement. Because of the difficulty in ascertaining InfoSend's actual damages for Client's termination without cause or a termination of the Agreement due to a breach by Client prior to the expiration of the then-current Term, Client agrees that, prior to the effective date of such termination and in addition to all other payables then due and owing to InfoSend, Client will pay to InfoSend the following discontinuance fee:

The discontinuance fee is equal to two (2) months of the Client's average monthly billing for the previous six (6) months of Service (excluding any postage charges and professional services fees that were invoiced in that time period).

Client shall not be required to pay the Discontinuance Fee if Client or InfoSend terminates the Agreement pursuant to Section 3, Paragraph (a).

## Section 5. Confidentiality of Information

All information and data relating to Client's business submitted by Client to InfoSend under this Agreement shall be treated as confidential by InfoSend and shall not, unless otherwise required by law, be disclosed to any third party by InfoSend without Client's written consent. InfoSend shall promptly notify Client should InfoSend be served with a summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, requests for admission, or other discovery request or court order from any third party regarding this Agreement and/or the Services performed under this Agreement.

InfoSend takes great care in both data security and human resource security. InfoSend has a Human Resources policy that requires all new employees to pass a background check performed by an outside company. All new employees must pass a drug-screening test as well. These practices will remain in place for the duration of the Agreement.

## Section 6. Limitation of Liability and Indemnification

InfoSend will not be responsible for actions or omissions resulting from receiving data and/or following instructions received from Client. No damages shall be assessed against InfoSend when any delay or breach on InfoSend's part is caused by failure of Client to perform Clients' responsibilities or any other reason beyond the control of InfoSend. Client shall not be responsible for any claims or damages caused by InfoSend's negligent acts or omissions or willful misconduct.

InfoSend is a service provider, as such; Client acknowledges that data processing involves the risk of human and machine errors that InfoSend shall not be liable for any errors, omissions, delays or losses. In no event shall InfoSend be liable for indirect, special or consequential damages even if InfoSend has been advised of the possibility of such potential claim, loss or damage. The foregoing limitation of liability and exclusion of certain damages shall apply regardless of the success or effectiveness of other remedies. Notwithstanding anything to the contrary contained herein, InfoSend shall not be responsible for delays in receipt of Client information or processing Client information because of causes beyond its reasonable control, including, without limitation, failures or limitations on the availability
$\qquad$ InfoSend Initial
of third party telecommunications or other transmission facilities and Clients' failure to properly enter and/or transmit information.

## Section 7. Invoicing and Payment

InfoSend will issue monthly invoices. Invoice terms are NET 30. Should Client dispute any invoiced charges it must do so in a reasonable time frame. Disputes must be made within 3 months of the invoice date. Past due invoices are subject to a $1.5 \%$ per month finance charge.

Client acknowledges that past due invoices must be paid in a timely fashion to avoid service interruptions. The recurring nature of InfoSend's services result in a rapid rise in the Client's account balance if Client's accounts payable process is delayed. This is especially true if InfoSend is invoicing client for postage charges. It is therefore necessary for InfoSend to put service on hold if past due account balances are not paid in a timely manner. The Past Due Accounts Receivable notes and procedures are outlined below:

- InfoSend is at significant risk of financial loss if clients default on their past due debt. InfoSend's Accounts Receivable staff must therefore constantly monitor past due account balances and evaluate the risk of a client defaulting on debt if courtesy emails and finance charges do not reduce this risk. InfoSend reserves the right to reduce this risk by notifying Client's staff in writing that it must pay at least the portion of the account balance that is past due within five (5) days to avoid InfoSend's services being put on hold.
- Should a hold be instated it will immediately be removed once payment is received.
- Additionally, unpaid balances can result in cancellation of the agreement as per Section 3(b).


## Section 8. Force Majeure

Neither party will be liable for any failure or delay in performing an obligation under this Agreement that is due to causes beyond its reasonable control, including, but not limited to, fire, explosion, epidemics, earthquake, lightning, failures or fluctuations in electrical power or telecommunications equipment, accidents, floods, acts of God, the elements, war, civil disturbances, acts of civil or military authorities or the public enemy, fuel or energy shortages, acts or omissions of any common carrier, strikes, labor disputes, regulatory restrictions, restraining orders or decrees of any court, changes in law or regulation or other acts of government authority, transportation stoppages or slowdowns or the inability to produce parts or materials. In the event of Force Majeure, Client shall make all reasonable efforts to pay accrued payables due to InfoSend through any available lawful means acceptable to InfoSend.

## Section 9. Miscellaneous

The substantive laws of the state of California shall govern this Agreement. It constitutes the entire Agreement between the parties with respect to the subject matter hereof. No representations and agreements modifying or supplementing the terms of this Agreement will be valid unless in writing, signed by persons authorized to sign agreements on behalf of both parties. This Agreement is not intended to, and shall not be construed to, create or confer any right in or upon any person or entity not a party to it.


Name:
Title:
Signature:
Date:
$\qquad$ Signature:
Date:
$\qquad$ InfoSend Initial

## Exhibit A - Scope of InfoSend Primary Services

Client will select one or more of InfoSend's Primary Services from the list below by checking the box next to the Primary Service name. Any Primary Services not selected prior to the execution of this Agreement can be added at a later date via an Agreement Amendment. Optional Service Features can be turned on or off at any time without incurring a termination fee when turned off.

च Data Processing, Printing and Mailing Service ("DPPM Service"): During the term of this Agreement, InfoSend will provide data processing, printing and mailing services. The Service consists of processing data, printing documents, mail preparation, applying postage (where applicable) and sending via the United States Postal Service. Document types include but are not limited to bills, postcards and letters.

InfoSend will provide eBusiness services (the "eBusiness Services"). During the term of this Agreement InfoSend can provide eBusiness Services. These services can include presenting bills online and/or accepting payment transaction information to facilitate ACH and/or credit card payments.

## Section 1. Scope of DPPM Service:

## Data Transfer and Processing

- Client to transmit data to InfoSend in an agreed upon format. Should Client make changes to data file format after initial setup is complete it agrees to pay for the professional services required to accommodate the new file format. See Exhibit C - Professional Services for information on initial setup and ongoing programming changes.
- A File Transfer Report will be emailed to the Client representatives who have opted-in to this email. A copy of this report is also available to download from the InfoSend website.
- Client will have access to an online Job Tracking application that shows the progress of each file as it is processed and becomes a batch of documents to be printed and mailed. Client can see both the original input file name and the InfoSend-assigned "Job Code".
- InfoSend will process the mailing addresses and perform the following functions:
- Apply CASS-certified address validation
- Comply with USPS requirements to obtain pre-sort automation rates
- InfoSend will stay current with all USPS regulations required to mail presorted first class mail
- InfoSend will provide proofs of the final print-ready PDF files to Client to be reviewed and approved before printing begins (if requested).


## Document Printing and Mailing

- Batches are printed by InfoSend using a high-speed production process onto the agreed upon forms.
- Printed documents are put through a quality control process and then released to the mailing department to be inserted into outgoing envelope. The return envelope and any applicable inserts are included as well.
- After a batch of mail is completed in InfoSend's system it will be marked as such in the online Job Tracker and a Process Confirmation Report will be emailed to the Client representatives who have opted-in to this email. A copy of this report is also available to download from the InfoSend website.
$\qquad$ InfoSend Initial $\qquad$


## Exhibit B - InfoSend Fees

## Section 1. Price Escalations to InfoSend Fees

InfoSend Fees can be adjusted once every twelve (12) months to account for increases in the cost of materials, labor, and other overhead costs, not to exceed the Consumer Price Index (CPI) for the State of California, plus $1.5 \%$. This information can currently be found at : http://www.dof.ca.gov/. InfoSend reserves the right to increase InfoSend Fees on a yearly basis (starting with the first anniversary of the Agreement date). The Client will be notified, in writing, at least thirty (30) days prior to such price increase. An amendment to this Agreement will not be required if the Fees are changed, unless the terms or conditions of the Agreement have changed. Postage fees can change at any time per USPS regulations and do not require an Agreement amendment.

In addition to this, if Client uses the Printing and Mailing Service, it accepts that InfoSend reserves the right to pass on any extraordinarily high increases to the cost of forms or envelopes at any time. The Client will be notified, in writing, at least thirty (30) days prior to such price increase. Client reserves the right to immediately terminate this Agreement in the event of any such extraordinarily high increases to the cost of forms or envelopes.

## Section 2. DPPM Fees:

Client understands that print and mail production costs vary based on volume. The following InfoSend Fees are based on the estimated monthly volumes listed below. Should Client's actual continuous volume be less than $70 \%$ of the volume estimates Client has provided to InfoSend (listed below) then InfoSend reserves the right to invalidate the Fees listed in this Agreement. Should this rare situation arise then InfoSend will notify Client immediately and negotiate with Client in good faith to pass on any increased production costs to Client. Client reserves the right to immediately terminate this Agreement in the event InfoSend invalidates the Fees listed in this Agreement.

Sales tax is not included. Any applicable sales tax will be collected per government regulations.
The below pricing does not include any applicable initial setup fees, please see Exhibit $C$ - Professional Services for initial setup fee and ongoing Professional Services Fees pricing.
$\qquad$ InfoSend Initial $\qquad$

## Pricing: Data Processing, Print \& Mail Service Fees

InfoSend's Fees - Turnkey Data Processing, Print \& Mail Service:
The individual prices shown in the table below apply only to the turnkey Data Processing Print \& Mail service for the following document types. Other types of document printing and or mailing can be quoted later, if needed.

## Turnkey Data Processing Print \& Mail service

Price is per physical page. Includes processing of your unique data, CASS address validation, presorting, printing, and mail insertion. Finished mail pieces are delivered to the USPS within one (1) business day. If samples (proofs) are requested then the mailing will be completed within one day of sample approval. File upload deadline for next-day mailing is 3:00PM local time at the

| Per Item | Options Below: |
| :---: | :---: |
| All Utility Bills and Notices (Per Sheet) Est. Volume 8,000 documents/month <br> Different options are available at different prices. Numbers fewer than 4 equal spot colors. <br> The number $1=$ black or grey All sheets are billed at the same rate; the price for the sheet with the highest number of colors is the applicable fee 4 equals CMYK (full color). <br> 2/1 Printing <br> 3/1 Printing <br> 4/1 Printing <br> 4/4 Printing | $\$ 0.06$ <br> $\$ 0.063$ <br> $\$ 0.066$ $\$ 0.069$ <br> \$0.069 |
| Inline Inserts (Per Sheet) <br> Price depends on the ink coverage in the insert artwork file. Price is quoted upon request for each insert. | Subtract \$0.01 from the above prices. |
| Multiple Page Mail Piece Surcharge - Handwork <br> This surcharge is assessed per mail piece (not per page). This surcharge only applies to multiple page bills that have too many pages to be inserted into the \#10 envelope by machine. This surcharge covers the necessary manual labor required to process these mail pieces | \$0.30 |
| Postage (for all job types) <br> You will be invoiced for the exact postage used. You must use one of the two USPS approved Move Update methods to get the presort discounts: | $\begin{aligned} & \text { Pass } \\ & \text { Through } \end{aligned}$ |
| Electronic Address Updates - NCOALink or ACS Per reported update. InfoSend electronically reports the addresses it received in your data that need to be updated because the customer filed a Change of Address Report with the USPS. Cost is per update. | \$0.30 |

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Material Component Fees - Data Processing Print \& Mail Service

| Statement, Invoice, or Letter Paper Stock |  |  |  |
| :--- | :--- | :--- | :--- |
|  | All Documents: white paper stock with or without perforation. Paper is <br> $8.5 \times 11^{\prime \prime}$ and 24lb. Price includes all inventory costs. The larger $8.5 \times 14$ " <br> format is supported at a higher material cost and higher printing cost. | Per Sheet | $\$ 0.015$ |
| All of your content will be digitally printed on the plain white paper in black, |  |  |  |
| black plus one color, or full color per the printing option from the prior table |  |  |  |
| that you select before implementation. |  |  |  |


| Standard Window Envelopes | Per Standard Envelope | Options Below: |
| :---: | :---: | :---: |
| These envelopes include security tint printed on the inside of the paper stock and clear film that prevent the contents of the envelope from | \#10 InfoSend Standard Double Window Outgoing Envelope | \$0.016 |
| sustainably logged paper (SFI). | \#9 InfoSend Standard Single Window Return Envelope | \$0.014 |
| If you utilize the InfoSend standard \#10 single window envelope instead of the InfoSend standard \#10 double window envelope then you will be able to show messages through this window. This option can be combined with an $8.5 \times 14^{\prime \prime}$ bill design, if desired. |  |  |
| Other Envelopes |  |  |
| Flat Single Window Envelope - only used for statements that do not fit in the \#10 envelope. | Pe page Flat <br> Envelope | \$0.16 |

$\qquad$ InfoSend Initial

## Pricing: Turnkey Data Processing Print \& Mail Service

 Optional ServicesDrop-Shipped Inserts \& Inserting of InfoSend-Printed Inserts Clients can print and fold inserts and ship them to InfoSend to be mailed with the statements. If folding is required add $\$ 0.01$ to the fee. InfoSendprinted inserts are quoted upon request. No additional service cost to use selective inserting to selectively include inserts with certain bill types as long as at least 3,000 customers are targeted (set-up costs can apply in some situations for advanced selective inserting criteria). Cost includes all inventory costs. This does not apply to inline inserts, which are quoted above.
Print Messages on the Outside of the Standard Envelope Custom messages and images can be printed onto the standard InfoSend \#10 double window envelope. This type of printing is referred to as "sniping" and usually used to print temporary content on a month or two worth of envelope stock. It is more cost effective to digitally inkjet print this content onto pre-manufactured envelopes than to order truly custom stock that was manufactured specifically for you. Price depends on the artwork you'd like to print - number of colors and whether it prints on one or both sides of the envelope. Price is quoted upon request.
$\left.\begin{array}{|l|l|l|}\hline \begin{array}{l}\text { Print Image Archive } \\ \text { Each bill is stored as a PDF and indexed in a database. Search by account } \\ \text { number or other key fields. You are charged one up-front fee per document } \\ \text { to process it, index it, and store it for a set number of months. The PDFs } \\ \text { are accessed using a browser-based application that is accessed by }\end{array} & \begin{array}{c}\text { Per PDF } \\ \text { (No Set- } \\ \text { up Fee) }\end{array} & \begin{array}{l}\$ 0.01 \text { - For } \\ \text { logging in to the InfoSend wessite. Third party applications can also access } \\ \text { Retentions of }\end{array} \\ \text { the PDFs via a lightweight API with no cost increase to the unit fees. Setup } \\ \text { fees may apply depending on your configuration needs. }\end{array}\right)$
$\qquad$

| Professional Services <br> Per hour and performed only upon request. For customizations made to <br> document processing program or document format after go-live. Work is <br> only started after receiving your approval of a formal quote. | Per Hour | $\$ 130.00$ |
| :--- | :---: | :---: |

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$\qquad$

## Section 2.1. Custom Forms/Envelopes

If Client has selected the Printing and Mailing Service and at any time requests that InfoSend Fees include the cost of custom Client-specific materials (either in this Agreement or since its execution), then Client understands and accepts that these materials will be purchased in bulk to achieve the lowest possible per-unit cost. Client agrees to purchase any remaining supplies of requested custom materials (normally forms or envelopes) if Client stops using InfoSend's Service for any reason. Client agrees to purchase the remaining supply of custom forms/envelopes upon Client's request to change the custom forms/envelopes before the supply has been depleted.

## Section 2.2. USPS Postage Rates

Postage rates are determined by the United States Postal Service. All postage rate changes are determined directly by USPS and are independent of any InfoSend service or materials fees. In no event shall any change in the postage rates affect the InfoSend service or materials fees. The Client will be invoiced the amount of excess for overweight and foreign mail.

## Section 2.3. Postage Deposit

InfoSend purchases the postage needed to mail Client documents on the day of mailing. The postage charges are later invoiced to Client based on the Client's payment terms. InfoSend requires Client to submit a postage deposit prior to the first mailing to facilitate the payment terms. This amount will remain in deposit for the duration of the Agreement. Upon Agreement expiration or termination Client must pay in full any outstanding invoices from InfoSend for payables created under this Agreement; the postage deposit will be refunded within fifteen (15) days of the date that the last open invoice is paid.

The postage deposit is subject to an annual review and may be adjusted to account for changes to Client average mailing volume or changes to USPS postage rates. There will be no more than one adjustment requested per year, if at all.

