

AGENDA FOR A REGULAR MEETING OF THE BOARD OF DIRECTORS  
OF THE VALLECITOS WATER DISTRICT  
WEDNESDAY, MAY 3, 2017, AT 5:00 P.M.  
AT THE DISTRICT OFFICE  
201 VALLECITOS DE ORO, SAN MARCOS, CALIFORNIA

CALL TO ORDER – PRESIDENT ELITHARP

PLEDGE OF ALLEGIANCE

ROLL CALL

In the case of an emergency, items may be added to the Agenda by a majority vote of the Board of Directors. An emergency is defined as a work stoppage; a crippling disaster; or other activity which severely imperils public health, safety, or both. Also, items which arise after the posting of the Agenda may be added by a two-thirds vote of the Board of Directors.

ADOPT AGENDA FOR THE REGULAR MEETING OF MAY 3, 2017

PUBLIC COMMENT

Persons wishing to address a matter not on the Agenda may be heard at this time; however, no action will be taken until the matter is placed on a future agenda in accordance with Board policy. Public comments are limited to three minutes. A Request to Speak form is required to be submitted to the Executive Secretary prior to the start of the meeting, if possible. Public comment should start by stating name, address and topic. The Board is not permitted during this time to enter into a dialogue with the speaker.

NOTICE TO THE PUBLIC

All matters listed under the Consent Calendar will be voted upon by one motion. There will be no separate discussion of these items, unless a Board member or member of the public requests that a particular item(s) be removed from the Consent Calendar, in which case it will be considered separately under Action Items.

CONSENT CALENDAR

1.1 APPROVAL OF MINUTES (pp 5-21)

- A. FINANCE/INVESTMENT COMMITTEE MEETING – APRIL 17, 2017
- B. REGULAR BOARD MEETING – APRIL 19, 2017
- C. BOARD WORKSHOP MEETING – APRIL 20, 2017

*Approved minutes become a permanent public record of the District.*

**Recommendation: Approve Minutes**

1.2 WARRANT LIST THROUGH MAY 3, 2017 – \$4,146,379.88 (pp. 22-25)

**Recommendation: Approve Warrant List**

- 1.3 FINAL ACCEPTANCE OF WATER AND SEWER IMPROVEMENTS FOR DAVIA VILLAGE IMPROVEMENTS, APN'S 219-163-63 AND 219-163-64 (DAVIA EAST DEVELOPMENT, LLC) (pp. 26-28)

*The installation of water and sewer facilities has been completed.*

**Recommendation: 1) Accept Project Improvements; 2) Approve Filing of a Notice of Completion**

- 1.4 ADOPTION OF RESOLUTION ORDERING THE ANNEXATION OF APN'S 182-260-21 AND 182-190-92 INTO THE VALLECITOS WATER DISTRICT WATER SERVICE BOUNDARY (pp. 29-36)

*The owners of the property have requested annexation into the District's water service area.*

**Recommendation: 1) Approve Cancellation of Exchange Agreement with Vista Irrigation District; 2) Adopt Resolution**

- 1.5 CONSTRUCTION CONTRACT AWARD FOR THE MAIN FACILITY ROOF REPLACEMENT (pp. 37-40)

*The roofs for the Operations buildings are in need of repair; they continue to leak during rain events and the inner layers of the roofs are cracked and failing.*

**Recommendation: Award Construction Contract**

- 1.6 REPAIR OF 16" EMERGENCY BYPASS SEWERLINE (pp. 41-44)

*An earlier storm contributed to excessive sewer flows in the Land Outfall pipeline; the excessive flows put additional strain and weight on the Bypass, causing the pipe to crack and spill.*

**Recommendation: Approve Payment**

- 1.7 OPERATIONS & MAINTENANCE METRICS QUARTERLY REPORT – MARCH 31, 2017 (pp. 45-52)

\*\*\*\*\*END OF CONSENT CALENDAR\*\*\*\*\*

ACTION ITEMS

- 2.1 2017 COST OF SERVICE AND RATE STRUCTURE STUDY DRAFT UPDATE (pp. 53-87)

*On April 18, 2017, SDCWA staff presented their proposed commodity rates to Member Agency Finance Officers.*

**Recommendation: For information only**

2.2 2017 PUBLIC RATE HEARING NOTICE DRAFT (pp. 88-95)

*Draft Notice of Public Hearing to consider rate changes.*

**Recommendation: Request Board direction**

\*\*\*\*\*END OF ACTION ITEMS\*\*\*\*\*

REPORTS

3.1 GENERAL MANAGER

3.2 DISTRICT LEGAL COUNSEL

3.3 SAN DIEGO COUNTY WATER AUTHORITY

3.4 ENCINA WASTEWATER AUTHORITY  
- *Capital Improvement Committee*  
- *Policy and Finance Committee*

3.5 STANDING COMMITTEES

3.6 DIRECTORS REPORTS ON MEETINGS/CONFERENCES/SEMINARS ATTENDED

\*\*\*\*\*END OF REPORTS\*\*\*\*\*

OTHER BUSINESS

4.1 QUARTERLY BOARD EXPENSES (pp. 96-98)

**Recommendation: For Information Only**

\*\*\*\*\*END OF OTHER BUSINESS\*\*\*\*\*

5.1 DIRECTORS COMMENTS/FUTURE AGENDA ITEMS

\*\*\*\*\*END OF DIRECTORS COMMENTS/FUTURE AGENDA ITEMS\*\*\*\*\*

6.1 ADJOURNMENT

\*\*\*\*\*END OF AGENDA\*\*\*\*\*

If you have any disability which would require accommodation in order to enable you to participate in this meeting, please call the Executive Secretary at 760.744.0460 ext. 264 at least 48 hours prior to the meeting.

Audio and video recordings of all Board meetings are available to the public at the District website [www.vwd.org](http://www.vwd.org)

AFFIDAVIT OF POSTING

I, Diane Posvar, Executive Secretary of the Vallecitos Water District, hereby certify that I caused the posting of this Agenda in the outside display case at the District office, 201 Vallecitos de Oro, San Marcos, California by 4:00 p.m., Friday, April 28, 2017.

\_\_\_\_\_  
Diane Posvar

MINUTES OF A MEETING OF THE  
FINANCE/INVESTMENT COMMITTEE  
OF THE VALLECITOS WATER DISTRICT  
MONDAY, APRIL 17, 2017 AT 3:00 P.M.  
AT THE DISTRICT OFFICE, 201 VALLECITOS DE ORO,  
SAN MARCOS, CALIFORNIA

Director Martin called the meeting to order at the hour of 3:00 p.m.

Present: Director Martin  
Director Sannella  
General Manager Pruim  
Assistant General Manager Scaglione  
District Engineer Gumpel  
Finance Manager Fusco  
Accounting Supervisor Owen  
Administrative Secretary Johnson

Others Present: Director Evans  
Capital Facilities Senior Engineer Hubbard

ITEM FOR DISCUSSION

CAPITAL BUDGET REVIEW

Staff presented the preliminary 2017/18 Capital Improvement Program (CIP) budget as well as the projected five-year CIP budget to the Committee. Projects being carried over from prior budget years were discussed as well as new projects, some of which are projects that were proposed previously but were deferred for various reasons. This information, incorporating the Committee's feedback, will be presented to the full Board at the Board Workshop scheduled for April 26.

Finance Manager Fusco explained that a project qualifies as a capital project if it is an acquired or built asset that will last over one year and costs greater than \$10,000. He provided an overview of the CIP, discussed water and wastewater projects separately, which projects are replacement, capacity or both, and why that's important.

Finance Manager Fusco distributed handouts of the presentation he provided to the Committee which included the following:

- Draft 2017/18 Overall Budget
- Capital Budget
  - Capital Outlay
  - Resources
- CIP Costs

- Water Replacement – CIP
- Water Capacity – CIP
- Sewer Replacement – CIP
- Sewer Replacement – CIP Less EWA
- Sewer Capacity – CIP

General question and answer took place during the presentation regarding the Encina Wastewater Authority's (EWA) Five-Year Plan and Meadowlark Tank No. 3 project.

Director Sannella stated that because water purchases are such a large portion of the budget, he would like information about the employees' MOU from the San Diego County Water Authority (SDCWA) and EWA to see if those agencies are doing all they can to cut costs and run as efficiently as possible.

Finance Manager Fusco reviewed the Draft Comprehensive Project List in detail which includes carryover, new and future projects, and how it correlates with the budget document.

District Engineer Gumpel discussed information used in determining the CIP budget such as the Master Plan budgeting process which utilizes actual costs of previous projects that are scaled up or down and estimated costs for environmental, planning, design, management and staff hours. He discussed the Encina Parallel Land Outfall project and several projects that have the most impact on the CIP budget, both replacement and capital, including:

- San Marcos Interceptor
- Rock Springs Sewer Replacement
- North Vista Pressure Reducing Station Upgrade
- South Vista Pressure Reducing Station Upgrade
- Schoolhouse Tank Refurbishment
- Stargaze Court Water Line Replacement

Director Martin inquired about the status of the expansion of the men's locker room in Building B. District Engineer Gumpel stated the project had been deferred due to the necessity of finishing other more critical projects; however, the project will go out to bid soon and construction is scheduled to begin at the start of the next fiscal year. He explained the lengthy process involved in preparing a written request for proposal and all that it entails.

Director Martin asked District Engineer Gumpel if any of the proposed projects could be deferred. District Engineer Gumpel stated the Meadowlark Tank No. 3, Montiel Gravity Outfall and Mountain Bell Pump Station projects could be deferred, if necessary. General Manager Pruim cautioned about deferring projects too often as this could lead to serious problems later.

Finance Manager Fusco briefly reviewed the 2017/18 Capital Budget – Easements, Vehicles & Equipment Schedule.

General discussion took place.

Finance Manager Fusco summarized how the Cost of Service Study, water costs, revenue, operating costs, reserves and capital all come together and how they may impact rates. Once proposed water rates from the SDCWA are known they can be put into the budget model. He anticipates the draft proposed budget should be ready to present to the Board in early May.

General discussion took place regarding the operating efficiencies of SDCWA. General Manager Pruiim stated SDCWA's General Manager Maureen Stapleton will be providing a presentation to the Board in June.

The information presented at this meeting will be presented to the full Board at the Board Workshop scheduled for April 26.

#### OTHER BUSINESS

None.

#### PUBLIC COMMENT

None.

#### ADJOURNMENT

There being no further business to discuss, the meeting was adjourned at the hour of 5:07 p.m.

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS  
OF THE VALLECITOS WATER DISTRICT  
WEDNESDAY, APRIL 19, 2017, AT 5:00 PM AT THE DISTRICT OFFICE,  
201 VALLECITOS DE ORO, SAN MARCOS, CALIFORNIA

President Elitharp called the Regular meeting to order at the hour of 5:00 p.m.

Director Evans led the pledge of allegiance.

Present: Director Elitharp  
Director Evans  
Director Hernandez  
Director Martin  
Director Sannella

Staff Present: General Manager Pruum  
Assistant General Manager Scaglione  
Legal Counsel Scott  
Administrative Services Manager Emmanuel  
District Engineer Gumpel  
Finance Manager Fusco  
Development Services Senior Engineer Scholl  
Accounting Supervisor Owen  
Meter Supervisor Kirby  
Public Information/Conservation Supervisor Robbins  
Financial Analyst Arthur  
Executive Secretary Posvar

ADOPT AGENDA FOR THE REGULAR MEETING OF APRIL 19, 2017

17-04-03 MOTION WAS MADE by Director Evans, seconded by Director Hernandez, and carried unanimously, to adopt the agenda for the Regular Board Meeting of April 19, 2017.

PUBLIC COMMENT

None.

CONSENT CALENDAR

Director Martin requested Items 1.6, 1.7, 1.10, and 1.12 be pulled from the Consent Calendar for discussion.

17-04-04 MOTION WAS MADE by Director Evans, seconded by Director Hernandez, and carried unanimously, to approve Items 1.1, 1.2, 1.3, 1.4, 1.5, 1.8, 1.9, 1.11, 1.13 of the Consent Calendar as presented.



- 1.1 Approval of Minutes
  - A. Board Workshop Meeting – March 29, 2017
  - B. Regular Board Meeting – April 5, 2017
- 1.2 Warrant List through April 19, 2017 - \$1,082,352.72
- 1.3 Financial Reports
  - A. Water Meter Count – March 31, 2017
  - B. Water Production/Sales Report – 2016/2017
  - C. Quarterly Financial Report – March 31, 2017
  - D. Water Revenue and Expense Report – March 31, 2017
  - E. Sewer Revenue and Expense Report – March 31, 2017
  - F. Reserve Funds Activity – March 31, 2017
- 1.4 Approval of Construction Agreement for Montessa – APN: 218-110-05 (Calatlantic Group, Inc.)
- 1.5 Approval of Construction Agreement for Borden Road 22 Improvements, APNs: 224-040-11, 224-040-28 & 224-040-29 (Borden Road 22, LLC)
- 1.8 Final Acceptance of Water and Sewer Improvements for San Elijo Hills, Phase 3, P.A. “T”, Unit 9, APNs: 679-330-01, 679-330-02, 679-330-03 & 679-330-04 (Davidson Communities)
- 1.9 Adoption of Resolution Ordering the Annexation of Certain Properties Designated as the “Kovachy Annexation”, APN: 226-320-28 into the Sewer Improvement District
- 1.11 Resolution Declaring National Public Works Week
- 1.13 Quarterly Investment Report

Discussion of the remaining consent calendar items took place as follows:

- 1.6 Approval of Temporary Off-Site Water and Sewer Service Agreement for Broemmelsiek Property, APN: 226-020-79 (Ray Broemmelsiek)

Director Martin requested verification of the property location to which staff responded. Director Martin stated he pulled this item in error.

17-04-05 MOTION WAS MADE by Director Martin, seconded by Director Evans, and carried unanimously, to approve Item 1.6 of the Consent Calendar as presented.

1.7 Approval of Temporary Off-Site Water and Sewer Service Agreement for Dream Home Investment Property, APN: 182-150-46 (Dream Home Investments, LLC)

Director Martin confirmed the existing water main for the property. He further asked if there is a reason why temporary service is established in lieu of an actual agreement. Development Services Senior Engineer Scholl stated that staff avoids permanent offsite whenever possible in case there happens to be an entire reconfiguration of properties adjacent to the project property that may require development in the future. If it turns out there is absolutely no possible way, at that point staff might consider a permanent offsite.

17-04-06 MOTION WAS MADE by Director Martin, seconded by Director Evans, and carried unanimously, to approve Item 1.7 of the Consent Calendar as presented.

1.10 Resolution in Support of the Association of California Water Agencies' (ACWA) Policy Statement on Bay-Delta Flow Requirements

Director Martin requested clarification on what the Board is being asked to support. General Manager Pruim stated ACWA has adopted a strong policy statement to address what the State is doing regarding unimpaired flow definitions for the Bay-Delta Watershed which, in ACWA's opinion, is leaning more toward environmental protections without recognizing the water supply benefits. ACWA is requesting support for their position against the State's approach.

17-04-07 MOTION WAS MADE by Director Martin, seconded by Director Sannella, and carried unanimously, to approve Item 1.10 of the Consent Calendar as presented and adopt Resolution No. 1513 in support of ACWA's policy statement on Bay-Delta flow requirements.

1.12 Amendment to the General Manager's Employment Agreement

Director Martin stated he believes General Manager Pruim should be treated completely different than all other District employees and any consideration of a Cost of Living Adjustment (COLA) should be done when his employment contract is negotiated. Given that General Manager Pruim's contract was negotiated last fall, he suggested the Board consider a bonus for a job well done rather than a COLA as General Manager Pruim hasn't been employed at the District for a full year.

General discussion took place during which Director Sannella suggested if the Board approved a COLA for General Manager Pruim, it should be effective on the first day of the next fiscal year (July 1, 2017), or January 1, 2018, or at the same time the District employees receive a COLA (generally in March).

- 17-04-08 MOTION WAS MADE by Director Evans, seconded by Director Hernandez, and carried 3 – 2 with Directors Martin and Sannella voting no, to approve Item 1.12 of the Consent Calendar as presented, amending the General Manager’s Employment Agreement.

### ACTION ITEMS

#### EXECUTIVE ORDER B-40-17 AND FINAL PLAN TITLED “MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE”

Public Information/Conservation Supervisor Robbins provided a chronology of drought-related events and discussed Governor Brown’s Executive Order B-40-17, issued on April 7, 2017, which lifted the drought emergency in the State except in four counties. He facilitated a presentation on the following:

- California’s Drought Dates
- Executive Order B-40-17
- Executive Order B-37-16
- Making Water Conservation a California Way of Life
  - Chapter 1 – Introduction
  - Chapter 2 – Directives implemented within existing authorities
  - Chapter 3 – Recommendations that require new and expanded authorities to implement
  - Chapter 4 – Implementing the conservation framework
  - Shortages
  - Use Targets
  - Commercial, Industrial and Institutional Measures
- Water Use Standards Development Timeline

General discussion took place regarding the District educating its rate payers about the State’s conservation plan so they know what is coming, understand that the rules and regulations are mandated by the State, not the District, and what they can do about it.

This item was presented for information only.

#### RULES AND REGULATIONS GOVERNING CROSS CONNECTION CONTROL TO PROTECT THE PUBLIC WATER SYSTEM

Finance Manager Fusco stated the District’s existing ordinance governing cross-connection control to protect the public water system was adopted on December 1, 1986. Advancement of technology and terminology have made it necessary to bring the existing ordinance in line with current standards. California County Water District Law of 1949, and Title 17, Chapter V, Sections 7583 through 7605, of the California Code of Regulations sets forth rules and regulations governing cross-connections which the

District must follow. Cross-connection is defined as, “any unprotected actual or potential connection between a potable water system used to supply water for drinking purposes and any source or system containing unapproved water or a substance that is not or cannot be approved as safe, wholesome, and potable.” Regulations require a backflow prevention device be placed where a condition of cross-connection exists or possibly exists.

Finance Manager Fusco reviewed the changes from the 1986 ordinance and the proposed ordinance which include: updating terminology and definitions; additional and updated facilities and use types; more detailed information regarding backflow prevention assemblies, air-gap separation and reduced pressure principle backflow prevention assemblies; and new sections on backflow prevention assembly removal, upgrading existing approved backflow prevention assemblies, fire detector checks and existing non-conforming fire detector check assemblies.

Staff recommended the Board approve and adopt the proposed ordinance which stipulates the rules and regulations governing cross-connection control to protect the public water system.

Director Martin inquired about the cost of the District’s backflow prevention program. Finance Manger Fusco stated the current fee is \$2.50 per month per backflow prevention device. The fee covers the District’s costs to notify customers who have backflow prevention devices when they are due for their annual test and maintain records from each test to show compliance with the State. The fee has not changed in the last 12 years and there is no need to increase the fee. The cost of installing and maintaining a backflow prevention device is the responsibility of the property owner.

General discussion took place.

17-04-09 MOTION WAS MADE by Director Evans, seconded by Director Hernandez, and carried unanimously, to approve the rules and regulations and adopt the ordinance governing cross-connection control.

Ordinance No. 204 – The roll call vote was as follows:

AYES: Evans, Hernandez, Martin, Sannella, Elitharp

NOES:

ABSTAIN:

ABSENT:

#### 2017 COST OF SERVICE AND RATE STRUCTURE STUDY REVIEW AND UPDATE

Assistant General Manager Scaglione provided a presentation updating the Board on the Draft Cost of Service and Rate Structure Study, emphasizing that staff does not have a rate recommendation at this time as they are awaiting additional information. Information presented included:

- Cost of Service Study Process
- Objectives
- Hierarchy of Authority
- Demand Projection Table
- Proposed Changes to Tier Structure
- Tier Structure Comparison
- Customer Class = Meter Size
- Peaking Factors and Tier Allocations
- Allocate Capital Revenue Requirement
- Allocate Demand to Tiers
- Reduce Costs to Recover by Other Revenues
- Allocate Revenue Requirement to Ready-to-Serve (RTS) and Commodity Charges
- Calculate Unit Cost for RTS
- Calculate RTS Charge
- Calculate Commodity Charge
- Proposed Effective Dates

Question and answer took place during the presentation.

Staff requested consensus from the Board to direct legal counsel to perform a detailed legal review of the 2017 Cost of Service and Rate Structure Study and to possibly obtain a peer-to-peer or consultant review as well.

General discussion took place regarding the effective date of the proposed RTS and commodity rate increases, either at the proposed calendar year dates (July for RTS and January for commodity) or both components at the same time once per year. This will be considered at the May 3 Board meeting along with the format of the Proposition 218 Notice.

The consensus of the Board was to direct legal counsel to perform a detailed legal review the 2017 Cost of Service and Rate Structure Study.

Mike Hunsaker, member of the public, addressed the Board expressing his concerns regarding deficiencies he has identified in this plan, specifically the lack of drought rates, RTS charges unfairly distributed by meter size, the cost of the District having to purchase more sewer capacity, and the District's management of excessive and wasteful water use. He thanked the Board.

## REPORTS

### GENERAL MANAGER

General Manager Pruim reported the following:

- The Board has been provided copies of initiation and engagement letters from Rogers, Anderson, Malody and Scott, the firm that will be conducting the District's annual financial audit.
- At the recent San Diego County Water Authority (SDCWA) General Manager's meeting, the SDCWA indicated the "Table A" allocation is increasing over 80%.
- The third quarter Capital Improvement Program (CIP) update is now available on the District's website. The fourth quarter CIP update will be presented to the Board in August.
- A Board workshop is scheduled for April 20 at 5:00 p.m. to discuss pump zone charges.

### DISTRICT LEGAL COUNSEL

None.

### SAN DIEGO COUNTY WATER AUTHORITY

Director Evans stated the next Board meeting is scheduled for April 27. On April 20, she will be the SDCWA's delegate for the Conservation Water Wise Garden which is associated with the Joint Powers Insurance Authority, and on April 21 she will be attending the San Diego Regional Chamber Congressional Luncheon.

### ENCINA WASTEWATER AUTHORITY

Director Hernandez reported on his attendance to the Capital Improvement Committee meeting this morning at which discussion took place regarding improvement projects and the budget. He stated he had been approached by a construction port-a-potty pumper to see if EWA could take their waste as they had done years ago. When that program stopped, it forced them to take their waste to La Mesa or Temecula. This could be an opportunity to generate revenue. The Committee approved Director Hernandez' motion to conduct a high-level study to examine this in more detail to see what the potential revenue could be.

President Elitharp reported on his attendance to the Policy and Finance Committee meeting on April 11 at which the Committee performed a first review of the FY2018 operating budget. The budget looks relatively flat with a 1.6% total increase overall; however, he noted VWD's portion is 6.6% because VWD's flow and sewage strength have increased.

STANDING COMMITTEES

Director Martin stated the Finance/Investment Committee met this week to review the Capital Improvement Program.

Director Hernandez stated he is in the process of scheduling a meeting of the Engineering/Equipment Committee to talk with Geoscience, the organization that is performing the groundwater study for Olivenhain Municipal Water District, to see if this is something the District would want to do.

DIRECTORS REPORTS ON TRAVEL/CONFERENCES/SEMINARS ATTENDED

Director Sannella reported on his attendance to the Council of Water Utilities (COWU) meeting and the San Diego North Economic Development Council (SDNEDC) Economic Summit.

Director Martin reported on his attendance to the WaterReuse Annual Conference and COWU meeting in March, and the California Water Policy Conference, SDNEDC Economic Summit, and COWU meeting in April.

President Elitharp reported on his attendance to the COWU meeting and the California Water Policy Conference.

Director Hernandez reported on his attendance to the North San Diego Water Reuse Coalition Legislative Outreach meeting in Washington, DC.

Director Evans reported on her attendance to the COWU meeting.

OTHER BUSINESS

None.

DIRECTORS COMMENTS/FUTURE AGENDA ITEMS

Director Evans praised staff for the thorough information they have provided on the budget and rates, to which President Elitharp concurred.

Director Hernandez requested a land inventory of all properties the District owns. General Manager Pruiem stated he is in the process of preparing an exhibit of all District-owned parcels with corresponding data on each parcel such as the assessor's parcel number, acreage, and when the property was acquired. He anticipates this information will be completed within the next two weeks.

Director Martin stated this was a great meeting and that he looks forward to the next Board meeting at which staff will begin to change numbers back and forth to see how they affect rates.

Director Sannella asked if the District has any concerns for the upcoming audit that it is not compliant with its policy as it pertains to competing contracts that surpass \$100,000 in spending per year? General Manager Pruim responded he was unsure if this would come up during the audit, and that a list of vendors who are paid over \$100,000 annually has been compiled and will be brought to the Board as soon as staff is able to do so.

ADJOURNMENT

There being no further business to discuss, President Elitharp adjourned the Regular Meeting of the Board of Directors at the hour of 7:09 p.m.

A Regular Meeting of the Vallecitos Water District Board of Directors has been scheduled for Wednesday, May 3, 2017, at 5:00 p.m. at the District office, 201 Vallecitos de Oro, San Marcos, California.

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Craig Elitharp, President  
Board of Directors  
Vallecitos Water District

ATTEST:

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Glenn Pruim, Secretary  
Board of Directors  
Vallecitos Water District



MINUTES OF A WORKSHOP MEETING OF THE BOARD OF DIRECTORS  
OF THE VALLECITOS WATER DISTRICT  
THURSDAY, APRIL 20, 2017, AT 5:00 PM AT THE DISTRICT OFFICE,  
201 VALLECITOS DE ORO, SAN MARCOS, CALIFORNIA

President Elitharp called the Workshop meeting to order at the hour of 5:00 p.m.

Director Hernandez led the pledge of allegiance.

Present: Director Elitharp  
Director Evans  
Director Hernandez  
Director Martin  
Director Sannella

Staff Present: General Manager Pruim  
Assistant General Manager Scaglione  
Legal Counsel Scott  
Accounting Supervisor Owen  
Financial Analyst Arthur  
Executive Secretary Posvar

ADOPT AGENDA FOR THE WORKSHOP MEETING OF APRIL 20, 2017

17-04-10 MOTION WAS MADE by Director Hernandez, seconded by Director Martin, and carried unanimously to adopt the agenda for the Board Workshop Meeting of April 20, 2017.

DISCUSSION ITEM

PUMP ZONE CHARGES REVIEW

General Manager Pruim stated the purpose of the meeting is to determine how to capture the costs of the pump zone system. He explained what a pump zone system is; there are ten pump zones in the District's service boundaries, however, one of the zones has no customers in it. Customers in the pump zone areas are assessed a pump zone charge. Typical costs associated with pump zones include but are not limited to pumps, motors, piping, storage tanks, reservoirs, personnel who operate the pump zone equipment, equipment replacement, required electricity to pump water to the higher elevations. Staff is looking for the following direction: 1) the percentage of pump zone costs to capture through pump zone charges; 2) how to spread those costs across district customers, and 3) when the charges should become effective and will it be all in one lump sum or in a series of charges.

Some of the factors to consider are: 1) customers who receive the benefits of the service should be the customers who pay for that service; 2) the understanding that there is a general benefit to all customers of fire protection; 3) takes more electricity to pump water to higher elevations; and, 4) there are fixed costs in system inefficiencies that vary amongst the pump zones. The District is looking to capture only the electricity costs. Currently, the District is not capturing all the electrical costs - only collecting approximately 40% of the electrical costs. Sixty percent of those costs are being spread amongst customers who are not in pump zones. The District is not looking to recapture the non-electrical costs. Approximately \$125,000 in non-electrical costs are being spent on pump zone facilities.

General Manager Pruim stated that in order to move forward to establish rates for the next year, staff needed to make estimations on what the electricity costs would be. The estimate came to slightly over \$400,000 that would be required for the upcoming year. Pump operations are primarily at off-peak power rates in order to minimize costs to customers and the District. It is estimated that a little over 900,000 units of water will be pumped to pump zones in the next year which equates to 682 million gallons of water.

General Manager Pruim cited recent actions by the Board - the January 2017 approach as well as a new proposed approach. He discussed cost recovery options (Options A & Options B), charge allocation and longer term adjustments. Staff's recommendation was Option B which is to 1) collect 95% of the pump zone electrical costs through pump zone charges; 2) allocate the costs to the pump zone customers based on the weighted lift volume approach, which factors in elevation; 3) implement one-half of the change effective May 1, 2017, or another date selected by the Board, and the remaining half effective on July 1, 2018. He further discussed the financial impact of the recommended option.

General question and answer took place.

Ten members of the public addressed the Board expressing concerns regarding altitude factors and extra costs for pumping; is VWD a party to a class action lawsuit against SDG&E for overcharging – will VWD customers derive any benefit from that through lowering their rates should the suit be won?; pump zones are not a benefit of service; staff was going to find out what it would cost if the costs were shared with all District customers; customers at lower elevations should not be charged the pump zone rate; pump zone customers are being singled out; pump zone costs should be spread over all customers; analyze pressure levels; Prop. 218 requirements; other agencies don't charge pump zone rates; pumping charges are part of running the business; and, are other operations/charges singled out.

Staff responded to questions and concerns.

17-04-11 MOTION WAS MADE by Director Hernandez, seconded by Director Martin, and carried unanimously, to close the public comment period.

Director Sannella asked General Manager Pruim to explain why other agencies do not charge pump zone fees.

General Manager Pruim stated there are numerous examples of water districts that have elevation issues. Some choose to implement pump zone charges and some do not. A previous Vallecitos Board established the pump zone charges approximately 30 years ago.

Legal Counsel Scott stated that the Board is actually speaking about the recovery of electrical charges and who should pay for those. The historical philosophy has been that customers who receive the benefits of a service pay for that service. The charges being discussed now are the recovery of electrical costs.

General discussion followed as to if it is possible to have a different structure for high water users (farmers) where the increase is not so steep and if all agricultural customers have the agricultural rate for water, to which staff responded yes.

Director Martin explained the reason why 38 years ago the Board established the pump zones/rates and that new development would have to pay for the pump zone charges.

Director Sannella suggested the Board seriously consider phasing in the new rates over at least 3 or 4 years.

Director Martin expressed concern about spreading the increase out too far that the rates get miscalculated again and are not able to make up for it. He thinks two years should be the route to go and to revisit this every two years along with the 218 process. He would also recommend to the Board that all increases be done at one time.

Director Hernandez stated he would like to know how many other agencies in San Diego County have elevation differentials and would like to know whether or not they are charging pump zone fees. And if not, what is their justification and concerns related to Prop. 218. Director Hernandez further asked if staff has looked at or if there is a way to look at the issue of customers who are in the pump zone boundary only a little.

General Manager Pruim responded stating that when the hilltop developments were developed, they designed a plumbing system – pipelines, pumps, motors, and storage tanks. All the water is taken to the storage tank and it then flows downhill to the residents. For every residence, regardless of where they are at in the pump zone, that water had to be conveyed to the tank.

Director Hernandez moved to establish the pump zones over a three-year period beginning in July of 2017.

General Manager Pruim clarified that it would take three years to accomplish the four steps. The other option is three steps over two years.

Director Hernandez revised his motion to select an alternative option which would be a three-step process in which the last increase would take place in July 2019. Director Martin asked Director Hernandez if he would be willing to add that a review will be conducted every year. Director Hernandez agreed.

General Manager Pruim suggested that staff return to the Board on an annual basis to report to the Board on how the District is doing on pump zone charges.

17-04-12 MOTION WAS MADE by Director Hernandez, seconded by Director Martin, and carried unanimously, to implement a three-step process with a 95% recovery and annual review, with the last increase to take place July 1, 2019.

General Manager Pruim stated that in addition to the pump zone rates, staff will be making adjustments to the commodity portion, the ready-to-serve charge as well as sewer charges.

Assistant General Manager Scaglione reviewed the proposed budget schedule and potential effective dates for rate increases.

#### ADJOURNMENT

There being no further business to discuss, President Elitharp adjourned the Board Workshop Meeting at the hour of 6:47 p.m.

A Regular Meeting of the Vallecitos Water District Board of Directors has been scheduled for Wednesday, May 3, 2017, at 5:00 p.m. at the District office, 201 Vallecitos de Oro, San Marcos, California.

