

AGENDA

**REGULAR MEETING OF THE BOARD OF COMMISSIONERS
VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY (VWVRA)
Victorville City Hall – Conference Room “D”, 14343 Civic Drive, Victorville, CA
92392
Phone: (760) 246-8638**

**MEETING DATE: Thursday, June 21, 2018 TIME: 8:00 AM (Closed Session)
8:30 AM (Regular Session)**

CALL TO ORDER

PUBLIC COMMENTS – CLOSED SESSION AGENDA

CLOSED SESSION

CLOSED SESSION: During the course of conducting the business set forth on this agenda as a regular meeting of the Board, the Chair may convene the Board in closed session to consider matters of pending real estate negotiations, pending or potential litigation, or personnel matters, pursuant to Government Code Sections 54956.8, 54956.9, 54957 or 54957.6, as noted. Reports relating to (a) purchase and sale of real property; (b) matters of pending or potential litigation; or (c) employment actions, or which are exempt from public disclosure under the California Public Records Act, may be reviewed by the Board during a permitted closed session and are not available for public inspection. At such time the Board takes final action on any of these subjects, the minutes will reflect all required disclosures of information.

CONFERENCE WITH LEGAL COUNSEL- (Gov. Code Sec. 54954.5-54956.9(d)):

1. Flow Diversion

CONFERENCE WITH LEGAL COUNSEL-POTENTIAL LITIGATION (Gov. Code Sec. 54956.9(d)):

2. Threatened or Pending Litigation- Upper Narrows Project

CONFERENCE WITH LEGAL COUNSEL-POTENTIAL LITIGATION (Gov. Code Sec. 54956.9(1)(D)):

3. Potential Litigation- Angela Valles, Government Tort Claim

CONFERENCE WITH LEGAL COUNSEL-LABOR NEGOTIATION (Gov. Code Sec. 54957.6/54954.5 (f)):

4. Personnel Issues: Reorganization

REGULAR SESSION

CALL TO ORDER & PLEDGE OF ALLEGIANCE

REPORT FROM CLOSED SESSION

PUBLIC COMMENTS – REGULAR SESSION AGENDA

ANNOUNCEMENTS AND CORRESPONDENCE:

- 5. Possible conflict of interest issues**
- 6. Article: Toilet to Tap**
- 7. Article: Southern California Summer/Winter Natgas Supply Could Fall Short**
- 8. Anaerobic Digestion Facilities Processing Food Waste in the United States in 2015 Report**
- 9. Mauricio Marin recipient of the CWEA Electrical and Instrumentation Person of the Year award for the State of California**
- 10. Staff Introductions- New Hire**
- 11. VVWRA 40 Years**

CONSENT CALENDAR:

- 12. Approve May 2018 Disbursement Registers**
- 13. Approve Minutes from the May 17, 2018 Regular Meeting**
- 14. Recommendation for Professional Service Agreement with Biogas Engineering**
- 15. Recommendation to Ratify Low Voltage Power Emergency Purchases**
- 16. Recommendation to Approve Change Order #1 to Biogas Engineering for Micro-Grid CM Services**
- 17. Recommendation for Board Chair to Receive Clean Water Advocate Award**

REPORTS & PRESENTATIONS:

- 18. Presentation: 2018-2019 Budget (Keagy)**

PUBLIC HEARING:

- 19. Adoption of Fiscal Year 2016-2017 Budget**

ACTION & DISCUSSION ITEMS:

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- 20. Resolution 2018-03: Adopt FY 2018-2019 Budget**
- 21. Resolution 2018-04: FY 2018-2019 Holiday Schedule**
- 22. Resolution 2018-05: Honoring Russ Blewett**
- 23. Resolution 2018-06: Appreciation Bruce Correia**
- 24. Recommendation to Purchase Spare Pump for South Percolation Pond Pump Station**
- 25. Recommendation to Purchase Transfer Pump for Digesters 1, 2 and 3**
- 26. Recommendation to Approve WaterTrax Operational Software**
- 27. Recommendation to Approve Electric Cart Purchase**
- 28. Recommendation to Cancel June 28th Board Meeting**

STAFF/PROFESSIONAL SERVICES REPORTS:

- 29. Financial and Investment Report – May 2018**
- 30. Operations & Maintenance Report – May 2018**
- 31. Environmental Compliance Department Reports – May 2018**
- 32. Septage Receiving Facility Reports – May 2018**
- 33. Safety & Communications Report – May 2018**

NEXT VVWRA BOARD MEETING:

Thursday, June 28, 2018 – Regular Meeting of the Board of Commissioners

Thursday, July 19, 2018– Regular Meeting of the Board of Commissioners

FUTURE AGENDA ITEMS

Leave Policy

COMMISSIONER COMMENTS

ADJOURNMENT

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Agenda Posting: In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted in the main lobby of the Authority's Administrative offices not less than 72 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the Board Secretary.

Items Not Posted: In the event any matter not listed on this agenda is proposed to be submitted to the Board for discussion and/or action, it will be done in compliance with Section 54954.2(b) as an emergency item or because there is a need to take immediate action, which came to the attention of the Board subsequent to the posting of the agenda, or as set forth on a supplemental agenda posted in the manner as above, not less than 72 hours prior to the meeting date.

Public Comments: Any member of the public may address the Board of Commissioners on specific agenda items or matters of general interest. As determined by the Chair, speakers may be deferred until the specific item is taken for discussion and remarks may be limited to five minutes. Persons desiring to submit paperwork to the Board of Commissioners shall provide a copy of any paperwork to the Board Secretary for the official record.

Matters of Interest addressed by a member of the public and not listed on this agenda cannot have action taken by the Board of Commissioners except as authorized by Section 54954.2(b). If you wish to speak, please complete a Speaker's Form (located at the table in the lobby outside of the Board Room) and give it to the Board Secretary prior to the start of the meeting.

If any individual wishes to challenge an action of the Commission in court, he or she may be limited to raising those issues that were raised at the public hearing pertaining to the Commission's actions, or in any written correspondence delivered to the Commission on or prior to the public hearing.

Consent Calendar: All matters placed on the Consent Calendar are considered as not requiring discussion or further explanation and unless any particular item is requested to be removed from the Consent Calendar by a Commissioner, staff member or member of the public in attendance, there will be no separate discussion of these items. All items on the Consent Calendar will be enacted by one action approving all motions, and casting a unanimous ballot for resolutions included on the consent calendar. All items removed from the Consent Calendar shall be considered in the regular order of business.

The Chair will determine if any items are to be deleted from the Consent Calendar.

Items Continued: Items may be continued from this meeting without further notice to a Committee or Board meeting held within five (5) days of this meeting per Government Code Section 54954.2(b)(3).

Meeting Adjournment: This meeting may be adjourned to a later time and items of business from this agenda may be considered at the later meeting by Order of Adjournment and Notice in accordance with Government Code Section 54955 (posted within 24 hours).

Accommodations for the Disabled: In compliance with the Americans with Disabilities Act (ADA), the Board of Commissioners Meeting Room is wheelchair accessible. If you require any special disability related accommodations, please contact the Victor Valley Wastewater Reclamation Authority Board Secretary's office at 760-246-2892 at least 72 hours prior to the scheduled meeting. Requests must specify the nature of the disability and the type of accommodation requested.

Toilet-to-tap: Gross to think about, but how does it taste?

UC Riverside researchers conduct first blind taste test of recycled wastewater

By [J.D. Warren](#) On MARCH 13, 2018



UC Riverside researchers asked test subjects to compare the taste of recycled water with tap water and commercially bottled water.

RIVERSIDE, CA. (www.ucr.edu) – Here’s a blind test taste like Pepsi never imagined.

Researchers at the University of California, Riverside, recently published a study of recycled wastewater that did not focus on its safety—which has long been established—but rather its taste.

After years of drought, the notion of drinking recycled wastewater has gained momentum in California. Thoughts turned to all the water being discarded—to supplementing “conventional” groundwater with recycled water.

But consumers were quick to flag the euphemism of “recycled.” Some have even branded the technology “toilet to tap.”

“It seems that this term (wastewater), and the idea of recycled water in general, evokes disgust reactions,” said Daniel Harmon, a graduate student in psychology and the lead author in the study on

water taste. The study published in print in the February edition of the journal *Appetite*.

However, Harmon added: “It is important to make recycled water less scary to people who are concerned about it, as it is an important source of water now and in the future.”

The water’s safety has been the source of most related research. The wastewater is treated using reverse osmosis. A preferred technology is called indirect potable reuse, or IDR. IDR reintroduces treated wastewater into groundwater supplies, where it re-enters the drinking water system. Six California water agencies already employ IDR. These include the Water Replenishment District of Southern California, the Orange County Water District, the Los Angeles County Department of Public Works, the Inland Empire Utilities District, the city of Los Angeles, and the city of Oxnard).

Studies have found IDR removes virtually all contaminants. But no one has considered its relative taste – at least, not in a blind taste test, and not in a scientific study.

The UCR study included 143 people, who were asked to compare IDR-treated tap water with conventional tap water and commercially bottled water. The waters were presented in similar cups and were unlabeled, hence the participants were “blind” to the source of the water. After tasting the water, participants ranked the samples’ taste from one to five, then also in categories including texture, temperature, smell, and color.

The researchers weighed factors that influence taste perception.

There are genetic differences in taste sensitivity. That was gauged using a tried-and-true measure: paper strips coated with the chemical phenylthiocarbamide, or PTC. Those who find the strip’s taste to be bitter are considered to have more sensitive taste.

Researchers also considered two personality traits that help determine water preference. These traits are referred to as “Openness to Experience” and “Neuroticism.” Openness is how receptive people are to novel and diverse experiences. Neuroticism refers to anxiety and insecurity.

At the outset, researchers hypothesized the three waters would score equally. In fact, one emerged the least preferred.

“The groundwater-based water was not as well liked as IDR or bottled water,” said Mary Gauvain, a professor of psychology at UC Riverside and co-author of the study. “We think that happened because IDR and bottled water go through remarkably similar treatment processes, so they have low levels of the types of tastes people tend to dislike.”

The more nervous, anxious people in the study expressed the preference for IDR and bottled water, and were more negative about the more mineral-rich tap water. People more open to new experiences liked the three samples about the same.

Another surprise: Women preferred bottled water two-to-one over men.

The researchers' best guess: Women register higher “disgust reactions” than men, which means their reactions to tastes they dislike are more extreme. These disgust reactions are the subject of the team's next research paper.

In their conclusion, researchers suggest that favorable comparisons between reverse osmosis and bottled water may make consumers more amenable to drinking recycled wastewater. In particular, they suggest, marketing to women – who make most consumer purchasing decisions – should focus on these similarities, and also cater to women's demonstrated openness to new experiences.

“We think this research will help us find out what factors people pay attention to in their water decisions, and what populations need to be persuaded to drink IDR water and how to persuade them,” Harmon said.

Aside from Harmon and Gauvain, researchers in the study include Isaac Arthur, who recently completed his undergraduate studies at UC Riverside, Drew Story, a graduate student at UC Riverside, and Z Reisz, who received his Ph.D. at UC Riverside and is now at Santa Barbara City College. The research was supported by an Integrative Graduate Education and Research Traineeship, or IGERT, award from the National Science Foundation.

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ARCHIVED UNDER: [Health](#), [Daniel Harmon](#), [Drew Story](#), [IDR](#), [Inland Empire](#), [Mary Gauvain](#), [National Science Foundation](#), [Orange County Water District](#), [Press Release](#)

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MAY 8, 2018 / 10:15 AM / A MONTH AGO

Southern California summer/winter natgas supply could fall short -regulators

Scott DiSavino

May 8 (Reuters) - California regulators said reduced capacity in Southern California Gas' (SoCalGas) natural gas system poses a "moderate threat" to gas and electric reliability this summer and a "more serious threat" next winter.

The SoCalGas system has been operating at less than full capacity because of pipeline outages and restrictions on the use of the Aliso Canyon gas storage facility, the utility's biggest, following a leak between October 2015 and February 2016.

"The potential for additional (pipeline) outages means that the situation may be getting worse, not better," the Aliso Canyon Technical Assessment Group said in a report released Monday, noting SoCalGas avoided serious problems last winter due to unusually warm weather.

"With so many pipeline outages, it will be difficult for SoCalGas to fill storage to a level sufficient to ensure energy reliability throughout the coming winter," the group made up of state regulators and regional power companies said.

Officials at SoCalGas, a unit of California energy company Sempra Energy, could not immediately comment on the report.

To avoid power and gas interruptions this summer and next winter, the group recommended SoCalGas import liquefied natural gas (LNG) from Costa Azul in Mexico and that state regulators allow the utility to boost the capacity and use of Aliso Canyon.

The state has limited the amount of gas SoCalGas can inject into the 86-billion cubic feet (bcf) Aliso Canyon to just 24.6 bcf and only allows the utility to pull gas from the field when other options are not available to meet demand.

One billion cubic feet is enough to fuel about five million U.S. homes for a day.

The report said this summer's challenges stem primarily from continuing outages and reductions on key pipelines, including Lines 2000, 3000 and 4000 and 235-2.

The technical group projected capacity on SoCalGas' system would total 3.555 billion cubic feet per day (bcfd) this summer, which includes 2.655 bcfd from pipelines and 0.900 bcfd from storage.

That is lower than the 3.638 bcfd available without Aliso Canyon last summer and well below the 4.668 bcfd maximum the system could send out without Aliso Canyon if all pipelines were available, the group has previously forecast.

This summer's projected system capacity is just enough to cover forecast peak demand of 3.511 bcfd, the report said, warning higher gas usage or loss of additional pipelines could result in curtailments of the fuel to electric generators.

Reporting by Scott DiSavino; editing by Grant McCool

Anaerobic Digestion Facilities Processing Food Waste in the United States in 2015

Survey Results
May 2018
EPA/903/S-18/001

Author

Melissa Pennington, Sustainability Coordinator, EPA Region 3, Philadelphia, PA

Acknowledgements

EPA would like to thank all the facility operators who provided data. This report is based entirely on information provided by all of you. The response rate to the survey was fantastic, especially considering that completion of the survey was voluntary. EPA greatly appreciates receiving this valuable data. In return, we hope that you find the information provided in this report to be useful.

This project would never have gotten off the ground without the outstanding technical support of David MacFarlane in EPA Region 3's Information Systems Branch. David patiently and expertly assisted with the design and implementation of the electronic surveys.

Document Review

This document was peer reviewed by:

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The following team from EPA's Office of Land and Emergency Management, Office of Resource Conservation and Recovery, also reviewed the document:

Chris Carusiello, Environmental Engineer

Claudia Fabiano, Environmental Protection Specialist

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Quality Assurance

EPA conducted a quality assurance review of the data and calculations used to generate the information in this report. This review was conducted by Sharon D. Kenny, Environmental Engineer, EPA Region 3's Environmental Assessment and Innovation Division. No errors or inconsistencies were found in the datasets.

Disclaimer

The anaerobic digestion facilities and their locations are provided for informational purposes only. Companies mentioned in this database are not certified or approved by US EPA. EPA does not guarantee the accuracy or completeness of this information.

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Executive Summary

In 2017, EPA surveyed U.S. operators of anaerobic digestion (AD) facilities that accept food waste to identify the number of facilities in the U.S. and their locations, and to learn about their operations. This report is the first of three annual data collections EPA will make through 2019. This first report covers data for calendar year 2015 and summarizes data received for three types of anaerobic digestion facilities: (1) stand-alone food waste digesters; (2) on-farm digesters that co-digest food waste; and (3) digesters at water resource recovery facilities (WRRFs) that co-digest food waste. Future reports will summarize data for 2016, 2017, and 2018.

EPA determined the number of AD facilities known to accept food-based materials¹ by reviewing publicly available information. Based on this research, EPA offered the survey to all facilities for which contact information was known. EPA also made the survey available on the Agency's website. EPA then confirmed the operational status of the facilities through direct contact with operators, a portion of which provided survey responses (Table ES-1).

Table ES-1: Number of Anaerobic Digestion Facilities Confirmed Operational, and Responding to Survey by Digester Type (2015)

Digester type	Confirmed Operational	Submitted Survey	Survey Response Rate
Stand-alone digesters	58	50	86%
On-farm digesters	18	15	83%
WRRF digesters	78	72	92%
Total	154	137	90%

Processing Capacity and Amounts in 2015

Based on data submitted by 137 survey respondents, the total processing capacity for food waste and food-based materials in all three digester types in 2015 was 15,809,647 tons per year and the total amount of food waste processed in all three digester types was 12,730,657 tons (Table ES-2).

Table ES-2: Total Capacity for Processing Food Waste and Total Amount of Food Waste Processed by Digester Type (2015)

Digester Type	Reported Capacity (tons per year)	Reported Amount Processed (tons per year)
Stand-alone digesters	12,563,687	9,828,081
On-farm digesters	210,754	112,879
Co-digestion systems at WRRFs	3,035,206	2,789,697
Total	15,809,647	12,730,657

¹ For the purposes of this report, food-based materials include, but are not limited to: food scraps that have been separated and collected by municipalities from residential sources; food scraps that have been separated and collected from institutions or venues (e.g., prisons, hospitals, stadiums); food scraps from food preparation at restaurants, cafeterias, and other food services; plate scrapings from restaurants, cafeterias, and other food services; fats, oils and greases (FOG); unused food collected from grocery stores (e.g., bakery items, bruised fruit, items past shelf life); and pre-consumer by-products of the food and beverage processing industries.

The total amount of non-food waste processed in all three digester types combined was 2,219,988,176 gallons and 461,723 tons (Table ES-3).

Table ES-3 Total Amount of Non-Food Waste Processed by Digester Type (2015)

Digester Type	Amount (liquid)	Amount (solid)*
Stand-alone digesters	34,341,130 gallons	134,757 tons
On-farm digesters	2,940,000 gallons	2,103 tons
Co-digestion systems at WRRFs	2,182,707,046 gallons	324,863 tons
Total	2,219,988,176 gallons	461,723 tons

Biogas Production

The total amount of biogas produced at digesters in 2015 was 358,742 standard cubic feet per minute (SCFM), equivalent to 1,117 MW installed capacity, 8.361 billion kWh per year, or enough energy to power 684,639 homes for a year.

Table ES-4 Summary of Biogas Data Reported by Digester Type (2015)

Digester type	SCFM*	MW	kWh/yr (million)	Number of homes powered for one year
Stand-alone digesters	9,176	29	216	17,781
On-farm digesters	1,979	6	45	3,704
Co-digestion systems at WRRFs	347,587	1,083	8,064	663,812
Total	358,742	1,117	8,317	684,639
* SCFM values are reported by facility operators and added together to get total SCFM for 2015 (358,742). The MW, kWh/yr, and homes powered numbers are calculated using the LMOP interactive conversion tool. These values are rounded to the nearest whole number, which accounts for the fact that the column totals may not sum.				

These figures likely underestimate actual processing capacity, food waste processed, and biogas production because not all operational facilities provided a survey response, and EPA was not able to confirm if all identified digesters were operational (Appendix A lists operational digestion facilities and Appendix B lists additional digesters where operational data was not available).

Thirty-five states had at least one confirmed operating digester (Figure ES-1). States with ten or more confirmed operating digesters included California (30), Wisconsin (17), Ohio (13) and New York (13). Figure ES-2 shows the actual number of survey respondents by state.

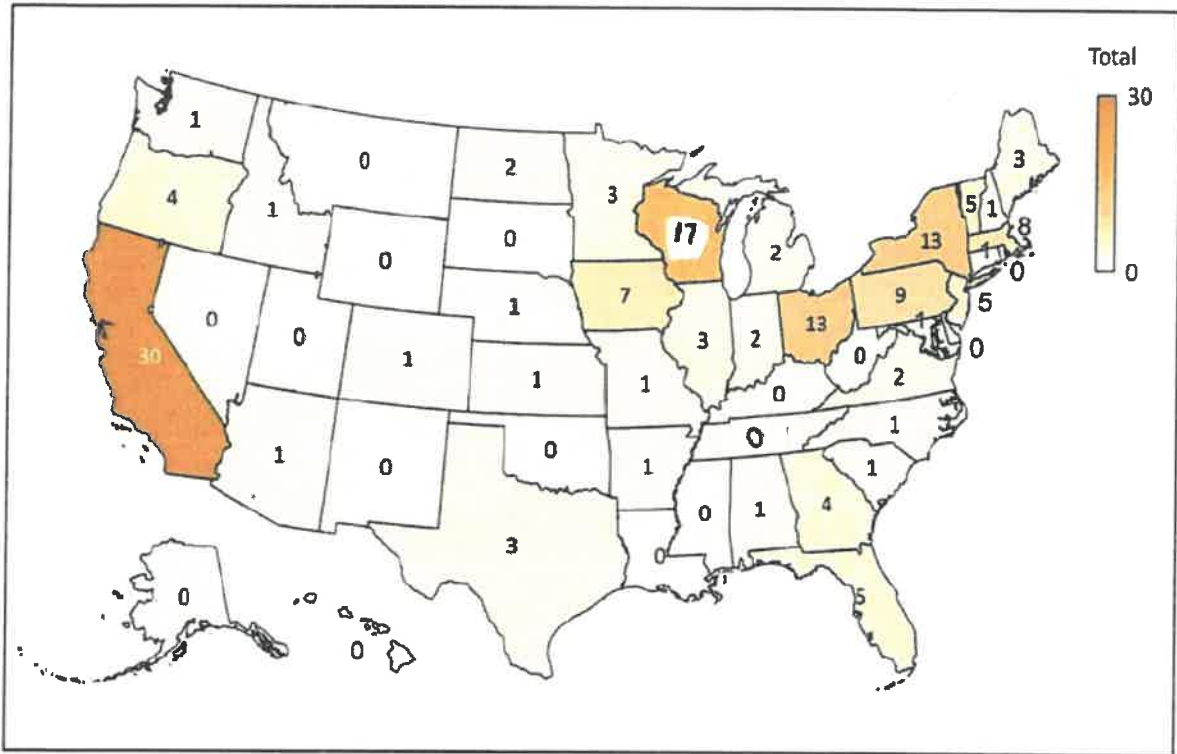


Figure ES-1: Confirmed Operating Food Waste Digesting Facilities by State (2015)

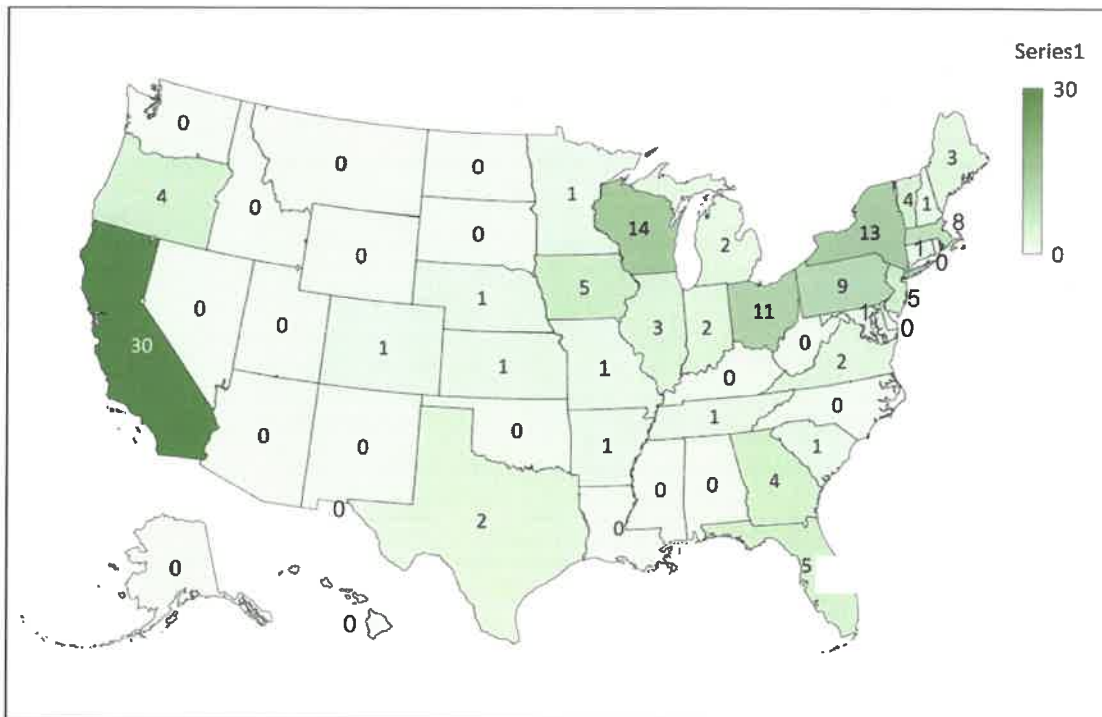


Figure ES-2: Survey Respondents by State (2015)

Operational Specifications and Pre-Processing Activity

In terms of operational specifications, the majority of digester types were found to be mesophilic and were wet digester systems. The top pre-processing/de-packaging activity for both stand-alone digesters and on-farm digesters was manual or mechanized de-packaging, and for co-digestion facilities at WRRFs, screening for debris or sorting.

Feedstock Sources and Types

Figure ES-3 aggregates the top five feedstock sources by digester type in 2015.

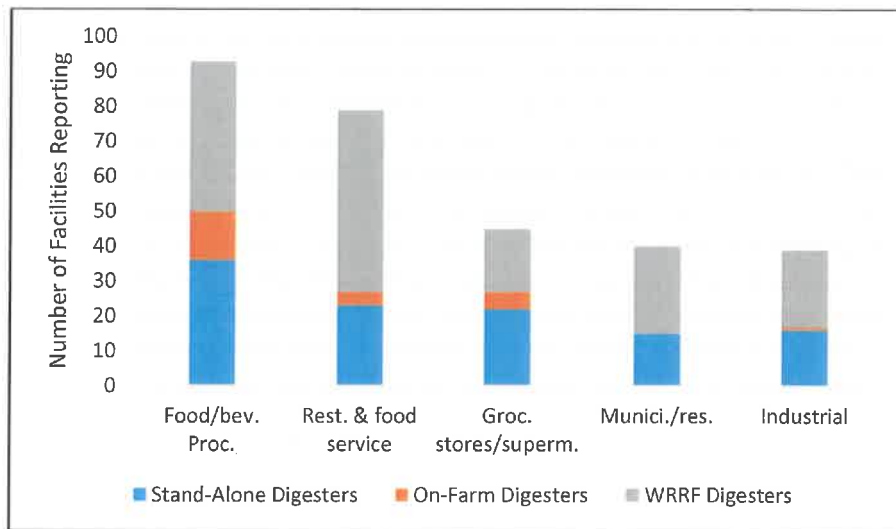


Figure ES-3: Top Five Sources of Digester Feedstock by Digester Type (2015)

Figure ES-4 aggregates the top five feedstocks accepted by digester type in 2015.

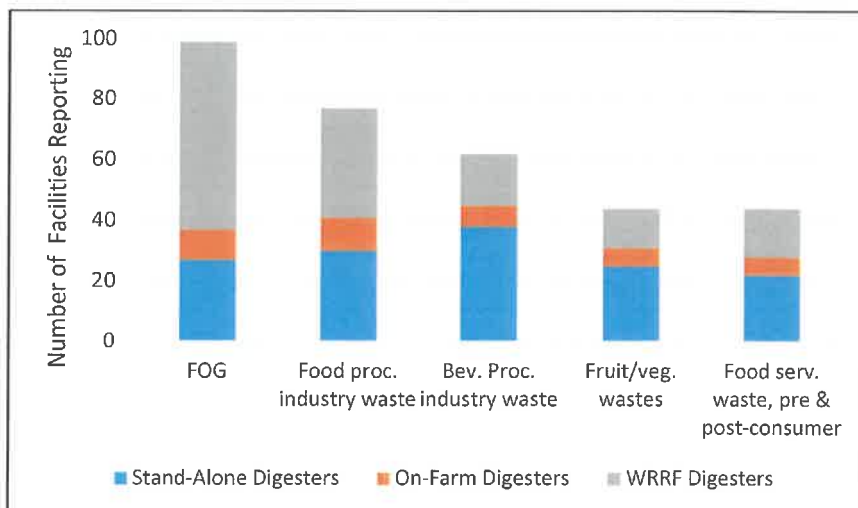


Figure ES-4: Top Five Feedstocks Accepted by Digesters Taking Food Waste by Digester Type (2015)

Biogas Uses and Cleaning Systems

Figures ES-5 and ES-6 provide information on biogas uses and cleaning systems. The top use of biogas among all three digester types was to produce heat and electricity (CHP). The next two highest uses of biogas for stand-alone digesters, on-farm digesters, and co-digestion facilities at WRRFs, respectively, were to produce electricity (sold to the grid), and to fuel boilers and furnaces to heat other spaces; to produce electricity (sold to the grid), and to produce electricity used behind the meter (including net metering); and to fuel boilers and furnaces to heat digesters, and to fuel boilers and furnaces to heat other spaces. Over 60% of all digester types reported that they utilize gas cleaning systems. The top constituents removed for all digester types overwhelmingly included moisture and sulfur. Another notable constituent removed with gas cleaning systems in co-digestion facilities at WRRFs were siloxanes.

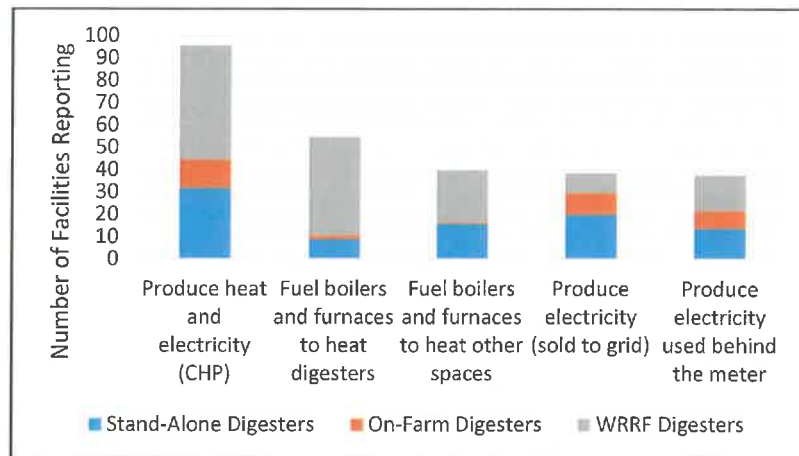


Figure ES-5: Top Five Uses of Biogas by Digester Type (2015)

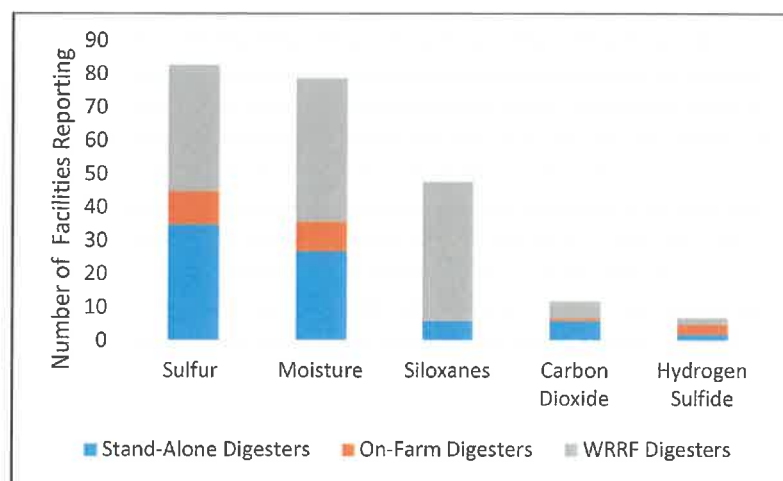


Figure ES-6: Top Five Constituents Removed by Digester Type (2015)

Solid and Liquid Digestate Uses

The top three solid digestate uses by specific digester type were:

- **Stand-Along Digesters:** Composted into a reusable/salable product, other, and de-watered/dried and land applied;
- **On-Farm Digesters:** processed into animal bedding, de-watered/dried and land applied, and composted into a reusable/salable product; and
- **WRRFs:** de-watered/dried and land applied, landfilled, and composted into a reusable/salable product.

The top uses of liquid digestate for stand-alone digesters, on-farm digesters, and co-digestion facilities at WRRFs, respectively, were: discharged to a wastewater treatment plant, reused as fertilizer via land application, and recirculated through the digester.

On-Farm Digesters

EPA asked operators of on-farm digesters to consider the following when calculating available food waste processing capacity:

Taking into account the average volume of manure from your livestock processed in your anaerobic digestion system, please identify the available capacity to co-digest other feedstocks.

EPA's goal was to determine how much outside food waste feedstock could potentially be processed at on-farm digesters in the U.S. All 15 survey respondents provided data on processing capacity, which totals 210,754 tons per year. This number only represents 35% of the on-farm co-digestion systems potentially operating in the U.S. Therefore, the actual capacity is likely to be greater than this amount.

Digesters at WRRFs

Determining the capacity for WRRFs to co-digest food waste is more challenging because there are more factors to consider than just the size of the tanks. EPA asked plant operators to consider the following when calculating available food waste processing capacity:

Please identify your facility's available capacity to accept feedstocks from offsite sources for all digesters combined. When calculating this available capacity, please take into account the average volume of wastewater solids processed at your facility and the total capacity of your digesters. Assume that your facility has all the necessary equipment to receive additional feedstocks (e.g. a receiving station, storage, mixing equipment, etc.)

Again, EPA's goal was to determine how much outside food waste feedstock could potentially be processed at WRRFs in the U.S. The data in this report directly reflects the information provided by the plant operators that responded to the survey. For operating WRRF co-digestion systems, 90% of respondents (65 out of 72) provided data on processing capacity. The total current processing capacity reported for food waste at co-digestion systems at WRRFs in the U.S. in 2015 was 3,035,206 tons per year.

Table 3: Total Capacity for Processing Food Waste via Anaerobic Digestion by Digester Type (2015)

Digester Type	Reported Capacity (tons per year)	Mean (tons per year)	Median* (tons per year)	Respondents Providing Data	Total Surveys Received
Stand-alone digesters	12,563,687	251,274	45,000	50	50
On-farm digesters	210,754	14,050	7,600	15	15
Co-digestion systems at WRRFs	3,035,206	42,156	9,595	65	72
Total	15,809,647			130	137

* Amounts were reported by facility response

C. Operational Dates

The general perception is that processing food waste via anaerobic digestion is a relatively new practice. Most of the facilities that provided data for this survey began operations well before 2015 (Figure 5). For co-digestion at WRRFs, the earliest start date reported was over 50 years ago (1966), and stand-alone digesters were not that far behind (1969). Twenty stand-alone and WRRF digesters began processing food waste in the 1980s and 1990s. In the early 2000s, AD of food waste and co-digestion of food waste with other waste streams started to become more prevalent in the U.S. The practice took a little longer to reach the farming sector. According to the survey responses received from farmers, co-digestion at farm digesters did not begin until 2005.

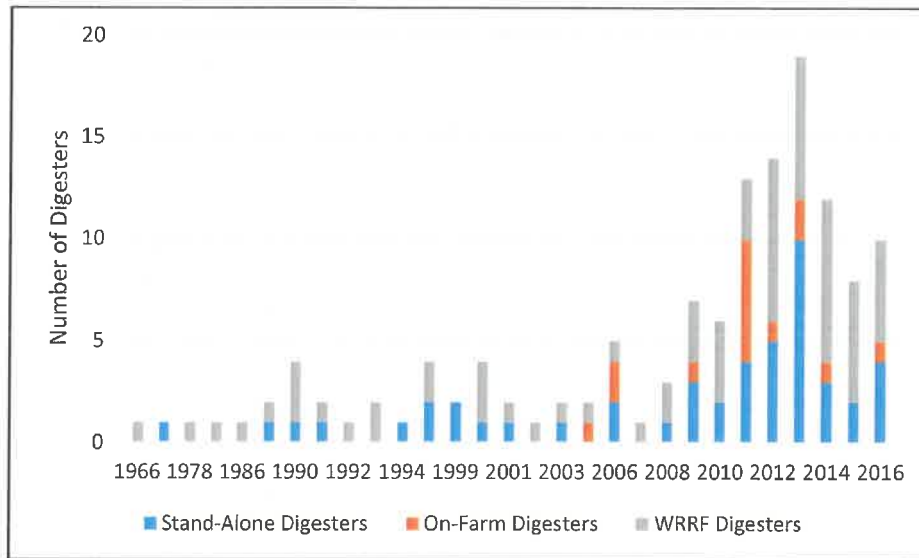


Figure 5: Distribution of First Year of Digester Operation by Digester Type

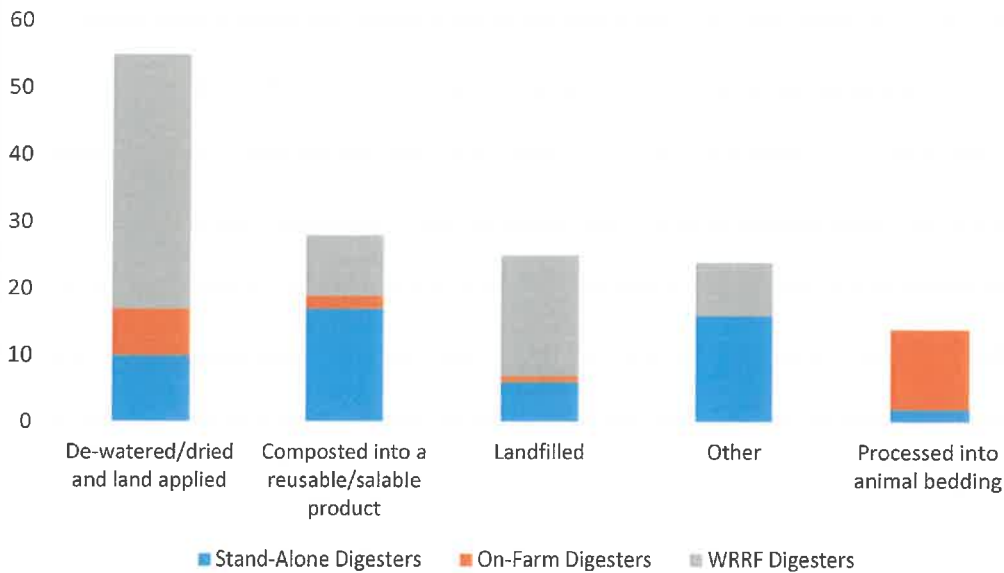


Figure 10: Top Five Uses of Solid Digestate by Digester Type (2015)

O. Liquid Digestate Uses

EPA asked how facilities manage liquid digestate, allowing respondents to provide more than one answer. Respondents from 48 of 50 stand-alone facilities (96%), all 15 on-farm digesters, and all 72 WRRFs provided data on the management of liquid digestate, as summarized in Table 21.

Of the 20 stand-alone digesters that reused digestate as fertilizer via land application in 2015, only two facilities further processed it prior to application (10%). Of the 14 on-farm digester operators that land applied liquid digestate, only one on-farm digester operator indicated that the liquid was further processed prior to application (7%). Six WRRF digesters indicated that the liquid digestate they produced was land applied, and none of these facilities further processed it prior to application.

Table 21: Liquid Digestate Uses (2015)

Digestate Use	Stand-Alone Digesters		On-Farm Digesters		Co-Digestion Systems at WRRFs	
	Number using Liquid Digestate as Specified	Percentage using Liquid Digestate as Specified*	Number using Liquid Digestate as Specified	Percentage of using Liquid Digestate as Specified†	Number using Liquid Digestate as Specified	Percentage of using Liquid Digestate as Specified§
Recirculated through digester	10	21%	6	40%	62	86%
Reused as fertilizer via land application	20	42%	14	93%	6	8%
Discharged to a wastewater treatment plant	24	50%	0	--	0	--
Other	4	8%	0	--	8	11%

* Percentage calculation based on 48 stand-alone facilities providing data on use of liquid digestate.
† Percentage calculation based on 15 farms providing survey responses.
§ Percentage calculation based on 72 WRRFs providing survey responses.

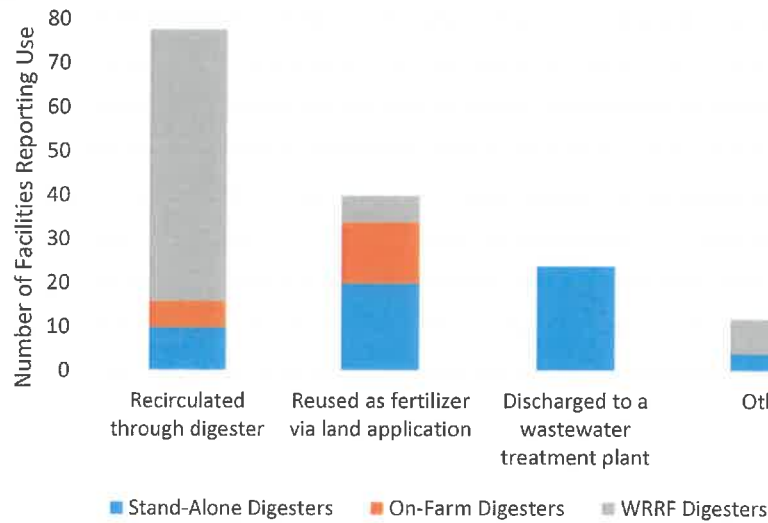


Figure 11: Uses of Liquid Digestate by Digester Type (2015)

IV. Conclusion

During this data collection, EPA established how many anaerobic digestion facilities were processing food waste in the U.S. in 2015, where those facilities are located, and their processing amounts and available capacity EPA also gathered information on the non-food waste processed at these facilities, feedstock types and sources, tipping fees, pre-processing/de-packaging techniques, operational specifications, biogas production and uses, gas cleaning systems, and solid and liquid digestate uses. In addition to this, EPA gathered information on facilities not yet operational, but that were anticipated to become operational in the future, which will be critical to tracking growth in capacity over time.

Based on information received directly from facilities that responded to the survey, the total processing capacity for food waste at these anaerobic digestion facilities in 2015 was 15,809,647 tons per year. The total amount food waste reported to be processed in 2015 was 12,730,657 tons and the total amount of non-food waste reported to be processed in 2015 was 2,219,988,176 gallons and 461,723 tons. The total amount of biogas produced in 2015 was 358,742 SCFM. Additional qualitative information on AD facilities is located in the body of this document, and can be seen in Table 22.

Table 22: Data Collection Results for 2015

Area of Data Collection	Result
Total Processing Capacity	15,809,647 tons per year
Total Food Waste Processed	12,730,657 tons
Total Non-Food Waste Processed at Co-Digesting Facilities	2,219,988,176 gallons and 461,723 tons
Total Biogas Produced	358,742 SCFM
Top Three States with the Most Digesters	California, Wisconsin, Ohio
Top Three Feedstock Types	FOG; Food Processing Industry Waste; Beverage Processing Industry Waste
Top Three Feedstock Sources	Food/beverage Processors; Restaurants & Food Services; Grocery Stores/Supermarkets
Top Three Biogas Uses	Produce Heat and Electricity (CHP); Fuel Boilers and Furnaces to Heat Digesters; Fuel Boilers and Furnaces to Heat Other Spaces
Top Three Constituents Removed	Sulfur; Moisture; Siloxanes
Top Three Uses of Solid Digestate	De-watered/dried and Land Applied; Composted into a Reusable/salable Product; Landfilled
Top Three Uses of Liquid Digestate	Recirculated Through Digester; Reused as Fertilizer via Land Application; Discharged to a Wastewater Treatment Plant

EPA will continue to gather data and seek to verify data received in 2017 to clarify this information over time. EPA will collect additional data for years 2016, 2017, and 2018 and will publish new reports in 2019 and 2020.

Table 3A: WRRF Digesters Co-Digesting Food Waste in the U.S.

WRRF Name	Location
Operational Co-Digestion Systems (Confirmed)	
Huntsville Spring Branch WWTP	Huntsville, AL
Fourche Creek Water Reclamation Facility	Little Rock, AR
Wildcat Hill Wastewater Treatment Plant	Flagstaff, AZ
Delta Diablo WWTP	Antioch, CA
Bakersfield Wastewater Treatment Plant # 2	Bakersfield, CA
Bakersfield Wastewater Treatment Plant # 3	Bakersfield, CA
Hill Canyon Wastewater Treatment Plant	Camarillo, CA
Encina Wastewater Authority WPCF	Carlsbad, CA
Joint Water Pollution Control Plant	Carson, CA
Sacramento Regional Wastewater Treatment Plant	Elk Grove, CA
Fairfield-Suisun Sewer District	Fairfield, CA
Fresno-Clovis RWRP	Fresno, CA
City of Hayward Water Pollution Control Facility	Hayward, CA
NapaSan Resource Recovery Facility	Napa, CA
East Bay Municipal Utility District Main Wastewater Treatment Plant	Oakland, CA
Silicon Valley Clean Water	Redwood City, CA
Oro Loma Sanitary District	San Lorenzo, CA
Central Marin Sanitation Agency	San Rafael, CA
El Estero WWTP	Santa Barbara, CA
Santa Rosa Regional Water Reuse Plant	Santa Rosa, CA
Victor Valley Wastewater Reclamation Authority	Victorville, CA
City of Watsonville	Watsonville, CA
City of Durango WWTP	Durango, CO
North Regional WWTP	Pampano Beach, FL
South Cross Bayou AWWTF	St. Petersburg, FL
Thomas P Smith WRF	Tallahassee, FL
F. Wayne Hill Water Resources Center	Buford, GA
South Columbus Water Treatment Facility	Columbus, GA
Lower Poplar Street WRF	Macon, GA
Ames WPC Plant	Ames, IA
Davenport WPC	Davenport, IA
Des Moines Metropolitan Wastewater Reclamation Authority	Des Moines, IA
Dubuque Water & Resource Recovery Center	Dubuque, IA
City of Waterloo, IA Anaerobic Lagoon	Waterloo, IA
Downers Grove Sanitary District	Downers Grove, IL
Rock River Water Reclamation District	Rockford, IL
Urbana & Champaign Sanitary District	Urbana, IL
West Lafayette WWRF	West Lafayette, IN
DLS Middle Basin	Overland Park, KS
Greater Lawrence Sanitary District	North Andover, MA
Lewiston-Auburn Water Pollution Control Authority	Lewiston, ME

WRRF Name	Location
Delhi Charter Township WWTP	Holt, MI
Theresa Street WRRF	Lincoln, NE
Joint Meeting of Essex & Union Counties	Elizabeth, NJ
Village of Ridgewood WPCF	Glen Rock, NJ
Landis Sewerage Authority	Vineland, NJ
Newtown Creek Wastewater Treatment Plant	Brooklyn, NY
LeRoy R. Summerson WWTF	Cortland, NY
Gloversville Johnstown Joint WTF	Johnstown, NY
Rome Water Pollution Control Facility	Rome, NY
Metropolitan Syracuse WWTP	Syracuse, NY
City of Watertown Pollution Control Plant	Watertown, NY
City of London	London, OH
City of Newark WWTP	Newark, OH
Struthers waste water	Struthers, OH
Wooster WWTP	Wooster, OH
Gresham WWTP	Gresham, OR
City of Pendleton, WWTRRF	Pendleton, OR
Clean Water Services - Durham AWTF	Tigard, OR
Hermitage Municipal Authority	Hermitage, PA
Derry Township Municipal Authority	Hershey, PA
Milton Regional Sewer Authority	Milton, PA
New Castle Sanitation Authority	New Castle, PA
Mauldin Road WRRF	Greenville, SC
Southside Wastewater Treatment Plant	Dallas, TX
Waco Metro - Area Regional Sewage System	Waco, TX
Village of Essex Junction	Essex Junction, VT
North River Wastewater Treatment Facility	Mt. Crawford, VA
Opequon Water Reclamation Facility	Winchester, VA
Appleton Wastewater Treatment Plant	Appleton, WI
Fond du Lac Regional Wastewater Treatment & Resource Recovery Facility	Fond du Lac, WI
City of Kiel	Kiel, WI
MMD South Shore Water Reclamation Facility	Oak Creek, WI
City of Port Washington WWTP	Port Washington, WI
City of Rice Lake	Rice Lake, WI
Stevens Point WWTP	Stevens Point, WI
City of West Bend Wastewater Treatment Plant	West Bend, WI
Wisconsin Rapids WWTF	Wisconsin Rapids, WI
Operational Co-digestion Systems (Not Confirmed*)	
Eastern Municipal Water District	Moreno Valley, CA
Lawrence Wastewater Treatment Plant 118	Lawrence, KS
*These WRRF co-digestion systems are included in the operating count because they are believed to be operational (not confirmed).	



7677 Oakport Street
Oakland, CA 94621
510.382.7800 • www.cwea.org

March 15, 2018

Mauricio Marin
Victor Valley Water Reclamation Authority
20111 Shay Road
Victorville, CA 92394

Re: Electrical Instrumentation Person of the Year

Dear Mauricio Marin,

Congratulations! You have been selected as the **First Place winner of the Electrical/Instrumentation Person of the Year Award**. This year the CWEA awards program received over 180 applications from our 17 Local Sections across California. There were 10 nominees for E/I Person of the Year. Congratulations on your outstanding win!

Preparations are underway to honor you at CWEA's Annual Conference being held at the Sacramento Convention Center, April 17-20, 2018.

We will be honoring your accomplishments at the following CWEA Annual Conference events:

- Operations and Maintenance Committee Breakfast Meeting: Thursday, April 19 7:00 a.m. - 8:30 a.m. (certificates will be handed out)
- Awards Luncheon: Friday, April 20 11:00 a.m.* You will be awarded a plaque for your first place award

You'll also be honored on CWEA's website in our Award Winners Gallery at awards.cwea.org

You can register for the Annual Conference using this Award Winner Reg Form. The CWEA office will honor the Early Bird rate until March 30. If you do not plan to attend, please let us know.

Congratulations Mauricio! We look forward to seeing you in Sacramento.

Sincerely,

Elizabeth Allan

Elizabeth Allan
Executive Director
California Water Environment Association
7677 Oakport Street, Suite 600
Oakland, CA 94621-1951

cwea.org
awards.cwea.org

VVWRA celebrates our 40th anniversary of serving the Victor Valley. VVWRA was actually started as part of the Mojave Water Agency in 1977, but on June 1, 1978 we became an independent organization. Today, VVWRA is a Joint Powers Authority providing services to Apple Valley, Hesperia, Victorville and portions of San Bernardino County including Spring Valley Lake and Oro Grande



Victor Valley

The Sun-Telegram, San Bernardino, Calif.
Wednesday, August 18, 1977 B Section

Ceremony marks start of work on sewer plant

ORO GRANDE — Participants and onlookers alike crowded by the hot afternoon Tuesday at a remote farmstead north of here to celebrate the opening of the Victor Valley regional sewer project.

"If anyone had told me," Mayor Harold Hollis of Adelanto said, "that I would be out in a hot August day at the groundbreaking of a sewer system in the middle of the Mojave Desert, I would have told them they were out of their cones-packing mind."

The groundbreaking symbolically started the building of a \$28 million sewer plant that eventually will serve Victorville, Oro Grande, Apple Valley, Hesperia and Adelanto.

The project has been developed by the Mojave Water Agency using state and federal grants and local bond and tax funds.

Hollis said it was a pleasure to see the first stage of construction of the much-delayed project under way. "A burden of Dads' has been heavy over the regional system," he said. "The important thing is that the obstacles have been overcome."

The voters "changed the feeling of 'oil for me' to 'oil for us,'" Hollis said.

The main speaker at the groundbreaking was Rep. Shirley Pettis, R-Loma Linda, who called the project "a true example of the vision of the drafters of the federal Clean Water Act."

Several speakers remarked on the many problems the project had met in getting to construction. William Factor, who introduced Pettis, said the project dated back to 1970, when water quality plans were set forth for protection of ground-water supplies.

"It has been a long and frustrating effort, but the reward is the project started here today," Factor said.

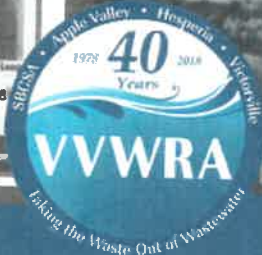
The project has been developed three times since 1973 and has received considerably in cost. The offer of grant funds for the project had to be extended twice before the cooperative financing could be completed.

The speeches were made from a flatbed truck trailer at the Celebration Ranch, which the agency bought as part of the sewer plant site.

After the speakers' remarks, representatives of the agency and the five communities involved in the project donned bright blue hard hats and took up golden-tipped shovels to dig a few shovelful of dirt for concrete.