The postage deposit amount is calculated by multiplying the estimated number mail pieces per month by the current 5-Digit pre-sorted first class postage rate. The postage deposit amount due for your account is:

8,000 mail pieces per month $\times \$ 0.373 \times 2=\$ 5,968.00$
$\qquad$ InfoSend Initial $\qquad$

## Exhibit C - Professional Services

## Section 1. Price Escalations to InfoSend Professional Services Fees

InfoSend Professional Services Fees can be adjusted once every twelve (12) months to account for increases to the cost of providing these services. InfoSend reserves the right to increase Professional Services Fees on a yearly basis, starting with the first anniversary of the Agreement date, if needed. Unless InfoSend obtains Client's prior written consent, annual increases shall not exceed the Consumer Price Index (CPI) for the State of California, plus $1.5 \%$. This information can currently be found at: http://www.dof.ca.gov/. The Client will be notified, in writing, at least thirty (30) days prior to such price increase. An amendment to this Agreement will not be required if the Professional Services Fees are changed, unless the terms or conditions of the Agreement have changed.

## Section 2. Definition of Professional Services

InfoSend Professional Services are the technical services that are required to perform the initial setup of the InfoSend Primary Services defined in Exhibit A and the technical services required to make changes to these Primary Services after the initial setup is complete. Once any Primary Service is live and operational Professional Services will not be required unless Client requests a change or makes changes to its data file format or business rules which necessitates a change to InfoSend's system configuration or programming. Examples of InfoSend Professional Services:

- Project requirements gathering and analysis hours
- Project management and/or consulting hours
- Software development and system configuration hours related to the processing of Client's data
- Software development and system configuration hours related to document design, web portal setup, business rule configuration, or any other applicable technical services
- Application testing and deployment hours


## Section 3. Professional Services Fee and Process for Approval and Payment of Fee

The current Professional Services Fee is $\$ 130.00$ per hour.
Anytime a project will incur billable Professional Services hours Client will be informed before work begins. InfoSend and Client will execute a Statement of Work for project that Client wants InfoSend to undertake. The payment terms for the project depend on the size and scope of the project. The Statement of Work can include payment terms that are different than the terms listed in this Agreement for InfoSend Fees, otherwise these terms will apply and the project fees will be invoiced upon project completion. Small projects that incur less than five (5) hours of Professional Services can be initiated without a Statement of Work if Client accepts and executes a Programming Quote for this work.

All projects that will take more than five (5) hours of Professional Services work will require both parties execute a formal Statement of Work. Depending on the nature of the work required InfoSend will provide one of the following quotation methods:

- Fixed Quote - a fixed project cost will be set. InfoSend may elect to waive this cost in some circumstances. Client understands and accepts that it must accept the terms and conditions of the Statement of Work for the project and that changes made to the project requirements, data file structure, etc. after the Statement of Work and any amendments to it have been finalized will require Client to pay for these changes on a Time and Materials basis. Client will be notified immediately if this scenario happens and given an option to keep the original project specifications to keep the fixed quote in place.
- Time and Materials quote - should it not be possible to provide a fixed quote due to the nature of a Client's requested project then InfoSend will provide an estimated number of hours to complete the project and bill the hours on a Time and Materials basis. The Statement of Work will include the terms and conditions for these project types and Client will be invoiced weekly for the hours spent on the project.
$\qquad$ InfoSend Initial


## Section 4. Initial Setup Cost: InfoSend Primary Services

The Initial Setup cost for the InfoSend Primary Services selected in Exhibit A are listed below. These costs have been provided using a Fixed Quote process, explained in Section 3 above. Client understands and agrees to these terms and to the project-specific terms and conditions that will be provided in the Statement of Work that will be created to capture Client's specific requirements and data types.

## Pricing: Data Processing, Print \& Mail Service Set-up Fee

InfoSend's Fees - Initial Set-up Costs

Implementation, professional services, and optional services fees
Please pick from one of the options below:

Option 1 - Express PDF Implementation: WAIVED
With this option you control the formatting of your documents and do not pay maintenance fees.

Option 2 - Data-Only (e.g. flat files, XML) Implementation: WAIVED When this option is selected InfoSend creates, hosts and maintains an application to generate your bills. Your current document design will be matched. Please note that data manipulations are not part of the standard offering.

Document Redesign Service after go-live of the initial implementation: WAIVED We will assist you in redesigning the format of your printed documents if needed. We will become responsible for later changing the format of the documents, if needed (Professional Services Fees will apply for future changes.

Please note that Clients must sign off on requirements documents (Statement of Work, project plan, etc.) before programming and system configuration can begin. Client can be charged additional fees and/or have the project go-live date delayed if requirements are changed after they have been finalized and signed off.

| Professional Services Fee <br> Per hour and performed only upon request. For customizations made <br> to your data processing application after go-live. Work is only started <br> after receiving your approval of a formal quote. | Per Hour | $\$ 130.00$ |
| :--- | :---: | :---: |

$\qquad$ InfoSend Initial $\qquad$

Data Processing and Document Creation Initial Setup Fee
This applies to the following services, unless client provides pre-rendered PDF files:
DPPM Service

Project Fixed Initial Setup Cost:

## See above

Project Summary: This project will be completed to process Client's input data files and create the output to be used for the print or online delivery channel.
Project Details: A requirements gathering process will be initiated to build the Statement of Work required to begin programming and system configuration. During the requirements gathering process the InfoSend and the Client will discuss:

- Client's custom data (if applicable). When custom data is provided by the Client a "field mapping" or "field description" document is required before project implementation can begin. This document is an absolute requirement; programming cannot be based on assumptions and all fields must be defined before programming can begin.
- Document design. Client must sign-off on a document design "mockup" before programming can begin. The mockup is a visual representation of how the document will look after Client's custom data is processed by InfoSend's system.

Project Schedule: Project is estimated to take $8-12$ weeks to complete. The Statement of Work will contain all client deliverables and responsibilities. Both parties agree to dedicate adequate resources to the project to complete it in the shortest amount of time possible.

Should Client make changes to the data file after programming has begun it must pay Professional Services Fees, on a Time and Materials basis, to cover the programming changes required to accept the new data. Should the document design be changed after the final mockup is accepted and signed off on by the Client then Professional Services Fees will apply, on a Time and Materials basis, to cover the cost of making these changes.

Changes to the Client data file, document design, or other key specifics collected and finalized during the requirements gathering process will impact the project completion date. Changes made after the Client has executed the Statement of Work and any follow up documents can cause delays to the project completion.
Project Cost has been Subsidized: InfoSend's internal cost to complete the project is higher than the cost quoted to Client at the top of this table. InfoSend has subsidized by factoring in years of Fees as it is confident that its quality of service will make Client want to stay with InfoSend for years beyond the Initial Term of this Agreement.
$\qquad$ InfoSend Initial $\qquad$

## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

APPROVAL OF RESOLUTION NO. 17-11 ESTABLISHING CHECK SIGNING AUTHORITY

## DESCRIPTION

The purpose of this Resolution is to establish check signing responsibilities and designate authorized signers of checks due to changes in Board Members. Resolution No. 17-11 will replace Resolution No. 17-01.

POLICY
Administrative Code, Chapter 5.01 - Banking

## BOARD OPTIONSIFISCAL IMPACTS

Option 1: Approve attached Resolution 17-11.
Option 2: Approve attached Resolution 17-11 with Board recommended revisions.

## STAFF RECOMMENDATION

## Staff recommends Option 1.



## RESOLUTION OF THE BOARD OF DIRECTORS <br> OF RAINBOW MUNICIPAL WATER DISTRICT ESTABLISHING CHECK SIGNING RESPONSIBILITIES AND DESIGNATING AUTHORIZED SIGNERS OF CHECKS

WHEREAS, the Rainbow Municipal Water District maintains an accounts payable checking account for the purposes of paying vendors, and a payroll checking account for the purpose of paying employees, and

WHEREAS, the bank requires that responsible parties be designated as authorized signers of these accounts, and

WHEREAS, it is appropriate to establish check signing responsibilities and designate authorized signers;

NOW, THEREFORE, IT IS HEREBY RESOLVED, DETERMINED AND ORDERED by the Board of Directors of Rainbow Municipal Water District that:

1. The following persons be designated as authorized signers on the checking accounts of the District:

Accounts Payable Authorized Signers:
Harriette "Helene" Brazier, Director
William Stewart, Director
Claude "Hayden" Hamilton, Director
Michael Mack, Director
Miguel Gasca, Director
Tom Kennedy, General Manager
Vanessa Martinez, Finance Manager
Sherry Kirkpatrick, Engineering Manager
Darren Milner, Operations Manager
Payroll Authorized Signers:
Tom Kennedy, General Manager
Vanessa Martinez, Finance Manager
Sherry Kirkpatrick, Engineering Manager
Darren Milner, Operations Manager
2. Accounts payable checks under $\$ 50,000$ shall be signed by members of the management staff, and checks over $\$ 50,000$ shall be signed by one member of the management staff and one Board member.
3. Payroll checks will be signed by one member of the management staff.
4. Resolution 17-11 rescinds Resolution 17-01.

PASSED AND ADOPTED at a Regular meeting of the Board of Directors of Rainbow Municipal Water District held on the $28^{\text {th }}$ day of March, 2017, 2017 by the following vote, to wit:

AYES:
NOES: ABSENT: ABSTAIN:

Helene Brazier, Board President
ATTEST:
Dawn Washburn, Board Secretary

## SUBJECT

## BACKGROUND

Situations which result in San Diego County being declared a state or federal disaster area can offer the opportunity for the District to apply for State and Federal emergency grant funding to reimburse expenses for related repairs and activities. Such reimbursements are overseen by the California State Office of Emergency Services and/or the Federal Emergency Management Agency.

On March 7th Governor Brown proclaimed a State of Emergency for the late January 2017 storms, and a separate State of Emergency for storm impacts beginning February 1, 2017. Both proclamations include San Diego County. Applications for reimbursement related to the January storms are due on April 11, 2017.

In order to apply for reimbursement from the California State Office of Emergency Services, the District's governing body must authorize a designated representative to execute documents related to present and future disaster relief applications. Without a resolution in place, the District may not be granted or be able to secure available disaster recovery funds.

## DESCRIPTION

Staff seeks a Board resolution authorizing the General Manager or Designees to apply for funds on behalf of the District. This designation remains in effect for three (3) years from the date of the resolution.

## POLICYISTRATEGIC PLAN KEY FOCUS AREA

MISSION: To provide our customers with reliable, high quality water and water reclamation services in a fiscally sustainable manner.

STRATEGIC FOCUS AREA: Fiscal Responsibility.
RELEVANT STATUES:

- Government code P.L. 93-288 as Amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988
- California Disaster Assistance Act


## BOARD OPTIONS/FISCAL IMPACTS

Fiscal impact of taking no action is unknown, but could be significant should another qualifying emergency occur.

1. To approve Resolution No. 17-12 authorizing the General Manager or Designees to execute State Office of Emergency Services and/or federal emergency documents and relevant permit applications for present and future disaster relief applications.
2. To approve Resolution No. 17-12 with revisions.
3. Provide staff with other direction.

## STAFF RECOMMENDATION

Staff recommends Option 1, approving Resolution No. 17-12 authorizing the General Manager or Designees to execute State Office of Emergency Services and/or federal emergency documents and relevant permit applications for present and future disaster relief applications.


## RESOLUTION NO. 17-12

## A RESOLUTION OF THE BOARD OF DIRECTORS OF RAINBOW MUNICIPAL WATER DISTRICT AUTHORIZING THE GENERAL MANAGER OR DESIGNEES TO EXECUTE STATE OFFICE OF EMERGENCY SERVICES AND/OR FEDERAL EMERGENCY DOCUMENTS AND RELEVANT PERMIT APPLICATIONS FOR PRESENT AND FUTURE DISASTER RELIEF APPLICATIONS

WHEREAS, Rainbow Municipal Water District is a duly organized public entity established under the laws of the State of California, providing water and wastewater services within the boundaries of Rainbow Municipal Water District; and

WHEREAS, the Board of Directors has considered the recommendation to authorize the General Manager or Designees to sign FEMA/CaIEMA applications, claims and other related documents for the purpose of obtaining certain federal assistance under Public Law 93-188 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.

## NOW THEREFORE, THE BOARD OF DIRECTORS OF THE RAINBOW MUNICIPAL WATER DISTRICT DOES HEREBY RESOLVE, DETERMINE AND ORDER:

1) The General Manager or Designees are hereby designated as the agent for the Rainbow Municipal Water District and authorized to sign FEMA/CaIEMA application(s), claims, and other related documents for the purpose of obtaining certain federal assistance under Public Law 93-188 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act;
2) Cal OES Form 130, the Designation of Applicant's Agent Resolution for Non-State Agencies (Exhibit "A") will be executed and submitted with Rainbow Municipal Water District Resolution No. 17-12; and
3) This is a universal resolution and is effective for all open and future disasters up to three (3) years following the date of approval.

PASSES AND APPROVED at a regular meeting of the Board of Directors held on the $28^{\text {th }}$ of March, 2017 by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

Helene Brazier, Board President
ATTEST:

Dawn Washburn, Board Secretary
$\qquad$

# DESIGNATION OF APPLICANT'S AGENT RESOLUTION FOR NON-STATE AGENCIES 

BE IT RESOLVED BY THE $\qquad$ OF THE $\qquad$

THAT

is hereby authorized to execute for and on behalf of the $\qquad$ , a public entity
(Name of Applicant)
established under the laws of the State of California, this application and to file it with the California Governor's Office of Emergency Services for the purpose of obtaining certain federal financial assistance under Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.

THAT the $\qquad$ a public entity established under the laws of the State of California, (Name of Applicant)
hereby authorizes its agent(s) to provide to the Governor's Office of Emergency Services for all matters pertaining to such state disaster assistance the assurances and agreements required.

## Please check the appropriate box below:

$\square$ This is a universal resolution and is effective for all open and future disasters up to three (3) years following the date of approval below.This is a disaster specific resolution and is effective for only disaster number(s) $\qquad$

Passed and approved this $\qquad$ day of $\qquad$ 20 $\qquad$
$\qquad$
(Name and Title of Governing Body Representative)
(Name and Title of Governing Body Representative)
(Name and Title of Governing Body Representative)

## CERTIFICATION

I, $\qquad$ duly appointed and $\qquad$ of (Title)

## (Name of Applicant)

do hereby certify that the above is a true and correct copy of a

Resolution passed and approved by the $\qquad$ of the $\qquad$ (Governing Body)
(Name of Applicant)
on the $\qquad$ day of $\qquad$ 20 $\qquad$

## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

DISCUSSION AND POSSIBLE ACTION REGARDING RMWD BOARD MEMBERS AND GENERAL MANAGER ATTENDING THE CSDA SPECIAL DISTRICT LEADERSHIP ACADEMY IN JULY 2017

## BACKGROUND

In preparation of the 2016 Strategic Plan, the Board had express interest in achieving the District of Distinction Accreditation.

The Special District Leadership Foundation states "In a time where proper fiscal management and responsibility in public agencies is paramount and the task of governing these agencies has become even more complex, regulated and costly, it has become increasingly important to demonstrate to constituents that districts have sound fiscal management policies and practices in place among other areas of importance in district operations.

This accreditation is designed as a way for districts to highlight their prudent fiscal practices along with other areas important to effectively operate and govern a special district."

Below is a list of reasons why special districts may want to earn such accreditation:

- The accreditation criterion gets to the heart of best practices in public agencies. Demonstrate that your district:
- Understands and respects the responsibilities inherent in providing essential public services.
- Has clean financial audits and operates in a fiscally responsible and transparent manner.
- Is conscious of the ever-changing operating environment by having current and relevant policies and procedures in place that conform to all statutes and regulations under state law.
- Places an emphasis on continuing education completed by having each of the district's board members and executive staff in ethics, governance and leadership training.
- Focuses on having sound policies in the areas of governance, board conduct, district finances, transparency and reserves.

The requirements for a District to receive accreditation are as follows:

- The District undergoes regular financial audits, has no major deficiencies and applies any recommendations to future years.
- District operations conform to all statutes and regulations under state law as reflected in a policies and procedures manual.
- All directors/trustees, general manager and executive staff (as designated by the district) have received training in governance as well as compliance with AB 1234 Ethics Training and AB 1825 Harassment Prevention Training.
- The District has completed SDLF's District Transparency Certificate of Excellence.