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Craig Elitharp, President  
Board of Directors  
Vallecitos Water District

ATTEST:

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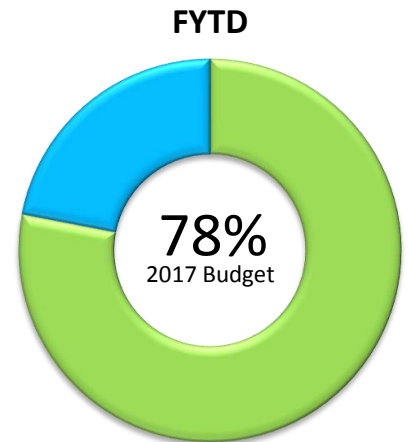
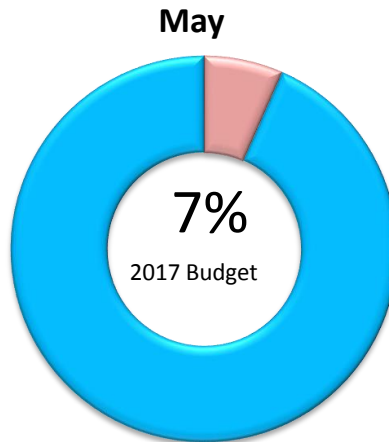
Glenn Pruum, Secretary  
Board of Directors  
Vallecitos Water District

**VALLECITOS WATER DISTRICT  
WARRANTS LIST SUMMARY  
May 3, 2017**

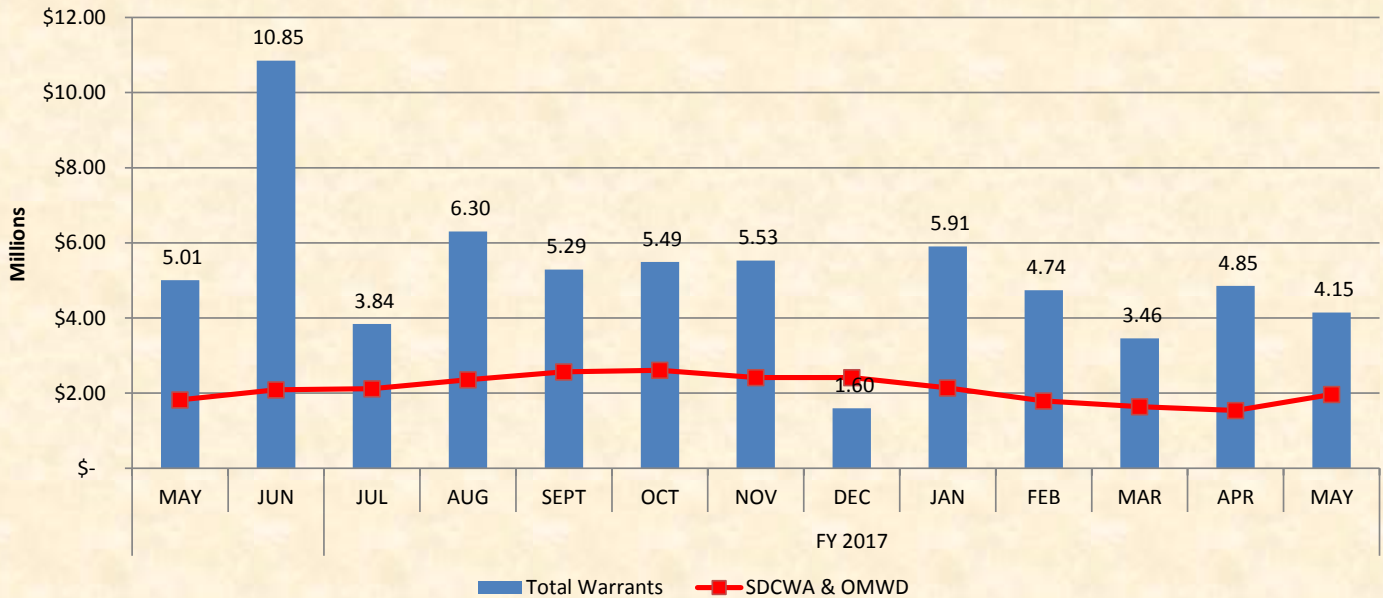
**Summary**

May Warrants	\$	4,146,380 *
YTD Warrants	\$	49,028,979 *
FY2017 Budget	\$	62,827,000

\* Excludes Debt Service

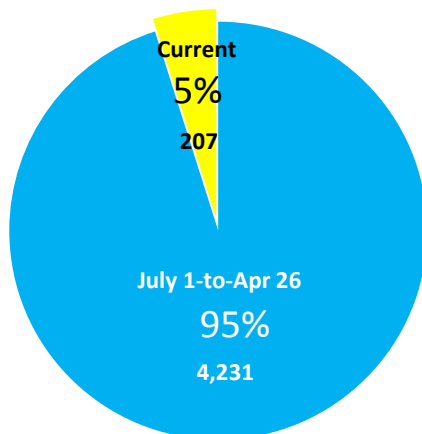


**Historical Warrants by Month\*\***



\*\* Historical Warrants by Month chart summarizes amounts in the Warrants List for the given month not amounts paid during the month with the exception of SDCWA & OMWD payments.

**Invoices Processed**



**Top 10 Vendors - FYTD**

SAN DIEGO COUNTY WATER AUTH.	\$22.6
ENCINA WASTEWATER AUTHORITY	\$4.7M
ACWA/JOINT POWERS INSURANCE	\$2.3M
PUBLIC EMPLOYEES RETIRE SYSTEM	\$2.1M
SAN DIEGO GAS & ELECTRIC	\$1.0M
OLIVENHAIN MWD	\$680K
SAN ELIJO HILLS DEVELOPMENT CO...	\$296K
BENS ASPHALT & MAINTENANCE CO...	\$291K
BLACK & VEATCH CORPORATION	\$249K
CARBON ACTIVATED CORP.	\$235K

VALLECITOS WATER DISTRICT

WARRANTS LIST

May 3, 2017

PAYEE	DESCRIPTION	CHECK#	AMOUNT
CHECKS			
Garnishments	Payroll Garnishments	110630 through 110633	-
Action Mail	Spring Splash Prj 20171-27	110634	1,232.21
ACWA/Joint Powers Insurance	Workers Compensation Quarter Ending 3-31-17	110635	52,191.84
Agustin S. Equihua	Sewer Easement Prj 90003	110636	914.00
Airgas USA LLC	Cylinder Rental	110637	97.28
All Star Signs, Inc	Name Plates 5	110638	53.88
Universal Protection Service LP	Weekly Deposit Svc	110639	59.36
Allison & Brian Devore	Closed Account Refund	110640	46.51
Aloha Printing	Stationary Letterhead, Large Window Envelopes	110641	4,637.19
APGN Inc.	Payments 13 & 14 of 24 Turbo Blower MRF	110642	8,138.00
Arthur A. Brown Plumbing	Replace Flush Valve in Women's Rest Room & Sink Repair	110643	880.00
AT&T	Phone Svc Mar	110644	2,908.12
B & C Crane Service Inc	Crane Rental	110645	507.50
Brady Sand And Material Inc	Rock & Cold Mix	110646	2,566.02
BRG Consulting Inc	San Marcos Interceptor Prj 71004, Land Outfall Sewer Prj 71177	110647	9,247.52
C & W Diving Services Inc	Inspection Svcs South Lake Sluice Gate	110648	9,217.00
CA Dept of Forestry/Fire Protection	Crew Work Mar	110649	914.48
CCI	Water Treatment Mar	110650	220.00
Cindy Vasquez	Closed Account Refund	110651	54.03
Coast Equipment Rentals	Dozer For Grading Easements	110652	2,804.00
Jeffrey Colwell	Video Production Prj 20171-28	110653	603.75
Constantino Roblero	Closed Account Refund	110654	40.00
Core Logic Information Solutions Inc	Engineering Map Svcs Mar	110655	300.00
Council of Water Utilities	Meeting 4-18-17, Elitharp, Evans, Hernandez, Martin, Sannella, Scaglione	110656	175.00
County of San Diego	Inspection Services Prj 20161-4	110657	820.00
Craig Elitharp	COWU Meetings 3-21-17 & 4-18-17, CA Water Policy Conference 4-6-17	110658	114.70
CSUSM	Water Academy Tuition 10 Employees	110659	8,630.00
CWEA	Membership J Scott	110660	172.00
Diamond Environmental Services	Portable Restroom MRF	110661	273.53
Digital Networks Group, Inc.	Audio Visual Upgrade Prj 20151-2	110662	9,252.75
DirecTV Inc	Satellite Svc Apr	110663	161.23
Doane & Hartwig Water Systems Inc	Chlorine Regulator Rebuild MRF	110664	971.04
Downstream Services	Closed Account Refund	110665	847.81
Craig Durban	Collection System Cert & Membership CWEA	110666	265.00
Electrical Sales Inc	Supplies For Storm Well Upgrade, Hardware Supplies	110667	2,133.72
Encina Wastewater Authority	Water & Sewer Testing	110668	33,060.50
Betty Evans	COWU Meetings 1-17-17 & 4-18-17	110669	33.04
Ewing Irrigation Products	PVC Supplies	110670	58.89
Fisher Scientific LLC	Thermometer, Reagents, Lab Supplies	110671	511.79
Fresca Realty	Closed Account Refund	110672	74.89
Hach Company	In Line Turbidity Meter MRF, Automatic Cleaning Module For Turbidity Meter MRF	110673	4,225.85
Harrington Industrial	Hardware Supplies	110674	353.82
James R Hernandez	WaterReuse Conference 3-20-17, COWU Meetings 3-21-17 & 4-18-17	110675	168.90
High Tech High	Donation For Installation of Water Bottle Filling Stations at School Site Prj 20171-30	110676	250.00
Infinisource	Admin Svcs Mar	110677	536.43
Infosend Inc	Support Fee, Postage & Printing Mar	110678	6,198.69
Infrastructure Engr Corp	Rock Springs Sewer Prj 90003, Fulton Rd Sewer Repair Prj 20161-11	110679	4,392.09
Jesse Dawber	Closed Account Refund	110680	116.25
Johnson Matthey Inc	Generator Upgrade Parts MRF	110681	1,137.00
JCI Jones Chemicals Inc	Chlorine	110682	7,777.40
Kaman Industrial Technologies	Actuator Skimmer #5 MRF	110683	1,101.58
Safety-Kleen Systems Inc	Parts Washer Rental	110684	205.90
Knight Security & Fire Systems	Removal of Old Wiring MRF	110685	55.00
Law Offices of Jeffrey G Scott	Legal Svcs Mar	110686	20,309.00
Liduvina Ayala	Sewer Easement Prj 90003	110687	914.00
Lloyd Pest Control	Pest Control Mar	110688	764.00

VALLECITOS WATER DISTRICT  
WARRANTS LIST  
May 3, 2017

PAYEE	DESCRIPTION	CHECK#	AMOUNT
Manpower Temp Services	Customer Svc Rep Week Ending 4-9-17 & 4-16-17	110689	1,927.86
Marcon Products Inc	Manhole Frame & Cover Prj 20161-11	110690	2,693.75
Maria De Jesus Equihua	Sewer Easement Prj 90003	110691	914.00
Hal Martin	CA Water Policy Conference 4-6-17, COWU Meeting 4-18-17	110692	120.18
Matheson Tri-Gas Inc	Cylinder Rental	110693	50.54
Mike Sannella	SDNEDC Meeting 4-12-17	110694	2.57
Nickloas & Lindsey Gabaldon	Closed Account Refund	110695	92.16
O.G. Supply Inc	Hardware Supplies	110696	96.86
Occu Med Ltd	Hazmat Exams 4	110697	1,144.00
One Source Distributors LLC	Hardware Supplies	110698	108.74
PC Specialists Inc	Dell Monitors 2, Dell Computers 2	110699	2,563.52
Pencco, Inc.	Trioxyn, Sulfend RT	110700	18,113.06
Petty Cash Custodian	Petty Cash	110701	802.16
Pitney Bowes	Mail System Lease Feb - Apr	110702	602.64
Rick Post Welding	Welding Svcs Prj 20161-4	110703	625.00
Recycled Aggregate Materials Co Inc	Concrete Recycling	110704	300.00
Air Quality Compliance Solutions, Inc.	Fuel Island Maintenance	110705	175.00
Richmond American Homes	Closed Account Refund	110706	235.22
Rodolfo Ayala	Sewer Easement Prj 90003	110707	914.00
Rusty Wallis Inc	Soft Water Tank Svc Apr	110708	225.00
Steven Saavedra	Water Operator Cert SWRCB	110709	130.00
SDG&E	Power Mar	110710	67,822.12
Shamrock Group, Inc.	Installation & Paving Manhole Lid Rancho Santa Fe Rd	110711	7,500.00
Brian Shore	Books For Leadership Academy CSUSM	110712	28.62
Shred-It US JV LLC	Shredding Svcs Mar	110713	153.59
Signarama	Banners 20 Prj 20171-27	110714	1,341.38
Staples Advantage	Office Supplies	110715	1,353.02
State Board of Equalization	Annexation Admin Fee	110716	300.00
Stephen Heywood	Closed Account Refund	110717	94.05
State Water Resources Control	Annual Permit Fee MRF 4-17 To 3-18	110718	1,676.00
Trussell Technologies Inc	Media Study MRF Prj 20121-4	110719	18,135.81
Univar USA Inc	Sodium Hypo Liquichlor, Caustic Soda, Sodium Bisulfite	110720	7,550.93
Victor Yap	Closed Account Refund	110721	38.97
Westley Owen	CSMFO Conference 2-7-17	110722	70.46
Tri-City Emergency Medical Group	Medical Svcs	110723	382.44
Ababa Bolt Inc	Hardware Supplies Prj 20161-20	110724	31.75
Athenx Inc	Replace & Rewire Back Gate, Lower Card Reader	110725	805.76
Chlorinators Incorporated	Chlorine Regulator Repair MRF	110726	887.80
Corodata Media Storage Inc	Back Up Storage Tape Mar	110727	172.41
County of San Diego	Facility Permit Twin Oaks	110728	517.00
Grainger Inc	Odor Scrubber Fan Motor MRF, Spray Paint, Tape Measures, Small Tools For MRF	110729	4,592.62
Hawthorne Machinery Co.	Hardware Supplies	110730	493.80
Major League Pest	Bee Removal	110731	240.00
Olivenhain MWD	Treated Water Mar	110732	59,472.20
Ostari Inc	VM Ware Annual Support Renewal - 1 Year	110733	13,558.72
Pacific Pipeline Supply	Test Stations, Couplings, Pressure Valves 5 Prj 20161-4	110734	5,915.70
San Marcos Chamber of Commerce	Festival Booth Prj 20171-27	110735	305.00
SD County Superintendent	Splash Labs 16 Prj 20171-29	110736	5,864.00
T.S. Industrial Supply	Lifting Chains, Hardware Supplies	110737	1,390.06
Target1 Instruments LLC	Meter Calibrations 3	110738	1,440.00
Unifirst Corporation	Uniform Delivery	110739	2,305.88
Valley Chain & Gear Inc	Hardware Supplies	110740	80.48
VAP Enterprises Inc	Right of Way Acquisitions 2 Prj 90003 & 20161-26	110741	2,580.00
VWR International	Lab Supplies	110742	214.32
Walters Wholesale Electric	Hardware Supplies	110743	335.52
J.L. Wingert Co.	Pump Rebuild Kit MRF	110744	395.41
Total Disbursements (111 Checks)			<u>443,576.57</u>



VALLECITOS WATER DISTRICT  
WARRANTS LIST  
May 3, 2017

PAYEE	DESCRIPTION	CHECK#	AMOUNT
<b>WIRES</b>			
San Diego County Water Authority	March Water Bill	Wire	1,966,861.71
Encina Wastewater Authority	Quarterly Billing	Wire	1,294,048.64
Public Employees Retirement System	Retirement Contribution - April 26, 2017 Payroll	Wire	<u>68,839.77</u>
Total Wires			<u>3,329,750.12</u>
<b>PAYROLL</b>			
Total direct deposits		Wire	226,325.44
VWD Employee Association		110630	510.00
Garnishments	110631 through	110633	1,721.06
IRS	Federal payroll tax deposit	Wire	100,383.46
Employment Development Department	California payroll tax deposit	Wire	18,177.55
CalPERS	Deferred compensation withheld	Wire	15,799.89
VOYA	Deferred compensation withheld	Wire	<u>10,135.79</u>
Total April 26, 2017 Payroll Disbursements			<u>373,053.19</u>
<b>TOTAL DISBURSEMENTS</b>			<u>4,146,379.88</u>

**DATE: MAY 3, 2017**  
**TO: BOARD OF DIRECTORS**  
**SUBJECT: FINAL ACCEPTANCE OF WATER AND SEWER IMPROVEMENTS FOR DAVIA VILLAGE IMPROVMENTS APN#'S 219-163-63 AND 219-163-64 (DAVIA EAST DEVELOPMENT, LLC)**

**BACKGROUND:**

Davia East Development, LLC, owner of the project, has completed the installation of the water and sewer facilities for 416 multi-family dwelling units and 15,229 square feet of commercial space. The 10.62-acre site is located on Armorlite Drive and Bingham Drive at 1045 Armorlite Drive.

**DISCUSSION:**

The project constructed approximately 1,050 feet of 8-inch diameter PVC water main, 690 feet of 12-inch diameter PVC sewer main and 860 feet of 8-inch diameter PVC sewer main. Upon final acceptance of the project, water and sewer service will be available to 416 multi-family units and 15,229 square feet of commercial space.

The owner has provided the District with the required security to guarantee repairs due to failure of materials or workmanship for a period of one year. All current fees and charges have been paid to date.

Along with the water and sewer mains, assorted appurtenances were installed such as water meters, fire hydrants, gate valves, sewer laterals and manholes.

The owner has paid all Water and Wastewater Capital Facility fees.

**FISCAL IMPACT:**

None. Future water and sewer revenues will offset costs of service.

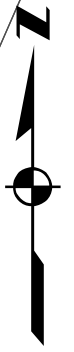
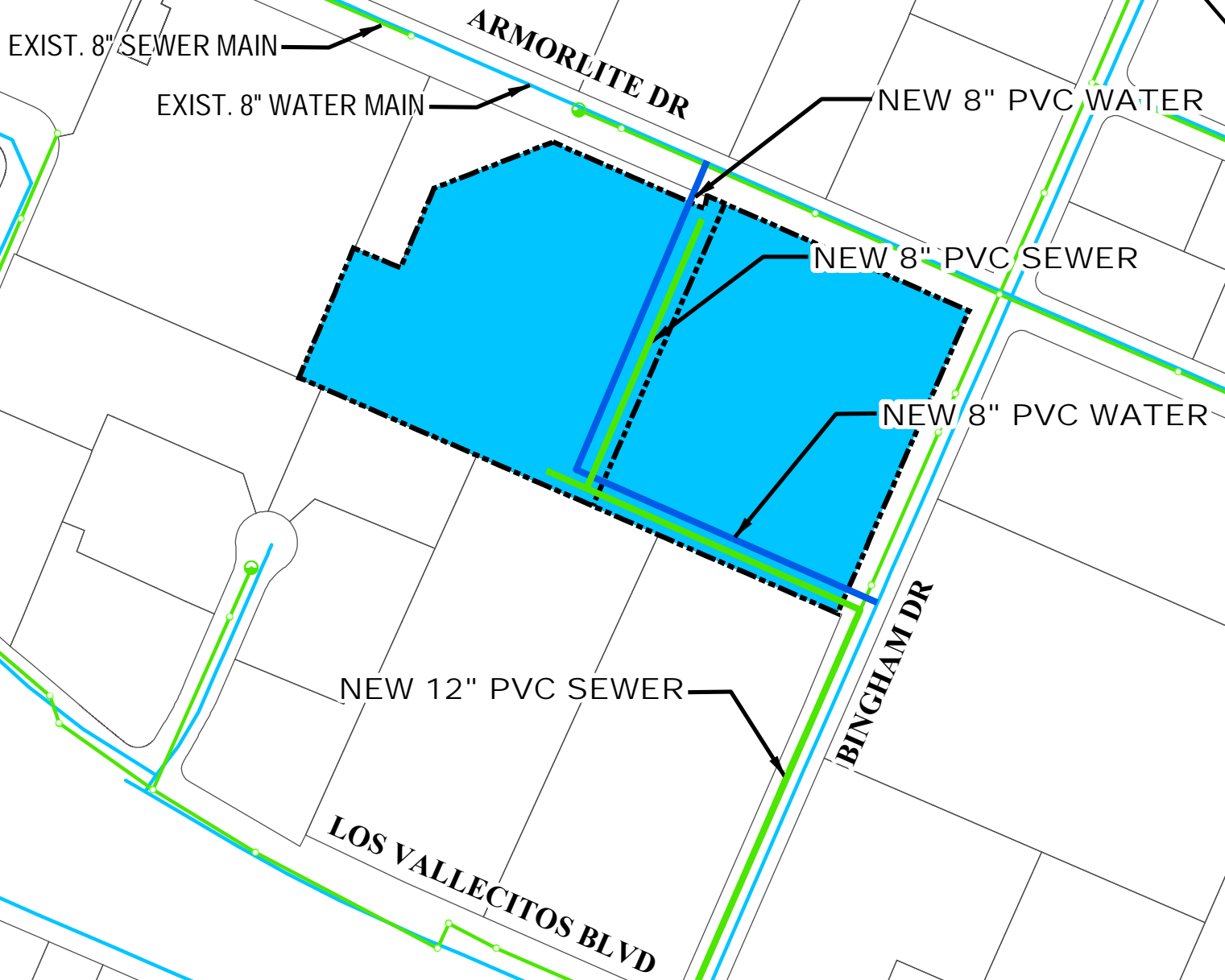
**RECOMMENDATION:**

Accept the project improvements and approve the filing of a notice of completion for Davia Village.

**ATTACHMENTS:**

2 Map Exhibits - 1 Plat and 1 Aerial

# FINAL ACCEPTANCE OF WATER & SEWER IMPROVEMENTS FOR DAVIA VILLAGE IMPROVEMENTS APN# 219-163-63 & 219-163-64 ( DAVIA EAST DEVELOPEMENT, LLC )



# FINAL ACCEPTANCE OF WATER & SEWER IMPROVEMENTS FOR DAVIA VILLAGE IMPROVEMENTS APN# 219-163-63 & 219-163-64 ( DAVIA EAST DEVELOPEMENT, LLC )

EXIST. 8" SEWER MAIN

EXIST. 8" WATER MAIN

ARMORLITE DR

NEW 8" PVC WATER

NEW 8" PVC SEWER

NEW 8" PVC WATER

SR-78

NEW 12" PVC SEWER

BINGHAM DR

LOS VALLECITOS BLVD

**DATE: MAY 3, 2017**  
**TO: BOARD OF DIRECTORS**  
**SUBJECT: ADOPTION OF RESOLUTION ORDERING THE ANNEXATION OF APN'S 182-260-21 AND 182-190-92 INTO THE VALLECITOS WATER DISTRICT WATER SERVICE BOUNDARY**

**BACKGROUND:**

Samy and Elena Colucci, Trustees of The Samy and Elena Colucci Qualified Trust and owner of the property, have requested annexation into the District's water service area. This request for annexation was submitted and approved by the Board on September 7, 2016. The property address is 2534 N. Twin Oaks Valley Rd. in San Marcos. The 7.34 acre property is currently within the Vallecitos Water District Sphere of Influence, but in the Vista Irrigation District (VID) water service boundary and is receiving water service from the District through an exchange agreement with VID.

The exchange agreement was recorded on September 2, 1987 when the Assessor Parcel Number (APN) was 182-270-03. The owners of the property have proposed the construction of two single family homes. VID has no existing facilities in this area and is unable to service this project. A boundary adjustment was completed through the County of San Diego that adjusted the boundary splitting APN 182-270-03 into two separate assessor parcel numbers.

**DISCUSSION:**

District water facilities are currently available to serve the properties on Twin Oaks Valley Road. The District currently has an 18-inch water main located along the frontage of the Colucci property to provide service connections. The area in which the project is located is within the District's Sphere of Influence and is designated by LAFCO to ultimately be served by the District.

The Samy and Elena Colucci Qualified Trust is responsible for the installation of the water connections to the property, to be made by a licensed underground contractor, and inspected and approved by the District.

All of the District's conditions for annexation approval have been met. The owner has paid all required fees, including water capital facility fees for two single family residences. LAFCO approved the proposed "Colucci Annexation" with the concurrent detachment from VID on April 3, 2017. With the completion of the LAFCO annexation, the exchange agreement with VID can be cancelled.

**FISCAL IMPACT:**

Payment of \$34,189.72 in annexation fees have been collected in accordance with Ordinance No. 200. All other fees will cover actual costs and have no fiscal impact.

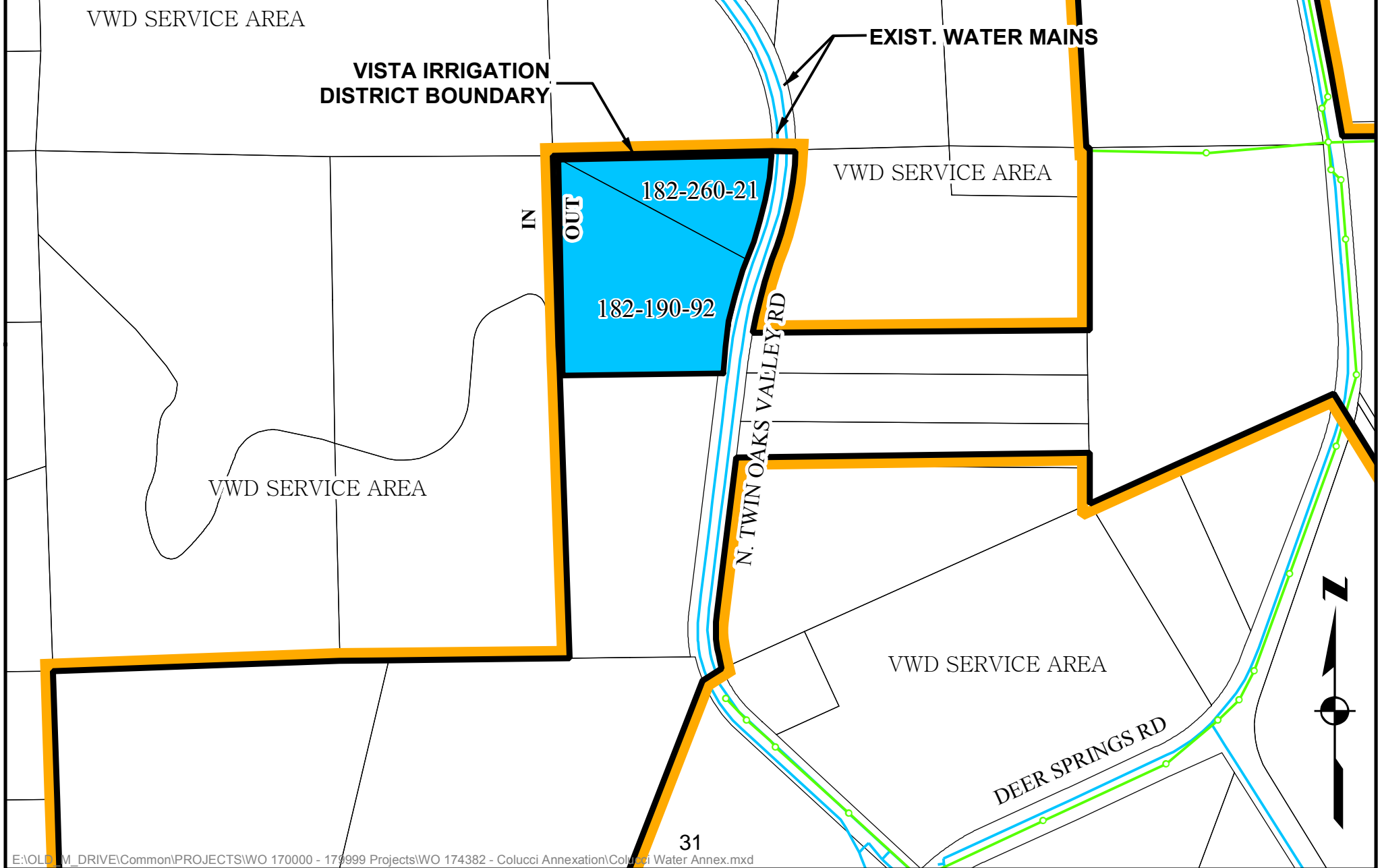
**RECOMMENDATION:**

Approve the cancellation of the exchange agreement with Vista Irrigation District and adopt the resolution, completing the above referenced annexation.

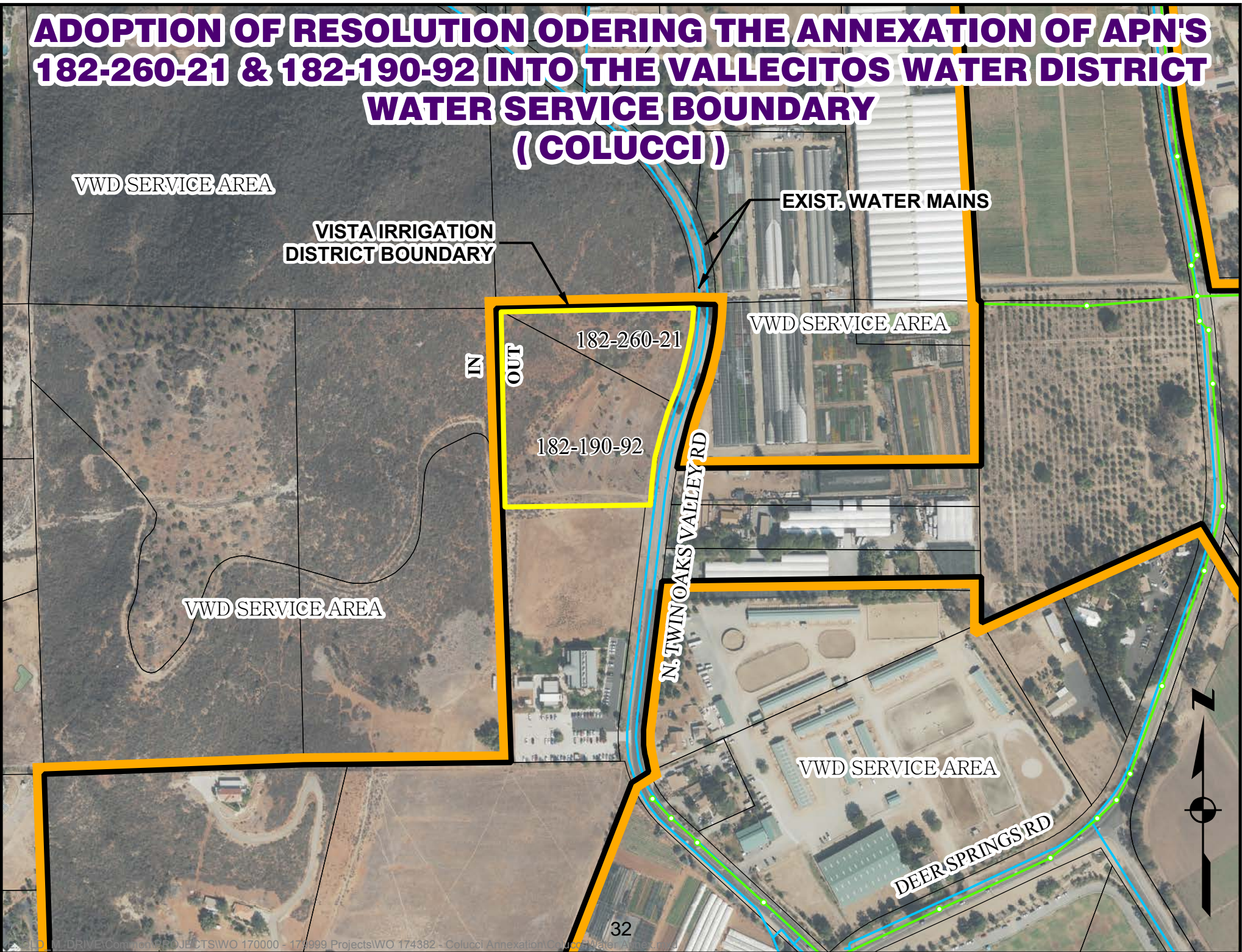
**ATTACHMENTS:**

- 2 Map Exhibits – 1 Plat & 1 Aerial
- 1 Resolution
- 1 Cancellation of Exchange Agreement

# ADOPTION OF RESOLUTION ORDERING THE ANNEXATION OF APN'S 182-260-21 & 182-190-92 INTO THE VALLECITOS WATER DISTRICT WATER SERVICE BOUNDARY ( COLUCCI )



# ADOPTION OF RESOLUTION ORDERING THE ANNEXATION OF APN'S 182-260-21 & 182-190-92 INTO THE VALLECITOS WATER DISTRICT WATER SERVICE BOUNDARY ( COLUCCI )





**RESOLUTION NO.**

**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE VALLECITOS WATER DISTRICT  
ORDERING THE ANNEXATION FOR WATER SERVICE  
OF APN #182-260-21 AND APN #182-190-92 (COLLUCCI ANNEXATION)**

**WHEREAS**, a petition for the detachment from the Vista Irrigation District and annexation to the Vallecitos Water District was filed with the Executive Officer of the Local Agency Formation Commission (LAFCO) of the County of San Diego; and

**WHEREAS**, the Executive Officer of the LAFCO examined the petition and determined that it is signed by the requisite number of signers, and has attached his certificate to the petition showing the results of his examination, as provided in Government Code Section 56150 through 56162, inclusive; and

**WHEREAS**, LAFCO approved and ordered the annexation on April 3, 2017, subject to payment of applicable annexation and capacity fees; and

**WHEREAS**, the land described in said petition is the land hereinafter described in Exhibit "A" attached hereto, and the owners of the land have given their written consent to said annexation; and

**WHEREAS**, the regular county assessment roll is utilized by this District; and

**WHEREAS**, the Board of Directors certifies that the determination by the Local Agency Formation Commission (LAFCO) that this reorganization is exempted by CEQA, Guidelines Section 15320, from the requirements of CEQA has been reviewed and considered; and

**WHEREAS**, while the territory currently is located within the Vista Irrigation District, there are no water facilities able to serve the site that precludes the provision of water service from that District's distribution system; and

**WHEREAS**, because water service can be provided by the Vallecitos Water District distribution system, representatives from both Districts agree to this reorganization; and

**WHEREAS**, the inclusion of the land will be for the best interest of the land, and the owners thereof consent to the inclusion of said land in the Vallecitos Water District; and

**WHEREAS**, the Board of Directors determines that all of the land described in said petition and hereinafter described shall be included in the Vallecitos Water District;

that the proceedings held for the detachment and inclusion herein and above referred to were genuine and sufficient and in all respect complied with the Cortese-Knox Government Reorganization Act of 1985, beginning with Section 56000, of the Government Code of the State of California.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE VALLECTIOS WATER DISTRICT, finds, determines, and resolves as follows:

**Section 1.** The Board of Directors of the Vallecitos Water District does hereby order the annexation to the Vallecitos Water District of all the land described in the petition and referred to as APN #182-260-21 and APN #182-190-92, as more particularly described on the attached Exhibit "A" legal description.

**Section 2.** The conditions of said annexation to the Vallecitos Water District are as follows:

**Section 2.1:** Payment of annexation fees of \$34,189.72 (\$4,658.00 per acre) in accordance with Ordinance No. 200.

**Section 2.2:** Payment of a \$500.00 fee to the State Board of Equalization.

**Section 2.3:** Confirmation of completion of detachment procedures from Vista Irrigation District.

**Section 2.4:** Confirmation that the land has been annexed to the San Diego County Water Authority and to the Metropolitan Water District of Southern California, and that the annexation shall be subject to all conditions established by said agencies.

**Section 2.5:** Payment of all water capital facility fees and related charges shall be required prior to the provision of water service and connection to the Vallecitos Water District distribution system.

**Section 2.6:** After annexation, the taxable property in the annexed area shall be subject to taxation for the purposes of the District, including obligations of the District authorized and outstanding at the time of the annexation and any future obligations.