Staff photo by Sam Lane
Rep. Shirley Pettis speaks at groundbreaking for regional sewer system





Victor Valley Wastewater Reclamation Authority
A Joint Powers Authority and Public Agency of the State of California

20111 Shay Rd. Victorville, CA 92394
 Telephone: (760) 246-8638
 Fax: (760) 948-9897

DATE: May 31, 2018
TO: Logan Olds
 General Manager
FROM: Chieko Keagy *ck*
 Controller
SUBJECT: Cash Disbursements Register

RECOMMENDED ACTION

It is recommended that the Board of Commissioners approve the cash disbursements and payroll register for the Victor Valley Wastewater Reclamation Authority.

BACKGROUND

The Cash Disbursements Register totals represented below are for the month of MAY 2018, check numbers 121541- 121702 and ACH's.

<i>Accounts Payable</i>			
<i>Checks</i>	<i>ACH's and EFT's</i>	<i>Payroll</i>	<i>Total</i>
<i>\$213,983.61</i>	<i>\$1,395,193.78</i>	<i>\$296,388.26</i>	<i>\$1,905,565.65</i>

Victor Valley Reclamation Authority
Cash Disbursement Register
From 5/1/18 through 5/31/18

Check Number	Check Date	Effective Date	Fund Code	Vendor Name	Transaction Description	Invoice Number	Check Amount
121541	5/1/2018	5/1/2018	01	Quill Corporation	Office Supplies	5451141	\$ (79.45)
121541	5/1/2018	5/1/2018	01	Quill Corporation	Office Supplies	5468288	\$ (503.99)
121551	5/1/2018	5/1/2018	01	Atmospheric Analysis And Consulting, Inc.	Analysis and Reporting	A-18113	\$ (1,890.00)
121560	5/1/2018	5/1/2018	01	Neofunds By Neopost	Postage	031618	\$ (510.00)
121620	5/18/2018	5/18/2018	01	San Bernardino County Fire Department	CUPA Permit	IN0128986	\$ (325.00)
121626	5/1/2018	5/1/2018	01	Neofunds By Neopost	Postage	031618	\$ 510.00
121627	5/1/2018	5/1/2018	01	Quill Corporation	Office Supplies	5451141	\$ 79.45
121627	5/1/2018	5/1/2018	01	Quill Corporation	Office Supplies	5468288	\$ 503.99
121628	5/8/2018	5/8/2018	01	A-Action Automotive	Repairs	61711	\$ 1,297.61
121628	5/8/2018	5/8/2018	01	A-Action Automotive	Window Repair	61687	\$ 371.39
121629	5/8/2018	5/8/2018	01	Alliant Insurance Services	AMVP 3rd Quarterly Endorsement	826337	\$ 1,420.00
121630	5/8/2018	5/8/2018	01	American Water Works Association	Logan Olds Membership Renewal	050318	\$ 105.00
121631	5/8/2018	5/8/2018	01	Liberty Utilities- Apple Valley Ranchos Water	AV Subregional Water Usage- 21012 Otoc Road	042618	\$ 53.00
121631	5/8/2018	5/8/2018	01	Liberty Utilities- Apple Valley Ranchos Water	AV Subregional Water Usage- Otoc	04262018	\$ 2,249.79
121631	5/8/2018	5/8/2018	01	Liberty Utilities- Apple Valley Ranchos Water	AV Subregional Water Usage- Otoc FS Road	04252018	\$ 98.49
121632	5/8/2018	5/8/2018	01	Atmospheric Analysis And Consulting, Inc.	Sampling	A-18283	\$ 1,930.00
121633	5/8/2018	5/8/2018	01	Blackline Safety Corp	Blackline Safety	INV2009092	\$ 210.00
121634	5/8/2018	5/8/2018	01	Blaine Tech Services, Inc.	Blaine Tech Services	2BLRS-180418BN	\$ 3,452.40
121634	5/8/2018	5/8/2018	01	Blaine Tech Services, Inc.	Blaine Tech Services	9739	\$ 3,345.00
121634	5/8/2018	5/8/2018	01	Blaine Tech Services, Inc.	Service	2BLRS-180416BN	\$ 7,406.90
121635	5/8/2018	5/8/2018	01	City Employees Associates	Supervisors Dues Deduction	050218	\$ 50.00
121636	5/8/2018	5/8/2018	01	Fastenal	Vest Harness	CAVIC58897	\$ 1,722.11
121637	5/8/2018	5/8/2018	01	Flyers Energy, Llc	Diesel and Gasoline	CFS-1602609	\$ 894.04
121638	5/8/2018	5/8/2018	01	G.A. Osborne Pipe & Supply	Materials	391557	\$ 197.60
121639	5/8/2018	5/8/2018	01	Hi Desert Fire Protection Inc	Fire Extinguisher Annual Service	336491	\$ 940.86
121640	5/8/2018	5/8/2018	07	Jericho Systems, Inc.	CEQA Documentation for Desert Knolls Wash	17-VVW-02.02	\$ 5,900.00
121641	5/8/2018	5/8/2018	01	Prudential Overall Supply	Maint and Ops Uniform	22601395	\$ 451.80
121642	5/8/2018	5/8/2018	01	Quill Corporation	Office Supplies	6620715	\$ 981.50
121643	5/8/2018	5/8/2018	01	Robertson'S Ready Mix, Ltd	Concrete	211972	\$ 741.12
121644	5/8/2018	5/8/2018	01	Royal Wholesale Electric	Network Card for AB753 Drive	6441-564046	\$ 588.20
121645	5/8/2018	5/8/2018	09	Southwest Gas Company	Subregional Natural Gas Connection	04232018	\$ 42,769.46
121646	5/8/2018	5/8/2018	01	Sparklets Drinking Water	Bottled Water	14877093 042918	\$ 1,461.29
121647	5/8/2018	5/8/2018	01	Thurlow'S Heating & A/C Inc.	Service Call	21840	\$ 902.13
121647	5/8/2018	5/8/2018	01	Thurlow'S Heating & A/C Inc.	Service Calls	21839	\$ 540.00
121648	5/8/2018	5/8/2018	01	Verizon Wireless	Acct# 472015939-00001	9805345269	\$ 1,710.01
121649	5/8/2018	5/8/2018	01	Victor Valley College Foundation	VVC Champions of Education	1/1/2018	\$ 5,000.00
121650	5/16/2018	5/16/2018	01	Donna Anthony	Retiree Health Benefit Allowance	ANTH051618	\$ 438.00
121651	5/16/2018	5/16/2018	01	Dan Sentman	Retiree Health Benefit Allowance	SENT051618	\$ 212.97
121652	5/17/2018	5/17/2018	01	Applied Industrial Technologies	Mprd Gear	7013268521	\$ 196.68
121653	5/17/2018	5/17/2018	01	Cortech Engineering	Waste Pump Impellar	49582823	\$ 1,847.82
121654	5/17/2018	5/17/2018	01	Done-Right Concrete Construction Services Inc.	Concrete Pour	543	\$ 1,689.00
121655	5/17/2018	5/17/2018	01	Frontier	Acct# 760-246-8178-122106-5	050918	\$ 3,773.51
121656	5/17/2018	5/17/2018	01	G.A. Osborne Pipe & Supply	Fittings	392021	\$ 406.74
121656	5/17/2018	5/17/2018	01	G.A. Osborne Pipe & Supply	Pipe Fittings	390748	\$ 425.66
121656	5/17/2018	5/17/2018	01	G.A. Osborne Pipe & Supply	Pipe Fittings	391432	\$ 46.99
121657	5/17/2018	5/17/2018	01	Golf Cars Of Riverside	Golf Cart Brake Service	80866	\$ 275.00
121658	5/17/2018	5/17/2018	01	G.P. Electric	OGPS Pump Repair Additional Cost	93657	\$ 952.93
121659	5/17/2018	5/17/2018	01	Guillermo Esparza Concrete Pumping	Concrete Pump	1905	\$ 400.00
121660	5/17/2018	5/17/2018	01	Harrington Industrial Plastics	Ball Valve	0128076	\$ 749.45
121661	5/17/2018	5/17/2018	01	Hi-Desert Communications	Site Rent	37791	\$ 100.00
121662	5/17/2018	5/17/2018	09	Jericho Systems, Inc.	Subregionals Responses to SWRCB	18-VVW-03.01	\$ 2,700.00
121663	5/17/2018	5/17/2018	01	Konica Minolta Business Solutions	Printing Charges	9004533599	\$ 525.23
121664	5/17/2018	5/17/2018	01	Napa Victorville	Battery	113487	\$ 511.41
121664	5/17/2018	5/17/2018	01	Napa Victorville	Pads and Rotor	113284	\$ 158.36
121665	5/17/2018	5/17/2018	01	Orkin	Pest Control	169777950	\$ 381.53
121666	5/17/2018	5/17/2018	01	Prudential Overall Supply	Uniform Service	22608611	\$ 453.43
121666	5/17/2018	5/17/2018	01	Prudential Overall Supply	Uniform Services	22605030	\$ 451.80
121667	5/17/2018	5/17/2018	01	Quantum Labs, Inc	Gloves	INV-399070	\$ 672.50
121668	5/17/2018	5/17/2018	01	Snap On Industrial	Torque Wrenches	ARV/35862141	\$ 744.96
121668	5/17/2018	5/17/2018	01	Snap On Industrial	Torque Wrenches	ARV/36019330	\$ 948.81
121669	5/17/2018	5/17/2018	01	Socal Filters And Services Inc.	Filters	5408	\$ 1,010.62
121670	5/17/2018	5/17/2018	01	Sparling Instruments, Inc.	Calibration	5915601	\$ 1,301.34
121671	5/17/2018	5/17/2018	01	Town & Country Tire	Maintenance Truck New Tires	251191	\$ 336.96
121672	5/17/2018	5/17/2018	01	Uc Regents	CEC Renewable Energy Storage	81043-008R	\$ 1,893.29
121673	5/24/2018	5/24/2018	01	A-Action Automotive	2500 Vehicle Repairs	61883	\$ 431.10
121674	5/24/2018	5/24/2018	01	Analytical Technology, Inc	ATI and Sludge Monitors	406850	\$ 29,934.63
121675	5/24/2018	5/24/2018	01	Big Bear Electric, Inc.	Ferric Tank Transducer Relocation	1004	\$ 145.82
121676	5/24/2018	5/24/2018	01	C.W.E.A.	Logan Olds CWEA Renewal	05082018	\$ 2,828.00
121677	5/24/2018	5/24/2018	01	Flyers Energy, Llc	Gasoline	CFS-1611085	\$ 1,306.79
121678	5/24/2018	5/24/2018	01	Mommar, Inc	Work Light	PS1234219	\$ 107.20
121679	5/24/2018	5/24/2018	01	Orkin	Pest Control Service	169777951	\$ 381.53
121680	5/24/2018	5/24/2018	01	Promesa Enterprises	Employee Profile Reports Feb 2018	47425	\$ 49.50
121680	5/24/2018	5/24/2018	01	Promesa Enterprises	Employee Profile Reports Mar 2018	47644	\$ 54.50
121681	5/24/2018	5/24/2018	01	Prudential Overall Supply	Uniform Service	22612080	\$ 451.80
121682	5/24/2018	5/24/2018	01	Roto-Rooter Plumbers	Automatic Flush Valve and Urinal Replacement	A50918004	\$ 1,855.44
121683	5/24/2018	5/24/2018	01	Scott Equipment, Inc	Pad Wear	E19235	\$ 120.91
121684	5/24/2018	5/24/2018	01	Uc Regents	C131 CEC Battery Install Project	81043-009	\$ 3,833.64
121685	5/31/2018	5/31/2018	09	Anaeragia Inc.	AV Subregional Valve Change	20162902-15	\$ 19,225.64
121686	5/31/2018	5/31/2018	09	Anaeragia Inc.	Hesperia Subregional Valve Change	20162902-16	\$ 19,225.64
121687	5/31/2018	5/31/2018	01	Apple Valley Transfer & Storage Dba Shredyourdocs.Com	Document Shredding Service	4312	\$ 45.00
121688	5/31/2018	5/31/2018	01	Atmospheric Analysis And Consulting, Inc.	Analysis and Reporting	A-18380	\$ 1,890.00
121689	5/31/2018	5/31/2018	01	Bio Vir Lab, Inc.	BioVir Service	172462	\$ 2,480.00
121690	5/31/2018	5/31/2018	01	City Employees Associates	Supervisors Association Dues	053018	\$ 50.00
121691	5/31/2018	5/31/2018	01	Concorde Communications	Telephone and Answering Service	180510049	\$ 107.90
121692	5/31/2018	5/31/2018	01	Luhdorff And Scalmanni Consulting Engineers, Inc.	3 Year Groundwater Reporting	33848	\$ 2,111.25
121693	5/31/2018	5/31/2018	01	Multi W Systems, Inc	Mechanical Seal	31830319	\$ 560.30
121694	5/31/2018	5/31/2018	01	Neofunds By Neopost	Postage	05302018	\$ 15.00
121695	5/31/2018	5/31/2018	01	Pioneer Research Corp.	En Solv Degreaser	252708	\$ 798.10
121696	5/31/2018	5/31/2018	01	Prudential Overall Supply	Uniform Service	22615533	\$ 453.43
121697	5/31/2018	5/31/2018	01	Royal Wholesale Electric	Network Card	6441-564648	\$ 527.77
121698	5/31/2018	5/31/2018	01	Sparklets Drinking Water	Bottled Water	14877093 052718	\$ 897.14
121699	5/31/2018	5/31/2018	01	Uc Regents	C131 CEC Renewable Energy Storage Project	81043-007	\$ 3,021.63
121700	5/31/2018	5/31/2018	01	Verizon Wireless	Wireless Telephone Charges	9807196124	\$ 3,440.44
121700	5/31/2018	5/31/2018	01	Verizon Wireless	Wireless Telephone Charges	9807196125	\$ 152.04
121701	5/31/2018	5/31/2018	01	City Of Victorville / Sanitation	Trash Service	2957051	\$ 6,379.71

**Victor Valley Reclamation Authority
Cash Disbursement Register
From 5/1/18 through 5/31/18**

Check Number	Check Date	Effective Date	Fund Code	Vendor Name	Transaction Description	Invoice Number	Check Amount
0019783-8	5/17/2018	5/17/2018	01	Bsk Associates	K&S Truck Wash Sampling	R800223	\$ 1,147.00
0019783-8	5/17/2018	5/17/2018	01	Bsk Associates	Lite Sisters Truck Wash Sampling	R800212	\$ 1,177.00
0019783-8	5/17/2018	5/17/2018	01	Bsk Associates	Nutro Products	R800218	\$ 1,227.00
0019783-8	5/17/2018	5/17/2018	01	Bsk Associates	VVWRA Sampling	R800217	\$ 1,147.00
0019783-8	5/17/2018	5/17/2018	01	Bsk Associates	VVWRA Metering Station Sampling	R800216	\$ 1,071.00
0019783-8	5/17/2018	5/17/2018	01	Bsk Associates	Walmart Sampling	R800219	\$ 1,147.00
0019783-9	5/17/2018	5/17/2018	01	Davis Electric, Inc	MSB Outage	18-0087	\$ 1,942.00
0019783-9	5/17/2018	5/17/2018	01	Davis Electric, Inc	PLC and Sensusphone Wiring Light Install	18-0085	\$ 16,127.00
0019876	5/21/2018	5/21/2018	09	Carollo Engineers, A Professional Corporation	Subregional ESDC	0164323	\$ 235,680.16
0020019	5/23/2018	5/23/2018	01	Primus Power	C131 CEC Battery Install Project	1016	\$ 191,867.92
0020097-1	5/24/2018	5/24/2018	01	Mauricio Marin	CWRA Hotel Reimbursement	04182018	\$ 825.52
0020097-2	5/24/2018	5/24/2018	01	Eric Schweizer	Eric Schweizer Grade 3 Certification Renewal	051118	\$ 150.00
0020099-1	5/24/2018	5/24/2018	01	ZG Energy Inc.	ZG sign	415-081800331	\$ 37.71
0020099-1	5/24/2018	5/24/2018	01	ZG Energy Inc.	Filters	415-081800315	\$ 1,770.55
0020099-10	5/24/2018	5/24/2018	01	Larry Walker Associates	NPDES Permit Renewal	00054.45-7	\$ 5,002.50
0020099-10	5/24/2018	5/24/2018	01	Larry Walker Associates	VVWRA Annual Reports	00054.49-5	\$ 250.00
0020099-11	5/24/2018	5/24/2018	01	U.S. Bank	Cal Card Charges April 2018	042318	\$ 7,690.50
0020099-11	5/24/2018	5/24/2018	09	U.S. Bank	Cal Card Charges April 2018	042318	\$ 209.00
0020099-2	5/24/2018	5/24/2018	01	American Express	American Express Charges April 2018	04292018	\$ 2,483.81
0020099-4	5/24/2018	5/24/2018	01	Arizona Instrument Llc	Solenoid and Straight Intake	335192	\$ 401.50
0020099-5	5/24/2018	5/24/2018	01	Biogas Engineering	CEC Miegrogrid Battery Storage Project	I28-CEC	\$ 14,426.58
0020099-6	5/24/2018	5/24/2018	01	Brenntag Pacific, Inc	Ferric Chloride	BP1836489	\$ 2,231.17
0020099-6	5/24/2018	5/24/2018	01	Brenntag Pacific, Inc	Ferric Chloride	BP1837488	\$ 3,278.37
0020099-7	5/24/2018	5/24/2018	09	Carollo Engineers, A Professional Corporation	Desert Knolls Wash Interceptor	0166894	\$ 19,304.50
0020099-8	5/24/2018	5/24/2018	01	Grainger	Battery and Fire Sign	9781545612	\$ 60.43
0020099-8	5/24/2018	5/24/2018	01	Grainger	Freezer Pops	9785398794	\$ 189.92
0020099-8	5/24/2018	5/24/2018	01	Grainger	Steel Carabiner	9782485362	\$ 84.47
0020099-9	5/24/2018	5/24/2018	01	Inertline Engineering	Otoe Wet Well Cleaning	170487	\$ 2,756.50
0020372-1	5/31/2018	5/31/2018	01	A.D.S. Corp.	Flow Monitoring	12928.22-0518	\$ 8,333.28
0020372-10	5/31/2018	5/31/2018	01	Victor Valley Wastewater Employees Assoc	Employee Dues Deductions	05312018	\$ 600.00
0020372-11	5/31/2018	5/31/2018	01	Wastewater Solids Management, Inc	Digester Cleaning	1009-18	\$ 22,960.00
0020372-12	5/31/2018	5/31/2018	01	Xylen Water Solutions	PEECO	3556A13161	\$ 1,421.58
0020372-2	5/31/2018	5/31/2018	01	Biogas Engineering	CEC Battery Installation Project	I12CEC	\$ 6,102.00
0020372-3	5/31/2018	5/31/2018	01	Culligan Water Conditioning	Water Softener	201805041401	\$ 470.00
0020372-4	5/31/2018	5/31/2018	01	Evoqua Water Technologies Llc	Bioxide	903545928	\$ 8,908.02
0020372-5	5/31/2018	5/31/2018	01	Graham Equipment	Service Material	015224	\$ 129.54
0020372-6	5/31/2018	5/31/2018	01	Grainger	Anchor Plates	9796525799	\$ 1,784.02
0020372-6	5/31/2018	5/31/2018	01	Grainger	Cable Tie	9788773043	\$ 97.56
0020372-6	5/31/2018	5/31/2018	01	Grainger	Carabiner	9788413749	\$ 61.20
0020372-6	5/31/2018	5/31/2018	01	Grainger	Cleaning Supplies	9793478208	\$ 540.08
0020372-7	5/31/2018	5/31/2018	01	Protection One	Protection One Monitoring	122915404	\$ 811.88
0020372-8	5/31/2018	5/31/2018	01	Rincoo Chemical Industries, Inc.	Chemical Disposal	1050594	\$ 823.46
0020372-9	5/31/2018	5/31/2018	01	T-Mobile	Wireless Telephones	053118	\$ 61.82
050918SWG	5/10/2018	5/10/2018	01	Southwest Gas Company	Natural Gas- VVWRA	04342018	\$ 1,231.09
050918UPS	5/10/2018	5/10/2018	01	Ups	Express Shipping	0000615V7V168	\$ 106.87
050918UPS	5/10/2018	5/10/2018	01	Ups	Express Shipping	0000615V7V178	\$ 43.86
052118Appa	5/21/2018	5/21/2018	01	Southwest Gas Company	Hesperia Subregional Natural Gas- Appaloosa	592018	\$ 279.40
052118CHAR	5/21/2018	5/21/2018	01	Charter Communications	Telephone Charges	0013529050718	\$ 4,857.64
052118FRESNO	5/21/2018	5/21/2018	01	Southwest Gas Company	Hesperia Subregional Natural Gas- Fresno	050918	\$ 73.38
052118Otoe	5/21/2018	5/21/2018	01	Southwest Gas Company	Apple Valley Subregional Natural Gas- Otoe	051018	\$ 262.03
052118UPS	5/21/2018	5/21/2018	01	Ups	Express Shipping	0000615V7V188	\$ 209.06
052118UPS	5/21/2018	5/21/2018	01	Ups	Express Shipping	0000615V7V198	\$ 296.97
053118SWG	5/31/2018	5/31/2018	01	Southwest Gas Company	Natural Gas	052318	\$ 383.27
2492229	5/10/2018	5/10/2018	01	Swrcb	Annual Permit Renewal	SW-0150180	\$ 1,400.00
2492234	5/10/2018	5/10/2018	01	Swrcb	Annual Permit Fee	SW-0152935	\$ 610.00
34555236	5/21/2018	5/21/2018	01	Hesperia Water District	Hesperia Subregional Water Usage- Appaloosa	050318	\$ 1,949.71
34734828	5/31/2018	5/31/2018	01	Hesperia Water District	Hesperia Subregional Water Usage	051618	\$ 597.38
74924144	5/10/2018	5/10/2018	01	Frontier	Accff/ 760-246-7864-030481-5	04252018	\$ 426.37
812872	5/21/2018	5/21/2018	01	Konica Minolta Business Solutions	Big Printer Lease	31827403	\$ 351.02
812872	5/21/2018	5/21/2018	01	Konica Minolta Business Solutions	Individual Printer Lease	31861753	\$ 662.95
82380696861299	5/10/2018	5/10/2018	01	Southern California Edison	Electricity	04212018	\$ 46,854.33
82380696861419	5/21/2018	5/21/2018	01	Southern California Edison	Electricity	05152018	\$ 46,988.57
83950026111419	5/21/2018	5/21/2018	01	Southern California Edison	Hesperia Subregional Electricity- Appaloosa	5112018	\$ 8,713.26
83950027691418	5/21/2018	5/21/2018	01	Southern California Edison	Hesperia Subregional Electricity- Fresno	051118	\$ 646.96
83977752891419	5/21/2018	5/21/2018	01	Southern California Edison	Apple Valley Subregional Electricity- Otoe	05112018	\$ 10,289.72
91000018956861	5/10/2018	5/10/2018	01	Lincoln Financial Group	Life and Disability Insurance	3665220441	\$ 3,473.38
91000018956861	5/10/2018	5/10/2018	01	Lincoln Financial Group	Life and Disability Insurance	3665221334	\$ 100.66
Total ACH & EFTs							1,395,193.78
Total Checks						213,983.61	
Total ACH and EFT						1,395,193.78	
Total Payroll - May 2018						296,388.26	
Total						1,995,565.65	

04.11.16 ask
APPROVED

**MINUTES OF A REGULAR MEETING
REGULAR MEETING OF THE BOARD OF COMMISSIONERS
VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY (VWVRA)
May 17, 2018**

CALL TO ORDER: Chair Larry Bird called the meeting to order at 8:02 am; in Conference Room D at Victorville City Hall, located at 14343 Civic Drive, Victorville California, with the following members present:

**CITY OF HESPERIA
ORO GRANDE (CSA 42) AND
SPRING VALLEY LAKE (CSA 64)
TOWN OF APPLE VALLEY
CITY OF VICTORVILLE**

**Larry Bird, Alternate
Jeff Rigney, Vice-Chair**

**Scott Nassif, Secretary
Jim Kennedy, Treasurer**

VWVRA Staff and Legal Counsel:

**Logan Olds, General Manager
Kristi Casteel, Secretary to GM/Board
Piero Dallarda, Legal Counsel (BB&K)
Chieko Keagy, Controller
Eugene Davis, O&M Manager**

**David Wylie, Safety & Communications Officer
Xiwei Wang, Senior Accountant
Marcos Avila, Lead Mechanic
Alton Anderson, Construction Manager
Robert Coromina, Director of Administration**

Others Present:

**Nils Bentsen, City of Hesperia
Keith Metzler, City of Victorville
Greg Snyder, Town of Apple Valley
Jim Cox, City of Victorville**

**Brian Gengler, City of Victorville
George Harris, City of Victorville**

CLOSED SESSION

PUBLIC COMMENTS- CLOSED SESSION AGENDA

Chair Bird asked if there were any comments from the public regarding any item on the Closed Session Agenda. Hearing none, he called for a motion to enter into Closed Session.

Commissioner Nassif made a motion to enter into Closed Session. Seconded by Commissioner Rigney.

REGULAR SESSION

CALL TO ORDER & PLEDGE OF ALLEGIANCE

Chair Bird called the meeting to order at 9:07 am.

REPORT FROM CLOSED SESSION

Piero Dallarda stated that the Board met in closed session under potential litigation claim against the City of Hesperia under government code section 54956.9 (d) and the discussion was to approve a tolling agreement with the City of Hesperia. It was unanimously approved. The tolling agreement is attached to the open session agenda. This tolling agreement is for both parties to forestall litigation until the mediation is completed on the issues involving the JPA.

The Board also met in closed session under government section code 54956.9 (d) to discuss a government tort claim by Angelita Valles against VVWRA and the Board unanimously voted to reject the claim and to direct legal counsel to provide notice to Ms. Valles's attorney.

PUBLIC COMMENTS- REGULAR SESSION AGENDA

None

ANNOUNCEMENTS AND CORRESPONDENCE:

5. Possible conflict of interest issues

Commissioner Nassif abstained from any disbursements to Napa Auto Parts.

6. Article: DNA From Ancient Latrines Reveal What People Ate Centuries Ago

7. Understanding Wastewater Treatment Performance on Advanced Water Treatment Processes and Finished Water Quality

VVWRA received a request from an organization to allow them to utilize the subregional facilities to possibly test the performance of different advanced water treatment systems. This relates to the industry moving in a direction to evaluating indirect and direct potable reuse and the regulations from the State of California – State Water Resources Control Board. Whether the study is approved will be determined at some point and VVWRA would only be providing water samples or allowing them to connect to our facility to test their treatment.

8. Letter- VVWRA National Pollutant Discharge Elimination System (NPDES) Permit Renewal

CONSENT CALENDAR:

9. Approve March & April 2018 Disbursement Registers

Commissioner Nassif abstained from any disbursements to Napa Auto Parts.

10. Approve Minutes from the March 15, 2018 Regular Meeting

11. Recommendation to Ratify Low Voltage Power Emergency Purchases

SCE is not accepting responsibility for the electrical issues VVWRA has had however, they have decided to install a voltage regulator on the lines that feed VVWRA. Hopefully it will be installed by the end of the calendar year and will provide some stability to VVWRA's power systems.

Commissioner Nassif made a motion to approve the consent calendar, seconded by Commissioner Kennedy and approved by roll call vote with Commissioner Nassif abstaining from any disbursements to Napa Auto Parts.

Chair Bird: Yes

Commissioner Rigney: Yes

Commissioner Nassif: Yes

Commissioner Kennedy: Yes

REPORTS & PRESENTATIONS:

12. Presentation: FY 2018-2019 Budget

Chieko Keagy presented the FY 2018-2019 budget

Commissioner Kennedy asked what happens if the \$3.8 million does not come in, what is not going to get paid.

Manager Olds stated that the debt service would not get paid. This fiscal year, as shown in the presentation, we budgeted to receive that \$3.8 million. VVWRA has made a number of cuts each year to maintain positive cash flow to ensure that VVWRA covers its debt. However, with the increase principal payments for the SRF Loans that is no longer possible.

Commissioner Kennedy asked if anyone has been notified.

Manager Olds stated that there is a memo to the Board when VVWRA notifies the State. VVWRA has yet to dip into the SRF loan reserve which would require VVWRA to notify the State. The other issue is that the Desert Knolls Wash Project still needs to be completed. Manager Olds stated that the Board needs to be aware that his recommendation is regardless what occurs; VVWRA must build Desert Knolls Wash. If that pipeline breaks with an estimated 1.2 million gallons running through it, VVWRA is subject to a \$120 million dollar fine per day. The cost of repairing that pipeline now is about \$1.8 million and is a small price to pay. The Board needs to be aware, that project takes precedence over meeting debt service.

There were questions with the projections and actuals in the budget presentation. Staff is going to update the actuals and provide more detail categorically between the Operations, Maintenance, and Administrative departments.

ACTION & DISCUSSION ITEMS:

13. Recommendation to Request Additional Funding For the Professional Services of Dr. Almgren to Perform an Analysis of the Financial Impact of Flow Diversion

Commissioner Rigney asked that before getting the invoice were we notified about the increase.

Manager Olds recommended that the Board table this item and have legal speak with Justice King regarding more detail.

It was the consensus of the Board to table this item.

14. Initiation of Litigation against City of Hesperia—Tolling Agreement

Commissioner Kennedy made a motion to approve the recommendation, seconded by Commissioner Rigney and approved by roll call.

Chair Bird: Yes

Commissioner Rigney: Yes

Commissioner Nassif: Yes

Commissioner Kennedy: Yes

STAFF/PROFESSIONAL SERVICES REPORTS:

15. Financial and Investment Report – April 2018

16. Operations & Maintenance Report – April 2018

- 17. Environmental Compliance Department Reports – April 2018
- 18. Septage Receiving Facility Reports – April 2018
- 19. Safety & Communications Report – April 2018

NEXT VVWRA BOARD MEETING:

Thursday, June 21, 2018 – Regular Meeting of the Board of Commissioners

FUTURE AGENDA ITEMS

Leave Policy

COMMISSIONER COMMENTS


ADJOURNMENT

APPROVAL:

DATE: June 21, 2018 **BY:** _____
 Approved by VVWRA Board Scott Nassif,
 Secretary VVWRA Board of Commissioners



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners
 21 June 2018

FROM: Logan Olds, General Manager 

TO: Board of Commissioners

SUBJECT: Investigation of Power Quality Issues at VVWRA

RECOMMENDATION

It is recommended that the Board of Commissioners authorize the General Manager to retain the professional services of Biogas Engineering to investigate power quality issues at VVWRA, determine the effectiveness of VVWRA and utility components to improve conditions, and verify the 2-second delay in the SCE interconnection agreement in an amount not to exceed \$23,800.00, twenty-three thousand eight hundred dollars.

REVIEW BY OTHERS

This recommendation was reviewed by Piero Dallarda, Legal Counsel, Alton Anderson, Construction Manager and Chieko Keagy, Controller.

BACKGROUND INFORMATION

VVWRA has experienced many low voltage issues over many years. In May of 2017 this may have been the root cause of the complete power failure at the Shay Road wastewater treatment plant. To address that incident VVWRA has expended \$578,047.25 to date. Staff believes that the Authority needs to understand how the low voltage is impacting our equipment, stand-by generators, power generation generators and the battery storage and microgrid currently under construction. In discussion with Biogas Engineering they believe that it may be possible to address the low voltage issues at our facility by integrating/modifying the existing control systems as well as those being installed for the microgrid project to address low voltage incidents. Biogas Engineering has staff that are the most familiar with our existing electrical systems, including power generation and backup power equipment. Therefore, staff requests that the professional services of Biogas Engineering be used to investigate and resolve these issues.

In one month in 2017 VVWRA experienced over 12 low voltage incidents. The Authority needs reliable and stable power. Given the potential regulatory fines if an incident led to a water quality violation this investment may enable the Authority to address those low voltage incidents on-site independently from SCE.

FINANCIAL IMPACT

A Professional Service expense not to exceed \$23,800.00

Finance Approval:

Fund 01 or 07	
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	01-02-174-8105
Transfer Needed due to Insufficient Budget	Y[] N[]
If Transfer, from Which Account String or Reserve	
Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	
Outside Funding Source if applicable	\$
Original Contract Amount	\$
Change Order	Y[] N[]
Contract after Change	\$

Fund 09	
Accounting Code (String) example: 09-xx-xxx-xxxx (<u>mandatory</u> project code)	
Transfer Needed due to Insufficient Budget	Y[] N[]
If Transfer, from Which Account String or Reserve	
Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	
Outside Funding Source	\$
Original Contract Amount	\$
Change Order	Y[] N[]
Contract after Change	\$

RELATED IMPACTS

Reliable and stable power at VVWRA.



June 8, 2018

Mr. Logan Olds
General Manager
Victor Valley Wastewater Reclamation Authority
20111 Shay Rd.
Victorville, CA 92394

Subject: Proposal to Investigate Power Quality Issues at VVWRA, Determine the Effectiveness of VVWRA and Utility components to Improve Conditions, and Verify 2-Second Delay in Interconnection Arrangement.

Dear Mr. Olds,

Provided herein is Biogas Engineering's (Biogas) proposal to address power quality issues experienced at the VVWRA waste water treatment plant (Plant). Under this project, Biogas will investigate Power Quality issues experienced at the plant, derive a solution to resolve the issue and verify current Interconnection Arrangement between VVWRA and Southern California Edison (SCE) including minimum import violation conditions, especially the allowable 2-Second minimum import condition.

We understand that the power supplied by SCE at the Plant fluctuates which results in black-outs, brown-outs or periods of low voltage. These voltage fluctuations (electrical power quality) shutdown the 1.6 MW generators producing renewable power, disrupt Plant operations, damage equipment and waste recycled water.

It is our understanding that existing equipment (2G engine generator) and proposed equipment (flow batteries and invertors, currently under commissioning) can potentially respond to certain types of voltage fluctuations and stabilize power feed to the Plant. Additionally, SCE has proposed installing a Voltage regulator to improve power quality supplied at the plant. As a part of the scope, Biogas will evaluate the type and characteristics of voltage fluctuations observed at the plant and determine how the existing/proposed equipment can be modified to respond to these events.

Under the current minimum import agreement, VVWRA is required to continuously import an agreed upon minimum amount of power from SCE. As mandated by California Public Utility Commission (CUPC) by Rule 21, if this minimum power import of power is below the agreed upon levels for more than 2 seconds, the 1.6 MW generators are instantly taken off line. With the upcoming improvement at the Plant (Micro-Grid project), this 2 second delay is of prime

concern to VWVRA. The Micro-Grid project is designed to respond in less than 2 seconds to stabilize certain type of power fluctuations in order to avoid the shutdown of the 1.6 MW generators. Since the upcoming Micro Grid project is required to respond in a narrow window of 2 seconds, the delay needs to be revisited to measure (and to verify) the amount of time between the minimum import violation trigger and the generators being taken off-line.

Scope of Work

The investigations and verifications proposed herein require different levels of involvement from SCE. The power quality investigations and equipment specification reviews will require minimal involvement from SCE. However, the 2-Second Delay verification requires significant SCE involvement (which is difficult to predict), for this reason Biogas proposes to complete this work under two separate tasks.

Task 1: Power Quality Investigation and Determination of Equipment to Improve Conditions

Biogas will investigate the technical details associated with the power quality fluctuations. They will also analyze the specifications of existing VWVRA equipment and the equipment proposed by SCE to determine their abilities to improve power quality. Biogas will perform following activities under this proposal:

- Collect and analyze data from VWVRA's SCADA system related to power quality fluctuations;
- Collect and analyze power quality data from the existing SEL protective devices;
- Review the specifications of the Primus Batteries and Inverters;
- Review the specifications of the existing 2G generators;
- Request and review the design and specifications of the SCE proposed voltage regulator;
- Review SCE's electrical infrastructure as it relates to VWVRA;
- Gather power quality data as requested by SCE; and
- Attend one meetings with SCE to discuss the issue.

It is our understanding that this analysis has been performed by Biogas staff already, Biogas will present the findings and discuss the approach to implement the findings. We propose a lump sum cost of \$5,800 to complete this project billed on percent complete.

Task 2: Verification of actual 2-Second Delay on Minimum Import Violation Trips

It is our understanding that during the commissioning of the 1.6 MW engine generators, SCE

tested and verified that if and when the minimum import agreement is violated, the generators are taken off-line. We believe that during this commissioning, the actual time window (2 seconds limit) was not tested and we believe, the generators are potentially taken offline even before the completion of the 2 seconds limits (in other words instantaneously). Therefore, it is important to see how this delay is being implemented and test the delay settings. To verify a 2-second delay Biogas will complete the following tasks:

- Review the existing program for the trip relay settings;
- Ensure a 2 second delay is programmed into the settings or insert a 2 second delay;
- Provide a copy of the program to SCE for review and approval;
- Contract with a Third-Party relay testing firm to verify the relay functions, as required by SCE;
- Work with the Third-Party relay testing firm to create a timing mechanism on the relay test;
- Accompany the Third-Party during initial relay testing and assist with trouble-shooting if necessary;
- Coordinate relay testing field work with VWVRA Operational Staff;
- Provide initial relay test results to SCE and schedule second test for SCE to observe;
- Accompany SCE on Third-Party relay testing;
- Submit Third Party relay testing results to SCE for review; and
- Attend up to three meetings with SCE to perform work under this task and complete the testing.

Because the time required to engage and complete the work with SCE is unknown, we propose a budget of **\$18,000** to be billed at T&M.

Closing

We continue to enjoy working with VWVRA staff and we are grateful to VWVRA for providing us with another opportunity to assist you. Should you have any questions, please don't hesitate to contact me.

Sincerely,



Arnold Ramirez, PE
Project Manager
Cell: (909) 942-0751
BIOGAS ENGINEERING



Gautam Arora, PE
President
Cell: (909) 286-9900
BIOGAS ENGINEERING



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners

June 21, 2018

FROM: Chieko Keagy, Controller *CK*
TO: Logan Olds, General Manager
SUBJECT: Low Voltage Power and Failure of Standby Generators 1 and 2

RECOMMENDATION

Per Board direction in response to two low voltage power failure emergencies in May of 2017, which damaged standby generators 1 and 2, staff is bringing new expenses before the Board for ratification in the amount of \$27,350.18 that incurred during February and March of 2018.

REVIEW BY OTHERS

This recommendation was reviewed by Piero Dallarda, Legal Counsel.

BACKGROUND INFORMATION

Please review the attached invoices for the expenses incurred during February and March. The attachment also shows the expenses incurred to date, \$578,047.25. The repair work on the generator has been completed on March 12, 2018.

FINANCIAL IMPACT

Finance Approval:

Fund 01 or 07	
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	01-02-545-6010 and 01-02-80-6000 From FY 2018 budget
Transfer Needed due to Insufficient Budget	Y [] N [X]
If Transfer, from Which Account String or Reserve	
Budgeted Amount Where Money Comes from	\$ 0.00
Budget Remaining after the Recommendation	
Outside Funding Source if applicable	\$
Original Contract Amount	\$ 0.00
Change Order	Y [] N []
Contract after Change	\$578,047.25

Fund 09	
Accounting Code (String) example: 09-xx-xxx-xxxx (<u>mandatory</u> project code)	
Transfer Needed due to Insufficient Budget	Y [] N []
If Transfer, from Which Account String or Reserve	
Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	
Outside Funding Source	\$
Original Contract Amount	\$
Change Order	Y [] N []
Contract after Change	\$

RELATED IMPACTS

The staff will report progress toward resolving the damages caused by the low voltage power to equipment and ensure that backup power is available in the future if both standby generators are damaged.

E005 Emergency Expenses
As of 2/28/2018

Previous Expenses

Document Number	Document Date	Document Description	Posted Amount	ID	Fund	Account
05222017	5/22/17	Cal Card Charges May 2017	\$ 113.46	USBA000	01	8060
JE054217	6/1/17	Reclass BIGB000 587	\$ 720.00		01	6035
05222017	5/22/17	Cal Card Charges May 2017	\$ 246.72	USBA000	01	8060
17-0042	5/18/17	Emergency Labor for Backwash pumps/Gen hookup	\$ 617.52	DAVI003	01	6035
17-0043	5/18/17	Emergency Labor for Backwash pumps/Gen hookup	\$ 1,075.33	DAVI003	01	6035
05222017	5/22/17	Cal Card Charges May 2017	\$ 162.69	USBA000	01	8060
M00963	5/18/17	Troubleshoot Generator not Producing Volage	\$ 7,776.55	VALL002	07	6000
108799	5/25/17	Emergency Service Call	\$ 5,655.69	TRIM000	01	6035
JE053417	5/31/17	Reclass PACI004 I413398 and I413400	\$ 1,981.96		01	7350
58225	5/24/17	Lucky Chaney	\$ 1,129.44	MORR000	01	6035
589	5/30/17	Emergency Labor	\$ 720.00	BIGB000	01	6035
3005139-0001	6/2/17	Generator 1000KW	\$ 4,457.60	JOHN009	07	6000
JE070217	7/12/17	Reclass JOHNO09 3005139-0001	\$ 14,181.25		01	6000
JE063417	6/28/17	Reclass VALL002 B38543	\$ 48,378.54		01	6000
6441-538695	6/13/17	VFD Board for Sludge Lagoon Transfer Pump	\$ 3,384.60	ROYA000	01	6015
B38493	5/4/17	Troubleshoot Generator Failure	\$ 2,163.44	VALL002	07	6010
JE061817	6/22/17	Reclass ROYA000 6441-538695	\$ 257.91		01	6015
CI0011822	6/22/17	Emergency Parts	\$ 1,902.03	DRAK000	01	6035
JE061917	6/22/17	Reclass PACI004 I413399	\$ 6,660.03		01	7350
S-7483	6/28/17	Unstable Unit	\$ 2,515.15	ABAC000	07	6010
0039942-IN	7/11/17	Generator Docking Station	\$ 17,538.07	ESLP000	07	6000
3005139-0002	6/30/17	Emergency Generator	\$ 11,181.25	JOHN009	07	6000
501302763	6/30/17	Emergency Service Commission	\$ 20,950.00	GEIN001	01	6035
JE064817	6/30/17	Reclass VALL002 B38493	\$ 10,367.50		01	6000
501330500	7/25/17	Main Switchboard Modifications	\$ 75,490.90	GEIN002	01	6000
205767	8/30/17	Emergency Service Used Gen BKR & Troubleshooting	\$ 28,739.08	GEIN002	01	6010
695	8/10/17	Otoe Pump Station Door Switch Failure	\$ 760.00	BIGB000	01	6035
B38953	8/23/17	Emergency Gen Service	\$ 2,850.00	VALL002	01	6010
E7002401	7/27/17	Generator Rental	\$ 12,592.45	QUIN002	07	6000
E7002402	8/24/17	Emergency Generator Rental	\$ 12,592.45	QUIN002	07	6000
M01173	7/29/17	Generator 1 Testing	\$ 11,320.25	VALL002	07	6010
E7002403	9/21/17	E005 Emergency Generator Rental	\$ 12,592.45	QUIN002	07	6000
e7002404	10/19/17	Emergency Generator Rental	\$ 12,592.45	QUIN002	07	7265
501445789	10/30/17	PSG Startup Field Service	\$ 16,351.06	GEIN001	01	6035
17-0175	8/22/17	E005 Generator Termination Cabinet	\$ 109,087.00	DAVI003	01	6060 (42,762.00) 6035 (66,325.00)
E7002405	11/16/2017	E005 Emergency Generator Rental	\$ 12,592.45	QUIN002	07	7265
E7002406	12/14/2017	E005 Emergency Generator Rental	\$ 12,592.45	QUIN002	07	7265
E7002407	1/11/2018	E005 Emergency Generator Rental	\$ 12,592.45	QUIN002	07	7265
E700024	2/8/2018	E005 Emergency Generator Rental	\$ 12,592.45	QUIN002	07	7265
E7002409	3/8/20018	E005 Emergency Generator Rental	\$ 12,592.45	QUIN002	07	7265
E7002410	3/14/2018	E005 Emergency Generator Rental	\$ 800.00	QUIN002	07	7265
501628542	3/28/2018	Main Switchboard Modification	\$ 27,830.00	GEIN002	01	6000
			\$ 550,697.07			

New E005 Expenses

Document Number	Document Date	Document Description	Posted Amount	ID	Fund	Account
JE053618	5/14/2018	Reclass GEIN002 210812	\$ 27,350.18	GEIN002	01	6010
			\$ 27,350.18			

Total E005 Expenses to Date \$ 578,047.25



GE INTERNATIONAL INC
4200 WILDWOOD PKWY
ATLANTA GA 30339-8402

VWVRA
MAY 09 2018

ILL
O:



ACCOUNTS PAYABLE
VICTOR VALLEY WASTE WATER
RECLAMATION FACILITY
20111 SHAY RD
VICTORVILLE CA 92394-8539

BRANCH: 4200 Wildwood Pkwy,
Atlanta, GA 30339 US

ORIGINAL INVOICE		
INVOICE NUMBER	INVOICE DATE	PAGE
210812	02-MAY-18	1 of 1
DUE DATE	PAYMENT TERMS	
01-JUN-18	NET 30	
SEND PAYMENT SHOWING INVOICE NO. & INVOICE DATE TO:		
By Mail:	By Wire:	
GE INTERNATIONAL INC	DEUTSCHE BANK TRUST COMP	
P.O. BOX #281997	ACC# 50280397	
ATLANTA, GA 30384-1997	ABA# 021001033	
	NEW YORK, NY	
	Swift Code: BKTRUS33	
GE Tax ID# 13-1962940		
Seller VAT ID:		
Customer VAT ID:		
We now accept: Master Card, Visa and American Express.		
Call phone number listed below for processing		

SHIP TO:
VICTOR VALLEY WASTE WATER
RECLAMATION FACILITY
20111 SHEA ROAD
VICTORVILLE CA 92392

CURRENCY
USD

CUSTOMER ORDER NUMBER	GE REFERENCE NUMBER	GE CUSTOMER NUMBER	BILLING PERIOD
15558 <i>16225</i>	50269355	5302455	02-MAY-18

LINE	SVC DATE	PRODUCT/SERVICE PROVIDED	TAX/VAT%	QUANTITY	UOM	UNIT PRICE	EXTENDED AMOUNT
1	20-MAR-18	70139350-Purchased Labor/Onsite Field Engineering Services & materials; 2/5 thru 3/20/18 Work Description: Main Switch Board Breaker connector replacements	7.75	1	LT	25,383.00	25,383.00

RECEIVED
MAY 10 2018

BY: *[Signature]*
OK TO PAY FOR
Mauricio.

[Handwritten Signature]
Expense

APPROVED			
01	02-5456-16	9994	27,350.18

Signature and Stamp	TAX SUMMARY BY RATE				
	TAX NAME/RATE	NET AMOUNT	TAX/VAT%	TAX/VAT AMOUNT	TOT AMOUNT
	US SALES TAX	25,383.00	7.75	1,967.18	27,350.18
	TOTAL	25,383.00		1,967.18	27,350.18

State tax statutes require that a copy of tax-exempt certificates be maintained in our records, otherwise we must collect tax on sales invoiced. If applicable, please return a copy of your valid tax-exempt certificate to the following address, to ensure accurate invoicing:

General Electric, PO Box 2639, Lilburn, GA 30048-2639 Fax: (949) 252-7340

	UNIT TOTAL	TAX TOTAL	SHIP HNDL TOTAL	INVOICE TOTAL
For queries/concerns regarding this invoice or for credit card processing please contact us at.	25,383.00	1967.18	0.00	27,350.18



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners
 21 June 2018

FROM: Alton Anderson, Construction Manager *AA*

TO: Board of Commissioners

SUBJECT: Recommendation to approve Change Order #1 to Biogas Engineering for Micro-Grid CM Services that were beyond their scope in a net increase of \$9,360.00.

RECOMMENDATION

It is recommended that the Board of Commissioners authorize the approval of Change Order No. 1 in support of the Microgrid Project Installation in a net increase in the contract by the amount of \$9,360.00 for a contract total of \$151,480.00. There is no time impact in this Change Order. The proposal letter for this Change Order #1 is attached.

REVIEW BY OTHERS

This recommendation was reviewed by Logan Olds, General Manager and Chieko Keagy, Controller.

BACKGROUND INFORMATION

Construction management for the Microgrid Project was scoped to be handled by Alton Anderson, VVWRA Construction Manager. For personal reasons I was off work on an extended leave for over two months. During this time Biogas Engineering stepped in and continued to keep the project moving. The construction activities were completed and ready for the equipment installation when it is delivered. This work was clearly beyond the scope of the existing agreement. This included;

- Daily accounting of contractors and equipment on-site
- Coordination of Safety training
- Identify and negotiate construction change orders
- Review and approve contractor invoices
- Seek quotes for Primus Battery shipping
- Generate Daily reports with photographs

Biogas staff provided these services between February 8th and May 5th of this year. An hourly breakdown accompanies the change order request.

Staff recommends that the Board authorize the approval of Change Order No. 1 for the Microgrid Project Installation as contained in the attached proposal from Biogas Engineering, as dated June 12, 2018 in the the amount of \$9,360.00.

FINANCIAL IMPACT

Finance Approval:

Fund 01 or 07		Fund 09	
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	01-02-174-1760-C131	Accounting Code (String) example: 09-xx-xxx-xxxx (<u>mandatory</u> project code)	
Transfer Needed due to Insufficient Budget	Y[] N[]	Transfer Needed due to Insufficient Budget	Y[] N[]
If Transfer, from Which Account String or Reserve		If Transfer, from Which Account String or Reserve	
Budgeted Amount Where Money Comes from		Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation		Budget Remaining after the Recommendation	
Outside Funding Source if applicable	\$	Outside Funding Source	\$
Original Contract Amount	\$142,120.00	Original Contract Amount	\$
Change Order	Y[x] N[]	Change Order	Y[] N[]
Contract after Change	\$151,480.00	Contract after Change	\$

RELATED IMPACTS

Reliable and stable power at VVWRA.



June 12, 2018

Mr. Logan Olds
 General Manager
 Victor Valley Wastewater Reclamation Authority
 20111 Shay Rd.
 Victorville, CA 92394

Subject: Request for Change Order, PO-14959. Providing additional Construction Management Services to Victor Valley Wastewater Reclamation Authority (VWVRA) supporting the Microgrid Project Installation.

Dear Mr. Olds,

Biogas Engineering (Biogas) is requesting a change order to the existing purchase order PO#14959 to support the installation of the battery installation project as intended. Biogas expended a portion of the allocate budget covering the VWVRA construction manager who was out on leave. This resulted in Biogas staff spending additional time during construction performing tasks which were not initially anticipated as part of our scope. Biogas was pleased to support the project and VWVRA when our services were needed.

Provided below is the list of activities performed during construction which were not anticipated during the original proposal.

List of Activities Performed

- Daily accounting of contractors and equipment on-site;
- Coordination of Safety training for contractors;
- Identify and negotiate construction change orders;
- Review and approve of Contractors invoices;
- Seek quotes for Primus Battery shipping to the site; and
- Generate Daily reports with photographs for construction Progress.

Our staff provided between the dates of February 8th and May 5th, 2018. The cost to provide these services are illustrated on the attached spreadsheet. The hours to cover this work was 65 at a total cost of **\$9,360**. Because these costs have already been applied to the CEC budget, we propose to bill these hours on an hourly rate against the Purchase Order applied to this work.

VVWRA Microgrid Construction Management Change Order Request

We continue to enjoy working with VVWRA staff and we are grateful to VVWRA for providing us with another opportunity to assist you. Should you have any questions, please don't hesitate to contact me.

Sincerely,





Arnold Ramirez, PE
Project Manager
Cell: (909) 942-0751
BIOGAS ENGINEERING



Gautam Arora, PE
President
Cell: (909) 286-9900
BIOGAS ENGINEERING

Biogas Engineering

				
Construction Management and Project Support				
VVWRA Microgrid Project				
CEC EPC-15-079				
Date	Work Description	Hours	Hourly Rate	Daily Total
2/8/2018	Construction Management, Safety training Coordination	2	\$144.00	\$288.00
2/9/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/12/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/13/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/14/2018	Construction Management, Progress and Quality review	3	\$144.00	\$432.00
2/15/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/16/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/17/2018	Construction Management, Progress and Quality review	3	\$144.00	\$432.00
2/20/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/21/2018	Construction Management, Safety training Coordination	3	\$144.00	\$432.00
2/22/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/23/2018	Primus Shipping coordination and management	4	\$144.00	\$576.00
2/26/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/27/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
2/28/2018	Primus Shipping coordination and management	4	\$144.00	\$576.00
3/1/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
3/5/2018	Change Order negotiation	2	\$144.00	\$288.00
3/6/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
3/7/2018	Change Order negotiation	2	\$144.00	\$288.00
3/8/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
3/9/2018	Construction Management, Progress and Quality review	4	\$144.00	\$576.00
3/12/2018	Change Order summary to accounting for approval	4	\$144.00	\$576.00
3/13/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
3/27/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
3/28/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
5/2/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
5/3/2018	Constructoin Management, Construction Daily, Photograph	2	\$144.00	\$288.00
Total hours		65 TOTAL		\$9,360.00



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY

Report/Recommendation to the Board of Commissioners

21 June 2018

FROM: Logan Olds, General Manager *LO*

TO: Board of Commissioners

SUBJECT: Board Chair to Receive the Clean Water Advocate Award from NACWA

RECOMMENDATION

It is recommended that the Board of Commissioners authorize the Board Chairman to attend the National Association of Clean Water Agencies (NACWA) Utility Leadership Conference to receive the Clean Water Advocate award in Boston Massachusetts July 23-26, 2018.