Since determining this accreditation should be included in the 2016 Strategic Plan, three of the then current Board Members as well as the General Manager attended the required Governance Foundations workshop provided by CSDA in San Diego County during 2016.

## DESCRIPTION

RMWD is seeking to achieve the CSDA District of Distinction Accreditation. Achieving this goal requires specific governance training on behalf of the entire RMWD Board of Directors and General Manager. There are several options available to meet this required training:

- Six hours of basic governance training within the past five years.
- Governance Foundations, offered by CSDA's Special District Leadership Academy satisfies this requirement.
- Other courses may qualify as well, however will need to be submitted for review by SDLF.
- Board Member Past Practices (3 hours), plus 2 approved webinars will satisfy this requirement. Approved webinars are: Board Member and District Liability Issues; Must Have Communication Protocols for Board \& Staff; and Who Does What? Best Practices in Board Staff Relations.

The Board Member Past Practices live webinar was held in January 2017 and is in the process of being transferred to an on-demand webinar. This is the same for the Must Have Communication Protocols for Board \& Staff. The other two on-demand webinars are currently available and accessible on the CSDA website; one is free and the other costs $\$ 49.00$ for SDRMA members such as RMWD.

CSDA has scheduled Special District Leadership Academies at three different locations in 2017; however, the dates for the La Jolla and San Luis Obispo fall on the dates of RMWD's regular Board Meetings. The third academy is scheduled for Napa Valley July 9-12, 2017.

Director Brazier and General Manager, Kennedy have already completed their required training within the past five years. General Manager, Kennedy has also has taken and passed the required Special District Administrator test for this accreditation in February 2017.

This item is to allow the Board to consider either attending the Special District Leadership Academy in Napa Valley in July, wait until later in 2017 when the on-demand webinars are made available by CSDA, or an academy is scheduled to be held in San Diego County.

## POLICYISTRATEGIC PLAN KEY FOCUS AREA

Strategic Focus Area Four: Fiscal Responsibility. Goal: Fiscally responsible, transparent, and sustainable approaches to managing and forecasting the District's finances.

## BOARD OPTIONS/FISCAL IMPACTS

Travel and conference expenses for four Board Members to attend the academy in Napa Valley in July 2017 total approximately $\$ 4,600$ for registration, airfare, hotel, and transportation between airport and conference. Taking the required courses via on-demand webinars would not have any fiscal impact.

Option 1: Approve participation in on-demand webinars to meet District of Distinction Accreditation requirements for one or more RMWD Board Members (Fiscal Impact: Approximately \$500).
Option 2: Approve attendance and all costs associated with attending the CSDA Special District Leadership Academy in Napa Valley July 9-12, 2017 to meet the District of Distinction Accreditation requirements for one or more RMWD Board Members (Fiscal Impact: Approximately $\$ 4,600.00$ ).

Option 3: Delay attendance and participation in required training until a CSDA Special District Leadership Academy is scheduled to be held in San Diego County during 2018 (Fiscal Impact: Approximately $\$ 2,580$ ).

## STAFF RECOMMENDATION

Staff supports Board decision.


## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

California Special Districts Association (CSDA) Call for Nominations Seat C

## DESCRIPTION

The Elections and Bylaws Committee is looking for Independent Special District Board Members or their General Managers who are interested in leading the direction of the California Special Districts Association for the 2018-2020 term.

The CSDA Board of Directors is the governing body responsible for all policy decisions related to CSDA's member services, legislative advocacy, education and resources. The Board of Directors is crucial to the operation of the Association and to the representation of the common interests of all California's special districts before the Legislature and the State Administration. Serving on the Board requires one's interest in the issues confronting special districts statewide.

A list of commitment and expectations as well as nomination procedures is provided in the attached CSDA memorandum. A copy of the member district's resolution or minute action and Candidate Information Sheet must accompany the nomination. The deadline for receiving the nominations is May 19, 2017.

Nominees will receive a Candidate's Packet in the mail and CSDA will mail ballots on June 2, 2017. The ballots must be received by CSDA no later than 5:00 p.m. August 4, 2017. The successful candidates will be notified no later than August 8, 2017 and will be introduced at the Annual Conference in Monterey, CA in September 2017.

This item is to give the RMWD Board an opportunity to consider nominations for the CSDA Board Members for Seat C.

POLICY

## N/A

BOARD OPTIONS/FISCAL IMPACTS
N/A
STAFF RECOMMENDATION
Staff supports Board decision


California Special Districts Association
Districts Stronger Together

## DATE: February 17, 2017

TO: $\quad$ CSDA Voting Member Presidents and General Managers
FROM: $\quad$ CSDA Elections and Bylaws Committee

## SUBJECT: CSDA BOARD OF DIRECTORS CALL FOR NOMINATIONS SEAT C

The Elections and Bylaws Committee is looking for Independent Special District Board Members or their General Managers who are interested in leading the direction of the California Special Districts Association for the 2018-2020 term.

The leadership of CSDA is elected from its six geographical networks. Each of the six networks has three seats on the Board with staggered 3 -year terms. Candidates must be affiliated with an independent special district that is a CSDA Regular member located within the geographic network that they seek to represent. (See attached Network Map)

The CSDA Board of Directors is the governing body responsible for all policy decisions related to CSDA's member services, legislative advocacy, education and resources. The Board of Directors is crucial to the operation of the Association and to the representation of the common interests of all California's special districts before the Legislature and the State Administration. Serving on the Board requires one's interest in the issues confronting special districts statewide.

## Commitment and Expectations:

- Attend all Board meetings, held every other month at the CSDA office in Sacramento.
- Participate on at least one committee, meets 3-5 times a year at the CSDA office in Sacramento.
(CSDA reimburses Directors for their related expenses for Board and committee meetings as outlined in Board policy).
- Attend CSDA's two annual events: Special Districts Legislative Days - held in the spring, and the CSDA Annual Conference - held in the fall.
- Complete all four modules of CSDA's Special District Leadership Academy within 2 years.
(CSDA does not reimburse for expenses for the two conferences or the Academy classes even if a Board or committee meeting is held in conjunction with the events).

Nomination Procedures: Any Regular Member in good standing is eligible to nominate one person, a board member or managerial employee (as defined by that district's Board of Directors), for election to the CSDA Board of Directors. A copy of the member district's resolution or minute action and Candidate Information Sheet must accompany the nomination. The deadline for receiving nominations is May 19, 2017. Nominations and supporting documentation may be mailed or faxed.

Nominees will receive a Candidate's Packet in the mail. The packet will include campaign guidelines.

CSDA will mail ballots on June $2^{\text {nd }}$. The ballots must be received by CSDA no later than 5:00 p.m. August 4, 2017. The successful candidates will be notified no later than August 8,2017 . All selected Board Members will be introduced at the Annual Conference in Monterey, CA in September 2017.

## Expiring Terms <br> (See enclosed map for Network breakdown)

| Northern Network | Seat C Fred Ryness, Burney Water District* |
| :---: | :---: |
| Sierra Network | Seat C Peter Kampa, Saddle Creek Community Services District* |
| Bay Area Network | Seat C Stanley Caldwell, Mt. View Sanitary District* |
| Central Network | Seat C Sandi Miller, Selma Cemetery District* |
| Coastal Network | Seat C Vincent Ferrante, Moss Landing Harbor District* |
| Southern Network | Seat C Arlene Schafer, Costa Mesa Sanitary District* |

If you have any questions, please contact Beth Hummel at 877-924-CSDA or bethh@csda.net.

California Special Districts Association
Districts Stronger Together

## 2017 BOARD OF DIRECTORS NOMINATION FORM

Name of Candidate: $\qquad$
District: $\qquad$
Mailing Address: $\qquad$

Network: $\qquad$ (see map on back)

Telephone:
(PLEASE BE SURE THE PHONE NUMBER IS ONE WHERE WE CAN REACH THE CANDIDATE)
Fax: $\qquad$
E-mail: $\qquad$
Nominated by (optional): $\qquad$

Return this form and a Board resolution/minute action supporting the candidate and Candidate Information Sheet by fax or mail to:

CSDA
Attn: Beth Hummel
1112 I Street, Suite 200
Sacramento, CA 95814
(877) 924-2732 (916) 442-7889 fax


## 2017 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information MUST accompany your nomination form and Resolution/minute order:

Name: $\qquad$
District/Company: $\qquad$
Title: $\qquad$
Elected/Appointed/Staff: $\qquad$
Length of Service with District: $\qquad$

1. Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.):
2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):
$\qquad$
$\qquad$
3. List local government involvement (such as LAFCo, Association of Governments, etc.):
$\qquad$
$\qquad$
4. List civic organization involvement:
**Candidate Statement - Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. Any statements received in the CSDA office after May 31, 2017 will not be included with the ballot.

INFORMATION

## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

QUARTERLY STRATEGIC PLAN OBJECTIVES AND GOALS UPDATE

## DESCRIPTION

The Strategic Plan serves as a practical document used as a roadmap for the future direction of the District. Within the Key Focus Areas of the Strategic Plan are a series of Objectives that were defined by the Board and are used to guide staff in our activities. As stated in this document the Board of Directors will review the progress that the District is making on these Objectives on a regular basis to ensure that the District remains on track to achieve these Objectives.

The worksheets given under separate cover will give a detailed breakdown of the Goals and Objectives for each of the six focus areas, defines the successes, accomplishments, and statuses for each focus area and the associated goals.

A presentation of this information will be given at the Board meeting.

## POLICY

N/A

FISCAL IMPACTS
N/A

MEETINGS/SEMINARS/CONFERENCES/WORKSHOPS

| VARIABLE |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| DATE | $\mathbf{2 0 1 7}$ | MEETING | LOCATION | ATTENDEES | POST |  |  |
| April | $\mathbf{1 3}$ | SDCWA Special Board Meeting | SDCWA | GM |  |  |  |
| April | $*$ | CSDA - San Diego Chapter | (Location to be Announced) $6: 00$ p.m. | Mack | N/A |  |  |
| April | $*$ | LAFCO Special Meeting | County Admin Center, Room 302 $-9: 30$ am | (As Advised by GM) | N/A |  |  |
| April | $*$ | Santa Margarita Watershed Council | Rancho California Water District | Hamilton |  |  |  |

MEETINGS/SEMINARS/CONFERENCES/WORKSHOPS

| RECURRING |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DATE | $\mathbf{2 0 1 7}$ | MEETING | LOCATION | ATTENDEES |  |
| April | 5 | Engineering Committee Meeting | RMWD Board Room 3:00 p.m. | Appointed Director, General Manager | 3/30 |
| April | 3 | LAFCO | County Admin. Center Room 302 9:00 <br> am | As Advised by GM |  |
| April | 3 | Communications Committee Mtg. | RMWD Board Room 3:30 p.m. | N/A |  |
| April | 11 | Budget \& Finance Committee Mtg. | RMWD Board Room 1:00 p.m. | Appointed Director, General Manager | 3/30 |
| April | 18 | SDCWA GM's Meeting | SDCWA, San Diego 9:30 a.m. | General Manager |  |
| April | 21 | NC Managers | Golden Egg 7:45 a.m. | General Manager |  |
| April | 21 | LAFCO Advisory Committee | LAFCO, 9335 Hazard Way, 9:30 a.m. | General Manager |  |
| April | 18 | Council of Water Utilities | Stoneridge Country Club 7:15 a.m. <br> Poway | All Directors, General Manager |  |
| April | 26 | North County Water Group | Rincon Del Diablo, Escondido 7:30 a.m. | All Directors on a Rotating Schedule, |  |
| Gpeneral Manager |  |  |  |  |  |


| From: | Dawn Washburn |
| :--- | :--- |
| Sent: | Wednesday, March 08, 2017 1:19 PM |
| To: | Tom Kennedy (tkennedy@rainbowmwd.com) |
| Cc: | vmartinez@rainbowmwd.com; vtornero@rainbowmwd.com; kharp@rainbowmwd.com; |
|  | cgray@rainbowmwd.com |
| Subject: | Phone Message - Joseph Beyer |

Joe Beyer left a message to purposely let us know how pleased he is with the following:

1) Our waiting period for recording is very informative and very professional.
2) Our newsletter is superb and he likes the information we are providing the customers in the limited space of one sheet.
3) Victor T. was outstanding in answering his questions.

He asked that we not short change ourselves when it comes to budgeting for the maintenance of our aging infrastructure. He has lived in RMWD for 27 years and understands that although pipes last a long time, we need to be able to replace them when necessary.

He requested that this information be passed along and I thought it would be nice to share with all of you so that you know the District as a whole and specific staff members are much appreciated by Mr. Beyer (Acct. No. W. Lilac Road, Bonsall).

Nice to hear positive feedback from the public. Way to go!!

## Dawn Waskburn

Executive $\mathcal{F}$ sisistant/ Board סecretary
dainbow dlunicipal Water District
3707 Eld dtighway 395
fallbrook, edt 92028
(760) 728-1178 £xt. 129

[^50]
## STAFF TRAINING REPORT



## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

Operations Report for February 2017

## DESCRIPTION

Activities for Operations \& Maintenance Division

## CONSTRUCTION \& MAINTENANCE:

The Valve Maintenance crew exercised a total of 101 valves this month. Their average goal is 303 per month. The crew assisted the Meter Staff for their replacement with the meter changeout program as well as emergency or planned shutdowns for the Construction crews. They checked and maintained PRV stations in the zones while performing valve maintenance.

The Construction crews repaired nine (9) leaks and performed six (6) planned/emergency shutdowns. The crew repaired several areas on main lines exposed from the storms. They also installed and/or repaired five (5) appurtenances and maintained District easements as well as completed the work at the District Yard. In addition, the crew also assisted with the meter changeout project.

## WATER OPERATIONS:

- Completed SDCWA shutdown: no issues/problems were encountered during the 10-day shutdown.
- Assisted Meter Department with flow testing of large meters for ABM Energy Solutions Audit Project.
- Electrical/SCADA Projects: Preventative/routine maintenance and troubleshooting.
- Monthly tank and reservoir cover inspections completed.
- Huntley Pump Station \#1 pump was in process of being reinstalled.
- U1 Pump Station \#3 pump/motor are still offline; motor is being rewound and pump rebuilt.


## Water Quality:

- 22 Routine coliform samples
- 22 Nitrification samples
- 3 Water quality complaints (taste and odor / dead end lines flushed)
- 1 Special sample, Twin Oaks main line repair


## WASTEWATER:

## Monthly, Semi Annual and Annual Reports:

February 21, 2017 Reportable Category 1 Private Sewer Overflow (CIWQS) California Integrated Water Quality System Event ID \#833019 1,000 Gallon spill volume.

February 1, 2017 - February 28, 2017 - Wastewater crewmember Christopher Hand assisted the Meter Division in water meter assessments. Task included cleaning and clearing meter boxes, checking for obstructions, backflow and valve relocation from homeowner to RMWD's water supply. He also performed customer service order requests.

## Lift Station Pumps / Preventative Maintenance:

February 18, 2017 - Lift Station \#5 Rancho Viejo PLC failure, high level alarm. Crew responded and pumped sewage down to operational level and returned to normal operations.

February 21, 2017 - Lift Station \#2 - Performed Semi Annual flow meter maintenance and flushing.

## Lift Station Generators:

Lift Station \#1: 30 Horsepower Generac Generator out of service pending reliable repairs. District has a temporary portable 100kw Whisper watt generator on site.

February 1, 2017 - February 28, 2017: 30 kw stationary generator out of service. District mechanic; to troubleshoot ongoing issues.

## Sewer Line Cleaning:

Dates: February 1, 2017 - February 28, 2017 = 7,149’ sewer lines cleaned.
Locations: Vista Valley, Los Padres Lane, Daisy lane, River Village, Fallbrook Oaks

## High Frequency Cleaning:

February 1, 2017 - February 28, 2017: Cleaned 1,410' of sewer siphon line ( $8^{\prime \prime} \& 10^{\prime \prime}$ )
February 21, 2017: Customer complaint of sewer leakage and bad odor - Made field observation and jetted sewer line: CCTV to be scheduled.

## Manhole Inspections:

Dates: February 1, 2017 - February 28, 2017
Total: 63 Manholes inspected
Locations: Brook Hills II, Vista Valley, Los Padres, Horse Ranch Creek
Repaired: Ames Construction repaired 3 manholes on Highway 76 due to wear and tear

## Smart/Cover Alarm Units:

Added (2) new smart covers to existing collection system:
Installed on February 24, 2017
Los Padres Drive I-6, Manhole \#11
Tecalote Drive - G-6, Manhole \#5
Increased from 11 units to 13 units within system to monitor collections sewage system to avoid sanitary sewer overflows.