**Section 3.** This resolution shall become effective immediately upon its final recordation.

**Section 4.** LAFCO shall file with the County Recorder of San Diego County a certified copy of this resolution and certificates stating that this resolution is complete. The Secretary of LAFCO shall further comply with the provisions of Government Code

Section 57204 by filing with the State Board of Equalization and with the County Assessor and Auditor of San Diego County statements of change of boundary together with a map or plat of the area to be assessed.

PASSED AND ADOPTED by the Board of Directors of the Vallecitos Water District at a regular meeting held on this 3<sup>rd</sup> day of May, 2017, by the following roll call vote:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

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Craig Elitharp, President  
Board of Directors  
Vallecitos Water District

ATTEST:

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Glenn Prui, Secretary  
Board of Directors  
Vallecitos Water District

Requested by and,  
When recorded, mail to the:

Vallecitos Water District  
201 Vallecitos de Oro  
San Marcos, CA 92069

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(Space above for Recorder's Use)

**CANCELLATION OF "EXCHANGE AGREEMENT FOR TEMPORARY DELIVERY OF WATER" APN: 182-270-03, Por of Lot 2, NW 1/4 of SW 1/4, Section 25, T11S, R3W, SBM.**

Reference is made to the exchange agreement for temporary delivery of water that was recorded on September 2, 1987, as recorded document no. 1987-498634, in the Office of the County Recorder of San Diego County. The Agreement is between the VISTA IRRIGATION DISTRICT and VALLECITOS WATER DISTRICT formerly known as SAN MARCOS COUNTY WATER DISTRICT and MORTIMER and AGATHA WINSKI "PROPERTY OWNERS", to provide temporary water services to the property APN: 182-270-03, Por of Lot 2, NW 1/4 of SW 1/4, Section 25, T11S, R3W, SBM. APN 182-270-03 has split and changed twice since execution. The agreement is no longer required; therefore, the agreement is hereby cancelled insofar as it affects the subject property.

SEE ATTACHED - EXHIBIT "A"

The effective date of the Cancellation of above mentioned Agreements is \_\_\_\_\_.

The Cancellation of these Agreements is executed by the duly authorized officers of the District.

**VALLECITOS WATER DISTRICT**

BY: \_\_\_\_\_  
Glenn Pruum, Secretary  
Board of Directors

Date: \_\_\_\_\_

**DATE: MAY 3, 2017**  
**TO: BOARD OF DIRECTORS**  
**SUBJECT: CONSTRUCTION CONTRACT AWARD FOR THE MAIN FACILITY ROOF REPLACEMENT**

**BACKGROUND:**

The roofs for Operations Buildings B, C, D, and E are in need of repair as they continue to leak during rain events. Several repairs have been made over the past 20 years since the facility was originally constructed. The inner layers of these roofs are cracked and failing. This project will replace the existing roofs with new roof membranes that will include a 20-year warranty.

On April 11, 2017 at 2:00 p.m., District staff received and opened bids from 4 contractors with bid results as follows:

<u>Bidder</u>	<u>Amount</u>
<b>Sylvester Roofing</b>	<b>\$359,000</b>
<b>Commercial and Industrial Roofing</b>	<b>\$359,134</b>
<b>Commercial Waterproofing Systems</b>	<b>\$509,812</b>
<b>Letner Roofing</b>	<b>\$510,000</b>

**DISCUSSION:**

Engineer's Estimate for the project was \$200,000. Staff and Counsel completed the evaluation of qualifications and determined that Sylvester Roofing was the lowest responsive, responsible bidder.

District staff will perform construction management. Antennae relocations and HVAC mounting hardware replacements for approximately \$9,500 will be performed separately by outside contractors working directly with District staff.

**FISCAL IMPACT:**

The total estimated cost and budget summary are as follows:

Budget	\$450,000
Construction	\$359,000
10% Contingency	\$ 35,900
Outside Facility Services	\$ 9,500
Staff	\$ 14,000
Overhead	<u>\$ 28,300</u>
Total	<u>\$446,700</u>
Budget Surplus	\$ 3,300

**RECOMMENDATION:**

Award the construction contract to Sylvester Roofing in the amount of \$359,000 for the Main Facility Roof Replacement Project, subject to provisions of the contract.

# CONSTRUCTION CONTRACT AWARD MAIN FACILITY ROOF REPLACEMENT

MISSION RD

BASEBALL FIELDS

BUILDING "E"

BUILDING "D"

BUILDING "C"

BUILDING "B"

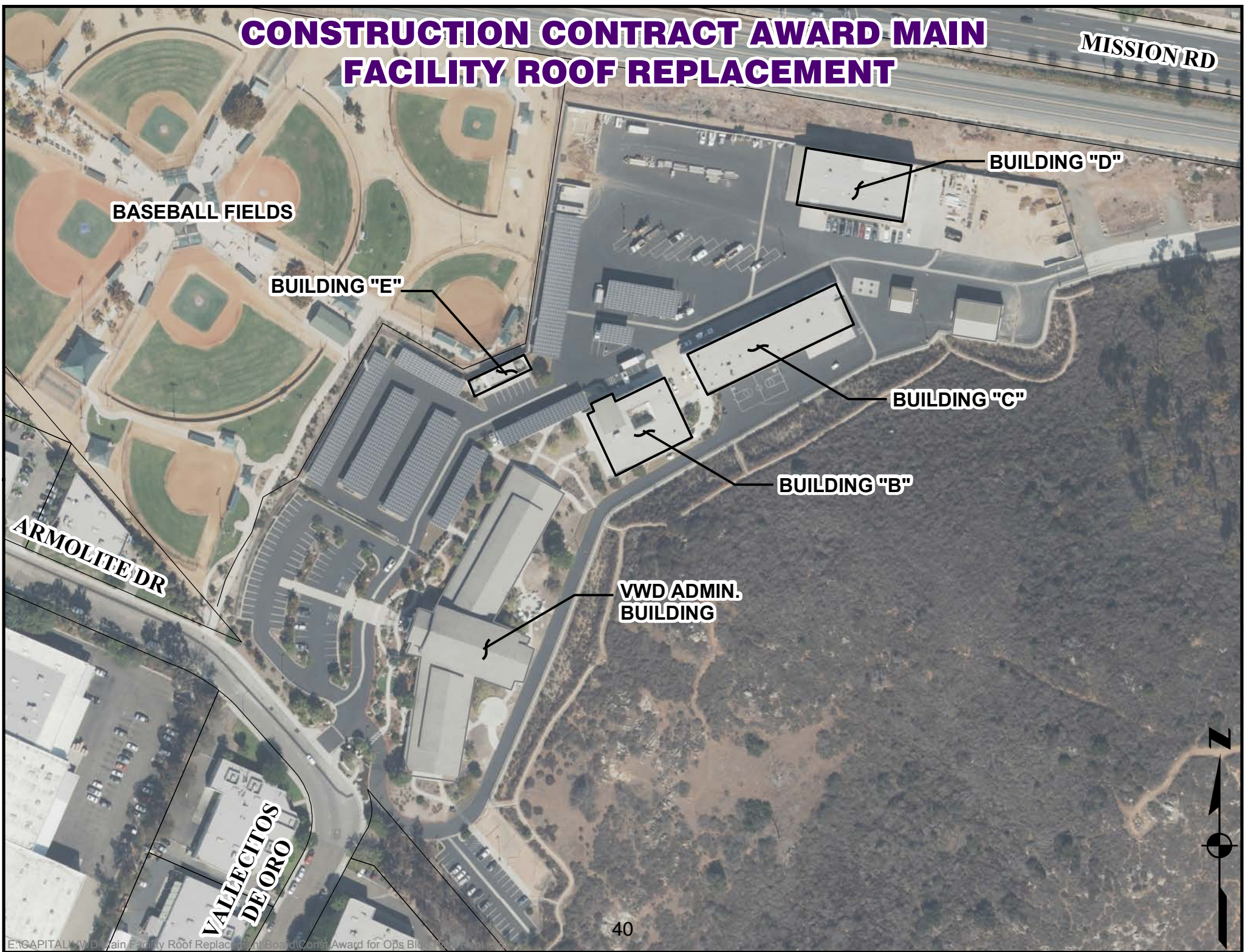
VWD ADMIN.  
BUILDING

ARMOLITE DR

VALLECITOS  
DE ORO



# CONSTRUCTION CONTRACT AWARD MAIN FACILITY ROOF REPLACEMENT



MISSION RD

BASEBALL FIELDS

BUILDING "E"

BUILDING "D"

BUILDING "C"

BUILDING "B"

VWD ADMIN.  
BUILDING

ARMOLITE DR

VALLECITOS  
DE ORO





**DATE: MAY 3, 2017**  
**TO: BOARD OF DIRECTORS**  
**SUBJECT: REPAIR OF 16" EMERGENCY BYPASS SEWERLINE**

**BACKGROUND:**

The 16" Emergency Bypass sewer pipeline (Bypass) was installed in 1969 and connects to the District's 24" Land Outfall pipeline on Melrose Drive, in the City of Carlsbad. Extending from Melrose Drive near Poinsettia Lane, the Bypass follows a natural canyon easterly to Rancho Santa Fe Road near Via Cancion. The Bypass is primarily composed of reinforced plastic mortar (RPM) pipe, commonly referred to as "Techite", and is used to divert flows from the Meadowlark Water Reclamation Facility (MRF) to the Land Outfall pipeline. Sewer in portions of the Bypass is under pressure due to its proximity to the pressurized section of the Land Outfall.

On February 28, 2017, a sewer spill occurred near Carrillo Way in Carlsbad due to a break in the Bypass. A recent storm, which released approximately 3.24 inches of rain in the area, contributed to the excessive sewer flows in the Land Outfall pipeline at the time.

The excessive flows put additional strain and weight on the Bypass, causing the pipe to crack and spill. District crews were mobilized on-site by 9:30 a.m., upon notification of the spill, and worked to prevent flows from entering a nearby creek. The 435,000-gallon spill was fully contained by 6:30 p.m. with a total of 338,000-gallons recovered and 97,000-gallons released to the environment. Water quality testing was performed from February 28<sup>th</sup> through March 7<sup>th</sup> and warning signs were posted per the direction of the County Department of Environmental Health.

**DISCUSSION:**

Staff hired Charles King Company to perform the repairs under the District's emergency purchasing policy. Under normal conditions, Resolution No. 1481 requires Board approval for construction above \$50,000. However, under Section 8 of this Resolution, the General Manager can authorize emergency purchases above \$50,000 if it is required "for the health, safety and welfare of the customers of the District, for the protection of the District's property, or if there is an immediate need or emergency which could not be reasonably foreseen." Board approval is required at the next available Board meeting.

Charles King was selected due to their previous work for the District installing capital improvement sewer projects and their ability to mobilize quickly for this repair. Charles King Company was able to mobilize the next day, March 1<sup>st</sup>. Repair work involved:

- pumping the sewer spill into a nearby City of Carlsbad sewer main
- dewatering the trench due to excessive groundwater
- building proper access to the site
- potholing of an adjacent 12" sewerline in close proximity
- excavation and installation of trench shoring shields up to 14 feet deep
- replacement of a 20-foot section of damaged techite pipe with new techite pipe
- backfill and clean-up of the site

Upon excavation of the repair point, it was determined that the pipe was cracked due to improper installation. District and industry standard is to surround buried pipelines with a supportive layer of gravel or sand. This particular section of pipe was laid on bare rock with no gravel or sand support. Also, a brick, typically used for leveling the pipe before backfilling, was left in place under the pipe. Both the bare rock and the brick created rigid points, creating a crack under the added strain and weight of the pressurized sewer flows and saturated soil above the pipe.

Charles King Company completed the repair in 6 working days. Construction management and inspection was performed by District staff.

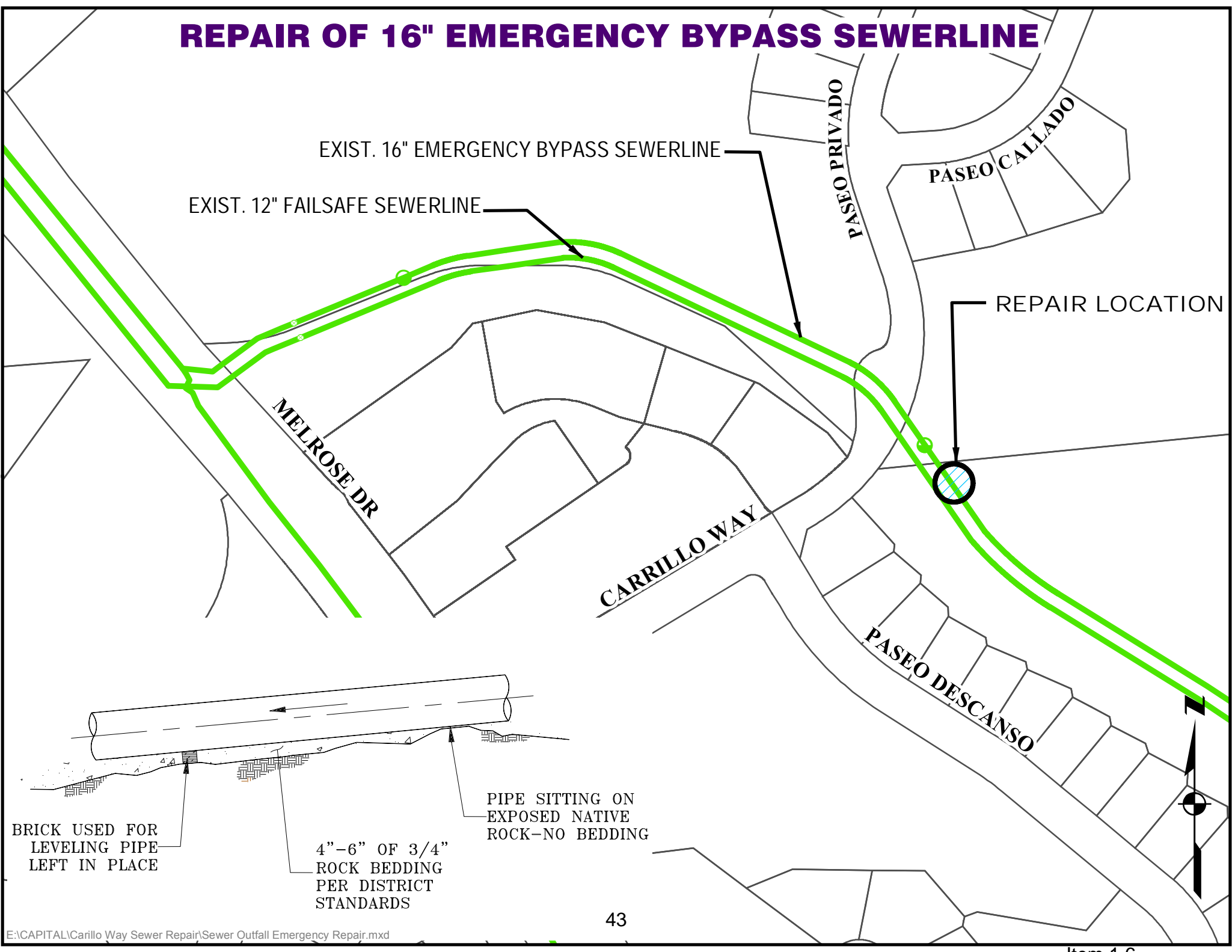
**FISCAL IMPACT:**

The total invoice from Charles King Company for the repairs is \$65,253.98. Funding for the repair will be from Fund 210 - Sewer Replacement.

**RECOMMENDATION:**

Approve payment to Charles King Company in the amount of \$65,253.98.

# REPAIR OF 16" EMERGENCY BYPASS SEWERLINE



EXIST. 16" EMERGENCY BYPASS SEWERLINE

EXIST. 12" FAILSAFE SEWERLINE

REPAIR LOCATION

MELROSE DR

CARRILLO WAY

PASEO DESCANSO

PASEO PRIVADO

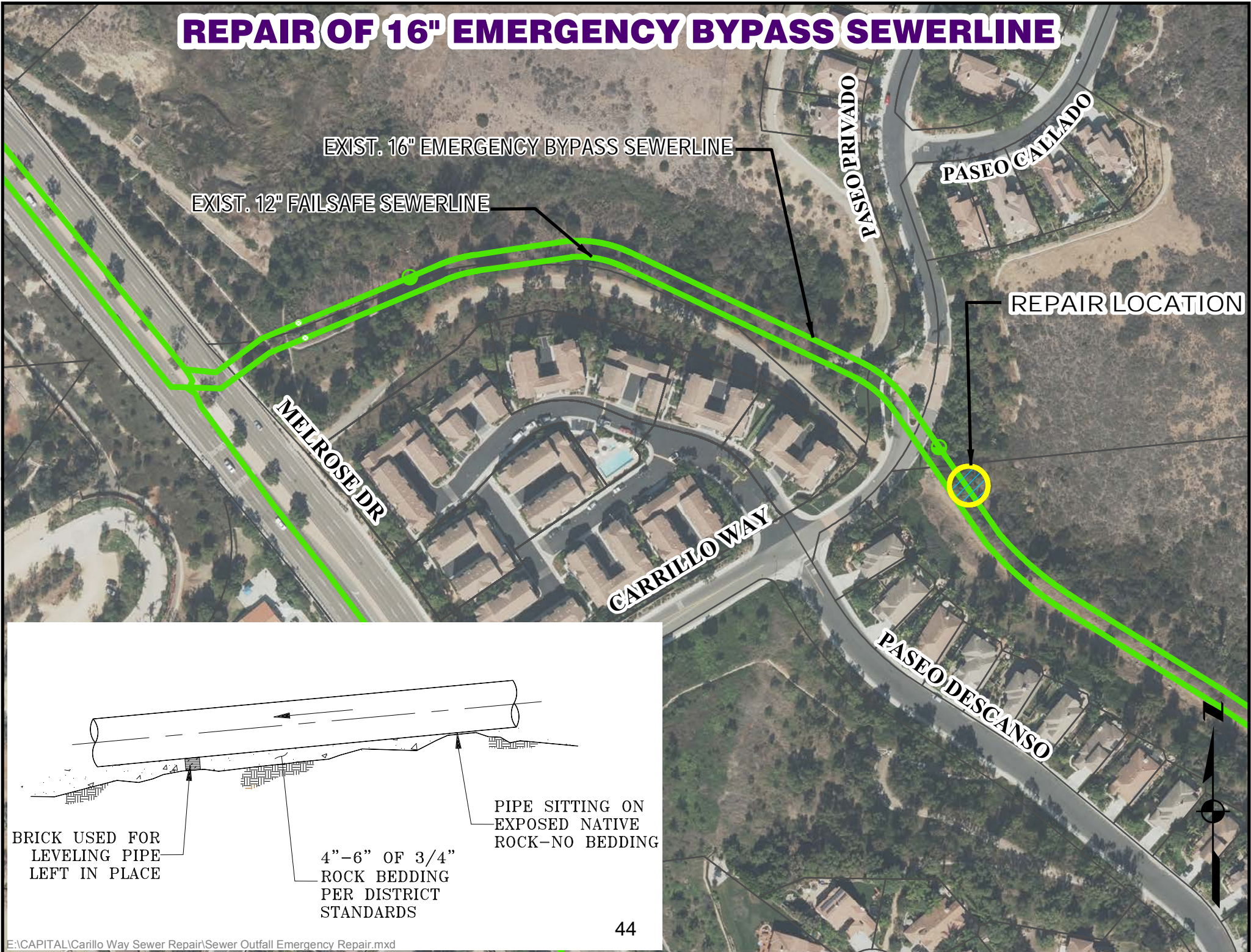
PASEO CALLADO

BRICK USED FOR  
LEVELING PIPE  
LEFT IN PLACE

4"-6" OF 3/4"  
ROCK BEDDING  
PER DISTRICT  
STANDARDS

PIPE SITTING ON  
EXPOSED NATIVE  
ROCK-NO BEDDING

# REPAIR OF 16" EMERGENCY BYPASS SEWERLINE



EXIST. 16" EMERGENCY BYPASS SEWERLINE

EXIST. 12" FAILSAFE SEWERLINE

PASEO PRIVADO

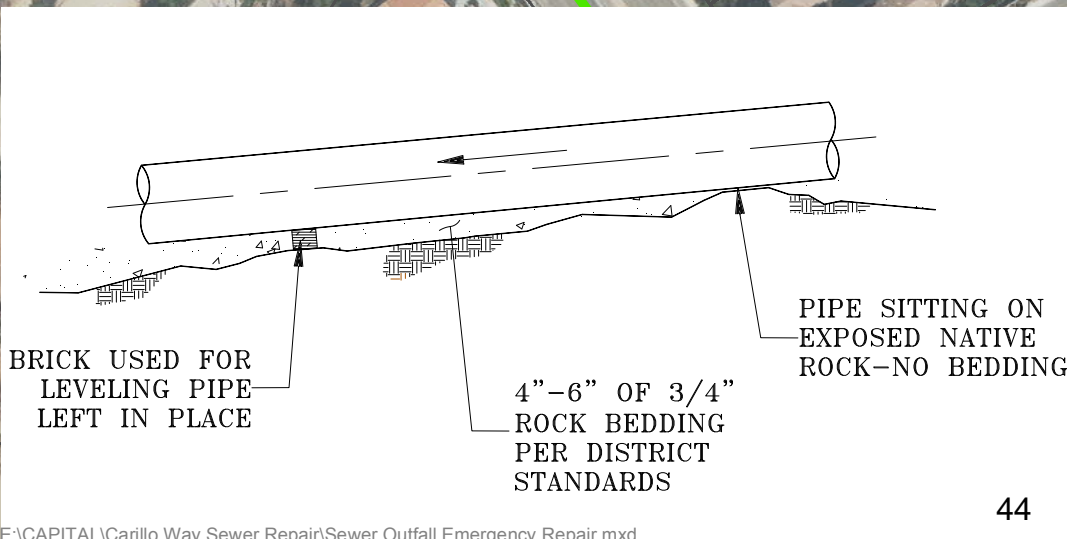
PASEO CALLADO

REPAIR LOCATION

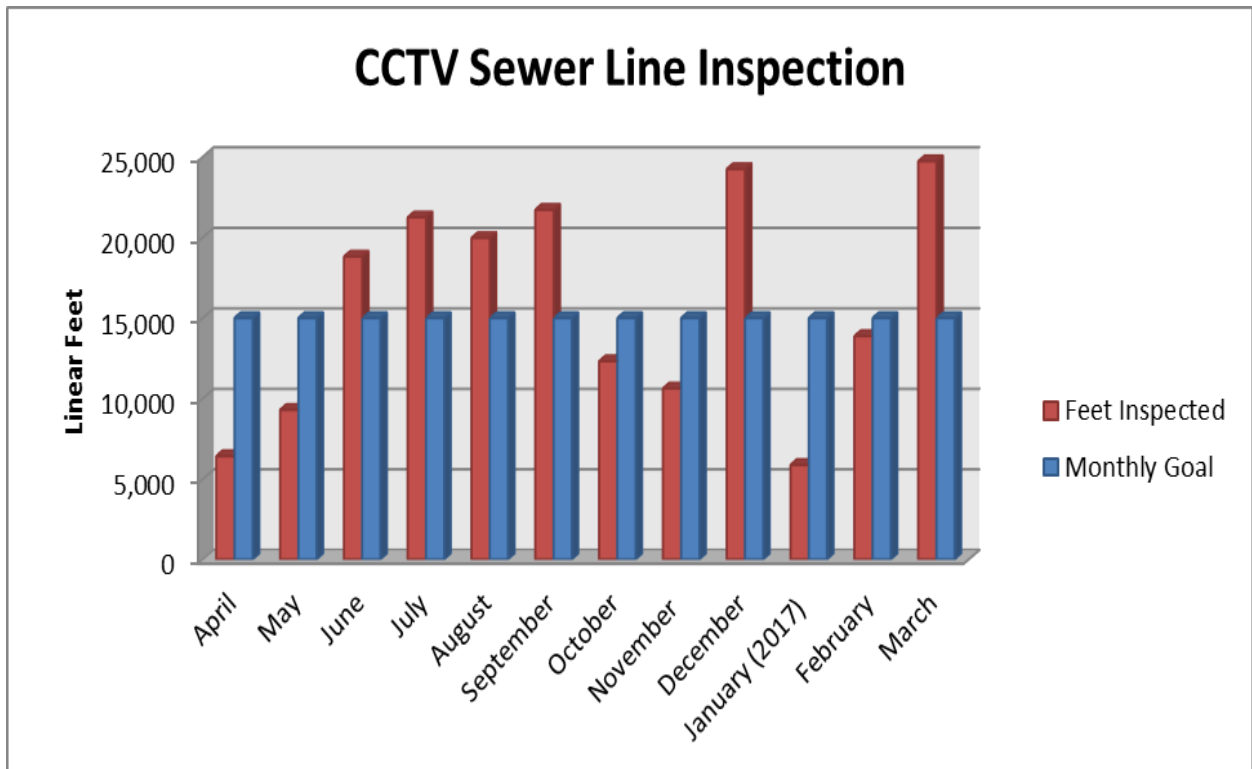
MELROSE DR

CARRILLO WAY

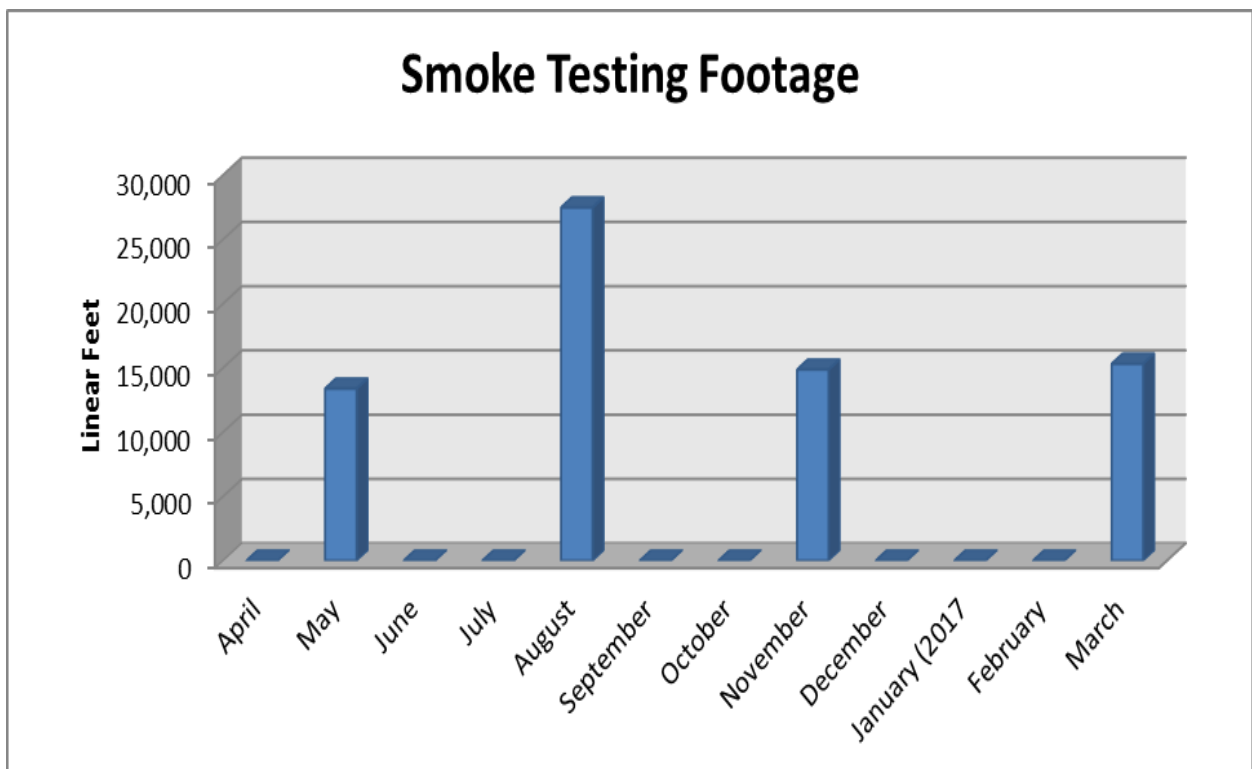
PASEO DESCANSO



# Quarterly O&M Metrics Report

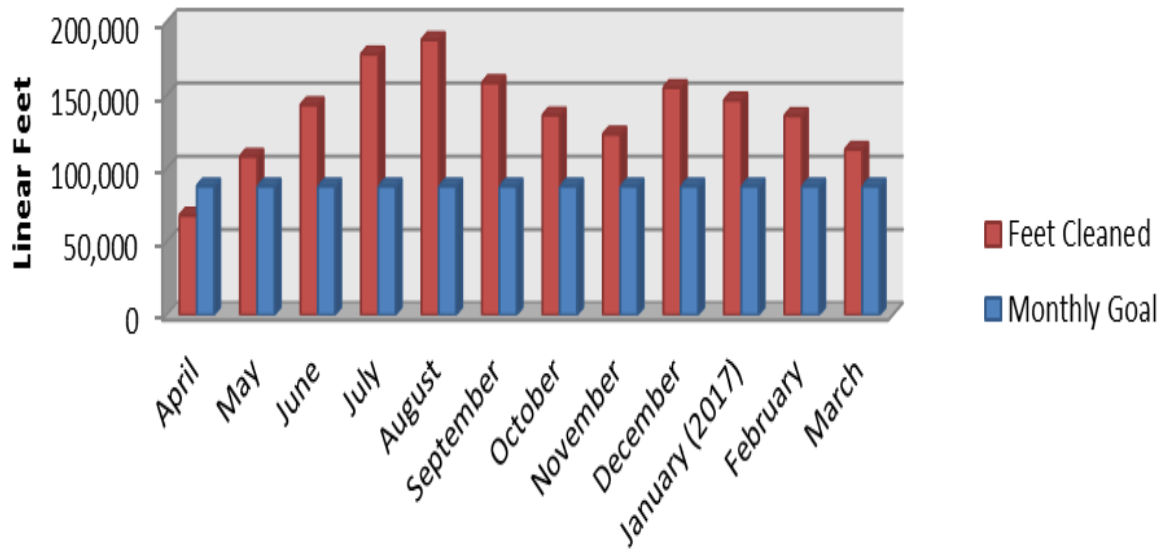


CCTV Sewer Line Inspection Totals in Feet  
(Goal is to inspect 180,000 feet of gravity lines per year)



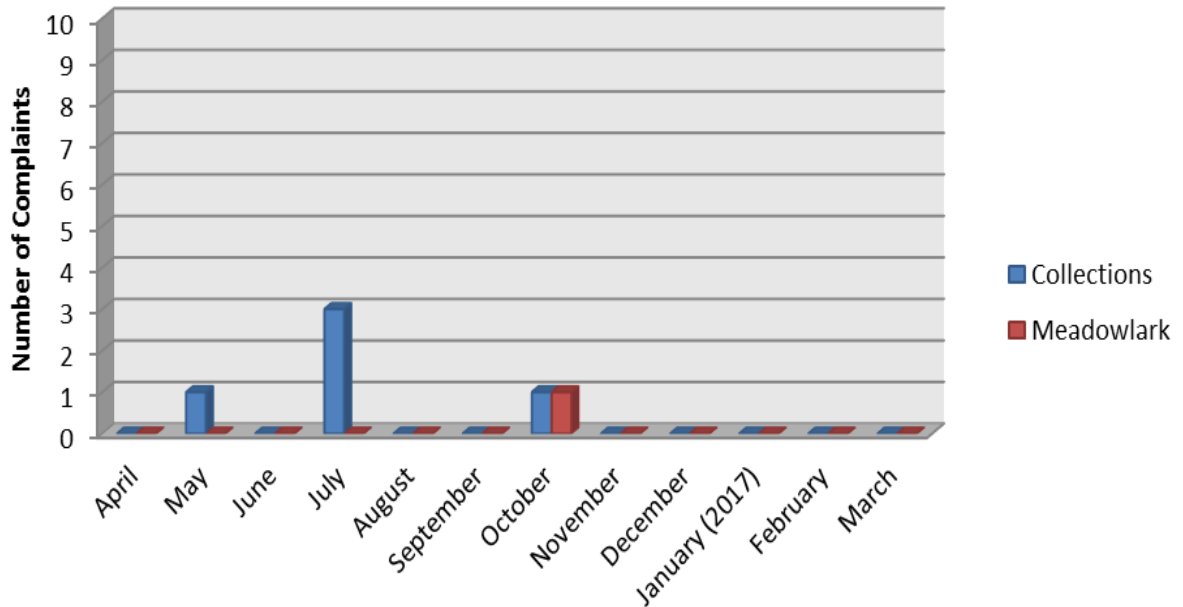
Smoke Testing of Sewer Lines in Feet  
(Goal is to Smoke Test 3 areas per year based on suspected I&I)

## Sewer Line Cleaning

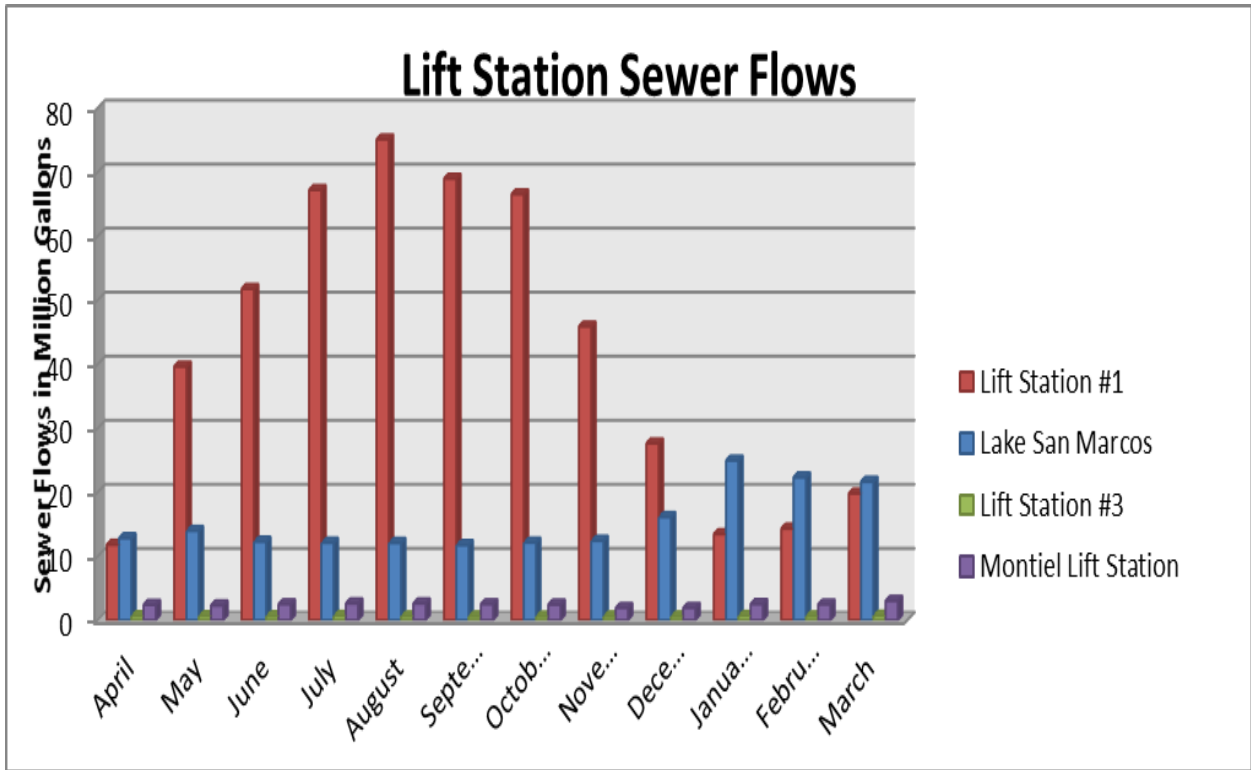


Sewer Line Cleaning Totals in Feet  
(Goal is to clean 1,000,000 feet of gravity lines per year)