REVIEW BY OTHERS

This recommendation was reviewed by Piero Dallarda, Legal Counsel and Chieko Keagy, Controller.

BACKGROUND INFORMATION

VWVRA was recently recognized by NACWA for its advocacy work on clean water issues. These include; Utility of the Future program, governance and peer to peer issues, regulatory reform initiative, and State Revolving Fund (SRF) streamlining efforts. This award is not applied for but is given by industry peers in recognition of a utilities efforts to further the goals of clean water at the state and national level.

Commissioner Rigney will be the incoming VWVRA Chairperson in July therefore this recommendation is to allow him to travel to the NACWA Utility Leadership Conference in Boston Massachusetts July 23-26, 2018 to attend the conference and receive the award on behalf of VWVRA.

FINANCIAL IMPACT

VWVRA routinely budgets five thousand dollars annually for Commissioners to attend educational programs associated with wastewater related topics. Staff anticipates that the expense would be approximately two thousand dollars.

Finance Approval:

Fund 01 or 07	
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	01-03-300-8080
Transfer Needed due to Insufficient Budget	Y[] N[X]
If Transfer, from Which Account String or Reserve	
Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	
Outside Funding Source if applicable	\$
Original Contract Amount	\$
Change Order	Y[] N[]
Contract after Change	\$

Fund 09	
Accounting Code (String) example: 09-xx-xxx-xxxx (<u>mandatory</u> project code)	
Transfer Needed due to Insufficient Budget	Y[] N[]
If Transfer, from Which Account String or Reserve	
Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	
Outside Funding Source	\$
Original Contract Amount	\$
Change Order	Y[] N[]
Contract after Change	\$

RELATED IMPACTS

Commissioner education on relevant technical, governance and regulatory issues associated with wastewater treatment.



1816 Jefferson Place NW
Washington DC 20036

T (202) 833-2672
F (888) 267-9505
www.nacwa.org

**EXECUTIVE
COMMITTEE**

PRESIDENT

David St. Pierre

Executive Director
Metropolitan Water
Reclamation District of
Greater Chicago
Chicago, IL

VICE PRESIDENT

Mark S. Sanchez

Executive Director
Albuquerque-Bernalillo
County Water
Utility Authority
Albuquerque, NM

TREASURER

John P. Sullivan, Jr.

Chief Engineer
Boston Water &
Sewer Commission
Boston, MA

SECRETARY

Terry Leeds

Director
KC Water
Kansas City, MO

**CHIEF EXECUTIVE
OFFICER**

Adam Krantz

June 4, 2018

Logan Olds
General Manager
Victor Valley Wastewater Reclamation Authority
20111 Shay RD
Victorville, CA 92394-8539

Dear Logan:

It gives us great pleasure to inform you that the Victor Valley Wastewater Reclamation Authority (VWVRA) has been selected to receive 2018 recognition as a *Clean Water Advocate*. NACWA's new Advocacy Recognition Program honors outstanding advocacy work undertaken by Member Agencies to further municipal clean water priorities.

VWVRA is being recognized for important work on numerous NACWA advocacy priorities, including your pioneering efforts as a Utility of the Future; engagement on governance and peer-to-peer issues; contributions to the Association's regulatory reform initiative and SRF streamlining efforts; and commitment to utility management issues. Under your leadership VWVRA has contributed significantly to achievement of our advocacy goals through NACWA committees and workgroups and engaging the national water sector during Water Week 2018.

As a *Clean Water Advocate* honoree, VWVRA will be recognized at an Awards Ceremony & Reception on Tuesday, July 24 during the NACWA's [2018 Utility Leadership Conference](#) in Boston, Massachusetts. We have included additional information and a response form for you to confirm your attendance.

We look forward to recognizing VWVRA for your advocacy on behalf of the clean water community. Congratulations on this prestigious honor.

Sincerely,

Edward G. Henifin
Chair, NACWA Awards Committee
General Manager
Hampton Roads Sanitation District, VA

Adam Krantz
Chief Executive Officer
NACWA

Enclosures



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
 Report/Recommendation to the Board of Commissioners

June 21, 2018

FROM: Chieko Keagy, Controller *CK*
TO: Logan Olds, General Manager
SUBJECT: Recommendation to Approve Resolution 2018-03: Adopt Budget for the Year Ending June 30, 2019

RECOMMENDATION

It is recommended that the Board of Commissioners approve Resolution 2018-03: Adoption of the Proposed Budget as presented for the year ending June 30, 2019.

REVIEW BY OTHERS

This recommendation has been reviewed by Piero Dallarda, Legal Counsel.

BACKGROUND INFORMATION

Staff prepared the fiscal year 2019 budget based on input from each department. This budget was presented and discussed by the External and Internal Finance Committees during meetings held on April 10, 2018 and May 2, 2018.

The following related documents are attached: "Operations & Capital Proposed Budget" and "Salary Schedule for the Year Ending June 30, 2019".

FISCAL IMPACT

The proposed budget should lay guidelines for daily operations and capital improvement projects. The budgeted revenues and expenses for the fiscal year are:

Operations and Maintenance	Revenues	\$	14,627,900	
	Loan to Repairs & Replacements		(632,629)	
	Expenses		(14,692,958)	
	FEMA/Cal OES Retention		747,034	\$ 49,347
				<hr/>
Repairs and Replacements	Revenues - Loan from Capital		2,116,697	
	Revenues - Loan from Operations		632,629	
	Expenses		(2,749,326)	-
				<hr/>
Capital	Revenues		2,035,000	
	Loan to Repairs & Replacements		(2,116,697)	
	Expenses		(3,023,678)	
	FEMA/Cal OES Retention		3,105,375	-
				<hr/>
				<u>\$ 49,347</u>

RELATED IMPACTS

Depending on cash flow, we may need inter-fund loans.

RESOLUTION 2018-03

**A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE
VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
TO APPROVE AND ADOPT THE FISCAL YEAR 2018-2019 BUDGET**

WHEREAS, the General Manager submitted to the Board of Commissioners (“Commission”) of the Victor Valley Wastewater Reclamation Authority (“VWVRA”) a proposed budget for the period July 1, 2018, through June 30, 2019, otherwise known as Fiscal Year 2018-2019, and said proposed budget provides details of the proposed revenues, expenditures, and appropriations for VWVRA during Fiscal Year 2018-2019 (“Budget”);

WHEREAS, the Commission has duly reviewed and considered the proposed Fiscal Year 2018-2019 Budget with respect to the projected revenues and the proposed expenditures, projects, programs, annual surcharge rate adjustments, and related items accordingly;

WHEREAS, the Commission provided public notice of and held a public hearing on June 21, 2018, on the proposed Fiscal Year 2018-2019 Budget (“Public Hearing”);

WHEREAS, at the Public Hearing all public input on the Budget was received and considered by the Commission;

WHEREAS, the Commission believes that it is both appropriate and desirable to address CPI increases for employees at the same time that it considers adoption of the Authority’s Budget; and that is consistent with the MOU adopted by the Board with the Employees Association on December 8, 2016;

WHEREAS, the Commission also adopted Resolution 2000-17, which established policies and procedures to determine appropriate employee salaries and to ensure that salaries remain competitive, while retaining fiscal flexibility for the Authority;

WHEREAS, the Commission has determined that it is economically feasible and in the best interest of Authority to adjust employees’ salaries by the Consumer Price Index (CPI) as the Authority desires to select, train, and develop well-qualified employees to work for and represent the Authority, and that competitive wages and stability in the work force are both rewarding to the employees and in the best interest of the Authority;

WHEREAS, the Commission for the Authority (“Commission”) has carefully considered the steps necessary to establish appropriate salaries and insure the long-term success of the Authority.

NOW, THEREFORE, THE BOARD OF COMMISSIONERS OF THE VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The Budget for Fiscal Year 2018-2019 for the Victor Valley Wastewater Reclamation Authority, a copy of which is attached hereto as Exhibit "A", is hereby approved and adopted, and the amounts of the proposed expenditures are appropriated for the projects, programs, and expenditures specified therein and as currently proposed in the accompanying Capital Improvement Plan spreadsheets, which are subject to future revision by the Board, and;

Section 2. The Commission has determined that it is economically feasible and in the best interest of the Authority to adjust employee salary ranges by the annual Consumer Price Index (CPI). The CPI utilized for this purpose is the annual average for All Urban Consumers for the Los Angeles-Riverside-Orange County (Riverside-San Bernardino-Ontario) area, as published by the Bureau of Labor Statistics, for the 12-month period ending March 31, 2018. The CPI percent change for the year ending March 31, 2018 is 3.8 percent. Per the MOU with the Employees Association the CPI is 2.5%. The adjusted steps and ranges shall be as shown in the attached Exhibit "B".

Section 3. Adoption of Annual Increases. The effective date of salary range adjustments described herein shall be July 1, 2018

Section 4. Execution of Resolution. The Chair of the Commission shall sign this Resolution, and the Secretary of the Commission shall certify that this Resolution was duly and properly adopted by the Commission.

Section 5. Within fifteen (15) days after the adoption of this resolution, the General Manager shall cause a copy of this resolution and the attached budget to be delivered to every member entity of VVWRA.

ADOPTED AND APPROVED this 21st day of June, 2018

Larry Bird, Chair
VVWRA Board of Commissioners

ATTEST:

APPROVED AS TO FORM:

Scott Nassif, Secretary
VVWRA Board of Commissioners

Piero Dallarda of
Best Best & Krieger LLP, Counsel VVWRA

CERTIFICATION:

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Board of Commissioners held on June 21, 2018.

Kristi Casteel – Clerk of the Board

EXHIBIT A

Fiscal Year **2018 - 2019**

**Operations & Capital
Proposed Budget**

**Victor Valley Wastewater
Reclamation Authority**



Taking the Waste Out of Wastewater

Administration Office and Treatment Plant
20111 Shay Road
Victorville, CA 92394
(760) 246-8638
(760) 246-2898 Fax

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VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY

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Fiscal Year 2018-2019**

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Section I: Introduction and Overview

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Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Administrative Offices

20111 Shay Road, Victorville, CA 92394

Telephone: (760) 246-8638

Fax: (760) 948-9897

E-mail: mail@vwwra.com

Budget Summary and Message from General Manager

Overview – Revenues and Expenses



VWVRA Percolation Pond

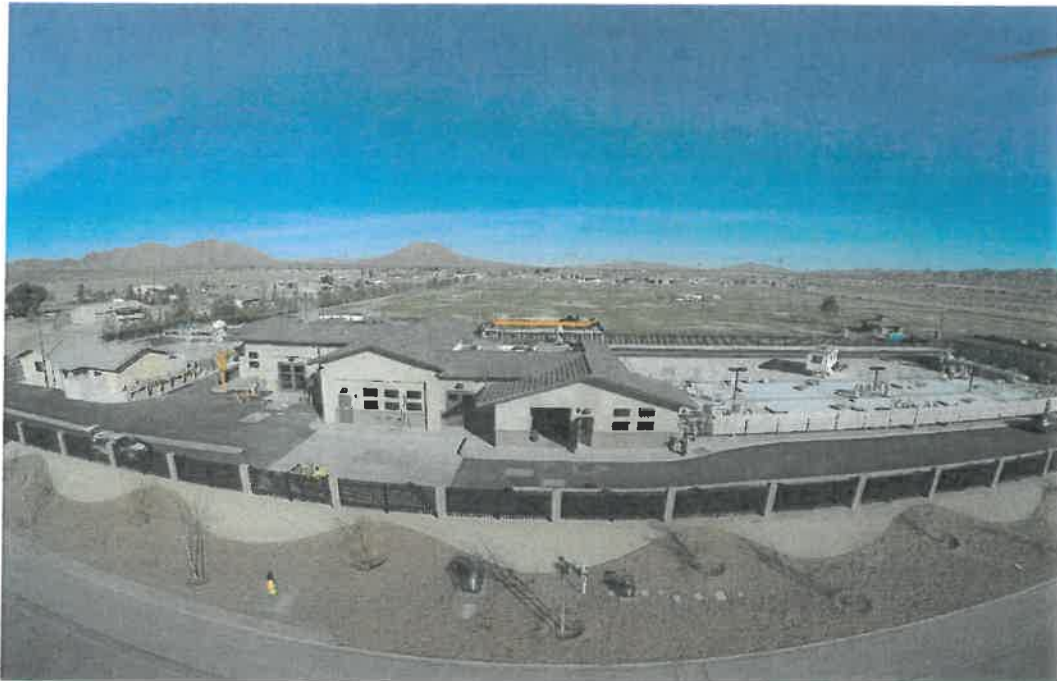
This document includes the budget information for the fiscal year ending June 30, 2019 (hereafter referred to as FY 2019) for Victor Valley Wastewater Reclamation Authority (VWVRA). We hope the table of contents and glossary will help you locate information.

VWVRA uses enterprise accounting to account for three divisions, (1) Operations and Maintenance Fund for daily activities, (2) Repairs and Replacements Fund for periodical repair and replacement work, and (3) Capital Fund for capital projects. VWVRA provides wastewater processing services to four member agencies; City of Victorville, Town of Apple Valley, City of Hesperia, and two areas of San Bernardino County Special Districts. Among the total operating revenue of \$15.4 million budgeted for FY 2019, \$13.7 million represents user fee revenue. We process wastewater, on the average, of 59% from City of Victorville, 17% from Town of Apple Valley, 18% from City of Hesperia and the remaining 6% from the two areas of San Bernardino County Special Districts. Other income includes septage processing fees; tipping fees for anaerobically digestible materials, fats,

oils, and grease; sludge flow; industrial pretreatment fees; and reclaimed water sales; and high strength surcharge fees. The new high strength surcharge rates for FY 2019 are shown at page 37. In addition, we estimated the connection fee revenue of \$2,000,000 for the construction of capital projects stated at page 34. We have estimated the connection fee revenues based on actual connections fees received during the year ended June 30, 2017 and projected connections fees for the year ending June 30, 2018.

The FY 2019 budget includes a one-time retention receipt of \$3.9 million from the Federal Emergency Management Agency (FEMA) and the California Governor's Office of Emergency Services (Cal OES) for the Upper Narrows Replacement and Emergency Projects that VWVRA did not receive during the year ending June 30, 2018. As we have completed the construction of Sub-regional Wastewater Reclamation Plants in the Town of Apple Valley and the City of Hesperia during April 2018, we do not anticipate any more grant revenues or loan proceeds during the year ending June 30, 2019.

Overview – Revenues and Expenses (Continued)



Apple Valley Wastewater Reclamation Plant

We have budgeted expenses of \$14.7 million for operations and maintenance, \$2.8 million for repairs and replacements, and \$3.0 million for capital projects. These expenses and expenditures exclude non-cash item, such as depreciation expense. With the total expense of \$20.5 million, we predict the total budgeted surplus for FY 2019 is \$49,347 under the assumption that we will not operate the two sub-regional plants during FY 2019. A balanced budget remains our challenge where the operating and capital revenues roughly equal the total expenses.

Capital Projects and their Expenditures

VVWRA has nearly completed its five-year capital improvement programs with some projects remaining during the FY 2019 to utilize cutting-edge technologies to continue providing quality wastewater treatment services to the service areas.

These projects, classified into three general categories: Wastewater Treatment, Interceptor, and Energy Efficiency, are listed in the *Capital Projects and Debts at Section V* on pages 43 through 51 with one or more funding sources: a grant from California Energy Commission; and repair and replacement cash reserve if available. These capital projects are listed in the order of priority, often overlapping several categories during the year.

Wastewater Treatment Plants:

Although we had predicted that the agency's entire wastewater capacity would increase with less hydraulic load on the Hesperia and Apple Valley interceptors while we continue providing quality wastewater treatment services for the community, we do not have a choice but postponing the operation

Capital Projects and their Expenditures (Continued)

of these plants due to insufficient operating fund. The plant in the City of Hesperia would provide reclaimed water to residential communities and commercial businesses along the I-15 corridor.



Hesperia Wastewater Reclamation Plant

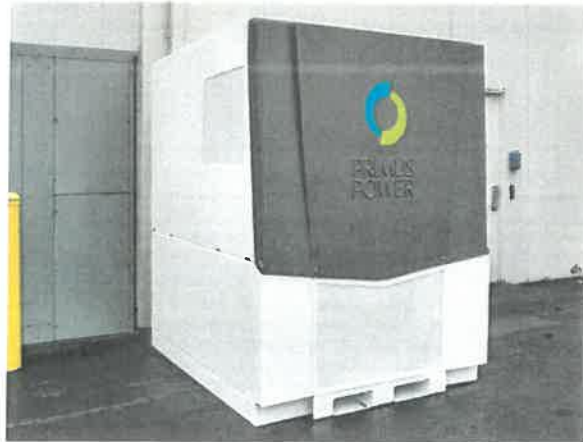
Another facility located in the Town of Apple Valley will provide reclaimed water to the town's public parks. In addition to the SRF loan, the Apple Valley plant construction costs are funded through Title 16 grant from Bureau of Reclamation, United States Department of the Interior, and grants by Propositions 1, 13, 50, and 84 of Department of Water Resources, State of California.

Interceptor Projects:

The gravity interceptors transport a majority of the wastewater from the surrounding cities in the service areas to VVWRA's wastewater treatment plant. While VVWRA continues to upgrade its treatment facilities to handle the increased flow, the agency has successfully increased its flow transportation capacity by completing the construction of these sub-regional plants and associated pipelines, and Nanticoke pipeline, in addition to the pipeline in the vicinity of the Upper Narrows of the Mojave River.

Energy Efficiency Projects:

As a result of the Phase III-A ultraviolet treatment project coming online, VVWRA has been experiencing major increases in power consumption. The agency is in process of implementing a series of energy efficiency projects in order to alleviate the high cost of power consumption. For example, VVWRA has completed pre-work for a micro-grid battery storage project during the year ending June 30, 2018. California Energy Commission has funded this project that can safe-guard the agency from unavoidably receiving low voltage electricity from Southern California Edison.



Primus Power Energy Pod 2

Environmental and Regulatory

The State Water Code authorizes VVWRA, the regional sewer service provider, to implement a regional reclaimed water permit program similar to the existing Industrial Pretreatment Program. Under this Master Permit, VVWRA can be responsible for permitting and monitoring reclaimed water users, expediting the more efficient permit process rather than relying on individual permits obtained through Lahontan Regional Water Quality Control Board.

Debts – State Revolving Fund (SRF) Loans

The agency has continuously attempted through numerous discussions with member agencies to obtain a solution for a loss of income due to the City of Victorville’s diversion (not sending) of its flow of 1.7 million gallons per day and further reduction of its connection fees to a current average monthly fees of \$75,000. Another factor affecting VVWRA’s cash flow is non-payment of the City of Hesperia that has been outstanding at approximately \$2.3 million. The solution that has not yet been reached among the member agencies should address cash flow issues to have a sufficient cash reserve to meet the SRF loan contractual reserve and repayment obligations.

As the flow diversion issue is still unsolved, the agency has not been able to conduct new financial planning to replace the most recent 2014 adopted financial plan that any longer reflects the cash flow projections made for the 2014 financial plan derailing the essential fee structure. The reduced income due to the flow diversion, much lower connection fee receipts from Victorville, and non-payments from Hesperia result in insufficient cash, forcing the agency not to operate the completed two sub-regional plants and not to meet the loan reserve requirements. Reflecting member agencies’ comments, our challenge includes a **balanced budget** where the collected fees sufficiently cover the operational expenses without relying on capital revenues, i.e. connection fees, which are exclusively earmarked for capital projects. This FY 2019 budget reflects such challenges the agency faces.

Although there are no applicable legal debt limits for VVWRA to adhere to, the agency is challenged with the loan contractual obligation of maintaining the annual debt service reserve for the SRF loans for the Hesperia and Apple Valley facility construction.

Debts – State Revolving Fund (SRF) Loans (Continued)

Under the circumstances, VVWRA has postponed the implementation of its vital and required several repair and replacement projects during the year ending June 30, 2018. Please see the proposed projects for the year ending June 30, 2019 on pages 47 and 48.

Long Term Financial Plans

The management of VVWRA seriously considers impacts of flow diversion by the City of Victorville and its 30 year notice of withdrawal from the joint venture in 2046 that Victorville announced on April 6, 2016. Under these circumstances, a new financial plan needs to be conducted and related cash flow assumptions should be revised drastically unless other measures are agreed to by the member agencies.

As the agency has not created a new five-year financial plan, this budget does not include a cash flow prediction and analysis over the next five years.

Conclusion

The significant financial issue for the year ending June 30, 2019 is first to find a means to supplement the loss of user fee and connection fee revenues and to solve the non-payment of fees. Second, we need to conduct financial planning with new projections based on the current situation to address the lack of growth in the service areas.

Logan Olds, General Manager



Victor Valley Wastewater Reclamation Authority
GFOA Distinguished Budget Presentation Award for the Fiscal Year Beginning July 1, 2017
Fiscal Year 2018-2019



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Victor Valley Wastewater Reclamation Authority
California**

For the Fiscal Year Beginning

July 1, 2017

Christopher P. Morill

Executive Director

Section II: Financial Structure, Policy and Process

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Victor Valley Wastewater Reclamation Authority

Governance

VVWRA is governed by a four-member Governing Board represented by an elected official of member agencies.

Board of Commissioners As of June 30, 2018



Larry Bird

Chair

City of
Hesperia



Jeffrey Rigney

Vice Chair

County of
San Bernardino



Scott Nassif

Secretary

Town of Apple
Valley



James Kennedy, CPA

Treasurer

City of
Victorville

Prepared by

Logan Olds, General Manager
and Finance Department



**The mission of
Victor Valley Wastewater Reclamation Authority**

Is...

To cost-effectively provide professional, competent wastewater treatment, reclamation, recycling, and reuse,
To maintain the environment by providing clean effluent to the community,
To provide a service to our customers, and
To keep the public informed.

By...

Selecting quality employees,
Effectively communicating at all levels,
Providing effective training,
Encouraging participation in water and wastewater organizations,
Working together as a 'TEAM', and
Providing the budget for projects and personnel.

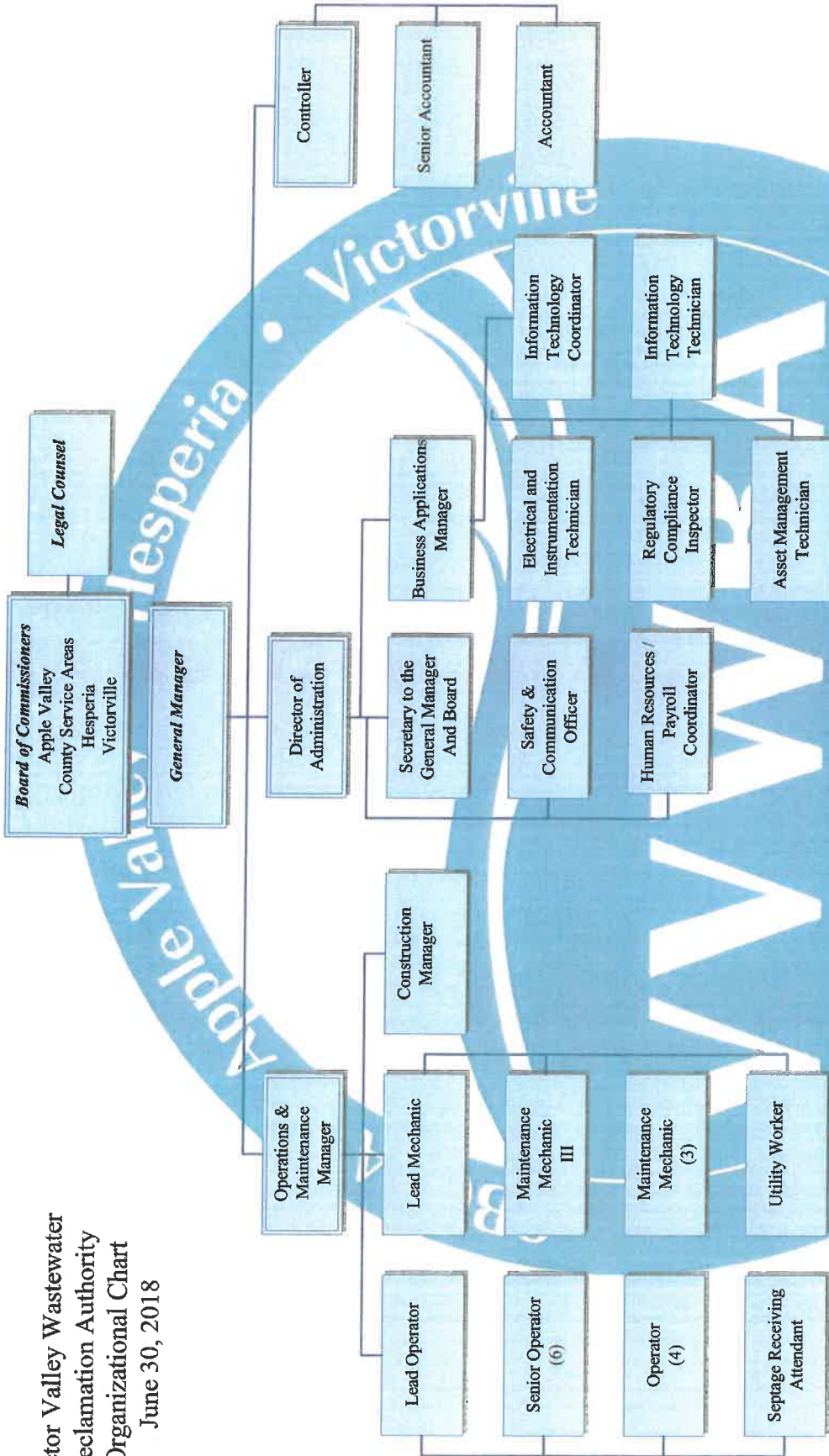
Motivated by...

Creating and maintaining a positive work environment,
Recognizing individual and group efforts, and
Providing competitive pay and benefits.

Measured by...

Meeting budgetary goals,
Meeting the standards for regulatory compliance,
The successful completion of projects,
Employee retention, and
A cooperative effort during emergencies.

Victor Valley Wastewater
Reclamation Authority
Organizational Chart
June 30, 2018



Victor Valley Wastewater Reclamation Authority
Our Organization
Fiscal Year 2018-2019

We are here to serve you.

The Board of Commissioners consists of four elected officials representing each member agency from the Town of Apple Valley, City of Hesperia, City of Victorville, and County of San Bernardino Two Service Areas.

The main function of Victor Valley Wastewater Reclamation Authority (VWVRA) is to receive wastewater from four member agencies and to process the wastewater then to discharge the cleaned water to the Mojave River. The VWVRA conducts its businesses based on an **Enterprise Accounting System** that is an accrual accounting system, similar to a regular business accounting method, by recording revenues and expenses as incurred instead of recognizing transactions when cash is received or paid. The enterprise accounting system is established based on three funds, (1) Operations and Maintenance Fund, (2) Repairs and Replacement Fund, and (3) Capital Fund. Please see how each department uses these funds as shown at the chart below. The Repairs and Replacement Fund is to show periodical repairs and replacement costs separately from normal operations and maintenance. Our main revenues are 'user fees' generated from processing (cleaning) wastewater that the member agencies send and connection fees charged to connect to the agency's system. The main distinction between the user fees and connection fees is that the user fees are associated with daily operations, while the connection fees are used for capital projects as new users will hook up to the system that may require further expansion of our infrastructure. In addition to operation expenses, we normally incur large sums of capital expenditures to improve and expand the infrastructure to fulfill member agencies' needs.



The main functions for each department are explained below.

- **Operations (OM – Fund 01 and 07)** adheres to State and Federal rules and regulations with no or minimum overflow incidences. The OM includes the operations, maintenance, and laboratory functions, which are to perform repairs and maintenance of equipment and to enforce regulatory compliance by testing samples utilizing a third party laboratory vendor.
- **Construction (Const – Fund 09)** meets the member agency's expansion needs within the limited budget with one staff.
- **Administration (Adm – Fund 01 and 07)** encompasses Environmental Compliance, Management Information System, Finance, and Human Resources with 12 staff.
 - Environmental Compliance and Management Information System (EC/MIS) enforces regulatory compliance including safety compliance and to maintain computer integrity.
 - Finance (Fin) compiles and publishes Comprehensive Annual Financial Reports and annual budgets. The agency maintains high accounting standards that are evidenced by consecutively winning GFOA awards.

Goals and objectives of each function

Here are goals and objectives of each function. See performance information at pages 22 through 27.

*The goal of **Operations** is to protect Victor Valley's environment and quality of life while creating reusable resources cost-effectively to the residents of the Victor Valley community. The Operations*

Victor Valley Wastewater Reclamation Authority
Our Organization
Fiscal Year 2018-2019

department provides effective and efficient advanced wastewater treatment, high-quality treated effluent that complies with 100% of all local, state and Federal requirements. Consistent with VVWRA's goals, the Operations' goal is summed up to improve water quality to protect the environment, wildlife and recreational uses of the waters from the nearby Mojave River and Downstream Mojave River Basin beneficial uses. The Operations department is staffed 24 hours a day 365 days per year by 14 highly trained wastewater treatment plant operators.

*The goal of **Construction** is to manage infrastructure construction projects to ensure that the scope of work is budgeted and completed to the appropriate quality standards in a safe manner to meet the member agencies' expansion and repair needs.*

*The goal of **Maintenance** is to provide a high level of cost effective services to all customers in the service areas and all sections of the agency. This cost effectiveness is accomplished based on preventive maintenance approaches resulting in control of wasteful maintenance and in the planning of all work activities. The maintenance department maintains the 300 plus acre wastewater treatment plant, in addition to two newly constructed reclamation plants with adjacent pump stations, vehicle fleet, portable auxiliary equipment, and 40 miles of sewer pipeline. The maintenance department consists of eight highly skilled craftsmen who are responsible for maintaining the agency's capital assets worth of 285 million dollars, working effectively and efficiently to comply with local, state and Federal requirements.*

*The goal of **Environmental Compliance and Management Information System (EC/MIS)** is to ensure that the agency is in compliance with all environmental laws, providing VVWRA with the latest technologies and support, educating the users and promoting the new technology as an integral component of VVWRA's vision. This effort includes implementation of computerized maintenance management systems that keep track of the maintenance inventory more efficiently. The EC department implements and enforces VVWRA's Industrial Pretreatment Program to prevent upset, interference, and pass-through at the wastewater treatment facility, to ensure beneficial reuse of plant effluents and bio-solids, to protect the structure and integrity of the sewerage collection system, to ensure the safety of personnel working in the system and to protect the health and safety of the public and environment. The EC/MIS department is staffed by skilled professionals, certified for Environmental Compliance Inspection, Collection System Maintenance, Industrial Pretreatment Plant Operation, Drinking Water Treatment and Drinking Water Distribution.*

The MIS department envisions an electronic network capable of distributing voice and data technology to all VVWRA staff. In this vision, VVWRA staff becomes users of the global information network with direct access to information and resources around the world. All of our effort is dedicated to provide the operations, maintenance, and administration personnel with electronic access to information and to enrich communication among them. To achieve our technological mission and materialize our vision, the staff is committed to employ all accessible and financially feasible technologies to support and educate all of our staff.

*The goal of **Finance** is to record approved revenues and expenses in a proper period based on the enterprise accounting and in compliance with the Commissioners-Approved budget and to create the Comprehensive Annual Financial Reports. In addition, its responsibilities include billing timely, collecting fees, establishing and monitoring internal control systems, preparing annual budgets and various financial reports, and administering general accounting including payroll. The Finance department has skilled professionals with certifications of certified public accountants.*

*The goal of **Administration** is to ensure a fair and equitable employment selection process, as well as to maintain, administer and implement VVWRA's policies and programs.*

**Victor Valley Wastewater Reclamation Authority
Budgeted Positions
Fiscal Year 2018- 2019**

Department	Position	2012 Budget	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	2018 Budget	2019 Budget
Administration									
Administrative	Director of Administrative Services	0	0	0	0	1	1	1	1
Administrative	General Manager	1	1	1	1	1	1	1	1
Administrative	Administrative Aide	1	1	1	1	1	1	0	0
Administrative	Management Technician to General Manager	0	0	0	0	0	0	0	0
Administrative	Secretary - GM/Board	1	1	1	1	1	1	1	1
Administrative	Administrative Assistant	0	0	0	0	0	0	0	0
Administrative	Public Information Officer	1	1	1	1	1	1	1	1
Finance	Director of Finance	1	1	1	1	0	1	1	0
Finance	Controller	0	0	0	0	0	0	0	1
Finance	Accounting Supervisor	1	1	1	1	1	1	1	0
Finance	Senior Accountant	0	0	0	0	0	0	0	1
Finance	Accountant I	1	1	1	1	1	1	1	1
Finance	Account Technician	1	1	1	1	1	1	1	0
Finance	Purchasing Technician	0	0	0	0	0	0	0	0
Finance	Fiscal Clerk	1	1	0	0	0	0	0	0
Human Resource	Human Resource Technician	1	1	1	1	1	1	1	1
Human Resource	Director of Human Resource	0	0	0	0	0	0	0	0
IT/Env Comp	IT Supervisor	1	1	1	1	1	0	0	0
IT/Env Comp	IS Coordinator	1	1	1	1	1	1	1	1
IT/Env Comp	IT Technician	0	0	0	0	0	1	0	1
IT/Env Comp	IT/Env Comp Supervisor	0	0	0	0	0	1	0	0
IT/Env Comp	Lead Environmental Compliance Inspector	0	1	1	1	1	0	0	0
IT/Env Comp	Environmental Compliance Safety Admin Aide	1	1	1	1	1	1	1	0
IT/Env Comp	Environmental Compliance Inspector-in-Training	1	1	1	1	1	0	0	0
IT/Env Comp	Environmental Compliance Inspector	0	0	0	0	0	1	1	1
IT/Env Comp	Environmental Compliance Supervisor	0	0	0	0	0	0	0	0
IT/Env Comp	EC/IT Supervisor	0	0	0	0	0	0	1	0
IT/Env Comp	Business Applications Manager	0	0	0	0	0	0	0	1
Safety	Environmental Health Safety/Risk Coordinator	0	0	0	0	0	0	0	0
		14	15	14	14	14	15	13	12
Operations									
Operations	Director of Operations	1	1	1	1	1	1	1	0
Operations	Operations/Maintenance Manager	0	0	0	0	0	0	0	1
Operations	Operations & Maintenance Supervisor	1	1	1	1	1	1	1	0
Operations	Lead Operator	1	1	1	1	1	1	1	1
Operations	Operator I	3	2	2	2	0	0	0	0
Operations	Operator II	0	0	0	0	0	0	0	0
Operations	Operator III	3	5	5	5	6	6	0	0
Operations	Operator IV	2	0	0	0	0	0	0	0
Operations	Operator V	0	1	1	1	0	0	0	0
Operations	Operator-in-Training	2	2	2	2	2	2	1	0
Operations	Operator	0	0	0	0	4	4	4	4
Operations	Senior Operator	0	0	0	0	0	0	5	6
Operations	Septage Receiving Attendant	0	0	0	0	1	1	1	1
Operations	O&M Clerk	0	0	1	1	1	1	0	0
Operations	Asset Management Technician	0	0	0	0	0	0	0	1
Lab/Env Comp	Lab & Environmental Compliance Supervisor	1	1	1	1	1	1	0	0
Lab/Env Comp	Lab Tech I	0	1	2	2	1	2	0	0
Lab/Env Comp	Lab Tech II	1	1	0	0	1	0	0	0
Lab/Env Comp	Lab Tech	0	0	0	0	0	0	0	0
		15	16	17	17	20	20	14	14
Maintenance									
Maintenance	Maintenance Supervisor	1	1	1	1	1	1	0	0
Maintenance	Electrical / Instrumentation Tech	3	3	2	2	2	1	0	0
Maintenance	Electrical / Instrumentation Tech II	0	0	0	0	0	1	0	0
Maintenance	Electrical / Instrumentation Tech II	0	0	0	0	0	0	0	1
Maintenance	Electrical / Instrumentation Tech IV	0	0	1	1	1	1	1	0
Maintenance	Maintenance Planner	1	1	1	1	1	1	0	0
Maintenance	Mechanical Tech I	1	1	1	1	1	1	0	1
Maintenance	Mechanical Tech III	0	2	2	2	2	2	0	1
Maintenance	Plant Maintenance Tech IV	3	0	0	0	0	0	0	0
Maintenance	Lead Mechanic	0	0	0	0	0	0	1	1
Maintenance	Maintenance Mechanic	0	0	0	0	0	0	1	0
Maintenance	Maintenance Mechanic in Training	1	1	1	1	3	3	3	3
Maintenance	Utility Worker I	0	0	0	0	0	0	0	0
Maintenance	Utility Worker II	1	1	1	1	1	1	1	1
		11	10	10	10	12	12	7	8
Construction									
Construction	Project Construction Manager	0	0	0	0	0	0	1	1
Construction	Construction & Energy Efficiency Manager	1	1	1	1	1	1	0	0
Construction	Construction Inspector	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1
Total Department		41	42	42	42	47	48	35	35

Notes: The FY 2016 and FY 2017 budget includes additional two positions each for two sub-regional plants and one for a septage

Operators	2	2
Maintenance in Training	2	2
Septage Receiving Attendant	1	1
	<u>5</u>	<u>5</u>

**Victor Valley Wastewater Reclamation Authority
Policies
Fiscal Year 2018-2019**

Reserve Policy

The Reserve Policy establishes fund reserve balances to maintain adequate cash reserves to comply with a debt coverage requirement for State Revolving Fund (SRF) loans from State Water Resources Control Board and to handle the possible emergency expenditures in future. The Reserve Policy consists of three types of reserves: Operations and Maintenance reserve, Repairs and Replacement reserve, and SRF loan reserve. The reserve balances are to be revised annually with adoption of the budget.

The Operations and Maintenance Reserve is funded by operating revenue and equals to 10% of the budgeted total operating expenses for the prior fiscal year. In addition, the Repairs and Replacement Reserve includes 1% of the sum of land improvements, buildings, and interceptors. The SRF loan reserve is funded by both operating and non-operating revenues in order to maintain a sufficient reserve to meet the agreement provision of maintaining one fiscal year's debt service payments.

The Operations and Maintenance Reserve is \$1.44 million and the Repairs and Replacement Reserve is \$2.06 million as of June 30, 2019. The SRF loan reserve for the year ending June 30, 2019 is \$5.39 million.

Procurement Policy

The Procurement Policy lays the guidance for internal controls for the purchases of goods, services and capital expenditures required by VVWRA within the established limits. The policy requires two signatures on a check and a wire transfer issued based on approved purchase orders.

Supervisors are each authorized to approve expenses up to a limit of \$5,000 on any one order or contract. The Construction Manager and the Department Directors are authorized to approve expenses up to a limit of \$10,000 on any one order or contract. The General Manager is authorized to approve expenses up to a limit of \$30,000 on any one order or contract. The VVWRA Board of Commissioners approves all expenses in excess of \$30,000, except for certain recurring expenses such as utilities, process chemicals, permit fees, and other expenses as defined in the policy, and must approve all construction contract change orders. Generally, the selection of purchases of materials, supplies, equipment and contractual services having an estimated value of more than \$2,000 should be considered based on a minimum of three quotes. Purchases of goods and services having an estimated value of more than \$30,000 should be made through a competitive sealed bid process defined in the policy.

Almost all of our construction contracts fall in this category. Such contracts are awarded through public bids.

Investment Policy

The Investment Policy provides guidelines for the prudent investment of VVWRA's temporary idle cash with the primary objectives of safety, liquidity and yield under provisions of the California Government Code Section 53600.3. Authorized investments include California State Treasurer's Local Agency Investment Fund (LAIF); Investment Trust of California; San Bernardino County

**Victor Valley Wastewater Reclamation Authority
Policies
Fiscal Year 2018-2019**

Investment Policy (Continued)

Local Agency Investment Fund; United States Treasury Bills, Notes and Bonds; insured Certificate of Deposits; and Money Market Mutual Funds.

The majority of VVWRA's investments is in LAIF and Cal TRUST.

Other Policies

Debt Coverage:

VVWRA maintains a cash reserve at least equal to the annual debt payment amount required by State Water Resources Control Board for the existing SRF loans specified as:

1. The financing agreement shall pledge the net revenue of the recipient for repayment of the proposed SRF financing agreement. This pledged revenue source shall be subject to lien and pledge as security for the obligation.
2. The recipient shall establish a restricted reserve fund, held in the recipient's fund, equal to one year's debt service prior to the construction completion date of the project. The reserve fund shall be maintained for the full term of the finance agreement and shall be subject to lien and pledge as security for the obligation.
3. The recipient shall establish rates and charges sufficient to generate net revenues of at least 1.10 times the total annual debt service.

The annual debt payment amounts for the year ending June 30, 2019 is \$4.10 million. As more SRF loans were added during FY 2015 for Upper Narrows Replacement, Nanticoke, and two Sub-regional projects; the annual due amount will be more than \$5.00 million during peak years. See pages 49 and 50 for the detail payment information. As a special district, VVWRA is not subject to legal debt limits.

Revenues – Rate Ordinance:

VVWRA specifies fees in Fee Ordinance to meet operation needs and most of reserve requirements. The fees, such as connection fees, user charges, high strength surcharges, and septage receiving fees are posted at http://www.vvwra.com/depts/finance/fee_schedule.htm and updated each year. The connection fees are designed to fund capital projects.

These connection and user fees were determined with several discussions with the member agencies to reflect ideas recommended by a five-year financial plan. Due to recent drastic decline in housing market in the high desert where we serve, the revenues from connection fees are not sufficient to support the capital projects. To supplement the funding of the capital projects, VVWRA has obtained federal and state grants in addition to the SRF loans.

Overhead Allocation to Project:

VVWRA records overhead expenses such as legal counsel, engineer consulting and audit fees as administration costs that are a part of the operation expenses. The personnel costs are also allocated among departments based on the hours the employees spend. See page 36 for the personnel allocation.

**Victor Valley Wastewater Reclamation Authority
Budget Preparation and Review Process
Fiscal Year 2018-2019**

Basis of Budgeting

Victor Valley Wastewater Reclamation Authority (VWVRA) employs a fiscal year beginning July 1. VWVRA prepares its annual budget based on an accrual accounting method (which recognizes revenues and expenses when they incur) excluding non-cash depreciation expense but including loan proceeds and the related repayments to present the fund inflows and outflows. We have included the reconciliation of FY 2017 actual to FY 2017 Comprehensive Annual Financial Report at page 23.

Balanced Budget

A balanced budget is when VWVRA's operating revenues are equal to or exceed its operating expenses. The FY 2019 budget shows the balanced budget with a surplus for its operations and capital funds.

Budget Process

VWVRA supervisory staff inputs budgetary estimates for the following year with their departmental goals^① in mind at the beginning of the budgetary process. Based on these input, the Accounting Supervisor prepares the draft budget. The senior management including the General Manager reviews the draft budget. The General Manager predicts capital project costs based on the member agency's needs. The Finance Department incorporates the data in to the draft budget.

The draft budget is presented to the External and Internal Financial Committees that consist of the member agencies for their close review. The revised draft budget is presented to the Financial Committees again to incorporate further recommendations in a proposed budget. After the revisions, the proposed budget is presented to the Board of Commissioners. Any additional comments are incorporated in to the proposed budget. Then the Financial Committee finalizes the recommendations and the Committee presents the budget to the public hearing and Board for approval.

VWVRA reviews and compares its performance to the budget at a mid-year point at around January. If any amendments are necessary, the finance staff revises the budget accordingly then present the revised budget to the Board for approval in February. The approved budgets are posted at VWVRA's website.

^① Please see pages 12 and 13 for the departmental goals.



the Mojave River

**Victor Valley Wastewater Reclamation Authority
Budget Preparation and Review Process
Fiscal Year 2018-2019**

The following budget calendar shows our preparation and review process timeline.

Budget Calendar

VVWRA Budget Planning FYE 06/30/2019		Required By Date
Budget Kickoff Meeting		02/05/18
Update actual numbers and prepare for new budget cycle.		02/05/18
Present the budget draft at Managers' meeting.		03/08/18
Present the first draft budget to General Manager (GM) for review.		03/15/18
Hold a preliminary staff budget review meeting with Supervisors and GM.		03/29/18
Provide the draft changes to Controller.		04/05/18
Present the budget executive summary to Internal Finance Committee.		04/12/18
Finalize the draft budget.		04/19/18
Present the budget recommendations to Internal and External Finance Committee.		04/26/18
Present the second recommendations to Internal and External Finance Committee.		05/03/18
Place a public notice on local newspaper to invite public participation.		05/23/18
Circulate the budget document to the Board.		05/10/18
Board Meeting - Present the budget.		05/17/18
Board budget hearing and adoption		06/21/18
The second Board budget hearing and adoption, if needed.		-
Apply for GFOA Award for Excellence in Budget Reporting.		06/28/18

Our budget activities are summarized as:

1. Initiate the budget.
2. Prepare a draft budget based on Supervisors' input.
3. Present the draft to Internal and External Finance Committee.
4. Publish a public hearing notice on local newspaper to invite public participation.
5. Present the budget to the Board of Commissioners.
6. Propose any budget amendments, if applicable, when we review the performance and budget at around January.

Section III: Goals and Performance

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**Victor Valley Wastewater Reclamation Authority
Goals, Objectives and Strategies
Fiscal Year 2018-2019**

Strategic Goals and Strategies to Benefit the Communities

The goal of Victor Valley Wastewater Reclamation Authority (VWVRA) is to provide sustainable and cost effective solutions to benefit the communities we serve. The VWVRA serves an arid region which has historically depleted its groundwater resources. For this reason, the processed wastewater is valued for projects, such as replenishing groundwater, protecting riparian habitat, and generating power plant cooling water. The energy stored in the organic matter delivered in the wastewater can be used to provide heat and power to operate the wastewater treatment plant. Finally, the organic residual resulting from the treatment process can be beneficially reused to amend soil quality and to provide energy to a local cement manufacture, reducing greenhouse gas emissions.

Long-Term Strategies to Pay Back SRF Loans for the Sub-Regional Projects

As the construction of Sub-regional plants are scheduled to complete at the end of December 2017, VWVRA's SRF loans for these projects will become due in December 2018 (one year after the completion of the construction of the project). The Board has discussed a long-term strategy to pay back these loans timely; the consensus indicates that proper rate adjustments of user fees and connection fees for the lost income from the City of Victorville are necessary. As these loan payments affect both funds, Operations (Fund 01) and Construction (Fund 09),¹ the rate consideration involves both user fees (for the Fund 01) and connection fees (for the Fund 09). Without such a remedy, VWVRA may not be able to operate the Sub-regional plants or risk not meeting debt service obligations.

Strategic Measures to Attain the Objectives

The VWVRA strives to accomplish objectives by pursuing four fundamental rules; these rules guide staff to evaluate the needs of the member agencies.

Rule #1: Treat the wastewater to the best means possible given the resources available.

VWVRA strives to optimize the wastewater treatment process, while utilizing the resources on hand in an efficient manner.

Rule #2: Obtain the resources to do #1.

VWVRA endeavors to establish reasonable rates, repair and maintain pipelines, and construct facilities to support Rule #1.

Rule #3: Manage liability.

It is every employee's responsibility to act professionally and be mindful of safety protocols to avoid potential liabilities.

¹ Please see page 12 for the descriptions of the funds.

**Victor Valley Wastewater Reclamation Authority
Goals, Objectives and Strategies
Fiscal Year 2018-2019**

Rule #4: Do not confuse governing authority with managerial authority.

The VVWRA Board determines the actions the agency takes. The General Manager implements those actions.

As the staff evaluates each issue by these rules, the staff can prioritize the tasks and focus his or her energy on projects to meet the goals and objectives of VVWRA.

Marketing Strategies

The VVWRA's strategic plan incorporates integrated financial planning, successful marketing of the programs it pursues, and partnerships with a private industry.

The two driving forces behind this agency's strategic plan are community growth and regulatory requirements that determine the amount of resources required to address issues. Additionally, the industry as a whole is changing with more focus on regional watershed-based decision making.

Through a series of capital projects, the VVWRA endeavors to achieve the goal of providing sustainable and cost effective solutions to the surrounding communities. Capital projects such as Westside Plant Phase III-A, Omnivore projects, and an energy storage project allow VVWRA to improve and to expand the infrastructure at its current regional treatment facility to meet new regulatory requirements as well as to expand the plant's treatment capacity.

To expand the operations outside of this Victorville facility, the VVWRA will further its quest for sustainability by constructing additional sewer lines and Sub-regional water reclamation plants in the Town of Apple Valley and the City of Hesperia. Further, a Nanticoke gravity sewer line, approximately 16,250 feet long of 30" PVC pipe, will eliminate the Nanticoke Pump Station, directly connecting to the existing Town of Apple Valley Otoe Pump Station. These Sub-regional plants would allow VVWRA to have sufficient wastewater flow to provide reclaimed water locally and reduce sewage in our over-capacity interceptors. These plants represent the first step in preparing for the people, business, and industry that would sustain regional growth; reducing the overall load on the collection system; and providing recycled water, the valuable and increasingly important resource in this arid region. Another benefit of locating the sub-regional plants farther up the watershed in the vicinity of residential areas will result in saving of the subsequent energy costs of pumping the recycled water back to the recycled water users.

Water is no longer viewed in simplistic terms of water and wastewater. There are now designer waters produced from recycled wastewater. The production of potable water can now include biological filtration. The public is more broadly aware of the direct injection of recycled water in to groundwater. The VVWRA's strategic planning incorporates the elements of sustainability, innovation, and successful marketing.

This concept is best exemplified in the publication building of a *wastewater utility brand*, which discusses how to transition from a traditional monopolistic public utility into an agency of creativity and foresight. Also given the fiscal constraints, it is important to consider opportunities to engage private partnerships and to diversify the revenue sources for the agency.

Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2018-2019

Operations Performance:

The following data shows the performance level during the last five years.

	2013	2014	2015	2016	2017
Removal Efficiency					
Biochemical Oxygen Demand	98.90%	98.90%	98.50%	99.00%	99.07%
Total Suspended Solids	99.40%	99.20%	99.40%	99.50%	99.45%
Ammonia Nitrogen	99.12%	98.60%	98.50%	99.20%	99.54%
Number of Active Basins					
Primary Treatment – Active Sedimentation Basins	6.00	6.00	6.00	6.00	6.00
Secondary Treatment – Active Aeration Basins	12.00	12.00	12.00	12.00	12.00
Wastewater Processed					
Percolation Ponds (MG)	2,341.36	2,303.45	1,613.97	1,889.44	1401.40
Tertiary Treatment (MG)	2,208.64	4,414.67	3,921.47	4,820.55	3,879.10
Average Influent (MGD)	12.41	12.01	10.72	10.49	10.63
Total Effluent (MG)	4,550.00	4,416.67	3,921.47	4,820.55	3,879.10
Miscellaneous Operations					
Septage Waste Received (MG)	2.83	5.35	6.54	6.82	7.07
Recycled Water Sold (MG)	29.52	284.20	214.66	160.78	54.8

Notes:

Removal Efficiency: Removal efficiency refers to the average removal of biochemical oxygen demand, total suspended solids and ammonia nitrogen in the overall treatment of wastewater.

Active Basins: VVWRA utilizes sedimentation basins for primary treatment and aeration basins for secondary treatment. From calendar year 2013 to 2017, the number of sedimentation basins has remained at six (out of existing eight basins) and the number of aeration basins has remained at twelve due to the sustained wastewater flow from the member agencies.

Wastewater Processing: VVWRA uses percolation ponds for disposal of secondary effluent which allow the water to slowly seep into the soil. Tertiary treatment is the final level of treatment before the treated wastewater is discharged into the Mojave River.