## EMPLOYEE RECOGNITION - OPERATIONS DIVISION:

## District's Monthly "Excellence Program" Coin Award Winners

1) Ramon Zuniga - Responsibility
2) Brian Fonseca \& Bryan Rose - Professionalism
3) Brian Fonseca - Teamwork


BOARD INFORMATION

## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

Engineering Report for February 2017

## DESCRIPTION

## CAPITAL PROJECTS:

Condition Assessment of Water Facilities: Received five proposals. Staff and two Engineering Committee members are conducting evaluations.

Gird to Monserate Hill: Bid documents pending management review/approval. CEQA in process.
Horse Creek Lift Station: Developer started construction.
Highway 76 East Segment: Contractor is raising manholes to finish grade and rehabilitating five existing manholes, including installing additional manholes.

Knottwood Way Waterline Improvements: Bid documents completed. Staff is coordinating with the Developer.

Lift Station 1 Replacement: Staff is working with property owner to purchase site on Thoroughbred. Staff reviewing the $100 \%$ submittal received on January 24, 2017.

Pump Station \#1 Upgrades: Project at 30\% design. Change order for building rehabilitation and electrical relocation has been executed.

Water / Wastewater Asset Cost \& Capacity Fee Study: Staff reviewing final capacity fee study.
Water Reclamation Plant (WRP) \& Recycled Water Distribution System (RWDS): Staff is continuing talks with Oceanside to determine options for indirect potable reuse or recycled water delivery.

Wastewater Outfall Replacement: Project on hold until further evaluation from local water alternatives.

Weese Filtration Plant Interconnect: Received one proposal. Staff conducting evaluation.

## OTHER PROJECTS:

Moosa Creek Mitigation Bank: Staff working with Consultant on easements.
San Luis Rey Ground Water Sources: Investigating the feasibility of combining a ground water
treatment project with indirect potable reuse.

## DEVELOPER PROJECTS:

Golf Green Estates: (near Lift Station 1): 94 SFR planned across from Bonsall Elementary School. Contractor installing 8 " onsite sewerline and 8 " onsite waterline.

Horse Ranch Creek Ridge (D.R. Horton - formally Campus Park, Passerelle): 850 WM / 850 EDUs Off of Highway 76 and Horse Ranch Creek Road. Staff is reviewing submittals. The Contractor has begun grading and construction of the lift station on Pankey Road, in addition to installing the gravity sewer within Horse Ranch Creek Road.

Malabar Ranch: 31 WMs / 29 EDUs - There are 17 out of 31 homes built. Contractor shall complete waterline relocation and punch list items.

Nessy Burger: Nessy Burger's is proposing to install a permanent building. Plan check two completed.

Paba Mesa Highlands: 124 Lots on Old Highway 395. Contractor started grading. Staff reviewing submittal.

Topa Topa: 11 Lots on Sterling View Drive. Plan check four completed.

## OTHER:

| ITEMS | NO\# | ITEMS | NO\# |
| :--- | :---: | :--- | :---: |
| Water Availability Letters | 1 | Water Meters Purchased | 1 |
| Sewer Availability Letters | 1 | Sewer EDUs Purchased | 1 |
| Water Commitment Letters | 0 | Developer Shutdowns | 0 |
| Sewer Commitment Letters | 0 | Jobs Closed: Olive Hill Estates | 0 |



Sherry Kirkpatrick
Engineering Manager

## BOARD OF DIRECTORS

March 15, 2017

SUBJECT
Customer Service \& Meter Services

## DESCRIPTION

## METER SERVICES:

Meter Services completed 628 service orders. Here is a summary of the most pertinent service orders shown by category.

| SERVICE ORDERS | COMPLETED |
| :--- | :--- |
| Check Reads | 421 |
| Transfers | 61 |
| Locked | 16 |
| Unlocked | 9 |
| Pressure Calls | 10 |
| Meter Leaks | 30 |
| Drought | 0 |

## CUSTOMER SERVICE \& METER SERVICES:

Nothing to report


## BOARD OF DIRECTORS

March 28, 2017

## SUBJECT

HUMAN RESOURCES REPORT FOR FEBRUARY/MARCH 2017

## DESCRIPTION

Personnel changes, human resources activities, and safety report for February/March 2017

## PERSONNEL CHANGES:

No changes to full time employees.
Customer Service Department will have a temporary employee from a staffing agency for a 3-5-month assignment. This temporary help will improve the level of service we can deliver to customers by reducing hold times and time to process service orders until we can install an improved phone system.

## WORKFORCE TRAINING AND DEVELOPMENT:

## Leadership Team Development

On February 21, the Superintendents met with the Michele Tamayo of the Tamayo Group and the Senior Leadership Team to review the important leadership role that Superintendents play at the District, as well as to review our values and how they, as leaders, can help bring them to life.

## Values in Action

On March 2, we held an all-hands workshop facilitated by the Tamayo Group. Each department delivered a presentation that answered four key questions: what we do, how we do it, what frustrates us, and what inspires us. The goal was to develop a greater understanding of operational challenges, develop empathy, and break down silos. The presentations were followed by breakout sessions to identify specific behaviors that all employees can exhibit to bring our values to life. These behavioral "anchors" will be used as criteria for the Coin recognition program and in future performance evaluations.

## Sexual Harassment Prevention Training

The bi-annual sexual harassment prevention training is scheduled for April ${ }^{\text {nd }}$. Alisa Shorago, JD will deliver the legally mandated AB1825 training for supervisory employees as well as a more general workshop for employees who are individual contributors.

## Workplace Civility Training (Anti-Bullying)

The Human Resources Manager is planning civility training in May with Catherine Mattice, SPHR, SHRM-SCP of Civility Partners, a leading author, speaker, award-winning blogger, and expert witness on the topics of workplace bullying and building positive workplaces. This is an important step in shifting and shaping a positive and productive culture for the future.

## NEOGOV IMPLEMENTATION:

## Onboard Module

The implementation process for the second module, Onboard, is still in progress and has been delayed by other operational priorities. Onboard will function as an employee intranet, with forms, activity checklists, and document libraries all housed within the system. This will help facilitate improved internal communications and more efficient processes.

## Perform Module

The Perform Module is how we will shift our performance evaluation process to an online process that promises to be more efficient, useful, and meaningful to employees. Kickoff for implementation of this module is expected to begin immediately following completion of Onboard.

## EMPLOYEE RECOGNITION:

## Values Coin Awards

For the month of February, fourteen (14) employees were nominated for Values coins. The selection committee made the final selections of the winners, which were announced at the all-hands meeting on March $2^{\text {nd }}$. The February recipients were:

| Integrity | Michael Powers - Engineering |
| :--- | :--- |
| Innovation | Cynthia Gray - Administration |
| Responsibility | Ramon Zuñiga - Wastewater |
| Professionalism | Brian Fonseca - Wastewater, and Bryan Rose - Valve Maintenance |
| Teamwork | Brain Fonseca - Wastewater |

## BENEFITS:

## Lincoln Financial

Lincoln Financial is scheduled to come meet with individual employees regarding their 457 plan investments on March 23.

## LABOR RELATIONS:

## Compensation and Benefits Study

Nyhart Compensation Services is in the process of collecting data from the District and all comparator agencies. Target date for consultant to present the results of the study to the Board is at the May board meeting.

## Negotiations

Initial negotiation meetings with all three employee associations began on March $15^{\text {th }}$, as required by each MOU. Target date for completion of negotiations is June 8th, so that the new MOUs can be presented to the Board for approval at the June board meeting.

## SAFETY:

## Security Camera System

The Human Resources Manager, IT Administrator, Operations Manager, and Safety Administrator are working on upgrading the security cameras at the District offices and yard. The project team met to determine ideal locations for security cameras.

## Ergonomics

Sit/stand workstations were purchased for the Boardroom, and have been ordered for the Customer Service window, and two other employees' offices.

## Safety Committee

The Safety Committee defined positions for committee members and appointed specific members to fill each role, as follows:

Chair Karleen Harp
Vice Chair Jeff Stacy
Innovation Liaison Darren Milner
Office Safety Coordinator Michael Powers

## Office Safety Program

The office safety meeting was conducted on February $16^{\text {th }}$. Due to a last minute scheduling change, the Safety Administrator was unavailable for the meeting and the newly appointed Office Safety Coordinator, Michael Powers ran the meeting and facilitated a discussion based on the "It's a Jungle Out There" office safety booklet.

## Incidents

It has been 481 days since our last worker's compensation claim.
It has been 791 days since our last lost time injury.

## Safety Training

Target Solutions: 21 completions for February 2017
Tailgate Training:
Hazard Communication: 33 Employees
Confined Spaced Entry: 32 Employees
Rigging and Slings: 26 Employees


## General Ledger

Interim Financials
Period: Jan-17




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## General Ledger

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## E01 Sub Totals:

## Revenue Sub Totals:

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## General Ledger

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## General Ledger Budget Status <br> Period：Jan－17



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E15



E05 Sub Totals：
WATER OPERATION EXPENSES
Electronics
Equipment Maintenance／Repairs Equipment Maintenance Contract
Building Maintenance

Building Maintenance
Supplies And Services
Tank Maintenance Regulatory Permits

Dues \＆Subscriptions
Printing \＆Reproductions
Small Tools And Equipment
Small Tools And Equipment
Travel／Conf／Training Utilities

Capital Equipment

## General Ledger



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| Description |
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| Expense Sub Totals： |
| Dept 32 Sub Totals： |
| VALVE MAINTENANCE |
| PAYROLL \＆EMPLOYEE EXPENSES |
| Regular Salaries |
| Overtime Paid，Comptime Earn． |
| Employer＇S Share Fica Ssi |
| Employer＇S Share Fica Medicare |
| Medical Ins Acwa Health Ben |
| Dental Insurance |
| Vision Ins Acwa |
| Life，S／T，L／T Disability Ins |
| Retirement－Calpers |
| Employee Training／Tuition Reim |
| Worker＇S Compensation Ins |
| State Unemployment Ins，E．T．T． |
| Deferred Comp－Employer Contrib |
| E05 Sub Totals： |
| VALVE MAINTENANCE EXPENSES |
| Supplies And Services |
| Small Tools And Equipment |
| Travel／Conferences／Training |
| Shop And Field Equipment |
| E20 Sub Totals： |
| Expense Sub Totals： |
| Dept 33 Sub Totals： |

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## General Ledger

 Budget StatusPeriod: Jan-17 Account Number
PAYROLL \& EMPLOYEE EXPENSES




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## General Ledger

 Budget StatusPeriod: Jan-17
Account Number

| Account Number |  | Description |
| :---: | :---: | :---: |
| Dept | 01-35 | METER SERVICES |
| E05 |  | PAYROLL \& EMPLOYEE EXPENSES |
| 01-35-56101 |  | Regular Salaries |
| 01-35-56103 |  | Overtime Paid, Comptime Earn. |
| 01-35-56501 |  | Employer'S Share Fica Ssi |
| 01-35-56502 |  | Employer'S Share Fica Medicare |
| 01-35-56503 |  | Medical Ins Acwa Health Ben |
| 01-35-56504 |  | Dental Insurance |
| 01-35-56505 |  | Vision Ins Acwa Serv Corp |
| 01-35-56506 |  | Life, S/T, L/T Disability Ins |
| 01-35-56507 |  | Retirement - Calpers |
| 01-35-56512 |  | Employee Training/Tuition Reim |
| 01-35-56515 |  | Worker'S Compensation Ins |
| 01-35-56516 |  | State Unemployment Ins, E.T.T. |
| 01-35-56520 |  | Deferred Comp-Employer Contrib |
| 01-35-56524 |  | OTHER POST EMPLOYMENT BENEFITS |
|  |  | E05 Sub Totals: |
| E30 |  | METER SERVICES EXPENSES |
| 01-35-63404 |  | Backflow Expenses |
| 01-35-72000 |  | Supplies \& Services |
| 01-35-73000 |  | Small Tools And Equipment |
| 01-35-75300 |  | Replacement Reserve-Oceanside |
| 01-35-82000 |  | Shop And Field Equipment |
|  |  | E30 Sub Totals: |
|  |  | Expense Sub Totals: |
|  |  | Dept 35 Sub Totals: |
| Dept | 01-41 | ADMINISTRATION/HR |
| E15 |  | WATER OPERATION EXPENSES |
| 01-41-72000 |  | Supplies And Services |
|  |  | E15 Sub Totals: |

General Ledger Budget Status Period：Jan－17
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Expense Sub Totals:

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## R30 Sub Totals：


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## General Ledger <br> Budget Status Period: Jan-17

Account Number

| WASTEWATER |
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| PAYROLL \& EMPLOYEE EXPENSES |
| Regular Salaries |
| Overtime Paid, Comp Time Earn. |
| Employer'S Share Fica Ssi |
| Employer'S Share Fica Medicare |
| Medical Ins Acwa Health Ben |
| Dental Insurance |
| Vision Ins Acwa |
| Life, S/T,L/T Disability Ins |
| Retirement-Calpers |
| Employee Training/Tuition Reim |
| Worker'S Compensation Ins |
| State Unemployment Ins, E.T.T. |
| Duty Pay |
| Deferred Comp-Employer Contrib |
| Other Post Employment Benefits |
| E05 Sub Totals: |
| WASTEWATER EXPENSES |
| Equipment |
| Equipment Maintenance-Sewer |
| Building Maintenance |
| Professional Services |
| Legal Services |
| Supplies And Services-Sewer |
| Regulatory Permits |
| Books And Resources |
| Dues And Subscriptions |
| Sewer Line Cleaning |
| Small Tools And Equipment |
| Travel/Conferences/Training |
| Sewage Treat.-Oceanside Plant |


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|  | Dept 00 Sub Totals: |
| Dept |  |
| E05 |  |
| $02-61-56101$ | WASTEWATER |
| $02-61-56103$ | PAYROLL \& EMPLOYEE EXPENSES |
| $02-61-56501$ | Regular Salaries |
| $02-61-56502$ | Overtime Paid, Comp Time Earn. |
| $02-61-56503$ | Employer'S Share Fica Scsi |
| $02-61-56504$ | Employer'S Share Fica Medicare |
| $02-61-56505$ | Medical Ins Acwa Health Ben |
| $02-61-56506$ | Dental Insurance |
| $02-61-56507$ | Vision Ins Acwa |
| $02-61-56512$ | Life, S/T,L/T Disability Ins |
| $02-61-56515$ | Retirement-Calpers |
| $02-61-56516$ | Employee Training/Tuition Reim |
| $02-61-56518$ | Worker'S Compensation Ins |
| $02-61-56520$ | State Unemployment Ins, E.T.T. |
| $02-61-56524$ | Duty Pay |
|  | Deferred Comp-Employer Contrib |
|  | Other Post Employment Benefits |
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| E05 Sub Totals: |  |
| E60 |  |
| $02-61-60000$ | WASTEWATER EXPENSES |
| $02-61-63100$ | Equipment |
| $02-61-63401$ | Equipment Maintenance-Sewer |
| $02-61-70000$ | Building Maintenance |
| $02-61-70300$ | Professional Services |
| $02-61-72000$ | Legal Services |
| $02-61-72150$ | Supplies And Services-Sewer |
| $02-61-72200$ | Regulatory Permits |
| $02-61-72400$ | Books And Resources |
| $02-61-72600$ | Dues And Subscriptions |
| $02-61-73000$ | Sewer Line Cleaning |
| $02-61-75300$ | Small Tools And Equipment |
| $02-61-77000$ | Travel/Conferences/Training |
|  | Sewage Treat.-Oceanside Plant |
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Description

## General Ledger

## Budget Status

Period: Jan-17
Account Number

| Account Number | Description |
| :--- | :--- |
| $02-61-77100$ | Replacement Reserve-Oceanside |
| $02-61-78000$ | Utilities |
| $02-61-78300$ | Hazardous Waster Material Disp |
| $02-61-78700$ | Utilities-Propane |
| $02-61-82000$ | Shop And Field Equipment |
|  | E60 Sub Totals: |
|  |  |
|  | Expense Sub Totals: |
|  |  |
|  | Dept 61 Sub Totals: |
|  | Fund Revenue Sub Totals: |
|  | Fund Expense Sub Totals: |
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|  | Fund 02 Sub Totals: |
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|  | GENERAL FUND |
|  |  |
|  | OTHER REVENUE |
| Fund | Overhead Trs From Water, Sewer |
| Dept | Operating Inc Penalty/Int Chgs |
| R70 | Operating Inc Plan Check Rev. |
| $03-00-42200$ | Non Oper Inc-Rents And Leases |
| $03-00-43102$ | Miscellaneous Revenue |
| $03-00-43108$ | MISC Revenue - Eng. Services |
| $03-00-49108$ |  |