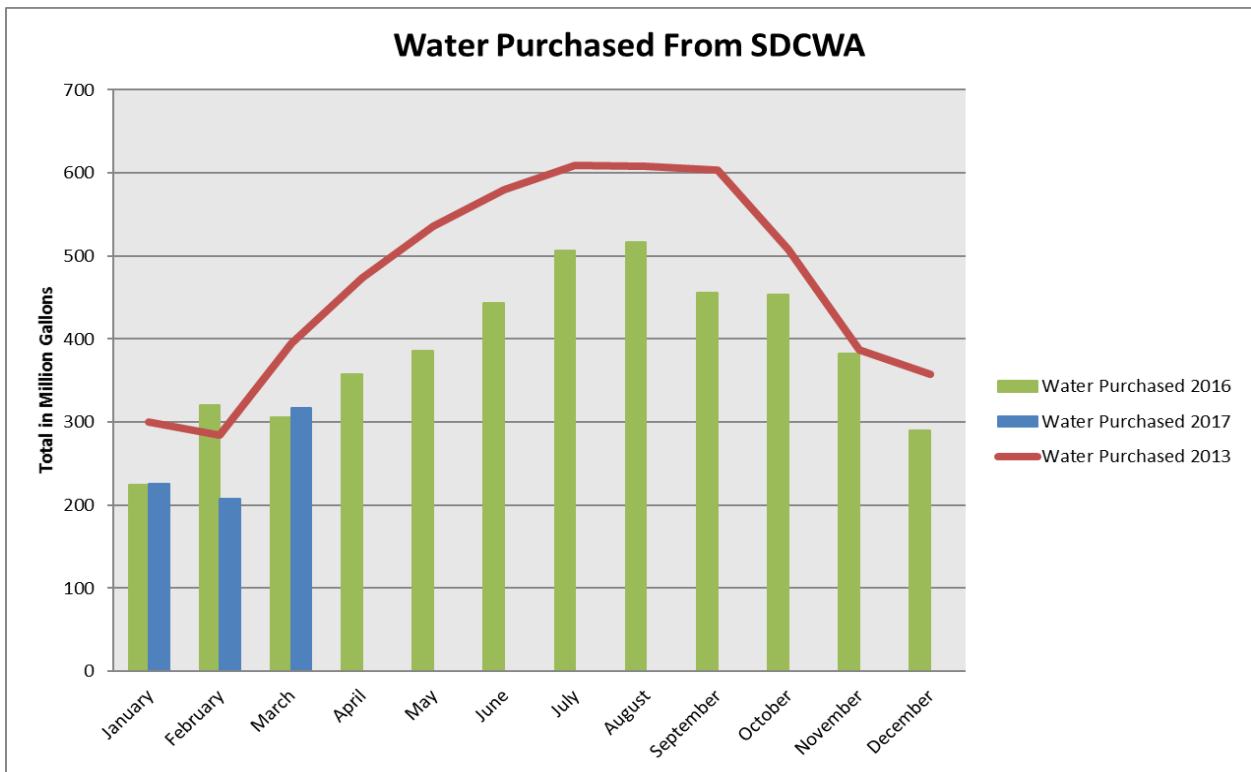
## Odor Complaints



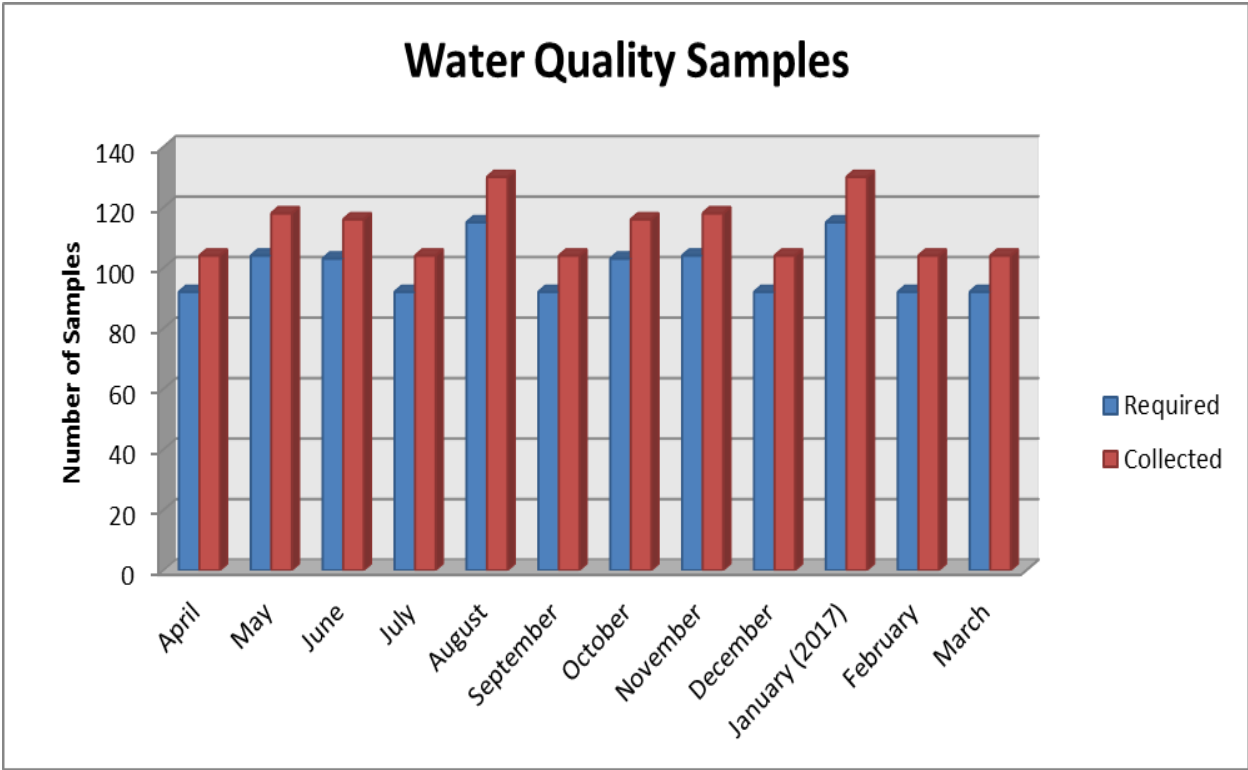
Customer Sewer Odor Complaints



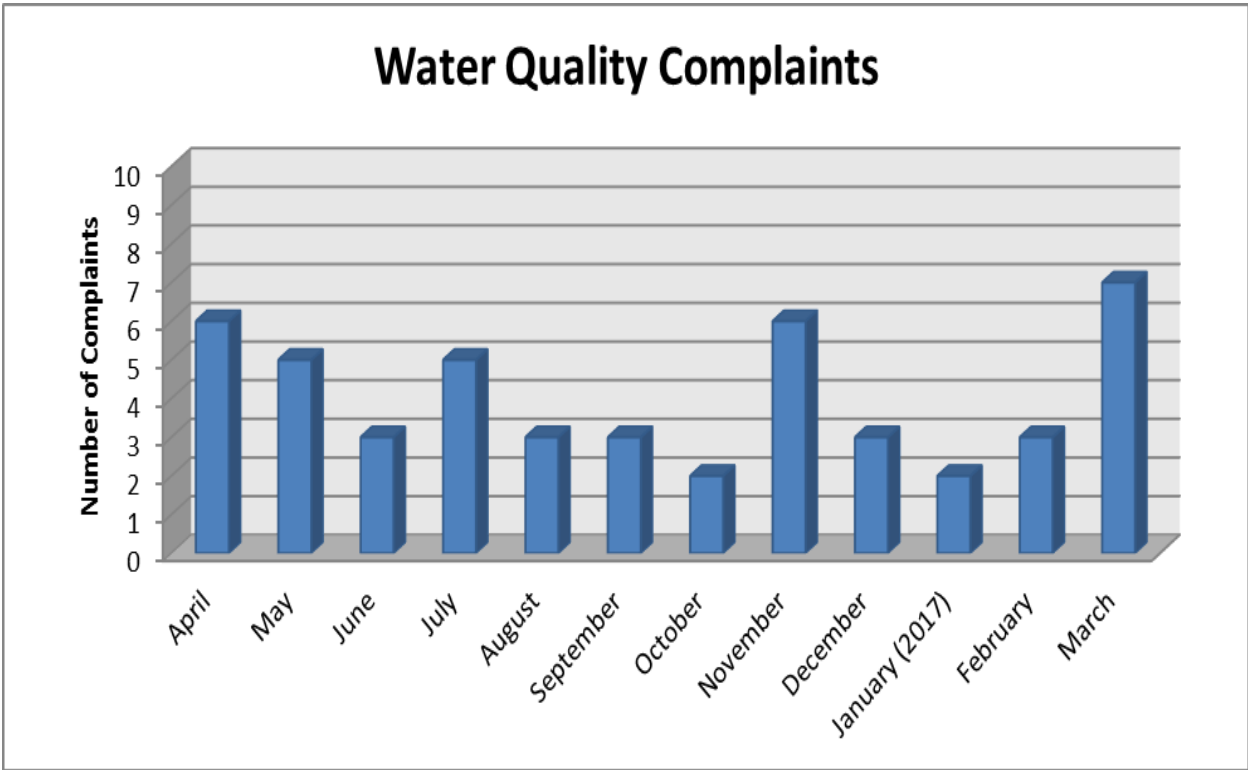
Sewer Flows Pumped from District Lift Stations



Water Purchased from the San Diego County Water Authority  
(Includes water from the desalination and OMWD plants)

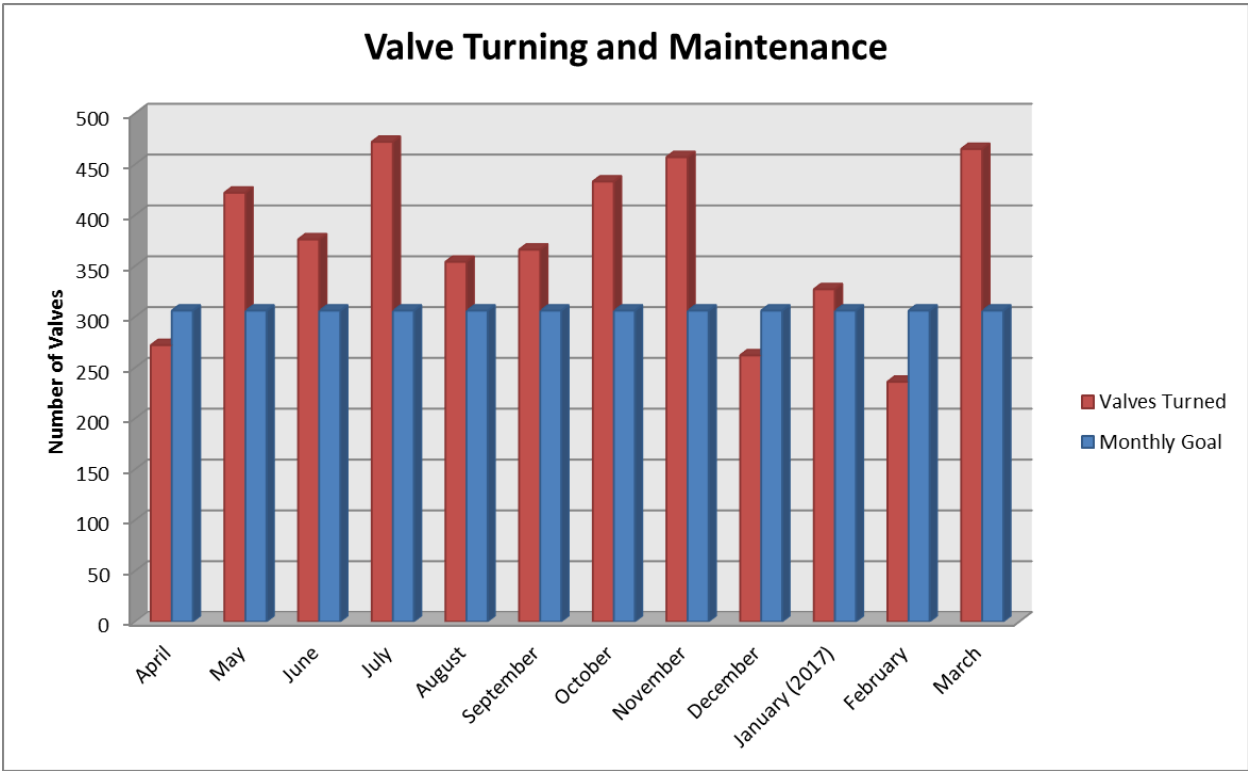


Bacteriological Water Quality Samples

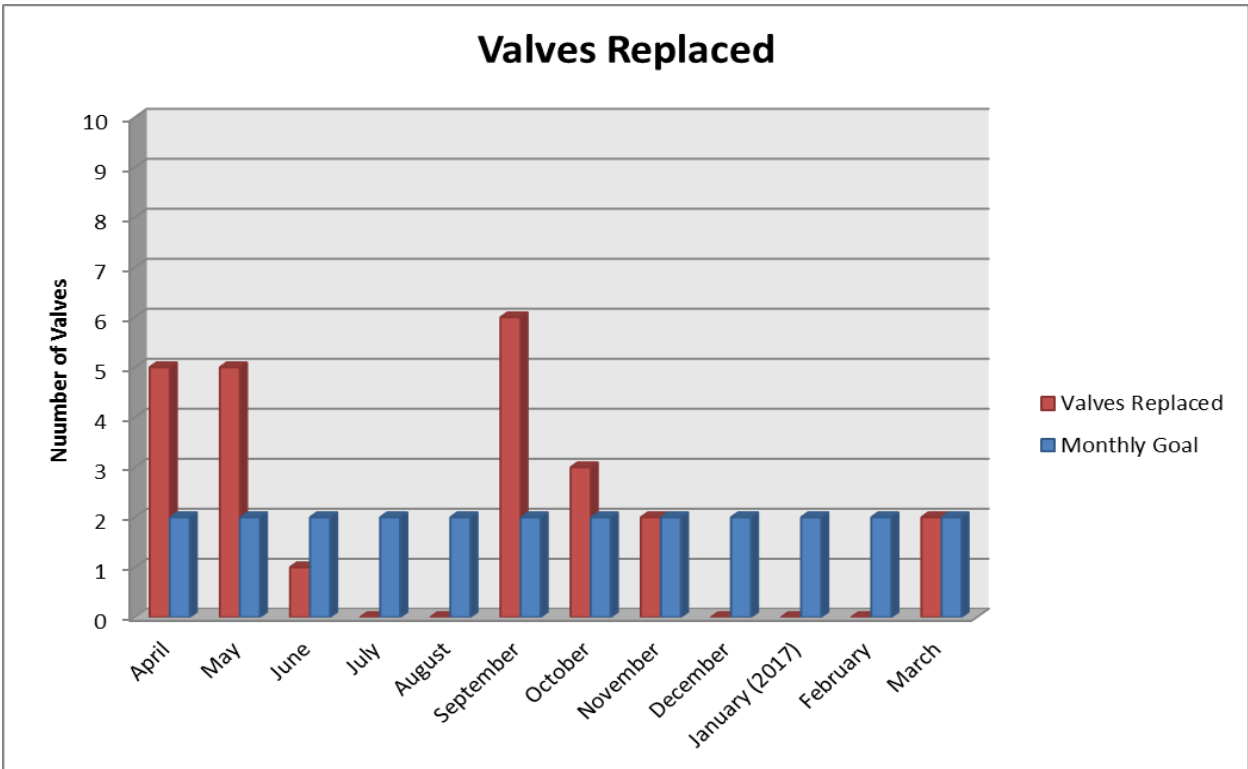


Customer Water Quality Complaints

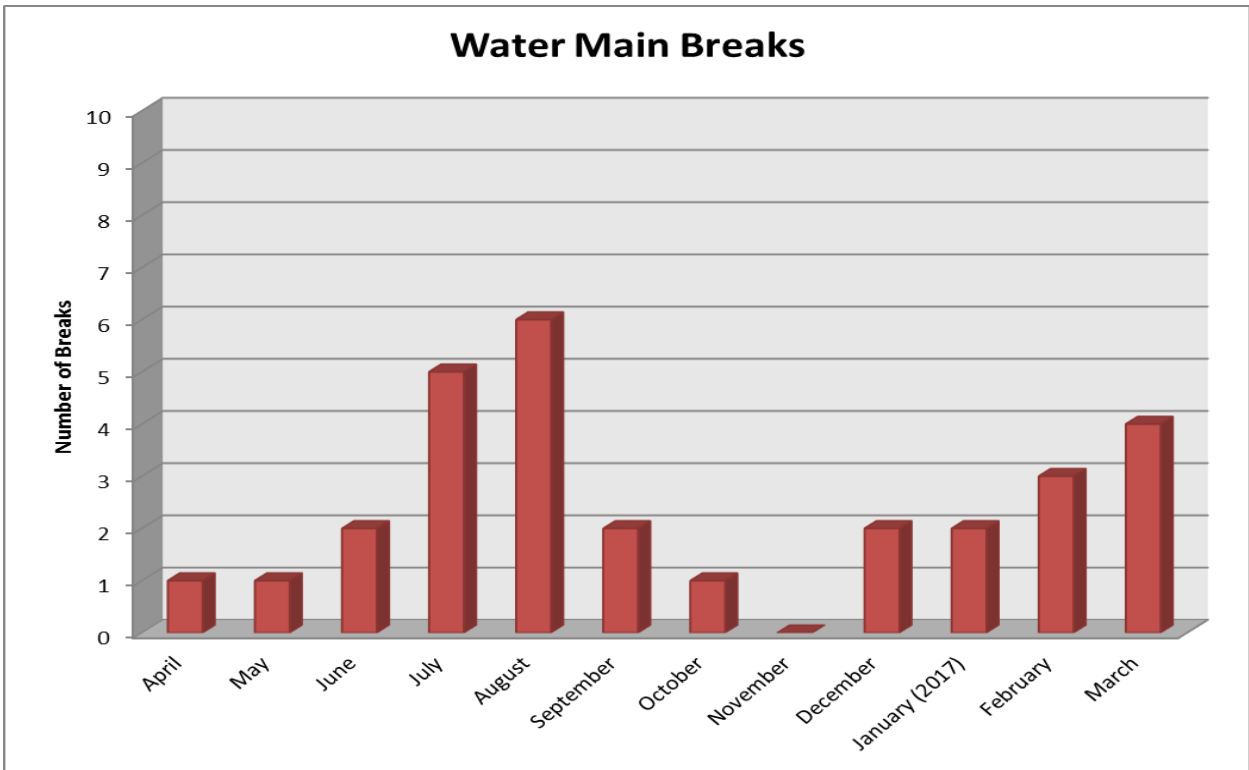




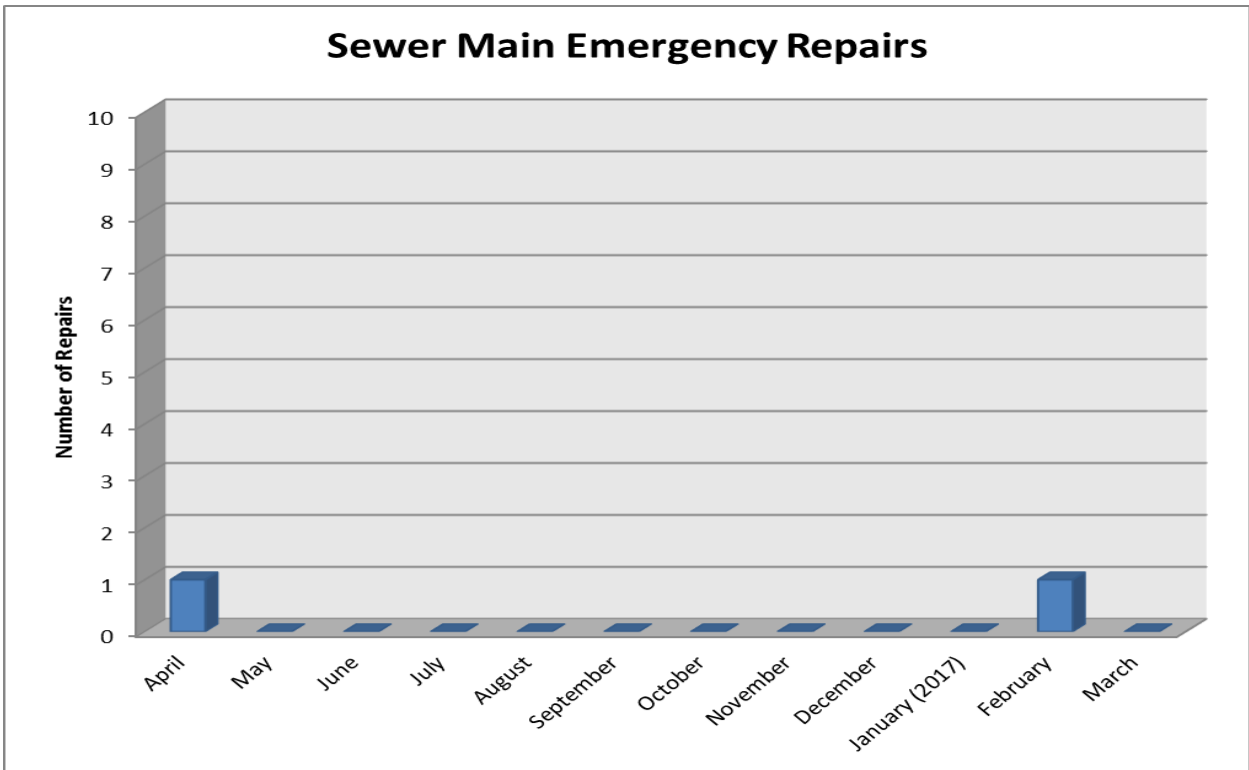
Water Valves Turned in the Distribution System  
 (Goal is to turn 50% of all valves every year or an average of 306/Month)



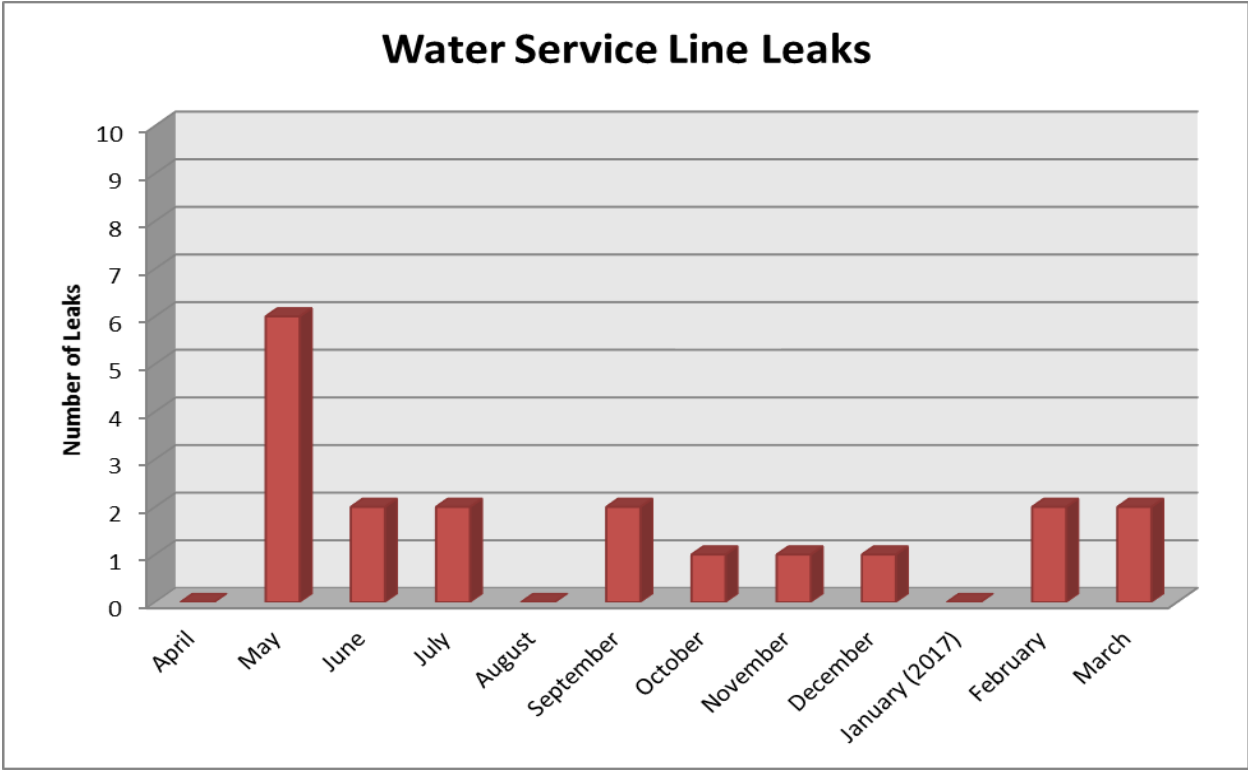
Water Valves Replaced in the Distribution System  
 (Goal is to replace 20 valves every year or around 2 per month)



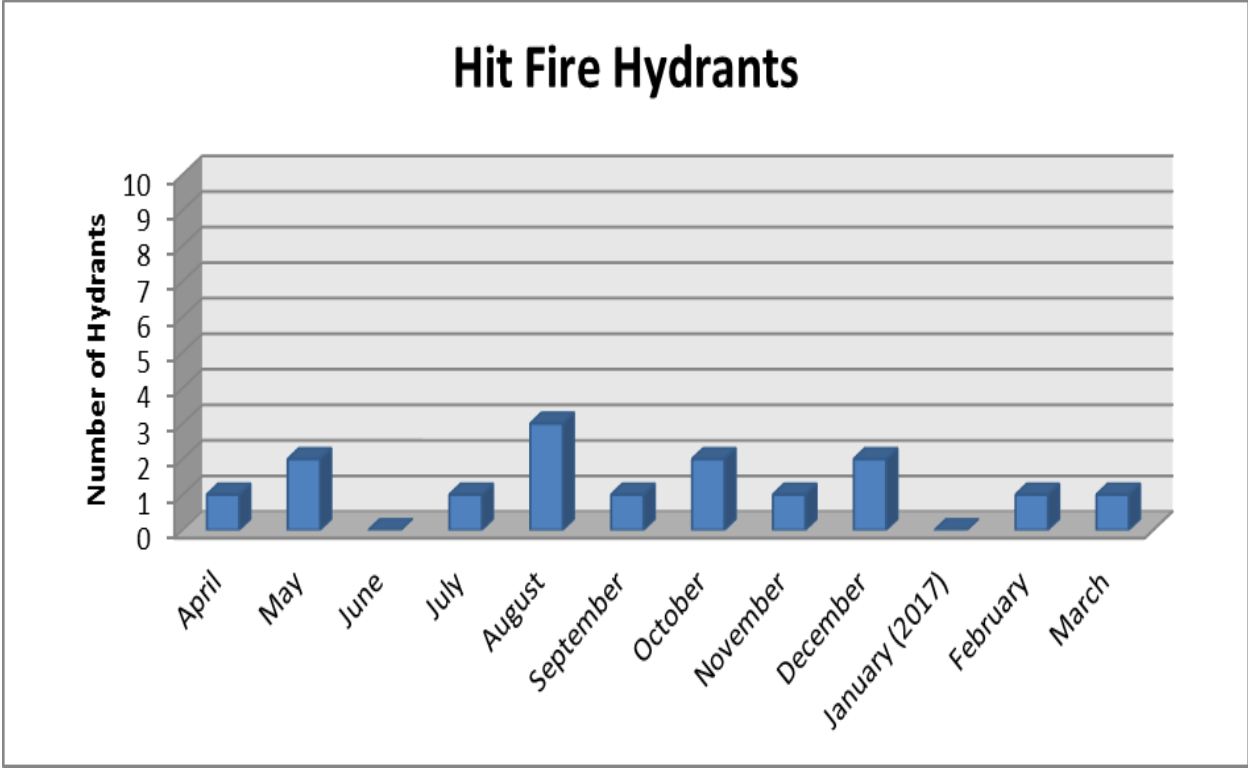
Water Mainline Breaks in the Distribution System



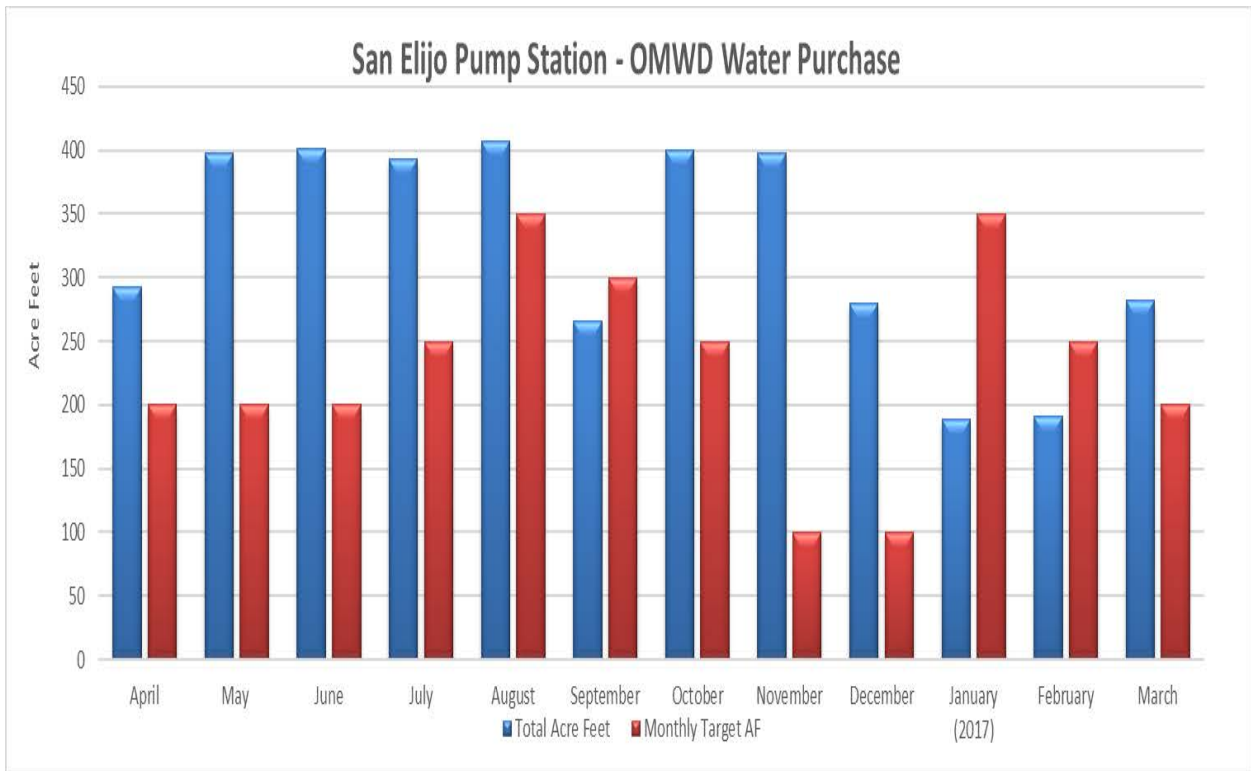
Sewer Main Emergency Repairs in the Collections System



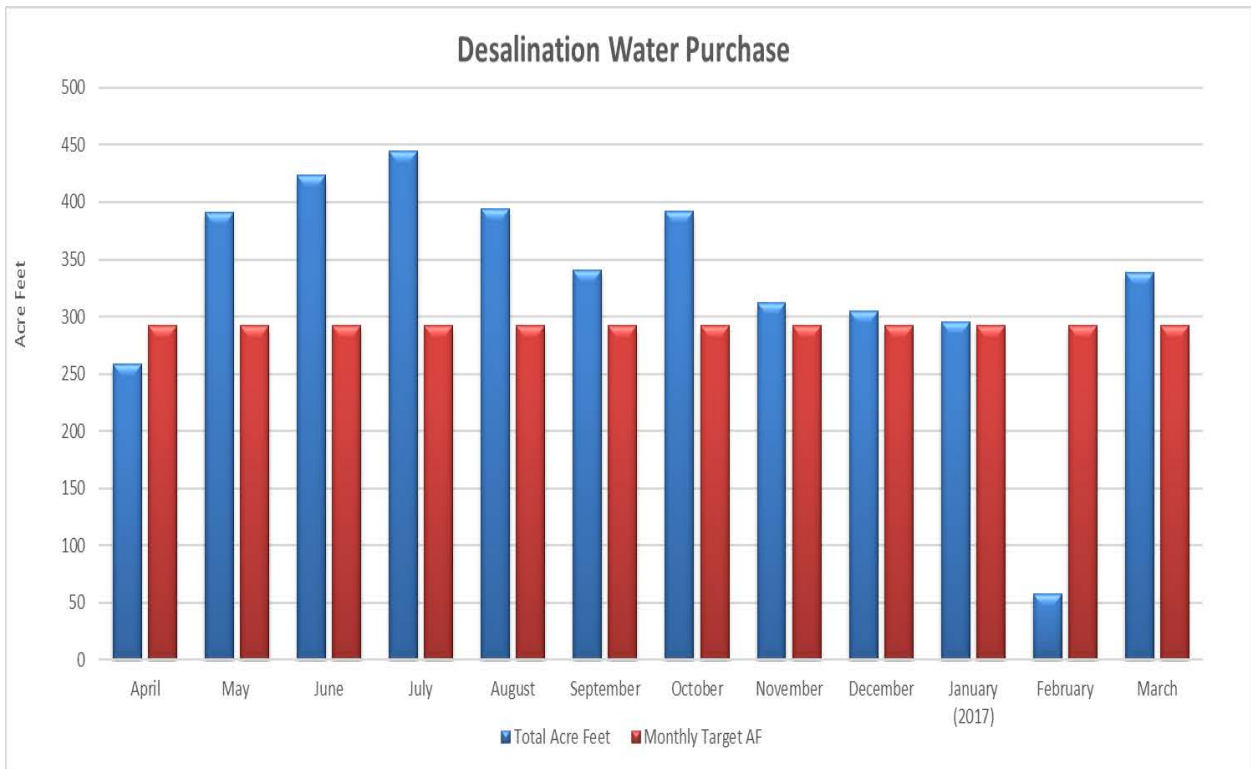
Water Service Line Leaks in the Distribution System



Fire Hydrants Hit in the Distribution System



Acre Feet of Water Purchased from Olivenhain MWD – San Elijo Pump Station



Acre Feet of Water Purchased from the Carlsbad Desalination Plant

**DATE: MAY 3, 2017**  
**TO: BOARD OF DIRECTORS**  
**SUBJECT: 2017 COST OF SERVICE AND RATE STRUCTURE STUDY DRAFT UPDATE**

**BACKGROUND:**

At the April 19, 2017, Board meeting, staff recapped the progress made towards the 2017 Cost of Service and Rate Structure Study (Study) and presented the draft. At the time of preparation of the draft Study, proposed San Diego County Water Authority (SDCWA) rates were not known, and the *Relevant Guidance and Law Review* section of the Study was not complete.