Miscellaneous Operations: VVWRA operates a septage receiving facility, where the local septage haulers may dispose their waste at the facility for a fee. Recycled water is provided to neighboring American Organics and the High Desert Power Plant for cooling water.

**Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2018-2019**

Operations Department:

The Operations Department continued to enhance injection of external feed stocks to anaerobic digesters. The 7,678,775 gallons of anaerobically digestible materials, such as food waste, fats, oil and grease were injected to the digesters, increasing the biogas productions by 262% to generate electrical energy. It also eliminated natural gas import for power production resulting in \$109,398 annual savings and annual revenue of \$307,151 from tipping fees.

Under private and public partnership with Anaergia, the department continues to operate two 2G biogas-powered heat and power generators (CHP) to provide a total of 6,033,249 kWh Renewable Energy during the reporting year, utilizing biogas from anaerobic digester, and making the facility 90% to 100% energy and carbon neutral (self-sustained). The facility CHP system produced electricity to power 585.5 homes for one-year based on US Energy Information Administration Statistics. In addition, 5.4 million British thermal unit (BTU) per hour heat, available from the exhaust was transferred to water that flows through the system heat exchangers to heat the anaerobic digesters eliminating the need for installation, operation and maintenance of external sources such as boilers.

Construction Department:

The following are the currently known construction projects for the coming year. Depending on cash flow and urgency needs some of the schedules may be modified.

Project Name	Project Status
1 Subregionals Projects, Apple Valley & Hesperia	Construction began February 2015. Notice of Completion was issued April 6, 2018. Staff is currently placing the facilities in operation
2 Laboratory Building Replacement Project	Project Canceled
3 Drying Beds Repair and Drainage	VVWRA Staff completing project. Beds 1, 2, and 3 are complete. Bed 4 will be completed this summer.
4 Nanticoke Pump Station Bypass Sewer	Project Completed.
5 Desert Knolls Wash, Apple Valley Interceptor Realignment	--\$1,000,000, Currently in design. Construction scheduled for November 2018 through May 2019
6 Apple Valley Odor Control	Study will follow the operation of the Apple Valley WRP and the Desert Knolls Wash Realignment.
7 North Hesperia Relief Interceptor	On hold until evaluation of impact from completed SubRegionals project
8 Spring Valley Lake Relief Interceptor	On hold until evaluation of impact from completed SubRegionals project
9 Ossum Wash Interceptor	\$650,000, on hold awaiting funding
10 Oro Grande Crossing of Mojave River	\$5,700,000, awaiting environmental approvals and funding

**Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2018-2019**

11	Shay Plant Storm Water Retention	\$150,000, Currently in design. Anticipate construction complete December 2018
12	Digesters 1 - 3 Rehabilitation	\$150,000, VVWRA staff working on having operational September 2018
13	Digesters 4 & 5 Structural Evaluation	\$200,000, Anticipate evaluation complete by November 2018
14	Digesters 4 & 5 Structural Repairs	Cost will depend on what is found in evaluation. Complete March 2019
15	O & M Building expansion	Anticipate consultant selection and design complete September 2018



Apple Valley Sub-regional



Hesperia Sub-regional

Regulatory Compliance and Information Systems Department:

Electrical and Instrumentation projects completed:

1. Otoe Pump Station new automation controls including, new PLC, New VFDs and a New pump
2. Installation of the wet well mixing solution at the Otoe Pump Station
3. Backwash Pump Station new automation controls
4. 5 Flowmeters totalizer installation and integration into SCADA
5. Completed overhaul of the standby generators at the regional plant
6. Installation of a backup system (Temporary Tap) that allows the regional plant to run on rented generator.

**Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2018-2019**

Information System Projects completed:

eLogger:

In FY 2018, we achieved a significant progress in the implementation of an electronic logbook solution “eLogger”. This program has helped us see the following benefits: eLogger went Live June 14th 2017. eLogger is used across these locations: Apple Valley Sub Regional, Hesperia Sub Regional, All interceptors & collection systems structures, Industrial Dischargers, Pump Stations, Regional Plant and FOG/Septic Haulers.

- 63 different logs are now tracked
- 15284 logs as of 6/6/18
- 33 Active users capture and use important information daily to make operational and regulatory decisions
- 132 different templates were created to make logs relevant and easy to use.
- 59 saved searches and reports

eLogger Highlights

1. Binders and spreadsheets in the control room are disappearing one at a time
2. Green logbooks are a thing of the past
3. eLogger is now being used daily by Operations, Maintenance, E&I, MIS and Pretreatment staff across all locations
4. Information is better organized and can be found faster, we are better informed and more knowledgeable
5. New employees learning curve has also improved
6. AQMD and Storm water regulatory compliance reports are better, faster and more accurate.
7. After a 5 months testing period On January 1st, 2018, all LOTO (Lock out /Tag out) Logs will become electronic
8. Operational meetings are more focused
9. During this process we come to recognize that capturing and preserving VVWRA’s staff knowledge about plant processes, systems, procedures and more -- is critical to our long-term operational success.

Regional Plant SCADA communication improvement project:

A new SCADA software solutions by Ignition Software by [Inductive Automation](#) implementation started in FY 2018 and will be completed FY 2019 .The new SCADA software offers the following features:

- **Web-Based Deployment:** Cross-platform software that will let us quickly launch our SCADA system to any computer or device equipped with a web browser.
- **Rapid Development:** Powerful and intuitive rapid development tools will allow us to spend less time developing and more time innovating.
- **Unlimited Licensing:** Everything we will need for one affordable price. We will use our existing server hardware and use unlimited number of clients, connections, tags and possibilities.
- **Security and Stability:** we will create a secure, reliable control system using modern security protocols and a unified architecture with built-in redundancy.
- **Easy Expandability:** A flexible modular architecture built upon modern IT standards designed to perfectly fit VVWRA’s needs.

**Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2018-2019**

Laboratory Department:

- Maintained accurate laboratory sampling and testing.
- In preparing for the Sub-regional plants becoming operational in the near future, sampling and testing of groundwater monitoring wells were initiated for four consecutive months starting in February 2015. Groundwater quality data generated from this baseline study will help determine future testing requirements.

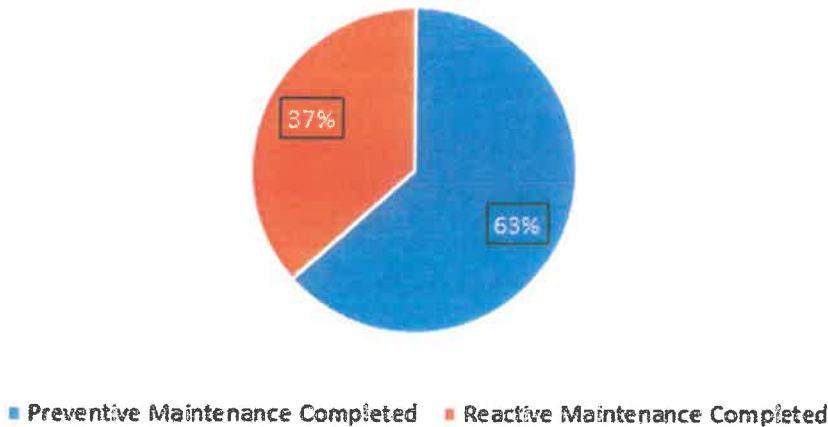
The Laboratory/Environmental Compliance groups continued in their efforts to streamline the evaluation process of compliance of industrial permits by adapting existing software reporting features to include analytical data and specific permit requirements.

Maintenance Department:

Preventive maintenance: Planned maintenance, also referred to as scheduled maintenance, is a proactive strategy where maintenance and inspections of assets (i.e. plant and equipment) are scheduled at regular intervals to ensure that equipment is operating correctly so as to minimize breakdown and downtime levels.

Reactive maintenance: Often referred to as breakdown maintenance or corrective maintenance, is very much a reactive strategy where repairs are performed at the point when equipment fails. This maintenance results in unplanned downtime and damaged equipment.

Assets Management Trend 2015-2018



**Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2018-2019**

1. Septage Receiving station consumables	\$35,134.12 - complete
2. 2G CHP #1, service and replacements	\$149,717.02 - complete
Parts	
3. Waukesha #5 VGF Crankshaft replacement	\$39,650.75 - complete
4. 5000 gallon ferric tank	\$39,271.81 - complete
5. AVPS Pump #2 installation	\$20,150.00 - complete
6. AVPS pump replacement parts	\$11,066.47 - complete
7. DAFT #3 thicken primary sludge pump	\$19,123.00-complete
8. Quarterly Calibrations 3rd Party	\$15,000.00 - complete
9. UV Wiper Replacements	\$28,280.00 - complete
10. Tire Replacements, smog's & Repairs	\$27,740.00 - complete
Fleet	
11. A/C Repairs and Service	\$44,093.72 - complete
12. Gas Scrubber Media Change-out	\$91,000.00- complete
13. Plumbing valves, piping, fittings	\$18,392.23 - complete
14. Waukesha Engine	\$47,76.23 - complete
Repairs/Maintenance	
15. Vector truck repairs.	\$13,539.77.48 - complete
16. Off highway equipment	\$71,874.46 - complete
17. Digester varec, grinders, blowers	\$17,225.09 - complete
18. Grounds maintenance	\$7,547.45 - complete
19. Primary Grit removal Parts	\$18,086.10 - complete

**Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2018-2019**

Finance Department:

The Finance Department has achieved its goal of presenting financial projections and results in an easy-to-understand format that has led VVWRA to win the Government Finance Officers Association awards. The awards won are:

1. Budgets: Distinguished Budget Presentation Award in the years beginning July 1, 2012 through 2017 and
2. Comprehensive Annual Financial Reports: Certificate of Achievement for Excellence in Financial Reporting for the years ended June 30, 2010 through 2017.

All the departmental goals and objectives are to pursue the agency's overall goal of serving the member agencies' needs, quantified as much as practically possible.

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Section IV: Financial Information and Trend Analyses

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Victor Valley Wastewater Reclamation Authority
Consolidated Budget Statement of All Funds
Fiscal Year 2018-2019

Our goals, objectives and strategies are transformed into numbers for the budgets with a projection for the rest of FY 2018. The consolidated budget on this page shows all functions of the entire organization. The next page 29 demonstrates a reconciliation of FY 2017 actual to CAFR for the year ended June 30, 2017. The budget on page 30 is for the Operations and Maintenance Fund, the budget on page 32 is for the Repairs and Replacements Fund, and the page 34 shows the budget for the Capital Fund.

	2017 Actual \$3,774/MG	2017 Budget \$3,774/MG	2018 Actual as of 4/30/2018	2018 Projected to the Year End	2018 Budget \$3,503/MG	2019 Budget \$3,503/MG
Operations & Maintenance Fund Revenues						
User Charges	\$ 12,549,674	\$ 12,768,600	\$ 9,302,637	\$ 11,163,165	\$ 13,661,700	\$ 13,661,700
Allocate Resource to Repairs and Replacements Fund	-	-	(247,500)	(247,500)	(247,500)	(2,749,326)
VVIWWTP Sludge	140,569	110,000	92,545	111,054	137,074	120,000
High Strength Waste Surcharges	29,585	20,000	15,561	18,673	25,000	20,000
ADM FOG Tipping Fee Revenue	234,160	-	257,549	309,059	205,000	200,000
Septage Receiving Facility Charges	649,362	500,000	511,586	613,903	609,000	550,000
Reclaimed Water Sales	30,870	60,000	13,999	16,799	44,000	25,000
Interest	128	-	815	978	-	-
Pretreatment Fees	52,282	45,000	46,700	56,000	51,200	50,000
Miscellaneous	25,676	1,100	9,250	11,100	1,250	1,200
Grant - Proposition 1	-	-	480,048	576,058	458,297	-
Grant - Water Recycling	-	-	260,092	312,110	246,466	-
	<u>\$ 13,712,306</u>	<u>\$ 13,504,700</u>	<u>\$ 10,743,282</u>	<u>\$ 12,941,439</u>	<u>\$ 15,191,487</u>	<u>\$ 11,878,574</u>
Other Operating Financing Sources						
SRF Loan Funding	\$ -	\$ -	\$ 2,178,283	\$ 3,037,733	\$ 1,684,303	\$ -
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2,178,283</u>	<u>\$ 3,037,733</u>	<u>\$ 1,684,303</u>	<u>\$ -</u>
Repairs and Replacements Fund Financing Sources						
Transferred from Operations & Maintenance Fund	\$ -	\$ -	\$ 247,500	\$ 247,500	\$ 247,500	\$ 2,749,326
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 247,500</u>	<u>\$ 247,500</u>	<u>\$ 247,500</u>	<u>\$ 2,749,326</u>
Capital Fund Revenues						
Connection Fees	\$ 2,951,667	\$ 700,000	\$ 1,254,472	\$ 1,435,246	\$ 878,900	\$ 2,000,000
Interest	37,759	10,000	64,928	77,914	38,000	35,000
Grant - FEMA/Cal-OES	978,765	4,503,400	-	-	3,105,375	3,105,375
Grant - Water Recycling	1,808,434	1,267,000	166,288	199,546	157,577	-
Grant - Proposition 1	3,844,476	3,500,000	306,916	368,299	293,010	-
Grant - Proposition 84	-	-	-	-	-	-
Grant - Title 16	-	-	-	-	-	-
Grant - CEC Microgrid	135,881	-	311,727	382,472	-	-
	<u>\$ 9,756,982</u>	<u>\$ 9,980,400</u>	<u>\$ 2,111,331</u>	<u>\$ 2,463,477</u>	<u>\$ 4,472,862</u>	<u>\$ 5,140,375</u>
Other Capital Financing Sources						
SRF Loan Funding	\$ 34,683,136	\$ 44,750,140	\$ 1,392,672	\$ 1,794,885	\$ 593,349	\$ -
	<u>\$ 34,683,136</u>	<u>\$ 44,750,140</u>	<u>\$ 1,392,672</u>	<u>\$ 1,794,885</u>	<u>\$ 593,349</u>	<u>\$ -</u>
Total Revenues and Other Financing Sources	\$ 58,152,424	\$ 68,235,240	\$ 16,673,068	\$ 20,485,034	\$ 22,189,501	\$ 19,768,275
Operations and Maintenance Fund Expenses						
Personnel and Benefits	\$ 4,080,926	\$ 4,967,711	\$ 3,055,944	\$ 3,667,134	\$ 4,086,603	\$ 4,080,784
Maintenance	1,349,023	1,833,784	1,540,592	1,848,710	2,919,360	2,194,767
Operations	2,432,028	3,190,930	2,203,408	2,644,090	3,066,985	3,151,072
Administration	2,816,124	2,057,832	1,465,996	1,759,194	2,270,884	2,183,749
Construction	119,582	-	4,336,283	4,391,921	2,389,065	-
	<u>\$ 10,797,683</u>	<u>\$ 12,050,257</u>	<u>\$ 12,602,223</u>	<u>\$ 14,311,049</u>	<u>\$ 14,732,897</u>	<u>\$ 11,610,372</u>
Emergency Expenses						
Maintenance	\$ -	\$ 67,000	\$ -	\$ -	\$ -	\$ -
Operations	-	83,000	-	-	-	-
FEMA Expenses	-	150,000	-	-	-	-
Expected FEMA/Cal-OES Grants	-	(915,474)	-	-	(747,034)	(747,034)
	<u>\$ -</u>	<u>\$ (765,474)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (747,034)</u>	<u>\$ (747,034)</u>
Repairs and Replacements Fund Expenses						
Personnel and Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance	656,509	808,200	49,966	59,959	242,500	1,204,326
Operations	-	20,700	101,540	121,848	-	25,000
Administration	-	-	-	-	5,000	150,000
Construction	33,660	-	7,950	9,540	-	1,370,000
	<u>\$ 690,169</u>	<u>\$ 828,900</u>	<u>\$ 159,456</u>	<u>\$ 191,347</u>	<u>\$ 247,500</u>	<u>\$ 2,749,326</u>
Capital Fund Expenses						
Personnel and Benefits	\$ 354,863	\$ 400,477	\$ 302,236	\$ 362,683	\$ 416,716	\$ 378,554
Maintenance	3,541	-	-	-	40,000	-
Operations	12,068	171	-	-	170	170
Administration	29,205	-	(2,054)	(2,465)	140,000	-
Construction	59,311	48,111,352	2,311,540	2,347,111	2,482,435	430,000
	<u>\$ 458,988</u>	<u>\$ 48,512,000</u>	<u>\$ 2,611,722</u>	<u>\$ 2,707,329</u>	<u>\$ 3,079,321</u>	<u>\$ 808,724</u>
Debt Services						
SRF Principal	\$ 2,555,733	\$ 1,825,710	\$ 1,185,125	\$ 2,056,359	\$ 2,056,359	\$ 4,097,480
SRF Interest	528,814	564,205	175,691	570,419	570,419	1,200,061
	<u>\$ 3,084,547</u>	<u>\$ 2,389,915</u>	<u>\$ 1,360,816</u>	<u>\$ 2,626,778</u>	<u>\$ 2,626,778</u>	<u>\$ 5,297,541</u>
Total Expenses and Debt Services	\$ 15,031,387	\$ 63,015,598	\$ 16,734,217	\$ 19,836,503	\$ 19,939,462	\$ 19,718,929
Total Agency Net Surplus or (Deficit)	\$ 43,121,037	\$ 5,219,642	\$ (61,149)	\$ 648,531	\$ 2,250,039	\$ 49,346

Note: Please see Allocations of Personnel Expenses at page 36 and Projected Cash Allocation Per Fund at page 47.

Victor Valley Wastewater Reclamation Authority
Reconciliation from Actual to CAFR for the Year Ended June 30, 2017
Fiscal Year 2018-2019

	2017 Actual on Page 28	Reconciliation to CAFR	2017 Per CAFR
Operating Revenues			
User Charges	\$ 12,549,674	\$ -	\$ 12,549,674
Adelanto User Charges	140,569	-	140,569
High Strength Waste Surcharges	29,585	-	29,585
Septage Receiving Facility Charges	649,362	-	649,362
ADM FOG Tipping Fee Revenue	234,160	-	234,160
Reclaimed Water Sales	30,870	-	30,870
Pretreatment Fees	52,282	-	52,282
Miscellaneous	25,676	-	25,676
	<u>\$ 13,712,178</u>	<u>\$ -</u>	<u>\$ 13,712,178</u>
Capital Revenues			
Connection Fees	\$ 2,951,667	\$ -	\$ 2,951,667
Interest	37,887	-	37,887
Grant - FEMA/Cal-OES	978,765	-	978,765
Grant - Water Recycling	1,808,434	-	1,808,434
Grant - Proposition 1	3,844,476	-	3,844,476
Grant - Proposition 84	-	-	-
Grant - CEC Microgrid	135,881	-	135,881
	<u>\$ 9,757,110</u>	<u>\$ -</u>	<u>\$ 9,757,110</u>
Other Financing Sources			
SRF Loan Funding	\$ 34,683,136	\$ (34,683,136)	\$ -
	<u>\$ 34,683,136</u>	<u>\$ (34,683,136)</u>	<u>\$ -</u>
Total Revenues and Other Financing Sources	<u>\$ 58,152,424</u>	<u>\$ (34,683,136)</u>	<u>\$ 23,469,288</u>
Operating Expenses			
Personnel and Benefits	\$ 4,080,926	\$ -	\$ 4,080,926
Maintenance	1,349,023	-	1,349,023
Operations	2,432,028	-	2,432,028
Administration	2,816,124	-	2,816,124
Construction	119,582	-	119,582
	<u>\$ 10,797,683</u>	<u>\$ -</u>	<u>\$ 10,797,683</u>
Emergency Expenses			
Maintenance	\$ -	\$ -	\$ -
Operations	-	-	-
FEMA Expenses	\$ -	\$ -	\$ -
Expected FEMA/Cal-OES Grants	-	-	-
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Depreciation Expense			
	\$ -	\$ 7,900,370	\$ 7,900,370
Repair and Replacement Expense			
Personnel and Benefits	\$ -	\$ -	\$ -
Maintenance	656,509	-	656,509
Operations	-	-	-
Administration	-	-	-
Construction	33,660	-	33,660
	<u>\$ 690,169</u>	<u>\$ -</u>	<u>\$ 690,169</u>
Capital Expenses			
Personnel and Benefits	\$ 354,863	\$ -	\$ 354,863
Maintenance	3,541	-	3,541
Operations	12,068	-	12,068
Administration	29,205	-	29,205
Construction	59,311	-	59,311
	<u>\$ 458,988</u>	<u>\$ -</u>	<u>\$ 458,988</u>
Debt Services			
SRF Principal	\$ 2,555,733	\$ (2,555,733)	\$ -
SRF Interest	528,814	-	528,814
	<u>\$ 3,084,547</u>	<u>\$ (2,555,733)</u>	<u>\$ 528,814</u>
Total Expenses with Debt Services	<u>\$ 15,031,387</u>	<u>\$ 5,344,637</u>	<u>\$ 20,376,024</u>
Total Net Surplus or (Deficit)	<u>\$ 43,121,037</u>	<u>\$ (40,027,773)</u>	<u>\$ 3,093,264</u>

Victor Valley Wastewater Reclamation Authority
Budget Statement of Operations and Maintenance Fund
Fiscal Year 2018-2019

	2017 Actual \$3,274/MG	2017 Budget \$3,274/MG	2018 Actual as of 4/30/2018	2018 Projected to the Year End	2018 Budget \$3,503/MG	2019 Budget \$3,503/MG
Revenues						
User Charges	\$ 12,549,674	\$ 12,768,600	\$ 9,302,637	\$ 11,163,165	\$ 13,661,700	\$ 13,661,700
Allocate Resource to Repairs and Replacements Fund	-	-	(247,500)	(247,500)	(247,500)	(2,749,326)
VVIWWTP Sludge	140,569	110,000	92,545	111,054	137,074	120,000
High Strength Waste Surcharges	29,585	20,000	15,561	18,673	25,000	20,000
ADM FOG Tipping Fee Revenue	234,160	-	257,549	309,059	205,000	200,000
Septage Receiving Facility Charges	649,362	500,000	511,586	613,903	609,000	550,000
Reclaimed Water Sales	30,870	60,000	13,999	16,799	44,000	25,000
Interest	128	-	815	978	-	-
Pretreatment Fees	52,282	45,000	46,700	56,040	51,200	50,000
Miscellaneous	25,676	1,100	9,250	11,100	1,250	1,200
Grant - Proposition 1	-	-	480,048	576,058	458,297	-
Grant - Water Recycling	-	-	260,092	312,110	246,466	-
	\$ 13,712,306	\$ 13,504,700	\$ 10,743,282	\$ 12,941,439	\$ 15,191,487	\$ 11,878,574
Other Financing Sources						
SRF Loan Funding	\$ -	\$ -	\$ 2,178,283	\$ 3,037,733	\$ 1,684,303	\$ -
	\$ -	\$ -	\$ 2,178,283	\$ 3,037,733	\$ 1,684,303	\$ -
Total Operating Revenues and Other Financing Sources	\$ 13,712,306	\$ 13,504,700	\$ 12,921,565	\$ 15,979,172	\$ 16,875,790	\$ 11,878,574
Expenses						
Personnel and Benefits	\$ 4,080,926	\$ 4,967,711	\$ 3,055,944	\$ 3,667,134	\$ 4,086,603	\$ 4,080,784
Maintenance	1,349,023	1,833,784	1,540,592	1,848,710	2,919,360	2,194,767
Operations	2,432,028	3,190,930	2,203,408	2,644,090	3,066,985	3,151,072
Administration	2,816,124	2,057,832	1,465,996	1,759,194	2,270,884	2,183,749
Construction	119,582	-	4,336,283	4,391,921	2,389,065	-
	\$ 10,797,683	\$ 12,050,257	\$ 12,602,223	\$ 14,311,049	\$ 14,732,897	\$ 11,610,372
Emergency Expenses						
Maintenance	\$ -	\$ 67,000	\$ -	\$ -	\$ -	\$ -
Operations	-	83,000	-	-	-	-
FEMA OPERATING EXPENSES	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
Expected FEMA/Cal-OES Grants	-	(915,474)	-	-	(747,034)	(747,034)
	\$ -	\$ (765,474)	\$ -	\$ -	\$ (747,034)	\$ (747,034)
Debt Services						
SRF Principal	\$ 1,427,774	\$ 697,751	\$ 204,050	\$ 857,475	\$ 857,475	\$ 2,094,805
SRF Interest	308,197	343,588	65,092	361,138	361,138	762,842
	\$ 1,735,971	\$ 1,041,339	\$ 269,142	\$ 1,218,613	\$ 1,218,613	\$ 2,857,647
Total Operations & Maintenance Expenses with Debt Services	\$ 12,533,654	\$ 12,326,122	\$ 12,871,365	\$ 15,529,662	\$ 15,204,476	\$ 13,720,985
Operations & Maintenance Net Surplus or (Deficit)	\$ 1,178,652	\$ 1,178,578	\$ 50,200	\$ 449,510	\$ 1,671,314	\$ (1,842,411)

⊕ Please see detailed expense information at page 31.

We have predicted 3,900 million gallons (MG) of wastewater inflows to process for the FY 2019 budget. The FY 2019 inflow quantity is multiplied by the rate of \$3,503 per MG. Please refer to page 36 for the personnel expenses allocated between Operations & Maintenance (O&M) and Capital Funds. The emergency projects was completed during the FY 2017. The expected FEMA and Cal OES Grant revenue \$747,034 is shown as a negative number to include the 10% retention that will be awarded at the completion of the projects. As for the State Revolving Fund (SRF) loan principal and interest payments for future years, please refer to pages 49 and 50 for the SRF loan payment schedule per maturities. The O&M Fund covers the Repairs and Replacements Fund expenses. See Budget Statement of Repairs and Replacement Fund at page 32.

Victor Valley Wastewater Reclamation Authority
Operations and Maintenance Fund – Expenses Other Than Emergency Expenses
Fiscal Year 2018-2019

	2017 Actual \$3,274/MG	2017 Budget \$3,274/MG	2018 Actual as of 4/30/2018	2018 Projected to the Year End	2018 Budget \$3,503/MG	2019 Budget \$3,503/MG
Personnel Expenses Allocations ①						
Allocation to Maintenance	\$ 1,064,589	\$ 1,267,716	\$ 738,799	\$ 886,561	\$ 970,585	\$ 1,151,161
Allocation to Operations	1,641,242	2,009,414	1,242,527	1,491,032	1,661,723	1,777,237
Allocation to Administrations	1,375,095	1,690,581	1,074,618	1,289,541	1,454,295	1,152,386
	<u>\$ 4,080,926</u>	<u>\$ 4,967,711</u>	<u>\$ 3,055,944</u>	<u>\$ 3,667,134</u>	<u>\$ 4,086,603</u>	<u>\$ 4,080,784</u>
Maintenance Expenses						
Maintenance Equipment	\$ 459,708	\$ 584,257	\$ 602,255	\$ 722,706	\$ 1,110,560	\$ 1,141,560
Instrumentation	343,654	354,377	410,197	492,236	648,000	318,169
Total Grounds Maintenance & Landscaping	347,294	372,050	246,779	296,135	724,400	358,900
Vehicle Repairs	69,964	149,600	196,764	236,117	251,400	241,638
Interceptor Sewer Maintenance	55,925	335,500	55,100	66,120	105,500	90,000
Maintenance Safety Equipment	9,311	38,000	13,341	16,009	38,000	3,000
Misc. Maintenance Expense	63,167	-	16,156	19,387	41,500	41,500
	<u>\$ 1,349,023</u>	<u>\$ 1,833,784</u>	<u>\$ 1,540,592</u>	<u>\$ 1,848,710</u>	<u>\$ 2,919,360</u>	<u>\$ 2,194,767</u>
Operations Expenses						
Process Chemicals	\$ 254,998	\$ 558,970	\$ 238,425	\$ 286,110	\$ 370,540	\$ 346,850
Utilities	1,378,463	1,326,423	1,227,618	1,473,142	1,557,423	1,528,431
Trash and Sludge	99,242	124,600	114,798	137,758	148,000	156,000
Fuel and Lubricants	64,752	138,500	76,205	91,446	159,000	110,000
Lab Supplies and Services	136,952	399,813	37,934	45,521	115,100	107,700
Outside Lab Services	284,073	351,650	308,022	369,626	450,500	461,500
Safety Equipment	81,507	95,474	42,277	50,732	66,422	169,291
Custodial Services and Supplies	35,946	52,000	29,709	35,651	45,500	51,500
Equipment Rental	31,190	44,000	59,609	71,531	55,000	120,300
Uniforms	23,706	21,000	18,427	22,112	21,000	11,000
Security	6,474	18,500	24,498	29,398	18,500	28,500
Permits	34,725	60,000	25,886	31,063	60,000	60,000
Misc. Operating Expense	-	-	-	-	-	-
	<u>\$ 2,432,028</u>	<u>\$ 3,190,930</u>	<u>\$ 2,203,408</u>	<u>\$ 2,644,090</u>	<u>\$ 3,066,985</u>	<u>\$ 3,151,072</u>
Administrations Expenses						
Telephone and Communications	\$ 216,311	\$ 277,220	\$ 140,587	\$ 168,704	\$ 278,220	\$ 297,500
Computer Supplies	99,135	92,252	76,096	91,315	77,000	60,000
Office Supplies	55,476	122,450	47,861	57,433	109,450	103,800
Travel, Meeting, Training	87,122	199,000	83,809	100,571	188,750	186,550
Employee and Community Events	15,612	26,200	12,707	15,248	28,700	25,000
Membership, Fees, Licenses	48,342	50,855	53,428	64,114	41,705	54,005
Professional Services	496,863	561,855	355,893	427,072	729,765	636,894
Legal Services and Fees	682,036	360,000	391,017	469,220	360,000	440,000
Temporary Labor	8,356	45,000	24,532	29,438	133,294	40,000
Bond & Liability Insurance	136,410	120,000	97,564	117,077	125,000	130,000
Finance Fees	510	-	452	542	-	-
Misc. Administration Expense	802,443	-	(55)	(66)	-	-
Permit Fees	167,508	203,000	182,105	218,526	199,000	210,000
Interest Accrual	-	-	-	-	-	-
Supplemental Environmental Project Payment	-	-	-	-	-	-
	<u>\$ 2,816,124</u>	<u>\$ 2,057,832</u>	<u>\$ 1,465,996</u>	<u>\$ 1,759,194</u>	<u>\$ 2,270,884</u>	<u>\$ 2,183,749</u>
Construction Expenses	\$ 119,582	\$ -	\$ 4,336,283	\$ 4,391,921	\$ 2,389,065	\$ -
Total Operations and Maintenance Fund Expenses Before Emergency	<u>\$ 10,797,683</u>	<u>\$ 12,050,257</u>	<u>\$ 12,602,223</u>	<u>\$ 14,311,049</u>	<u>\$ 14,732,897</u>	<u>\$ 11,610,372</u>

① Please see Allocations of Personnel Expenses at page 36.

Victor Valley Wastewater Reclamation Authority
Budget Statement of Repairs and Replacements Fund
Fiscal Year 2018-2019

	2017 Actual \$3,274/MG	2017 Budget \$3,274/MG	2018 Actual as of 4/30/2018	2018 Projected to the Year End	2018 Budget \$3,503/MG	2019 Budget \$3,503/MG
Repairs and Replacements Financing Sources						
Transferred from Operations & Maintenance Fund	\$ -	\$ -	\$ 247,500	\$ 247,500	\$ 247,500	\$ 2,749,326
	\$ -	\$ -	\$ 247,500	\$ 247,500	\$ 247,500	\$ 2,749,326
Expenses Ⓢ						
Personnel and Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance	656,509	808,200	49,966	59,959	242,500	1,204,326
Operations	-	20,700	101,540	121,848	-	25,000
Administration	-	-	-	-	5,000	150,000
Construction	33,660	-	7,950	9,540	-	1,370,000 Ⓢ
	\$ 690,169	\$ 828,900	\$ 159,456	\$ 191,347	\$ 247,500	\$ 2,749,326
Emergency Expenses						
Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operations	-	-	-	-	-	-
FEMA OPERATING EXPENSES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expected FEMA/Cal-EMA Grants	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Services						
SRF Principal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SRF Interest	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Repairs and Replacements Expenses with Debt Services	\$ 690,169	\$ 828,900	\$ 159,456	\$ 191,347	\$ 247,500	\$ 2,749,326
Repairs and Replacements Net Surplus or (Deficit)	\$ (690,169)	\$ (828,900)	\$ 88,044	\$ 56,153	\$ -	\$ -

Note: Repair & Replacement projects are:

Desert Knolls Wash Project	1,340,000
Oro Grande Interceptor	30,000
	<u>1,370,000</u> Ⓢ

This Repairs and Replacement (R&R) Fund has been a part of Operations and Maintenance (O&M) Fund in the past-year budget presentations. For FY 2017 thru FY 2019, we have presented the R&R Fund separately, as we strongly believe that such presentation better describes the normal operations and maintenance results without skewing them with periodical high repairs and replacement costs. With the predicted beginning fund and excess O&M revenues, we estimate the positive ending balance for the R&R fund.

Victor Valley Wastewater Reclamation Authority
Repairs and Replacements Fund Expenses
Fiscal Year 2018-2019

	2017 Actual \$3,274/MG	2017 Budget \$3,274/MG	2018 Actual as of 4/30/2018	2018 Projected to the Year End	2018 Budget \$3,503/MG	2019 Budget \$3,503/MG
Personnel Expenses Allocations						
Allocation to Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Allocation to Operations	-	-	-	-	-	-
Allocation to Administrations	-	-	-	-	-	-
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Maintenance Expenses						
Maintenance Equipment	\$ 450,252	\$ 476,000	\$ 25,374	\$ 30,449	\$ 153,000	\$ 353,000
Instrumentation	168,864	332,200	12,592	15,110	37,000	394,326
Total Grounds Maintenance & Landscaping	37,393	-	12,000	14,400	32,500	425,000
Vehicle Repairs	-	-	-	-	-	32,000
Interceptor Sewer Maintenance	-	-	-	-	-	-
Maintenance Safety Equipment	-	-	-	-	-	-
Misc. Maintenance Expense	-	-	-	-	20,000	-
	<u>\$ 656,509</u>	<u>\$ 808,200</u>	<u>\$ 49,966</u>	<u>\$ 59,959</u>	<u>\$ 242,500</u>	<u>\$ 1,204,326</u>
Operations Expenses						
Process Chemicals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities	-	-	-	-	-	-
Trash and Sludge	-	-	-	-	-	-
Fuel and Lubricants	-	-	-	-	-	-
Lab Supplies and Services	-	20,700	-	-	-	-
Outside Lab Services	-	-	-	-	-	-
Safety	-	-	-	-	-	25,000
Custodial Services and Supplies	-	-	-	-	-	-
Equipment Rental	-	-	101,540	121,848	-	-
Uniforms	-	-	-	-	-	-
Security	-	-	-	-	-	-
Permits	-	-	-	-	-	-
Misc. Operating Expense	-	-	-	-	-	-
	<u>\$ -</u>	<u>\$ 20,700</u>	<u>\$ 101,540</u>	<u>\$ 121,848</u>	<u>\$ -</u>	<u>\$ 25,000</u>
Administrations Expenses						
Telephone and Communications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Supplies	-	-	-	-	-	50,000
Office Supplies	-	-	-	-	5,000	-
Travel, Meeting, Training	-	-	-	-	-	-
Employee and Community Events	-	-	-	-	-	100,000
Membership, Fees, Licenses	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-
Legal Services and Fees	-	-	-	-	-	-
Temporary Labor	-	-	-	-	-	-
Bond & Liability Insurance	-	-	-	-	-	-
Finance Fees	-	-	-	-	-	-
Misc. Administration Expense	-	-	-	-	-	-
Permit Fees	-	-	-	-	-	-
Rent	-	-	-	-	-	-
Supplemental Environmental Project Payment	-	-	-	-	-	-
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 5,000</u>	<u>\$ 150,000</u>
Construction Expenses	\$ 33,660	\$ -	\$ 7,950	\$ 9,540	\$ -	\$ 1,370,000
Total Repairs and Replacements Fund Expenses	<u>\$ 690,169</u>	<u>\$ 828,900</u>	<u>\$ 159,456</u>	<u>\$ 191,347</u>	<u>\$ 247,500</u>	<u>\$ 2,749,326</u>

Victor Valley Wastewater Reclamation Authority
Budget Statement of Capital Fund
Fiscal Year 2018-2019

	2017 Actual \$4,000/EDU (1)	2017 Budget \$4,000/EDU (1)	2018 Actual as of 4/30/2018	2018 Projected to the Year End	2018 Budget \$4,000/EDU (1)	2019 Budget \$4,000/EDU (1)
Revenues						
Connection Fees	\$ 2,951,667	\$ 700,000	\$ 1,254,472	\$ 1,435,246	\$ 878,900	\$ 2,000,000
Interest	37,759	10,000	64,928	77,914	38,000	35,000
Grant - FEMA/Cal-EMA	978,765	4,503,400	-	-	3,105,375	3,105,375
Grant - Water Recycling	1,808,434	1,267,000	166,288	199,546	157,577	-
Grant - Proposition 1	3,844,476	3,500,000	306,916	368,299	293,010	-
Grant - Proposition 84	-	-	-	-	-	-
Grant - Title 16	-	-	-	-	-	-
Grant - CEC Microgrid	135,881	-	318,727	382,472	-	-
	<u>\$ 9,756,982</u>	<u>\$ 9,980,400</u>	<u>\$ 2,111,331</u>	<u>\$ 2,463,477</u>	<u>\$ 4,472,862</u>	<u>\$ 5,140,375</u>
Other Financing Sources						
SRF Loan Funding	\$ 34,683,136	\$ 44,750,140	\$ 1,392,672	\$ 1,794,885	\$ 593,349	\$ -
	<u>\$ 34,683,136</u>	<u>\$ 44,750,140</u>	<u>\$ 1,392,672</u>	<u>\$ 1,794,885</u>	<u>\$ 593,349</u>	<u>\$ -</u>
Total Capital Revenues and Other Financing Sources	<u>\$ 44,440,118</u>	<u>\$ 54,730,540</u>	<u>\$ 3,504,003</u>	<u>\$ 4,258,362</u>	<u>\$ 5,066,211</u>	<u>\$ 5,140,375</u>
Expenses						
Personnel and Benefits	\$ 354,863	\$ 400,477	\$ 302,236	\$ 362,683	\$ 416,716	\$ 378,554
Maintenance	3,541	-	-	-	40,000	-
Operations	12,068	171	-	-	170	170
Administration	29,205	-	(2,054)	(2,465)	140,000	-
Construction	59,311	48,111,352	2,311,540	2,347,111	2,482,435	430,000 (2)
	<u>\$ 458,988</u>	<u>\$ 48,512,000</u>	<u>\$ 2,611,722</u>	<u>\$ 2,707,329</u>	<u>\$ 3,079,321</u>	<u>\$ 808,724</u>
Debt Services						
SRF Principal	\$ 1,127,959	\$ 1,127,959	\$ 981,075	\$ 1,198,884	\$ 1,198,884	\$ 2,002,675
SRF Interest	220,617	220,617	110,599	209,281	209,281	437,219
	<u>\$ 1,348,576</u>	<u>\$ 1,348,576</u>	<u>\$ 1,091,674</u>	<u>\$ 1,408,165</u>	<u>\$ 1,408,165</u>	<u>\$ 2,439,894</u>
Total Capital Expenses with Debt Services	<u>\$ 1,807,564</u>	<u>\$ 49,860,576</u>	<u>\$ 3,703,396</u>	<u>\$ 4,115,494</u>	<u>\$ 4,487,486</u>	<u>\$ 3,248,618</u>
Capital Net Surplus or (Deficit)	<u>\$ 42,632,554</u>	<u>\$ 4,869,964</u>	<u>\$ (199,393)</u>	<u>\$ 142,868</u>	<u>\$ 578,725</u>	<u>\$ 1,891,757</u>

(1) EDU = Equivalent Dwelling Unit (245 gallons/day or 20 fixture units)

	FY 2019 O&M Fund	FY 2019 Capital Fund
Capital Projects		
Stormwater Pump Station	-	340,000
Miscellaneous Projects	-	90,000
Construction Total	<u>-</u>	<u>430,000</u> (2)

VVWRA has completed the construction of sub-regional water reclamation plants (sub-regionals) in the City of Hesperia and the Town of Apple Valley during FY 2018. The construction costs of these plants approximate \$40 million each. These projects are funded mostly by Clean Water State Revolving Fund (SRF) loans from the California State Water Resources Control Board (SWRCB) and the remaining by Title 16 Grant from the Federal Bureau of Reclamation, by Proposition One Water Quality, Supply, and Infrastructure Improvement Act of 2014 and Proposition 84 Round Two Integrated Regional Water Management Implementation Grant from the California State Department of Water Resources, and by Propositions 13 and 50 under Water Recycling Grant Program from the SWRCB. These SRF loan repayments for the sub-regionals would affect FY 2019 operation costs as the loan repayment process begins during the year. As the loan agreements require, VVWRA has set up a loan reserve to cover one-year payment of principal and interest for the sub-regional projects. In order to be in compliance, the member agencies have searched for the long-term solution how to repay the SRF loans for these projects. With the daily loss of 1.7 million gallons of wastewater flow from the City of Victorville that was a part of the flow revenue projected in our 2014 financial plan, the member agencies' consensus is to have a proper rate adjustment to either operate these two plants or pay back the loans as they become due. The FY 2019 budget is based on not-operating these sub-regional plants per the Finance Committee

**Victor Valley Wastewater Reclamation Authority
Budget Statement of Capital Fund
Fiscal Year 2016-2017**

recommendation. Until the agency can change the user fee rate, it will most likely face the challenge during FY 2019 when we may not have enough reserves as required for the sub-regional projects.

Please refer to pages 50 and 51 for the SRF loan payments that impact both Operations and Capital fund activities.

The long-range financial impact of these capital projects on the OM and Capital budget is significant, as the loan repayment of principal and interest will increase from \$2.6 million in FY 2018 to \$5.3 million in FY 2019 and still impact the years after during the loan terms. In order to maintain the required debt payment reserve level, VVWRA has raised the user charge and connection fee rates during FY 2015. Comparatively, the connection fee will remain from FY 2015 through FY 2018. The Board of Commissioners approved the rates below in FY 2014. In addition to the City of Victorville's diversion of flow to its own reclamation facility and not sending a portion of connection fees to VVWRA, another member agency, the City of Hesperia stopped paying its user and connection fees in protest to the Victorville's non-payment. It is uncertain now whether VVWRA could maintain this reserve level that could have enabled us to comply with the SWRCB's debt reserve revenue requirements. Although the user charge will be gradually increased by 9% per year from FY 2015 through 2017 and by 7% in FY 2018, the offsetting loss of revenues would likely lead us to financially unsustainable condition. Without user and connection fee revenues as predicted in the 2014 financial plan, these rates may not sustain to absorb the operations and maintenance costs at the water reclamation plants in future years. As the long-term financial plan was planned but not executed, the agency does not have financial plans as of the issuing date of this budget.

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
User Charge (\$/MG)	\$2,528.00	\$2,756.00	\$3,004.00	\$3,274.00	\$3,503.00	\$3,503.00
Connection Fee (\$/EDU)	\$3,750.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00

Victor Valley Wastewater Reclamation Authority
Allocations of Personnel Expenses
Fiscal Year 2018-2019

	2017 Actual \$3,274/MG	2017 Budget \$3,274/MG	2018 Actual as of 4/30/2018	2018 Projected to the Year End	2018 Budget \$3,503/MG	2019 Budget \$3,503/MG
Operations and Maintenance Salary Expenses						
Regular Salaries	\$ 2,923,703	\$ 3,442,789	\$ 2,276,970	\$ 2,732,364	\$ 2,850,355	\$ 2,884,301
Overtime	117,292	145,100	107,476	128,971	133,400	156,500
Call-Out Pay	61,367	49,800	47,158	56,590	66,120	66,120
Salaries Expense - Capital	(248,189)	-	(218,844)	(262,613)	-	-
	<u>\$ 2,854,173</u>	<u>\$ 3,637,689</u>	<u>\$ 2,212,760</u>	<u>\$ 2,655,312</u>	<u>\$ 3,049,875</u>	<u>\$ 3,106,921</u>
Operations and Maintenance Benefit Expenses						
Longevity	\$ 27,863	\$ 31,984	\$ 28,722	\$ 34,466	\$ 30,895	\$ 33,209
Vehicle Allowance	-	18,069	-	-	18,000	18,000
Sick Leave Buy Back	-	25,000	-	-	-	-
Medicare	43,471	50,134	34,481	41,377	41,504	42,083
Social Security Expense	(207)	-	657	788	-	-
PERS / Health Insurance	347,281	408,579	273,838	328,606	232,969	232,969
Dental / Vision Insurance	38,648	31,134	26,868	32,242	22,436	22,436
Workers Comp Insurance	111,481	105,376	1,788	2,146	87,133	88,291
PERS / Retirement	630,931	500,624	516,419	619,703	420,942	252,000
PERS / Retirement - GASB 68	-	-	-	-	-	-
PERS / Retirement-EUL	-	266,502	-	-	308,170	366,667
Life Insurance	12,976	18,344	10,472	12,566	15,168	15,370
Unemployment Insurance	16,171	15,134	15,339	18,407	10,948	10,948
Disability Insurance	18,059	24,265	11,806	14,167	20,064	20,331
Misc Personnel Expense	(204)	9,500	6,186	7,423	9,500	11,500
OPEB Expense	86,957	85,294	-	-	85,000	85,000
Benefits Expense - Capital	(106,674)	-	(83,392)	(100,070)	-	-
	<u>\$ 1,226,753</u>	<u>\$ 1,589,939</u>	<u>\$ 843,184</u>	<u>\$ 1,011,821</u>	<u>\$ 1,302,729</u>	<u>\$ 1,198,804</u>
Capital Salary and Benefits Expenses						
Salaries	\$ 248,189	\$ 118,512	\$ 218,844	\$ 262,613	\$ 127,607	\$ 129,872
Benefits	106,674	22,048	83,392	100,070	23,108	23,741
	<u>\$ 354,863</u>	<u>\$ 140,560</u>	<u>\$ 302,236</u>	<u>\$ 362,683</u>	<u>\$ 150,715</u>	<u>\$ 153,613</u>
Total Personnel Expenses	\$ 4,435,789	\$ 5,368,188	\$ 3,358,180	\$ 4,029,816	\$ 4,503,319	\$ 4,459,338
Allocations of Personnel Expenses						
<i>1. Allocations to Operations and Maintenance Fund</i>						
To Maintenance Department	\$ (1,064,589)	\$ (1,267,716)	\$ (738,799)	\$ (886,561)	\$ (970,585)	\$ (1,151,161)
To Operations Department	(1,641,242)	(2,009,414)	(1,242,527)	(1,491,032)	(1,661,723)	(1,777,237)
To Administration (other departments except Construction)	(1,375,095)	(1,690,581)	(1,074,618)	(1,289,541)	(1,454,295)	(1,152,386)
	<u>\$ (4,080,926)</u>	<u>\$ (4,967,711)</u>	<u>\$ (3,055,944)</u>	<u>\$ (3,667,134)</u>	<u>\$ (4,086,603)</u>	<u>\$ (4,080,784)</u>
<i>2. Allocation To Capital Fund</i>						
To Construction Department	\$ (354,863)	\$ (400,477)	\$ (302,236)	\$ (362,683)	\$ (416,716)	\$ (378,554)
Personnel Expenses After Allocations	\$ -	\$ -	\$ -	\$ (1)	\$ -	\$ -

**Victor Valley Wastewater Reclamation Authority
High Strength Surcharges
Fiscal Year 2018-2019**

This page shows high strength surcharge rates for FY 2019 and the calculation worksheet.

Worksheet

User Charges from Member Agencies	\$ 13,661,700
Unit User Charge per MG	\$3,503.00
Estimated Treatment Flow (MG)	3,900

	① Influent mg/l	Influent lbs/day	① Effluent mg/l	Effluent lbs/day	Removal lbs/day	Removal lbs/year	Percent of Cost	Removal Cost/lb	Unit Cost \$
BOD	402.66	35,882	3.68	328	35,554	12,977,223	35.0%	\$4,781,595	\$0.3685
TSS	427.25	38,073	2.20	196	37,877	13,825,176	25.0%	\$3,415,425	\$0.2470
NH3	30.60	2,727	0.14	12	2,714	990,742	30.0%	\$4,098,510	\$4.1368
Annual Flow - MG per Day									
3,900 MG / 365 days		10.68					10.0%	\$1,366,170	
							100.0%	\$13,661,700	

	BOD	TSS	NH3
	\$/lb	\$/lb	\$/lb
Surcharge Rates:	\$0.3685	\$0.2470	\$4.1368
Applied to Concentrations Above:	200 mg/l	250 mg/l	20 mg/l

FORMULAS

lbs/day = flow (mgd) x concentration
(mg/l) x weight of water (8.34 lbs/gal)

BOD

Influent (flow mgd) x (influent mg/l) x 8.34 lbs/gal = lbs/day
Effluent (flow mgd) x (effluent mg/l) x 8.34 lbs/gal = lbs/day

TSS

Influent (flow mgd) x (influent mg/l) x 8.34 lbs/gal = lbs/day
Effluent (flow mgd) x (effluent mg/l) x 8.34 lbs/gal = lbs/day

NH3

Influent (flow mgd) x (influent mg/l) x 8.34 lbs/gal = lbs/day
Effluent (flow mgd) x (effluent mg/l) x 8.34 lbs/gal = lbs/day

REMOVAL

Per day: Influent lb/day - Effluent lb/day = Removal lbs/day
Per year: Removal lb/day x 365 = Removal lb/year

REMOVAL COST

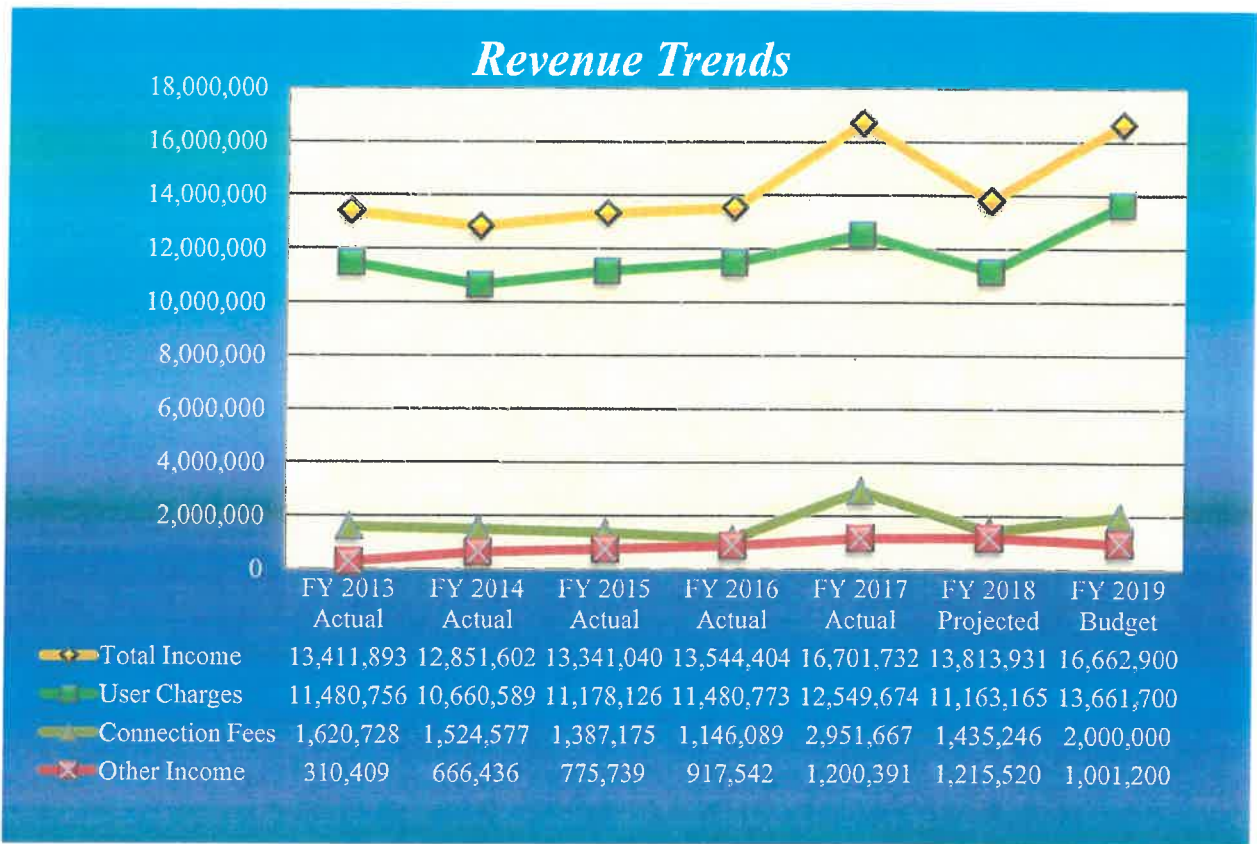
Per lb: Total user cost x 35% = Removal cost/lb
Per unit: Removal cost/lb / Removal lb/year

① From 2017 Annual Discharge Monitoring Report.