[^52] E05 Sub Totals:
Period: Jan-17







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ADMINISTRATION \＆HR EXPENSES
Employee Relations Employee Relations

Equipment Maintenance Contract Equipment Rental

Kitchen Supplies
Building Maintenance Property／Liability Insurance District Paid Insurance Claims Professional Services Legal Services Supplies And Services Books And Resources Dues And Subscriptions Public Notices／Advertising Stationary \＆Office Supplies Communicatons \＆Phone Bills Phone Bill

Travel／Conferences／Training Utilities－Electricity

Utilities－Propane Trash Pick－Up E40 Sub Totals：

Expense Sub Totals：
Dept 41 Sub Totals：
SAFETY SAFETY

PAYROLL \＆EMPLOYEE EXPENSES Regular Salaries

Overtime Paid，Comp Time Earn． Employer＇S Share Fica Ssi



## Account Number <br> Description

| Account Number | Description |
| :---: | :---: |
| E40 | ADMINISTRATION \＆HR EXPENSES |
| 03－41－56513 | Employee Relations |
| 03－41－60100 | Computers |
| 03－41－63102 | Equipment Maintenance Contract |
| 03－41－63200 | Equipment Rental |
| 03－41－63400 | Kitchen Supplies |
| 03－41－63401 | Building Maintenance |
| 03－41－65000 | Property／Liability Insurance |
| 03－41－65100 | District Paid Insurance Claims |
| 03－41－70000 | Professional Services |
| 03－41－70300 | Legal Services |
| 03－41－72000 | Supplies And Services |
| 03－41－72200 | Books And Resources |
| 03－41－72400 | Dues And Subscriptions |
| 03－41－72702 | Public Notices／Advertising |
| 03－41－72900 | Stationary \＆Office Supplies |
| 03－41－74000 | Communicatons \＆Phone Bills |
| 03－41－74100 | Phone Bill |
| 03－41－75300 | Travel／Conferences／Training |
| 03－41－78000 | Utilities－Electricity |
| 03－41－78700 | Utilities－Propane |
| 03－41－78900 | Trash Pick－Up |
|  | E40 Sub Totals： |
|  | Expense Sub Totals： |
|  | Dept 41 Sub Totals： |
| Dept 03－43 | SAFETY |
| E05 | PAYROLL \＆EMPLOYEE EXPENSES |
| 03－43－56101 | Regular Salaries |
| 03－43－56103 | Overtime Paid，Comp Time Earn． |
| 03－43－56501 | Employer＇S Share Fica Ssi |
| 03－43－56502 | Employer＇S Share Fica Medicare |
| 03－43－56503 | Medical Ins Acwa Health Ben |

## General Ledger <br> Budget Status Period: Jan-17

## Account Number




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YTD Variance Encumbered Available

YTD Amount
Budget Amount Period Amount



| $\tilde{\sim}_{0}^{\infty}$ |  |
| :---: | :---: |
| $\begin{aligned} & \stackrel{\circ}{\infty} \\ & \underset{\infty}{\infty} \end{aligned}$ | 守 |


| Account Number | Description |
| :--- | :--- |
|  | 03-43-56504 |
| $03-43-56505$ | Dental Insurance |
| $03-43-56506$ | Vision Ins Acwa |
| $03-43-56507$ | Life, S/T,L/T Disability Ins |
| $03-43-56512$ | Retirement-Calpers |
| $03-43-56515$ | Employee Training/Tuition Reim |
| $03-43-56516$ | Worker'S Compensation Ins |
| $03-43-56520$ | State Unemployment Ins, E.T.T. |
| $03-43-56524$ | Deferred Comp-Employer Contrib |
|  | Other Post Employment Benefits |
|  | E05 Sub Totals: |
|  |  |
| E45 | SAFTEY COMPLIANCE EXPENSES |
| $03-43-63100$ | Equipment Maintenance |
| $03-43-63102$ | Equipment Maintenance Contract |
| $03-43-72000$ | Supplies And Services |
| $03-43-72200$ | Books And Resources |
| $03-43-72400$ | Dues And Subscriptions |
| $03-43-72500$ | Safety Supplies |
| $03-43-73000$ | Small Tools And Equipment |
| $03-43-75300$ | Travel/Conferences/Training |
|  |  |
|  | E45 Sub Totals: |
|  | Expense Sub Totals: |
|  |  |

## General Ledger

 uo! ! d!..0s?Account Number


## General Ledger

Account Number

| Account Number | Description |
| :---: | :---: |
| 03-52-56516 | State Unemployment Ins, E.T.T. |
| 03-52-56520 | Deferred Comp-Employer Contrib |
| 03-52-56524 | Other Post Employment Benefits |
|  | E05 Sub Totals: |
| E55 | CUSTOMER SERVICE EXPENSES |
| 03-52-56508 | Employee Sick Leave |
| 03-52-63100 | Equipment Maintenance |
| 03-52-69110 | Bad Debt Exp/Billing Adjust'S |
| 03-52-72000 | Supplies And Services |
| 03-52-72700 | Printing And Reproductions |
| 03-52-75300 | Travel/Conferences/Training |
|  | E55 Sub Totals: |
|  | Expense Sub Totals: |
|  | Dept 52 Sub Totals: |
| Dept 03-91 | ENGINEERING |
| E05 | PAYROLL \& EMPLOYEE EXPENSES |
| 03-91-56101 | Regular Salaries |
| 03-91-56103 | Overtime Paid, Comp Time Earn. |
| 03-91-56501 | Employer'S Share Fica Ssi |
| 03-91-56502 | Employer'S Share Fica Medicare |
| 03-91-56503 | Medical Ins Acwa Health Ben |
| 03-91-56504 | Dental Insurance |
| 03-91-56505 | Vision Ins Acwa |
| 03-91-56506 | Life, S/T,L/T Disability Ins |
| 03-91-56507 | Retirement-Calpers |
| 03-91-56512 | Employee Training/Tuition Reim |
| 03-91-56515 | Worker'S Compensation Ins |
| 03-91-56516 | State Unemployment Ins, E.T.T. |
| 03-91-56520 | Deferred Comp-Employer Contrib |
| 03-91-56524 | Other Post Employment Benefits |

## General Ledger


YTD Variance Encumbered Available \% Available





YTD Amount
Budget Amount Period Amount
$783606 \quad 60012$

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## Accounts Payable

January American Express Detail

| Check Number Check Date |  | Amount |
| :---: | :---: | :---: |
| 245 - ABCANA INDUSTRIES Line Item Account |  |  |
| 2081701 02/08/2017 |  |  |
| Inv 1000230 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/12/2017 HYPOCHLORITE SOLUTION BULK DELIVERY AND SODIUN | 01-32-72000 | 694.96 |
| Inv 1000230 Total |  | 694.96 |
| Inv 999619 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 12/22/2016 HYPOCHLORITE SOLUTION BULK DELIVERY AND SODIUN | 01-32-72000 | 1,161.24 |
| Inv 999619 Total |  | 1,161.24 |
| 2081701 Total: |  | 1,856.20 |
| 245 - ABCANA INDUSTRIES Total: |  | 1,856.20 |
| 280 - AMAZON.COM Line Item Account |  |  |
| 2081702 02/08/2017 |  |  |
| Inv 0355901-1123479 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/24/2017 (4) DELL DUAL MONITOR STAND | 03-41-60100 | 317.96 |
| Inv 0355901-1123479 Total |  | 317.96 |
| Inv 0815667-4925830 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/24/2017 CABLE MATTERS RACK OR WALL MOUNT 24-PORT KEYST( | 03-41-60100 | 29.07 |
| Inv 0815667-4925830 Total |  | 29.07 |
| Inv 1825743-1683435 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/12/2017 . 100 PCS 1/2" 13MM CLEAR PVC LED ROPE LIGHT HOLDER $\downarrow$ | 03-36-72000 | 9.66 |
| Inv 1825743-1683435 Total |  | 9.66 |
| Inv 2105587-7665052 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/25/2017 KOHLER 17083 21-S AIR FILTER ELEMENT | 03-36-63000 | 14.14 |

Inv 2105587-7665052 Total

Inv 2391173-3113036
Line Item Date Line Item Description
Line Item Account
$03-41-60100$$\quad 40.23$

Inv 2391173-3113036 Total

Inv 3064598-2653805
$\frac{\text { Line Item Date }}{01 / 04 / 2017} \quad$ Line Item Description $\quad$ ENERGIZER BATTERIES 319 SILVER OXIDE WATCH BATTER

Inv 3064598-2653805 Total
Line Item Account
$02-61-72000$$\quad 5.39$
Line Item Account
$03-41-72900$ 18.34
Line Item Account
$02-61-72000$$\quad 5.50$

Inv 3925175-8780227 Total

Inv 4550987-3175460

| Line Item Date | Line Item Description | Line Item Account |  |
| :---: | :---: | :---: | :---: |
| 01/13/2017 | RHINO LABEL MAKER KIT | 01-32-72000 | 139.64 |
| Inv 4550987-3175460 Total |  |  | 139.64 |
| Inv 5867210-1311452 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/24/2017 | CAR CHARGER, POWERDRIVE WITH APPLE MFI-CERTIFIEL | 03-41-60100 | 150.70 |

Inv 5867210-1311452 Total 150.70

Inv 6279079-7348232

| Line Item Date | Line Item Description | Line Item Account |  |
| :---: | :---: | :---: | :---: |
| 01/18/2017 | CABLE MATTER 1U 19INCH RACK MOUNT SHELF \& SCREM | 03-41-60100 | 117.06 |
| Inv 6279079-7348232 Total |  |  | 117.06 |
| Inv 6689794-1797007 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/10/2017 | INDUSTRIAL LABELS \& REUSABLE FASTENING CABLE, | 03-41-60100 | 53.07 |
| Inv 6689794-17 | Total |  | 53.07 |


| Inv 7908569-2241818 |  |  |
| :---: | :---: | :---: |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/25/2017 EXTENSION POWER CORD 10-FOOT, 20 AMPS/125V, 12AWG | 03-41-60100 | 65.98 |
| Inv 7908569-2241818 Total |  | 65.98 |
| Inv 8840626-7461839 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/24/2017 WIFI VISION PRO AND WIRELESS INDOOR SENSOR | 03-41-60100 | 215.85 |
| Inv 8840626-7461839 Total |  | 215.85 |
| Inv 9287138-9534614 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/04/2017 JUICED SYSTEMS MICROSOFT SURFACE PRO 3-4 IN 1 ADA | 02-61-72000 | 34.97 |
| Inv 9287138-9534614 Total |  | 34.97 |
| Inv 9581050-4329055 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/04/2017 MICROSOFT SURFACE PEN FOR SURFCE PRO 3 | 02-61-72000 | 47.41 |
| Inv 9581050-4329055 Total |  | 47.41 |
| 2081702 Total: |  | 1,264.97 |
| 280 - AMAZON.COM Total: |  | 1,264.97 |
| 220 - APPLE, INC Line Item Account |  |  |
| 2081703 02/08/2017 |  |  |
| Inv W563200729 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/05/2017 APPLE TV 64GB, 01-14-17 EMPLOYEE RECOGNITION RAFFL | 03-41-56513 | 214.42 |
| 01/05/2017 SHOP WITH MR. POINTS - PURCHASE AMEX CREDIT (APPL] | 03-41-56513 | -214.42 |
| Inv W563200729 Total |  | 0.00 |
| 2081703 Total: |  | 0.00 |
| 220 - APPLE, INC Total: 0 |  |  |
| 603247 - BIZCHAIR.COM Line Item Account |  |  |
| 2081704 02/08/2017 |  |  |
| Inv 904362 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/04/2017 NAVY VINYL LUXURIOUS CONFERENCE CHAIR WITH CAS | 03-41-63401 | 387.96 |
| Inv 904362 Total |  | 387.96 |


| Check Number | Check Date |  | Amount |
| :---: | :---: | :---: | :---: |
| 2081704 Total: |  |  | 387.96 |
| 603247 - BIZCHAIR | COM Total: |  | 387.96 |
| 4970 - BRADY SAND \& MATERIAL, INC. Line Item Account |  |  |  |
| Inv 72923 |  |  |  |
| $\frac{\text { Line Item Date }}{12 / 14 / 2016}$ | Line Item Description CLASS II BASE, COLD MIX, 3/4" ROCK THE YARD + TRUCKI | $\frac{\text { Line Item Account }}{01-34-72000}$ | 1,779.29 |
| Inv 72923 Total |  |  | 1,779.29 |
| Inv 72924 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/04/2017 | CL II THE YARD, TRUCKING FEE | 01-34-72000 | 1,809.24 |
| Inv 72924 Total |  |  | 1,809.24 |
| Inv 75870 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/14/2016 | SPLIT LOAD CHARGE TRUCKING FEE, THE YARD CL2 + TR1 | 01-34-72000 | 427.67 |
| Inv 75870 Total |  |  | 427.67 |
| Inv 75871 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/14/2016 | THE YARD, COLD MIX, TRUCKING FEE | 01-34-72000 | 1,225.79 |
| Inv 75871 Total |  |  | 1,225.79 |
| Inv 75887 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/04/2017 | CL II, THE YARD, TRUCKING FEE | 01-34-72000 | 1,690.59 |
| Inv 75887 Total |  |  | 1,690.59 |
| 2081705 Total: |  |  | 6,932.58 |
| 4970 - BRADY SAND \& MATERIAL, INC. Total: |  |  | 6,932.58 |
| 2885 - CORELOGIC INFORMATION Line Item Account |  |  |  |
| 2081706 02/08/2017 |  |  |  |
| Inv 81760393 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/31/2016 | REALQUEST.COM SALE DOC IMAGE | 03-91-63102 | 50.00 |
| Inv 81760393 T |  |  | 50.00 |


| Inv 81760625 |  |  |
| :---: | :---: | :---: |
| Line Item Date Line Item Description | Line Item Account |  |
| 12/31/2016 REALQUEST.COM MAP SEARCH, GEOGRAPHIC PACKAGE | 03-91-63102 | 192.50 |
| Inv 81760625 Total |  | 192.50 |
| 2081706 Total: |  | 242.50 |
| 2885 - CORELOGIC INFORMATION Total: |  | 242.50 |
| 2027 - CULLIGAN OF ESCONDIDO Line Item Account |  |  |
| 2081707 02/08/2017 |  |  |
| Inv 123116 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/02/2017 WATER SOFTNER | 03-41-63401 | 73.00 |
| Inv 123116 Total |  | 73.00 |
| 2081707 Total: |  | 73.00 |
| 2027 - CULLIGAN OF ESCONDIDO Total: |  | 73.00 |
| 2760 - FALLBROOK CHAMBER OF COMMERCE Line Item Account |  |  |
| 2081708 02/08/2017 |  |  |
| Inv 20362066514 |  |  |
| Line Item Date <br> Line Item Description | Line Item Account |  |
| 01/13/2017 <br> NEW MEMBERSHIP | $03-41-72400$ | 295.00 |
| Inv 20362066514 Total |  | 295.00 |
| Inv 20362068835 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/13/2017 EXPO FEE | 03-41-72400 | 40.00 |
| Inv 20362068835 Total |  | 40.00 |
| Inv 20385073385 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/26/2017 AVOCADO FESTIVAL BOOTH RECEIPT \#315 | 03-41-72400 | 100.00 |
| Inv 20385073385 Total |  | 100.00 |
|  |  |  |
| 2760 - FALLBROOK CHAMBER OF COMMERCE Total: |  | 435.00 |
| 603283 - GLOBAL EQUIPMENT COMPANY INC. Line Item Account |  |  |