**DISCUSSION:**

At the April 18, 2017, meeting of SDCWA's Member Agency Finance Officers, SDCWA staff presented their proposed commodity rates. Fixed charges will not be available until the middle of May. The attached updated Draft Study includes SDCWA proposed commodity rates. SDCWA fixed charges remain the same as the previous draft. The attached Draft Study also includes a *Relevant Guidance and Law Review* section.

**FISCAL IMPACT:**

None.

**RECOMMENDATION:**

For information only.

# Cost of Service and Rate Structure Study



 **VALLECITOS  
WATER DISTRICT**  
*Water and Wastewater Specialists since 1955*

*2017 Draft in Progress  
Not for Public Release*

**TABLE OF CONTENTS**

Executive Summary and Recommendations	1
Objectives	3
Vallecitos Water District Water Rate Structure History	4
Relevant Guidance and Law Review (to be included in final version)	6
Data Collection and Analysis	8
Tier Structure for Water Commodity Charges	12
Cost of Service Allocation	13
Units of Service	24
Rate Calculations	27
Recommended Rates	29
Rate Impacts	30
Rate Survey	31

## EXECUTIVE SUMMARY AND RECOMMENDATIONS

This Cost of Service and Rate Structure Study (Study), prepared by Vallecitos Water District (District) staff, resulted in the recommended

water rate structure and rates shown in the following tables.

Ready-to-Serve Charge					Commodity Rates							
Meter Size	Current	FY 2018	FY 2019	FY 2020	Current	CY 2018	CY 2019					
5/8"	\$ 31.42	\$ 35.30	\$ 36.78	\$ 39.19	Tier 1	\$ 3.08	\$ 3.37	\$ 3.55				
3/4"	36.52	35.30	36.78	39.19	Tier 2	4.12	4.40	4.58				
1"	55.29	51.70	53.86	57.39	Tier 3	5.33	8.40	9.14				
1.5"	110.59	133.67	139.23	148.39	Tier 4	7.41						
2"	178.11	215.65	224.61	239.39	Tier Structure in Units							
3"	356.22	330.41	344.13	366.79	Meter Size	Current				Effective CY 2018		
4"	552.94	494.36	514.88	548.79	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	
6"	1,105.88	986.21	1,027.13	1,094.79	<1"	1 - 5	6 - 17	18 - 36	37 +	1 - 6	7 - 21	22 +
10"	2,549.36	2,297.81	2,393.13	2,550.79	1"	1 - 5	6 - 60	61 - 214	215 +	1 - 16	17 - 78	79 +
multi	18.26	9.84	10.25	10.92	1.5"	1 - 5	6 - 157	158 - 627	628 +	1 - 43	44 - 196	197 +
Fireline per diameter"	5.87	4.46	4.54	6.33	2"	1 - 5	6 - 242	243 - 806	807 +	1 - 85	86 - 335	336 +
					>2"	1 - 5	6 - 1133	1134 - 3970	3,971 +	1 - 430	431 - 1,190	1,191 +
					Ag	1 - 5	6 +				1 +	
					Temporary Construction						1 +	1 +

The rate structure and rates are recommended to be part of a public hearing pursuant to California Proposition 218, with rates becoming effective as follows.

- Fiscal Year 2018 Ready-to-Serve Charge effective the month after adoption of the rates and approval of the corresponding rate ordinances,
- Calendar Year 2018 Commodity Rates effective January 1, 2018, on bills mailed after February 2018,
- Fiscal Year 2019 Ready-to-Serve Charge effective July 1, 2018,
- Calendar Year 2019 Commodity Rates effective January 1, 2019, on bills mailed after February 2019, and
- Fiscal Year 2020 Ready-to-Serve Charge effective July 1, 2019.

The District's fiscal year starts July 1 and ends June 30.

### Ready-to-Serve Charge

The Ready-to-Serve charge (RTS) recovers pass-through fixed charges from the San Diego County Water Authority (the District's wholesaler), expenses associated with meters and service lines, expenses not directly associated with the flow of water (general and administration, engineering, information technology, etc.), and the portion of capital replacement allocated to service lines, meters, and general facilities.

### Commodity Rates

Commodity rates recover per acre foot (commodity) charges from the San Diego County Water Authority (SDCWA), expenses directly associated with water flow (transmission and distribution, water treatment, tanks and reservoirs, etc.), conservation costs, and the portion of capital replacement allocated to water flow (tanks and reservoirs, transmission and distribution, and pumping less the portion allocated to fire protection).

Commodity rate increases become effective each January 1, but are not reflected on invoices until after February because some of the water purchased by the District at the previous year's SDCWA rate may not be billed to some of the District's customers until early February.



## EXECUTIVE SUMMARY AND RECOMMENDATIONS (Continued)

### Rate Structure

The District's rate structure is made up of inclining block tiers with tier breaks varying by meter size. Customers with larger meters pay higher Ready To Serve charges (RTS), and pay for additional system capacity. The Study also compared actual 2015 and 2016 use within classes by customer type and classes by meter size, calculated relative standard deviations, and found that usage behavior was more homogeneous when grouped by meter size than when grouped by customer type.

The first tier limit is equal to the average minimum monthly use within each meter size class as calculated from the complete District billing data from 2013 through 2016. The second tier limit is equal to the average maximum monthly use from the same data. A consumptive use model (database of actual District bills with formulas to isolate use within hypothetical tiers) is used to calculate demand within each tier.

The Tier 1 rate is equal to the wholesale cost of water produced to supply Tier 1 demand plus an allocation of transmission and distribution, water treatment, tanks and reservoirs, and other costs associated with flow, divided by Tier 1 demand. A treatment agreement with the Olivenhain Municipal Water District produces the lowest cost water for the District, and is allocated entirely to tier one with the remaining demand coming the SDCWA treated water purchases.

The Tier 3 rate is equal to the wholesale cost of water produced to supply Tier 3 demand plus conservation costs and an allocation of transmission and distribution, water treatment, tanks and reservoirs, and other costs associated with flow, divided by Tier 3 demand. A purchase commitment agreement between the District and SDCWA for a direct take of desalinated water from the Carlsbad Desalination Plant provides drought proof, and the most expensive, water. If demand were much less and easily satisfied with current sources, the District would not have pursued increased reliability from desalinated water, and as such, all of the Tier 3 demand comes from desalinated water.

The Tier 2 rate is equal to the wholesale cost of water produced to supply Tier 2 demand plus an allocation of transmission and distribution, water treatment, tanks and reservoirs, and other costs associated with flow, divided by Tier 2 demand. Tier 2 demand comes from the committed desalinated water purchases remaining after allocation to Tier 3, and SDCWA treated water purchases to make up the remaining Tier 2 demand.

This report details the methodologies, calculations, allocations, and development of the recommended rates and rate structure.

## OBJECTIVES

All the following objectives of this Cost of Service and Rate Structure Study (Study) were presented to the Vallecitos Board of Directors (Board) during the beginning of the planning process and have been or will be achieved with the final presentation to the Board anticipated on June 7, 2017.

*Provide Rates and a Structure to the Board for Approval* – Staff anticipates that the rate structure and rates developed in this Study will be presented to the Board on June 7, 2017

*Provide One or Two Alternative Structures if Practical* – Staff introduced this Study to the Board by presenting the various common rate structures used in Southern California – Flat rate per unit, Inclining tiers by meter size, Inclining tiers by customer type, and Budget-based. After discussion on the pros and cons of each structure, and an analysis of the homogeneity of customer classes by meter size and by customer type, Board consensus was to prepare the Study based on an inclining tier structure by meter size.

*Keep the Board Apprised of Progress through Board Workshops throughout the Process* – Staff has presented to the Board and Finance Committee regarding the rate process in 2017 at the following meetings: January 24 Finance Committee meeting – 218 notice discussion; February 1 Workshop – water rate structure consideration and the 218 process; February 15 Board Meeting – water rate structure development update; February 22 Finance Committee meeting – rate study update; March 15 2017 Board meeting – Cost of Service and Rate Structure Study Review and update; March 27 2017 Finance Committee meeting – handed out rate model and next rate update presentation; March 29 Workshop – rate model and allocation of fixed vs variable costs.

*Alternatives Presented are Legal and Defensible* – Staff developed the recommended rate structure with no arbitrary attributes or components. Staff followed guidance presented in American Water Works Association’s Principles of Water Rates, Fees, and Charges. Staff was sensitive to the outcomes of recent rate litigation and common law guidance provided by their decisions.

*Alternatives Presented Satisfy the District’s Mission Statement, Strategic Plan Objectives, and Financial Master Plan Objectives* – The District’s Mission Statement, water and wastewater specialists providing exceptional and sustainable services, is achieved through satisfying adopted strategic plan objectives, including “consider and adopt water and sewer rates that support the operation and maintenance of the District and adequately fund replacement and upgrades required to ensure service and reliability.” The revenue requirement covered by the recommended rates includes all operation and maintenance costs, as well as a provision for capital replacement and upgrades.

*Provide a thorough and understandable administrative record* – This Study along with the Rate Model; a spreadsheet documenting methodologies, calculations, and processes; a Consumptive Use Model; and all presentations to the Board, provide a thorough and understandable administrative record.

*Nothing arbitrary (tier levels, cost acceleration from tie to tier, etc.)* – Tier levels are tied to historical usage behavior patterns. Costs to provide water within each tier are well documented and based on the costs of water supply and maintenance costs associated with peaking at various levels.

*Establish a revenue requirement that exhausts all efforts to cut costs and maintains or increases the current level of service and workforce engagement* – This objective is achieved through the participative budget process employed by District staff.

## VALLECITOS WATER DISTRICT WATER RATE STRUCTURE HISTORY

In 2003, the San Diego County Water Authority (SDCWA) changed their rate structure from recovering its entire revenue requirement from a single commodity charge to recovering a portion from fixed charges and the remainder from various categories of commodity-based charges. As a result, Vallecitos Water District (District) fixed costs increased while the variable cost of water decreased. District customers were suddenly faced with higher fixed charges (the Ready-to-Serve, or RTS charge) and lower commodity charges. To mitigate the potential disincentive to conserve, the District implemented inclining block rates.

2002 Rates	
RTS for 5/8" Meter	Per Metered Unit
\$ 9.16	\$ 1.53

Starting in 2003, tier limits were established for each category of customer by analyzing average use and total use within the category. Ninety percent of average monthly use was set as the Tier 1 limit. The amount of use per customer totaled within each category that captured 90% of the use within that category was set as the Tier 2 limit.

2003 Rates			
RTS for 5/8" Meter	Per Metered Unit		
	A Unit = 100 Cu Ft, or 748 gallons		
	Tier 1	Tier 2	Tier 3
\$ 11.55	\$ 1.41	\$ 1.44	\$ 1.59
Residential	1 to 16	17 to 34	35 +
Irrigation	1 to 174	175 to 769	770 +
Commercial	1 to 61	62 to 529	530 +
Agricultural	1 to 415	416 to 2,449	2,450 +

2010 Commodity Rates			
	Tier 1	Tier 2	Tier 3
M&I	\$ 2.60	\$ 3.25	\$ 3.90
Ag	\$ 2.60	\$ 2.82	\$ 3.01
Multifamily	1 - 6	7 - 11	12 +
Meters			
< 1"	1 - 17	18 - 36	36 +
1"	1 - 60	61 - 214	215 +
1.5"	1 - 157	158 - 627	628 +
2"	1 - 242	243 - 806	807 +
> 2"	1 - 1,133	1,134 - 3,970	3,971 +

The next significant change in commodity rates was effective in 2010. Customer classes were changed from type to meter size and tier price ranges were widened to induce conservation. The board contemplated a change to budget based rates. Tiers by meter size allowed bigger allotments for justified higher demands without having to go through complex technical billing changes figuring out a separate budget for every single parcel. Larger meters also paid higher RTS charges and paid for more capacity that they would otherwise be penalized for using had the District retained

tiers by customer type. Tier breaks were calculated as before: the first at 90% of average use, the second capturing 90% of total demand. Ag's tiers accelerated less because the incentive to conserve already existed as water is a growers most significant cost. Tier premium revenue was compared to conservation costs and the cost of SDCWA water beyond their wholesale cost from Metropolitan Water District (cost of diversification) to ensure that tier premiums weren't inflated (overcharged).

The first outside cost of service study was prepared by Black & Veatch for 2013 rates. B&V affirmed the meter size methodology for tiers but used peaking factors to differentiate pricing. The study addressed a frugal use discount in place at that time and recommended suspending the discount as it was not consistent with nexus requirement of Propositions 218 and 26 and the discount was only available to residential customers who used 5 units or less for the month. To ease the burden to low water users, the Board created a low tier, 1 to 5 units, for all customers, assigning only wholesale costs to that tier. The 2013 study is the basis of rates in effect today.

2017 Commodity Rates				
	Tier 1	Tier 2	Tier 3	Tier 4
M&I	\$ 3.08	\$ 4.12	\$ 5.33	\$ 7.41
Ag	\$ 3.08	\$ 4.12	\$ 4.12	\$ 4.12
Multifamily	1 - 5	1 - 6	7 - 11	12 +
Meters				
< 1"	1 - 5	6 - 17	0 - 17	36 +
1"	1 - 5	6 - 60	61 - 214	215 +
1.5"	1 - 5	6 - 157	158 - 627	628 +
2"	1 - 5	6 - 242	243 - 806	807 +
> 2"	1 - 5	6 - 1,133	1,134 - 3,970	3,971 +

*For multifamily, the first tier is per meter, Tiers 2 through 4 are per dwelling unit.  
 The Ag tier was flattened to align with the industry standard.*

## VALLECITOS WATER DISTRICT WATER RATE STRUCTURE HISTORY (continued)

B&V was engaged again to perform a cost of service and rate study in 2016. B&V's 2016 study proposed eliminating the 5 unit first tier and changing customer class from meter size back to customer type, assigning 3 tiers to residential, 2 tiers to irrigation, and flat per-unit rate for remaining customers. The Board did not adopt the study or recommended rates, but instead passed through half of the wholesale increase from the San Diego County Water Authority which was significant due to 2016 being the first full year of committed desal deliveries.

District staff researched and compared the District's current rate structure to a budget-based rate structure and the 2016 B&V rate structure which proposed rates for 2017. As shown in the table below, for customers using 60 units of water under the 2016 B&V rate structure, a VWD customer with a 3/4" meter paid 42% more for water commodity than a customer with a 1" meter. Rancho California Water District (RCWD) is one of many water districts in Southern California using a budget-based rate structure. From a random sample of 10 RCWD bills, a customer using 60 units of water with a 3/4" meter pays 269% more for water commodity than a customer using the same amount of water with a 1" meter. At RCWD, as with all agencies using budget-based rates, every customer will likely pay a varying amount for the same water use, because every customer has a unique water budget imposed upon them. The B&V rate structure also yielded varying cost recoveries for a single-family resident with 60 units paying 61% more for the same amount of water through an irrigation meter.

Monthly Bill												
Units used	VWD's 2017 Rates		Budget Based Rates				B&V 2017 Proposed Rates					
	3/4"	1"	3/4"	1"	SFR	Irr	CI	Public	Ag			
34	\$ 155	\$ 135	\$ 113	\$ 36	\$ 206	\$ 130	\$ 166	\$ 171	\$ 163			
60	344	242	277	75	404	251	320	301	287			
166	1,129	807	947	234	1,214	754	947	907	795			

Water budgets imposed within a budget-based structure are justified through a complex analysis of each individual customer's needs. A meter-sized rate structure justifies need because larger meters are only provided to customers that have greater demands. A water rate structure tiered by meter size simulates the same allotments as a budget-based system without having to implement resource-draining methods, procedures, and technologies. Customers with larger meters pay higher ready-to-serve charges and pay for greater capacity in the system.

Per the industry standard as published in the American Water Works Association's Principles of Water Rates, Fees, and Charges (AKA M1 Manual), "In some cases, it may be better to determine customer classes based on meter size. A utility can also implement an increasing block structure by meter size if it can demonstrate a consistent relationship or homogeneous usage pattern by meter size." This Study analyzed the relative standard deviations of use within customer classes by meter size and customer classes by customer type and found that usage within meter size was more homogeneous than usage within customer types.

## RELEVANT GUIDANCE AND LAW REVIEW

The California Constitution provides the highest level of authoritative support for California water rate setting. The next highest authority is case law that interprets the Constitution and sets precedent for future challenges and defenses. Industry guidance, while not authoritative, is most prevalent in the M1 Manual published by the American Water Works Association.



### Statutory Law – California Constitution

The California Constitution has recognized the importance of conserving water since 1925 when Article X, Section 2 was adopted – “The general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use of water be prevented.”

In 1977, the California Water Code, Section 375, provided that agencies may adopt and enforce a water conservation program. Later amended in 1993, Section 375 states that a water conservation ordinance or resolution may encourage conservation through rate structure design.

Proposition 218 (1996) added Articles XIII C and D to the California Constitution, which established procedural and substantive requirements for property related fees. Procedural requirements, Article XIII D Section 6(a), refer to holding a public hearing, the noticing thereof, and majority protests. Section(b) requires that fees not exceed the cost to provide the service, not be used for any other purpose, and not exceed the proportional cost of providing the service attributable to the parcel on which it is imposed.

Water Code sections 370-374 (2008) established volumetric allotments of water, a basic charge, a conservation charge, and proportionality and cost-revenue nexus requirements through tiers and allocations. Conservation and water resource management costs are to be determined and supported.

Proposition 26 (2010) clarified the meaning of “tax” requiring voter approval and identified five specific exceptions, one of which is “A charge imposed for a specific government service or product ... which does not exceed the reasonable costs ... of the service or product ...”

### Common Law

Common law is derived from judicial precedent rather than statutes. The following cases have set some of the more significant precedents and are often cited in challenges and other cases.

In ***Brydon v. East Bay Municipal Utility District*** (1994), appellants alleged that tiered rates imposed by the District violated the California Constitution and were "arbitrary, capricious and not rationally related to any legitimate legislative or administrative objective." The opinion rendered by Judge Hodge of the Superior Court of Contra Costa County stated, "In our view, the inclining block rate structure is one small and modest component of a well-conceived and eminently reasonable drought management program [and] ... does not violate the California Constitution. ... The inclining block rate structure bears none of the indicia of taxation which California Constitution, article XIII A purported to address. ... The rates were levied against water consumers in accordance with patterns of usage... The incremental rate was not compulsory to the extent that any consumer had the option of reducing his or her consumption."

## RELEVANT GUIDANCE AND LAW REVIEW (continued)

### Common Law (continued)

In ***City of Palmdale v. Palmdale Water District (2011)***, the City of Palmdale (City) successfully challenged (on appeal) that the Palmdale Water District's rate structure discriminated unfairly against the customer class of irrigation accounts. In the discussion of the decision the City asserts that the Palmdale Water District (PWD) "failed to prove its revenues under the new rate structure will not exceed the costs of providing water service in contravention of Article XIII D, section 6(b)(1), ... [and] makes no showing whatsoever that PWD's cost of delivering service to those irrigation users is proportionately higher than PWD's costs of delivering service to residential and commercial users."

As decided in the case of ***Griffith v. Pajaro Valley Water Management Agency (2013)***, property related fees do not have to be established on a "parcel-by-parcel" basis, as allocating costs of service "is not a determination that lends itself to precise calculation."

In ***Morgan v. IID (2014)***, the trial court determined that establishing customer classes is consistent with the proportionality requirement of Article XIII D, Section 6(b). The appellate court stated that Section 6 does not require data used in cost of service studies to be perfect.

In ***Capistrano Taxpayers Association v. City of San Juan Capistrano (2015)***, the decision states that "Neither the voters nor the Constitution say anything we can find that would prohibit tiered pricing." And while the conclusion reiterates Proposition 218's provision that fees "not exceed the proportional cost of service attributable to the parcel," the conclusion also states that this doesn't mean that rates need to be calculated for *specific* parcels. The decision concludes that computations to show costs associated with high usage levels "would seem to satisfy Proposition 218." The City simply failed to show its computations. The conclusion is also explicit that passing on costs attributable to high use "to those consumers whose extra use of water forces water agencies to incur higher costs to supply that extra water" is not precluded by the California Constitution. The City simply failed to demonstrate the nexus.

A challenge to the ***Sweetwater Authority***, by Ben Benumof, the same attorney who sued San Juan Capistrano, was settled for an attorneys' fee payment. Sweetwater implemented new rates with *more cost analysis on the tiers and a higher Tier 1 rate*. Mr. Benumof is not challenging the new rates.

### Industry Guidance

Principles of Water Rates, Fees and Charges, Manual of Water Supply Practices, M1, published by the American Water Works Association, is commonly known as the M1 Manual, and is frequently used as guidance by rate consultants. The M1 Manual is not specific to California rate setting, but most of the larger consulting firms performing cost of service studies in California rely heavily on the M1 Manual and are contributing authors and editors to the publication.

## DATA COLLECTION AND ANALYSIS

### Demand Projection

Staff analyzed recent growth and usage behavior trends to project demand. The Table 1 below isolates growth by showing the increase in meters year-to-year, and behavior by showing the increase in Municipal and Industrial (M&I) usage year-to-year.

		Demand in Acre Feet					Increase			
		Meters	M&I	AG	Construction	Total	# of Meters	Meter%	M&I Demand	
A c t u a l	2007	19,929	17,595	2,438	465	20,499				
	2008	20,332	17,121	1,685	252	19,058	403	2.0%	-2.7%	
	2009	20,445	14,985	1,607	62	16,655	113	0.6%	-12.5%	
	2010	20,459	13,250	1,176	41	14,466	14	0.1%	-11.6%	
	2011	20,622	13,532	1,062	40	14,634	163	0.8%	2.1%	
	2012	20,828	14,109	1,342	38	15,489	206	1.0%	4.3%	
	2013	21,080	14,399	1,535	50	15,984	252	1.2%	2.1%	
	2014	21,273	14,994	1,455	74	16,522	193	0.9%	4.1%	
	2015	21,340	11,398	991	37	12,426	67	0.3%	-24.0%	
	2016	21,397	12,236	909	145	13,290	57	0.3%	7.4%	
	p r o j e c t e d	2017	21,460	12,600	900	100	13,600	<i>assumptions: 3% increase in M&amp;I - 0.3% growth, 2.7% behavior; 1% decline in Ag; 30% decrease in construction water</i>		
		2018	21,530	13,000	900	100	14,000	<i>assumptions: 3% increase in M&amp;I - 0.3% growth, 2.7% behavior; Ag and construction flat</i>		
		2019	21,590	13,400	900	100	14,400	<i>assumptions: 3% increase in M&amp;I - 0.3% growth, 2.7% behavior; Ag and construction flat</i>		
		2020	21,660	13,800	900	100	14,800	<i>assumptions: 3% increase in M&amp;I - 0.3% growth, 2.7% behavior; Ag and construction flat</i>		
2021		21,720	14,200	900	100	15,200	<i>assumptions: 3% increase in M&amp;I - 0.3% growth, 2.7% behavior; Ag and construction flat</i>			
2022		21,790	14,600	900	100	15,600	<i>assumptions: 3% increase in M&amp;I - 0.3% growth, 2.7% behavior; Ag and construction flat</i>			

This Study assumes growth in the number of meters to be 0.3% annually and 2.7% increase in consumption per meter for M&I, for a total increase in demand of 3% per year. The 2.7% increase, based on historical averages, is known as bounce-back – the increase in consumptive behavior following conservation mandated during a period of drought. Agricultural (Ag) consumption was cut largely due to permanent removal of productive crop (i.e., no intent to return to previous levels of consumption). Therefore, Ag use is assumed to be steady. Grading activity picked up in 2016 with the increase in construction activity, and is assumed to remain steady at the conservative assumption of 100 acre feet per year.

### Water Supply Tranches

Prior to receiving desalinated water (Desal) and contracting for water treatment services from Olivenhain Municipal Water District (OMWD), the District paid one price for all its water. Now with differing costs of supply, and supply making up about 78% of the revenue requirement, supply costs are the focus of this Study. This Study distinguishes supply sources in tranches. The lowest tranches are assigned to lowest cost water. A 5.6% assumption of unbilled water (most recent 3-year average) is include in the cost of each supply tranche.

	2018 Cost		Projected AF Demand	Extended Cost
	per Unit	per AF		
<b>Tranche 3</b>				
Desal	\$ 5.51	\$ 2,401	3,854	\$ 9,252,005
<b>Tranche 2</b>				
SDCWA	3.13	1,362	6,306	8,590,589
<b>Tranche 1</b>				
Treated by OMWD	2.96	1,291	3,840	4,958,892
<b>TOTAL</b>			<b>14,000</b>	<b>\$22,801,486</b>

*Price per Acre Foot (AF) includes unbilled water*

## DATA COLLECTION AND ANALYSIS (continued)

### **Water Supply Tranches (continued)**

#### ***Tranche 1 – Treated by OMWD***

In 2012, the District contracted with the Olivenhain Municipal Water District (OMWD) to treat raw water from the San Diego County Water Authority (SDCWA) and deliver it to the District. OMWD charges the District 80% of SDCWA's treatment surcharge, so water treated by OMWD will always be less expensive than SDCWA water. Calendar Year 2016 was the first full year of operations under the agreement with OMWD. Vallecitos paid \$1,109 per acre foot pursuant to the OMWD Agreement compared to \$1,165 per acre foot from SDCWA. Per the agreement, OMWD can limit deliveries to specified monthly amounts totaling 2,750 acre feet per year if OMWD needs the capacity in their plant to meet their customers' demand. Deliveries from OMWD from April 2016 through March 2017 totaled 3,899 acre feet. Water operators from OMWD and Vallecitos both project that future deliveries will be at least equal to recent deliveries. While not all the District's customers receive OMWD treated water, all customers benefit because OMWD water can be pushed to other parts of the District in the event of a disruption in flow from the SDCWA Aqueduct. Because the District will maximize deliveries of OMWD water, and OMWD water is the least expensive water in the District's supply portfolio, all OMWD deliveries are allocated to Tier 1 in this recommended water rate structure.

#### ***Tranche 2 – SDCWA***

Prior to the water treatment agreement with OMWD and the water purchase agreement with SDCWA for a direct supply of desalinated water, the District's only supply was from SDCWA's melded sources. SDCWA water is allocated mostly to Tier 2 and some to Tier 1 to make up the difference between OMWD supply and the Tier 1 demand.

#### ***Tranche 3 – Desal***

In 2012, the District contracted with SDCWA for a direct purchase commitment of desalinated sea water from the Carlsbad Desalination Plant (Desal Plant). The commitment amount is priced at full recovery of cost – about \$2,400 per acre foot in 2016. SDCWA's contract with Poseidon Resources LTD is for a County-wide purchase commitment of 48,000 acre feet. The District's contract with SDCWA carves out 3,500 acre feet of the 48,000 acre feet commitment by SDCWA. Annual deliveries from the Desal Plant are estimated at 87% of plant capacity, or 56,000 acre feet. Any County-wide deliveries from the Desal Plant in excess of the 48,000 acre feet commitment (Excess Water) is priced to recover variable costs only – projected at \$735 per acre feet in 2018, the Study's base year. The District receives a pro-rata share of the Excess Water (County-wide Excess Water x 3,500 District Commitment / 48,000 SDCWA Commitment). Desal deliveries commenced in 2016. No Excess Water was delivered during Fiscal Year 2017 and none is expected during Fiscal Year 2018 due to decreased demands and the necessity of SDCWA to meet other purchase commitments. Both purchase commitment contracts are on a fiscal year basis – July through June. This Study assumes a steady ramp-up to the District's full anticipated Excess Water – 583 acre feet – from Fiscal Year 2019 to Fiscal Year 2022. While not all the District's customers receive Desal water, all customers benefit because Desal water can be pushed to other parts of the District in the event of a disruption in flow from the SDCWA Aqueduct, the drought proof Desal water provides additional allocations of water during cutbacks from Metropolitan Water District (MWD) and SDCWA to all customers, and reduces reliance on water imported from the Colorado River and the Delta. Because the District pursued the Desal contract to address reliability issues and secure a drought proof supply source, all Tier 3 demand comes from Desal, with the remaining Desal allocated to Tier 2.



**DATA COLLECTION AND ANALYSIS**  
 (continued)

**Defining Customer Classifications - Tiers by Meters vs. Tiers by Customer Type**

*The ideal solution to developing rates for water utility customers is to assign cost responsibility to each individual customer served and to develop rates that reflect that cost. Unfortunately, it is neither economically practical nor often possible to determine the cost responsibility and applicable rates for each individual customer served. However, the cost of providing service can reasonably be determined for groups or classes of customers that have similar water-use characteristics ...*

American Water Works Association, Principles of Water Rates, Fees, and Charges – M1 Manual

The District’s current rate structure establishes customer classifications by meter size. A water rate structure tiered by meter size simulates the same allotments as a budget-based system without having to implement resource-draining methods, procedures, and technologies. Customers with larger meters pay higher ready-to-serve charges and pay for greater capacity in the system.

District staff researched and compared the District's current rate structure to a budget-based rate structure and a rate structure by customer type proposed (but not adopted) in 2016 by the consulting firm of Black & Veatch (B&V). As shown in the table below, for customers using 60 units of water, a District customer with a 3/4" meter paid 42% more for water than a customer with a 1" meter. From a random sample of 10 Rancho California Water District bills, a customer using 60 units of water with a 3/4" meter pays 269% more than a customer using the same amount of water with a 1" meter. At Rancho, as with all agencies using budget-based rates, every customer will likely pay a varying amount for the same water use, because every customer has a unique water budget imposed upon them. The B&V rate structure also yielded varying cost recoveries for a single-family resident with 60 units paying 61% more for the same amount of water through an irrigation meter.

**TABLE 3**

Units used	Monthly Bill									
	VWD's 2017 Rates		Budget Based Rates		B&V 2017 Proposed Rates					
	3/4"	1"	3/4"	1"	SFR	Irr	CI	Public	Ag	
34	\$ 155	\$ 135	\$ 113	\$ 36	\$ 206	\$ 130	\$ 166	\$ 171	\$ 163	
60	344	242	277	75	404	251	320	301	287	
166	1,129	807	947	234	1,214	754	947	907	795	

Staff studied water use characteristics for customers within meter size classifications versus the same customers within customer type classifications. Per the industry standard as published in the M1 Manual, “In some cases, it may be better to determine customer classes based on meter size. A utility can also implement an increasing block structure by meter size if it can demonstrate a consistent relationship or homogeneous usage pattern by meter size.” The analysis focuses on average rather than maximum, or peak use, because 78% of the revenue requirement from the last cost of service study provided by B&V was supply, while only 12 % was allocated based on peaking. Since 2016, the cost of supply varies.

**DATA COLLECTION AND ANALYSIS**  
 (continued)

**Defining Customer Classifications - Tiers by Meters vs. Tiers by Customer Type (continued)**

Staff calculated relative standard deviations in average use of customers within meter size classifications compared to customers within customer type classifications for the two most recent years. Meter size classification results in a more homogeneous usage pattern.

CY 2016					TABLE 4	CY 2016				
Meter size	# meters	Avg Use per Month	Standard Deviation Absolute	Standard Deviation Relative		Customer Type	# meters	Avg Use per Month	Standard Deviation Absolute	Standard Deviation Relative
< 1"	19,239	12	11	96%	Residential - SF	19,036	12	11	96%	
1"	1,021	40	66	164%	Residential - MF	512	142	282	198%	
1.5"	689	101	152	151%	Irrigation	826	106	175	165%	
2"	505	188	236	126%	Agriculture	115	280	450	160%	
> 2"	101	511	754	148%	Comm/Ind	939	49	106	216%	
					Other	91	126	317	252%	

CY 2015					TABLE 4	CY 2015				
Meter size	# meters	Avg Use per Month	Standard Deviation Absolute	Standard Deviation Relative		Customer Type	# meters	Avg Use per Month	Standard Deviation Absolute	Standard Deviation Relative
< 1"	19,206	11	11	93%	Residential - SF	18,997	11.47	13	116%	
1"	1,016	37	55	147%	Residential - MF	506	140.48	280	199%	
1.5"	682	94	150	160%	Irrigation	818	84.51	132	156%	
2"	500	170	217	127%	Agriculture	117	282.19	484	171%	
> 2"	95	476	682	143%	Comm/Ind	942	47.55	97	205%	
					Other	89	123.79	321	259%	

This Study recommends inclining tiers by customer classifications of meter size.