**Victor Valley Wastewater Reclamation Authority
Revenue Trend Analysis
Fiscal Year 2018-2019**

Revenue Analysis

Although Victor Valley Wastewater Reclamation Authority (VWVRA) has been recovering from the decreased operating revenues since FY 2013, the 6.5% user fee rate increase at the beginning of the FY 2018 cannot absorb the lost user fee revenue from the City of Victorville (Victorville). We have used connection fee revenue \$2.0 million for FY 2019 budget to maintain about the same level throughout the years since FY 2013. The Victorville’s 1.7 MGD reduction of wastewater flow and 66.67% decrease in Victorville’s connection fees further negatively affect the overall income from fewer new housing developments in the service areas. Although the overall income declines from FY 2017 to FY 2018, we predict the revenue trend would increase from \$13.8 million (projection) in FY 2018 to \$16.7 million in FY 2019 helped with other income, such as FOG/ADM and septage processing fee revenues.



Source: VWVRA FY = Fiscal Year ended June 30

The other income also includes high strength surcharges for high contents of certain chemical, reclaimed water sales from the processed water, industrial pretreatment permits charged to businesses, and interest income. Grants are excluded in this revenue analysis for the period from FY 2013 to FY 2019.

Due to an overall decrease of the net income in coming years, we have to solve urgently how to handle such a substantial decline of income as the decline of income will also affect net position.

Please refer to the glossary on page 62 for the term definitions.

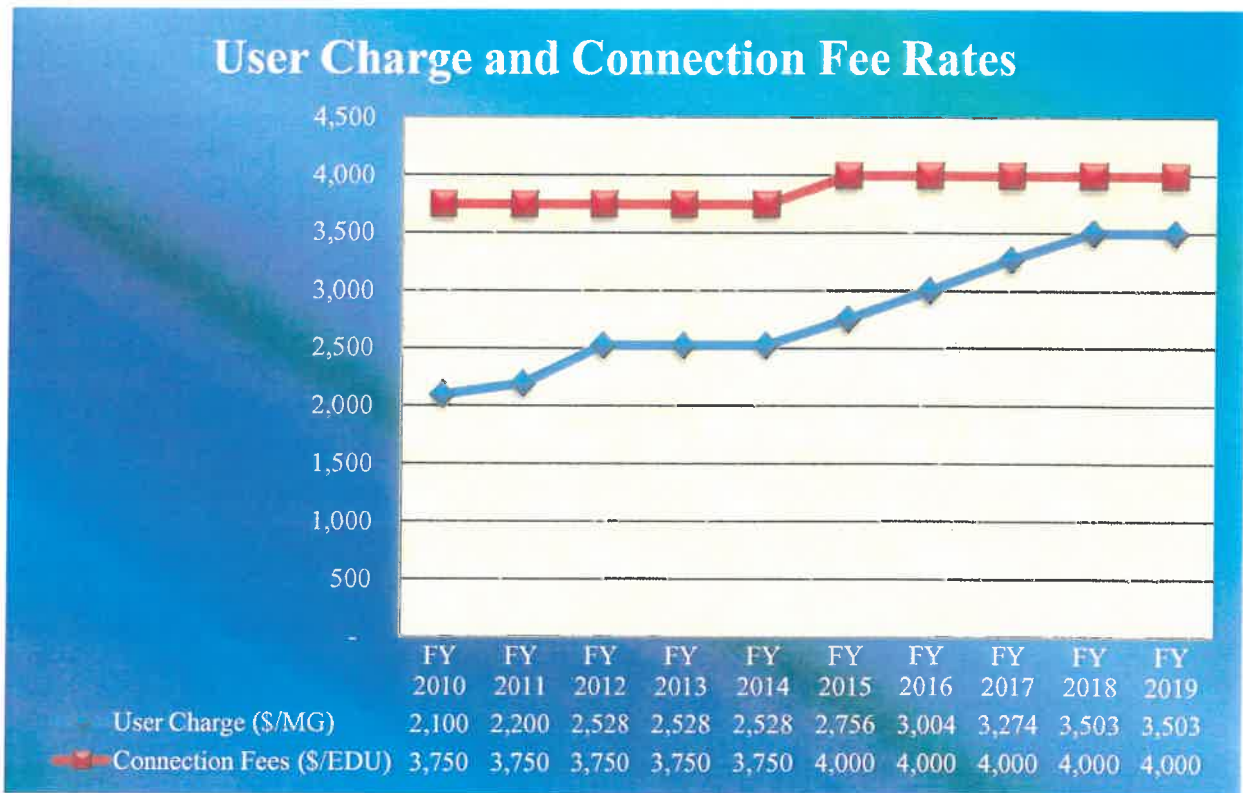
**Victor Valley Wastewater Reclamation Authority
Revenue Trend Analysis
Fiscal Year 2018-2019**

Revenue Analysis (Continued)

Both user charges and connection fees are determined multiplying quantity received by unit prices; multiplying the flow quantity of million gallons (MG) by the user fee rate (\$3,503/MG) for the user fee revenue and by multiplying the Equivalent Dwelling Unit (EDU) by the connection fee rate (\$4,000/EDU). The four member agencies determined these rates as incorporated in the revenue ordinances to absorb the operating and construction costs. The graph below shows rate changes up to FY 2019 based on the five-year financial plan.

The connection fees are calculated based on sewage quantity discharged by a single family home for a period of twenty-four hours. This single family home unit is referred to as one equivalent dwelling unit (EDU).

The Board of Commissioners reserves the right to change the rates of user fee and connection fee from time to time as necessary to fund its operations, maintenance, repairs, replacements, and expansion of the regional system.



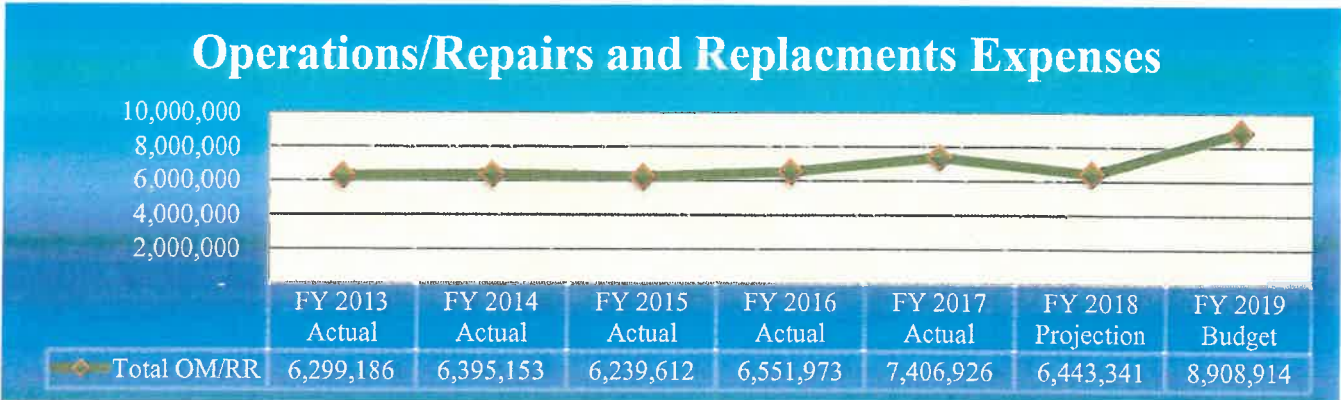
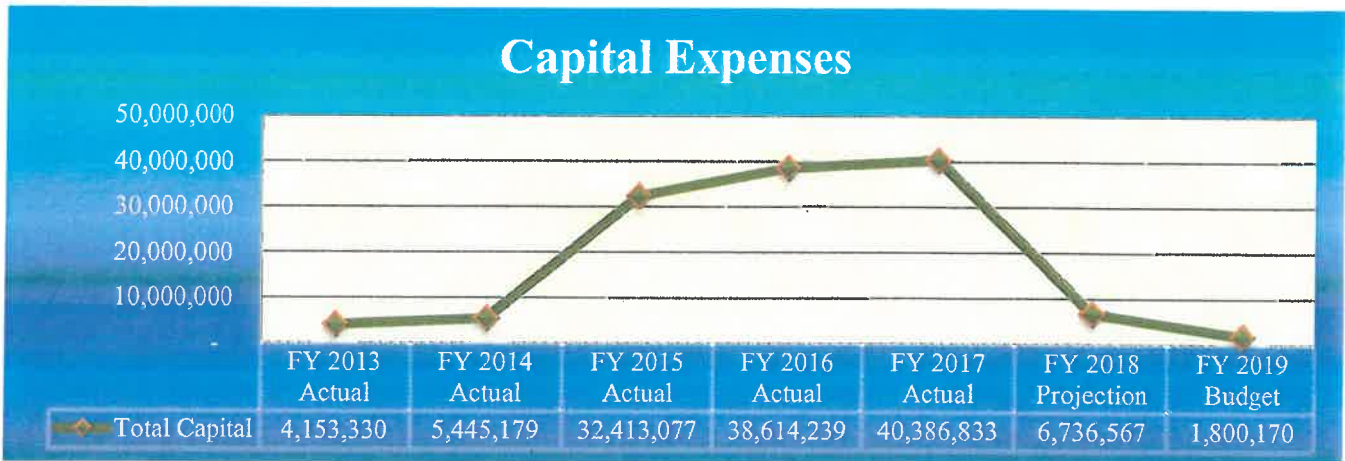
Source: VVWRA FY = Fiscal Year ended June 30

**Victor Valley Wastewater Reclamation Authority
Expense Trend Analysis
Fiscal Year 2018-2019**

Expense Analysis

Capital Expenses: The construction costs below reflect the actual expenses per CAFR (except FY 2018 and FY 2019) adjusted by adding the construction costs accounted for as construction in progress that were funded by the grants and loan proceeds. The capital expenditures have risen from FY 2014, as we have constructed the two sub-regional plants in the City of Hesperia and the Town of Apple Valley during the years of FY 2015 and FY 2018. We have budgeted \$1.8 million for FY 2019 (page 47) to fund the construction of the Desert Knolls Wash pipeline to replace the existing pipeline damaged by a storm.

Expenses Incurred by Operations and Repairs/Replacements: The operations and repairs/replacements expenses were at about the same level with a steady increase except FY 2018 reduced expense projection and FY 2019 higher costs. During FY 2018, such costs were kept low forced by a low cash flow level that contradicts to the higher budget for FY 2019 when necessary repairs and replacements can no longer wait without causing alarming level of loss in equipment integrity. In addition, these expenses continue to show the high electricity costs for the UV system throughout the period. During FY 2018, VVWRA has started its micro-grid project to cope with such high electricity costs and unpredictable lack of steady energy level.



Source: VVWRA - The graphs excludes personnel costs.

FY = Fiscal Year ended June 30

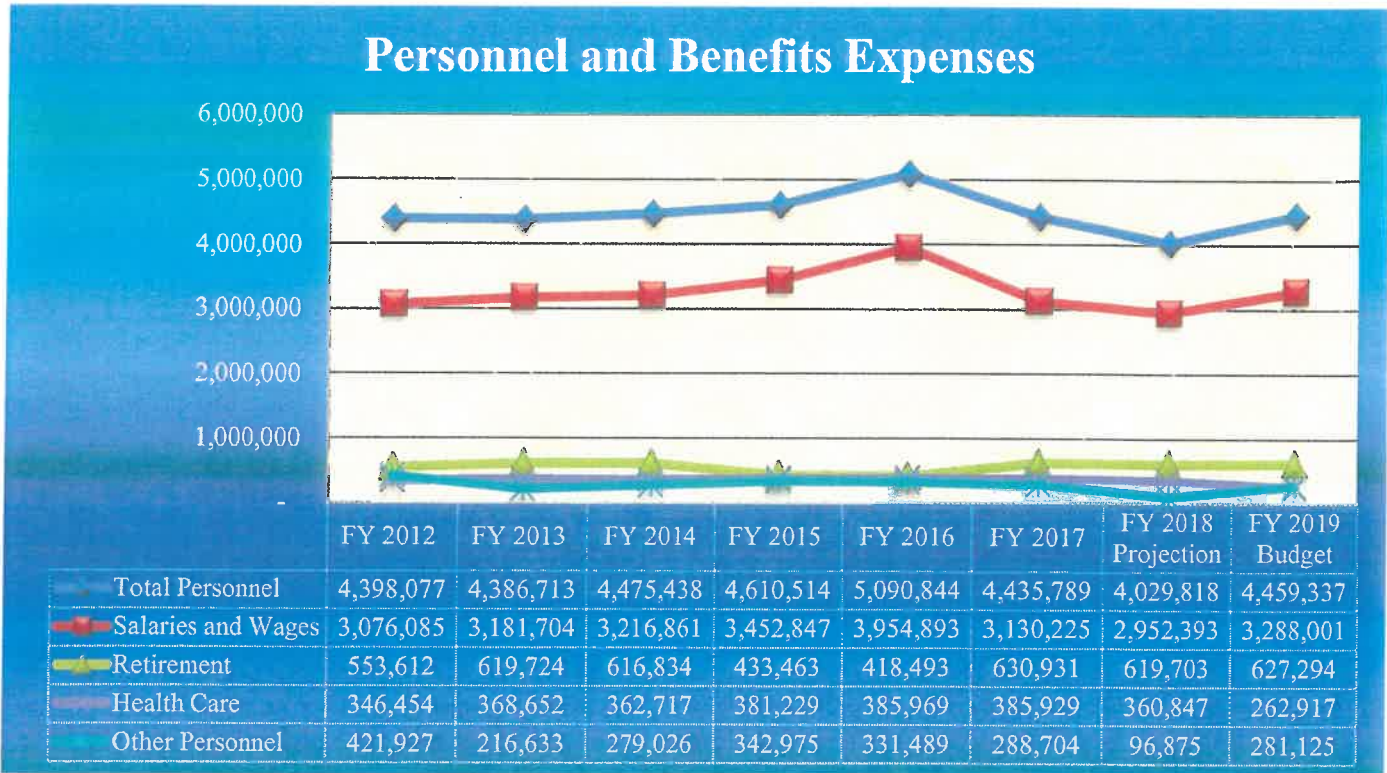
**Victor Valley Wastewater Reclamation Authority
Expense Trend Analysis
Fiscal Year 2018-2019**

Expense Analysis (Continued)

The personnel costs have remained stable with a slight increase over the years and a jump during FY 2016 when more staff was employed in anticipation of operating those two plants in Hesperia and Apple Valley. However, the personnel costs declined in FY 2017 thru FY 2019 to reflect 1/3 lay-off during FY 2017 under the scenario where the agency will not operate those two plants without a sufficient operating fund.

The health care cost has been kept at about the same level throughout the period from FY 2013 to FY 2019.

Other personnel costs include OPEB costs, Medicare, workers comp insurance, life insurance, unemployment insurance, disability insurance, and miscellaneous personnel expense, such as payroll processing fees.



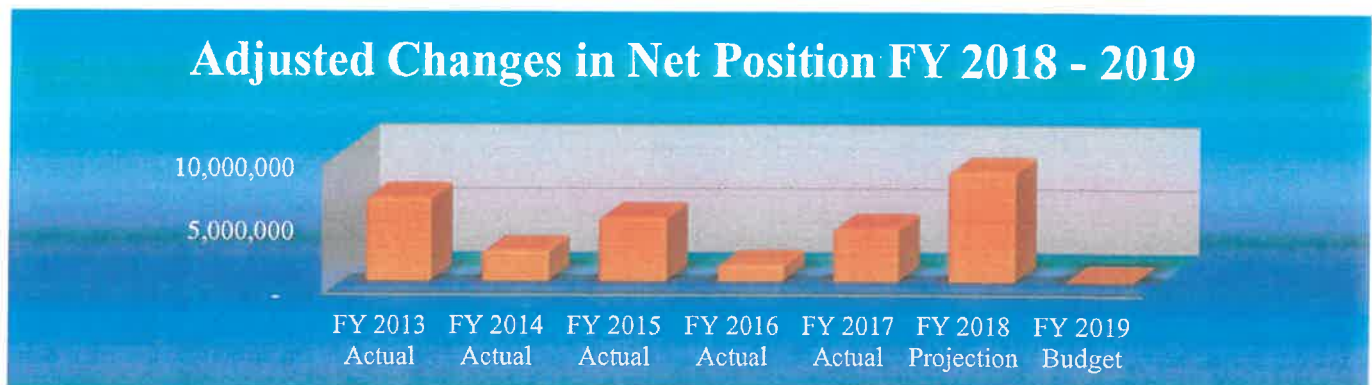
Source: VVWRA. FY = Fiscal Year ended June 30

Victor Valley Wastewater Reclamation Authority
History of Changes in Net Position
Fiscal Year 2018-2019

History of changes in net position

The table below shows *adjusted changes in net position* whose amounts are highlighted in navy blue in the table. The graph below shows the fluctuation of adjusted changes in net position during FY 2013 through FY 2019, or the total revenues over total expenses. The decrease is mostly due to the sharp decline of connection fee revenues from member agencies. Although the connection fee revenues shows an increase of 82% from \$1,620,728 in FY 2013 to \$2,951,667 in FY 2017, \$1.4 million out of the \$2.9 million connection fees collected during FY 2017 was from the City of Victorville who owed in previous years. On the other hand, the operating expenses have increased by 9%, from \$9,977,454 in FY 2013 to \$10,904,348 in FY 2017. Grant revenues are recorded in CAFR but most of related construction costs are recorded in a construction in progress, excluded from expenses. For fair comparison purpose, the above actual net positions from FY 2013 to 2018 are adjusted by adding back the grant related capitalized expenses and also adding non-cash depreciation and amortized interest expenses. Please see detailed discussions on capital improvement projects anticipated during FY 2019 and beyond at pages 47 and 48. The FY 2019 net position includes a one-time receipt of retention revenue from FEMA and Cal OES that were also a part of FY 2018 budget but never paid by those agencies who still have not paid as of June 30, 2018.

FY = Fiscal Year	Beginning Net Position	Changes in Net Position per CAFR *= <i>Per Budget</i>	Ending Net Position	Grants CIP/Interest Amortization and Depreciations Expense	Adjusted Changes in Net Position	Adjusted Ending Net Position
FY 2013 Actual	100,216,259	520,654	100,736,913	6,124,656	6,645,310	106,861,569
FY 2014 Actual	100,736,913	(2,228,708)	98,508,205	4,699,735	2,471,027	103,207,940
FY 2015 Actual	98,508,205	21,316,749	119,824,954	(16,212,939)	5,103,810	103,612,015
FY 2016 Actual	119,824,954	7,686,678	127,511,632	(6,308,679)	1,377,999	121,202,953
FY 2017 Actual	127,511,632	3,093,264	130,604,896	1,132,183	4,226,077	131,737,709
FY 2018 Projection	130,604,896	648,531*	131,253,427	8,097,745	8,446,276	139,351,172
FY 2019 Budget	131,253,427	49,346 *	131,302,773	-	49,346	131,302,773



Source: VVWRA FY = Fiscal Year ended June 30

① CAFR operating expenses without depreciation expense

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Section V: Capital Projects and Debts

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Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs – Overview and Project Descriptions
Fiscal Year 2018-2019

Overview

The Capital Improvement Programs (CIP) on pages 46 show the new capital projects funded in fiscal year 2019 budget. The presented budget prioritizes the projects in four categories; Wastewater Treatment, Interceptor, Energy Efficiency, and Information Technology. The level of priority of each project determines the individual timing of the project.

The pages 47 and 48 focus on the projects, the funds, and the types of project financing. These pages summarize all the capital projects and related monthly cash flows for the FY 2019. Finally, the pages 49 and 50 indicate when our existing State Revolving Fund loans mature with annual payment amounts.

The capital expenditures are for the construction projects that have an extended life of over five years. Generally, the capital expenditures include capital replacement projects that repair, replace or enhance existing facilities, equipment, or infrastructure, thus significantly expanding the life of or adding more capacity to the facilities that VVWRA owns.

In this section, the term CIP is used to describe capital improvement programs that are in fact construction in progress. Logically, capital expenditures for the CIP are separate from operating expenses. The operating expense items are usually under \$5,000 with less than one year of useful life.

The agency has completed its major construction projects of sub-regional plants and related Nanticoke project during FY 2018.

**Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs – Overview and Project Descriptions
Fiscal Year 2018-2019**

Project Descriptions

Wastewater Treatment

- 1 Operations Building Extension; Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.
- 2 Digesters 4 & 5 Supernatant Line; Digesters 4 & 5 currently require pumping to withdraw solids that has to be timed with influent pumping and gas production/withdrawal. Replacement with a gravity system will reduce costs and improve operational reliability.
- 3 Golf Cart Recharging Station; Provides a stable location to charge golf cart batteries.
- 4 Westside Plant Spill Containment System; Several instances have occurred which allowed partially treated wastewater to inadvertently enter the storm drain system. Not all of it was able to be returned to the headworks thus reportable spills occurred. This project will create a valve and a pipeline to redirect flows from the storm water system to the backwash basin.
- 7 Tertiary Filter Enclosure; The enclosure to reduce the amount of filter flies, dust and debris that accumulate in the tertiary filters.
- 8 Eastside WWTP (Serving Northern Triangle, VV-TOAV); Possible construction depending on how situations develop.

Interceptor

- 9 Ossum Wash; The double barrel interceptor that crosses Ossum Wash requires lining to ensure its structural integrity.
- 10 Oro Grande Interceptor; The line will replace the existing Oro Grande interceptor.
- 11 Apple Valley Odor Control; An odor study was performed by V&A engineering in 2009. Before it could be acted upon the Upper Narrows Emergency occurred. Due to FEMA requirements it is necessary to delay all activities with this project until the Upper Narrows Interceptor Replacement Project is completed.
- 12 Apple Valley Interceptor Realignment, Desert Knolls Wash; San Bernardino County Flood Control intends to reconstruct desert knolls wash which will require VVWRA to realign its manholes in that area. It is anticipated that this project will coincide with the odor control project since they occur in the same vicinity.
- 13 North Hesperia Relief Interceptor; If the Board chooses not to pursue construction of the Hesperia Subregional then VVWRA would construct this interceptor. The minimal funds allocated would be to initiate the environmental process. The design was completed as part of a settlement agreement with RBF Engineering. Planning costs would be paid for with Capital Cash Reserves and construction with an SRF loan. If the Hesperia Subregional is constructed it is not anticipated that this project would be built within the next ten years.
- 14 Spring Valley Lake Relief Interceptor; If the Board chooses not to pursue construction of the Hesperia Subregional then VVWRA would construct this interceptor. The minimal funds allocated would be to initiate the environmental process. The design was completed as part of a settlement agreement with RBF Engineering. Planning costs would be paid for with Capital Cash Reserves and construction with an SRF loan. If the Hesperia Subregional is constructed it is not anticipated that this project would be built within the next ten years.

**Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs – Overview and Project Descriptions
Fiscal Year 2018-2019**



Apple Valley Sub-regional Water Reclamation Plant Project



Hesperia Sub-regional Water Reclamation Plant Project

**Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs - Expenditures by Projects
Fiscal Year 2018-2019**

As explained at page 43, all the projects are to be completed during FY 2020. These projects are funded by one or combination of the following sources: operating cash reserve; capital cash reserve; State Revolving Fund; and federal and California grants.

Capital Improvement Programs - Expenditures by Projects

Project Title	FY 2016 Budget	FY 2017 Budget	FY 2018 Budget	FY 2019 Budget	FY 2020 Budget
Operations Building Extension	-	-	205,000	-	205,000
Golf Cart Recharging Station	-	-	15,000	-	15,000
Microgrid/Battery Storage Project	-	-	80,000	40,000	-
Digital Information Management System (DIM)	-	-	150,000	60,000	-
Digesters 4 and 5 Supernatant Line	75,000	-	-	-	75,000
Digester 1-5 Engineering Services	-	-	-	170,000	-
Digester 1-3 Equipment	-	-	-	161,000	-
Drying Beds Repair and Drainage Improvemen	150,000	-	-	-	-
Stormwater Spill Containment System	-	-	265,000	340,000	-
Hesperia Sub-regional Water Reclamation Plan	21,684,959	21,365,176	615,500	-	-
TOAV Sub-regional Water Reclamation Plant	21,684,959	21,365,176	3,301,000	-	-
Tertiary Filter Enclosure	50,000	-	-	-	-
Coating Project: UV and DAFTS	-	-	-	425,000	-
SCADA Upgrade Project (Ignition)	-	-	-	139,000	-
Eastside WWTP (Serving Northern Triangle, VV-TOAV)	-	-	-	-	-
Total Wastewater Treatment Projects	\$ 43,644,918	\$ 42,730,352	\$ 4,631,500	\$ 1,335,000	\$ 295,000
Upper Narrows Interceptor Replacement Proj	2,490,738	1,191,000	-	-	-
Nanticoke PS Bypass Sewer	5,000,000	3,990,000	-	-	-
Ossum Wash	650,000	-	-	-	650,000
Oro Grande Interceptor	-	-	-	190,000	2,510,000
Desert Knolls Wash	-	-	-	1,340,000	-
Yates Road Sampling Station	84,900	-	-	-	-
Apple Valley Odor Control	100,000	100,000	-	-	-
Apple Valley Interceptor Realignment	100,000	100,000	240,000	-	-
North Hesperia Relief Interceptor	-	-	-	-	-
Spring Valley Lake Relief Interceptor	-	-	-	-	-
Shay Road Diversion Structure	75,000	-	-	-	-
Total Interceptor Projects	\$ 8,500,638	\$ 5,381,000	\$ 240,000	\$ 1,530,000	\$ 3,160,000
Aeration Energy Efficiency Project	900,000	-	-	-	-
Biogas Solids Project	500,000	-	-	-	-
Total Energy Efficiency Projects	\$ 1,400,000	\$ -	\$ -	\$ -	\$ -
Document Management System	100,000	-	-	-	-
Nitrogen and Capacity Study	-	-	-	100,000	-
Finance Plan and Rate Study	-	-	-	50,000	-
Organizational Performance Assessment	-	-	-	47,000	-
Programmable Logic Control (PLC)	-	-	-	55,000	445,000
Accounting Software	-	-	-	100,000	-
Total Information Technology Projects	\$ 100,000	\$ -	\$ -	\$ 352,000	\$ 445,000
TOTAL	\$ 53,645,556	\$ 48,111,352	\$ 4,871,500	\$ 3,217,000	\$ 3,900,000

**Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs - Summary
Fiscal Year 2018 - 2019**

FY 18/19	Project	Project Title	Project Financing	Account Code	Estimated Expense		
					Total	FY 18-19	Future
Wastewater Treatment Projects							
2	1	Golf Cart Recharging Station	Capital Cash Reserve	09-02-80-9000, 9999	15,000		15,000
1	2	Microgrid/Battery Storage Project	Capital Cash Reserve	09-02-620-9050, C130	40,000	40,000	
2	2	Digital Information Management System (DIMS) Operations Automation	Operating Cash	01-03-535-8105	60,000	60,000	
2	4	Operations Building Extension	Capital Cash Reserve	09-03-82-9050, C130	205,000		205,000
2	5	Digesters 4 and 5 Supernatant Line	Capital Cash Reserve	09-02-152-9025/9000, 9999, R132	75,000		75,000
1	6	Stormwater Spill Containment System	Capital Cash Reserve	09-02-162-9025/9000, C106	340,000	340,000	
1	7	Digester 1-5 Engineering Services	Operating Cash	07-02-152-8105	170,000	170,000	
1	8	Digester 1-3 Equipment	Operating Cash	01-02-152-6000/6010/6011	161,000	161,000	
1	9	SCADA Upgrade Project (Ignition)	Operating Cash	07-02-530-6022-9999	139,000	139,000	
1	10	Coating Project: UV and DAFTS	Operating Cash	07-02-130/151/190-6055-9999	425,000	425,000	
Total Wastewater Treatment Projects					\$ 1,630,000	\$1,335,000	\$295,000
Interceptor Projects							
2	11	Ossum Wash	Capital Cash Reserve	07-05-20-9000/9025, C127	650,000		650,000
2	12	Oro Grande Interceptor	USDA	09-27-05-9025/9000, C126	2,700,000	190,000	2,510,000
1	13	Desert Knolls Wash: Interceptor, pigging station, odor control, flow monitoring, grit removal	Capital Cash Reserve	09-19-20-9025/9000, C113	1,340,000	1,340,000	
3	14	North Hesperia Relief Interceptor ¹	TBD	09-21-20-9000			
3	15	Spring Valley Lake Relief Interceptor ¹	TBD	09-23-20-9000			
Total Interceptor Projects					\$ 4,690,000	\$1,530,000	\$3,160,000
Administrative Projects							
1	16	Nitrogen and Capacity Study	Operating Cash	01-03-535-8105	100,000	100,000	
1	17	Finance Plan and Rate Study	Operating Cash	01-03-510-9130	50,000	50,000	
1	18	Organizational Performance Assessment	Operating Cash	01-03-515-8140	47,000	47,000	
1	19	Programmable Logic Control (PLC) Replacement		01-02-530-6022-9999	500,000	55,000	445,000
1	20	Accounting Software	Operating Cash	01-02-530-8115	100,000	100,000	
Total Administrative Projects					\$797,000	\$352,000	\$445,000
TOTAL					\$ 7,117,000	\$ 3,217,000	\$ 3,900,000

Items that could be delayed: \$581,000

**Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs - Summary
Fiscal Year 2018 - 2019**



Apple Valley – During the Construction



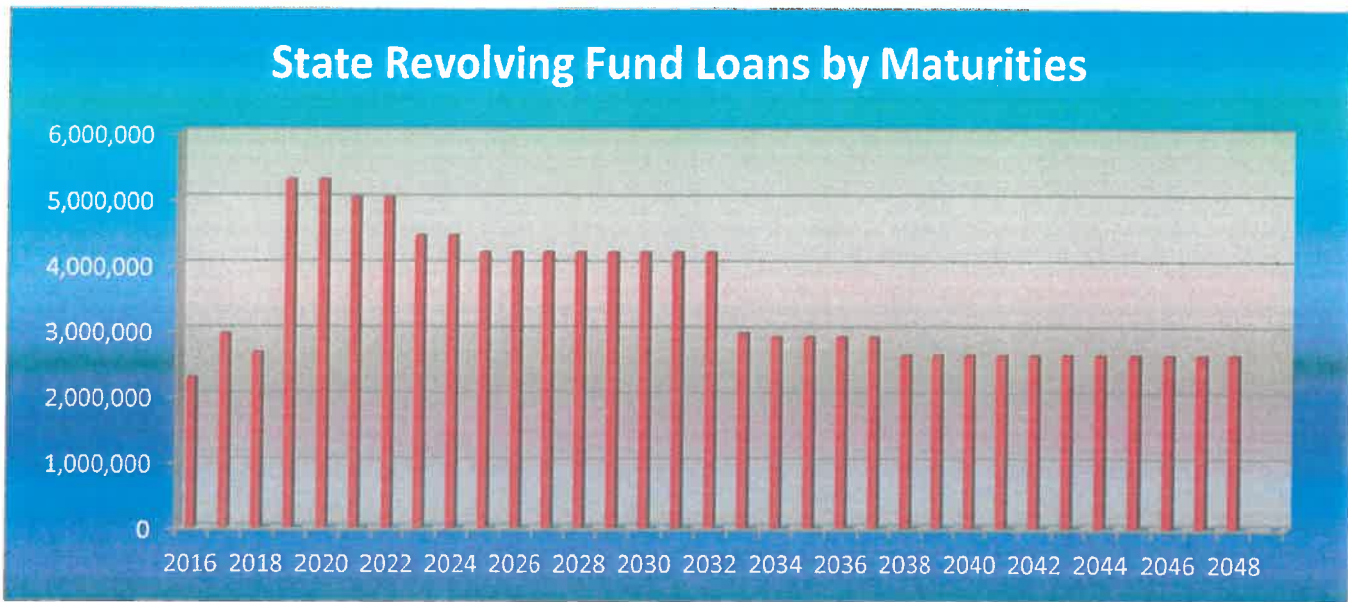
Desert Knolls Wash exposed due to the storm

Victor Valley Wastewater Reclamation Authority
Existing State Revolving Fund Loan Payments by Maturities
Fiscal Year 2018-2019

The table below represents our debt service payments for the Clean Water State Revolving Fund (SRF) loans. In addition to \$4.0 million Water Recycling grant and \$9.2 million Proposition One grant, we have obtained a \$27.1 million SRF loan for Apple Valley Sub-regional plant and \$40.7 million SRF loan for Hesperia Sub-regional plant during FY 2015. In addition, we have added a \$4,286,380 SRF loan for the Upper Narrows Pipeline Replacement Project and a \$4,459,190 SRF loan for the Nanticoke Pump Station Bypass Sewer Project during FY 2016. Our debts consist of the SRF loans only, as listed below. As a special district, we are not required to maintain a legal debt limit but are required to adhere to the debt coverage clauses specified at page 16. Please also refer to page 51 for the impact of the debt repayments to the Operations & Maintenance and Capital Funds. Next page shows the annual repayments in a graph.

VVWRA Annual Debt Service									
Fiscal Year	9.5 MGD Capital Improvements	11 MGD Expansion	North Apple Valley Interceptor	Phase IIIA Regulatory Upgrades	Upper Narrows Replacement	Nanticoke Bypass	Apple Valley Sub-Regional	Hesperia Sub-Regional	Total
2016	265,049	579,870	258,151	1,027,610	143,890	-	-	-	2,274,570
2017	265,049	579,870	258,151	1,027,610	810,978	-	-	-	2,941,658
2018	265,049	579,870	258,151	1,027,610	257,745	271,633	-	-	2,660,058
2019	265,049	579,870	258,151	1,027,610	257,745	271,633	1,050,521	1,574,511	5,285,090
2020	265,049	579,870	258,151	1,027,610	257,745	271,633	1,050,521	1,574,511	5,285,090
2021	-	579,870	258,151	1,027,610	257,745	271,633	1,050,521	1,574,511	5,020,041
2022	-	579,870	258,151	1,027,610	257,745	271,633	1,050,521	1,574,511	5,020,041
2023	-	-	258,151	1,027,610	257,745	271,633	1,050,521	1,574,511	4,440,171
2024	-	-	258,151	1,027,610	257,745	271,633	1,050,521	1,574,511	4,440,171
2025	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2026	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2027	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2028	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2029	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2030	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2031	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2032	-	-	-	1,027,610	257,745	271,633	1,050,521	1,574,511	4,182,020
2033	-	-	-	-	60,393	271,633	1,050,521	1,574,511	2,957,058
2034	-	-	-	-	-	271,633	1,050,521	1,574,511	2,896,665
2035	-	-	-	-	-	271,633	1,050,521	1,574,511	2,896,665
2036	-	-	-	-	-	271,633	1,050,521	1,574,511	2,896,665
2037	-	-	-	-	-	271,633	1,050,521	1,574,511	2,896,665
2038	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2039	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2040	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2041	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2042	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2043	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2044	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2045	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2046	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2047	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
2048	-	-	-	-	-	-	1,050,521	1,574,511	2,625,032
Total	1,325,245	4,059,090	2,323,359	17,469,370	4,881,436	5,432,660	31,515,630	47,235,330	114,242,120

**Victor Valley Wastewater Reclamation Authority
Existing State Revolving Fund Loan Payments by Maturities
Fiscal Year 2018-2019**



This graph presents the annual SRF loan repayments. At peak years, the repayment amount exceeds \$5 million. During FY 2019 the impact on Operations and Maintenance (O&M) Fund is \$2,844,845, while the effect on Capital Fund is \$2,440,247. For FY 2020, the impact on O&M Fund is also \$2,844,845 and effect on Capital Fund is \$2,440,247. Please refer to page 51 for the detail information.

Summary: VVWRA has utilized State Revolving Fund (SRF) loans through California State Water Resources Control Board to fund most capital projects. The construction of the projects below was completed during the year ended June 30, 2018. This page shows the next two years of principal and interest repayments per Operations & Maintenance and Capital Funds.

2019	9.5 MGD Capital Improvements	11 MGD Expansion	North Apple Valley Interceptor	Phase IIIA Regulatory Upgrades	Upper Narrows Replacement Project	Nanticoke Bypass Project	Apple Valley Sub-Regional Project	Hesperia Sub-Regional Project	2019 Total
SRF Loan Amount	\$ 4,069,859	\$ 11,430,726	\$ 4,084,688	\$ 15,717,668	\$ 4,286,380	\$ 4,459,190	\$ 27,129,023	\$ 40,658,810	\$ 111,836,344
Annual Payment	\$ 265,050	\$ 579,870	\$ 258,151	\$ 1,027,610	\$ 257,745	\$ 270,220	\$ 1,050,521	\$ 1,574,511	\$ 5,283,678
Payment Date	September 15	April 3	February 13	June 30	December 31	June 30	February 28	February 28	
1. Operations	4.30%	0.00%	0.00%	75.00%	100.00%	75.00%	61.00%	61.00%	
Original Loan	\$ 175,004	\$ -	\$ -	\$ 11,788,251	\$ 4,286,380	\$ 3,344,393	\$ 16,548,704	\$ 24,801,874	
Principal	\$ 10,827	\$ -	\$ -	\$ 530,766	\$ 197,174	\$ 142,474	\$ 486,104	\$ 727,394	\$ 2,094,739
Interest	\$ 570	\$ -	\$ -	\$ 239,942	\$ 60,571	\$ 61,251	\$ 154,714	\$ 233,058	\$ 750,106
Annual Payment	\$ 11,397	\$ -	\$ -	\$ 770,708	\$ 257,745	\$ 203,725	\$ 640,818	\$ 960,452	\$ 2,844,845
2. Capital	95.70%	100.00%	100.00%	25.00%	0.00%	25.00%	39.00%	39.00%	
Original Loan	\$ 3,894,855	\$ 11,430,726	\$ 4,084,688	\$ 3,929,417	\$ -	\$ 1,114,798	\$ 10,580,319	\$ 15,856,936	
Principal	\$ 240,960	\$ 538,835	\$ 222,603	\$ 176,922	\$ -	\$ 47,491	\$ 310,787	\$ 465,055	\$ 2,002,653
Interest	\$ 12,693	\$ 41,035	\$ 35,548	\$ 79,981	\$ -	\$ 20,417	\$ 98,916	\$ 149,004	\$ 437,594
Annual Payment	\$ 253,653	\$ 579,870	\$ 258,151	\$ 256,903	\$ -	\$ 67,908	\$ 409,703	\$ 614,059	\$ 2,440,247
Total Principal	\$ 251,787	\$ 538,835	\$ 222,603	\$ 707,688	\$ 197,174	\$ 189,965	\$ 796,891	\$ 1,192,449	\$ 4,097,391
Total Interest	\$ 13,263	\$ 41,035	\$ 35,548	\$ 319,922	\$ 60,571	\$ 81,668	\$ 253,630	\$ 382,062	\$ 1,187,700
Annual Payment	\$ 265,050	\$ 579,870	\$ 258,151	\$ 1,027,610	\$ 257,745	\$ 271,633	\$ 1,050,521	\$ 1,574,511	\$ 5,283,678

2020	9.5 MGD Capital Improvements	11 MGD Expansion	North Apple Valley Interceptor	Phase IIIA Regulatory Upgrades	Upper Narrows Replacement Project	Nanticoke Bypass Project	Apple Valley Sub-Regional Project	Hesperia Sub-Regional Project	2020 Total
SRF Loan Amount	\$ 4,069,859	\$ 11,430,726	\$ 4,084,688	\$ 15,717,668	\$ 4,286,380	\$ 4,459,190	\$ 27,129,023	\$ 40,658,810	\$ 111,836,344
Annual Payment	\$ 265,050	\$ 579,870	\$ 258,151	\$ 1,027,610	\$ 257,745	\$ 270,220	\$ 1,050,521	\$ 1,574,511	\$ 5,283,678
Payment Date	September 15	April 3	February 13	June 30	December 31	June 30	February 28	February 28	
1. Operations	4.30%	0.00%	0.00%	75.00%	100.00%	75.00%	61.00%	61.00%	
Original Loan	\$ 175,004	\$ -	\$ -	\$ 11,788,251	\$ 4,286,380	\$ 3,344,393	\$ 16,548,704	\$ 24,801,874	
Principal	\$ 11,108	\$ -	\$ -	\$ 545,097	\$ 200,921	\$ 145,181	\$ 480,192	\$ 719,708	\$ 2,102,207
Interest	\$ 289	\$ -	\$ -	\$ 225,611	\$ 56,824	\$ 58,544	\$ 160,626	\$ 240,744	\$ 742,638
Annual Payment	\$ 11,397	\$ -	\$ -	\$ 770,708	\$ 257,745	\$ 203,725	\$ 640,818	\$ 960,452	\$ 2,844,845
2. Capital	95.70%	100.00%	100.00%	25.00%	0.00%	25.00%	39.00%	39.00%	
Original Loan	\$ 3,894,855	\$ 11,430,726	\$ 4,084,688	\$ 3,929,417	\$ -	\$ 1,114,798	\$ 10,580,319	\$ 15,856,936	
Principal	\$ 247,225	\$ 548,803	\$ 228,168	\$ 181,699	\$ -	\$ 48,394	\$ 307,008	\$ 460,140	\$ 2,021,437
Interest	\$ 6,427	\$ 31,067	\$ 29,983	\$ 75,204	\$ -	\$ 19,515	\$ 102,695	\$ 153,919	\$ 418,810
Annual Payment	\$ 253,652	\$ 579,870	\$ 258,151	\$ 256,903	\$ -	\$ 67,909	\$ 409,703	\$ 614,059	\$ 2,440,247
Total Principal	\$ 258,333	\$ 548,803	\$ 228,168	\$ 726,796	\$ 200,921	\$ 193,574	\$ 787,200	\$ 1,179,848	\$ 4,123,643
Total Interest	\$ 6,716	\$ 31,067	\$ 29,983	\$ 300,814	\$ 56,824	\$ 78,059	\$ 263,321	\$ 394,663	\$ 1,161,448
Annual Payment	\$ 265,049	\$ 579,870	\$ 258,151	\$ 1,027,610	\$ 257,745	\$ 271,633	\$ 1,050,521	\$ 1,574,511	\$ 5,283,691

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Section VI: History and Demographics

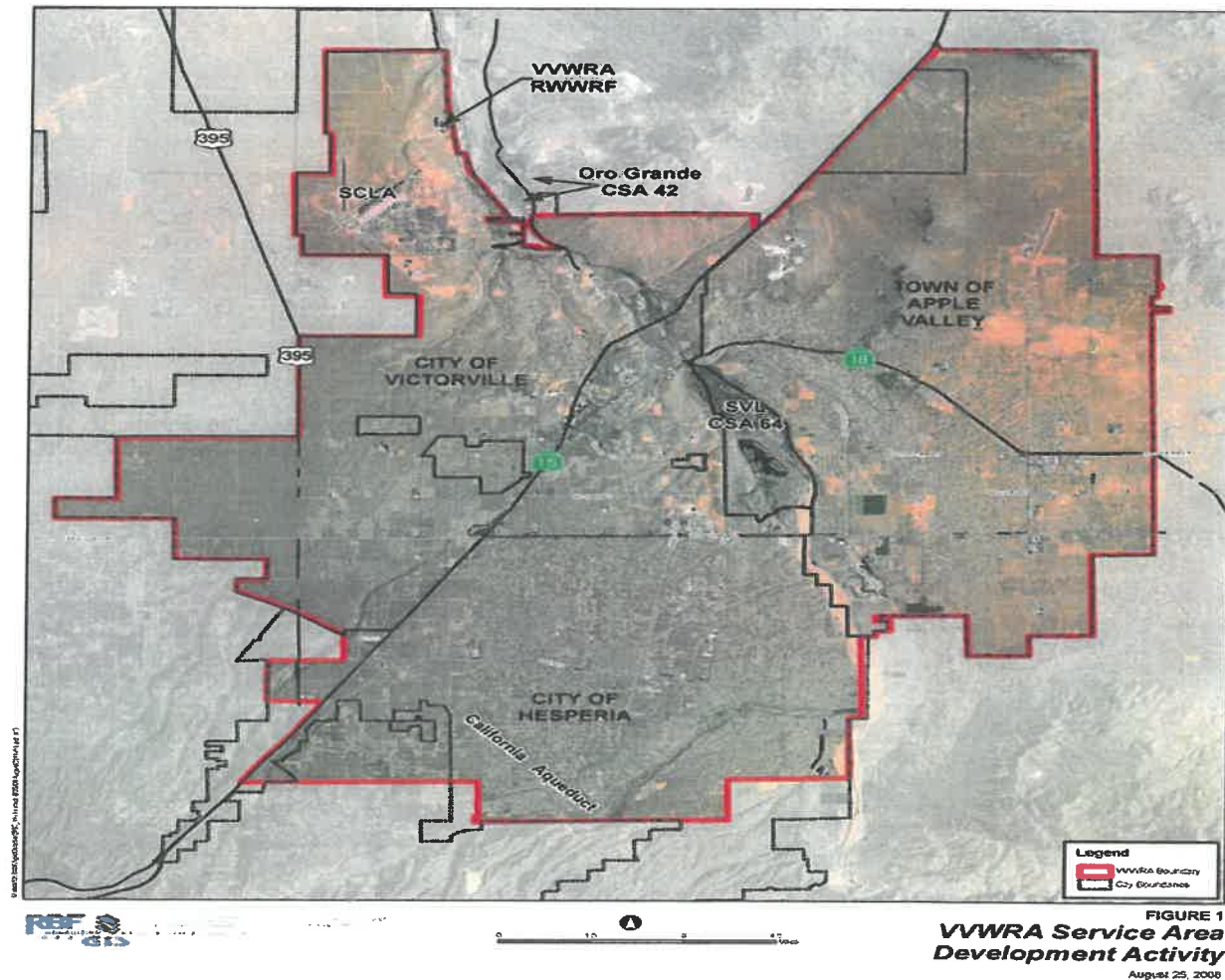
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**Victor Valley Wastewater Reclamation Authority
History and Demographics
Fiscal Year 2018-2019**

History

Victor Valley Wastewater Reclamation Authority (VWVRA) was originally formed by the Mojave Water Agency to help meet the requirements of the federal Clean Water Act and provide wastewater treatment for the growing area. Our original treatment plant, with supporting pipelines and infrastructure, began operating in 1981, providing tertiary level treatment for up to 4.5 million gallons per day. VWVRA is now a joint powers public agency of the state of California handling 12.05 million gallons a day.

Over the years, VWVRA has completed treatment plant upgrades and several capacity increases. This regional treatment plant is currently capable of treating a portion of the flow to a tertiary level and the remaining flow to a secondary level for percolation. A majority of the highly treated wastewater is discharged into the Mojave River Basin, while a smaller quantity is sold to Victorville power plant and American Organics.



Provided by RBF Consulting, Inc.

**Victor Valley Wastewater Reclamation Authority
History and Demographics
Fiscal Year 2018-2019**

Governance

VVWRA is a quasi-governmental agency called a Special District of the State of California. It is not regulated by California Public Utilities Commission but governed by a Board of four Commissioners who are publicly elected for a four-year term from each member agency. Our affairs are bound by a joint powers agreement between VVWRA and member local government agencies consisting of City of Victorville, City of Hesperia, Town of Apple Valley and the County of San Bernardino Service Areas No. 42 (Oro Grande) and No. 64 (Spring Valley Lake) for the purpose of construction, operation, and maintenance of sewer collection, transmission and treatment facilities within the region. The General Manager is responsible for carrying out the policies and ordinances approved by the Board (and by the community residents) and for overseeing the day-to-day operations of VVWRA.

San Bernardino County

San Bernardino County is the largest county in the United States. According to the 2010 U.S. Census, the San Bernardino County has a population of 2,035,210. With an area of 20,160 square miles, the San Bernardino County is larger than the combined area of the four smallest states in the nation. Over 90% of this county is desert, while the remaining 10% is mountains and valleys that rest in the Inland Empire.

Demographics

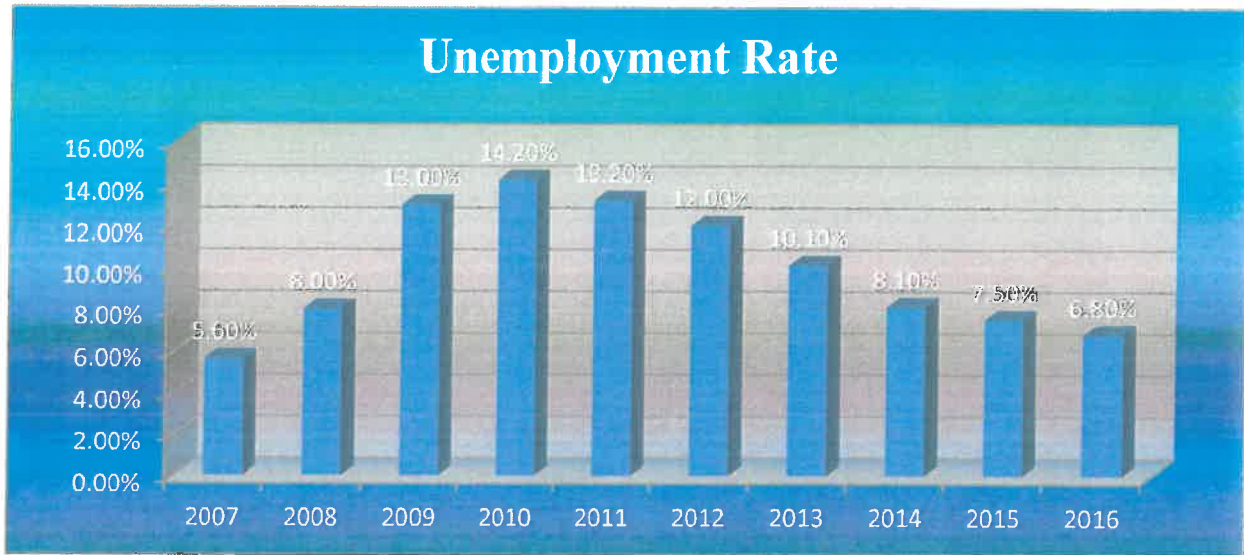
The service area has a population of 292,399 in 2016 with a slow and steady population growth from 2007 to 2016.

Unemployment in the San Bernardino County has risen from 8% in 2008 to 10.1% in 2013 due to the economic downturn that started in late 2008. The increased unemployment has also impacted the personal income per capita, which decreased from \$30,363 in 2008 to \$21,792 in 2009, then recovered to \$33,302 in 2016.

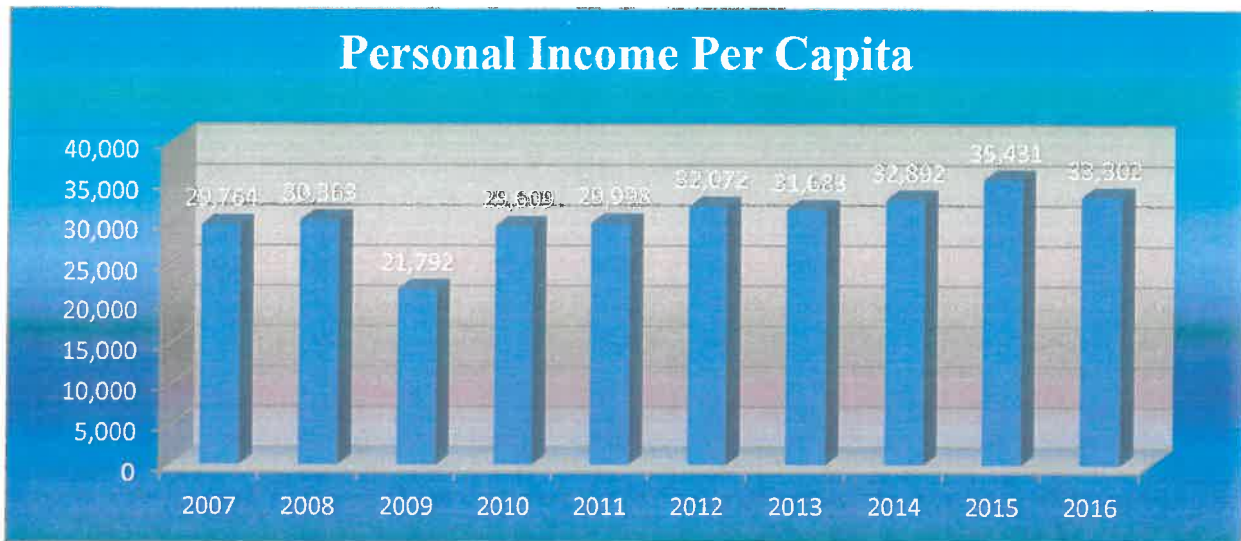


Source: California Department of Finance and U.S. Census Bureau. Years are calendar years.