Inv 9275131739

| Line Item Date |  | Line Item Description | Line Item Account |
| :--- | :--- | ---: | ---: |
| $11 / 08 / 2016$ |  | TRENCHING SHOVEL P/N - S1012 | $01-00-14610$ |
| $11 / 08 / 2016$ | 4" PAINT BRUSH P/N - K1055 | $01-00-14610$ |  |
| $11 / 08 / 2016$ |  | WIRE BRUSH LARGE P/N - K1054 | $01-00-14610$ |
| $11 / 08 / 2016$ | SQUARE SHOVEL P/N - S1029 | $01-00-14610$ |  |
| $11 / 08 / 2016$ | TEFLON PIPE DOPE $1 / 2$ PINT P/N - K1089 | $01-00-14610$ |  |
| $11 / 08 / 2016$ | PREM WET \& DRY CEMENT 1/2 PT P/N - K1086 | $01-00-14610$ |  |
| $11 / 08 / 2016$ | PRIMER CLEANER PURPLE 8OZ P/N - K1082 | $01-00-14610$ |  |
| $11 / 08 / 2016$ | HACK SAW BLADES P/N - K1004 | 05.77 |  |
|  |  | $01-00-14610$ |  |
| Inv 9275131739 Total |  |  |  |

Inv 9275811223
$\frac{\text { Line Item Date }}{11 / 08 / 2016} \quad$ Line Item Description $\quad$ HIGH PRESSURE SODIUM LAMP

Inv 9275811223 Total

Inv 9295913256
Line Item Date
Line Item Description
ALUMINUM PIPE WRENCH, 18 ' \& 24"

Inv 9295913256 Total

Inv 9315793662
Line Item Date
Line Item Description
Line Item Account
12/27/2016
TORQUE WRENCH HEAD, BOX END, 13/16 IN. AND 1 IN

Inv 9315793662 Total
01-34-72000
376.82

Inv 9317283688

| Line Item Date | Line Item Description |
| :---: | :---: |
| 12/28/2016 | WIRE WHEEL P/N - K7777 |
| 12/28/2016 | GRINDING WHEEL 4-1/2" X 1/4" |

Inv 9317283688 Total

| Line Item Account |  |
| ---: | ---: |
| $01-00-14610$ | 201.84 |
| $01-00-14610$ | 26.30 |

Inv 9321582117

| Line Item Date | Line Item Description | Line Item Account |  |
| :---: | :---: | :---: | :---: |
| 01/04/2017 | HAZARD MARKING TAPE, 2 IN., BLCK/YELLOW | 03-41-63401 | 15.84 |
| Inv 9321582117 Total |  |  | 15.84 |
| Inv 9321582125 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/04/2017 | TRADESMANS VISE, 17-5/16IN. LX9-7/64IN.W | 01-35-82000 | 1,331.00 |
| Inv 9321582125 Total |  |  | 1,331.00 |

Inv 9324035055
Line Item Date Line Item Description Line Item Account

| Check Number | Check Date |  | Amount |
| :---: | :---: | :---: | :---: |
| 01/06/2017 | SAFETY RED SPRAY PAINT P/N - PA1022 | 01-00-14610 | 98.60 |
| 01/06/2017 | WD-40 P/N - PA1005 | 01-00-14610 | 101.37 |
| 01/06/2017 | WHITE GLOSS SPRAY PAINT P/N - PA1043 | 01-00-14610 | 19.71 |
| 01/06/2017 | WHITE MARKING PAINT P/N - PA1002 | 01-00-14610 | 37.89 |
| 01/06/2017 | SAFETY YELLOW SPRAY PAINT P/N - PA1016 | 01-00-14610 | 138.03 |
| 01/06/2017 | BLUE MARKING PAINT P/N - PA1004 | 01-00-14610 | 37.89 |
| Inv 9324035055 | 5 Total |  | 433.49 |
| Inv 9329590062 |  |  |  |
| Line Item Date | $\underline{\text { Line Item Description }}$ | Line Item Account |  |
| 01/12/2017 | PLUG IN RELAY, 8 PINS \& 11 PINS | 01-31-72000 | 178.89 |
| Inv 9329590062 Total |  |  | 178.89 |
| 2081711 Total: |  |  | 4,197.87 |
| 3325 - GRAINGER, W.W. INC. Total: |  |  | 4,197.87 |
| 5425 - OFFICE DEPOT Line Item Account |  |  |  |
| 2081712 02/08/2017 |  |  |  |
| Inv 890722537001 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| $12 / 29 / 2016$ | DESKPAD, PLANNER | 03-41-72900 | 44.30 |
| Inv 890722537001 Total |  |  | 44.30 |
| Inv 890722692001 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/29/2016 | IPHONE 5 CASE | 03-41-72900 | 43.73 |
| Inv 890722692001 Total |  |  | 43.73 |
| Inv 892282623001 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/05/2017 | DESKPAD, WALLCAL, TONER, FOLDER, TONER | 03-41-72900 | 369.38 |
| Inv 892282623001 Total |  |  | 369.38 |
| Inv 892282684001 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/05/2017 | FILE, EVRYDY LTR, AZ, MBE | 03-41-72900 | 26.93 |
| Inv 892282684001 Total |  |  | 26.93 |
| Inv 893526483001 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/10/2017 | DESKPAD, PRESSBOARD FLRD, CARTRIDGE, TONER CARTF | 03-41-72900 | 291.87 |
| Inv 893526483001 Total |  |  | 291.87 |

Inv 893912888001

| Line Item Date Line Item Description | Line Item Account |  |
| :---: | :---: | :---: |
| 01/12/2017 COPY PAPER: 8.5 X 11, 8.5 X 11 3-HOLE, AND 11 X17 | 03-41-72900 | 1,467.24 |
| Inv 893912888001 Total |  | 1,467.24 |
| Inv 893913723001 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/11/2017 CALENDAR, WALL | 03-41-72900 | 15.51 |
| Inv 893913723001 Total |  | 15.51 |
| Inv 893913775001 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/11/2017 INVISIBLE TAPE | 03-41-72900 | 16.29 |
| Inv 893913775001 Total |  | 16.29 |
| Inv 896131086001 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/19/2017 LABEL, TAPE, PACKAGING SCOTCH TAPE | 03-41-72900 | 91.12 |
| Inv 896131086001 Total |  | 91.12 |

2081712 Total: $2,366.37$

5425-OFFICE DEPOT Total:

5910 - PACIFIC PIPELINE SUPPLY Line Item Account
2081713
Inv 309882
$\frac{\text { Line Item Date }}{01 / 02 / 2017} \quad \frac{\text { Line Item Description }}{\text { BRASS BUSH DOMESTIN 1" X 1/4", PO\# } 0000029038}$

Inv 309882 Total

Inv 311667
Line Item
12/29/2016
Line Item Description
6" 300\# FLANGED DUCTIL 45 P/N - Y1326

Inv 311667 Total

Inv 311676
Line Item Date
Line Item Description
1/2"x 5" BLK IRON NIPPLE P/N - J1404

Inv 311676 Total

Line Item Account
$01-00-14610$$\quad 340.23$

Line Item Account

| Check Number C | Check Date |  | Amount |
| :---: | :---: | :---: | :---: |
| 12/20/2016 | GASKET METER 1/32" RUBBER NEOPRENE 3/4" | 01-35-72000 | 243.09 |
| 12/20/2016 | GASKET METER 1/32" RUBBER NEOPRENE 1" | 01-35-72000 | 254.14 |
| Inv 311677 Total |  |  | 497.23 |
| Inv 311681 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/20/2016 | 1/2" PVC COUP SLPXSLP P/N - H1088 | 01-00-14610 | 5.94 |
| 12/20/2016 | 1/2" PVC SLIP CAP P/N - H1178 | 01-00-14610 | 10.37 |
| Inv 311681 Total |  |  | 16.31 |
| Inv 311746 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/29/2017 | 3" 150\# SCREW FLANGE P/N - K1028 | 01-00-14610 | 151.46 |
| Inv 311746 Total |  |  | 151.46 |
| Inv 311755 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/29/2016 | RESIDENTIAL FIRE HYDRANT1 $1 / 8$ " NUT \& S.D DRILL $7 / 8{ }^{\prime \prime}$ I | 01-00-14610 | 5,337.74 |
| Inv 311755 Total |  |  | 5,337.74 |
| Inv 311930 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/12/2017 | DEEP SOCKET SET ( $\left.15 / 16^{\prime \prime}, 1-1 / 16^{\prime \prime} 1-1 / 4^{\prime \prime} 1-1 / 8^{\prime \prime}\right)$ | 01-33-82000 | 491.34 |
| Inv 311930 Total |  |  | 491.34 |
| 2081713 Total: |  |  | 7,694.30 |
| 5910 - PACIFIC PIPELINE SUPPLY Total: |  |  | 7,694.30 |
| 5635 - PALA MESA RESORT Line Item Account |  |  |  |
| 2081714 02/08/2017 |  |  |  |
| Inv 10156320170 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/13/2017 | REFUND FOR EMPLOYEE RECOGNITION BANQUET 1/14/17 | 03-41-56513 | -46.55 |
| 01/13/2017 | PAYMENT FOR EMPLOYEE RECOGNITION BANQUET 1/14/1 | 03-41-56513 | 730.75 |
| Inv 10156320170 Total |  |  | 684.20 |
| 2081714 Total: |  |  | 684.20 |
| 5635 - PALA MESA RESORT Total: |  |  | 684.20 |
| 5970 - PROCOPIO, CORY, HARGREAVES AND SAVITCH LLP Line Item Account |  |  |  |
| 2081715 02/08/2017 |  |  |  |


| Inv 593609 |  |  |  |
| :---: | :---: | :---: | :---: |
| Line Item Date | Line Item Description | Line Item Account |  |
| 01/11/2017 | PROFESSIONAL SERVICES RENDERED THRU 12/31/16: DAVI | 03-41-70300 | 710.00 |
| Inv 593609 Total |  |  | 710.00 |
| 2081715 Total: |  |  | 710.00 |
| 5970 - PROCOPIO, CORY, HARGREAVES AND SAVITCH LLP Total: |  |  | 710.00 |
| 5976 - PRUDENTIAL OVERALL SUPPLY Line Item Account |  |  |  |
| 2081716 02/08/2017 |  |  |  |
| Inv 130709458 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/06/2016 | MONTHLY UNIFORMS | 03-41-56511 | 217.94 |
| 12/06/2016 | MATS \& MISC | 03-41-63401 | 136.62 |
| Inv 130709458 Total |  |  | 354.56 |
| Inv 130709459 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/06/2016 | MONTHLY UNIFORMS | 03-41-56511 | 96.05 |
| Inv 130709459 Total |  |  | 96.05 |
| Inv 130711009 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/13/2016 | MONTHLY UNIFORMS | 03-41-56511 | 125.92 |
| 12/13/2016 | MATS \& MISC | 03-41-63401 | 6.62 |
| Inv 130711009 Total |  |  | 132.54 |
| Inv 130711010 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/13/2016 | MONTHLY UNIFORMS | 03-41-56511 | 96.05 |
| Inv 130711010 Total |  |  | 96.05 |
| Inv 130712578 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/20/2016 | MATS \& MISC | 03-41-63401 | 136.62 |
| 12/20/2016 | MONTHLY UNIFORMS | 03-41-56511 | 132.77 |
| Inv 130712578 Total |  |  | 269.39 |
| Inv 130712579 |  |  |  |
| Line Item Date | Line Item Description | Line Item Account |  |
| 12/20/2016 | MONTHLY UNIFORMS | 03-41-56511 | 96.05 |
| Inv 130712579 Total |  |  | 96.05 |


| 2081716 Total: |  | 1,044.64 |
| :---: | :---: | :---: |
| 5976 - PRUDENTIAL OVERALL SUPPLY Total: |  | 1,044.64 |
| 603175 - RODRIGUEZ, MANDY Line Item Account |  |  |
| 2081717 02/08/2017 |  |  |
| Inv 022089 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/06/2017 DJ \& MC SERVICES FOR EMPLOYEE RECOGNITION EVENT | 03-41-56513 | 275.00 |
| Inv 022089 Total |  | 275.00 |
| 2081717 Total: |  | 275.00 |
| 603175 - RODRIGUEZ, MANDY Total: |  | 275.00 |
| 603307 - TELEFLORA Line Item Account |  |  |
| 2081718 02/08/2017 |  |  |
| Inv 259022926 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 12/30/2016 FLOWER ARRANGEMENT - ZEN GARDEN - SYMPATHY | 03-41-56513 | 63.94 |
| Inv 259022926 Total |  | 63.94 |
| 2081718 Total: |  | 63.94 |
| 603307 - TELEFLORA Total: |  | 63.94 |
| 603294 - VISTAPRINT Line Item Account |  |  |
| 2081719 02/08/2017 |  |  |
| Inv 3XG0Z-54A23-7N0 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 01/17/2017 RAISED PRINT UV BUSINESS CARDS . QTY 250 | 03-41-72900 | 49.53 |
| Inv 3XGOZ-54A23-7N0 Total |  | 49.53 |
| 2081719 Total: |  | 49.53 |
| 603294 - VISTAPRINT Total: |  | 49.53 |
| 8155 - WESTERN WATER WORKS SUPPLY Line Item Account |  |  |
| 2081720 02/08/2017 |  |  |
| Inv 437475-00 |  |  |
| Line Item Date Line Item Description | Line Item Account |  |
| 12/21/2016 11/2" X 3" PIPE REPAIR CLAMP P/N-K2014 | 01-00-14610 | 207.36 |



| Check Number $\quad$ Check Date | Amount |
| :--- | :--- |
|  | $=$ |
| Total: | $=$ |
|  | $=-$ |


| ZS＇ $29 \varepsilon \quad \$$ |  |  |  |  |  |
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|  |  |  |  | LLOZ－9LOZ 人」 səsuədxヨ s，」0łכə．！！ |  |


|  |  |  |  | $\$$ | 25.00 |  |  | $\$$ | 25.00 |  |  |
| :--- | ---: | :--- | ---: | :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | $\$$ | $(367.52)$ |
| $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 175.00 | $\$$ | 150.00 | $\$$ | 25.00 | $\$$ | - |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 367.52 |  |  |  |  |  |


| $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 |  |  |
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|  |  |  |  |  |  |  |  |  |  |  | $\$$ |
| $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | 150.00 | $\$$ | - |
|  |  |  |  |  |  |  |  |  |  |  |  |


| $\$$ | 150.00 | $\$$ | 150.00 |  |  |  | $\$$ | 150.00 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |


Director's Expenses
FY 2016-2017



| Director's Expenses <br> FY 2016-2017 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dennis <br> Sanford-25 | Helene <br> Brazier-27 | Tory <br> Walker-29 | Richard <br> Bigley | William <br> Stewart | Paul <br> Christensen |
|  |  |  | $\$$ | 367.52 |  |
|  |  |  |  |  |  |

## Bank Reconciliation <br> January Check Register



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Bank Reconciliation

## January Check Register

## Check No.

Vendor/Employee FREEDOM AUTOMATION, INC
HACH
JESUS HERNANDEZ

JOE PERREIRA
SAN DIEGO GAS \& ELECTRIC FREEDOM AUTOMATION, INC

QUALITY FENCE COMPANY

## SAN DIEGO GAS \& ELECTRIC


REPAIR GATE AND FENCE AT MORRO TANK AND REPLACE BARB WIRE
$0 \downarrow 01$
Total for Department: 32 OPERATIONS

## Transaction Description

PLC PROGRAMMING -COMPLETED MAGEE PUMP CONTROL \& BASE SITE COM TOTAL CHLORINE REPLACEMENT VIALS FOR THE SWIFTEST DISPENSER
SWRCB GRADE 5 WATER DISTRIBUTION OPERATOR CERT FEE REIMB FOR AWWA WQ LABORATORY ANALYST GRADE I RENEWAL FEE REIMB FOR SWRCB GRADE T3 CERTIFICATION FEE MONTHLY GAS AND ELECTRIC SERVICE
FIELD SERVICE CALL 12/6/16




$01 / 11 / 2017$
$01 / 24 / 2017$


REIMB CA-NV-AWWA CROSS-CONNECTION CONTROL SPECIALIST RENEWAL HDQ350 3" X 50' DISCHARGE HOSE QUICK COUPLER

Total for Department: 33 VALVE MAINTENANCE

## TRENCH PLATES AND EQUIPMENT, TRUCKING/DELIVER Y/PICKUP FEE

 8X10 TRENCH PLATE RENTAL \& TRUCKING PICK UP FEE SAN LUIS RAY 14" REPAIR3/8" CHAIN FOUNDARY HOOK P/N - OKE-10-10
TRAFFIC CONTROL 12/1/16
RAI88 NEW TICKET CHARGES
REIMB FOR TUITION FEES FOR CSUSM ENVIRONMENTAL WTR ISSUES CLASS REIMB FOR TUITION FEES FOR COOPERATIVE EDUCATION CLASS