## TIER STRUCTURE FOR WATER COMMODITY CHARGES

Staff presented pros and cons of various rate structures to the Board of Directors at a February 1, 2017, Board Workshop, and the analysis of usage patterns within in customer classes of meter size versus customer type at the February 15, 2017, Board meeting, and received consensus from the Board of Directors to continue this Study using a rate structure tiered by meter size.

Continuing with a study of usage patterns, staff calculated average minimum monthly use, average monthly use, and average maximum monthly use for the years from 2013 through 2016.

**TABLE 5** 2013 through 2016 (averages in units, use captured in acre feet)

Meter size	Average Use		Average Use		Average Use	
	Min Use	Use Captured	Use	Use Captured	Max Use	Use Captured
< 1"	6	2,922	13	4,989	21	5,953
1"	16	346	45	688	78	854
1.5"	43	575	117	1,047	196	1,271
2"	85	829	201	1,527	335	1,939
> 2"	430	539	778	829	1,190	1,041
<b>TOTAL</b>		<b>5,211</b>		<b>9,080</b>		<b>11,058</b>

*Multi-Family is currently Included in the above meter sizes*

Average Minimum Use provides a natural and non-arbitrary threshold for the Limit of Tier 1 use. Average Maximum Use provides a natural and non-arbitrary threshold for the Limit of Tier 2 use.

No costs associated with peaking or conservation will be allocated to Tier 1. Minimal use does not drive these costs. All the OMWD supply will be allocated to Tier 1, with the remaining demand made up from SDCWA water. Some costs associated with peaking and the Desal water remaining after fulfilling satisfying Tier 3 demand will be allocated to Tier 2. Costs associated with peaking, conservation, and Desal water will be allocated to Tier 3.

**TABLE 6**

Meter Size	Tier Structure in Units		
	Tier 1	Tier 2	Tier 3
<1"	1 - 6	7 - 21	22 +
1"	1 - 16	17 - 78	79 +
1.5"	1 - 43	44 - 196	197 +
2"	1 - 85	86 - 335	336 +
>2"	1 - 430	431-1,190	1,191 +
Ag		1 +	
Temporary Construction			1 +

### **Multifamily**

The existing rate structure distinguishes multifamily from other customer classes and provides use specified per living unit to calculate tier limits. This Study recommends nondiscriminatory classification for multifamily customers by meter size – no separate distinction of customer class.

### **Agricultural (Ag)**

All water use by certified Ag customers is currently assigned to Tier 2 and not subject to higher tiers. This Study recommends no change to this practice. Certified Ag customers who participate in the SDCWA Transitional Special Agricultural Water Rate program pay Metropolitan Water District’s rate and not the blended rate because during times of cutback, alternative water sources are not available to Ag customers. Tier 2 use for Ag is consistent with SDCWA’s program and with other water agencies.

### **Temporary Construction**

By District ordinance, water purchased through a temporary construction meter is subject to the rate in the highest tier. Temporary use burdens the system beyond just operation and maintenance costs. Temporary use has not paid for capacity, annexation, or ongoing upkeep on the system.

## COST OF SERVICE ALLOCATION

### **Effective Date of Rate Changes**

The Ready-to-Serve charge (RTS) recovers pass-through fixed charges from the San Diego County Water Authority (the District’s wholesaler), expenses associated with meters and service lines, expenses not directly associated with the flow of water (general and administration, engineering, information technology, etc.), and the portion of capital replacement allocated to service lines, meters, and general plant. The effective date of changes to RTS is each July 1 – the beginning of each fiscal year. This time frame coincides with the budget and financial reporting. The District’s Rate Model prepared as a part of this study includes full cost allocations by fiscal year to appropriately determine the RTS rate.

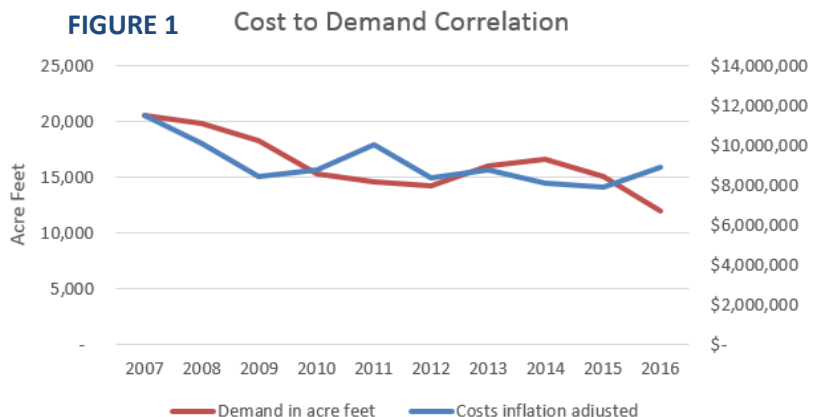
Commodity rates recover per acre foot (commodity) charges from the San Diego County Water Authority (SDCWA), expenses directly association with water flow (transmission and distribution, water treatment, tanks and reservoirs, etc.), conservation costs, and the portion of capital replacement allocated to water flow (tanks and reservoirs, transmission and distribution, and pumping less the portion allocated to fire protection). Commodity rate increases become effective each January 1, to coincide with rate increases from SDCWA, but are not reflected on invoices until after February because some of the water purchased by the District at the previous year’s SDCWA rate may not be billed to the District’s customer until early February. The District’s Rate Model prepared as a part of this Study includes full cost allocations by calendar year to appropriately determine the commodity rates. Since budgeted and projected expenses are accumulated and presented by fiscal year, fiscal year expenses are averaged to convert to the revenue requirement for each calendar year, except for water purchases. Historically, 60% of annual water demand occurs from July through December. The 60/40 split is assumed in the projection of demand to cost water in the calendar year projections.

### **Fixed versus Variable Cost Allocation**

The last rate study performed for the District included an 80/20 RTS/commodity allocation split of expenses not directly associated with the flow of water (general and administration, engineering, information technology, etc.). One of the objectives of this study was to eliminate all arbitrary attributes and components of the rate design. Staff studied the relation of Target Costs – all operating expenses, less purchased water, revenue offsets, costs allocated to fire protection, and plus capital replacement costs – to determine if there was a correlation to demand. Staff accumulated the last ten years of Target Costs, adjusted them for inflation, compared them to demand in the corresponding year (Table 7), but found no correlation.

Staff plotted the Target Costs and related demand to visualize the amount of these costs that tend to vary compared to the amount that tends to be stable.

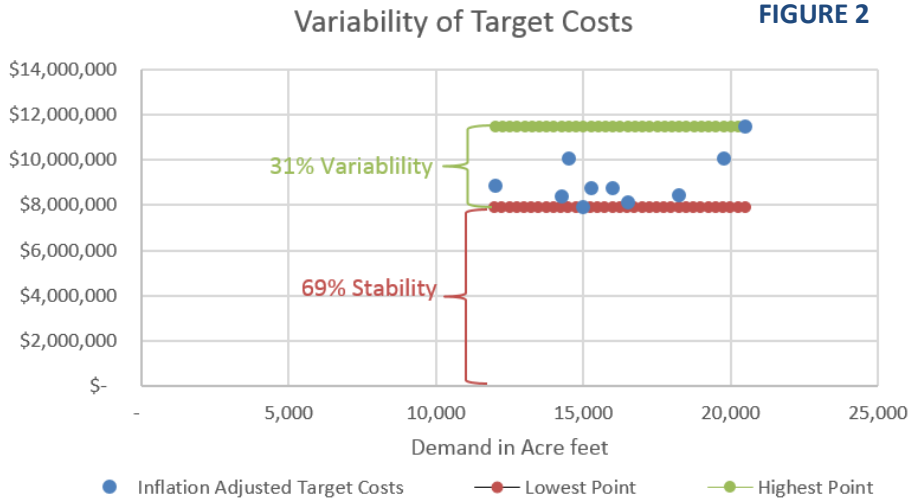
	<b>Costs</b>	<b>AF Demand</b>
2007	\$11,490,906	20,528
2008	10,070,960	19,776
2009	8,427,569	18,313
2010	8,733,230	15,346
2011	10,058,971	14,513
2012	8,391,661	14,259
2013	8,764,041	15,989
2014	8,104,832	16,581
2015	7,916,775	15,072



**COST OF SERVICE ALLOCATION**  
 (continued)

**Fixed versus Variable Cost Allocation** (continued)

Sixty-nine percent of Target Costs tend to not vary. Staff allocated all Target Costs directly associated with the flow of water flow (transmission and distribution, water treatment, tanks and reservoirs, etc.) to the commodity charge, and all Target Costs not directly associated with the flow of water



(general and administration, engineering, information technology, etc.) to the RTS charge, and found a close resemblance to the trend in variability with the costs assigned to commodity – 34% in the preliminary allocated of estimated 2018 costs. To achieve the exact trend of 31% variability, a portion of the cost directly association with flow would have to be carved out and allocated to RTS. The Study does not recommend this carve out as it may be perceived as an arbitrary split and examples through the M1 Manual allocate 100% of costs directly associated with flow to commodity.

**TABLE 8**

	Projected		Ready-to-Serve		Commodity			Fire Protection
	2018	Offset	Meters	Bill	Tier1	Tier2	Tier3	
Water cost	\$30,158,204	\$ -	\$ 7,036,880	\$ -	\$4,958,892	\$12,704,467	\$5,457,965	\$ -
Operating Expenses								
Pumping	583,500	375,000	-	-	28,602	135,384	34,089	10,425
Water Quality	177,500	-	-	-	43,688	102,897	25,915	-
Water Treatment	401,500	-	-	-	57,977	274,425	69,098	-
Tanks & Reservoirs	363,500	-	-	-	49,865	236,030	59,430	18,175
Transmission & Dist.	1,490,000	-	-	-	129,377	612,628	673,495	74,500
Services	200,500	-	200,500	-	-	-	-	-
Meters	691,500	162,604	342,191	186,705	-	-	-	-
Backflow Prevention	77,000	77,000	-	-	-	-	-	-
Customer Accounts	759,500	235,227	524,273	-	-	-	-	-
Equipment & Vehicles	323,500	-	323,500	-	-	-	-	-
Building & Grounds	328,000	-	328,000	-	-	-	-	-
Engineering	1,639,500	31,314	1,608,186	-	-	-	-	-
Safety & Reg. Affairs	284,500	-	284,500	-	-	-	-	-
Information Technology	992,500	-	992,500	-	-	-	-	-
G&A - Conservation	683,079	-	-	-	-	-	683,079	-
General&Admin - Other	2,375,921	96,923	2,278,998	-	-	-	-	-
Capital Replacement	2,265,700	1,519,000	146,715	-	69,892	332,123	167,996	29,974
Reserve Target Adjustmnt	-	-	-	-	-	-	-	-
<b>Total Costs to Recover</b>	<b>\$43,795,404</b>	<b>\$2,497,068</b>	<b>\$13,541,970</b>	<b>\$710,978</b>	<b>\$5,343,293</b>	<b>\$14,397,954</b>	<b>\$7,171,067</b>	<b>\$133,074</b>

**COST OF SERVICE ALLOCATION**  
 (continued)

**Peaking Factors and Tier Allocations**

The District incurs proportionately more costs to maintain facilities designed to meet peak flows than facilities designed to meet average flows – bigger pipes, bigger reservoirs, bigger pumps, etc. Certain water system facilities are designed to meet maximum daily flows and some designed to meet maximum hourly flows. To allocate costs associated with peaking to higher tiers, District peaking factors determined for the District's Master Plan are used to formulate allocation percentages along with demand per tier. Average daily demand is assigned a factor of 1.0. Maximum Daily Demand (Max Day) is 1.9 times more than average daily demand and is therefore assigned a factor of 1.9. Maximum Hourly Demand is 3 times higher than demand during an average hour and is therefore assigned a factor of 3.0.

Master Plan	TABLE 9	Factor
Average Daily Demand		1.0
Maximum Day Demand		1.9
Maximum Hour Demand		3.0

Water quality expense is not impacted by peak demands (peak demands improve water quality). Water quality costs are allocated based on water demand without regard to peaking. Storage, treatment, and pumping facilities are designed for maximum daily flows, and related expenses are allocated based on average daily demand (1.0 / 1.9), and maximum daily flows (0.9 / 1.9). Transmission and distribution is designed to meet maximum hourly demand and related costs are allocated to average daily flows (1.0 / 3.0), maximum daily flows (0.9 / 3.0), and hourly maximum flows (1.1 / 3.0). Table 10 illustrates how percentages used to allocated costs directly associated with flow are calculated based on demand within each tier and peaking factors.

TABLE 10	FY 2017/18 Allocation				CY 2018 Allocation			
	Total	Tier1	Tier2	Tier3	Total	Tier1	Tier2	Tier3
Water Demand in Acre Feet	13,760	5,187	6,561	2,012	14,000	5,195	6,761	2,044
Water Demand Percent	100.00%	37.70%	47.68%	14.62%	100.00%	37.11%	48.29%	14.60%
<b>Facilities designed to meet max day demand</b>								
<i>E.g., Storage, treatment, pumping</i>								
Base = (1.0/1.9) x 100 =	52.63%	19.85%	25.09%	7.69%	52.63%	19.53%	25.42%	7.68%
Max Day = (1.9 - 1.0)/1.9 x 100 =	47.37%	-	36.25%	11.12%	47.37%	-	36.37%	11.00%
		19.85%	61.34%	18.81%		19.53%	61.79%	18.68%
<b>Facilities designed to meet max hour demand</b>								
<i>E.g., Transmission and distribution</i>								
Base = (1.0/3) x 100 =	33.33%	12.57%	15.89%	4.87%	33.33%	12.36%	16.10%	4.87%
Max Day = (1.9 - 1.0)/3 x 100 =	30.00%	-	22.96%	7.04%	30.00%	-	23.04%	6.96%
Max Hr = (3 - 1.9)/3 x 100 =	36.67%	-	-	36.67%	36.67%	-	-	36.67%
		12.57%	38.85%	48.58%		12.36%	39.14%	48.50%

**COST OF SERVICE ALLOCATION**  
 (continued)

**Peaking Factors and Tier Allocation** (continued)

TABLE 10 (continued)	FY 2018/19 Allocation				CY 2019 Allocation			
	Total	Tier1	Tier2	Tier3	Total	Tier1	Tier2	Tier3
Water Demand in Acre Feet	14,160	5,203	6,891	2,066	14,400	5,211	7,091	2,098
Water Demand Percent	100.00%	36.74%	48.67%	14.59%	100.00%	36.19%	49.24%	14.57%
Facilities designed to meet max day demand								
<i>E.g., Storage, treatment, pumping</i>								
Base = (1.0/1.9) x 100 =	52.63%	19.33%	25.62%	7.68%	52.63%	19.04%	25.92%	7.67%
Max Day = (1.9 - 1.0)/1.9 x 100 =	47.37%	-	36.44%	10.93%	47.37%	-	36.55%	10.82%
		19.33%	62.06%	18.61%		19.04%	62.47%	18.49%
Facilities designed to meet max hour demand								
<i>E.g., Transmission and distribution</i>								
Base = (1.0/3) x 100 =	33.33%	12.25%	16.22%	4.86%	33.33%	12.06%	16.41%	4.86%
Max Day = (1.9 - 1.0)/3 x 100 =	30.00%	-	23.08%	6.92%	30.00%	-	23.15%	6.85%
Max Hr = (3 - 1.9)/3 x 100 =	36.67%	-	-	36.67%	36.67%	-	-	36.67%
		12.25%	39.30%	48.45%		12.06%	39.56%	48.38%
FY 2019/20 Allocation								
	Total	Tier1	Tier2	Tier3	Total	Tier1	Tier2	Tier3
Water Demand in Acre Feet	14,560	5,219	7,221	2,120	14,800	5,227	7,421	2,152
Water Demand Percent	100.00%	35.85%	49.59%	14.56%	100.00%	35.32%	50.14%	14.54%
Facilities designed to meet max day demand								
<i>E.g., Storage, treatment, pumping</i>								
Base = (1.0/1.9) x 100 =	52.63%	18.87%	26.10%	7.66%	52.63%	18.59%	26.39%	7.65%
Max Day = (1.9 - 1.0)/1.9 x 100 =	47.37%	-	36.62%	10.75%	47.37%	-	36.72%	10.65%
		18.87%	62.72%	18.41%		18.59%	63.11%	18.30%
Facilities designed to meet max hour demand								
<i>E.g., Transmission and distribution</i>								
Base = (1.0/3) x 100 =	33.33%	11.95%	16.53%	4.85%	33.33%	11.77%	16.71%	4.85%
Max Day = (1.9 - 1.0)/3 x 100 =	30.00%	-	23.19%	6.81%	30.00%	-	23.26%	6.74%
Max Hr = (3 - 1.9)/3 x 100 =	36.67%	-	-	36.67%	36.67%	-	-	36.67%
		11.95%	39.72%	48.33%		11.77%	39.97%	48.26%
FY 2020/21 Allocation								
	Total	Tier1	Tier2	Tier3	Total	Tier1	Tier2	Tier3
Water Demand in Acre Feet	14,960	5,235	7,551	2,174	15,200	5,243	7,751	2,206
Water Demand Percent	100.00%	35.00%	50.47%	14.53%	100.00%	34.50%	50.99%	14.51%
Facilities designed to meet max day demand								
<i>E.g., Storage, treatment, pumping</i>								
Base = (1.0/1.9) x 100 =	52.63%	18.42%	26.56%	7.65%	52.63%	18.15%	26.84%	7.64%
Max Day = (1.9 - 1.0)/1.9 x 100 =	47.37%	-	36.78%	10.59%	47.37%	-	36.88%	10.49%
		18.42%	63.34%	18.24%		18.15%	63.72%	18.13%
Facilities designed to meet max hour demand								
<i>E.g., Transmission and distribution</i>								
Base = (1.0/3) x 100 =	33.33%	11.67%	16.82%	4.84%	33.33%	11.50%	16.99%	4.84%
Max Day = (1.9 - 1.0)/3 x 100 =	30.00%	-	23.29%	6.71%	30.00%	-	23.35%	6.65%
Max Hr = (3 - 1.9)/3 x 100 =	36.67%	-	-	36.67%	36.67%	-	-	36.67%
		11.67%	40.11%	48.22%		11.50%	40.34%	48.16%

**COST OF SERVICE ALLOCATION**  
 (continued)

**Revenue Offsets**

The District has sources of revenue other than from user fees – property tax, late/lock charges, pumping surcharges, investment earnings, backflow fees, engineering fees, and miscellaneous revenues – that offset, or reduce, budgeted and projected costs required to be recovered from user fees (revenue requirement). Property tax and investment earnings in replacement reserves offset the revenue requirement for capital replacement. Pumping surcharges assessed to recover the cost of power to pump water to customers in higher elevations, offset pumping expenses. Late and lock fees assessed to delinquent accounts, offset expenses in the meter and customer service department. A time analysis was performed to determine an allocation of meter department effort between meter reads and rereads, estimated at 27% of staff time; late and lock notice deliveries, meter locks and unlocks, estimated at 40% of staff time; and meter maintenance, estimated at 33% of staff time. After the 40% for late/lock meter department expenses reduces the offset of late/lock revenue, the remaining offset of late and lock revenue reduces the customer service expense revenue requirement. Backflow fees are collected to recover the administrative cost of water quality regulatory compliance – tracking test results, sending letters, etc. – and offset backflow expense with any remaining revenue offsetting meter department expense. Interest in the operating account and miscellaneous revenue (recoveries, cell tower rentals) offset general and administrative expenses.

**TABLE 11** Meter Department Effort

Meter reads/rereads	27%
Late/Lock	40%
Maintenance	33%
	100%

**TABLE 12**

FY 2017/18	Amount		Other							Property Tax	Investment Earnings	Total
	Before Offset	Pumping Charges	Interest	Late/Lock Charges	Backflow Fees	Engineering Fees	Misc					
EXPENSES												
Pumping	\$ 677,000	\$250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	
Meters	629,000	-	-	251,600	19,000	-	-	-	-	-	270,600	
Backflow Prevention	64,000	-	-	-	64,000	-	-	-	-	-	64,000	
Customer Accounts	614,000	-	-	135,400	-	-	-	-	-	-	135,400	
Engineering	1,388,000	-	-	-	-	31,000	-	-	-	-	31,000	
General & Admin.	2,769,000	-	5,000	-	-	-	174,000	-	-	-	179,000	
Capital Replacement	3,119,407	-	-	-	-	-	-	1,969,000	244,000	-	2,213,000	
		\$250,000	\$5,000	\$387,000	\$83,000	\$31,000	\$174,000	\$1,969,000	\$244,000		\$3,143,000	

CY 2018	Amount		Other							Property Tax	Investment Earnings	Total
	Before Offset	Pumping Charges	Interest	Late/Lock Charges	Backflow Fees	Engineering Fees	Misc					
EXPENSES												
Pumping	\$ 739,000	\$295,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 295,000	
Meters	642,000	-	-	256,800	19,000	-	-	-	-	-	275,800	
Backflow Prevention	65,000	-	-	-	65,000	-	-	-	-	-	65,000	
Customer Accounts	627,500	-	-	135,700	-	-	-	-	-	-	135,700	
Engineering	1,415,500	-	-	-	-	31,500	-	-	-	-	31,500	
General & Admin.	2,851,000	-	5,000	-	-	-	176,500	-	-	-	181,500	
Capital Replacement	2,714,152	-	-	-	-	-	-	1,681,500	244,000	-	1,925,500	
		\$295,000	\$5,000	\$392,500	\$84,000	\$31,500	\$176,500	\$1,681,500	\$244,000		\$2,910,000	



## COST OF SERVICE ALLOCATION

(continued)

### Capital Replacement

Capital replacement costs fluctuate significantly year-to-year. The revenue requirement for capital replacement over each of the five budgeted and projected years has been smoothed and matched to the projected trend of revenue offset to avoid spikes and significant changes year-to-year.

Property Tax &	5 Year Total	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Investment Earnings Offset	\$ 8,922,000	\$ 2,213,000	\$ 1,638,000	\$ 1,664,000	\$ 1,690,000	\$1,717,000
Capital Replacement	12,576,300	4,110,000	3,900,200	2,036,100	2,530,000	-
Capital Revenue Requirement Smoothed		3,119,407	2,308,897	2,345,546	2,382,195	2,420,254

Capital replacement is allocated based on existing assets and the peaking and tier allocations previously presented in the Study. The portion of capital replacement equal to the percent of existing service lines, meters, and general plant in relation to total assets is allocated to the RTS charge. The portion of capital replacement equal to the percent of existing pumping, water treatment, tanks and reservoirs, and transmission and distribution assets in relation to total assets is allocated to the commodity charge based on previously presented peaking factors. Fire protection is allocated 5% of related assets based on requirement for system capacity. Table 14 shows the percent used to allocate each year of capital revenue requirement determined in Table 13.

Plant Assets	Total	Meters	Commodity			Fire
			Tier1	Tier2	Tier3	Protection
Pumping	\$ 7,364,983	\$ -	\$ 1,388,851	\$ 4,291,797	\$ 1,316,086	\$ 368,249
Water Treatment	95,357	-	18,928	58,492	17,937	-
Tanks & Reservoirs	54,313,776	-	10,242,220	31,650,267	9,705,600	2,715,689
Transmission&Distribution	50,658,198	-	6,049,349	18,696,674	23,379,265	2,532,910
Services	13,438,304	13,438,304	-	-	-	-
Meters	5,067,418	5,067,418	-	-	-	-
General Plant	8,987,362	8,987,362	-	-	-	-
	<u>\$139,925,398</u>	<u>\$27,493,084</u>	<u>\$17,699,348</u>	<u>\$54,697,230</u>	<u>\$34,418,888</u>	<u>\$5,616,848</u>
Allocation Percent	100.00%	19.65%	12.65%	39.09%	24.60%	4.01%

### Projected Demand within Tiers

Demand is assumed to increase in Tier 1, average minimum use, by the growth assumption of 0.3% annually. The overall assumed 3% increase in M&I demand remaining after the assumed 0.3% increase in Tier 1 demand is allocated among the mid and highest tier based on the historical trend of increases between these tiers (as calculated in Table 15). The demand within tiers in the base or test year, 2018, was determined by entering the tier limits in a consumptive use model of over 220,000 recent customer bills representing one year of demand adjusted to the 2018 demand projection of 14,000 acre feet.

2018 Base Year	Tier 1		Tier 2		Use in AF	
Meter Size	Limit	Use in AF	Limit	Use in AF	Tier 3	Total
< 1"	6	2,922	21	3,031	723	6,676
1"	16	343	78	510	201	1,054
1.5"	43	566	196	701	289	1,556
2"	85	829	335	1,104	493	2,426
> 2"	430	535	1,190	515	238	1,288
AG		-		900	-	900
Construction		-		-	100	100
<b>TOTAL</b>		<u>5,195</u>		<u>6,761</u>	<u>2,044</u>	<u>14,000</u>
				composition of remaining tiers	76.8%	23.2%
				historical mid/high tier split	65.0%	35.0%
				Product of factors	49.9%	8.1%
				Allocation of remaining increase	86.0%	14.0%

**COST OF SERVICE ALLOCATION**  
 (continued)

**Cost Allocations**

This Study incorporates a five-year outlook of cost allocations of the revenue requirement, both by fiscal year for Ready-to-Serve charge (RTS), and calendar year for commodity charge. The revenue requirement is the budgeted and projected, operating and capital expenses, less revenue offsets – the amount needed to be recovered by user charges – RTS and commodity rates. Each year’s allocation begins with a distribution of water demand and production among to each tier within the commodity charge with projected costs per acre foot applied.

**Cost Allocation – Fiscal Year 2017/18**

Budgeted costs for the 2017/18 fiscal year are noted as projected in the first column. The next column shows the “offsets” of revenues other than from user charges, as discussed previously under *Revenue Offsets*. The remaining columns spread the revenue requirement in accordance with how it will be recovered – through the RTS, Commodity, or Fire Service charges.

TABLE 16	Projected		Ready-to-Serve		Commodity			Fire
	2017/18	Offset	Meters	Bill	Tier1	Tier2	Tier3	Protection
<b>Water Costs</b>								
Projected AF demand	13,760				5,187	6,561	2,012	
Projected AF production	14,580							
OMWD	3,899				3,899			
SDCWA	7,181				1,596	5,585		
Desal - committed	3,500					1,369	2,131	
Desal - excess	-						-	
Cost per AF					\$ 1,218	\$ 1,277	\$ 2,510	
					\$ 1,277	\$ 2,510	\$ 733	
Water purchases					\$ 4,748,982	\$ 7,132,045	\$ 5,348,810	
					\$ 2,038,092	\$ 3,436,190	\$ -	
Water cost	\$ 29,555,379	\$ -	\$ 6,851,260	\$ -	\$ 6,787,074	\$ 10,568,235	\$ 5,348,810	\$ -
<b>Operating Expenses</b>								
Pumping	677,000	250,000	-	-	80,521	248,826	76,303	21,350
Water Quality	175,000	-	-	-	65,975	83,440	25,585	-
Water Treatment	447,000	-	-	-	88,729	274,190	84,081	-
Tanks & Reservoirs	416,000	-	-	-	78,447	242,416	74,337	20,800
Transmission & Dist. Services	1,835,000	-	-	-	219,126	677,253	846,871	91,750
Meters	245,000	-	245,000	-	-	-	-	-
Meters	629,000	270,600	188,570	169,830	-	-	-	-
Backflow Prevention	64,000	64,000	-	-	-	-	-	-
Customer Accounts	614,000	135,400	-	478,600	-	-	-	-
Equipment & Vehicles	304,000	-	304,000	-	-	-	-	-
Building & Grounds	362,000	-	362,000	-	-	-	-	-
Engineering	1,388,000	31,000	1,357,000	-	-	-	-	-
Safety & Reg. Affairs	261,000	-	261,000	-	-	-	-	-
Information Technology	1,003,000	-	1,003,000	-	-	-	-	-
G&A - Conservation	574,087	-	-	-	-	-	574,087	-
General&Admin - Other	2,194,913	179,000	2,015,913	-	-	-	-	-
Capital Replacement	3,119,407	2,213,000	178,094	-	114,653	354,317	222,958	36,385
Reserve Target Adjustmnt	-	-	-	-	-	-	-	-
<b>Total Costs to Recover</b>	<b>\$ 43,863,786</b>	<b>\$ 3,143,000</b>	<b>\$ 12,765,837</b>	<b>\$ 648,430</b>	<b>\$ 7,434,525</b>	<b>\$ 12,448,677</b>	<b>\$ 7,253,032</b>	<b>\$ 170,285</b>

**COST OF SERVICE ALLOCATION**  
 (continued)

**Cost Allocation – Fiscal Year 2017/18** (continued)

The RTS is divided into two columns – Meters and Bill. Expenses allocated to RTS are fixed in nature – do not change when demand changes – and are not directly related to the flow of water. Expenses allocated to Meters include SDCWA’s fixed charges, general and administrative, engineering, information technology, maintenance expenses for meters and service lines, capital replacement allocated to meters, service lines, and general plant, and other overhead expenses (buildings and grounds, vehicles and equipment, safety and regulatory affairs).

Expenses directly related to customer billing – customer service and meter reading expenses – are allocated to the Bill column. Expenses directly related to flow (transmission and distribution, water treatment, tanks and reservoirs, etc.) are allocated to the commodity tiers based on demand and peaking factors – see *Peaking Factors and Tier Allocation*, Page 14. Conservation expenses are allocated to the highest use tier. A portion of capital replacement is allocated to tiers based on the District’s investment in assets – see *Capital Replacement*, Page 16.

**Cost Allocation – Calendar Year 2018**

**TABLE 17**

	Projected		Ready-to-Serve		Commodity			Fire Protection
	2018	Offset	Meters	Bill	Tier1	Tier2	Tier3	
<b>Water Costs</b>								
Projected AF demand	14,000				5,195	6,761	2,044	
Projected AF production	14,830							
OMWD	3,899				3,899			
SDCWA	7,431				1,604	5,827		
Desal - committed	3,500					1,335	2,165	
Desal - excess	-						-	
<b>Cost per AF</b>					\$ 1,249	\$ 1,309	\$ 2,560	
					\$ 1,309	\$ 2,560	\$ 733	
<b>Water purchases</b>					\$ 4,869,851	\$ 7,627,543	\$ 5,542,400	
					\$ 2,099,636	\$ 3,417,600	\$ -	
<b>Water cost</b>	\$ 30,593,910	\$ -	\$ 7,036,880	\$ -	\$ 6,969,487	\$ 11,045,143	\$ 5,542,400	\$ -
<b>Operating Expenses</b>								
Pumping	739,000	295,000	-	-	82,378	260,630	78,792	22,200
Water Quality	181,000	-	-	-	67,169	87,405	26,426	-
Water Treatment	460,500	-	-	-	89,936	284,543	86,021	-
Tanks & Reservoirs	422,500	-	-	-	78,388	248,010	74,977	21,125
Transmission & Dist.	1,941,500	-	-	-	227,971	721,908	894,546	97,075
<b>Services</b>	259,000	-	259,000	-	-	-	-	-
Meters	642,000	275,800	192,860	173,340	-	-	-	-
Backflow Prevention	65,000	65,000	-	-	-	-	-	-
Customer Accounts	627,500	135,700	-	491,800	-	-	-	-
Equipment & Vehicles	302,500	-	302,500	-	-	-	-	-
Building & Grounds	359,500	-	359,500	-	-	-	-	-
Engineering	1,415,500	31,500	1,384,000	-	-	-	-	-
Safety & Reg. Affairs	266,500	-	266,500	-	-	-	-	-
Information Technology	1,024,500	-	1,024,500	-	-	-	-	-
G&A - Conservation	581,089	-	-	-	-	-	581,089	-
General&Admin - Other	2,269,911	181,500	2,088,411	-	-	-	-	-
Capital Replacement	2,714,152	1,925,500	154,957	-	99,758	308,286	193,993	31,658
Reserve Target Adjustmnt	-	-	-	-	-	-	-	-
<b>Total Costs to Recover</b>	<b>\$ 44,865,562</b>	<b>\$ 2,910,000</b>	<b>\$ 13,069,107</b>	<b>\$ 665,140</b>	<b>\$ 7,615,087</b>	<b>\$ 12,955,925</b>	<b>\$ 7,478,244</b>	<b>\$ 172,058</b>

**COST OF SERVICE ALLOCATION**  
 (continued)

**Cost Allocation – Calendar Year 2018** (continued)

This Study includes cost allocations by calendar year because commodity charges are based on calendar year revenue requirement. Calendar year allocations distribute demand and water production the same as the fiscal year allocations. Water cost changes from SDCWA are effective January 1 each year. Operating costs for calendar years are averaged from budget and projected fiscal year operating expenses as adopted in the District’s operating budget.

**Cost Allocation – Fiscal Year 2018/19**

The demand projection – Page 7 – was prepared on a calendar year basis. The cost allocations for fiscal years assume, based on historical trend analysis, 60% of the year’s demand occurs July through December, while 40% occurs from January through June. Since SDCWA changes in cost per acre foot occur each January 1, the costs per acre foot of water each fiscal year is weight averaged assuming the 60/40 split in demand.