**Victor Valley Wastewater Reclamation Authority
History and Demographics
Fiscal Year 2018-2019**



Source: State of California Employment Development Department (Data shown is for the County of San Bernardino.) Years are calendar years.



Source: State of California Employment Development Department (Data shown is for the County of San Bernardino.) Years are calendar years.

**Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2018-2019**

Sewer Overflow

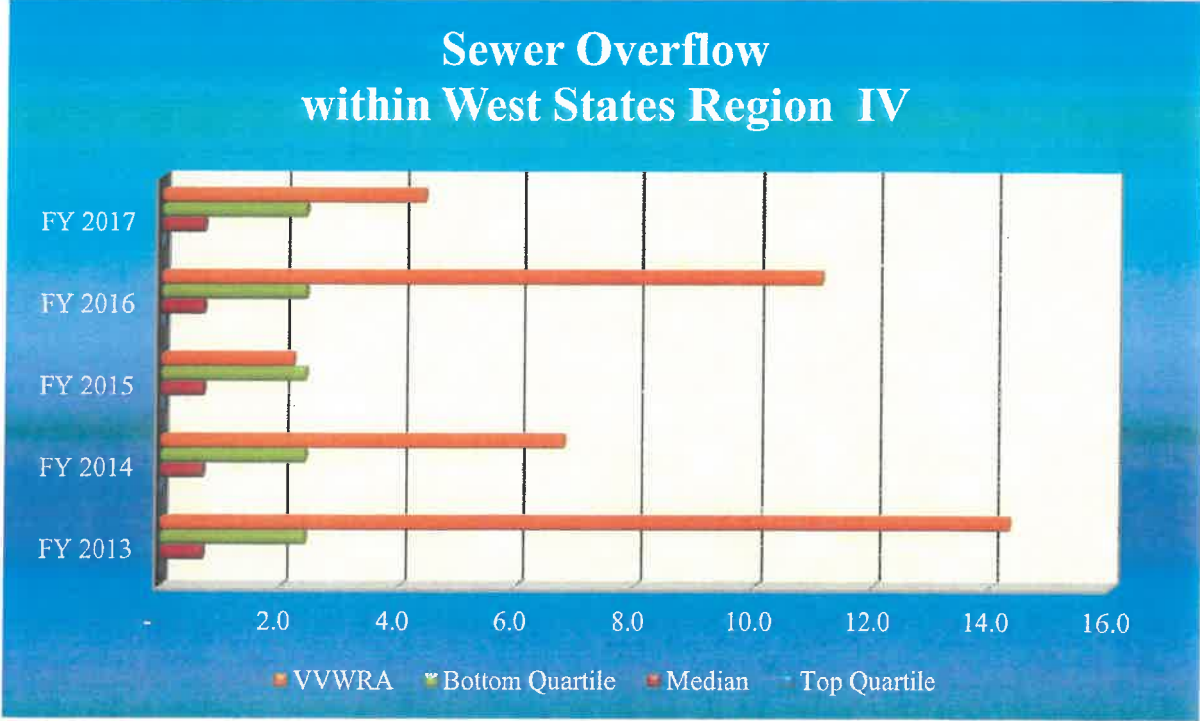
The sewer overflow rate is an indicator that tracks the condition and the effectiveness of the maintenance of the wastewater collection system.

San Bernardino County, including Upper and Lower Narrows of the Mojave River, experienced a severe rain storm during December 2010. President Obama declared this storm as a National Disaster on January 26, 2011. The flood and debris damaged pipelines that lead to an unexpectedly high sewer overflow rate of 12.2 for FY 2011. VVWRA installed an emergency temporary pipeline to divert the flow from the damaged pipeline. This rain storm caused unusual overflows including one at the “T” Avenue pipeline in the City of Hesperia. To remedy overflow in this area, VVWRA constructed the Santa Fe relief pipeline during FY 2012.

VVWRA had two reported spill at the Upper Narrows Emergency Bypass Sites during FY 2017 which resulted in a sewer overflow rate of 4.40. VVWRA has completed the construction of a permanent interceptor during FY 2017 to replace the temporary bypass line.

Sewer Overflow-West States Region IV Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2017	<i>Data Not Available</i>	0.70	2.40	4.40
FY 2016	<i>Data Not Available</i>	0.70	2.40	11.10
FY 2015	<i>Data Not Available</i>	0.70	2.40	2.20
FY 2014	<i>Data Not Available</i>	0.70	2.40	6.80
FY 2013	<i>Data Not Available</i>	0.70	2.40	14.30

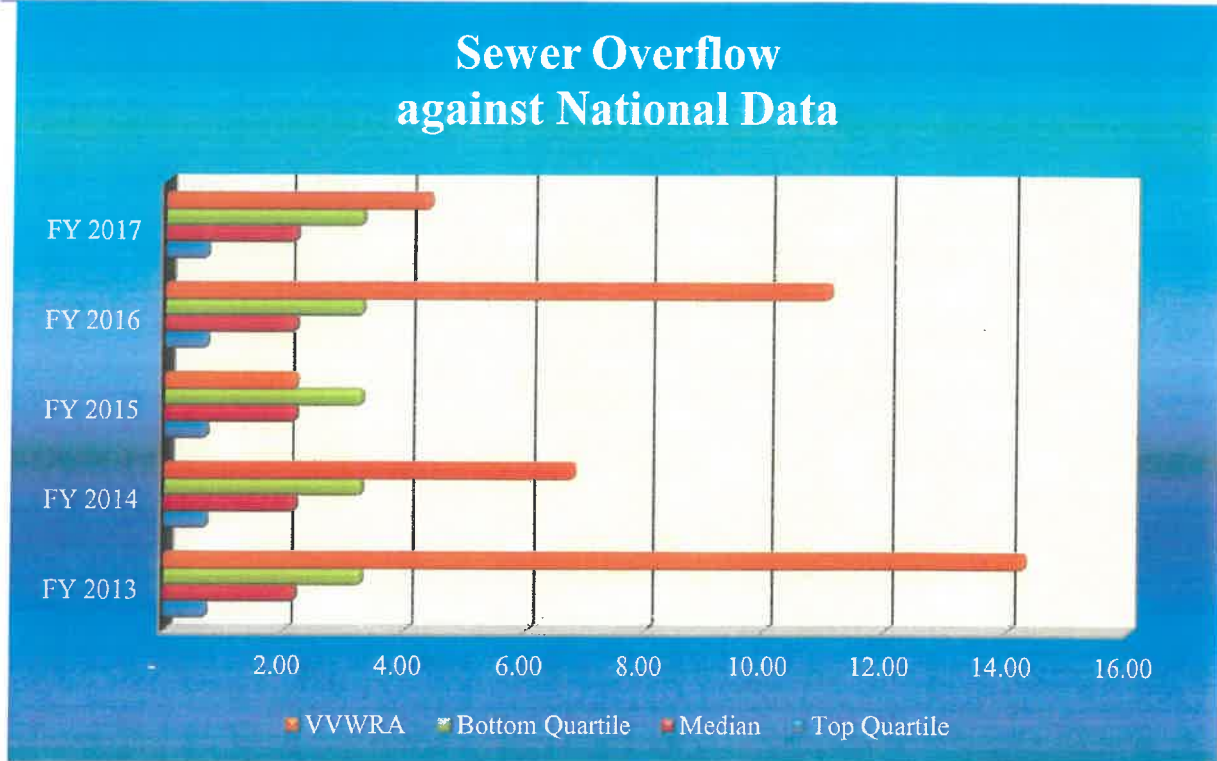


Source: 2012 American Water Works Association Benchmarking analysis FY = Fiscal Year ended June 30

**Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2018-2019**

Sewer Overflow-National Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2017	0.70	2.20	3.30	4.40
FY 2016	0.70	2.20	3.30	11.10
FY 2015	0.70	2.20	3.30	2.20
FY 2014	0.70	2.20	3.30	6.80
FY 2013	0.70	2.20	3.30	14.30



Source: 2012 American Water Works Association Benchmarking analysis

FY = Fiscal Year ended June 30

**Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2018-2019**

How Much Each Employee Processed

The quantity of wastewater processed by each employee has decreased from 0.31 million gallons per day (MGD) in FY 2013 to 0.24 MGD in FY 2016 and increased back to 0.31 MGD in FY 2017. The total amount of wastewater that VVWRA has processed has decreased by 18%, from 4,704 MG in FY 2013 to 3,845 MG in FY 2017. However, the total number of employees that VVWRA employed has decreased as well by 17%, from 41 to 34.

Compared to West States Region IV, VVWRA has almost continuously remained at the top quartile during FY 2013. Compared nationally, the quantity of wastewater processed by each employee has surpassed the median since FY 2013.

How Much Each Employee Processed-West States Region IV Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2017	0.31	0.23	0.14	0.31
FY 2016	0.31	0.23	0.14	0.24
FY 2015	0.31	0.23	0.14	0.29
FY 2014	0.31	0.23	0.14	0.30
FY 2013	0.31	0.23	0.14	0.31



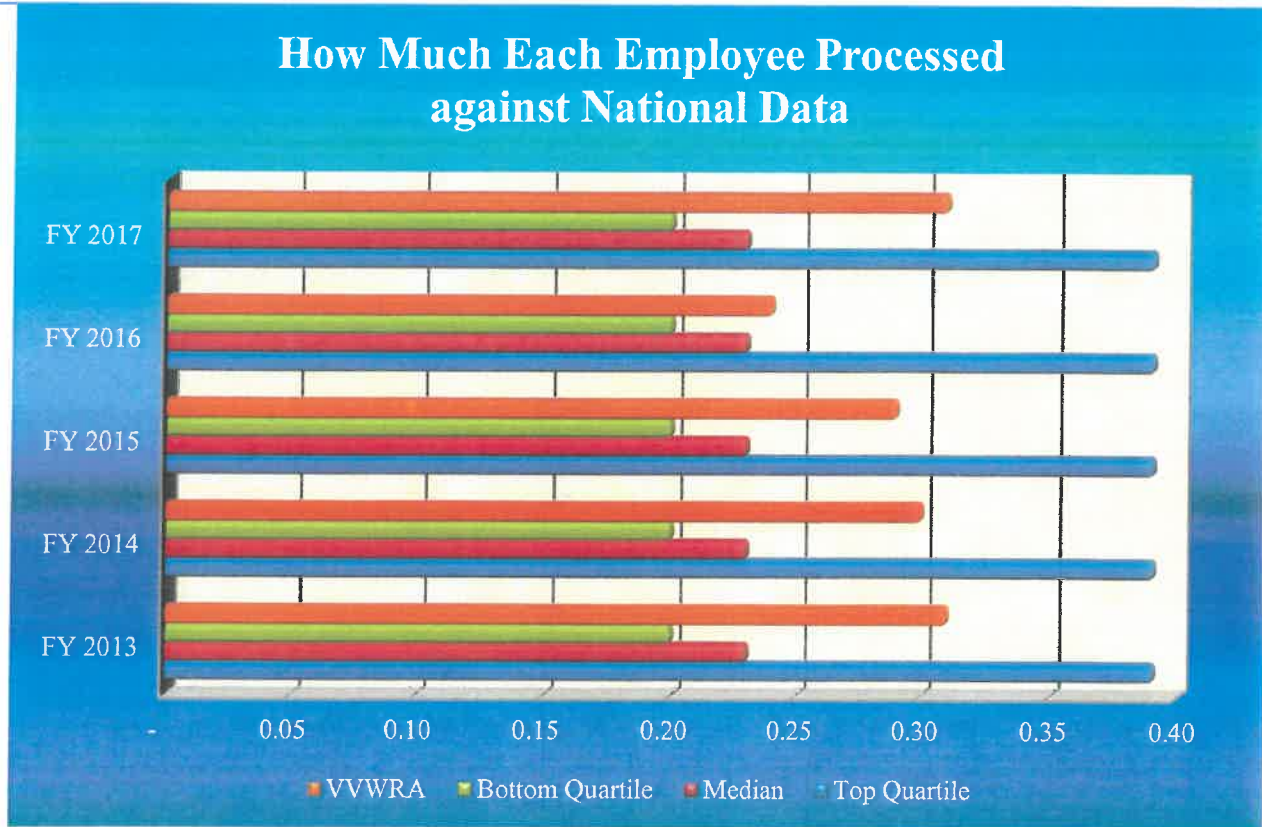
Source: 2012 American Water Works Association Benchmarking analysis

FY = Fiscal Year ended June 30

**Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2018-2019**

How Much Each Employee Processed-National Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2017	0.39	0.23	0.20	0.31
FY 2016	0.39	0.23	0.20	0.24
FY 2015	0.39	0.23	0.20	0.29
FY 2014	0.39	0.23	0.20	0.30
FY 2013	0.39	0.23	0.20	0.31



Source: 2012 American Water Works Association Benchmarking analysis

FY = Fiscal Year ended June 30

**Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2018-2019**

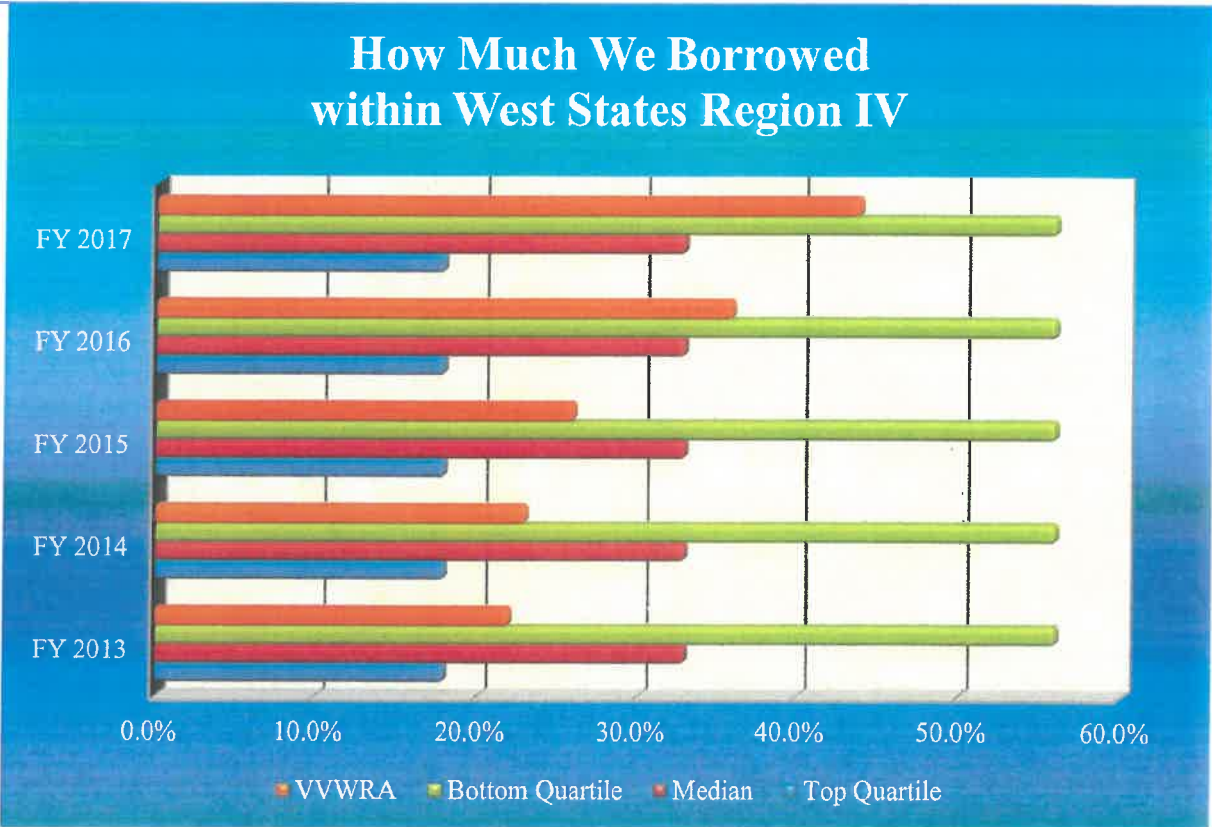
How Much We Borrowed

When you compare what you owe (liabilities) to what you have (assets), you will obtain a debt ratio. The debt ratio can be used to measure the health of a business. Lower value of debt ratio is favorable and a higher value indicates that a higher portion of the organization's assets are claimed by its creditors which means there is a higher risk in operation since the entity would find it difficult to obtain loans for new projects. VVWRA's debt ratio has increased from 22.00% in FY 2013 to 44.00% in FY 2017 due to the growth in the amount of State Revolving Fund loans for the construction projects.

VVWRA surpassed the median quartile in FY 2013 and performed better than the median quartile of the West States Region IV in later years. Compared nationally, VVWRA is ranked between median and top quartiles in FY 2013. The national data for later years is not available.

How Much We Borrowed-West States Region IV Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2017	18.0%	33.0%	56.0%	44.00%
FY 2016	18.0%	33.0%	56.0%	36.00%
FY 2015	18.0%	33.0%	56.0%	26.00%
FY 2014	18.0%	33.0%	56.0%	23.00%
FY 2013	18.0%	33.0%	56.0%	22.00%



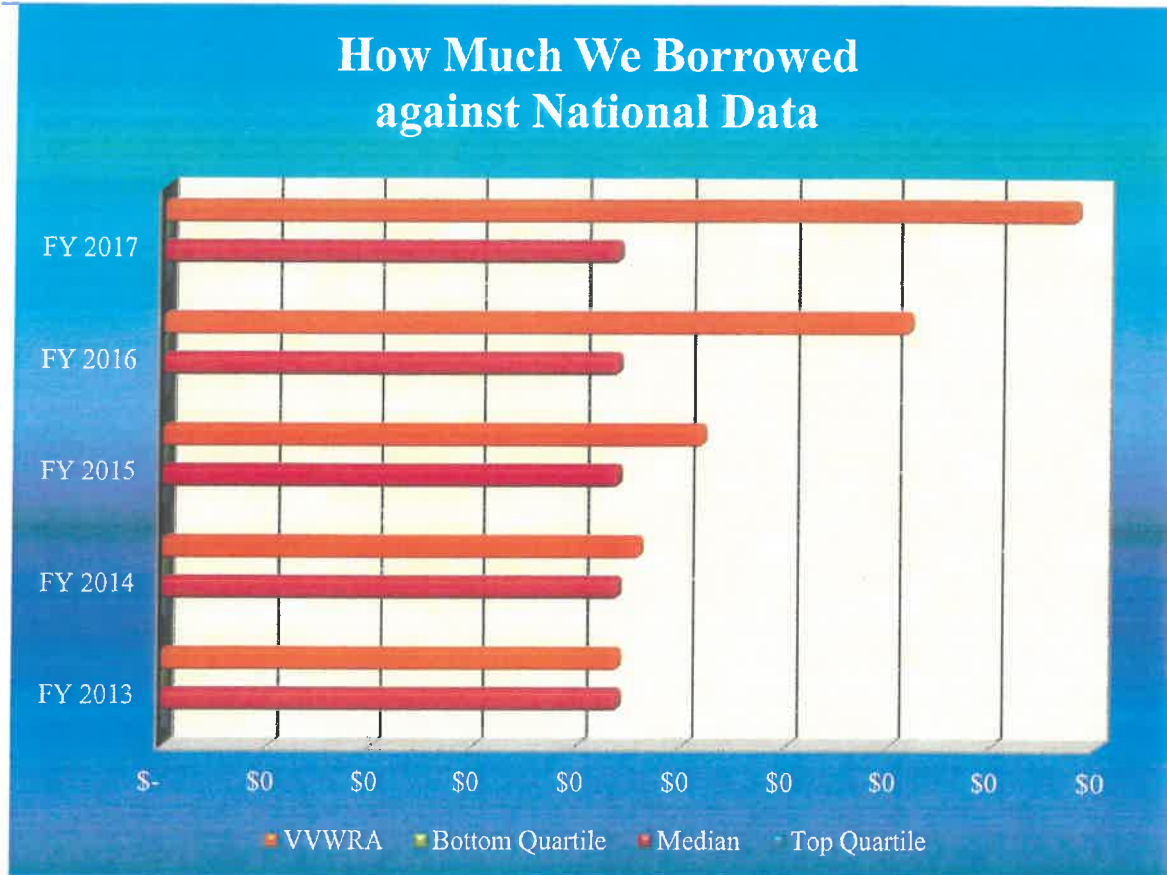
Source: 2012 American Water Works Association Benchmarking analysis

FY = Fiscal Year ended June 30

**Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2018-2019**

How Much We Borrowed-National Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2017	Data Not Available	22.0%	Data Not Available	44.00%
FY 2016	Data Not Available	22.0%	Data Not Available	36.00%
FY 2015	Data Not Available	22.0%	Data Not Available	26.00%
FY 2014	Data Not Available	22.0%	Data Not Available	23.00%
FY 2013	Data Not Available	22.0%	Data Not Available	22.00%



Source: 2012 American Water Works Association Benchmarking analysis

FY = Fiscal Year ended June 30

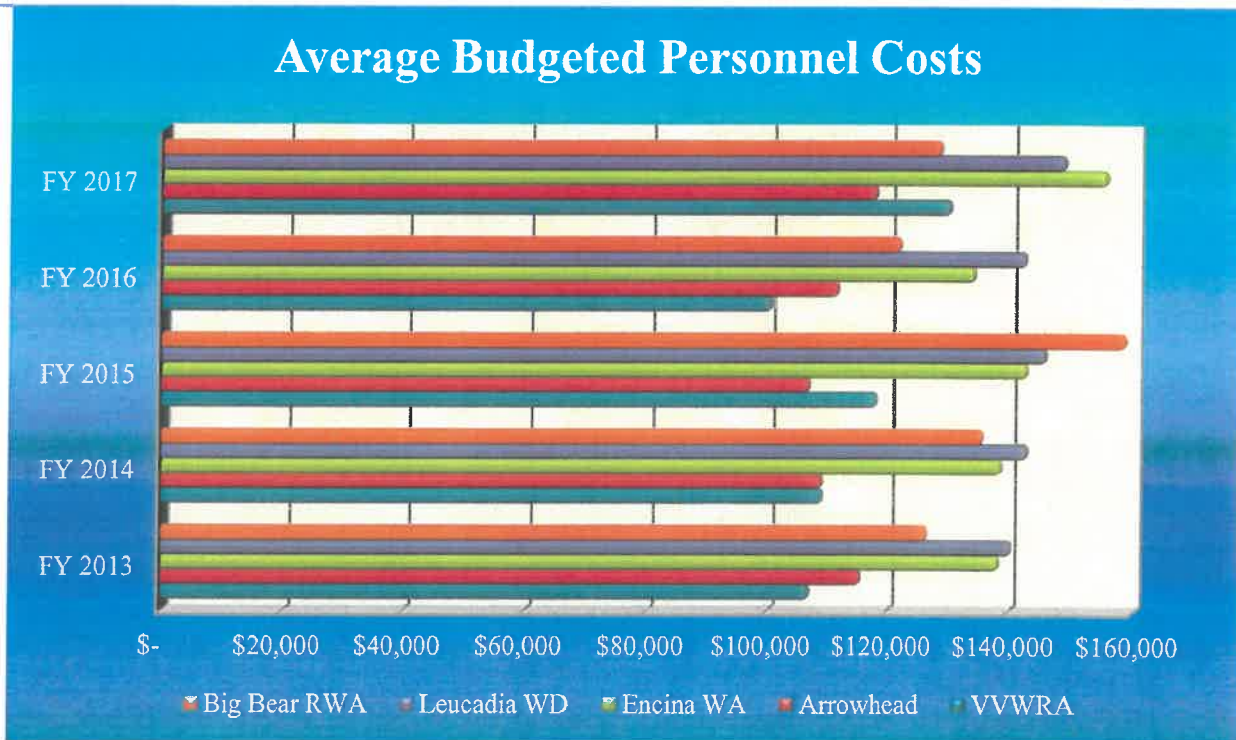
**Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2018-2019**

Average Budgeted Personnel Cost

Average budgeted personnel cost indicates the cost-effectiveness of an agency’s overall personnel budget. Such an indicator is calculated by dividing the total budgeted personnel costs by the total budgeted number of employees for a fiscal year. VVWRA’s average budgeted personnel costs have improved from median to the low end compared to other wastewater treatment agencies with similar size in the Southern California.

Average Budgeted Personnel Cost

	VVWRA	Arrowhead	Encina WA	Leucadia WD	Big Bear RWA
FY 2017	\$ 130,464	\$ 118,190	\$ 155,394	\$ 148,888	\$ 128,896
FY 2016	\$ 100,670	\$ 111,767	\$ 134,317	\$ 142,734	\$ 122,160
FY 2015	\$ 118,218	\$ 107,039	\$ 142,968	\$ 145,960	\$ 158,417
FY 2014	\$ 109,157	\$ 109,058	\$ 138,791	\$ 142,991	\$ 135,720
FY 2013	\$ 106,993	\$ 115,469	\$ 138,421	\$ 140,339	\$ 126,547



Source: 2012 American Water Works Association Benchmarking analysis

FY = Fiscal Year ended June 30

Section VII: Glossary

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Victor Valley Wastewater Reclamation Authority
Glossary
Fiscal Year 2018-2019

Glossary	
Ammonia Nitrogen	The soluble ionized and unionized ammonia nitrogen component in wastewater that can be measured using the procedure described in the current edition of “ <i>Standard Methods for the Examination of Water and Wastewater</i> ” published by the American Public Health Association.
Biochemical oxygen demand (BOD)	The measure of decomposable organic material in wastewater as represented by the oxygen utilized as determined by the procedure described in the current edition of “ <i>Standard Methods for the Examination of Water and Wastewater</i> ” published by the American Public Health Association.
Cal-OES	The California Governor’s Office of Emergency Services (Cal-OES) serves the public through effective collaboration in preparing for, protecting against, responding to, recovering from, and mitigating the impacts of all hazards and threats.
Cash Basis	Revenues and expenses are recognized when cash is received or paid out.
Connection Fee	A fee paid by a new discharger for the costs of capacity in the regional wastewater system.
Effluent	The liquid outflow discharged from the Publicly Owned Treatment Works (POTW) facility or the nondomestic wastewater discharged by industrial users to the POTW.
Enterprise accounting	Uses an accrual basis of accounting method to account for the activities of a government agency that provides goods or services to the public on a fee basis.
Enterprise Accounting System	An accrual accounting system that is similar to a regular business accounting method, where revenues and expenses are recorded when they incur. VVWRA employs two funds, (1) Operations and Maintenance Fund and (2) Capital Fund. Both of the funds employ the Enterprise Accounting System.
FEMA	The Federal Emergency Management Agency (FEMA) coordinates the federal government’s role in preparing for, preventing, mitigating the effects of, responding to, and recovering from all domestic disasters, whether natural or man-made, including acts of terror.
Interceptor	A pipeline that conveys wastewater from the sewer collection facilities of a Member Agency to the VVWRA’s wastewater treatment facilities.
Member Agencies	The four government agencies who participate in the joint power agreement with VVWRA. They are the City of Victorville; Town of Apple Valley; Hesperia Water District; and County of San Bernardino Service Areas, #42 Oro Grande and #64 Spring Valley Lake.
MG	Million Gallons.
MGD	Million Gallons per Day.
POTW	The Publicly Owned Treatment Works is sewage treatment plants that are owned and usually operated by local government agencies.
Industrial Pretreatment	The reduction and elimination of pollutants or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the POTW.
Reclaimed Water	Water that, as a result of waste treatment, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.
Septage	Any wastewater or sludge removed from cesspools, septic tanks, holding tanks, or chemical toilets that is trucked or hauled to the point of discharge.
SRF	State Revolving Fund.
High Strength Surcharge	An assessment, in addition to the service charge, which may be levied on those users whose waste are greater in strength than threshold concentration values established.
Total Suspended Solids	The insoluble solid matter suspended in wastewater that is separable by laboratory filtration in accordance with the procedure described in the current edition of “ <i>Standard Methods for the Examination of Water and Wastewater</i> ” published by the American Public Health Association.
Ultraviolet Disinfection	A non-chemical process whereby a pathogen, contained within the wastewater, is exposed to a dosage of ultraviolet radiation, resulting in the deactivation of the pathogen’s DNA, such that the pathogen is unable to reproduce.
User	Any person who contributes, causes, or permits the contribution of wastewater into the POTW, including households, private residences, nonresidential users, and Member Agencies.
VVWRA	The Victor Valley Wastewater Reclamation Authority.
Wastewater	The domestic or nondomestic liquid wastes discharged from dwellings, or commercial buildings, industrial facilities, and institutions, together with any ground water, surface water, and storm water that may be present, whether treated or untreated, which is contributed into or permitted to enter the POTW.

EXHIBIT B

VICTOR VALLEY WASTEWATER RECLATION AUTHORITY
 SALARY SCHEDULE WITH CPI 2.50%
 FY 2018-2019

Range	CPI 2.50%		PERS 0.00%		Step B	Step B1	Step C	Step C1	Step D	Step D1	Step E	
	Step A	Step A1	Step A	Step A1								
1	32,468.80	33,259.20	34,112.00	34,923.20	35,838.40	36,753.60	37,648.00	38,584.00	39,540.80	Annual		
	2,705.73	2,771.60	2,842.67	2,910.27	2,986.53	3,062.80	3,137.33	3,215.33	3,295.07	Monthly		
	15.61	15.99	16.40	16.79	17.23	17.67	18.10	18.55	19.01	Hourly		
2	32,905.60	33,696.00	34,507.20	35,443.20	36,316.80	37,190.40	38,126.40	39,083.20	40,060.80	Annual		
	2,742.13	2,808.00	2,875.60	2,953.60	3,026.40	3,099.20	3,177.20	3,256.93	3,338.40	Monthly		
	15.82	16.20	16.59	17.04	17.46	17.88	18.33	18.79	19.26	Hourly		
3	33,280.00	34,112.00	34,923.20	35,838.40	36,753.60	37,648.00	38,584.00	39,540.80	40,560.00	Annual		
	2,773.33	2,842.67	2,910.27	2,986.53	3,062.80	3,137.33	3,215.33	3,295.07	3,380.00	Monthly		
	16.00	16.40	16.79	17.23	17.67	18.10	18.55	19.01	19.50	Hourly		
4	33,696.00	34,548.80	35,443.20	36,316.80	37,190.40	38,126.40	39,083.20	40,081.60	41,059.20	Annual		
	2,808.00	2,879.07	2,953.60	3,026.40	3,099.20	3,177.20	3,256.93	3,340.13	3,421.60	Monthly		
	16.20	16.61	17.04	17.46	17.88	18.33	18.79	19.27	19.74	Hourly		
5	34,112.00	34,923.20	35,859.20	36,774.40	37,668.80	38,604.80	39,582.40	40,560.00	41,579.20	Annual		
	2,842.67	2,910.27	2,988.27	3,064.53	3,139.07	3,217.07	3,298.53	3,380.00	3,464.93	Monthly		
	16.40	16.79	17.24	17.68	18.11	18.56	19.03	19.50	19.99	Hourly		
6	34,548.80	35,464.00	36,316.80	37,211.20	38,126.40	39,104.00	40,081.60	41,059.20	42,120.00	Annual		
	2,879.07	2,955.33	3,026.40	3,100.93	3,177.20	3,258.67	3,340.13	3,421.60	3,510.00	Monthly		
	16.61	17.05	17.46	17.89	18.33	18.80	19.27	19.74	20.25	Hourly		
7	34,944.00	35,859.20	36,774.40	37,668.80	38,604.80	39,582.40	40,580.80	41,600.00	42,619.20	Annual		
	2,912.00	2,988.27	3,064.53	3,139.07	3,217.07	3,298.53	3,381.73	3,466.67	3,551.60	Monthly		
	16.80	17.24	17.68	18.11	18.56	19.03	19.51	20.00	20.49	Hourly		
8	35,464.00	36,316.80	37,211.20	38,126.40	39,104.00	40,081.60	41,080.00	42,120.00	43,139.20	Annual		
	2,955.33	3,026.40	3,100.93	3,177.20	3,258.67	3,340.13	3,423.33	3,510.00	3,594.93	Monthly		
	17.05	17.46	17.89	18.33	18.80	19.27	19.75	20.25	20.74	Hourly		
9	35,859.20	36,774.40	37,668.80	38,604.80	39,582.40	40,580.80	41,600.00	42,619.20	43,680.00	Annual		
	2,988.27	3,064.53	3,139.07	3,217.07	3,298.53	3,381.73	3,466.67	3,551.60	3,640.00	Monthly		
	17.24	17.68	18.11	18.56	19.03	19.51	20.00	20.49	21.00	Hourly		
10	36,337.60	37,211.20	38,147.20	39,104.00	40,081.60	41,080.00	42,120.00	43,139.20	44,241.60	Annual		
	3,028.13	3,100.93	3,178.93	3,258.67	3,340.13	3,423.33	3,510.00	3,594.93	3,686.80	Monthly		
	17.47	17.89	18.34	18.80	19.27	19.75	20.25	20.74	21.27	Hourly		
11	36,774.40	37,668.80	38,604.80	39,582.40	40,580.80	41,600.00	42,619.20	43,680.00	44,824.00	Annual		
	3,064.53	3,139.07	3,217.07	3,298.53	3,381.73	3,466.67	3,551.60	3,640.00	3,735.33	Monthly		
	17.68	18.11	18.56	19.03	19.51	20.00	20.49	21.00	21.55	Hourly		
12	37,211.20	38,147.20	39,104.00	40,102.40	41,080.00	42,140.80	43,139.20	44,241.60	45,364.80	Annual		
	3,100.93	3,178.93	3,258.67	3,341.87	3,423.33	3,511.73	3,594.93	3,686.80	3,780.40	Monthly		
	17.89	18.34	18.80	19.28	19.75	20.26	20.74	21.27	21.81	Hourly		
13	37,689.60	38,625.60	39,603.20	40,580.80	41,600.00	42,619.20	43,680.00	44,844.80	45,905.60	Annual		
	3,140.80	3,218.80	3,300.27	3,381.73	3,466.67	3,551.60	3,640.00	3,737.07	3,825.47	Monthly		
	18.12	18.57	19.04	19.51	20.00	20.49	21.00	21.56	22.07	Hourly		
14	38,147.20	39,145.60	40,102.40	41,080.00	42,140.80	43,139.20	44,241.60	45,364.80	46,529.60	Annual		
	3,178.93	3,262.13	3,341.87	3,423.33	3,511.73	3,594.93	3,686.80	3,780.40	3,877.47	Monthly		
	18.34	18.82	19.28	19.75	20.26	20.74	21.27	21.81	22.37	Hourly		
15	38,625.60	39,603.20	40,601.60	41,620.80	42,640.00	43,700.80	44,844.80	45,905.60	47,070.40	Annual		
	3,218.80	3,300.27	3,383.47	3,468.40	3,553.33	3,641.73	3,737.07	3,825.47	3,922.53	Monthly		
	18.57	19.04	19.52	20.01	20.50	21.01	21.56	22.07	22.63	Hourly		
16	39,145.60	40,102.40	41,121.60	42,140.80	43,201.60	44,241.60	45,364.80	46,529.60	47,673.60	Annual		
	3,262.13	3,341.87	3,426.80	3,511.73	3,600.13	3,686.80	3,780.40	3,877.47	3,972.80	Monthly		
	18.82	19.28	19.77	20.26	20.77	21.27	21.81	22.37	22.92	Hourly		
17	39,603.20	40,601.60	41,620.80	42,640.00	43,700.80	44,844.80	45,926.40	47,070.40	48,256.00	Annual		
	3,300.27	3,383.47	3,468.40	3,553.33	3,641.73	3,737.07	3,827.20	3,922.53	4,021.33	Monthly		

VICTOR VALLEY WASTEWATER RECLATION AUTHORITY
SALARY SCHEDULE WITH CPI 2.50%
FY 2018-2019

Range	Step A	Step A1	Step B	Step B1	Step C	Step C1	Step D	Step D1	Step E	
	19.04	19.52	20.01	20.50	21.01	21.56	22.08	22.63	23.20	Hourly
18	40,102.40	41,121.60	42,140.80	43,201.60	44,262.40	45,364.80	46,529.60	47,673.60	48,880.00	Annual
	3,341.87	3,426.80	3,511.73	3,600.13	3,688.53	3,780.40	3,877.47	3,972.80	4,073.33	Monthly
	19.28	19.77	20.26	20.77	21.28	21.81	22.37	22.92	23.50	Hourly
19	40,601.60	41,620.80	42,640.00	43,700.80	44,865.60	45,926.40	47,070.40	48,256.00	49,483.20	Annual
	3,383.47	3,468.40	3,553.33	3,641.73	3,738.80	3,827.20	3,922.53	4,021.33	4,123.60	Monthly
	19.52	20.01	20.50	21.01	21.57	22.08	22.63	23.20	23.79	Hourly
20	41,121.60	42,161.60	43,201.60	44,262.40	45,385.60	46,550.40	47,694.40	48,880.00	50,148.80	Annual
	3,426.80	3,513.47	3,600.13	3,688.53	3,782.13	3,879.20	3,974.53	4,073.33	4,179.07	Monthly
	19.77	20.27	20.77	21.28	21.82	22.38	22.93	23.50	24.11	Hourly
21	41,620.80	42,640.00	43,721.60	44,865.60	45,926.40	47,091.20	48,256.00	49,483.20	50,689.60	Annual
	3,468.40	3,553.33	3,643.47	3,738.80	3,827.20	3,924.27	4,021.33	4,123.60	4,224.13	Monthly
	20.01	20.50	21.02	21.57	22.08	22.64	23.20	23.79	24.37	Hourly
22	42,161.60	43,222.40	44,262.40	45,385.60	46,550.40	47,694.40	48,880.00	50,148.80	51,376.00	Annual
	3,513.47	3,601.87	3,688.53	3,782.13	3,879.20	3,974.53	4,073.33	4,179.07	4,281.33	Monthly
	20.27	20.78	21.28	21.82	22.38	22.93	23.50	24.11	24.70	Hourly
23	42,660.80	43,721.60	44,865.60	45,926.40	47,091.20	48,276.80	49,504.00	50,710.40	51,979.20	Annual
	3,555.07	3,643.47	3,738.80	3,827.20	3,924.27	4,023.07	4,125.33	4,225.87	4,331.60	Monthly
	20.51	21.02	21.57	22.08	22.64	23.21	23.80	24.38	24.99	Hourly
24	43,222.40	44,262.40	45,385.60	46,550.40	47,694.40	48,900.80	50,148.80	51,376.00	52,644.80	Annual
	3,601.87	3,688.53	3,782.13	3,879.20	3,974.53	4,075.07	4,179.07	4,281.33	4,387.07	Monthly
	20.78	21.28	21.82	22.38	22.93	23.51	24.11	24.70	25.31	Hourly
25	43,721.60	44,865.60	45,947.20	47,091.20	48,276.80	49,504.00	50,710.40	52,000.00	53,268.80	Annual
	3,643.47	3,738.80	3,828.93	3,924.27	4,023.07	4,125.33	4,225.87	4,333.33	4,439.07	Monthly
	21.02	21.57	22.09	22.64	23.21	23.80	24.38	25.00	25.61	Hourly
26	44,283.20	45,406.40	46,550.40	47,715.20	48,900.80	50,148.80	51,376.00	52,644.80	53,976.00	Annual
	3,690.27	3,783.87	3,879.20	3,976.27	4,075.07	4,179.07	4,281.33	4,387.07	4,498.00	Monthly
	21.29	21.83	22.38	22.94	23.51	24.11	24.70	25.31	25.95	Hourly
27	44,886.40	45,947.20	47,112.00	48,276.80	49,504.00	50,710.40	52,000.00	53,310.40	54,662.40	Annual
	3,740.53	3,828.93	3,926.00	4,023.07	4,125.33	4,225.87	4,333.33	4,442.53	4,555.20	Monthly
	21.58	22.09	22.65	23.21	23.80	24.38	25.00	25.63	26.28	Hourly
28	45,406.40	46,571.20	47,715.20	48,900.80	50,169.60	51,396.80	52,665.60	53,976.00	55,307.20	Annual
	3,783.87	3,880.93	3,976.27	4,075.07	4,180.80	4,283.07	4,388.80	4,498.00	4,608.93	Monthly
	21.83	22.39	22.94	23.51	24.12	24.71	25.32	25.95	26.59	Hourly
29	45,947.20	47,112.00	48,297.60	49,524.80	50,752.00	52,000.00	53,310.40	54,662.40	56,056.00	Annual
	3,828.93	3,926.00	4,024.80	4,127.07	4,229.33	4,333.33	4,442.53	4,555.20	4,671.33	Monthly
	22.09	22.65	23.22	23.81	24.40	25.00	25.63	26.28	26.95	Hourly
30	46,571.20	47,715.20	48,921.60	50,169.60	51,396.80	52,665.60	53,996.80	55,307.20	56,721.60	Annual
	3,880.93	3,976.27	4,076.80	4,180.80	4,283.07	4,388.80	4,499.73	4,608.93	4,726.80	Monthly
	22.39	22.94	23.52	24.12	24.71	25.32	25.96	26.59	27.27	Hourly
31	47,112.00	48,297.60	49,524.80	50,752.00	52,000.00	53,310.40	54,662.40	56,056.00	57,408.00	Annual
	3,926.00	4,024.80	4,127.07	4,229.33	4,333.33	4,442.53	4,555.20	4,671.33	4,784.00	Monthly
	22.65	23.22	23.81	24.40	25.00	25.63	26.28	26.95	27.60	Hourly
32	47,736.00	48,921.60	50,169.60	51,396.80	52,665.60	53,996.80	55,328.00	56,721.60	58,156.80	Annual
	3,978.00	4,076.80	4,180.80	4,283.07	4,388.80	4,499.73	4,610.67	4,726.80	4,846.40	Monthly
	22.95	23.52	24.12	24.71	25.32	25.96	26.60	27.27	27.96	Hourly
33	48,297.60	49,524.80	50,752.00	52,020.80	53,352.00	54,683.20	56,056.00	57,408.00	58,884.80	Annual
	4,024.80	4,127.07	4,229.33	4,335.07	4,446.00	4,556.93	4,671.33	4,784.00	4,907.07	Monthly
	23.22	23.81	24.40	25.01	25.65	26.29	26.95	27.60	28.31	Hourly
34	48,921.60	50,190.40	51,417.60	52,686.40	53,996.80	55,328.00	56,721.60	58,156.80	59,612.80	Annual
	4,076.80	4,182.53	4,284.80	4,390.53	4,499.73	4,610.67	4,726.80	4,846.40	4,967.73	Monthly
	23.52	24.13	24.72	25.33	25.96	26.60	27.27	27.96	28.66	Hourly

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VICTOR VALLEY WASTEWATER RECLATION AUTHORITY
 SALARY SCHEDULE WITH CPI 2.50%
 FY 2018-2019

Range	Step A	Step A1	Step B	Step B1	Step C	Step C1	Step D	Step D1	Step E	
35	49,524.80	50,772.80	52,020.80	53,352.00	54,683.20	56,076.80	57,428.80	58,884.80	60,361.60	Annual
	4,127.07	4,231.07	4,335.07	4,446.00	4,556.93	4,673.07	4,785.73	4,907.07	5,030.13	Monthly
	23.81	24.41	25.01	25.65	26.29	26.96	27.61	28.31	29.02	Hourly
36	50,190.40	51,417.60	52,686.40	54,017.60	55,328.00	56,742.40	58,156.80	59,612.80	61,110.40	Annual
	4,182.53	4,284.80	4,390.53	4,501.47	4,610.67	4,728.53	4,846.40	4,967.73	5,092.53	Monthly
	24.13	24.72	25.33	25.97	26.60	27.28	27.96	28.66	29.38	Hourly
37	50,772.80	52,020.80	53,352.00	54,683.20	56,076.80	57,428.80	58,884.80	60,361.60	61,880.00	Annual
	4,231.07	4,335.07	4,446.00	4,556.93	4,673.07	4,785.73	4,907.07	5,030.13	5,156.67	Monthly
	24.41	25.01	25.65	26.29	26.96	27.61	28.31	29.02	29.75	Hourly
38	51,417.60	52,686.40	54,017.60	55,348.80	56,742.40	58,177.60	59,633.60	61,110.40	62,628.80	Annual
	4,284.80	4,390.53	4,501.47	4,612.40	4,728.53	4,848.13	4,969.47	5,092.53	5,219.07	Monthly
	24.72	25.33	25.97	26.61	27.28	27.97	28.67	29.38	30.11	Hourly
39	52,041.60	53,393.60	54,724.80	56,076.80	57,428.80	58,905.60	60,382.40	61,880.00	63,419.20	Annual
	4,336.80	4,449.47	4,560.40	4,673.07	4,785.73	4,908.80	5,031.87	5,156.67	5,284.93	Monthly
	25.02	25.67	26.31	26.96	27.61	28.32	29.03	29.75	30.49	Hourly
40	52,707.20	54,017.60	55,348.80	56,742.40	58,177.60	59,633.60	61,131.20	62,628.80	64,230.40	Annual
	4,392.27	4,501.47	4,612.40	4,728.53	4,848.13	4,969.47	5,094.27	5,219.07	5,352.53	Monthly
	25.34	25.97	26.61	27.28	27.97	28.67	29.39	30.11	30.88	Hourly
41	53,393.60	54,724.80	56,097.60	57,470.40	58,905.60	60,382.40	61,880.00	63,419.20	65,000.00	Annual
	4,449.47	4,560.40	4,674.80	4,789.20	4,908.80	5,031.87	5,156.67	5,284.93	5,416.67	Monthly
	25.67	26.31	26.97	27.63	28.32	29.03	29.75	30.49	31.25	Hourly
42	54,038.40	55,348.80	56,763.20	58,177.60	59,654.40	61,131.20	62,628.80	64,230.40	65,832.00	Annual
	4,503.20	4,612.40	4,730.27	4,848.13	4,971.20	5,094.27	5,219.07	5,352.53	5,486.00	Monthly
	25.98	26.61	27.29	27.97	28.68	29.39	30.11	30.88	31.65	Hourly
43	54,724.80	56,097.60	57,470.40	58,905.60	60,382.40	61,900.80	63,440.00	65,000.00	66,664.00	Annual
	4,560.40	4,674.80	4,789.20	4,908.80	5,031.87	5,158.40	5,286.67	5,416.67	5,555.33	Monthly
	26.31	26.97	27.63	28.32	29.03	29.76	30.50	31.25	32.05	Hourly
44	55,369.60	56,763.20	58,198.40	59,654.40	61,172.80	62,649.60	64,251.20	65,832.00	67,496.00	Annual
	4,614.13	4,730.27	4,849.87	4,971.20	5,097.73	5,220.80	5,354.27	5,486.00	5,624.67	Monthly
	26.62	27.29	27.98	28.68	29.41	30.12	30.89	31.65	32.45	Hourly
45	56,097.60	57,470.40	58,926.40	60,424.00	61,900.80	63,440.00	65,020.80	66,664.00	68,348.80	Annual
	4,674.80	4,789.20	4,910.53	5,035.33	5,158.40	5,286.67	5,418.40	5,555.33	5,695.73	Monthly
	26.97	27.63	28.33	29.05	29.76	30.50	31.26	32.05	32.86	Hourly
46	56,763.20	58,198.40	59,654.40	61,172.80	62,649.60	64,251.20	65,832.00	67,496.00	69,160.00	Annual
	4,730.27	4,849.87	4,971.20	5,097.73	5,220.80	5,354.27	5,486.00	5,624.67	5,763.33	Monthly
	27.29	27.98	28.68	29.41	30.12	30.89	31.65	32.45	33.25	Hourly
47	57,491.20	58,926.40	60,424.00	61,921.60	63,460.80	65,020.80	66,664.00	68,348.80	70,054.40	Annual
	4,790.93	4,910.53	5,035.33	5,160.13	5,288.40	5,418.40	5,555.33	5,695.73	5,837.87	Monthly
	27.64	28.33	29.05	29.77	30.51	31.26	32.05	32.86	33.68	Hourly
48	58,198.40	59,675.20	61,172.80	62,691.20	64,251.20	65,852.80	67,516.80	69,180.80	70,928.00	Annual
	4,849.87	4,972.93	5,097.73	5,224.27	5,354.27	5,487.73	5,626.40	5,765.07	5,910.67	Monthly
	27.98	28.69	29.41	30.14	30.89	31.66	32.46	33.26	34.10	Hourly
49	58,947.20	60,424.00	61,921.60	63,460.80	65,062.40	66,684.80	68,369.60	70,054.40	71,801.60	Annual
	4,912.27	5,035.33	5,160.13	5,288.40	5,421.87	5,557.07	5,697.47	5,837.87	5,983.47	Monthly
	28.34	29.05	29.77	30.51	31.28	32.06	32.87	33.68	34.52	Hourly
50	59,675.20	61,193.60	62,691.20	64,272.00	65,852.80	67,516.80	69,180.80	70,969.60	72,716.80	Annual
	4,972.93	5,099.47	5,224.27	5,356.00	5,487.73	5,626.40	5,765.07	5,914.13	6,059.73	Monthly
	28.69	29.42	30.14	30.90	31.66	32.46	33.26	34.12	34.96	Hourly
51	60,444.80	61,921.60	63,460.80	65,062.40	66,684.80	68,369.60	70,075.20	71,801.60	73,632.00	Annual
	5,037.07	5,160.13	5,288.40	5,421.87	5,557.07	5,697.47	5,839.60	5,983.47	6,136.00	Monthly
	29.06	29.77	30.51	31.28	32.06	32.87	33.69	34.52	35.40	Hourly
52	61,193.60	62,691.20	64,272.00	65,873.60	67,537.60	69,201.60	70,969.60	72,737.60	74,526.40	Annual