TRAFFIC CONTROL RENTALS \& LABOR
3RD QUARTER 2016 - ROAD USE TAX DUE
AFTER HOURS MEAL - 7 EMPLOYEES
ZEP SCENTGARD 4GAL
DR TORQUE WRENCH, 25 PC1 2INDR 30MM GEAR
REIMBURSEMENT FOR A.W.S.D.1.1 WELDING CERTIFICATION CLASS FEE 20 WOOD PALLETS 40 X 48

Total for Department: 34 WATER DISTRIBUTION


| 0 | MISSION VALLEY SANITATION-SD |
| :--- | :--- |
| 52933 | DEPT OF FORESTRY \& FIRE PROTEC |
| 52971 | IFLOW ENERGY SOLUTIONS INC. |

Fund: 02 SEWER FUND Department: 00
0
52978
Department: 61
WASTEWATER
HOME DEPOT
SAN DIEGO GAS \& ELECTRIC
SWRCB ACCOUNTING OFFICE
RAMON ZUNIGA

## Vendor/Employee

## Department: 35 METER SERVICES 0 52933 52971

RMWD \& OAK CREST MHE ANNUAL PERMIT FEE \#9 000000082
Refund Check
Total for Department: 00
$01 / 30 / 2017$
$01 / 19 / 2017$

9,613.58



## January Check Register

## Check No.



$7,465.00$
666.72

| $N$ |
| :---: |
|  |
|  |  |

Date
$01 / 11 / 2017$
$01 / 11 / 2017$
$01 / 19 / 2017$


## Total for Fund:01 WATER FUND <br> Transaction Description <br> DISTRICT WEED ABATEMENT $11 / 2^{\prime \prime}$ MODEL 3101 KAMSTRUP ULTRASONIC WATER METER W/ENCODED OUTP

MONTHLY BIN RENTAL
AUTO BATTERY WITH CORE EXCHANGE
AR FILTER
RMWD COLLECTIONS SYSTEM PERMIT \#9SS010687
AMERICAN WATER WORKS CROSS CONNECTION RENEWAL \#00967
CREDIT ON ACCT-CK\# 51484
ELECTRIC CHARGE
MONTHLY ELECTRIC SERVICE, ACCT: 93804405125
ANNUAL MEMBERSHIP RENEWAL FOR RAMON ZUNIGA ID\# 0002800001I
ADJ WRENCH, TOTE, UTILITY KNNFE, GAS CONN, CLAW, COBALT, 19PC
MONTHLY GAS AND ELECTRIC SERVICE
ANNUAL PERMIT FEE 7/1/166-6/30/17
SHEET METAL, TEKS LATHE, SLEEVE ANCHR, LEAKSEAL
REIMB CWEA COLLECTION SYSTEM MAINT TECH GRADE 4 CERT RENEWAL
Total for Department: 61 WASTEWATER


Bank Reconciliation
January Check Register

## Vendor/Employee

CB\&T / ACWA-JPIA
PLIC-SBD GRAND ISL
MONTHLY HEALTH \& VISION INS-FEB 2017 (COBRA)
MONTHLY INSURANCE - FEBRUARY 2017
Transaction Description
$01 / 11 / 2017$
$01 / 30 / 2017$
886.77
95.60

LE'Z86
Committed to Excellence
Amount

Date

## 01/09/2017


Total for Department: 20 BOARD
EXIDE EDGE AGM, AUTO BATTERY WITH CORE EXCHANGE, 12 VOLT 35 AM H FUEL \& OIL, ORDER \#050665-17


## Bank Reconciliation

January Check Register

88



AP \& PO ELECTRONIC APPROVAL WORKFLOWS REQURED EXA

DELIVERY, FLATBED TRUCK ITEM - 2254 INSIGHT ENTERPRISE, PERFORMANCE EVAL, \& ONBOARD SOFTWARE LICENSE MONTHLY COPY COUNT

ANNUAL SUBSCRIPTION FOR ASSET MANAGEMENT SOFTWARE
REPAIRS. FAULTY T FAIOSTAT. REPAIRS: REPLACED FAI SED VICE LANDSCAPE MAINTENANCE SERVICE MONTHLY LEASE

GM CAB FEE
pies ONTH Y PHONE SERVICE BAN: 858141363 RESTROOM AND BATHROOM SUPPLIES MONTHLY ELECTRIC SERVICE, ACCT: 40

MONTHLY CELLULAR SERVICE
PUBLICATION OF OPENING FOR DIVISION 3 DIRECTOR
PROPANE GAS
MONTHLY PEST CONTROL
TRIDENT KRAKEN A.M.S SERIES INDUSTRIAL EDITION-PROTECTIVE CASE MEMBERSHIP RENEWAL FEE-PRIMARY \& ANDREW ECHOLS MONTHL Y PEFUSE AND RECYCLE

MILEAGE REIMBURSEMENT - NEOGOV TRAINING 1/10/17 DLX HDMI, SSTESTER

LEASE AG
RENTAL AGREEMENT
FUEL SURCHARGE, DOT CERTIFIED DRUG \& ALCOHOL TEST CONTAINER FOR CSDA MEETING SUPPLIE

QUARTERLY FULL GATE MANTENANCE
ASSESSMENT STATEMENT FOR FY16-17
MONTHLY SERVICE AGREEMENT MONTH FOR DAMAGES DONE MONTHLY PHONE SERVIC EIMBURSEMETT MONTHLY PHONE SERVICE TREAD TAPE

GENERAL COUNSEL SERVICES RENDERED THROUGH 11/30/16

Check No.
Department: 41

ADMINISTRATION/HR

## Vendor/Employee

ACCELA, INC. \#774375 CA SPECIAL DIST. ASSOCIATION DATAPROSE INC. GOVERNMENTJO IMAGE SOURCE

REM MECHANICAL, INC WESTERN LANDSCAPE MAINTENANCE PLUS XEROX CORP.

UNION BANK (VISA)
UNION BANK (VISA)
UNION BANK (VISA)
COVERALL NORTH AMERICA, INC SAN DIEGO GAS \& ELECTRIC VERIZON WIRELESS

AMERIGAS - TEMECULA BONSALL PEST CONTROL CDW GOVERNMENT, INC. CDW GOVERNMENT, INC.
COSTCO WHOLESALE MEMB COUNCIL OF WATER UTILITIES FALLBROOK WASTE AND RECY KARLEEN HARP HOME DEPOT

MITEL LEASING
MODULAR BUILDING CONCEPTS, INC
NATIONAL SAFETY COMPLIANCE,INC PETTY CASH

QUALITY GATE COMPANY SD COUNTY VECTOR CONTROL PROGRAM
SHRED-IT USA LLC KATIE NEGLIA

DAWN WASHBURN
MOE TORABI
AT\&T
HOME DEPOT NOSSAMAN, LLP
PINE TREE LUMBER

## Bank Reconciliation <br> January Check Register



135,469.02 $\overline{\overline{\text { Mogiviven }} \text { \% }}$ $\overline{\overline{\text { Mogiviven }} \text { \% }}$

Total for Department: 41 ADMINISTRATION/HR
 2,921.25
$7,282.18$
20.81
124.04 7,427.03



## Transaction Description

PROCESSING FEE FOR RECORDING RELEASE OF LIEN DOCS (2)
MS ENTERPRISE AGREEMENT SLG- OFFICE 365 PLAN G3 SHARED SERVER EmPLOYEE PLAQUE - VEENSTRA 15 YEARS MONTHLY INTERNET CONNECTION - JAN MONTHLY LEASE
POPANE GAS MONTHLY PHONE SERVICE, BAN: 858141363 REPLACE WATER HEATER IN BLDG-1 MONTHLY CELLULAR SERVICE

## PATROL SERVICES FOR 1/1/17-1/31/17 FOR DISTRICT

REPAIR DOOR LOCK ON BLDG 2 WASTEWATER ENTRY ANNUAL MEMBERSHIP RENEWAL FEE
THE BUSINESS GRAMMAR AND PROOFREADING SEMINAR. J. STACY ATTEND 18GALSTGBX
SAFETY BOOTS - WASTE WATER DEPT BOOTS FOR: JTHOMAS, MCLINE, CHOELSCHER, AND EBRADLEY WATER RESISTANT GLOVES
REIMBURSE FOR PURCHASE OF SAFETY WORK BOOTS
DEFIBULATOR PADS FOR AED IN BUILDING 2
Total for Department: 43 SAFETY
Total for Department: 51 FINANCE

## Department: 43 SAFETY

SEND DOCUMENTS VIA CERTIFIED MAIL
2016 TAX FORMS - W2, 1099, ENVELOPES
POSTAGE
SEND DOC
L TAX ORMS W2, 109, ENVELOPES
Vendor/Employee
SD COUNTY ASSESSOR/RECORDER/CLERK SOFTCHOICE CORPORATION TAMAYO GROUP, INC TIME WARNER CABLE XEROX FINANICAL SERVICES AMERIGAS - TEMECULA
AT\&T LONG DISTANCE
VERIZON WIRELESS
Check No.



$$
\begin{aligned}
& \text { DATAPROSE INC. } \\
& \text { PETTY CASH } \\
& \text { CENTRO PRINT SOLUTIONS }
\end{aligned}
$$ PROFESSIONAL SERVICES FOR ORGANIZATION \& MANAGEMENT DEV

GLV G-TEK MAXIFLEX ULT, BT KN SZ 11 STL TOE, ERMF THNDR T3 BLK

$$
\begin{aligned}
& \text { T.R.Y. ENTERPRISES, INC. } \\
& \text { ALERT LOCKSMITH } \\
& \text { PACIFIC SAFETY CENTER } \\
& \text { SKILLPATH SEMINARS } \\
& \text { HOME DEPOT } \\
& \text { PETYY CASH } \\
& \text { RAMON ZUNIGA } \\
& \text { AIRGAS SAFETY INC } \\
& \text { BOOT BARN INC } \\
& \text { HOME DEPOT } \\
& \text { BRYAN ROSE } \\
& \text { PHYSIO-CONTROL, INC }
\end{aligned}
$$

Department: 91 ENGINEERING

37,986.23
M
N.
N
N
$01 / 19 / 2017$

$01 / 19 / 2017$


Comparative Water Sales YTD from Prior Years

|  |  |  |  |  |  |  | FISCAL YEA | R 2016-201 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quantity of Meters | User Code | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | Acre <br> Feet |
| 591 | AD | 36216 | 34134 | 39119 | 28217 | 22903 | 24494 | 7934 |  |  |  |  |  | 443 |
| 403 | AG | 156957 | 152359 | 172040 | 132882 | 104544 | 96050 | 31370 |  |  |  |  |  | 1,943 |
| 5 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  | - |
| 231 | CM | 47830 | 45043 | 43040 | 26707 | 20970 | 21140 | 5876 |  |  |  |  |  | 483 |
| 30 | CN | 4900 | 4950 | 7309 | 11456 | 7426 | 561 |  |  |  |  |  |  | 84 |
| 24 | IS | 3806 | 3701 | 3980 | 3061 | 2446 | 1653 | 1408 |  |  |  |  |  | 46 |
| 88 | MF | 11307 | 11657 | 13746 | 10597 | 8876 | 11213 | 7139 |  |  |  |  |  | 171 |
| 326 | SC | 183744 | 166212 | 206354 | 150910 | 121456 | 115009 | 18861 |  |  |  |  |  | 2,210 |
| 1034 | SD | 279246 | 253718 | 298226 | 222243 | 181674 | 171322 | 39597 |  |  |  |  |  | 3,320 |
| 5122 | SF | 187516 | 175736 | 202555 | 154361 | 120520 | 133125 | 57385 |  |  |  |  |  | 2,367 |
| 7854 | Total | 911522 | 847510 | 986369 | 740434 | 590815 | 574567 | 169570 |  |  |  |  |  | 11,067 |



| FISCAL YEAR 2014-2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quantity of Meters | User Code | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | Acre Feet |
| 426 | A | 118146 | 136346 | 116938 | 122567 | 99702 | 62354 | 19943 |  |  |  |  |  | 1,552 |
| 341 | C | 102461 | 111946 | 90197 | 95608 | 76060 | 51612 | 29802 |  |  |  |  |  | 1,280 |
| 36 | CN | 3175 | 3510 | 3579 | 2898 | 1119 | 372 | 1 |  |  |  |  |  | 34 |
| 5558 | D | 220019 | 244786 | 204723 | 208649 | 178916 | 121527 | 67259 |  |  |  |  |  | 2,860 |
| 96 | MF | 15917 | 16081 | 14016 | 14241 | 13689 | 10249 | 8659 |  |  |  |  |  | 213 |
| 323 | SC | 207708 | 245358 | 221301 | 241409 | 186106 | 108701 | 25015 |  |  |  |  |  | 2,837 |
| 1040 | SD | 284083 | 332533 | 282418 | 297792 | 260513 | 165578 | 46135 |  |  |  |  |  | 3,832 |
| 7820 | Total | 951509 | 1090560 | 933172 | 983164 | 816105 | 520393 | 196814 |  |  |  |  |  | 12,607 |

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: |



## SEWER EQUIVALENT DWELLING UNITS (EDUs) STATUS REPORT FEBRUARY 2017

| STATUS SUMMARY | EDUs |
| :--- | ---: |
| Total Treatment Capacity Purchased from Oceanside | $8,333.33$ |
| Less 5\% Contractual Allowance | 416.67 |
| EDUs Set Aside by Board for Emergencies | 60.00 |
| EDUs Connected | $3,935.34$ |
| EDUs Unconnected | $1,277.96$ |
| Total EDUs Available for Purchase: |  |


| DEVELOPMENTS WITH UNCONNECTED EDUs | EDUs | CAPACITY <br> FEES PAID |  |
| :--- | ---: | ---: | ---: |
| Others (Misc. SFR) | 21.40 | $\$$ | 320,034 |
| Golf Green Estates (Dev. Solutions) | 102.46 | $\$$ | $1,777,700$ |
| Horse Creek Ridge/ Passarelle | 850.57 | $\$$ | - |
| Palomar College | 100.00 | $\$$ | - |
| Polo Club (Vista Valley Dev.) | 59.85 | $\$$ | $1,022,775$ |
| Pala Mesa Highlands (Beazer Homes) | 124.00 | $\$$ | 965,007 |
| Lake Vista Estates (Arestad) | 2.68 | $\$$ | 45,890 |
| Vista Valley Country Club | 5.00 | $\$$ | 85,450 |
| Silver Holdings | 9.00 | $\$$ | 153,810 |
| VNUIT LLC (Kakileti) | 3.00 | $\$$ | 51,270 |
| TOTAL UNCONNECTED: | $\mathbf{1 , 2 7 7 . 9 6}$ | $\$$ | $\mathbf{4 , 4 2 1 , 9 3 6}$ |

*Deferred Total Payment until Building Permits are Issued.


[^0]:    ${ }^{(1)}$ Allocation based on average of Member Agency purchases from 2011-14.

[^1]:    Dawn M. Washburn, Board Secretary

[^2]:    Confidential Information

[^3]:    Rainbow Municipal Water District
    Design Services for the Robert A. Weese Filtration Plant Interconnect

[^4]:    Your Project Manager, Mr. Rick Kennedy, PE has personally managed the design of more than 12 pump station projects ranging in size from very small to over 400 mgd , with a variety of types of pumps and drive configurations. Of the projects we have further detailed on the following pages, Mr. Kennedy served as Project Manger on the Post Road Booster Pump Station, Gheen Site Pump Station, and the Lake Murray Pump Station at the Alvarado Water Treatment Plant.