**TABLE 18**

	Projected		Ready-to-Serve		Commodity			Fire Protection
	2018/19	Offset	Meters	Bill	Tier1	Tier2	Tier3	
<b>Water Costs</b>								
Projected AF demand	14,160				5,203	6,891	2,066	
Projected AF production	15,000							
OMWD	3,899				3,899			
SDCWA	7,455				1,613	5,842		
Desal - committed	3,500					1,311	2,189	
Desal - excess	146						146	
Cost per AF					\$ 1,266	\$ 1,327	\$ 2,594	
					\$ 1,327	\$ 2,594	\$ 767	
Water purchases					\$ 4,936,134	\$ 7,752,334	\$ 5,678,266	
					\$ 2,140,451	\$ 3,400,734	\$ 111,982	
Water cost	\$ 31,242,400	\$ -	\$ 7,222,499	\$ -	\$ 7,076,585	\$ 11,153,068	\$ 5,790,248	\$ -
<b>Operating Expenses</b>								
Pumping	801,000	340,000	-	-	84,656	271,792	81,502	23,050
Water Quality	187,000	-	-	-	68,704	91,013	27,283	-
Water Treatment	474,000	-	-	-	91,625	294,164	88,211	-
Tanks & Reservoirs	429,000	-	-	-	78,779	252,926	75,845	21,450
Transmission & Dist.	2,048,000	-	-	-	238,336	764,621	942,643	102,400
Services	273,000	-	273,000	-	-	-	-	-
Meters	655,000	281,000	197,150	176,850	-	-	-	-
Backflow Prevention	66,000	66,000	-	-	-	-	-	-
Customer Accounts	641,000	136,000	-	505,000	-	-	-	-
Equipment & Vehicles	301,000	-	301,000	-	-	-	-	-
Building & Grounds	357,000	-	357,000	-	-	-	-	-
Engineering	1,443,000	32,000	1,411,000	-	-	-	-	-
Safety & Reg. Affairs	272,000	-	272,000	-	-	-	-	-
Information Technology	1,046,000	-	1,046,000	-	-	-	-	-
G&A - Conservation	588,091	-	-	-	-	-	588,091	-
General&Admin - Other	2,344,909	184,000	2,160,909	-	-	-	-	-
Capital Replacement	2,308,897	1,638,000	131,820	-	84,863	262,256	165,027	26,931
Reserve Target Adjustmnt	-	-	-	-	-	-	-	-
<b>Total Costs to Recover</b>	<b>\$ 45,477,297</b>	<b>\$ 2,677,000</b>	<b>\$ 13,372,378</b>	<b>\$ 681,850</b>	<b>\$ 7,723,548</b>	<b>\$ 13,089,840</b>	<b>\$ 7,758,850</b>	<b>\$ 173,831</b>

**COST OF SERVICE ALLOCATION**  
 (continued)

**Cost Allocation – Calendar Year 2019**

TABLE 19	Projected		Ready-to-Serve		Commodity			Fire
	2019	Offset	Meters	Bill	Tier1	Tier2	Tier3	Protection
Water Costs								
Projected AF demand	14,400				5,211	7,091	2,098	
Projected AF production	15,250							
OMWD	3,899				3,899			
SDCWA	7,705				1,621	6,084		
Desal - committed	3,500					1,278	2,222	
Desal - excess	146						146	
Cost per AF					\$ 1,291	\$ 1,354	\$ 2,645	
					\$ 1,354	\$ 2,645	\$ 767	
Water purchases					\$ 5,033,609	\$ 8,237,736	\$ 5,877,190	
					\$ 2,194,834	\$ 3,380,310	\$ 111,982	
Water cost	\$ 32,227,617	\$ -	\$ 7,391,956	\$ -	\$ 7,228,443	\$ 11,618,046	\$ 5,989,172	\$ -
Operating Expenses								
Pumping	875,500	390,000	-	-	87,817	288,127	85,281	24,275
Water Quality	193,500	-	-	-	70,028	95,279	28,193	-
Water Treatment	487,500	-	-	-	92,820	304,541	90,139	-
Tanks & Reservoirs	436,500	-	-	-	78,955	259,047	76,673	21,825
Transmission & Dist.	2,181,500	-	-	-	249,935	819,851	1,002,639	109,075
Services	290,000	-	290,000	-	-	-	-	-
Meters	667,500	286,000	201,275	180,225	-	-	-	-
Backflow Prevention	67,000	67,000	-	-	-	-	-	-
Customer Accounts	660,000	136,500	-	523,500	-	-	-	-
Equipment & Vehicles	306,500	-	306,500	-	-	-	-	-
Building & Grounds	363,000	-	363,000	-	-	-	-	-
Engineering	1,475,000	32,500	1,442,500	-	-	-	-	-
Safety & Reg. Affairs	277,000	-	277,000	-	-	-	-	-
Information Technology	1,069,500	-	1,069,500	-	-	-	-	-
G&A - Conservation	598,935	-	-	-	-	-	598,935	-
General&Admin - Other	2,439,565	186,500	2,253,065	-	-	-	-	-
Capital Replacement	2,327,222	1,651,000	132,867	-	85,536	264,337	166,337	27,145
Reserve Target Adjustmnt	1,300,000	-	255,429	-	164,439	508,174	319,774	52,184
Total Costs to Recover	\$ 48,243,339	\$ 2,749,500	\$ 13,983,092	\$ 703,725	\$ 8,057,973	\$ 14,157,402	\$ 8,357,143	\$ 234,504

The *Reserve Target Adjustment*, last line of the cost allocation, includes \$1.3 million for 2019. This amount is necessary to maintain the projected favorable debt service coverage ratio which will allow for a debt issuance. Without the reserve adjustment, the District may not have the capacity to incur debt. Without this adjustment, more debt would lower the projected debt service coverage ratio below the District’s target of 1.15 times coverage without capacity fees or property tax.

**COST OF SERVICE ALLOCATION**  
 (continued)

**Cost Allocation – Fiscal Year 2019/20**

**TABLE 20**

	Projected	Offset	Ready-to-Serve		Commodity			Fire
	2019/20		Meters	Bill	Tier1	Tier2	Tier3	Protection
<b>Water Costs</b>								
Projected AF demand	14,560				5,219	7,221	2,120	
Projected AF production	15,420							
OMWD	3,899				3,899			
SDCWA	7,729				1,630	6,099		
Desal - committed	3,500					1,254	2,246	
Desal - excess	292						292	
Cost per AF					\$ 1,313	\$ 1,377	\$ 2,679	
					\$ 1,377	\$ 2,679	\$ 802	
Water purchases					\$ 5,119,387	\$ 8,398,323	\$ 6,017,034	
					\$ 2,244,510	\$ 3,359,466	\$ 234,184	
Water cost	\$ 32,934,317	\$ -	\$ 7,561,413	\$ -	\$ 7,363,897	\$ 11,757,789	\$ 6,251,218	\$ -
<b>Operating Expenses</b>								
Pumping	950,000	440,000	-	-	91,426	303,878	89,196	25,500
Water Quality	200,000	-	-	-	71,700	99,180	29,120	-
Water Treatment	501,000	-	-	-	94,539	314,227	92,234	-
Tanks & Reservoirs	444,000	-	-	-	79,594	264,553	77,653	22,200
Transmission & Dist.	2,315,000	-	-	-	262,810	873,542	1,062,898	115,750
Services	307,000	-	307,000	-	-	-	-	-
Meters	680,000	291,000	205,400	183,600	-	-	-	-
Backflow Prevention	68,000	68,000	-	-	-	-	-	-
Customer Accounts	679,000	137,000	-	542,000	-	-	-	-
Equipment & Vehicles	312,000	-	312,000	-	-	-	-	-
Building & Grounds	369,000	-	369,000	-	-	-	-	-
Engineering	1,507,000	33,000	1,474,000	-	-	-	-	-
Safety & Reg. Affairs	282,000	-	282,000	-	-	-	-	-
Information Technology	1,093,000	-	1,093,000	-	-	-	-	-
G&A - Conservation	609,779	-	-	-	-	-	609,779	-
General&Admin - Other	2,534,221	189,000	2,345,221	-	-	-	-	-
Capital Replacement	2,345,546	1,664,000	133,913	-	86,210	266,418	167,647	27,358
Reserve Target Adjustmnt	1,300,000	-	255,429	-	164,439	508,174	319,774	52,184
<b>Total Costs to Recover</b>	<b>\$ 49,430,863</b>	<b>\$ 2,822,000</b>	<b>\$ 14,338,376</b>	<b>\$ 725,600</b>	<b>\$ 8,214,615</b>	<b>\$ 14,387,761</b>	<b>\$ 8,699,519</b>	<b>\$ 242,992</b>

Subsequent years of allocations are included in Rate Model calculations – five-year planning horizon. Staff recommends implementation of RTS for Fiscal Years 2017/18, 2018/19, and 2019/20, and commodity rates for Calendar Years 2018 and 2019, so allocations only for these years are presented in this report.

## UNITS OF SERVICE

To calculate rates, the total costs to recover, or revenue requirement, determined in the Cost Allocation Section of this report – pages 18 through 22 – is broken down into Units of Service. The revenue requirement allocated to RTS-Meters is divided by total meter equivalents billed throughout the year. The revenue requirement allocated to RTS-Bill is divided by the number of water bills processed and sent throughout the year. The revenue requirement for each tier of water commodity is divided by the respective demand within each tier. The revenue requirement allocated to Fire Protection is divided by the number of diameter” of pipe billed through the year for fire services.

### **Meters**

District rates include a Ready-to-Serve Charge (RTS) to recover costs that are fixed in relation to demand or not directly associated with the flow of water. The meters in service are projected from the actual active meters billed in December of 2016 using the 0.3% growth assumption – see Demand Projection, Page 7 – with the allocation of the 0.3% among meter sizes projected by historical increases by meter size. The number of meters in December, mid fiscal year, represents the monthly average throughout the year.

### ***Bills***

The monthly average number of meters is then multiplied by twelve to estimate the number of water bills processed each year. The revenue requirement allocated to Meters-Bill is divided by the estimated number of bills processed each year to assign a cost per bill for subsequent RTS calculation.

Meter Size	Active Meters		Avg Annual Increase	Projected Average Meters				
	12/31/2011	12/31/2016		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
< 1"	18,488	19,149	0.72%	19,160	19,171	19,185	19,196	19,210
1"	915	1,024	2.38%	1,053	1,081	1,114	1,142	1,175
1.5"	662	689	0.82%	699	709	720	730	741
2"	491	511	0.81%	521	531	542	552	563
3"	62	63	0.32%	64	65	66	67	68
4"	17	17	0.00%	17	17	17	17	17
6"	15	15	0.00%	15	15	15	15	15
10"	1	1	0.00%	1	1	1	1	1
<b>Total</b>	<b>20,651</b>	<b>21,469</b>		<b>21,530</b>	<b>21,590</b>	<b>21,660</b>	<b>21,720</b>	<b>21,790</b>
<b>Number of Bills Processed Each Year</b>				<b>258,360</b>	<b>259,080</b>	<b>259,920</b>	<b>260,640</b>	<b>261,480</b>

**TABLE 21**

### ***Meter Equivalents***

As of March 31, 2017, the District had 21,456 actively billed meters of sizes varying from 5/8” to 10”. Larger meters and associated capacities require more resources to maintain. The District performed a Meter Equivalent Analysis (MEA), when the standard specification for the base meter changed from a 5/8” meter to a 3/4” meter. The MEA resulted in a recommendation of an appropriate number of meter equivalents per meter size.

**TABLE 22**

	GPM Rating		Factor		
	Mid	High	Mid	High	Average
iPerl 5/8"	12.6	25.0	0.72	0.71	0.71
iPerl 3/4"	17.6	35.0	1.00	1.00	1.00
iPerl 1"	27.7	55.0	1.58	1.57	1.57
Omni 1 1/2"	80.8	160.0	4.60	4.57	4.59
Omni 2"	100.8	200.0	5.74	5.71	5.73
Omni 3"	251.3	500.0	14.32	14.29	14.30
Omni 4"	501.5	1,000.0	28.58	28.57	28.57
Omni 6"	1,002.0	2,000.0	57.09	57.14	57.12
MAG 10"	4,015.5	8,000.0	228.80	228.57	228.69

**UNITS OF SERVICE**  
 (continued)

**Meters** (continued)

**Meter Equivalents** (continued)

**TABLE 23**

	Provision for Replacement								Factor Based on Meter Cost
	Meter		Register/Calibration		MXU		Total Annual		
	Cost	Life	Cost	Life	Cost	Life	Cost	Factor	
SRII 5/8"	\$ 132.77	20	\$ 68.51	10.0	\$141.38	10.0	\$ 27.63	1.26	0.85
iPerl 3/4"	155.51	20	-	10.0	141.38	10.0	21.91	1.00	1.00
iPerl 1"	226.20	20	-	10.0	141.38	10.0	25.45	1.16	1.45
Omni 1 ½"	870.74	20		10.0	141.38	10.0	57.67	2.63	5.60
Omni 2"	1,032.84	20	770.5	10.0	141.38	10.0	142.82	6.52	6.64
Omni 3"	1,287.05	20	946.3	10.0	141.38	10.0	173.12	7.90	8.28
Omni 4"	2,505.69	20	946.3	10.0	141.38	10.0	234.06	10.68	16.11
Omni 6"	4,511.06	20	1,633.5	10.0	141.38	10.0	403.04	18.39	29.01
MAG 10"	7,177.50	20	1,215.6	10.0	141.38	10.0	494.57	22.57	46.15

**TABLE 24**

	Meter Equivalent Multiple (Factor)				
	Based on GPM Rating		Based on Cost		
	Previous	Current	Replacement	Meter	Recommended
5/8"	0.7	0.7	1.3	0.9	1.0
3/4"	1.0	1.0	1.0	1.0	1.0
1"	1.7	1.6	1.2	1.5	1.5
1 ½"	3.3	4.6	2.6	5.6	4.0
2"	5.3	5.7	6.5	6.6	6.5
3"	10.7	14.3	7.9	8.3	10.0
4"	16.7	28.6	10.7	16.1	15.0
6"	33.3	57.1	18.4	29.0	30.0
10"	76.7	228.7	22.6	46.2	70.0

E.g., a base meter, ¾" is the equivalent of 1, when a 2" meter is the equivalent of 6.5 base meters in terms of the effort and resources expended to maintain the meter and the system to serve the capacity of that meter. The MEA focused on Gallons Per Minute (GPM) ratings, repair/replacement costs, and meter costs. Recommended meter equivalents are multiplied by the average number of meters anticipated to be billed throughout the year. The resulting product in the number of Units of

Service to divide by the revenue requirement of RTS-Meters.

**TABLE 25**

Meter Size	Meter Equivalents per meter	FY				
		2018	2019	2020	2021	2022
< 1"	1.0	19,160.0	19,171.0	19,185.0	19,196.0	19,210.0
1"	1.5	1,579.5	1,621.5	1,671.0	1,713.0	1,762.5
1.5"	4.0	2,796.0	2,836.0	2,880.0	2,920.0	2,964.0
2"	6.5	3,386.5	3,451.5	3,523.0	3,588.0	3,659.5
3"	10.0	640.0	650.0	660.0	670.0	680.0
4"	15.0	255.0	255.0	255.0	255.0	255.0
6"	30.0	450.0	450.0	450.0	450.0	450.0
10"	70.0	70.0	70.0	70.0	70.0	70.0
Additional multi-family units	0.3	4,110.0	4,122.3	4,134.6	4,146.9	4,159.2
<b>Units of Service</b>						
	Per Month	32,447.0	32,627.3	32,828.6	33,008.9	33,210.2
	Per Year	389,364.0	391,527.6	393,943.2	396,106.8	398,522.4



**UNITS OF SERVICE**  
 (continued)

**Meters** (continued)

***Additional Multi-Family Units***

Multi-family residential accounts are currently charged one-half the base meter RTS for each additional living unit served by the meter – e.g., an apartment complex of 8 living units served by one 2” meter pays the 2” RTS charge plus 7 times one-half the ¾” RTS charge. The current additional unit charge includes unit of service for the processing of a bill. This Study recommends not including an allocation of the Bill revenue requirement since no additional bill is generated for the additional living units. Staff also analyzed average demand from multi-family meters compared to other same-size meters and found on average a 30% higher demand for multi-family meters. This Study also recommends reducing the meter equivalent for additional units from 0.5 to 0.3, representing the 30% more demand and maintenance/replacement burden from multi-family meters.

***Fire Line RTS***

The District assesses RTS on fire service lines based on the diameter in inches of the service line. A rate is applied for each inch of diameter. The current rate is \$5.87 per service diameter inch (e.g., a customer with an 8” fire service line would pay \$46.96 – 8” times \$5.87 – per month in RTS monitor usage and maintain that fire service and meter). The total number of billing units (inches of fire service line, as of December 31, 2016 was 3,169 as shown in Table 26. The same growth assumption of 0.3% is applied to service line inches each year and multiplies by 12 to arrive at the number of units of service to divide into the fire protection revenue requirement to calculate a rate per inch of diameter fire line. December is used, the midpoint, to approximate the average for the fiscal year.

**TABLE 26**

**Fire Lines as of December 31, 2016**

<u>Diameter</u>	<u># of Accounts</u>	<u>Total Billing Units</u>
1"	2	2
3"	23	69
4"	65	260
6"	180	1,080
8"	201	1,608
10"	15	150
<b>Total</b>	<b>486</b>	<b>3,169</b>

**Commodity**

Units of service of commodity within each tier are determined in each calendar year costs allocations – Tables 17 and 19. This demand is divided in to the revenue requirement for each tier to determine the rate.

### RATE CALCULATIONS

RTS and commodity rates are calculated by dividing the revenue requirement components by the associated units of service.

**RTS**

RTS-Meter revenue requirements determined in Tables 16, 18, and 20, are divided by meter equivalents for the year determined in Table 25. RTS-Bill revenue requirement is divided by the number of bills processed for the year as determined in Table 21 to determine the unit cost of a bill. The unit cost of a bill is added to the product of the meter equivalents and meter equivalent unit cost to arrive at the recommended RTS.

**TABLE 27**

Projected 2017/18	Ready-to-Serve		Fire
	Meters	Bill	Protection
Revenue Requirement	\$12,765,837	\$648,430	\$170,285
Billing Units	389,364	258,360	38,148
Unit Cost	\$ 32.79	\$ 2.51	\$ 4.46

Meter Size	Meter Equivalents		Ready-to-Serve Charge		
	Per Meter	Unit Cost	Meter	Bill	Total
5/8"	1.0	\$ 32.79	\$ 32.79	\$ 2.51	\$ 35.30
3/4"	1.0	32.79	32.79	2.51	35.30
1"	1.5	32.79	49.19	2.51	51.70
1.5"	4.0	32.79	131.16	2.51	133.67
2"	6.5	32.79	213.14	2.51	215.65
3"	10.0	32.79	327.90	2.51	330.41
4"	15.0	32.79	491.85	2.51	494.36
6"	30.0	32.79	983.70	2.51	986.21
10"	70.0	32.79	2,295.30	2.51	2,297.81
multi	0.3	32.79	9.84	-	9.84

**TABLE 28**

Projected 2018/19	Ready-to-Serve		Fire
	Meters	Bill	Protection
Revenue Requirement	\$13,372,378	\$681,850	\$173,831
Billing Units	391,528	259,080	38,268
Unit Cost	\$ 34.15	\$ 2.63	\$ 4.54

Meter Size	Meter Equivalents		Ready-to-Serve Charge		
	Per Meter	Unit Cost	Meter	Bill	Total
5/8"	1.0	\$ 34.15	\$ 34.15	\$ 2.63	\$ 36.78
3/4"	1.0	34.15	34.15	2.63	36.78
1"	1.5	34.15	51.23	2.63	53.86
1.5"	4.0	34.15	136.60	2.63	139.23
2"	6.5	34.15	221.98	2.63	224.61
3"	10.0	34.15	341.50	2.63	344.13
4"	15.0	34.15	512.25	2.63	514.88
6"	30.0	34.15	1,024.50	2.63	1,027.13
10"	70.0	34.15	2,390.50	2.63	2,393.13
multi	0.3	34.15	10.25	-	10.25

**RATE CALCULATIONS**  
 (continued)

**RTS (continued)**

**TABLE 29**

Projected 2019/20	Ready-to-Serve		Fire
	Meters	Bill	Protection
Revenue Requirement	\$14,338,376	\$725,600	\$242,992
Billing Units	393,943	259,920	38,388
Unit Cost	\$ 36.40	\$ 2.79	\$ 6.33

Meter Size	Meter Equivalents		Ready-to-Serve Charge		
	Per Meter	Unit Cost	Meter	Bill	Total
5/8"	1.0	\$ 36.40	\$ 36.40	\$ 2.79	\$ 39.19
3/4"	1.0	36.40	36.40	2.79	39.19
1"	1.5	36.40	54.60	2.79	57.39
1.5"	4.0	36.40	145.60	2.79	148.39
2"	6.5	36.40	236.60	2.79	239.39
3"	10.0	36.40	364.00	2.79	366.79
4"	15.0	36.40	546.00	2.79	548.79
6"	30.0	36.40	1,092.00	2.79	1,094.79
10"	70.0	36.40	2,548.00	2.79	2,550.79
multi	0.3	36.40	10.92	-	10.92

**Commodity Rates**

Commodity rates are determined by dividing the revenue requirement within each tier by the demand, or billing units (748 gallons, or 100 cubic feet), within this tiers. Both the revenue requirement and the demand are presented in Tables 17 and 19. Demand is presented in acre feet in Tables 17 and 19, and multiplied by 435.6 to convert to billing units.

**TABLE 30**

CY 2018	Tier 1	Tier 2	Tier 3
Revenue Requirement	\$7,615,087	\$12,955,925	\$7,478,244
Billing Units - HCFs	2,262,942	2,945,092	890,366
Unit Cost	\$ 3.37	\$ 4.40	\$ 8.40

CY 2019	Tier 1	Tier 2	Tier 3
Revenue Requirement	\$8,057,973	\$14,157,402	\$8,357,143
Billing Units - HCFs	2,269,912	3,088,840	913,889
Unit Cost	\$ 3.55	\$ 4.58	\$ 9.14

**RECOMMENDED RATES**

**TABLE 31**

Meter Size	Ready-to-Serve Charge						Increase to:				
	Current	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY2018	FY2019	FY2020	FY2021	FY2022
5/8"	\$ 31.42	\$ 35.30	\$ 36.78	\$ 39.19	\$ 40.14	\$ 40.81	12.3%	4.2%	6.6%	2.4%	1.7%
3/4"	36.52	35.30	36.78	39.19	40.14	40.81	-3.3%	4.2%	6.6%	2.4%	1.7%
1"	55.29	51.70	53.86	57.39	58.70	59.71	-6.5%	4.2%	6.6%	2.3%	1.7%
1.5"	110.59	133.67	139.23	148.39	151.50	154.18	20.9%	4.2%	6.6%	2.1%	1.8%
2"	178.11	215.65	224.61	239.39	244.30	248.66	21.1%	4.2%	6.6%	2.1%	1.8%
3"	356.22	330.41	344.13	366.79	374.22	380.92	-7.2%	4.2%	6.6%	2.0%	1.8%
4"	552.94	494.36	514.88	548.79	559.82	569.87	-10.6%	4.2%	6.6%	2.0%	1.8%
6"	1,105.88	986.21	1,027.13	1,094.79	1,116.62	1,136.72	-10.8%	4.1%	6.6%	2.0%	1.8%
10"	2,549.36	2,297.81	2,393.13	2,550.79	2,601.42	2,648.32	-9.9%	4.1%	6.6%	2.0%	1.8%
multi	18.26	9.84	10.25	10.92	11.14	11.34	-46.1%	4.1%	6.6%	2.0%	1.8%
Fire Line per diameter"	5.87	4.46	4.54	6.33	7.95	9.12	-24.0%	1.8%	39.4%	25.6%	14.7%
<b>Commodity Rates</b>											
	Current	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY2018	CY2019	CY2020	CY2021	CY2022
Tier 1	\$ 3.08	\$ 3.37	\$ 3.55	\$ 3.75	\$ 3.97	\$ 4.09	9.4%	5.3%	5.6%	5.9%	3.0%
Tier 2	4.12	4.40	4.58	4.76	4.93	4.93	6.8%	4.1%	3.9%	3.6%	0.0%
Tier 3	5.33	8.40	9.14	9.85	10.51	10.79	57.6%	8.8%	7.8%	6.7%	2.7%
Tier 4	7.41										
<b>Tier Structure in Units</b>											
Meter Size	Current				Effective CY 2018						
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3				
<1"	1 - 5	6 - 17	18 - 36	37 +	1 - 6	7 - 21	22 +				
1"	1 - 5	6 - 60	61 - 214	215 +	1 - 16	17 - 78	79 +				
1.5"	1 - 5	6 - 157	158 - 627	628 +	1 - 43	44 - 196	197 +				
2"	1 - 5	6 - 242	243 - 806	807 +	1 - 85	86 - 335	336 +				
>2"	1 - 5	6 - 1,133	1134-3970	3,971 +	1 - 430	431-1,190	1,191 +				
Ag	1 - 5	6 +				1 +					
Temporary Construction				1 +			1 +				

**RATE IMPACTS**

Low User (Average Minimum Use - 6 Units for 3/4" Meter)											TABLE 32
	Effective						Increase				
	Current	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2018	CY 2019	CY2020		
5/8"	\$ 50.94	\$ 55.52	\$ 56.60	\$ 57.80	\$ 59.12	\$ 59.84	\$ 4.58	9.0%	\$ 1.08	1.9%	2.1%
3/4"	56.04	55.52	56.60	57.80	59.12	59.84	(0.52)	-0.9%	1.08	1.9%	2.1%
1"	116.01	105.62	110.66	117.39	122.22	125.15	(10.40)	-9.0%	5.04	4.8%	6.1%
1.5"	282.55	278.58	291.88	309.64	322.21	330.05	(3.97)	-1.4%	13.30	4.8%	6.1%
2"	523.11	502.10	526.36	558.14	581.75	596.31	(21.02)	-4.0%	24.26	4.8%	6.0%
3"	2,122.62	1,779.51	1,870.63	1,979.29	2,081.32	2,139.62	(343.11)	-16.2%	91.12	5.1%	5.8%
Ag 1"	148.97	157.30	163.78	171.63	177.02	178.03	8.33	5.6%	6.48	4.1%	4.8%
Ag 1.5"	406.15	454.87	473.57	495.87	511.39	514.07	48.72	12.0%	18.70	4.1%	4.7%
Mf 1"	246.17	186.64	195.03	206.71	213.69	217.82	(59.53)	-24.2%	8.39	4.5%	6.0%
Mf 1.5"	610.01	483.34	505.10	535.32	553.34	564.20	(126.68)	-20.8%	21.76	4.5%	6.0%

Average User (13 units for a 3/4" meter)											
	Effective						Increase				
	Current	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2018	CY 2019	CY2020		
5/8"	\$ 79.78	\$ 86.32	\$ 90.14	\$ 95.01	\$ 98.47	\$ 99.86	\$ 6.54	8.2%	\$ 3.82	4.4%	5.4%
3/4"	84.88	86.32	90.14	95.01	98.47	99.86	1.44	1.7%	3.82	4.4%	5.4%
1"	235.49	233.22	243.48	255.43	265.19	268.12	(2.27)	-1.0%	10.26	4.4%	4.9%
1.5"	587.43	604.18	630.80	661.88	687.03	694.87	16.75	2.9%	26.62	4.4%	4.9%
2"	1,001.03	1,012.50	1,057.64	1,110.30	1,153.63	1,168.19	11.47	1.1%	45.14	4.5%	5.0%
3"	3,556.38	3,310.71	3,464.47	3,635.77	3,796.96	3,855.26	(245.67)	-6.9%	153.76	4.6%	4.9%
Ag 1"	470.33	500.50	521.02	542.91	561.56	562.57	30.17	6.4%	20.52	4.1%	4.2%
Ag 1.5"	1,633.91	1,766.07	1,838.41	1,914.35	1,980.53	1,983.21	132.16	8.1%	72.34	4.1%	4.1%
Mf 1"	414.57	340.64	355.33	373.31	386.24	390.37	(73.93)	-17.8%	14.69	4.3%	5.1%
Mf 1.5"	1,080.55	905.74	944.78	992.28	1,026.62	1,037.48	(174.82)	-16.2%	39.04	4.3%	5.0%

High User (Average Maximum Use - 21 units for a 3/4" meter)											
	Effective						Increase				
	Current	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2018	CY 2019	CY2020		
5/8"	\$ 117.58	\$ 121.52	\$ 126.78	\$ 133.09	\$ 137.91	\$ 139.30	\$ 3.94	3.4%	\$ 5.26	4.3%	5.0%
3/4"	122.68	121.52	126.78	133.09	137.91	139.30	(1.16)	-0.9%	5.26	4.3%	5.0%
1"	393.23	378.42	394.62	412.51	427.88	430.81	(14.81)	-3.8%	16.20	4.3%	4.5%
1.5"	960.10	951.78	992.62	1,037.92	1,076.50	1,084.34	(8.32)	-0.9%	40.84	4.3%	4.6%
2"	1,665.64	1,602.10	1,671.36	1,748.14	1,814.25	1,828.81	(63.55)	-3.8%	69.26	4.3%	4.6%
3"	5,318.67	5,123.51	5,351.43	5,596.89	5,828.12	5,886.42	(195.16)	-3.7%	227.92	4.4%	4.6%
Ag 1"	816.41	870.10	905.74	942.75	975.68	976.69	53.69	6.6%	35.64	4.1%	4.1%
Ag 1.5"	2,754.55	2,962.87	3,084.17	3,209.07	3,321.49	3,324.17	208.32	7.6%	121.3	4.1%	4.0%
Mf 1"	727.22	630.64	666.31	704.58	736.43	747.00	(96.58)	-13.3%	35.7	5.7%	5.7%
Mf 1.5"	1,816.74	1,594.94	1,685.56	1,782.87	1,863.63	1,891.01	(221.81)	-12.2%	90.6	5.7%	5.8%

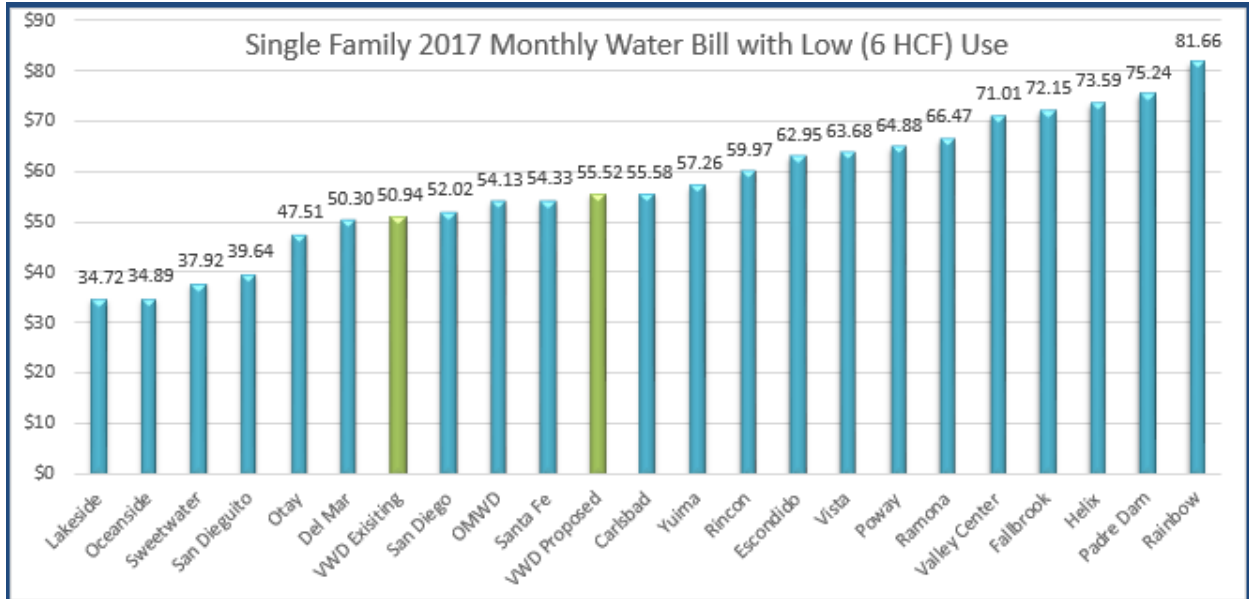
  

Very High User (Twice the Average Maximum Use)											
	Effective						Increase				
	Current	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2018	CY 2019	CY2020		
5/8"	\$ 241.99	\$ 297.92	\$ 318.72	\$ 339.94	\$ 358.62	\$ 365.89	\$ 55.93	23.1%	\$ 20.80	7.0%	6.7%
3/4"	247.09	297.92	318.72	339.94	358.62	365.89	50.83	20.6%	20.80	7.0%	6.7%
1"	808.97	1,033.62	1,107.54	1,180.81	1,247.66	1,272.43	224.65	27.8%	73.92	7.2%	6.6%
1.5"	2,004.78	2,598.18	2,784.06	2,968.52	3,136.46	3,199.18	593.40	29.6%	185.88	7.2%	6.6%
2"	3,451.19	4,416.10	4,733.26	5,047.89	5,335.10	5,443.46	964.91	28.0%	317.16	7.2%	6.6%
3"	11,661.4	15,119.5	16,228.0	17,318.4	18,335.0	18,726.5	3,458.1	29.7%	1,108.5	7.3%	6.7%
Ag 1"	1,578.61	1,684.10	1,753.04	1,823.35	1,887.73	1,888.74	105.49	6.7%	68.94	4.1%	4.0%
Ag 1.5"	5,407.83	5,796.47	6,033.69	6,274.51	6,496.41	6,499.09	388.64	7.2%	237.2	4.1%	4.0%
Mf 1"	1,475.63	1,479.04	1,589.45	1,699.43	1,797.94	1,836.79	3.41	0.2%	110.4	7.5%	6.9%
Mf 1.5"	3,706.29	3,736.94	4,016.26	4,294.62	4,543.68	4,642.46	30.65	0.8%	279.3	7.5%	6.9%

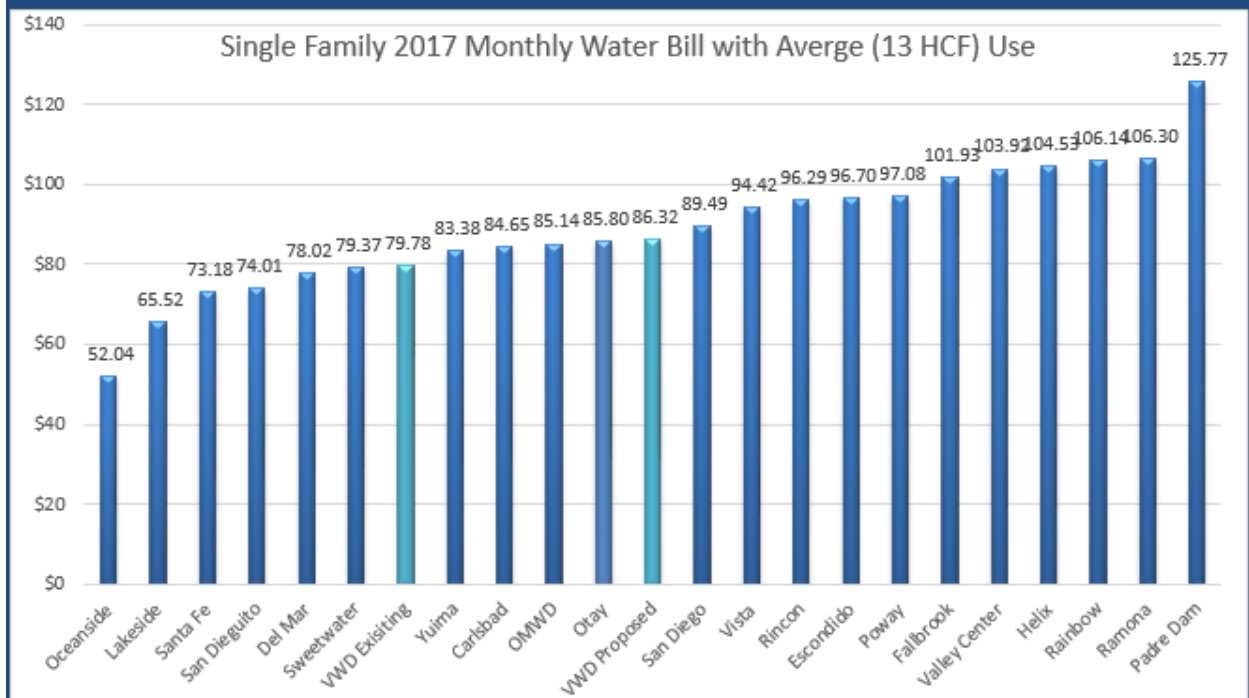
Ag=agricultural, Mf=Multi-family (apartments, mobile homes, etc.,)

### RATE SURVEY

The VWD proposed rate for 2018 is compared to all other agencies' 2017 rate. The rate increase for all other agencies is unknown at this time.