VICTOR VALLEY WASTEWATER RECLATION AUTHORITY
 SALARY SCHEDULE WITH CPI 2.50%
 FY 2018-2019

Range	Step A	Step A1	Step B	Step B1	Step C	Step C1	Step D	Step D1	Step E	
	5,099.47	5,224.27	5,356.00	5,489.47	5,628.13	5,766.80	5,914.13	6,061.47	6,210.53	Monthly
	29.42	30.14	30.90	31.67	32.47	33.27	34.12	34.97	35.83	Hourly
53	61,942.40	63,481.60	65,062.40	66,705.60	68,390.40	70,075.20	71,822.40	73,632.00	75,504.00	Annual
	5,161.87	5,290.13	5,421.87	5,558.80	5,699.20	5,839.60	5,985.20	6,136.00	6,292.00	Monthly
	29.78	30.52	31.28	32.07	32.88	33.69	34.53	35.40	36.30	Hourly
54	62,712.00	64,292.80	65,873.60	67,537.60	69,201.60	70,990.40	72,737.60	74,526.40	76,419.20	Annual
	5,226.00	5,357.73	5,489.47	5,628.13	5,766.80	5,915.87	6,061.47	6,210.53	6,368.27	Monthly
	30.15	30.91	31.67	32.47	33.27	34.13	34.97	35.83	36.74	Hourly
55	63,481.60	65,083.20	66,705.60	68,390.40	70,096.00	71,822.40	73,652.80	75,524.80	77,376.00	Annual
	5,290.13	5,423.60	5,558.80	5,699.20	5,841.33	5,985.20	6,137.73	6,293.73	6,448.00	Monthly
	30.52	31.29	32.07	32.88	33.70	34.53	35.41	36.31	37.20	Hourly
56	64,292.80	65,873.60	67,558.40	69,201.60	70,990.40	72,737.60	74,547.20	76,440.00	78,353.60	Annual
	5,357.73	5,489.47	5,629.87	5,766.80	5,915.87	6,061.47	6,212.27	6,370.00	6,529.47	Monthly
	30.91	31.67	32.48	33.27	34.13	34.97	35.84	36.75	37.67	Hourly
57	65,083.20	66,726.40	68,411.20	70,096.00	71,843.20	73,652.80	75,524.80	77,376.00	79,310.40	Annual
	5,423.60	5,560.53	5,700.93	5,841.33	5,986.93	6,137.73	6,293.73	6,448.00	6,609.20	Monthly
	31.29	32.08	32.89	33.70	34.54	35.41	36.31	37.20	38.13	Hourly
58	65,894.40	67,558.40	69,222.40	70,990.40	72,758.40	74,547.20	76,440.00	78,353.60	80,308.80	Annual
	5,491.20	5,629.87	5,768.53	5,915.87	6,063.20	6,212.27	6,370.00	6,529.47	6,692.40	Monthly
	31.68	32.48	33.28	34.13	34.98	35.84	36.75	37.67	38.61	Hourly
59	66,726.40	68,411.20	70,116.80	71,843.20	73,652.80	75,545.60	77,396.80	79,352.00	81,307.20	Annual
	5,560.53	5,700.93	5,843.07	5,986.93	6,137.73	6,295.47	6,449.73	6,612.67	6,775.60	Monthly
	32.08	32.89	33.71	34.54	35.41	36.32	37.21	38.15	39.09	Hourly
60	67,558.40	69,222.40	71,011.20	72,758.40	74,588.80	76,460.80	78,374.40	80,329.60	82,368.00	Annual
	5,629.87	5,768.53	5,917.60	6,063.20	6,215.73	6,371.73	6,531.20	6,694.13	6,864.00	Monthly
	32.48	33.28	34.14	34.98	35.86	36.76	37.68	38.62	39.60	Hourly
61	68,411.20	70,116.80	71,864.00	73,673.60	75,545.60	77,396.80	79,352.00	81,307.20	83,366.40	Annual
	5,700.93	5,843.07	5,988.67	6,139.47	6,295.47	6,449.73	6,612.67	6,775.60	6,947.20	Monthly
	32.89	33.71	34.55	35.42	36.32	37.21	38.15	39.09	40.08	Hourly
62	69,243.20	71,011.20	72,779.20	74,588.80	76,460.80	78,374.40	80,329.60	82,368.00	84,385.60	Annual
	5,770.27	5,917.60	6,064.93	6,215.73	6,371.73	6,531.20	6,694.13	6,864.00	7,032.13	Monthly
	33.29	34.14	34.99	35.86	36.76	37.68	38.62	39.60	40.57	Hourly
63	70,158.40	71,864.00	73,673.60	75,566.40	77,438.40	79,372.80	81,328.00	83,387.20	85,425.60	Annual
	5,846.53	5,988.67	6,139.47	6,297.20	6,453.20	6,614.40	6,777.33	6,948.93	7,118.80	Monthly
	33.73	34.55	35.42	36.33	37.23	38.16	39.10	40.09	41.07	Hourly
64	71,032.00	72,779.20	74,630.40	76,481.60	78,395.20	80,371.20	82,388.80	84,427.20	86,507.20	Annual
	5,919.33	6,064.93	6,219.20	6,373.47	6,532.93	6,697.60	6,865.73	7,035.60	7,208.93	Monthly
	34.15	34.99	35.88	36.77	37.69	38.64	39.61	40.59	41.59	Hourly
65	71,884.80	73,694.40	75,566.40	77,438.40	79,372.80	81,328.00	83,387.20	85,467.20	87,609.60	Annual
	5,990.40	6,141.20	6,297.20	6,453.20	6,614.40	6,777.33	6,948.93	7,122.27	7,300.80	Monthly
	34.56	35.43	36.33	37.23	38.16	39.10	40.09	41.09	42.12	Hourly
66	72,800.00	74,630.40	76,481.60	78,395.20	80,371.20	82,388.80	84,468.80	86,528.00	88,691.20	Annual
	6,066.67	6,219.20	6,373.47	6,532.93	6,697.60	6,865.73	7,039.07	7,210.67	7,390.93	Monthly
	35.00	35.88	36.77	37.69	38.64	39.61	40.61	41.60	42.64	Hourly
67	73,694.40	75,587.20	77,459.20	79,393.60	81,348.80	83,408.00	85,467.20	87,630.40	89,793.60	Annual
	6,141.20	6,298.93	6,454.93	6,616.13	6,779.07	6,950.67	7,122.27	7,302.53	7,482.80	Monthly
	35.43	36.34	37.24	38.17	39.11	40.10	41.09	42.13	43.17	Hourly
68	74,630.40	76,502.40	78,416.00	80,392.00	82,430.40	84,468.80	86,528.00	88,712.00	90,916.80	Annual
	6,219.20	6,375.20	6,534.67	6,699.33	6,869.20	7,039.07	7,210.67	7,392.67	7,576.40	Monthly
	35.88	36.78	37.70	38.65	39.63	40.61	41.60	42.65	43.71	Hourly
69	75,587.20	77,459.20	79,393.60	81,348.80	83,408.00	85,488.00	87,630.40	89,814.40	92,081.60	Annual
	6,298.93	6,454.93	6,616.13	6,779.07	6,950.67	7,124.00	7,302.53	7,484.53	7,673.47	Monthly

VICTOR VALLEY WASTEWATER RECLATION AUTHORITY
 SALARY SCHEDULE WITH CPI 2.50%
 FY 2018-2019

Range	Step A	Step A1	Step B	Step B1	Step C	Step C1	Step D	Step D1	Step E	
	36.34	37.24	38.17	39.11	40.10	41.10	42.13	43.18	44.27	Hourly
70	76,502.40	78,416.00	80,392.00	82,430.40	84,489.60	86,569.60	88,712.00	90,916.80	93,204.80	Annual
	6,375.20	6,534.67	6,699.33	6,869.20	7,040.80	7,214.13	7,392.67	7,576.40	7,767.07	Monthly
	36.78	37.70	38.65	39.63	40.62	41.62	42.65	43.71	44.81	Hourly
71	77,480.00	79,414.40	81,369.60	83,428.80	85,488.00	87,651.20	89,814.40	92,081.60	94,390.40	Annual
	6,456.67	6,617.87	6,780.80	6,952.40	7,124.00	7,304.27	7,484.53	7,673.47	7,865.87	Monthly
	37.25	38.18	39.12	40.11	41.10	42.14	43.18	44.27	45.38	Hourly
72	78,436.80	80,412.80	82,451.20	84,489.60	86,569.60	88,732.80	90,937.60	93,225.60	95,555.20	Annual
	6,536.40	6,701.07	6,870.93	7,040.80	7,214.13	7,394.40	7,578.13	7,768.80	7,962.93	Monthly
	37.71	38.66	39.64	40.62	41.62	42.66	43.72	44.82	45.94	Hourly
73	79,414.40	81,369.60	83,449.60	85,508.80	87,651.20	89,835.20	92,102.40	94,411.20	96,803.20	Annual
	6,617.87	6,780.80	6,954.13	7,125.73	7,304.27	7,486.27	7,675.20	7,867.60	8,066.93	Monthly
	38.18	39.12	40.12	41.11	42.14	43.19	44.28	45.39	46.54	Hourly
74	80,412.80	82,451.20	84,510.40	86,590.40	88,753.60	90,937.60	93,225.60	95,576.00	97,968.00	Annual
	6,701.07	6,870.93	7,042.53	7,215.87	7,396.13	7,578.13	7,768.80	7,964.67	8,164.00	Monthly
	38.66	39.64	40.63	41.63	42.67	43.72	44.82	45.95	47.10	Hourly
75	81,390.40	83,449.60	85,508.80	87,672.00	89,835.20	92,102.40	94,432.00	96,803.20	99,153.60	Annual
	6,782.53	6,954.13	7,125.73	7,306.00	7,486.27	7,675.20	7,869.33	8,066.93	8,262.80	Monthly
	39.13	40.12	41.11	42.15	43.19	44.28	45.40	46.54	47.67	Hourly
76	82,472.00	84,510.40	86,632.00	88,753.60	90,958.40	93,246.40	95,576.00	97,968.00	100,422.40	Annual
	6,872.67	7,042.53	7,219.33	7,396.13	7,579.87	7,770.53	7,964.67	8,164.00	8,368.53	Monthly
	39.65	40.63	41.65	42.67	43.73	44.83	45.95	47.10	48.28	Hourly
77	83,470.40	85,529.60	87,672.00	89,856.00	92,123.20	94,432.00	96,824.00	99,195.20	101,691.20	Annual
	6,955.87	7,127.47	7,306.00	7,488.00	7,676.93	7,869.33	8,068.67	8,266.27	8,474.27	Monthly
	40.13	41.12	42.15	43.20	44.29	45.40	46.55	47.69	48.89	Hourly
78	84,531.20	86,632.00	88,774.40	90,958.40	93,267.20	95,596.80	97,988.80	100,443.20	102,960.00	Annual
	7,044.27	7,219.33	7,397.87	7,579.87	7,772.27	7,966.40	8,165.73	8,370.27	8,580.00	Monthly
	40.64	41.65	42.68	43.73	44.84	45.96	47.11	48.29	49.50	Hourly
79	85,529.60	87,692.80	89,897.60	92,123.20	94,452.80	96,824.00	99,195.20	101,712.00	104,249.60	Annual
	7,127.47	7,307.73	7,491.47	7,676.93	7,871.07	8,068.67	8,266.27	8,476.00	8,687.47	Monthly
	41.12	42.16	43.22	44.29	45.41	46.55	47.69	48.90	50.12	Hourly
80	86,652.80	88,774.40	90,979.20	93,267.20	95,617.60	97,988.80	100,464.00	102,980.80	105,580.80	Annual
	7,221.07	7,397.87	7,581.60	7,772.27	7,968.13	8,165.73	8,372.00	8,581.73	8,798.40	Monthly
	41.66	42.68	43.74	44.84	45.97	47.11	48.30	49.51	50.76	Hourly
81	87,692.80	89,897.60	92,144.00	94,452.80	96,844.80	99,236.80	101,732.80	104,270.40	106,870.40	Annual
	7,307.73	7,491.47	7,678.67	7,871.07	8,070.40	8,269.73	8,477.73	8,689.20	8,905.87	Monthly
	42.16	43.22	44.30	45.41	46.56	47.71	48.91	50.13	51.38	Hourly
82	88,816.00	91,020.80	93,288.00	95,617.60	98,009.60	100,464.00	102,980.80	105,601.60	108,222.40	Annual
	7,401.33	7,585.07	7,774.00	7,968.13	8,167.47	8,372.00	8,581.73	8,800.13	9,018.53	Monthly
	42.70	43.76	44.85	45.97	47.12	48.30	49.51	50.77	52.03	Hourly
83	89,918.40	92,164.80	94,473.60	96,865.60	99,257.60	101,732.80	104,270.40	106,870.40	109,553.60	Annual
	7,493.20	7,680.40	7,872.80	8,072.13	8,271.47	8,477.73	8,689.20	8,905.87	9,129.47	Monthly
	43.23	44.31	45.42	46.57	47.72	48.91	50.13	51.38	52.67	Hourly
84	91,020.80	93,288.00	95,638.40	98,030.40	100,484.80	103,001.60	105,601.60	108,243.20	110,926.40	Annual
	7,585.07	7,774.00	7,969.87	8,169.20	8,373.73	8,583.47	8,800.13	9,020.27	9,243.87	Monthly
	43.76	44.85	45.98	47.13	48.31	49.52	50.77	52.04	53.33	Hourly
85	92,164.80	94,494.40	96,865.60	99,257.60	101,753.60	104,291.20	106,891.20	109,595.20	112,340.80	Annual
	7,680.40	7,874.53	8,072.13	8,271.47	8,479.47	8,690.93	8,907.60	9,132.93	9,361.73	Monthly
	44.31	45.43	46.57	47.72	48.92	50.14	51.39	52.69	54.01	Hourly
86	93,308.80	95,638.40	98,030.40	100,505.60	103,043.20	105,622.40	108,243.20	110,947.20	113,713.60	Annual
	7,775.73	7,969.87	8,169.20	8,375.47	8,586.93	8,801.87	9,020.27	9,245.60	9,476.13	Monthly
	44.86	45.98	47.13	48.32	49.54	50.78	52.04	53.34	54.67	Hourly

VICTOR VALLEY WASTEWATER RECLATION AUTHORITY
 SALARY SCHEDULE WITH CPI 2.50%
 FY 2018-2019


Range	Step A	Step A1	Step B	Step B1	Step C	Step C1	Step D	Step D1	Step E	
87	94,494.40	96,886.40	99,278.40	101,774.40	104,312.00	106,912.00	109,595.20	112,361.60	115,169.60	Annual
	7,874.53	8,073.87	8,273.20	8,481.20	8,692.67	8,909.33	9,132.93	9,363.47	9,597.47	Monthly
	45.43	46.58	47.73	48.93	50.15	51.40	52.69	54.02	55.37	Hourly
88	95,659.20	98,051.20	100,505.60	103,043.20	105,643.20	108,264.00	110,968.00	113,734.40	116,584.00	Annual
	7,971.60	8,170.93	8,375.47	8,586.93	8,803.60	9,022.00	9,247.33	9,477.87	9,715.33	Monthly
	45.99	47.14	48.32	49.54	50.79	52.05	53.35	54.68	56.05	Hourly
89	96,886.40	99,299.20	101,774.40	104,312.00	106,912.00	109,616.00	112,361.60	115,169.60	118,040.00	Annual
	8,073.87	8,274.93	8,481.20	8,692.67	8,909.33	9,134.67	9,363.47	9,597.47	9,836.67	Monthly
	46.58	47.74	48.93	50.15	51.40	52.70	54.02	55.37	56.75	Hourly
90	98,051.20	100,526.40	103,084.80	105,643.20	108,284.80	110,988.80	113,734.40	116,604.80	119,475.20	Annual
	8,170.93	8,377.20	8,590.40	8,803.60	9,023.73	9,249.07	9,477.87	9,717.07	9,956.27	Monthly
	47.14	48.33	49.56	50.79	52.06	53.36	54.68	56.06	57.44	Hourly
91	99,299.20	101,795.20	104,332.80	106,953.60	109,636.80	112,382.40	115,190.40	118,060.80	120,993.60	Annual
	8,274.93	8,482.93	8,694.40	8,912.80	9,136.40	9,365.20	9,599.20	9,838.40	10,082.80	Monthly
	47.74	48.94	50.16	51.42	52.71	54.03	55.38	56.76	58.17	Hourly
92	100,547.20	103,105.60	105,664.00	108,284.80	110,988.80	113,755.20	116,625.60	119,496.00	122,532.80	Annual
	8,378.93	8,592.13	8,805.33	9,023.73	9,249.07	9,479.60	9,718.80	9,958.00	10,211.07	Monthly
	48.34	49.57	50.80	52.06	53.36	54.69	56.07	57.45	58.91	Hourly
93	101,816.00	104,353.60	106,974.40	109,636.80	112,403.20	115,211.20	118,081.60	121,035.20	124,009.60	Annual
	8,484.67	8,696.13	8,914.53	9,136.40	9,366.93	9,600.93	9,840.13	10,086.27	10,334.13	Monthly
	48.95	50.17	51.43	52.71	54.04	55.39	56.77	58.19	59.62	Hourly
94	103,105.60	105,684.80	108,305.60	111,009.60	113,776.00	116,625.60	119,516.80	122,553.60	125,611.20	Annual
	8,592.13	8,807.07	9,025.47	9,250.80	9,481.33	9,718.80	9,959.73	10,212.80	10,467.60	Monthly
	49.57	50.81	52.07	53.37	54.70	56.07	57.46	58.92	60.39	Hourly
95	104,353.60	106,974.40	109,657.60	112,403.20	115,232.00	118,123.20	121,056.00	124,030.40	127,171.20	Annual
	8,696.13	8,914.53	9,138.13	9,366.93	9,602.67	9,843.60	10,088.00	10,335.87	10,597.60	Monthly
	50.17	51.43	52.72	54.04	55.40	56.79	58.20	59.63	61.14	Hourly
96	105,684.80	108,326.40	111,051.20	113,776.00	116,646.40	119,537.60	122,553.60	125,632.00	128,752.00	Annual
	8,807.07	9,027.20	9,254.27	9,481.33	9,720.53	9,961.47	10,212.80	10,469.33	10,729.33	Monthly
	50.81	52.08	53.39	54.70	56.08	57.47	58.92	60.40	61.90	Hourly
97	106,995.20	109,678.40	112,424.00	115,232.00	118,123.20	121,076.80	124,051.20	127,192.00	130,374.40	Annual
	8,916.27	9,139.87	9,368.67	9,602.67	9,843.60	10,089.73	10,337.60	10,599.33	10,864.53	Monthly
	51.44	52.73	54.05	55.40	56.79	58.21	59.64	61.15	62.68	Hourly
98	108,326.40	111,051.20	113,796.80	116,667.20	119,537.60	122,574.40	125,652.80	128,772.80	132,017.60	Annual
	9,027.20	9,254.27	9,483.07	9,722.27	9,961.47	10,214.53	10,471.07	10,731.07	11,001.47	Monthly
	52.08	53.39	54.71	56.09	57.47	58.93	60.41	61.91	63.47	Hourly
99	109,678.40	112,444.80	115,252.80	118,144.00	121,076.80	124,051.20	127,212.80	130,395.20	133,619.20	Annual
	9,139.87	9,370.40	9,604.40	9,845.33	10,089.73	10,337.60	10,601.07	10,866.27	11,134.93	Monthly
	52.73	54.06	55.41	56.80	58.21	59.64	61.16	62.69	64.24	Hourly
100	111,072.00	113,817.60	116,688.00	119,600.00	122,595.20	125,673.60	128,793.60	132,038.40	135,345.60	Annual
	9,256.00	9,484.80	9,724.00	9,966.67	10,216.27	10,472.80	10,732.80	11,003.20	11,278.80	Monthly
	53.40	54.72	56.10	57.50	58.94	60.42	61.92	63.48	65.07	Hourly
101	112,444.80	115,294.40	118,164.80	121,097.60	124,092.80	127,254.40	130,416.00	133,681.60	137,009.60	Annual
	9,370.40	9,607.87	9,847.07	10,091.47	10,341.07	10,604.53	10,868.00	11,140.13	11,417.47	Monthly
	54.06	55.43	56.81	58.22	59.66	61.18	62.70	64.27	65.87	Hourly
102	113,859.20	116,688.00	119,641.60	122,616.00	125,673.60	128,793.60	132,059.20	135,366.40	138,736.00	Annual
	9,488.27	9,724.00	9,970.13	10,218.00	10,472.80	10,732.80	11,004.93	11,280.53	11,561.33	Monthly
	54.74	56.10	57.52	58.95	60.42	61.92	63.49	65.08	66.70	Hourly
103	115,294.40	118,185.60	121,118.40	124,113.60	127,254.40	130,436.80	133,702.40	137,030.40	140,441.60	Annual
	9,607.87	9,848.80	10,093.20	10,342.80	10,604.53	10,869.73	11,141.87	11,419.20	11,703.47	Monthly
	55.43	56.82	58.23	59.67	61.18	62.71	64.28	65.88	67.52	Hourly
104	116,708.80	119,662.40	122,616.00	125,694.40	128,814.40	132,059.20	135,387.20	138,756.80	142,230.40	Annual

VICTOR VALLEY WASTEWATER RECLATION AUTHORITY
 SALARY SCHEDULE WITH CPI 2.50%
 FY 2018-2019

Range	Step A	Step A1	Step B	Step B1	Step C	Step C1	Step D	Step D1	Step E	
	9,725.73	9,971.87	10,218.00	10,474.53	10,734.53	11,004.93	11,282.27	11,563.07	11,852.53	Monthly
	56.11	57.53	58.95	60.43	61.93	63.49	65.09	66.71	68.38	Hourly
105	118,185.60	121,139.20	124,155.20	127,275.20	130,457.60	133,723.20	137,051.20	140,462.40	144,019.20	Annual
	9,848.80	10,094.93	10,346.27	10,606.27	10,871.47	11,143.60	11,420.93	11,705.20	12,001.60	Monthly
	56.82	58.24	59.69	61.19	62.72	64.29	65.89	67.53	69.24	Hourly
106	119,862.40	122,657.60	125,715.20	128,835.20	132,080.00	135,408.00	138,798.40	142,251.20	145,808.00	Annual
	9,971.87	10,221.47	10,476.27	10,736.27	11,006.67	11,284.00	11,566.53	11,854.27	12,150.67	Monthly
	57.53	58.97	60.44	61.94	63.50	65.10	66.73	68.39	70.10	Hourly
107	121,139.20	124,176.00	127,296.00	130,478.40	133,723.20	137,092.80	140,462.40	144,040.00	147,617.60	Annual
	10,094.93	10,348.00	10,608.00	10,873.20	11,143.60	11,424.40	11,705.20	12,003.33	12,301.47	Monthly
	58.24	59.70	61.20	62.73	64.29	65.91	67.53	69.25	70.97	Hourly
108	122,678.40	125,756.80	128,856.00	132,100.80	135,428.80	138,819.20	142,272.00	145,828.80	149,448.00	Annual
	10,223.20	10,479.73	10,738.00	11,008.40	11,285.73	11,568.27	11,856.00	12,152.40	12,454.00	Monthly
	58.98	60.46	61.95	63.51	65.11	66.74	68.40	70.11	71.85	Hourly
109	124,176.00	127,316.80	130,478.40	133,744.00	137,113.60	140,504.00	144,060.80	147,638.40	151,299.20	Annual
	10,348.00	10,609.73	10,873.20	11,145.33	11,426.13	11,708.67	12,005.07	12,303.20	12,608.27	Monthly
	59.70	61.21	62.73	64.30	65.92	67.55	69.26	70.98	72.74	Hourly
110	125,798.40	128,876.80	132,121.60	135,428.80	138,819.20	142,292.80	145,849.60	149,489.60	153,254.40	Annual
	10,483.20	10,739.73	11,010.13	11,285.73	11,568.27	11,857.73	12,154.13	12,457.47	12,771.20	Monthly
	60.48	61.96	63.52	65.11	66.74	68.41	70.12	71.87	73.68	Hourly
111	127,337.60	130,499.20	133,764.80	137,113.60	140,545.60	144,081.60	147,638.40	151,320.00	155,147.20	Annual
	10,611.47	10,874.93	11,147.07	11,426.13	11,712.13	12,006.80	12,303.20	12,610.00	12,928.93	Monthly
	61.22	62.74	64.31	65.92	67.57	69.27	70.98	72.75	74.59	Hourly
112	128,876.80	132,142.40	135,449.60	138,860.80	142,313.60	145,870.40	149,510.40	153,275.20	157,040.00	Annual
	10,739.73	11,011.87	11,287.47	11,571.73	11,859.47	12,155.87	12,459.20	12,772.93	13,086.67	Monthly
	61.96	63.53	65.12	66.76	68.42	70.13	71.88	73.69	75.50	Hourly
113	130,520.00	133,785.60	137,134.40	140,566.40	144,081.60	147,659.20	151,340.80	155,168.00	159,057.60	Annual
	10,876.67	11,148.80	11,427.87	11,713.87	12,006.80	12,304.93	12,611.73	12,930.67	13,254.80	Monthly
	62.75	64.32	65.93	67.58	69.27	70.99	72.76	74.60	76.47	Hourly
114	132,163.20	135,470.40	138,881.60	142,334.40	145,891.20	149,531.20	153,296.00	157,060.80	161,012.80	Annual
	11,013.60	11,289.20	11,573.47	11,861.20	12,157.60	12,460.93	12,774.67	13,088.40	13,417.73	Monthly
	63.54	65.13	66.77	68.43	70.14	71.89	73.70	75.51	77.41	Hourly
115	133,848.00	137,155.20	140,587.20	144,102.40	147,680.00	151,382.40	155,209.60	159,078.40	163,051.20	Annual
	11,154.00	11,429.60	11,715.60	12,008.53	12,306.67	12,615.20	12,934.13	13,256.53	13,587.60	Monthly
	64.35	65.94	67.59	69.28	71.00	72.78	74.62	76.48	78.39	Hourly
116	135,491.20	138,902.40	142,355.20	145,912.00	149,552.00	153,316.80	157,102.40	161,033.60	165,089.60	Annual
	11,290.93	11,575.20	11,862.93	12,159.33	12,462.67	12,776.40	13,091.87	13,419.47	13,757.47	Monthly
	65.14	66.78	68.44	70.15	71.90	73.71	75.53	77.42	79.37	Hourly
117	137,176.00	140,608.00	144,123.20	147,700.80	151,424.00	155,230.40	159,099.20	163,072.00	167,169.60	Annual
	11,431.33	11,717.33	12,010.27	12,308.40	12,618.67	12,935.87	13,258.27	13,589.33	13,930.80	Monthly
	65.95	67.60	69.29	71.01	72.80	74.63	76.49	78.40	80.37	Hourly
118	138,923.20	142,376.00	145,932.80	149,572.80	153,337.60	157,123.20	161,054.40	165,110.40	169,208.00	Annual
	11,576.93	11,864.67	12,161.07	12,464.40	12,778.13	13,093.60	13,421.20	13,759.20	14,100.67	Monthly
	66.79	68.45	70.16	71.91	73.72	75.54	77.43	79.38	81.35	Hourly
119	140,628.80	144,144.00	147,742.40	151,444.80	155,251.20	159,120.00	163,113.60	167,190.40	171,350.40	Annual
	11,719.07	12,012.00	12,311.87	12,620.40	12,937.60	13,260.00	13,592.80	13,932.53	14,279.20	Monthly
	67.61	69.30	71.03	72.81	74.64	76.50	78.42	80.38	82.38	Hourly
120	142,376.00	145,953.60	149,593.60	153,358.40	157,185.60	161,075.20	165,131.20	169,249.60	173,472.00	Annual
	11,864.67	12,162.80	12,466.13	12,779.87	13,098.80	13,422.93	13,760.93	14,104.13	14,456.00	Monthly
	68.45	70.17	71.92	73.73	75.57	77.44	79.39	81.37	83.40	Hourly



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners
 June 21, 2018

FROM: Kristi Casteel, Secretary to the General Manager and Board of Commissioners 

TO: Logan Olds, General Manager

SUBJECT: Recommendation to Approve Resolution No. 2018-04: FY 2018-2019 Holiday Calendar

RECOMMENDATION

It is recommended that the Board of Commissioners approve and adopt Resolution No. 2018-04 to establish the paid holidays for VVWRA employees during fiscal year 2018-2019 which is consistent with the MOU with the Employees Association adopted on December 8, 2016.

REVIEWED BY

This recommendation was reviewed by Logan Olds

BACKGROUND INFORMATION

Each year, the Board of Commissioners approves and adopts a schedule of paid holidays for VVWRA employees. There have been no changes to the holiday calendar since it was last adopted under Resolution No. 2013-12 on May 16, 2013. The holiday calendar was not revised as part of the MOU negotiations with the Employees Association. It is recommended that the Holiday Calendar for FY 2018-2019 be approved and adopted as shown under Resolution 2018-04.

FINANCIAL IMPACT

None.

RELATED IMPACTS

None.

RESOLUTION 2018-04**A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY TO APPROVE AND ADOPT A SCHEDULE OF PAID HOLIDAYS FOR FISCAL YEAR 2018-2019****FY 2018-2019 HOLIDAY CALENDAR**

Holiday:	Non-Operations Staff:	Operations Staff:
Independence Day	July 4, 2018 (Wednesday)	July 4, 2018 (Wednesday)
Labor Day	September 3, 2018 (Monday)	September 3, 2018 (Monday)
Veterans Day	November 12, 2018 (Monday)	November 11, 2018 (Sunday)
Thanksgiving Day	November 22, 2018 (Thursday)	November 22, 2018 (Thursday)
Day after Thanksgiving	November 23, 2018 (Friday)	November 23, 2018 (Friday)
Christmas Eve	December 24, 2018 (Monday)	December 24, 2018 (Monday)
Christmas Day	December 25, 2018 (Tuesday)	December 25, 2018 (Tuesday)
New Year's Eve	December 31, 2018 (Monday)	December 31, 2018 (Monday)
New Year's Day	January 1, 2019 (Tuesday)	January 1, 2019 (Tuesday)
Martin Luther King Day	January 21, 2019 (Monday)	January 21, 2019 (Monday)
President's Day	February 18, 2019 (Monday)	February 18, 2019 (Monday)
Memorial Day	May 27, 2019 (Monday)	May 27, 2019 (Monday)
Floating Holiday (1)		

ADOPTED and APPROVED by the Board of Commissioners on this 21st day of June, 2018.

 Larry Bird , Chair
 VVWRA Board of Commissioners

ATTEST:

APPROVED AS TO FORM:

 Scott Nassif, Secretary
 VVWRA Board of Commissioners

 Piero C. Dallarda, a Partner of
 Best Best & Krieger LLP
 Counsel, VVWRA

CERTIFICATION:

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Board of Commissioners held on June 21, 2018.

Kristi Casteel – Clerk of the Board

RESOLUTION NO. 2018-05**A RESOLUTION OF THE VICTOR VALLEY WASTEWATER
RECLAMATION AUTHORITY HONORING RUSS BLEWETT**

WHEREAS, the City of Hesperia, Victor Valley Wastewater Reclamation Authority, and the entire High Desert Community lost a valued member and leader on May 30, 2018 with the death of Mayor Russ Blewett ; and

WHEREAS, Mayor Blewett was a tireless and outspoken advocate of the people of the High Desert Community; and

WHEREAS, Mayor Blewett served on the Board of Commissioners for the Victor Valley Wastewater Reclamation Authority since 2011 and most recently held the position of Chair. Mayor Blewett's humor, kindness, passion, and energy enriched those fortunate enough to know and work with him.

NOW THEREFORE, BE IT RESOLVED that this Commission does hereby recognize and extends sincere gratitude and appreciation to Mayor Russ Blewett for his dedicated service and commitment to the Victor Valley Wastewater Reclamation Authority and for his significant contributions to the High Desert Community over the course of his distinguished career and mourns his death. The Commission extends its sincerest condolences to his family, friends, and colleagues.

ADOPTED this 21st day of June 2018.

APPROVED AS TO FORM:

**Piero C. Dallarda of
Best Best & Krieger LLP**

**Larry Bird, Chair
VWRA Board of Commissioners**

**Scott Nassif, Secretary
VWRA Board of Commissioners**

CERTIFICATION

I, Kristi Casteel, Secretary to the Board of Commissioners of the Victor Valley Wastewater Reclamation Authority, State of California, do hereby certify that the foregoing is a full, true and correct, adopted by the Board of Commissioners of said Authority at its meeting of June 21, 2018.

Kristi Casteel
Secretary to the Board of Commissioners

RESOLUTION NO. 2018-06

**A RESOLUTION OF THE VICTOR VALLEY WASTEWATER
RECLAMATION AUTHORITY IN RECOGNITION AND APPRECIATION
OF DEDICATED SERVICE TO BRUCE CORREIA**

WHEREAS, Bruce Correia has served VVWRA for a period of 25 years; and

WHEREAS, Bruce Correia' s background, knowledge, and experience while serving at VVWRA have been invaluable to the Authority; and

WHEREAS, Bruce Correia has served the needs of the Authority and addressed those needs by being the designer and leading the original implementation of the plant's Supervisory Control and Data Acquisition (SCADA), which today is heavily relied upon by the operations department; and

WHEREAS, the Authority, supports and encourages the use of technology to provide increased efficiency and more finite process control capabilities, for the purpose of protecting public health and seeks to promote the use of innovative technologies, by:

- Maximizing the use of existing resources
- Utilizing existing resources with the goal of enabling the Shay Road wastewater treatment plant to operate with a high level of sustainability
- Promoting technology efficiencies locally and nationally
- Aids in the evaluation and development of technologies by the Authority and its employees
- Promotes employee longevity at the Authority by setting an example of a dedicated and ethical staff member
- Supporting partnerships with local organizations that are beneficial to the future of the technology arena in our industry

WHEREAS, Bruce Correia has worked tirelessly for the past 25 years to insure that the Authority is up to date with the latest technologies and to provide exceptional staff support to all departments at VVWRA. His tireless efforts have had a large impact on the success the Authority has realized to this point.

NOW THEREFORE, BE IT RESOLVED that this Commission does hereby recognize and extend sincere gratitude and appreciation to Bruce Correia for his dedicated service and commitment to the Victor Valley Wastewater Reclamation Authority and for his concern for the residents and environment of the Victor Valley.

ADOPTED this 21st day of June 2018.

Larry Bird, Chair
VVWRA Board of Commissioners

APPROVED AS TO FORM:

**Piero C. Dallarda of
Best Best & Krieger LLP**

**Scott Nassif, Secretary
VWRA Board of Commissioners**

CERTIFICATION

I, Kristi Casteel, Secretary to the Board of Commissioners of the Victor Valley Wastewater Reclamation Authority, State of California, do hereby certify that the foregoing is a full, true and correct, adopted by the Board of Commissioners of said Authority at its meeting of June 21, 2018.

Kristi Casteel
Secretary to the Board of Commissioners



**VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners**

June 21, 2018

FROM: Marcos Avila Maintenance Mechanic Lead

TO: Logan Olds, General Manager

SUBJECT: South Percolation Pond Pump Station Simflo Spare Pump Purchase.

RECOMMENDATION

It is recommended that the Board of Commissioners approve the purchase of a spare replacement Simflo pump S/N 107282 from the sole source provider Industry Uptime, Inc. in the amount not to exceed \$44,760.01.

REVIEW BY OTHERS

This recommendation was reviewed by Latif Laari Business Applications Manager, Brad Adams Lead Operator and Chieko Keagy Controller.

BACKGROUND INFORMATION

The South Percolation ponds pump station has a total of four pumps (2 large Simflo pumps and 2 Small Johnston pumps) used to divert tertiary flow to south percolation ponds when needed. A failed large Simflo pump at this pump station requires around the clock regional plant coverage and historically the lead time to repair such failed pump(s) can range from eight to twelve weeks. It also requires the use of a large diesel powered godwin pump to be setup in the failed pumps location. Staging this pump there removes it from our inventory of emergency response pumps. Also the portable pump needs to be serviced after use at the south perc pond structure to ensure reliability in an emergency response situation.

A spare large Simflo pump on hand will allow the operation of this pump station in a normal fashion, with minimum downtime when failure occurs. It also keeps our largest portable available for emergency use.

FINANCIAL IMPACT

Finance Approval:

Fund 01 or 07	
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	01-02-118-6011-9999

Fund 09	
Accounting Code (String) example: 09-xx-xxx-xxxx (mandatory project code)	

Transfer Needed due to Insufficient Budget	Y[] N[X]	Transfer Needed due to Insufficient Budget	Y[] N[X]
If Transfer, from Which Account String or Reserve	NA	If Transfer, from Which Account String or Reserve	NA
Budgeted Amount Where Money Comes from	\$44821.30	Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	61.29	Budget Remaining after the Recommendation	0
Outside Funding Source if applicable	NA	Outside Funding Source	NA
Original Contract Amount	\$44,760.01	Original Contract Amount	
Change Order	Y[] N[X]	Change Order	Y[] N[X]
Contract after Change	NA	Contract after Change	NA

RELATED IMPACTS

- Having an immediate redundant replacement pump will help the plant operations, due to long repair lead-times.
- No 24 hour staff coverage for a perc pond pump failure.
- No service cost to portable pump.
- Keeps emergency response equipment in active inventory.



IndustryUptime, Inc.
PO Box 603
Meadow Vista, CA 95722

Phone # 530-878-4855
 Fax # 530-878-4840
 www.industryuptime.com

Product Quote

Date	Quote #
4/16/2018	5238

Customer Information
Victor Valley Wastewater Reclamation Attn: Accounts Payable 15776 Main Street, Suite 3 Hesperia, CA 92345

IndustryUptime's Consulting Services:	IndustryUptime's Product Lines:
<ul style="list-style-type: none"> - Vibration monitoring and analysis - Pump performance testing - Rotating Equipment Troubleshooting - Pump & System Design Review - Reliability Program Development - Plant Reliability Audits - Shaft Alignment - Visit www.industryuptime.com 	<ul style="list-style-type: none"> - Royal Purple - AESSEAL - P-K Machine - Summit Pumps - Bel-Ray - Thordon Bearings - Oil Safe - Easy Laser Alignment Systems

P.O. No.	Terms
	Net 30

Item	Qty	Type/Size/Face/Elastomer/Gasket/Misc	Unit Price	Delivery	Total
Simflo	1	Replacment Pump for S/N 107282 Conditions of Service 3150 gpm @ 100' TDH. TPL - 217.06" +/- 1" 1-15/16" - 10 tpi take off 10" stick up -Standard materials of Construction -Keyed Impeller -Devoe BarRust 233H epoxy coating on the exterior Non-witnessed Certified Bowl Performance Test 1-15/16" x 12" x 5± PROD. LUBE CLMN ASSY 416SS shaft 304SS couplings 304SS brg. retainers with bearings 316SS bolting Devoe BarRust 233H epoxy coating on the ID & OD column FABRICATED DISCHARGE HEAD FP-700 Fabricated discharge head Miter Ell VFD bracing SS safety guards Chesterton 155 cartridge seal 416SS head shaft Motor shaft assembly for VHS motor 12" - Class 150lb RF flanged discharge Devoe BarRust 233H epoxy coating - head ID FP-700M Fabricated steel foundation plate with Devoe BarRust 233H epoxy coating on the underside. Standard enamel on the exterior discharge head and top of foundation plate.	38,942.00		38,942.00T

This quote is valid for 5 business days. Shipping and/or duty fees not included. Expedite fees may apply. Orders can be changed or canceled only when agreed to in writing by IndustryUptime, and may incur change/cancellation fees. Returned items are subject to restocking fees. Non-stock orders may require progress payment and cannot be returned. Past Due balances on Net 30 accounts subject to 2.0% service charge per month after 30 days.

Total



IndustryUptime, Inc.
PO Box 603
Meadow Vista, CA 95722

Phone # 530-878-4855
 Fax # 530-878-4840
 www.industryuptime.com

Product Quote

Date	Quote #
4/16/2018	5238

Customer Information
Victor Valley Wastewater Reclamation Attn: Accounts Payable 15776 Main Street, Suite 3 Hesperia, CA 92345

IndustryUptime's Consulting Services: - Vibration monitoring and analysis - Pump performance testing - Rotating Equipment Troubleshooting - Pump & System Design Review - Reliability Program Development - Plant Reliability Audits - Shaft Alignment - Visit www.industryuptime.com	IndustryUptime's Product Lines: - Royal Purple - AESSEAL - P-K Machine - Summit Pumps - Bel-Ray - Thordon Bearings - Oil Safe - Easy Laser Alignment Systems
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P.O. No.	Terms
	Net 30

Item	Qty	Type/Size/Face/Elastomer/Gasket/Misc	Unit Price	Delivery	Total
Shipping & Ha...		Shipment: Estimated 12-13 weeks following complete release to production from 100% approved, released submittals, Internal Engineering Review and Contract Approval. We recommend, due to unit length, the unit be transported via dedicated truck. PREPAY AND ADD FOB Factory estimated freight cost \$2800 Quote valid for 30 days Reference Quote 1534 SN-107282. Sales Tax	0.00		0.00
			7.75%		3,018.01

This quote is valid for 5 business days. Shipping and/or duty fees not included. Expedite fees may apply. Orders can be changed or canceled only when agreed to in writing by IndustryUptime, and may incur change/cancellation fees. Returned items are subject to restocking fees. Non-stock orders may require progress payment and cannot be returned. Past Due balances on Net 30 accounts subject to 2.0% service charge per month after 30 days.

Total	\$41,960.01
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April 4, 2018

Ms. Laura Dierssen
Pumpworks, Inc.
(Industry Uptime)
16790 Placer Hills Road, Ste B
Meadow Vista, CA 95772

Reference: Victor Valley WRA

Laura,

Please send this letter to all concerned for the referenced project. To whom it may concern. Please be advised that Pumpworks, Inc (Industry Uptime) located in Meadow Vista, California is the only source distributor for this project authorized to sell and service products as manufactured by SIMFLO.

Respectively submitted,

A handwritten signature in black ink that reads "Bob Denton".

Bob Denton
Senior Projects Manager
SIMFLO

PO Box 849 Willcox, AZ 85644
754 E. Maley Street Willcox, AZ 85643

Tel : (520)384-2273
Fax : (520) 384-4042
Email : info@simflo.com





VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners

June 21, 2018

FROM: Marcos Avila Maintenance Mechanic Lead *MA*

TO: Logan Olds, General Manager

SUBJECT: Transfer Pump for Digesters 1, 2 and 3 Purchase

RECOMMENDATION

It is recommended that the Board of Commissioners approve the purchase of a replacement of the Transfer Pump for Digesters 1, 2 and 3 NEMO Progressive Cavity Pump Model# NE120X from the sole source provider Gierlich Mitchell, Inc. in the amount not to exceed \$57,808.73

REVIEW BY OTHERS

This recommendation was reviewed by Latif Laari Business Applications Manager, Brad Adams Lead Operator and Chieko Keagy Controller.

BACKGROUND INFORMATION

VVWRA is undertaking the recommissioning of Digesters 1, 2 and 3 to allow for the inspections of Digesters 4 and 5. In 2016 while Digesters 1, 2 and 3 were out of service one of the existing transfer pumps was repurposed to the gravity belt thickener to transfer thickened sludge to solar drying beds that are further away from the GBT itself. This gained us more capacity in the drying beds, which has been an issue since the lining of the sludge lagoons. Because of this fact, the pump is vital to the drying bed operation and cannot be removed from its new location at the GBT.

With the recommissioning of digesters 1-3 a new pump is now needed to replace the original transfer pump that was taken. It is critical to have a redundant pump for transferring digested sludge to the sludge lagoons. The digesters are fed 24hrs a day, and volume fed to the digesters needs to be removed from the digesters or a upset or overflow situation can occur.

FINANCIAL IMPACT

Finance Approval:

Fund 01 or 07	
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	07-02-152-6011-9999
Transfer Needed due to Insufficient Budget	Y [x] N [X]

Fund 09	
Accounting Code (String) example: 09-xx-xxx-xxxx (mandatory project code)	
Transfer Needed due to Insufficient Budget	Y [] N [X]

If Transfer, from Which Account String or Reserve	01-08-180-6115-9999
Budgeted Amount Where Money Comes from	\$58,376.64
Budget Remaining after the Recommendation	\$567.91
Outside Funding Source if applicable	NA
Original Contract Amount	\$57,808.73
Change Order	Y[] N[X]
Contract after Change	NA

If Transfer, from Which Account String or Reserve	NA
Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	0
Outside Funding Source	NA
Original Contract Amount	
Change Order	Y[] N[X]
Contract after Change	NA

RELATED IMPACTS

- Digesters 1,2 and 3 recommissioning
- Replacement redundant transfer pump.

NETZSCH Pumps North America, LLC. **NETZSCH**

October 25, 2016

Victor Valley Wastewater Reclamation Authority
20111 Shay Rd.
Victorville, CA 92394

Attn: Marcos Avila

Subject: Authorized Distribution of NETZSCH Pumps and Parts

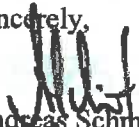
This letter is to confirm that Gierlich-Mitchell Inc. is the sole source authorized distributor of NETZSCH Pumps and Parts for the Municipal Market in Southern California.

Gierlich-Mitchell's contact information is as follows:

Gierlich-Mitchell Inc.
10533 Progress Way
Suite A
Cypress, CA 90630
Phone: (714) 236-6070
Fax: (714) 236-6080

Thank you for your interest in the NETZSCH product line and if you need any additional information, please feel free to contact me at this office.

Sincerely,


Andreas Schmidt
Western Regional Manager
NETZSCH Pumps North America, LLC
andreas.schmidt@netzsch.com
(484) 502-8115

NETZSCH Pumps North America, LLC.
119 Pickering Way
Exton, PA 19341

Trademarks by NETZSCH Pumps North America, LLC:
M.CHAMP, TORNADO, TORNADO (L), NM, N-IPOS, N-ELOR, ABP-Modul,
PMT PILOT, NEMO, iFD Stator, NEMOLAST, C.PRO, NE, NEMO CERATEC,
SBBPF, EPBPF, The Heart of Your Process, Blue-gray design, B.MAX., T.PROC, T.AGRI,
T.SANO, T.RURA, T.ENVI.

Tel: +1 610-363-8010
Fax: +1 610-363-0971
Email: npa@netzsch.com

Website: www.netzschusa.com



GMI Quote #01469 Rev 1

January 31, 2018

Mike Koncur
Victor Valley WRA

Re: Netzsch Pump

Dear Mike,

We are pleased to offer the following for your consideration:

<u>ITEM</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>	<u>PRICE</u>
1	1	One (1) NEMO Progressive Cavity Pump model NE120X bare shaft pump and carbon steel baseplate (no drive) as per the technical.	\$42,265.71	\$42,265.71
2	1	One (1) Premium Efficient Gearmotor: 30 HP with Flex Coupling and Coupling Guard. 230/460 V TEFC 1800 RPM. Customer to modify fit as necessary.	\$9,425.71	\$9,425.71
3	1	Pump Freight	\$1,632.00	\$1,632.00
4	1	Motor Freight	\$350.00	\$350.00
		TOTAL		\$53,673.42

GENERAL NOTES:

1. No taxes included in above pricing
2. Pricing valid for thirty (30) days from date of bid.
3. Price is F.O.B. Factory, FFA.
4. Proposal subject to GMI Terms & Conditions attached and/or terms and conditions of individual companies quoted.

Thank you for giving us the opportunity to quote you on this project. If you have any comments or questions, please feel free to contact our office at (714) 236-6070.


Respectfully yours,
GIERLICH-MITCHELL, INC.

Bryson Brockman
 Engineered Sales Associate



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners

June 21, 2018

FROM: Robert Coromina, Director of Administration 
TO: Logan Olds, General Manager
SUBJECT: Staff Recommendation to approve professional service agreement for WaterTrax Compliance online data management service.

RECOMMENDATION

It is recommended that the Board of Commissioners authorize the General Manager to enter in to a professional service agreement for the WaterTrax Compliance online data management service in an amount not to exceed \$49,700.

REVIEW BY OTHERS

This recommendation has been prepared by Robert Coromina, Director of Administration and reviewed by, Latif Laari, Business Applications Manager, Eugene Davis, Operations and Maintenance Manager and Chieko Keagy, Controller.

BACKGROUND INFORMATION

VVWRA has been utilizing the Operator 10 Wastewater Data Management software for the past 10+ years. Originally the software worked well to help VVWRA staff organize their daily data needs into one application which was available to all operations staff. For the past 5 years we have seen a measurable decline in the functionality of what the software offers, specifically with regards to compliance reporting capabilities and accessibility. The software is used to accomplish the following:

- Maintain a centralized operations data repository
- Collect and maintain daily operational data.
- Assist in the creation of compliance reporting.

VVWRA is required to submit recurring reports to the Lahontan Regional Water Quality Control Board, (Lahontan), on a monthly, semi-annual, and annual basis. The reports inform Lahontan of VVWRA's performance around maintaining compliance with their NPDES and WDR permits. Failure to provide the reports in an accurate and timely manner results in negative consequences. Fines, consent decrees, negative public relations and additional reporting requirements are all common, costly outcomes if accurate reporting is not provided.

Due to the lack of functionality of the Operator 10 software, VVWRA staff is spending several days manually creating the reports for the Lahontan and verifying the data for accuracy. The lab and operational data is entered manually by staff daily due to a lack of import capabilities which equates to a minimum 45 man hours a month of data entry.

Due to the software’s inability to import data from our laboratory provider and the non-existent compliance reporting capabilities, VVWRA staff was required to find a solution with the capabilities required for streamlined compliance reporting and data importing. After speaking with our laboratory and investigation by our MIS staff, it was determined that the WaterTrax Compliance service solution would best meet the requirements set fourth by our regulatory board for reporting and meet VVWRA’s data import requirement.

The WaterTrax service is a Software as a Service, (SaaS), solution which provides online data management to consolidate and report water, solids, and air quality data for the facility. Because it is a SaaS solution, which only provides access to the online data management service, VVWRA is not required to purchase any software or equipment to utilize the service. All maintenance, security, access, and importing is done on the WaterTrax servers. Therefore VVWRA wishes to enter into a professional services agreement with WaterTrax to utilize their SaaS solution.

The existing tools used by VVRWA are time consuming, inadequate and leave the Authority at risk of failing to accurately provide the required reports. Staff are currently spending large amounts of time manually gathering data submitted to the Lahontan. Additionally, staff are hand entering lab data, which poses a risk of transcription errors.

This software will empower staff to import data directly from the lab, maximizing the efficiency of how Authority Staff spend their time. Alerts will be received by staff when a result is out of compliance, so that it may be addressed and corrected before it is too late. Routine tasks such as lab data entry will be automated. The required reports for Lahontan are produced with a few mouse clicks, and possible inaccuracies are highlighted so they may be corrected before submittal to the State. With a proper data management system in place, VVWRA is reducing the manual aspect of wastewater data management, improving staff efficiency, and protecting itself from negative findings and fines during a State Water Resources Control Board Audit / Inspection.

FINANCIAL IMPACT

Finance Approval:

Fund 01 or 07		
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	01-02-530-8120-9999	
Transfer from Reserve	Y []	N [X]
If Transfer, from Which Reserve		
Outside Funding Source if applicable		
Change Order	Y []	N [x]
Original Budget Amount	\$49,700	
Revised Original Contract Amount	\$	
Budget Remaining after the Recommendation	\$	
Contract after Change	\$	

Fund 09		
Accounting Code (String) example: 09-xx-xxx-xxxx (<u>mandatory</u> project code)		
Transfer from Reserve	Y []	N []
If Transfer, from Which Reserve		
Outside Funding Source		
Change Order	Y []	N []
Original Budget Amount	\$	
Original Contract Amount	\$	
Budget Remaining after the Recommendation	\$	
Contract after Change	\$	

RELATED IMPACTS

- Hundreds of man labor hours are saved, freeing up staff to perform more tasks.
- Reporting to Lahontan is streamlined and accurate.
- Risk of negative findings or enforcement upon VVWRA by the State is greatly reduced.
- Risk of sampling events being missed is greatly reduced.
- VVWRA staff gain knowledge of WWTP performance, and areas needing improvement.
- VVWRA is protected from employee turnover; anyone can step in and use the software.
- The vendor supports the software, removing the burden from VVWRA's IT Department.
- A paperless system that supports "Go Green" initiatives.



WaterTrax
 2400 - 1111 West Georgia St
 Vancouver BC V6E 4M3

Created Date 5/15/2018
 Quote Number 00000793

BUDGET PLANNING ESTIMATE

Prepared for:

Victor Valley Wastewater Reclamation Authority

 Robert Coromina

 15776 Main Street, suite 3
 Plant: 20111 Shay Road, Victorville, CA 92394
 Hesperia, CA 92345

Prepared by:

David Stadelmann

 (303) 952-0021

 dave@linkotechnology.com

Core Product	Line Item Description	Total Price
Wastewater Data Management	Annual subscription to Wastewater Data Management software for streamlined compliance reporting and operational visibility of WWTP water quality and compliance related data.	\$15,500.00
Sampling Planner - Wastewater	Includes twenty five (25) end user log-ins. All users have access to all WaterTrax software and modules, pending end-user permissions assigned by client administrator. End user log ins are transferable. Annual subscription to Sampling Planner module to ensure all required samples are collected and assist with complex sampling regimes. - Meet requirements of unique sample schedules for each unique sampling location - Ensure all required parameters are sampled for. - Receive sampling reminders and alerts - Set up Chain of Custody (COC) and bottle labels	\$3,100.00
WaterTrax Mobile	Annual subscription to the mobile data entry application for entering results and measurements in the field/plant using smartphones or tablets.	\$1,200.00
Base Package Configuration	One time professional services fee for WaterTrax set up and configuration. Includes complete configuration of all software proposed. - System Hierarchy, End user permissions, Administrator settings - Sampling locations, frequencies, parameter limits, alerts - Mobile data entry sheets (Rounds) - Build, test and implement six (6) state-required reports for Wastewater compliance reporting to the California Water Quality Control Board. - Monthly SMR - Monthly DMR - Quarterly SMR - Quarterly DMR - Annual SMR - Annual DMR	\$18,450.00
Data Migration	One time data migration service to load historical Op10 data into the WaterTrax software. Includes mapping, migration, testing, client review and acceptance.	\$8,200.00



WaterTrax
 2400 - 1111 West Georgia St
 Vancouver BC V6E 4M3

Created Date 5/15/2018
 Quote Number 00000793

Base Package Training	<p>Provide training courses for all WaterTrax software purchased. Delivered with a combination of on-site training (8 hours) and remote sessions using GoToMeeting screen share software and a live instructor. Remote courses are typically two hours in length and can accommodate up to twelve people.</p> <p>Courses to be delivered include:</p> <ul style="list-style-type: none"> - WaterTrax 101, Getting started with the Basics - Using Sample Planner for sampling excellence - Make it Mobile - Using WaterTrax Mobile for field data entry - Catch all, follow up session. 	\$3,250.00
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Summary of Fees

Total Recurring Annual Fee	\$19,800.00
Total One Time Software License Fee	\$0.00
One Time Professional Services Fee	\$29,900.00
GRAND TOTAL	TOTAL \$49,700.00

Please note: This document is for the purpose of budget planning. This is not a formal quote.