    In addition to those projects provided, Mr. Kennedy has served as Project Manager for the following, demonstrating that he is a well qualified and suited for this project:

    - Pump Station SD17/FCF SD22, City of San Diego - 42,000 gpm pump station
    - Diemer Booster Pumping Station, Municipal Water District of Orange County - 250,000 gpm pump station
    - Santa Margarita Pumping Station, Santa Margarita Water District - 6,700 gpm pump station
    - Trask Reservoir Site Water Improvement Project, City of Garden Grove - 9,000 gpm lift pump station
    - Ozonated Settled Water Pump Station, City of San Diego - 140,000 gpm pump station
    - Miramar Water Treatment Plant Clearwells Improvement, City of San Diego - 150,000 gpm lift pump station

[^5]:    Rainbow Municipal Water District

[^6]:    Ilrmwd-blStore021DriveCIDatalDrive-EVADMINISTRATIVE CODE\Drafts Not ApprovedlNew Engineering Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHfmwd-
    blStore03\BeardFilestBeard Secretary/Administrative Gode Working FilelBoard Admin Code 2005-20061Board Admin Gode TABLE OF CONTENTS 2005-2006 update.doclIApproved Ordinance 05-07\18-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07 IVAmended and Updated 11-17-06 per Ordinance 06-09IIAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05<br>Amended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 0809IVAmended and Updated 12-06-11 per Ordinance 11-06\VAmended and Updated 2-26-13 per Ordinance 1302\VAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07<br>Amended and Updated 11-18-14 per Ordinance 14-09 and 14-101VAmended and Updated 1-27-15 per Ordinance 15-01\VAmended and Updated 2-24-15 per Ordinance 15-02\IAmended and Updated 12-15-15 per Ordinance 15-09lVAmended and Updated 1-26-16 per Ordinance 16-01\Amended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05IVAmended and Updated 6-28-16 per Ordinance 16-11IIDRAFT

[^7]:    \lrmwd-blStore02\DriveCIDatalDrive-EVADMINISTRATIVE CODEIDrafts Not ApprovedINew Engineering Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHrmwd-
    b/Store031BoardFilestBeard SecretaryLAdministrative Code Working FilelBoard Admin Gode 2005-20061Board Admin Gode TABLE OF GONTENTS 2005-2006 update.do6/VApproved Ordinance 05-07\18-3-05IIAmended and Updated 8-18-06 per Ordinance 06-071VAmended and Updated 11-17-06 per Ordinance 06-09IVAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IIAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 080911 Amended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 1302lIAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07\VAmended and Updated 11-18-14 per Ordinance 14-09 and 14-101VAmended and Updated 1-27-15 per Ordinance 15-01\VAmended and Updated 2-24-15 per Ordinance 15-02\IAmended and Updated 12-15-15 per Ordinance 15-091VAmended and Updated 1-26-16 per Ordinance 16-01\Amended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05IVAmended and Updated 6-28-16 per Ordinance 16-11 IIDRAFT

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[^9]:    IIrmwd-blStore021DriveCIDatalDrive-E\ADMINISTRATIVE CODEIDrafts Not ApprovedlNew Engineering
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    blStore031BoardFilestBoard Secretary Administrative Gode Working FilelBoard Admin Code 2005-20061Board Admin Code TABLE OF CONTENTS 2005-2006 updałe.doc\IApproved Ordinance 05-07\18-3-05IIAmended and Updated 8-18-06 per Ordinance 06-07\VAmended and Updated 11-17-06 per Ordinance 06-09IVAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08\VAmended and Updated 7-22-08 per Ordinance 08$091 \backslash A m e n d e d ~ a n d ~ U p d a t e d ~ 12-06-11 ~ p e r ~ O r d i n a n c e ~ 11-06 I \ A m e n d e d ~ a n d ~ U p d a t e d ~ 2-26-13 ~ p e r ~ O r d i n a n c e ~ 13-~$ 02lVAmended and Updated 7-23-13 per Ordinance 13-06I\Amended and Updated 11-19-13 per Ordinance 1308\VAmended and Updated 10-28-14 per Ordinance 14-07<br>Amended and Updated 11-18-14 per Ordinance 14-09 and 14-10\VAmended and Updated 1-27-15 per Ordinance 15-01\VAmended and Updated 2-24-15 per Ordinance 15-02l\Amended and Updated 12-15-15 per Ordinance 15-09lVAmended and Updated 1-26-16 per Ordinance 16-01\IAmended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05IIAmended and Updated 6-28-16 per Ordinance 16-11IIDRAFT

[^10]:    IIrmwd-b\Store021DriveCIDatalDrive-EVADMINISTRATIVE CODEIDrafts Not ApprovedlNew Engineering Section 61Board Admin Code TABLE OF CONTENTS 2005-2006 update. docHrmwd-
    blStore031BoardFilestBoard Secretary\Administrative Code Working FilelBoard Admin Code 2005-20061Board Admin Code TABLE OF CONTENTS 2005-2006 update.docllApproved Ordinance 05-07\18-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07\VAmended and Updated 11-17-06 per Ordinance 06-09【VAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05\VAmended and Updated 11-7-07 per Ordinances 07-15 and 0716IVAmended and Updated 6-24-08 per Ordinance 08-08\VAmended and Updated 7-22-08 per Ordinance 0809IVAmended and Updated 12-06-11 per Ordinance 11-06IVAmended and Updated 2-26-13 per Ordinance 1302lWAmended and Updated 7-23-13 per Ordinance 13-06IVAmended and Updated 11-19-13 per Ordinance 1308IVAmended and Updated 10-28-14 per Ordinance 14-07\VAmended and Updated 11-18-14 per Ordinance 14-09 and 14-10\VAmended and Updated 1-27-15 per Ordinance 15-01\IAmended and Updated 2-24-15 per Ordinance 15-02lVAmended and Updated 12-15-15 per Ordinance 15-091VAmended and Updated 1-26-16 per Ordinance 16-01\IAmended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05<br>Amended and Updated 6-28-16 per Ordinance 16-11IIDRAFT

[^11]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts Not Approved\New Engineering Section 6\Construction of Water and Sewer Facilities 6.07.docW:\BOARD\Board Secretary 4 Administrative Code Working FileไBeard Admin Code 2005-2006 Water PolicyConstruction of Water Facilities 8.32.doel\Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \backslash D R A F T$

[^12]:    IIrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts Not Approved $\backslash$ New Engineering Section 6\Reimbursement 6.08.docW:\BOARD\Board Secretary\Administrative Code Working File\Board Admin Code 2005-2006.Water Policy 1 Other Facilities 8.33.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>DRAFT

[^13]:    【rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\New Engineering Section 6\Reimbursement 6.08.docW: UBOARD\Board Secretary 1 Administrative Code Working File\Board Admin Code 2005-2006\Water Policy\Other Facilities 8.33.dec<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>DRAFT

[^14]:    \lrmwd-blStore02\DriveCLDatalDrive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8 Definitions 8.02.doc<br>Approved Ordinance 05-07\|8-3-05<br>Approved by Ordinance 14-07\10-28-14【DRAFT

[^15]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved $\backslash$ Updated Water Policy
    

[^16]:    【lrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODEDDrafts Not Approved\Updated Water Policy
    8\Area Served 8.03. doctlrmwd-blStore03\BoardFiles \Board Secretary\Administrative Code Working File\Board Admin Code 2005-2006 Water Policy 1 Area Served 8.03.doc<br>Approved Ordinance 05-07\18-3-05<br>Approved by Ordinance $14-07 \backslash 10-28-14 \backslash \backslash$ Amended and Updated 1-26-16 by Ordinance 16-01<br>Amended and Updated 3-22-16 by Ordinance $16-05$ \DRAFT

[^17]:    \lrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved $\backslash$ Updated Water Policy $8 \backslash$ Area Served 8.03. docthrmwd-b\Store03\BoardFiles $\backslash$ Board Secretary $\backslash$ Administrative Code Working File\Board Admin Code 2005-2006tWater Policy $\backslash$ Area Served 8.03.doe $\backslash$ AApproved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>Amended and Updated 1-26-16 by Ordinance 16-01 $\backslash$ Amended and Updated 3-22-16 by Ordinance $16-05 \ 1$ DRAFT

[^18]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8【Establishment of Water Service 8.04. docHrmwd-b\Store03\BeardFilesไBeard Secretary $\backslash$ Administrative Code Working FileไBoard Admin Code 2005-2006\Water Policy/Establishment of Water Service 8.04.doc<br>Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 16-03 \backslash \ 2-23-~$ $16 \backslash \backslash$ Approved by Ordinance 16-09<br>5-24-16<br>Approved by Ordinance 16-12<br>DRAFT

[^19]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts Not Approved\Updated Water Policy
    8\Establishment of Water Service 8.04.doc Hrmwd-b\Store03\BoardFileshBoard Seeretary 4 Administrative Code Working File\Board Admin Code 2005-2006\Water Policy Establishment of Water Service 8.04.doel\Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 16-03 \backslash \ 2-23-~$
    

[^20]:    $\lfloor$ lrmwd-b\Store02\DriveC\DatalDrive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 81Establishment of Water Service 8.04.docHrmwd-b\Store03\BoardFiles\Board Secretary\Administrative Code Working File\Board Admin Code 2005-20061Water PolicylEstablishment of Water Service 8.04.doel\Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 16-03 \backslash 22-23-~$
    $16 \backslash$ Approved by Ordinance $16-09 \backslash \backslash 5-24-16 \backslash$ Approved by Ordinance 16-12

[^21]:    【lrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8\Installations 8.06.docttrmwd-blStore031BoardFiles\Board Secretary\Administrative Code Working FilelBoard Admin Code 2005-2006 Water Policy Installations 8.06.doe<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by
    

[^22]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts Not Approved\Updated Water Policy 8\Pressure 8.21.docW:\BOARD\Board Secretary 4 Administrative Code Working FileไBeard Admin Code 2005z006\Water Policy\Pressure 8.23.doe<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-2814\DRRAFT

[^23]:    Ilrmwd-blStore021DriveCIDatalDrive-EVADMINISTRATIVE CODEIDrafts Not ApprovedIUpdated Sewer Policy 9/Revocation or Suspension of Permits 9.16. docW:IBOARD\Board Secretary/Administrative Code Working FilelBeard Admin Code 2005-20051Sewer PolicylRevocation or Suspension of Permits 9.17.doc|\Amended and Approved 12-6-11 Per Ordinance 11-06IIDRAFT

[^24]:    IIrmwd-blStore02\DriveCIDatalDrive-EVADMINISTRATIVE CODEIDrafts_Not ApprovedINew Engineering

[^25]:    \lrmwd-blStore02\DriveCIData\Drive-E\ADMINISTRATIVE CODE\Drafts_Not ApprovedINew Engineering

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[^27]:    IIrmwd-b\Store02\DriveCIDatalDrive-EXADMINISTRATIVE CODE\Drafts_Not Approved\New Engineering Section 6\Board Admin Code TABLE OF CONTENTS 2005-2006 update.doclVApproved Ordinance 05-07118-3-05IVAmended and Updated 8-18-06 per Ordinance 06-07IVAmended and Updated 11-17-06 per Ordinance 06-09IIAmended and Updated 1-23-07 per Ordinance 07-03//Amended and Updated 3-27-07 per Ordinance 07-04//Amended and Update 6-26-07 per Ordinance 07-05IVAmended and Updated 11-7-07 per Ordinances 07-15 and 07-16IIAmended and Updated 6-24-08 per Ordinance 08-08IVAmended and Updated 7-22-08 per Ordinance 08-09IVAmended and Updated 12-06-11 per Ordinance 11-06IIAmended and Updated 2-26-13 per Ordinance 13-02<br>Amended and Updated 7-23-13 per Ordinance 13-06IIAmended and Updated 11-19-13 per Ordinance 13-08IVAmended and Updated 10-28-14 per Ordinance 14-07\IAmended and Updated 11-18-14 per Ordinance 14-09 and 14-10IVAmended and Updated 1-27-15 per Ordinance 15-01 IVAmended and Updated 2-24-15 per Ordinance 15-02lVAmended and Updated 12-15-15 per Ordinance 15-091VAmended and Updated 1-26-16 per Ordinance 16-01\VAmended and Updated 2-23-16 per Ordinance 16-03IVAmended and Updated 3-22-16 per Ordinance 16-05\IAmended and Updated 6-28-16 per Ordinance 16-11\IDRAFT

[^28]:    \rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\New Engineering Section 6\Master Plan 6.02.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28$14 \backslash \backslash D R A F T$

[^29]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\New Engineering Section $6 \backslash$ Construction of Water and Sewer Facilities 6.07.doc $\backslash$ Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>DRAFT

[^30]:    \lrmwd-blStore02\DriveCIDatalDrive-EVADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8IChapter 8.02.docIIDRAFT

[^31]:    \} Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Definitions 8.02 .doc $\backslash \backslash A p p r o v e d ~ O r d i n a n c e ~ 05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \ D R A F T ~$

[^32]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Definitions 8.02 .doc $\backslash \backslash A p p r o v e d ~ O r d i n a n c e ~ 05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \backslash D R A F T ~$

[^33]:    IIrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8【Definitions 8.02.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>DRAFT

[^34]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Definitions 8.02.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>DRAFT

[^35]:    \/rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Definitions 8.02.doc $\backslash \backslash$ Approved Ordinance $05-07 \backslash \backslash 8$-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>DRAFT

[^36]:    I rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Definitions 8.02 .doc $\backslash$ Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \ D R A F T ~$

[^37]:    IUrmwd-b\Store02\DriveC\DatalDrive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8 Definitions 8.02.doc<br>Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-28-14 \backslash \ D R A F T ~$

[^38]:    I rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Area Served 8.03.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>Amended and Updated 1-26-16 by Ordinance 16-01 $1 \backslash$ Amended and Updated 3-22-16 by Ordinance $16-05 \backslash$ DRRAFT

[^39]:    \lrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8【Establishment of Water Service 8.04.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>Approved by Ordinance 16-03<br>2-23-16<br>Approved by Ordinance 16-09<br>5-24-16<br>Approved by Ordinance 16-12<br>DRAFT

[^40]:    \lrmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8\Establishment of Water Service 8.04.doc<br>Approved Ordinance 05-07\18-3-05<br>Approved by Ordinance 14-07\110-28-14<br>Approved by Ordinance 16-03\2-23-16<br>Approved by Ordinance 16-09<br>5-24-16<br>Approved by Ordinance 16-12\DDRAFT

[^41]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Establishment of Water Service 8.04.doc<br>Approved Ordinance $05-07 \backslash \backslash 8-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash \backslash 10-~$ 28-14<br>Approved by Ordinance 16-03<br>2-23-16<br>Approved by Ordinance 16-09<br>5-24-16<br>Approved by Ordinance 16-12\IDRAFT

[^42]:    I rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy 8\Installations 8.06.doc $\backslash \backslash$ Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>Amended and Approved by Ordinance 16-16-05<br>3-22-16<br>DRAFT

[^43]:    I rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Installations 8.06.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28-14<br>Amended and Approved by Ordinance 16-16-05<br>3-22-16<br>DRAFT

[^44]:    \Irmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Connection and Meter Charges 8.11.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-$28-14 \backslash \backslash A m e n d e d ~ a n d ~ A p p r o v e d ~ b y ~ O r d i n a n c e ~ 16-05 \backslash \ 3-22-16 \backslash \ D R A F T ~$

[^45]:    \lrmwd-b|Store02\DriveC\DatalDrive-E\ADMINISTRATIVE CODE\Drafts_Not ApprovedlUpdated Water Policy $8 \backslash$ Connection and Meter Charges 8.11.doc<br>Approved Ordinance $05-07 \backslash 18-3-05 \backslash \backslash A p p r o v e d ~ b y ~ O r d i n a n c e ~ 14-07 \backslash 10-~$ 28-14<br>Amended and Approved by Ordinance 16-05<br>3-22-16|IDRAFT

[^46]:    \/rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ By-Passes and Tampering 8.19.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-2814<br>DRAFT

[^47]:    \rrmwd-b\Store02\DriveCLData\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy $8 \backslash$ Schedules, Tarrifs or Lists 8.22.doc<br>Approved Ordinance 05-07<br>8-3-05<br>Approved by Ordinance 14-07<br>10-28$14 \backslash$ \DRAFT

[^48]:    \/rmwd-b\Store02\DriveC\Data\Drive-E\ADMINISTRATIVE CODE\Drafts_Not Approved\Updated Water Policy

[^49]:    \Irmwd-b\Store02\DriveC\DatalDrive-EXADMINISTRATIVE CODEIDrafts_Not Approved\Updated Sewer Policy 9/Revocation or Suspension of Permits 9.16.docl\Amended and Approved 12-6-11 Per Ordinance 11-06IIDRAFT

[^50]:    "NOTICE: All e-mails to and from the Rainbow Municipal Water District may be considered public records and are subject to public disclosure pursuant to the California Public Records Act."

[^51]:    E20
    01－33－72000 01－33－73000 01－33－75300

[^52]:    PAYROLL \& EMPLOYEE EXPENSES Regular Salaries

    Overtime Paid, Comp Time Earn. Employer'S Share Fica Ssi Employer'S Share Fica Medicare Medical Ins Acwa Health Ben Vision Ins Acwa Life, S/T,L/T Disability Ins Retirement-Calpers Worker'S Compensation Ins Deferred Comp-Employer Contrib