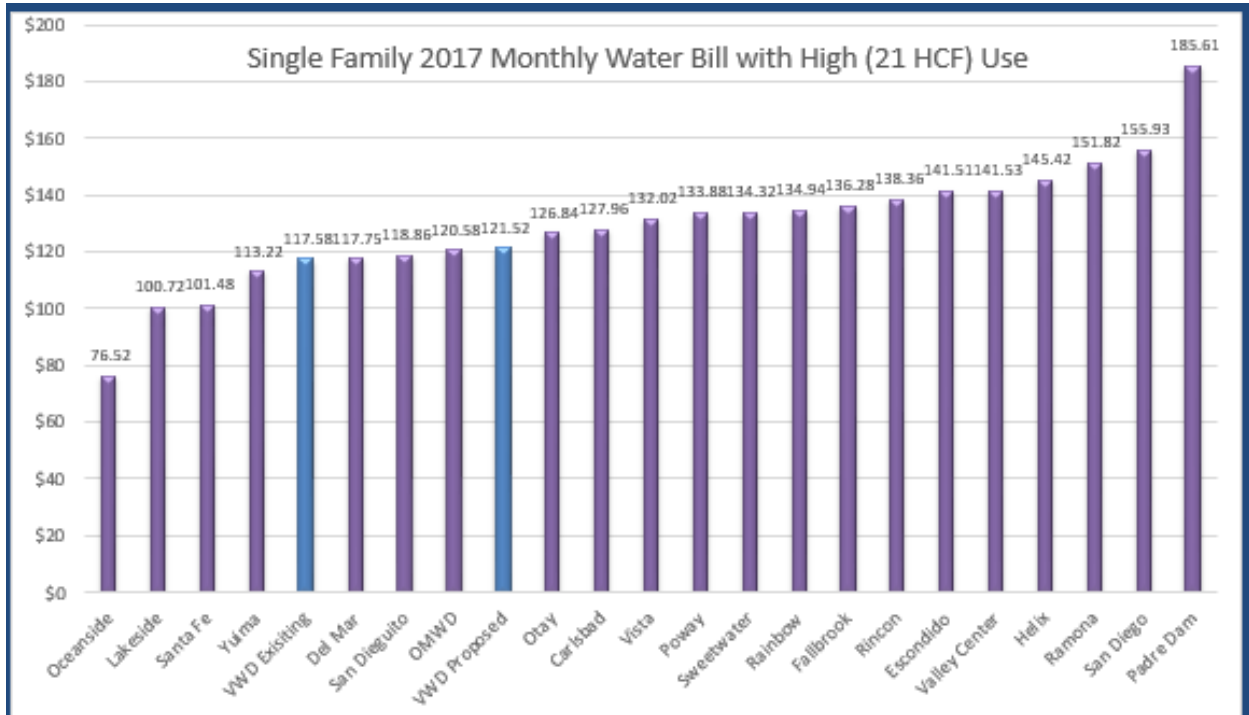


Average =57.31; Median =55.58

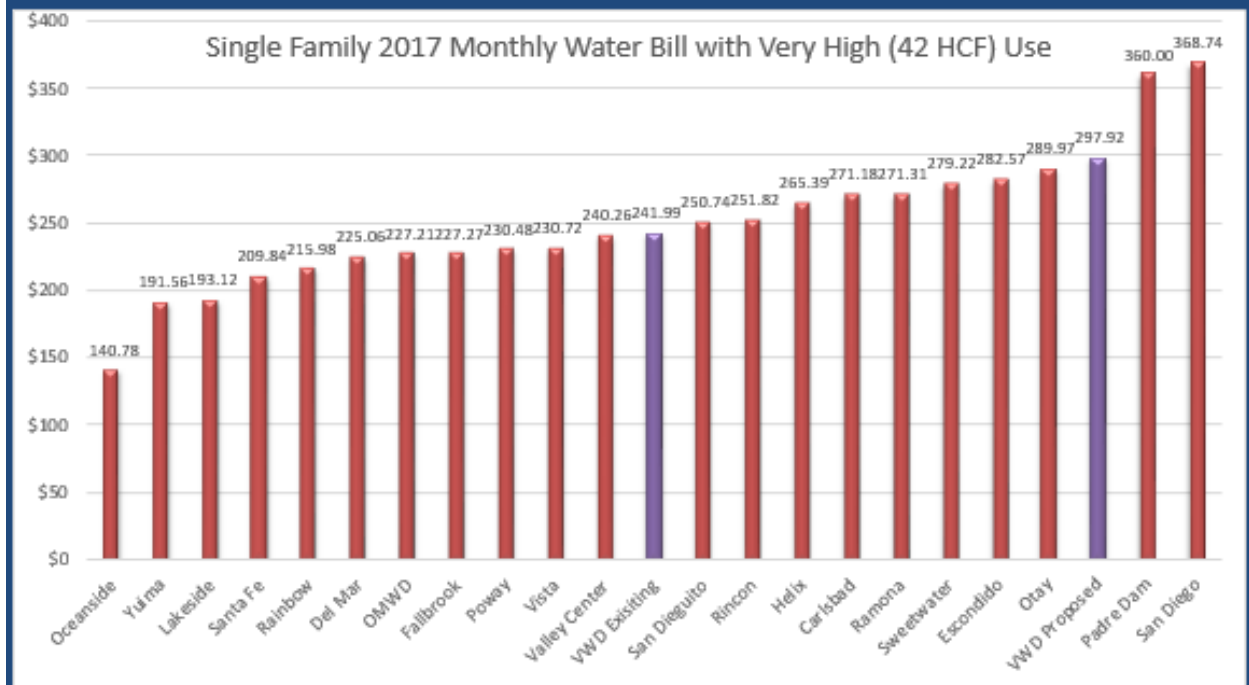


Average =89.25; Median =86.32

**RATE SURVEY**  
 (continued)



Average = 129.69; Median = 132.02



Average = 248.42; Median = 241.99

**DATE: MAY 3, 2017**  
**TO: BOARD OF DIRECTORS**  
**SUBJECT: 2017 PUBLIC RATE HEARING NOTICE DRAFT**

**BACKGROUND:**

In accordance with Article XIII D Section 6(a) of the California Constitution, the District mails a Notice of Public Rate Hearing to all ratepayers in anticipation of any proposed rate increase. Ratepayers must receive the notification at least forty-five days in advance of a public hearing to consider rate increases. The District anticipates presenting a final Notice of Public Hearing draft for approval at the June 7, 2017, Board meeting. An initial draft with optional effective dates and presentation of effective dates is presented herein for Board consideration and direction.

**DISCUSSION:**

Currently, changes in the District Ready-to-Serve (RTS) and sewer charges are effective with each fiscal year – on July 1 of each year, while commodity rate changes are effective on each January 1 to match the effective date from the San Diego County Water Authority (SDCWA). Options discussed by the Board of the April 19, 2017, Board meeting include showing the increase annually, showing the increase when each rate component becomes effective (every July 1 and every January 1), and shifting effective dates so all rate changes are effective on the same day each year. The initial draft Public Hearing Notice includes embedded options for each effective-date scenario. Options 1 and 2 have the same effective dates for RTS (September 1, 2017, July 1, 2018, and July 1, 2019) and commodity (January 1, 2018 and January 1, 2019). The difference between Options 1 and 2 is the presentation: Option 1 shows the annual impact, while Option 2 shows the impact at each implementation date. Option 3 assumes the same effective date of January 1 for RTS, sewer, and commodity charges. The RTS for 2018 is the average of the calculated Fiscal Year (FY) 2017/18 and the FY 2018/19 RTS. The RTS for 2019 is the average of the calculated FY 2018/19 RTS and the FY 2019/20 RTS.

The draft Public Hearing Notice shows the anticipated fiscal impact to a single family residential customer with average use (13 units). The following pages of the notice provide detailed proposed rate schedules. Rates presented are from the current Cost of Service and Rate Structure Study update which includes preliminary draft budget amounts and proposed commodity charges from SDCWA. Rates do not reflect proposed fixed SDCWA charges as these charges have yet to be proposed by SDCWA. The following tables provide a further breakdown of the proposed increases. In each scenario, the RTS charge has been smoothed over the first two effective dates. Without smoothing, the first year increase to the 5/8" RTS charge would be proposed at a 12.3% increase under Options 1 and 2, and a 14.7% increase under Option 3.



**Option 1**

Average Single Family Residential Customer Bill*										
	Sept 2017				July 2018			July 2019		
	Current	Proposed	Increase		Proposed	Increase		Proposed	Increase	
RTS	\$ 31.42	\$ 34.10	\$ 2.68	8.5%	\$ 36.78	\$ 2.68	7.9%	\$ 39.19	\$ 2.41	6.6%
Commodity	48.36	48.36	-	0.0%	51.02	2.66	5.5%	53.36	2.34	4.6%
Total Water	79.78	82.46	2.68	3.4%	87.80	5.34	6.5%	92.55	4.75	5.4%
Sewer	38.99	38.99	-	0.0%	38.99	-	0.0%	38.99	-	0.0%
<b>Total Bill</b>	<b>\$ 118.77</b>	<b>\$ 121.45</b>	<b>\$ 2.68</b>	<b>2.3%</b>	<b>\$ 126.79</b>	<b>\$ 5.34</b>	<b>4.4%</b>	<b>\$ 131.54</b>	<b>\$ 4.75</b>	<b>3.7%</b>

\*The average Single Family Residential Bill assumes a 5/8" meter using 13 units of water per month.

**Option 2**

Average Single Family Residential Customer Bill*																
	Sept 2017			Jan 2018			July 2018			Jan 2019		July 2019				
	Current	Proposed	Increase	Proposed	Increase		Proposed	Increase		Proposed	Increase	Proposed	Increase			
RTS	\$ 31.42	\$ 34.10	\$ 2.68	8.5%	\$ 34.10	\$ -	0.0%	\$ 36.78	\$ 2.68	7.9%	\$ 36.78	\$ -	0.0%	\$ 39.19	\$ 2.41	6.6%
Commodity	48.36	48.36	-	0.0%	51.02	2.66	5.5%	51.02	-	0.0%	53.36	2.34	4.6%	53.36	-	0.0%
Total Water	79.78	82.46	2.68	3.4%	85.12	2.66	3.2%	87.80	2.68	3.1%	90.14	2.34	2.7%	92.55	2.41	2.7%
Sewer	38.99	38.99	-	0.0%	38.99	-	0.0%	38.99	-	0.0%	38.99	-	0.0%	38.99	-	0.0%
<b>Total Bill</b>	<b>\$118.77</b>	<b>\$121.45</b>	<b>\$ 2.68</b>	<b>2.3%</b>	<b>\$124.11</b>	<b>\$ 2.66</b>	<b>2.2%</b>	<b>\$126.79</b>	<b>\$ 2.68</b>	<b>2.2%</b>	<b>\$129.13</b>	<b>\$ 2.34</b>	<b>1.8%</b>	<b>\$131.54</b>	<b>\$ 2.41</b>	<b>1.9%</b>

\*The average Single Family Residential Bill assumes a 5/8" meter using 13 units of water per month.

**Option 3**

Average Single Family Residential Customer Bill*							
	Jan 2018				Jan 2019		
	Current	Proposed	Increase		Proposed	Increase	
RTS	\$ 31.42	\$ 35.44	\$ 4.02	12.8%	\$ 37.99	\$ 2.55	7.2%
Commodity	48.36	51.02	2.66	5.5%	53.36	2.34	4.6%
Total Water	79.78	86.46	6.68	8.4%	91.35	4.89	5.7%
Sewer	38.99	38.99	-	0.0%	38.99	-	0.0%
<b>Total Bill</b>	<b>\$ 118.77</b>	<b>\$ 125.45</b>	<b>\$ 6.68</b>	<b>5.6%</b>	<b>\$ 130.34</b>	<b>\$ 4.89</b>	<b>3.9%</b>

\*The average Single Family Residential Bill assumes a 5/8" meter using 13 units of water per month.

Another option for consideration is whether to include pending pump zone surcharge changes as part of the Public Rate Hearing Notice. Pump zone surcharges are not subject to the noticing provisions of Proposition 218. Not all customers are subject to pump zone surcharges. Inclusion may lead to confusion, but omission may be conceived as a lack of transparency.

**FISCAL IMPACT:**

None.

**RECOMMENDATION:**

Direct staff as to which option of effective dates and presentation of effective dates to include in the next draft of Public Rate Hearing Notice.

201 Vallecitos de Oro • San Marcos, California • 92069-1453 (760) 744-0460

**NOTICE OF PUBLIC HEARING ON PROPOSED CHANGE IN  
WATER AND SEWER SERVICE RATES AND WATER RATE  
STRUCTURE**

**Date: Wednesday, August 2, 2017**

**Time: 5:00 p.m.**

**Location: 201 Vallecitos de Oro, San Marcos, CA 92069**

You are receiving this notice because you are a Vallecitos Water District customer. This notice is being furnished to you pursuant to the California Constitution Article XIID, also known as Proposition 218. The August 2, 2017, public hearing will cover the proposed adjustments for water and sewer rates, **pumping surcharges** and water rate structure to become effective from **September 1, 2017**, through December 31, 2019. This notice addresses why rate changes are necessary, what the water and sewer rates fund, and the basis for the proposed rates.

**What is the impact to the average single family residence?**

**[Option 1]**

**EXAMPLE**

**The proposed rates will result in the following increases to the average single family residential bill.** Your resulting increase will vary depending on your water usage and meter size.

Average Single Family Residential Customer Bill*				
	Current	Sept 2017	July 2018	July 2019
Total Water and Sewer Bill	\$ 118.77	\$ 121.45	\$ 126.79	\$ 131.54
\$ Increase over Prior Year		\$ 2.68	\$ 5.34	\$ 4.75
% Increase over Prior Year		2.3%	4.4%	3.7%

\*The average Single Family Residential Bill assumes a 5/8" meter using 13 units of water per month.

Changes in the Ready-to-Serve and Sewer charges are effective September 1, 2017, and each subsequent July 1<sup>st</sup>. Changes to the tiered structure and the water commodity rate effective January 1, 2018 with subsequent changes to water commodity rates effective each January 1<sup>st</sup> thereafter.

**Why are rate increases necessary?**

**Rate increases are necessary to continue to provide safe, reliable and sustainable water and sewer service to our customers** and are required to cover the increased cost of wholesale water, electricity cost increases, inflationary cost increases, escalating costs to comply with increasingly stringent environmental regulations, replace aging infrastructure, fund an asset replacement program and meet debt service requirements.

**Even with the proposed rate increases, Vallecitos is a public agency that does not operate for profit, so only those charges sufficient to support your service are billed to you.** Each end user pays a fair share of the cost of water acquisition and delivery, as well as the rehabilitation, operation and maintenance of the public water and sewer facilities. As always, we will continue to honor our commitment to provide the most reliable service at the lowest possible cost.

**[Option 2]**

The proposed rates will result in the following increases to the average single family residential bill. Your resulting increase will vary depending on your water usage and meter size.

Average Single Family Residential Customer Bill*						
	Current	Sept 2017	Jan 2018	July 2018	Jan 2019	July 2019
Total Water and Sewer Bill	\$ 118.77	\$ 121.45	\$ 124.11	\$ 126.79	\$ 129.13	\$ 131.54
\$ Increase over Prior Period		\$ 2.68	\$ 2.66	\$ 2.68	\$ 2.34	\$ 2.41
% Increase over Prior Period		2.3%	2.2%	2.2%	1.8%	1.9%
*The average Single Family Residential Bill assumes a 5/8" meter using 13 units of water per month.						

Changes in the Ready-to-Serve and Sewer charges are effective September 1, 2017, and each subsequent July 1<sup>st</sup>. Changes to the tiered structure and the water commodity rate effective January 1, 2018 with subsequent changes to water commodity rates effective each January 1<sup>st</sup> thereafter.

**[Option 3]**

The proposed rates will result in the following increases to the average single family residential bill. Your resulting increase will vary depending on your water usage and meter size.

Average Single Family Residential Customer Bill*			
	Current	Jan 2018	Jan 2019
Total Water and Sewer Bill	\$ 118.77	\$ 125.45	\$ 130.34
\$ Increase over Prior Year		\$ 6.68	\$ 4.89
% Increase over Prior Year		5.6%	3.9%
*The average Single Family Residential Bill assumes a 5/8" meter using 13 units of water per month.			

### **What do water and sewer rates fund?**

The proposed rates are being considered solely for the purpose of covering costs incurred by the water and sewer system, which include treated water purchases, collection and treatment of wastewater and disposal of treated effluent, water and sewer system operation and maintenance, facility and equipment maintenance, water and sewer system rehabilitation, regulatory compliance, metering, billing, and account management. The new rate structure will also be tiered to encourage conservation, fund conservation programs, comply with drought alerts and cover the costs of public awareness, education and outreach, and water reliability and diversification.

The proposed rate increases include wholesale water cost increases from our wholesaler, the San Diego County Water Authority (CWA). CWA has adopted rates for calendar years 2017 and 2018 but not for subsequent years and these wholesale rates are passed through to our customers.

### **What Vallecitos is doing to control costs?**

Vallecitos' priority to ensure financial stability is to control costs. In recent years Vallecitos has restructured its organization, eliminating positions, and redistributing workload to maximize productivity and efficiency. The last two labor negotiations have resulted in cuts to employee benefits. Vallecitos contracted with the Olivenhain Municipal Water District for water treatment services at a cost of 20% less than the San Diego County Water Authority's treatment charge. Vallecitos has engaged consultants to perform energy and operational efficiency studies and implemented recommendations from the studies, as well as input from staff, including changes and upgrades to the sewer treatment process which reduced chemical usage and power consumption, installing energy efficient lighting and pumping equipment, in-house mechanical and fleet maintenance, critical asset condition assessments, predictive asset maintenance and replacement, and strategic use of technology throughout field operations and customer billing. Staff evaluates the effectiveness of changes implemented and continuously improves efficiency of operations.

### **How are water and sewer rates determined?**

A comprehensive Cost of Service Study was performed. One of the major goals of the study was to ensure equitable water and sewer rates that produce adequate revenues to meet the District's financial needs, recognize customer costs of service and encourage water conservation in a resource-constricted environment. No increase to sewer rates are being proposed. For more information, the report is posted to [www.vwd.org](http://www.vwd.org).

### **How to provide comments or protest the rate adjustment**

You may comment or ask questions at any time by contacting Vallecitos Water District, 760.744.0460, [vwd@vwd.org](mailto:vwd@vwd.org), or participating in the August 2, 2017, Public Hearing at 5:00 pm.

You have the right to protest the rate change if you are:

- i. The record owner of an affected parcel,
- ii. A person with a legal interest in an affected parcel, or
- iii. A person who is legally responsible to pay the rates for an affected parcel.

User rates are subject to majority protest, which means if a majority of impacted owners submit written protest against the increase, Vallecitos Water District cannot institute the new rates.

Protests must be in writing and mailed or hand-delivered to Vallecitos Water District. In accordance with State law, faxed or e-mailed protests cannot be accepted.

In compliance with Proposition 218, only one protest per property will be counted. All written protests must be received by Vallecitos Water District before the end of the Public Hearing on August 2, 2017. Please direct written protests to Vallecitos Water District, General Manager, 201 Vallecitos de Oro, San Marcos CA 92069.

[Options 1 and 2]

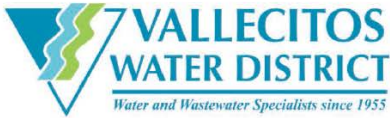
Water Monthly Ready-to-Serve Charges				
Meter Size	Current	Effective:		
		Sept 2017	July 2018	July 2019
5/8"	\$ 31.42	\$ 34.10	\$ 36.78	\$ 39.19
3/4"	36.52	36.52	36.78	39.19
1"	55.29	55.29	55.29	57.39
1.5"	110.59	123.19	135.79	148.39
2"	178.11	198.54	224.61	239.39
3"	356.22	356.22	356.22	366.79
4"	552.94	552.94	552.94	552.94
6"	1,105.88	1,105.88	1,105.88	1,105.88
10"	2,549.36	2,549.36	2,549.36	2,550.79
Multiple Dwelling Unit	18.26	10.92	10.92	10.92
Temporary Meters	204.48	249.02	293.55	338.09
Fire Line per diameter inch	5.87	5.87	5.87	5.87

Water Commodity Tier Structure in Units (748 gallons)							
Meter Size	Current				Effective 2018		
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3
<1"	1 - 5	6 - 17	18 - 36	37 +	1 - 6	7 - 21	22 +
1"	1 - 5	6 - 60	61 - 214	215 +	1 - 16	17 - 78	79 +
1.5"	1 - 5	6 - 157	158 - 627	628 +	1 - 43	44 - 196	197 +
2"	1 - 5	6 - 242	243 - 806	807 +	1 - 85	86 - 335	336 +
>2"	1 - 5	6 - 1133	1134-3970	3,971 +	1 - 430	431-1,190	1,191 +
Agricultural	1 - 5	6 +				1 +	
Temporary Construction				1 +			1 +

Water Commodity Rates per Unit			
	Current	Effective:	
		2018	2019
Tier 1	\$ 3.08	\$ 3.37	\$ 3.55
Tier 2	4.12	4.40	4.58
Tier 3	5.33	8.40	9.14
Tier 4	7.41		

[Option 3]

Water Monthly Ready-to-Serve Charges			
Meter Size	Current	Effective:	
		2018	2019
5/8"	\$ 31.42	\$ 35.44	\$ 37.99
3/4"	36.52	36.52	37.79
1"	55.29	55.29	55.29
1.5"	110.59	127.20	143.81
2"	178.11	205.06	232.00
3"	356.22	356.22	356.22
4"	552.94	552.94	552.94
6"	1,105.88	1,105.88	1,105.88
10"	2,549.36	2,549.36	2,549.36
Multiple Dwelling Unit	18.26	10.92	10.92
Temporary Meters	204.48	266.00	327.52
Fire Line per diameter inch	5.87	5.87	5.87



PRSR STD  
 US POSTAGE  
 PAID  
 SAN DIEGO CA  
 PERMIT 906

This legal notice contains important information regarding rates associated with providing 21,000 plus customers in San Marcos, portions of Carlsbad, Escondido, Vista and unincorporated areas in San Diego County with safe, reliable water and wastewater services. (Para información en Español, visítenos en [www.vwd.org](http://www.vwd.org) o llámenos a (760)744-0460.)



Notice of Public Rate Hearing

# Conservation Assistance

To assist customers to conserve water and reduce their water bill, Vallecitos offers free landscape irrigation audits to determine the efficiency of your irrigation system. For more information on water conservation programs, please visit our website at [www.vwd.org/conservation](http://www.vwd.org/conservation) or go to [SustainableLandscapesSD.org](http://SustainableLandscapesSD.org).

**SUSTAINABLE LANDSCAPES PROGRAM**

- Guidelines
- Education & Training
- Technical Assistance
- Landscape Materials
- Incentives
- Resources

"Like us" on Facebook or follow us on Twitter@vallecitoswater [www.vwd.org](http://www.vwd.org) | 760.744.0460

**VWD DIRECTOR'S COMPENSATION FOR January - March 2017**

**Payments from EWA (Encina Wastewater Authority)**

<u>VENDOR</u>	<u>NAME</u>	<u>EWA DATE</u>	<u>CHECK NO</u>	<u>INVOICE NET</u>	<u>DESCRIPTION</u>
2212	CRAIG ELITHARP	1/23/2017	1280	182.00	BOD MEETING 01/25/17
2212	CRAIG ELITHARP	2/1/2017	1334	182.00	BOD MEETING 02/22/17
2212	CRAIG ELITHARP	2/1/2017	1304	182.00	PCF MEETING 02/07/17
2212	CRAIG ELITHARP	3/10/2017	1353	182.00	PFC MEETING 03/07/17
2212	CRAIG ELITHARP	3/16/2017	1376	182.00	BOD MEETING 03/22/17
			Meetings Only	<u>910.00</u>	
2028	JIM HERNANDEZ	1/23/2017	184083	182.00	BOD MEETING 01/25/17
2028	JIM HERNANDEZ	2/1/2017	184226	182.00	CIC MEETING 02/15/17
2028	JIM HERNANDEZ	2/1/2017	184226	182.00	BOD MEETING 02/22/17
2028	JIM HERNANDEZ	3/16/2017	184363	182.00	CIC MEETING 03/15/17
2028	JIM HERNANDEZ	3/16/2017	184363	182.00	BOD MEETING 03/22/17
			Meetings Only	<u>910.00</u>	



San Diego County Water Authority  
Board of Directors  
1st Quarter 2017 Expenses  
January, February, March

Director	Per Diem Payments	Mileage	Travel/Other	Total
Betty Evans	\$1,200.00	\$242.89	\$55.00	\$1,497.89

VALLECITOS WATER DISTRICT  
Board of Directors Per Diem and Expenses (1)  
January 1, 2017 through March 31, 2017

Director Meeting/Seminar	Per Diem		Benefits	Meeting				Reimbursements		Total
	#	Payments		Registration	Travel	Lodging	Meals	Other Agencies		
<b>ELITHARP, Craig</b>										
Paid by VWD:										
VWD Meetings	11	\$ 2,200.00	-	-	-	-	20.82	-	\$ 2,220.82	
ACWA	2	400.00	-	699.00	-	-	-	-	1,099.00	
CASA	3	600.00	-	625.00	849.33	1,442.72	102.37	-	3,619.42	
CA Wtr Policy confr #26	-	-	-	399.00	-	-	-	-	399.00	
COWU - Council of Water Utilities	2	400.00	-	75.00	33.04	-	-	-	508.04	
Ethics Training	1	200.00	-	-	-	-	-	-	200.00	
SDNEDC	-	-	-	-	7.36	-	-	-	7.36	
UWI - Urban Water Institute	3	600.00	-	375.00	178.77	364.75	78.81	-	1,597.33	
Group Insurance.	-	-	271.14	-	-	-	-	-	271.14	
Paid by VWD - Encina JPA make-up pmt	-	54.00	-	-	-	-	-	-	54.00	
<b>Paid by EWA - Encina JPA</b>	<b>5</b>	<b>910.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>910.00</b>	
	<b>27</b>	<b>\$ 5,364.00</b>	<b>\$ 271.14</b>	<b>\$ 2,173.00</b>	<b>\$ 1,068.50</b>	<b>\$ 1,807.47</b>	<b>\$ 202.00</b>	<b>\$ -</b>	<b>\$ 10,886.11</b>	
<b>EVANS, Betty</b>										
Paid by VWD:										
VWD Meetings	13	\$ 2,600.00	-	-	-	-	-	-	\$ 2,600.00	
COWU - Council of Water Utilities	2	400.00	-	50.00	16.68	-	-	-	466.68	
Ethics Training	1	200.00	-	-	-	-	-	-	200.00	
North County Group - Rincon	1	200.00	-	-	-	-	-	-	200.00	
San Marcos - State of the City	-	-	-	95.00	-	-	-	-	95.00	
UWI - Urban Water Institute	3	600.00	-	375.00	118.77	470.08	46.32	-	1,610.17	
Water Reuse	-	-	-	400.00	-	-	-	-	400.00	
Group Insurance	-	-	2,200.14	-	-	-	-	-	2,200.14	
Paid by VWD - SDCWA make-up pmts	-	400.00	-	-	-	-	-	-	400.00	
<b>Paid by SDCWA</b>	<b>8</b>	<b>1,200.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>297.89</b>	<b>1,497.89</b>	
	<b>28</b>	<b>\$ 5,600.00</b>	<b>\$ 2,200.14</b>	<b>\$ 920.00</b>	<b>\$ 135.45</b>	<b>\$ 470.08</b>	<b>\$ 46.32</b>	<b>\$ 297.89</b>	<b>\$ 9,669.88</b>	
<b>HERNANDEZ, James</b>										
Paid by VWD:										
VWD Meetings	10	\$ 2,000.00	-	-	-	-	-	-	\$ 2,000.00	
ACWA	2	400.00	-	1,344.00	210.75	-	71.47	-	2,026.22	
CASA	5	1,000.00	-	1,175.00	998.63	1,486.80	96.65	-	4,757.08	
COWU - Council of Water Utilities	2	400.00	-	75.00	16.52	-	-	-	491.52	
CSDA - CA Special Districts Assoc	1	200.00	-	30.00	-	-	-	-	230.00	
DC phone confr.	1	200.00	-	-	-	-	-	-	200.00	
SDNEDC	-	400.00	-	64.29	14.81	-	-	-	479.10	
UWI - Urban Water Institute	-	600.00	-	375.00	123.77	357.80	132.84	-	1,589.41	
WaterReuse	2	400.00	-	400.00	-	-	-	-	800.00	
Group Insurance	-	-	5,813.52	-	-	-	-	-	5,813.52	
<b>Paid by EWA - Encina JPA</b>	<b>5</b>	<b>910.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>910.00</b>	
	<b>28</b>	<b>\$ 6,510.00</b>	<b>\$ 5,813.52</b>	<b>\$ 3,463.29</b>	<b>\$ 1,364.48</b>	<b>\$ 1,844.60</b>	<b>\$ 300.96</b>	<b>\$ -</b>	<b>\$ 19,296.85</b>	
<b>MARTIN, Hal</b>										
Paid by VWD:										
VWD Meetings	12	\$ 2,400.00	-	-	-	-	-	-	\$ 2,400.00	
ACWA	2	400.00	-	944.00	396.88	217.80	62.77	-	2,021.45	
Business Journal Econ summit	1	200.00	-	-	-	-	-	-	200.00	
CASA	2	400.00	-	550.00	122.70	455.80	6.35	-	1,534.85	
CA Wtr Policy confr #26	-	-	-	399.00	-	-	-	-	399.00	
COWU - Council of Water Utilities	1	200.00	-	75.00	33.04	-	-	-	308.04	
CSDA - CA Special Districts Assoc	1	200.00	-	30.00	30.03	-	-	-	260.03	
San Diego Business Journal	-	-	-	69.00	41.61	-	-	-	110.61	
San Marcos - State of the City	-	-	-	95.00	-	-	-	-	95.00	
SDNEDC	1	200.00	-	64.29	22.17	-	-	-	286.46	
UWI - Urban Water Institute	3	600.00	-	375.00	118.77	366.05	35.11	-	1,494.93	
WaterReuse	-	-	-	400.00	116.13	-	8.00	-	524.13	
Group Insurance.	-	-	1,780.32	-	-	-	-	-	1,780.32	
	<b>23</b>	<b>\$ 4,600.00</b>	<b>\$ 1,780.32</b>	<b>\$ 3,001.29</b>	<b>\$ 881.33</b>	<b>\$ 1,039.65</b>	<b>\$ 112.23</b>	<b>\$ -</b>	<b>\$ 11,414.82</b>	
<b>SANELLA, Mike</b>										
Paid by VWD:										
VWD Meetings	12	\$ 2,400.00	-	-	-	-	17.93	-	\$ 2,417.93	
COWU - Council of Water Utilities	2	400.00	-	50.00	33.04	-	-	-	483.04	
CSDA - CA Special Districts Assoc	1	200.00	-	30.00	30.03	-	-	-	260.03	
SDNEDC	2	400.00	-	64.29	22.17	-	-	-	486.46	
Group Insurance.	-	-	1,780.32	-	-	-	-	-	1,780.32	
	<b>17</b>	<b>\$ 3,400.00</b>	<b>\$ 1,780.32</b>	<b>\$ 144.29</b>	<b>\$ 85.24</b>	<b>\$ -</b>	<b>\$ 17.93</b>	<b>\$ -</b>	<b>\$ 5,427.78</b>	
<b>TOTALS</b>	<b>123</b>	<b>\$ 25,474.00</b>	<b>\$ 11,845.44</b>	<b>\$ 9,701.87</b>	<b>\$ 3,535.00</b>	<b>\$ 5,161.80</b>	<b>\$ 679.44</b>	<b>\$ 297.89</b>	<b>\$ 56,695.44</b>	

(1) Includes both expenses paid directly by the Agencies and reimbursements of expenses paid by Board members.  
Presented in accordance with ordinance number 194, effective 5/17/2015. (Board per Diem, \$200/meeting)