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners

June 21, 2018

FROM: Marcos Avila Maintenance Mechanic Lead *MA*

TO: Logan Olds, General Manager

SUBJECT: O&M Electric Mobile Carts.

RECOMMENDATION

It is recommended that the Board of Commissioners to approve Prestige Golf Cars for the purchase of a 12 replacement Electric Mobile Carts, not to exceed \$64,410.50

REVIEW BY OTHERS

This recommendation was reviewed by Brad Adams Operations Lead, Marcos Avila Maintenance Lead, Robert Coromina Director of administration, Chieko Keagy Controller.

BACKGROUND INFORMATION

Our current fleet of carts is over 16 years old. They are suffering from broken frames, charging issues and body breakage. They are in constant need of maintenance, and are a model that is no longer in production. The Staff relies heavily on these carts to transport tools, sampling supplies, personnel, and other materials around the plant on a daily basis. They also cut down the time it takes to respond to alarms on our 400+ acre site. The new carts chosen are more efficient, which means less energy to fully charge the carts. They have no mechanical brakes, and brushless AC motors that will cut down on maintenance time and cost.

FINANCIAL IMPACT

Finance Approval:

Fund 01 or 07	
Accounting Code (String) example: 01-xx-xxx-xxxx (project code if any)	01-02-180-6120-9999
Transfer Needed due to Insufficient Budget	Y [X] N []
If Transfer, from Which Account String or Reserve	01-02-104-6010-9999

Fund 09	
Accounting Code (String) example: 09-xx-xxx-xxxx (<u>mandatory</u> project code)	
Transfer Needed due to Insufficient Budget	Y [] N [X]
If Transfer, from Which Account String or Reserve	NA

	01-02-80-6165-9999 01-02-152-6165-9999
Budgeted Amount Where Money Comes from	\$64,410.50
Budget Remaining after the Recommendation	\$4,233.56
Outside Funding Source if applicable	NA
Original Contract Amount	\$64,410.50
Change Order	Y[] N[X]
Contract after Change	NA

Budgeted Amount Where Money Comes from	
Budget Remaining after the Recommendation	0
Outside Funding Source	NA
Original Contract Amount	
Change Order	Y[] N[X]
Contract after Change	NA

RELATED IMPACTS

- Time to complete tasks
- Time to respond to alarms.
- Maintenance cost and man hours.
- Safety of staff operating carts.

**Victor Valley Wastewater Reclamation Authority
Quotation Comparison**

Item	Description	Qty	Vendor #1			Vendor #2			Vendor #3					
			Name	Per Unit	Total	Name	Per Unit	Total	Name	Per Unit	Total			
			Prestige Golf Cars			19th Hole Golf Carts			Golf Cars of Riverside					
			Contact Tyson Mrosek			Contact Robin			Contact Casey Highley					
			Telephone 951-695-2720			Telephone 951-699-3989			Telephone 951-276-9872					
			Per Unit	Total	+T	+Frt	Per Unit	Total	+Tax	+Frt	Per Unit	Total	+Tax	+Frt
1	Golf Carts	12	4850	58200	N	N	5990	71880	N	N	6064.88	72777.66	N	N
2	Dealer Prep	1	1200	1200	N	N	NA	NA	N	N	2400	2400	N	N
3					N	N			N	N			N	N
4					N	N			N	N			N	N
5					N	N			N	N			N	N
6					N	N			N	N			N	N
7					N	N			N	N			N	N
			4210.50			6289.50			5640.24					
Plus Sales Tax									7932.00					
Plus Shipping/Freight			63910.56			78169.56			88749.84					
Total														



27230 Madison Ave. Suite C-2, Temecula CA 92590 Office: (951)695-2720 Cell: (951)322-0465 Fax: (951)695-2716
 Email: tyson@prestigegolfcars.com

Prepared For: VWRA
 Dept:
 Attn:Brad Adams

QUOTE NO: 14' RXV
 QUOTE DATE:5/31/18
 QUOTE BY: Tyson Mrosek

QTY	DESCRIPTION	MSRP	UNIT PRICE	EXT. PRICE
12	2014 EZGO RXV Options Included: 48 V AC Electric Drive Automatic Battery Charger New White Body Cowling Front and Rear Short Canopy Top New Fold Down Windshield New Batteries New LED head/tailights New Rear Flip Seat		4850.00	58200.00
				58200.00
			SUB TOTAL	58200.00
			DELIVERY	0.00
			SALES TAX 7.75%	4510.50
			FREIGHT	0.00
			DMV/DOC FEES	0.00
			DEALER PREP	1200.00
			TOTAL	63910.50
Terms 30 Days		F.O.B. Delivered	Approx. Delivery Date	

19th HOLE GOLF CARTS

28822 Old Town Front St. #101

Temecula, CA 92590

Tel. 951-699-3989

Fax 951-587-2200

Sales Invoice

Date	Invoice #
5/30/2018	293

Customer/ Address/ Phone
Brad Adam/Victorville Water 760-553-0357

Delivery Address

PO #	Terms	Customer Email
N/A		badams@vwvra.com

Item Sold	Quantity	Sale Description	Amount
Golf Cart	12	Refurbished EZ-GO TXT 4 Pass Flip Seat @ \$5990.00 each	71,880.00
Sales Tax 8.75		Sales Tax 8.75	6,289.50
Delivery		Delivery No Charge In Exchange For 8 Running Club Car Carts with Charger (or) \$1200.00 Delivery Fee	0.00
Deposit		Deposit Non-Refundable \$12,000 (Cashier Check)	0.00
		All Carts Must Be Paid In Full Prior To Delivery (Cashier Check)	

ALL SALES FINAL-NO REFUNDS-DEPOSITS ARE NON REFUNDABLE
 Purchaser agrees and assumes responsibility from all liabilities or alleged liabilities including all costs, attorney's fee for any injuries or damages to persons or properties caused in any manner by use of good purchased. Vehicles are sold "as-is" with no warranties unless otherwise stated above. Full Payment is due prior to pick-up/delivery. In lieu of imprint, I/We authorize the use of said credit card for any and all charges related to this transaction. I/We further authorize delivery of vehicle or goods without obtaining a release/sign-off signature. 20% restocking fee on all returns, If Applicable.

Sub-Total	\$78,169.50
Deposit Credit	\$0.00
Balance	\$78,169.50

	DATE
--	------

QUOTE/PROPOSAL

Date: 5-25-2018

Company: **Victor Valley Waste Water**
 Address: 2011 Shay Rd. Victorville, CA.92394
 Phone: 760-954-6103
 E-mail: denriquez@vwvra.com
 Attn: **Daniel Enriquez**



Riverside Ca.92501-1017
(P)951-276-9872 (F)951-276-0344



Sales Person: Casey Highley (P)951-255-4660

QUANTITY	US COMMUNITIES PRICING CONTRACT #EV2024-02	US COMM. PRICE	EXTENDED PRICE
12	New 2018 Club Car Carryall 100 (Electric) Vehicle List Price: \$6,699.00 48V System & Charger Bench Seats (Gray) Cup Holders, Small Cargo Box Headlights Reverse Warning Indicator Tires: 20 x 10-8 Body Color: White Rustproof Aluminum Frame & Rear Drum Brakes 1-Year Limited Commercial Warranty (Vehicle) 3-Year Limited Warranty (Batteries)	\$5,359.20	\$64,310.40
12	Hinged Windshield List Price: \$132.00	\$105.60	\$1,267.20
12	Canopy Top (Black) List Price: \$344.00	\$275.20	\$3,302.40
12	Lights: Head, Tail, Brake & Horn List Price: \$335	\$268.00	\$3,216.00
12	5-Panel Rear View Mirror List: \$71.00	\$56.80	\$681.60
Note:	Must be signed up with US Communities for discount. If you are not signed up it is free and easy to sign up. Go to: www.uscommunities.org (Its Free to register)		
	Sub Total:	\$6,064.80	\$72,777.60
	Sales Tax (7.75%):	\$470.02	\$5,640.24
	Dealer Prep:	\$200.00	\$2,400.00
	Freight from Augusta GA:	\$661.00	\$7,932.00
	TOTAL PRICE:	\$7,395.82	\$88,749.84

Accepted By: _____
 Company: _____
 Title: _____
 Date: _____

Quote By: Casey Highley / Golf Cars Of Riverside, Inc.



VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Report/Recommendation to the Board of Commissioners
 June 21, 2018

FROM: Logan Olds, General Manager *LO*
TO: Board of Commissioners
SUBJECT: Cancellation of June 28, 2018 Board Meeting

RECOMMENDATION

It is recommended that the Board of Commissioners cancel the regularly scheduled June 28, 2018 Board Meeting if the Board adopts the FY 2018-19 Budget at the regular meeting held on June 21, 2018.

REVIEWED BY

This recommendation was reviewed by Piero Dallarda, Legal Counsel

BACKGROUND INFORMATION

VWRA schedules two Board meetings in June to allow for any last minute changes to the Budget for the next fiscal year. If the Board adopts the fiscal year 2018-19 budget on June 21, 2018 staff recommends cancelling the June 28, 2018 Board Meeting.

FINANCIAL IMPACT

None.

RELATED IMPACTS

None.

Victor Valley Wastewater Reclamation Authority



Financial and Cash Report

May 2018

Victor Valley Wastewater Reclamation Authority
CASH AND RESERVE SUMMARY
 June 12, 2018

G/L Account	Description	Balance
1000	DCB Checking Account	\$ 1,113,000
1030	DCB Sweep Account	2,037,948
1075	Cal TRUST	3,104,186
1070	LAIF	1,540,750
	Total Cash	\$ 7,795,884

\$65 mil Max

Reserves:	Current Balance	Restricted	Assigned	Not Assigned
Targeted Capital Reserve	\$ -	\$ -	\$ -	\$ -
O&M Reserve: 10% of Prior Year Budgeted Operating Expenses	194,000		1,081,523	
R&R Reserve: 1% of Land Improvements/Plants/Interceptors PY CAFR	1,670,006		1,670,006	
Reserve for SRF Payments (P& I) - Operating	2,843,784	2,843,784		
Reserve for SRF Payments (P& I) - Capital	2,439,893	2,439,893		
Available for O&M	648,201	-		
Total Cash	\$ 7,795,884	\$ 5,283,677	\$ 2,751,529	\$ -

Note 1: ACCUMULATION FOR SRF LOAN PAYMENTS:

	9.5 MGD, 11.0 MGD, NAV, Phase III-A	Upper Narrows Replacement	Nanticoke Bypass	Sub-Regional Apple Valley	Sub-Regional Hesperia	Total
Reserve for SRF Payments (P& I) - Operating	\$ 782,104	257,745	202,665	640,818	960,452	\$ 2,843,784
Reserve for SRF Payments (P& I) - Capital	1,348,576	-	67,555	409,703	614,059	2,439,893
	\$ 2,130,680	257,745	270,220	1,050,521	1,574,511	\$ 5,283,677

Note 2: PROJECTS AND FUNDING:

a. Construction and Change Orders for Sub-Regional Plants	Bureau of Reclamation - Title 16 Grant	Dept. of Water Resources - Proposition 84 Grant	SWRCB SRF Loan - Hesperia	SWRCB SRF Loan - Apple Valley	SWRCB - Proposition One Grant - A.V.	SWRCB - Water Recycling Prop 13 Grant - A.V.	Total
Completion (or Termination) Dates	05/31/16	12/31/17	06/30/17	06/30/17	06/30/17	03/31/17	
Agreement Amounts	\$ 3,242,523	\$ 3,000,000	\$ 35,442,795	\$ 21,232,128	\$ 8,135,648	\$ 4,000,000	\$ 75,053,094
Claimed	(3,242,523)	(3,000,000)	(32,473,461)	(20,467,553)	(7,812,299)	(4,008,579)	(71,004,415)
Grant and Loan Balance Remaining	\$ -	\$ -	\$ 2,969,334	\$ 764,575	\$ 323,349	\$ (8,579)	\$ 4,048,679

b. Planning and Design for Sub-Regional Plants	Bureau of Reclamation - Title 16 Grant	Dept. of Water Resources - Proposition 84 Grant	SWRCB SRF Loan - Hesperia	SWRCB SRF Loan - Apple Valley	SWRCB - Proposition One Grant - A.V.	SWRCB - Water Recycling Prop 13 Grant - A.V.	Total
Completion (or Termination) Dates	05/31/16	not applicable	06/30/17	06/30/17	06/30/17	not applicable	
Agreement Amounts	\$ 1,607,477	\$ -	\$ 5,107,160	\$ 5,840,631	\$ 1,046,193	\$ -	\$ 13,601,461
Claimed	(1,607,477)	-	(4,910,572)	(5,840,631)	(1,038,301)	-	(13,396,980)
Grant and Loan Balance Remaining	\$ -	\$ -	\$ 196,588	\$ -	\$ 7,892	\$ -	\$ 204,481

c. Upper Narrows Emergency

*FEMA/Cal OES PW 1136 Revised Grant Limit - Completion 12/27/15	\$ -	7,954,740	
Eligible Cost Incurred 12/26/10 - 11/06/16		(7,750,326)	
Grant Balance Remaining	\$ -	204,414	
Funding Received or To Be Received:			
FEMA (Claims x .90 x .7500)	\$ 5,231,470		
Cal OES (Claims x .90 x .1875)	1,307,868	6,539,338	
VVWRA Share:			
VVWRA (Claims x .0625)	484,395	484,395	
10% Retention to Be Received upon Completion:			
(Claim - VVWRA portion) x .10	726,593	726,593	
	\$ -	7,750,326	

d. Upper Narrows Replacement

*FEMA/Cal OES PW 828 Grant Limit - Completion 12/27/15	\$ -	33,124,002		
Eligible Costs Incurred 04/01/11 - 08/31/16		(33,124,002)		
Grant Balance Remaining	\$ -	-		
Funding Received or Expected to Receive:				
FEMA (Claims x .90 x .7500)	\$ 22,358,701			
Cal OES (Claims x .90 x .1875)	5,589,675	27,948,377		
VVWRA Share:				
VVWRA (Claims x .0625)	2,070,250	2,070,250		
10% Retention to Be Received upon Completion:				
(Claim - VVWRA portion) x .10	3,105,375	3,105,375		
	\$ -	33,124,002		
	Incurred	Claimed	Remaining	
* SRF Loan	Construction	1,655,130	(1,655,130)	-
	Change Orders	1,825,000	(1,825,000)	-
	Soft Costs	806,250	(806,250)	-
		4,286,380	(4,286,380)	-

Victor Valley Wastewater Reclamation Authority
Statement of Net Position
May 31, 2018

<i>Assets and Deferred Outflows of Resources</i>	2018
Current assets:	
Cash and cash equivalents	\$ 7,720,590
Interest receivable	8,662
Accounts receivable	4,127,223
Receivable from FEMA Grants	3,881,929
Accounts receivable - Other	8,503
Allowance for Doubtful Accounts	(64,828)
Materials and supplies inventory	86,516
Prepaid expenses and other deposits	144,136
Total current assets	15,912,731
Fixed assets:	
Capital assets not being depreciated	84,982,461
Capital assets being depreciated	113,810,105
Total capital assets	198,792,566
Total assets	214,705,297
Deferred outflows of resources	
Deferred outflows of resources - pension	1,743,035
Total	\$ 216,448,332
<i>Liabilities, Deferred Inflows of Resources, and Net Position</i>	
Current liabilities:	
Accounts payable and accrued expenses	\$ 694,057
Accrued interest on long-term debt	75,383
Long-term liabilities - due within one year:	
Compensated absences	48,647
Loans payables	1,849,149
Other payables	88,725
Total current liabilities	2,755,961
Non-current liabilities:	
Long-term liabilities - due in more than one year:	
Compensated absences	219,396
Other post employment benefits payable	1,419,041
Loans payable	82,415,006
Net Pension Liability	5,011,624
Other payables	445,105
Total non-current liabilities:	89,510,172
Total liabilities	92,266,133
Deferred inflows of resources	
Deferred inflows of resources - pension	165,023
Net position:	
Net position as of 6/30/17	125,556,639
Restricted for SRF loan covenant	5,283,677
Decrease in net position FY 18	(6,586,277)
Total net position	124,017,176
Total	\$ 216,448,332

Victor Valley Wastewater Reclamation Authority
Revenues and Expenses
Operations and Maintenance
For the Month Ended May 31, 2018

	Actual May 2018	YTD Actual FY 17-18	Approved Budget FY 17-18
REVENUES			
User Charges	\$ 1,147,631	\$ 12,253,981	\$ 13,661,700
Sludge Flow Charge	8,592	101,137	137,074
High Strength Waste Surcharges	-	15,819	25,000
ADM FOG Tipping Fee Revenue	27,392	284,941	205,000
Septage Receiving Facility Charges	51,607	563,194	609,000
Reclaimed Water Sales	697	14,696	44,000
Potable Well Water Sales	50	803	650
Leased Property Income	50	550	600
Interest	121	937	-
Pretreatment Fees	3,000	49,700	51,200
Finance Charge	-	-	-
Grant - FEMA/Cal-BMA	-	-	747,034
Grant - Proposition I	-	-	458,297
Grant- Water Recycling	-	-	246,466
Grant- CEC Microgrid	-	318,727	-
Sale of Assets, Scrap, & Misc Income	348	8,346	-
Total REVENUES	\$ 1,239,488	\$ 13,612,831	\$ 16,186,021
EXPENSES			
Personnel	\$ 301,155	\$ 3,659,439	\$ 4,086,603
Maintenance	101,603	1,541,056	2,919,360
Operations	192,675	2,399,100	3,066,985
Administrative	72,123	1,561,986	2,270,884
Construction	-	-	2,389,065
Total EXPENSES	\$ 667,556	\$ 9,161,581	\$ 14,732,897
Revenues over Expenses before Depreciation, Debt Service and Transfers	\$ 571,932	\$ 4,451,250	\$ 1,453,124
Depreciation Expense	(673,767)	(7,421,888)	-
DEBT SERVICE			
SRF Interest	\$ -	\$ -	\$ 361,138
FUND TRANSFERS IN			
Salary/Benefits Charge from Capital	\$ 8,712	\$ 69,696	-
Admin Charge from Capital	3,311	26,484	-
Total FUND TRANSFERS IN	\$ 12,023	\$ 96,180	\$ -
FUND TRANSFERS OUT			
Transfer to Repairs and Replacements Fund	\$ -	\$ -	247,500
Inter-fund loan payment to Capital	-	(3,254)	-
Total FUND TRANSFERS OUT	\$ -	\$ (3,254)	\$ 247,500
Excess Revenues Over Expenses	\$ (89,812)	\$ (2,877,712)	\$ 844,486

Victor Valley Wastewater Reclamation Authority
Revenues and Expenditures
Repairs and Replacement
For the Month Ended May 31, 2018

	Actual 2018	May	YTD Actual FY 17-18	Approved Budget FY 17-18
REVENUES				
R&R Revenues	\$ -	\$ -	-	-
Total REVENUES	\$ -	\$ -	-	-
OTHER FINANCING SOURCES				
SRF Loan Funding	\$ -	\$ -	-	-
CAPITAL EXPENSES				
Personnel	\$ -	\$ -	-	-
Maintenance	-	-	49,966	242,500
Operations	-	-	101,540	-
Administrative	-	-	-	5,000
Construction	-	-	7,950	-
Total CAPITAL EXPENSES	\$ -	\$ -	159,456	\$ 247,500
Revenues over Expenses before Debt Service and Transfers	\$ -	\$ -	(159,456)	\$ (247,500)
DEBT SERVICE				
SRF Interest	\$ -	\$ -	-	-
FUND TRANSFERS IN				
Transfer from Operations and Maintenance Fund	\$ -	\$ -	247,500	\$ 247,500
Interfund Loan Payment from O&M	-	-	-	-
Total FUND TRANSFERS IN	\$ -	\$ -	247,500	\$ 247,500
FUND TRANSFERS OUT				
Salary/Benefits Charge to O & M	\$ -	\$ -	-	-
Admin Charge to O & M	-	-	-	-
Total FUND TRANSFERS OUT	\$ -	\$ -	-	\$ -
Excess Revenues Over Expenses	\$ -	\$ -	88,044	\$ -

Accrual Basis

Victor Valley Wastewater Reclamation Authority
Revenues and Expenditures
CAPITAL
For the Month Ended May 31, 2018

	Actual May 2018	YTD Actual FY 17-18	Approved Budget FY 17-18
REVENUES			
Connection Fees	\$ 75,200	\$ 1,329,672	\$ 878,900
Title 16 Grant - Subregional	-	-	-
Grant- Water Recycling	-	426,380	157,577
Sale of Assets, Scrap, & Misc Income	-	-	-
Interest	7,532	61,915	38,000
Proposition 1 Grant	-	786,964	293,010
Proposition 84 Grant	-	-	-
FMV Adjustment	-	1,612	-
CEC Microgrid Grant	-	212,021	-
Grant - FEMA/Cal-EMA	-	-	3,105,375
Total REVENUES	<u>\$ 82,732</u>	<u>\$ 2,818,564</u>	<u>\$ 4,472,862</u>
CAPITAL EXPENSES			
Personnel	\$ -	-	\$ 416,716
Maintenance	-	-	40,000
Operations	-	-	170
Administrative	-	(2,054)	140,000
Construction	-	6,348,610	2,482,435
Total CAPITAL EXPENSES	<u>\$ -</u>	<u>\$ 6,346,556</u>	<u>\$ 3,079,321</u>
Revenues over Expenses before Debt Service and Transfers	<u>\$ 82,732</u>	<u>\$ (3,527,992)</u>	<u>\$ 1,393,541</u>
DEBT SERVICE			
SRF Interest	\$ -	\$ 175,691	\$ 209,281
			<u>209,281</u>
FUND TRANSFERS IN			
Capital Recovery - Septage from O&M	\$ -	-	\$ -
Interfund Loan Payment from O&M	-	3,254	-
Total FUND TRANSFERS IN	<u>\$ -</u>	<u>\$ 3,254</u>	<u>\$ -</u>
FUND TRANSFERS OUT			
Salary/Benefits Charge to O & M	\$ 8,712	\$ 69,696	\$ -
Admin Charge to O & M	3,311	26,484	-
Total FUND TRANSFERS OUT	<u>\$ 12,023</u>	<u>\$ 96,180</u>	<u>\$ -</u>
Excess Revenues Over Expenses	<u>\$ 70,709</u>	<u>\$ (3,796,609)</u>	<u>\$ 1,184,260</u>

Accrual Basis

VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
SRF LOAN SUMMARY
May 31, 2018

	Existing	Existing	Existing	Existing	Existing	In Progress	In Progress	In Progress	In Progress	In Progress	Total Agreed
	9.5 MGD Capital Improvements	11 MGD Expansion	North Apple Valley Interceptor	Phase IIIA Regulatory Upgrades	UN Replacement Project	Nanticoke Pump Station Bypass	Apple Valley Subregional	Hesperia Subregional	Apple Valley Subregional	Hesperia Subregional	SRF Loans
\$	4,069,859.00	11,430,726.00	4,084,688.00	18,581,561.00	4,286,380.00	4,495,212.79	27,129,023.47	40,658,809.92	27,129,023.47	40,658,809.92	\$ 114,736,260.18
	2.60%	* 0.00%	2.50%	2.70%	1.90%	1.90%	1.00%	1.00%	1.00%	1.00%	Varies
	n/a	1,905,159.00	-	-	-	-	-	-	-	-	1,905,159.00
	n/a	n/a	n/a	3,000,000.00	n/a	n/a	n/a	n/a	n/a	n/a	3,000,000.00
SRF Amount Borrowed	4,069,859.00	9,525,567.00	4,084,688.00	15,717,667.66	4,286,380.00	4,495,212.79	27,129,023.47	40,658,809.92	27,129,023.47	40,658,809.92	109,967,207.84
Annual Payment Amount	265,049.56	579,869.96	258,151.05	1,027,609.73	257,745.38	271,632.70	1,050,520.94	1,574,511.25	1,050,520.94	1,574,511.25	5,285,090.57
Annual Payment Due Date	September 15	April 3	February 13	June 30	December 31	June 30	February 28	February 28	February 28	February 28	Varies
Loan Term (years)	20	20	20	20	20	20	30	30	30	30	Varies
Years remaining	2	5	7	15	15	20	30	30	30	30	Varies
DEBT SERVICE											
Loan Outstanding Balance	510,119.27	2,218,127.18	1,421,928.33	12,538,025.97	3,187,940.73	4,495,212.79	27,129,023.47	40,658,809.92	27,129,023.47	40,658,809.92	92,159,187.66
Principal Paid to Date	3,559,739.73	7,307,439.82	2,662,759.67	3,179,641.69	1,098,439.27	-	-	-	-	-	17,808,020.18
Interest Paid to Date	1,154,214.00	1,803,806.32	934,964.01	1,900,631.83	110,860.41	-	-	-	-	-	5,904,476.57
First Payment Date	Sept. 15, 2000	April 3, 2003	Feb. 13, 2005	June 30, 2013	Dec. 31, 2016	Jun 30, 2018	February 28 2019	February 28 2019	February 28 2019	February 28 2019	Varies
Final Payment Date	Sept. 15, 2019	April 3, 2022	Feb. 13, 2024	June 30, 2032	Dec. 31, 2032	Jun. 30, 2037	February 28, 2048	February 28, 2048	February 28, 2048	February 28, 2048	Varies
Effective interest rate	2.544%	1.850%	2.499%	2.700%	1.900%	1.900%	1.00%	1.00%	1.00%	1.00%	Varies

* An imputed interest rate is 1.707% per annum.

SRF LOANS

Original Amount Financed
SRF Interest Rate (fixed)
Local Match Amount
Principal Forgiveness
SRF Amount Borrowed
Annual Payment Amount
Annual Payment Due Date
Loan Term (years)
Years remaining

DEBT SERVICE

Loan Outstanding Balance
Principal Paid to Date
Interest Paid to Date
First Payment Date
Final Payment Date
Effective interest rate

Victor Valley Wastewater Reclamation Authority
Flow Study
For the Month Ended April 30, 2018

Measured by ADS	Percentage of Total %	April Monthly MG
VSD 1 (less North Apple Valley)	5.1736%	17.9450
VSD 2	13.5874%	47.1290
VSD 3	25.9623%	90.0520
VSD 4	7.1880%	24.9320
VSD 5	0.5688%	1.9730
VSD 6	7.2226%	25.0520
VSD Total	59.7027%	207.0830
Apple Valley 01	10.6188%	36.8320
Apple Valley 02	5.8941%	20.4440
Apple Valley North	0.1090%	0.3780
Apple Total	16.6219%	57.6540
Hesperia	18.1181%	62.8440
CSA 64 SVL	4.7956%	16.6340
CSA 42 Oro Grande	0.7618%	2.6420
CSA Total	5.5574%	19.2760
Total Apportioned Flow	100.0000%	346.8570
Mojave Narrows Regional Park		0.1000
Total Study Flow		346.9570

VWRA
Upper Narrows Interceptor and Emergency Projects
5/31/2018

Upper Narrows Interceptor and Emergency Projects
5/31/2018

Upper Narrows Interceptor (E004)

<u>Planning/Design/Construction Management</u>		Expended to Date	Contract Amount	Total Remaining
Planning		449,368	277,990	(171,378)
(Tetra Tech) Design		737,952	783,481	45,529
(URS/AECOM) Construction Management		1,642,759	993,673	(649,086)
(TetraTech) Engineering Services During Construction		531,269	348,290	(182,979)
Total		3,361,348	2,403,434	(957,914)
<u>Construction</u>		Expended to Date	Contract Amount	Total Remaining
Construction - J.W. Fowler		26,136,908	26,482,075	345,167
Construction - AV Construction		1,525,267	863,371	(661,896)
Total		27,662,175	27,345,446	313,729
<u>Contingency</u>		Expended to Date	Contract Amount	Total Remaining
(Tetra Tech) Design		-	-	-
(URS/AECOM) Construction Management		271,346	325,612	54,266
(TetraTech) Engineering Services During Construction		-	-	-
Construction - J.W. Fowler		3,536,620	3,536,620	-
Construction - AV Construction		214,287	214,287	-
Total		35,045,776	33,825,399	(1,220,377)

Claimed to Date

FEMA/CalOES	27,948,377	29,811,603	1,863,226
FEMA/CalOES 10% Retention	3,105,375	3,312,400	207,025
UNR SRF Loan	3,515,952		
Total	34,569,704	33,124,003	2,070,251

Upper Narrows Emergency (E003)

Spent to Date 5/31/2018

<u>Planning/Design/Construction Management</u>	Expended to Date
Materials	811,401
Rented Equipment	3,226,387
Contracts	3,899,051
Force Account OT	42,805
Force Equipment	274,341
Total	8,253,985

Received to Date

FEMA/CalOES	6,539,338
FEMA/CalOES 10% Retention	726,593
Total Grants to Date	7,265,931
VWRA 6.25% Unreimbursable Cost	484,395
Total	7,750,326

Nanticoke Interceptor
5/31/2018

Costs Incurred Up to 5/31/2018		Expended to Date	Contract Amount	Total Remaining
Planning/Design/Construction Management				
	Planning		342,397	342,397
	Design		101,524	101,524
	Construction Management	476,557	407,373	(69,184)
	Engineering Services During Construction			-
	Sub-Total	476,557	851,294	374,737
Construction				
	Construction - Christensen Brothers GE Inc.	3,202,494	3,207,896	5,402
		Expended to Date	Contract Amount	
			SRF Loan	
Change Order (Contingency)				
	Planning/Design/Construction Management			-
	Construction	780,139	400,000	(380,139)
	Sub-Total	780,139	400,000	(380,139)
Total		4,459,190	4,459,190	-

Eligible for Reimbursements		Claimed	Contract Amount	Total Remaining
	SRF-Planning/Design/Construction Management	476,557	851,294	374,737
	SRF-Construction Cost	3,982,633	3,607,896	(374,737)
Total		4,459,190	4,459,190	-

Claims Made as of 5/31/2018		Requested	Contract Amount	Total Remaining
	SRF-Planning/Design/Construction Management	476,557	851,294	374,737
	SRF-Construction Cost	3,982,633	3,607,896	(374,737)
Total		4,459,190	4,459,190	-

Subregional Water Reclamation Plant Projects
5/31/2018
Apple Valley

Costs Incurred Up to 5/31/2018

		Expended to Date	Contract Amount	Total Remaining
Planning/Design/Construction Management				
	Planning	1,224,868	970,271	(254,597)
	(Carollo/HDR) Design	2,552,681	3,117,326	564,645
	(MWH) Construction Management	2,089,402	1,455,410	(633,992)
	(Carollo/HDR) Engineering Services During Construction	1,816,322	1,610,418	(205,904)
	Sub-Total	7,683,273	7,153,425	(529,848)
Construction				
	Construction	32,843,337	32,670,000	(173,337)
		Expended to Date	Contract Amount	
			SRF Loan	Lyles
Change Order (Contingency)				
	Planning/Design/Construction Management	-	1,001,640	-
	Construction - Cascade Drilling	256,448	376,986	-
	Construction - Lyles	709,845	624,654	500,000
	Sub-Total	966,293	2,003,280	500,000
Total		41,492,903	42,326,705	1,800,095

Eligible for Reimbursements

		Claimed	Contract Amount	Total Remaining
	Title 16	2,404,756	2,419,631	14,875
	Proposition 13 - Recycling Grant	3,992,563	4,000,000	7,437
	Proposition 84-AV Construction Cost	772,414	1,487,478	715,064
	Proposition 01-AV Planning/Design/Construction Management	1,038,301	1,046,193	7,892
	Proposition 01-AV Construction Cost	7,812,299	8,135,648	323,349
	Total Grants	16,020,333	17,088,950	1,068,617
	<i>% of Total Project</i>		39%	
	SRF-AV Planning/Design/Construction Management	4,413,807	4,535,127	121,320
	SRF-AV Construction Cost	21,058,763	22,537,632	1,478,869
Total		41,492,903	44,161,709	2,668,806

Claims Made as of 5/31/2018

		Requested	Contract Amount	Total Remaining
	Title 16	2,404,756	2,419,631	14,875
	Proposition 13 - Recycling Grant	4,008,579	4,000,000	(8,579)
	Proposition 84-AV Construction Cost	772,414	772,414	-
	Proposition 01-AV Planning/Design/Construction Management	1,038,301	1,046,193	7,892
	Proposition 01-AV Construction Cost	7,812,299	8,135,648	323,349
	Total Grants	16,036,349	16,373,886	337,537
	SRF-AV Planning/Design/Construction Management	5,390,631	4,535,127 *	(855,504)
	SRF-AV Construction Cost	20,017,553	22,537,632	2,520,079
Total		41,444,533	43,446,645	2,002,112

*Note: Proposition 01 grant of \$9.2M reduces AV SRF loan to \$4.5M.

Subregional Water Reclamation Plant Projects
5/31/2018
Hesperia

Costs Incurred Up to 5/31/2018

		Expended to Date	Contract Amount	Total Remaining
Planning/Design/Construction Management				
	Planning	861,802	624,264	(237,538)
	(Carollo/HDR) Design	3,106,096	3,580,792	474,696
	(MWH) Construction Management	2,503,033	1,479,914	(1,023,119)
	(Carollo/HDR) Engineering Services During Construction	1,625,913	1,687,052	61,139
	Sub-Total	8,096,844	7,372,022	(724,822)
Construction				
	Construction	33,058,585	33,220,000	161,415
		Expended to Date	Contract Amount	
			SRF Loan	Lyles
Change Order (Contingency)				
	Planning/Design/Construction Management	-	1,111,398	-
	Construction - Cascade Drilling	468,657	383,334	-
	Construction - Lyles	708,198	728,063	500,000
	Sub-Total	1,176,855	2,222,795	500,000
Total		42,332,284	43,314,817	982,533

Eligible for Reimbursements

		Claimed	Contract Amount	Total Remaining
	Title 16	2,445,244	2,460,369	15,125
	Proposition 84-HES Construction Cost	2,227,586	1,512,522	(715,064)
	Total Grants	4,672,830	3,972,891	(699,939)
	<i>% of Total Project</i>		9%	
	SRF-HES Planning/Design/Construction Management	3,134,436	7,329,955	4,195,519
	SRF-HES Construction Cost	34,525,018	33,220,000	(1,305,018)
Total		42,332,284	44,522,846	2,190,562

Claims Made as of 5/31/2018

		Requested	Contract Amount	Total Remaining
	Title 16	2,445,244	2,460,369	15,125
	Proposition 84-HES Construction Cost	2,227,586	2,227,586	-
	Total Grants	4,672,830	4,687,955	15,125
	SRF-HES Planning/Design/Construction Management	4,910,572	5,107,160	196,588
	SRF-HES Construction Cost	32,473,461	35,442,795	2,969,334
Total		42,056,863	45,237,910	3,181,047

Victor Valley Wastewater Reclamation Authority



Operations and Maintenance Report

May 2018

VWRA O&M Monthly Report – May 2018

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**Victor Valley Wastewater Reclamation Authority
Operations and Maintenance Report
May 2018**

TO: Logan Olds, General Manager
FROM: Operations & Maintenance Staff
SUBJECT: OPERATIONS/MAINTENANCE REPORT

DATE: June 7, 2018

The following information details the operation of the Victor Valley Wastewater Reclamation Authority Facility. Included in this report is pertinent information regarding flows, process control information, process sampling, permit requirements, operations activities, and facility maintenance activities. This report is based on O&M activities for May 2018.

	Total	Average	
Effluent to Mojave	157.26	5.07	
Effluent to Ponds	179.3	5.78	
			Limit
Biochemical Oxygen Demand (BOD)			10 mg/l
Effluent to Mojave	<2.88		
Percent Removal	99.26%		
			Limit
Total Suspended Solids (TSS)			10 mg/l
Effluent to Mojave	<2.1		
Percent Removal	>99.45		
			Limit
Turbidity			2.0 ntu
30 Day Average	0.49		

Major Operations Activities

Headworks

The Headworks area operated as intended throughout the month with normal equipment maintenance performed on a weekly basis. The aerated grit chambers were drained, inspected, and the air diffusers were replaced.

Primary Treatment

Overall removal efficiency of the primary clarifiers was 43.32% removal of influent BOD and 72.66% removal of TSS. Typical operating parameters are 25 to 35 percent removal of BOD and 50 to 60 percent removal of TSS. The primary sludge concentration averaged 2.98% total solids at 66,457.4 gallons per day.

Primary clarifiers: Primaries 2-8 are currently online and continue to treat all incoming flow. Primary 1 remained offline for the month. With one clarifier off line, the remaining 7 primary clarifiers are capable of treating peak flows up to 27 MGD.

The digester gas conditioning system remains online. The system will prevent premature wear and tear on engines 2 & 3 by removing siloxanes by the addition of ferric chloride. The system increases fuel pressure to the blower gas system, allowing for more output from the blower engine. Digester 4 and 5 gas is mixed and sent to the gas conditioning system. This all but eliminates the use of Natural gas to run engines 2 and 3.

Staff continues to add ADM / Grease to Daft 3 from Primaries and Hauler deliveries where it is then feed it to Digesters 4 and 5. This operation is assisting in additional grease removal from the primary clarifiers and increased gas production in the anaerobic digesters.

Secondary Process

Secondary Clarifiers 1-6 are currently offline, they are not needed at this time. We are operating

using only secondary clarifiers 7-10. During the month we had an issue with the RAS control valve on secondary 7. Operators have to adjust this valve manually whenever a flow change through the plant is made. Except for the inconvenience, this has had no negative effect on our treatment.

Currently aeration basins #1-6 and 7-12 are online, and operating with no issue.

Piller 1 is supplying air to basins 1-6, the mixed liquor channel and the aerated grit chamber. Piller 6 is supplying air to AB's 7-12.

Operators continue to monitor the solids under aeration, RAS returns, and SRT. Weekly Nitrogen studies collected by VVWRA staff produced results below regulatory requirements.

There was no need for the use of Thioguard during the month.

Secondary turbidity averaged 1.46 (NTU) this month.
The 30 minute settleometer test averaged 167.4 mL/L.
The average "pop time" of the MLSS was >90 min.

Percolation Ponds

South percolation ponds 7, 8, 10, 11, 12 and 13 were used and rotated during the month. All Percolation Pond freeboard level requirements have been met during the month. All the south ponds are being rotated on a daily basis. The north percolation ponds were used sparingly during the month. North percolation pond 6 remains off line and drained to minimal levels. No flow seepage has been observed.

Tertiary Filters

Aqua Diamond Filters 1 and 2 were both online for the month of May, with regular cleaning and PM's from maintenance, they operated with no issue. The filter effluent averaged a Turbidity of 0.59 NTU.

Solids

Digesters 1-3 along with all their systems were drained and inspected this month in preparation for placing them in service later this year to allow for the inspection of digesters 4 and 5.

Staff has been operating Digesters 4 and 5 by feeding them and letting them supernate. This supernate is then pumped to the sludge lagoons for storage before being pumped to the solar drying beds. During this month the supernate pit pump was pulled and replaced due to struvite build up. This build up made the not capable of keeping up with supernate flows. After the pump was replaced operations went back to normal.

VVWRA received 694,428 gallons of ADM (Anaerobically Digestible Material) and FOG (Fats Oil and Grease). Total is comprised of 594,928 gallons of ADM and 99,500 gallons of FOG.

A Total of 22,837,377scf of gas was created by digesters 4 and 5 for the month of May 2018.

That is an average gas production of 736,690cf/day.

Digester 4 gas production averaged 374,018cf/day.

Digester 5 gas production averaged 362,671cf/day.

Digester 4 Volatile Acid/Alkalinity averaged 0.018.

Digester 5 Volatile Acid/Alkalinity averaged 0.015.

Ultra Violet Disinfection (UV)

The UV system is currently operating without issue.

Monthly UV intensity probe and flow meter calibration checks were performed.

Wedeco was onsite and performed some routine maintenance on the system as well as taking care of minor issues.

Permit Continuous Monitoring Requirements and Permit Violations

All permit required, continuous monitoring equipment was on-line, in calibration and working properly during the month.

Date of last reportable incident: March 10, 2015

Days since last reportable incident: 1,184 days

Discharge Sampling

All required samples during the month of May 2018 were collected and processed as scheduled.

Miscellaneous

Apple Valley Pump Station upgrades were completed this month. Upgrades included VFDs for all pumps, an ultrasonic level detector, a new control PLC and programming, and a diffuser system in

the wet well to keep grease mats from forming on the surface. Plant has been operating better than ever after these upgrades were finished. AVPS continues being cleaned on a regular basis and the grease from these cleanings continues to be pumped to anaerobic digesters 4 and 5.

Maintenance Activities

CMMS Work Order Activity

VVWRA KPI Report

6/8/2018
10:07 AM

5/1/2018 - 5/31/2018

KPI	Count	Percent
Planned Work Total	446	
Planned Work Completed	412	92.38%
Planned Work Completed On-Time	265	59.42%
Planned Work Incomplete	34	7.62%
Planned Work Completed Late	149	33.41%
Total Work Completed	654	
Reactive Work Completed	105	16.06%
PM Work Completed	509	77.83%

Safety

1. Monthly Vehicle Safety Inspections completed.
2. Monthly gas tech monitor inspections completed.
3. Eyewash safety showers inspected.
4. Electrical Safety
5. Forklift refresher
6. Monthly SCBA inspections.

VVWRA O&M Monthly Report – May 2018

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7. Hazardous storage area inspection.
8. Spill kit inspections.
9. Fall protection refresher.
10. First Aid/CPR

Preliminary Process

1. Aqua Guard pre-treatment screen inspected and serviced.
2. Headwork's Conveyor Belt Lube & Inspect.
3. Septage auger replacement.
4. Barscreen brush PM completed.

Primary Process

1. All PH and conductivity probes cleaned and calibrated.
2. Influent PH and conductivity probe calibrations complete.
3. Replaced grating on primary clarifier 5-8
4. Primary #2 Shear pin replacement.
5. Primary effluent sampler repair

Secondary Process

1. Piller blowers 1 & 6 weekly inspections complete.
2. Service Air compressors inspection and service completed.
3. Waukesha engines inspections.

4. Piller #1 and #6 Filters Replacement.

Tertiary

1. Monthly gear box and platform drive wheel service complete
2. Filter #1 & #2 monthly platform gear box PM's comp
3. Filter #1 & #2 monthly backwash wasting pumps oil checks complete
4. All PH and conductivity probes cleaned and calibrated.
5. South Perc pond pumps 3&4 electrical repairs.

Ultra Violet Disinfection (UV)

1. PH and conductivity probes cleaned and calibrated
2. UVT probe calibrated
3. UV Compliance sample pumps foot valve cleaning.
4. UV MCC filters cleaning.
5. UV quarterly service completed.

Treatment Disposal

1. DAFT #1 and #2 Air Compressors 1&2 PM services complete.
2. GBT water supply repair
3. Digester 1,2,3 tanks cleaned.

4. Digester 4&5 heat exchangers inspected and cleaned.
5. Digester 4&5 clean out pump replacement.
6. Aqua diamond filter cleaning completed.

Miscellaneous Plant

1. Serviced Air Handling units for Blower Buildings completed.
2. O&M AC unit repair.
3. MSB AC unit repair.
4. Reclaim water station MCC AC repair.
5. EQ basin MCC Ac repair.
6. New 5000 gallon Ferric tank installed.
7. Tank drain pump replacement.

Plant Equipment

G/CHP 1&2

1. Monthly UREA refill completed CHP #1 & #2

VVWRA O&M Monthly Report – May 2018

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2. CHP1&2 differential pressure readings taken within normal range, Gas DP pressure collected within normal range
3. Monthly gas samples collected.

Gas Conditioning Skid

1. Blowers #1 & #2 inspections complete.
2. Monthly gas sampling collected.

OGPS

1. Monthly Generator Test completed
2. Pump #2 derag

AVPS

1. Grease pump out.
2. Monthly Generator test completed.
3. Air mixers installed.

OFFROAD EQUIPMENT

1. Brown Bear weekly PM's completed.
2. JCB front loader weekly PM's complete.

VVWRA O&M Monthly Report – May 2018

FLEET

1. Monthly fleet inspections completed pumps, vehicles, hose reel trailer, light towers.

Victor Valley Wastewater Reclamation Authority



Environmental Compliance Department Report

May 2018

VWRA Environmental Compliance Department
Industrial Pretreatment Program

I. Interceptors Operation and Maintenance:

1. Interceptors cleaning & CCTV:

- ✓ No Cleaning was performed in May

2. Interceptors Inspections:

The following interceptors were visually inspected for signs of damage, vandalism and evidence of sanitary sewer overflows:

- ✓ South Apple Valley & North Apple Valley.
- ✓ Schedule 1, 2, 3 & 4
- ✓ UNE Bypass HDPE pipe
- ✓ Hesperia, I Ave and Santa Fe.
- ✓ CSA 64
- ✓ Adelanto
- ✓ SCLA1

3. Damage and repair summary:

- ✓ No Damage reported

4. Sanitary sewer overflows (SSO) summary:

- ✓ Date of last reportable SSO: September 18th, 2018

5. Interceptors maintenance budget remaining:

- ✓ The fiscal year 2016-2018 Interceptor sewer maintenance amount remaining for sewer cleaning and inspection services is \$49021.11

6. Dig Alert Underground tickets processed:

- ✓ A total of Ninety Six (96) USA Tickets were received and processed in May 2018.

7. Flow monitoring Studies:

- ✓ A flow monitoring study by ADS Environmental is continuing.

II. Industrial pretreatment Activities:

1. **New Business Questionnaires and permits applications evaluated:**
 - ✓ Five (5) New Business Questionnaires were processed in the month of May 2018.
 - ✓ Zero (0) New Business Inspection was conducted in the month of May 2018.
2. **New permits issued:**
 - ✓ Zero (0) New permits were issued in the month of May 2018.
3. **Permit renewals issued:**
 - ✓ One (1) Class III permit renewals were issued in the month of May 2018.
4. **Work Orders:**
 - ✓ 54 Work Orders were completed in May 2018
5. **Monthly revenues collected, and invoices issued:**
 - ✓ Revenues: \$4,001.50
 - ✓ Invoiced: \$2,800

III. Industrial Pretreatment Activities (continued)

1. Current enforcement actions:

- ✓ Zero (0) Notice of Violation was issued in May 2018.

2. Current active industrial pretreatment permits:

- ✓ The current number of VVWRA's industrial wastewater discharge permits is 433, they are comprised as follows:

1	Class I	Categorical Industrial User
11	Class II	Non-Categorical Significant Industrial User
401	Class III	Non-Significant Industrial User
2	Class IV	Zero Discharge Industrial User
9	Class V	Sanitary Waste Haulers

- ✓ The permitted establishments include:

17	Automotive Service Facility
13	Bakery
1	Brewery/Winery
20	Car Wash/Truck Wash/Bus Wash
3	Coffee Shop
9	Dry Cleaner
3293	FSE
22	Grocery Store
3	Hospital
1	Medical
3	Misc. Food
3	Misc. Industrial
3	Other
1	Photographic
1	Print Shop
1	Prison
3	School
4	Water Retail
9	Waste Haulers

- ✓ Permitted businesses are distributed among member entities as follows: 171 in Victorville, 124 in Apple Valley, 123 in Hesperia and 1 in Oro Grande.

Victor Valley Wastewater Reclamation Authority



Environmental Compliance Department

Septage/FOG/ADM Monthly Report

May 2018

1. Septage/FOG/ADM receiving invoices and payments monthly report:

Payments and Invoices period: May 1st thru May 31st – Septage rate per Gallon: \$ 0.0936
FOG/ADM rate per Gallon: \$ 0.04

Receiving invoices

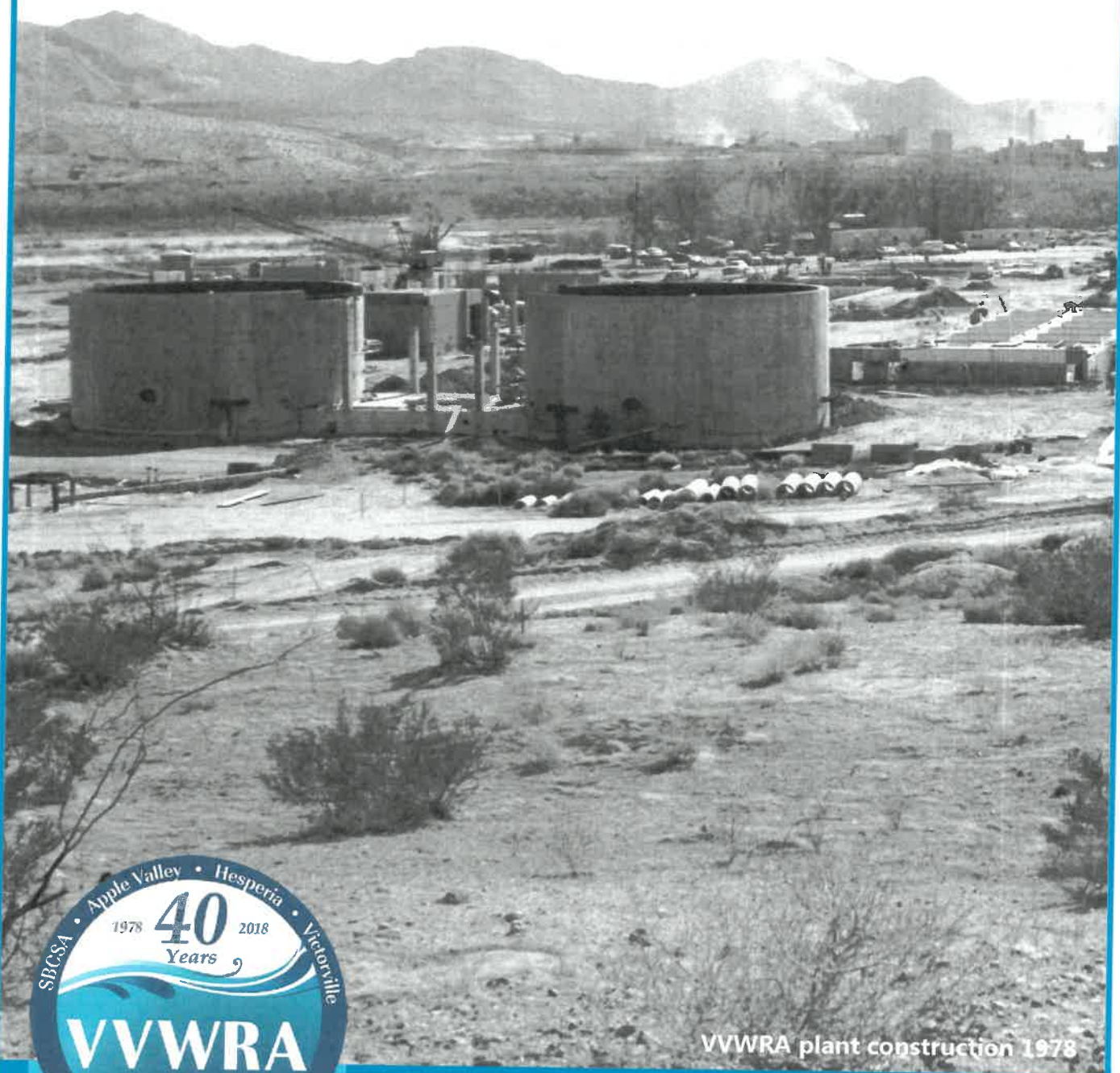
ID No	Septage Hauler	Invoice Date	Total Gallons	Invoice Amount
ABS000	Absolute Pumping	5/1/2018	43,523	\$4,073.75
ALP000	Alpha Omega Septic Service	5/1/2018	140,025	\$13,106.34
BUR000	Burns Septic	5/1/2018	163,900	\$15,341.04
HIT000	Hitt Plumbing	5/1/2018	0	\$0
HON001	Honest Johns Septic Service, Inc	5/1/2018	78,284	\$7,327.38
ROT001	T.R. Stewart Corp. dba Roto Rooter	5/1/2018	85,686	\$8,020.21
USA000	USA Septic	5/1/2018	51,900	\$4,857.84
ALP000	Alpha Omega Septic Service (Nutro)	5/1/2018	155,294	\$6,211.76
COW000	Co-West Commodities	5/1/2018	205,000	\$8,200.00
LIQ000	Liquid Environmental Solutions of CA	5/1/2018	0	\$0
SMC000	SMC Grease Specialist, Inc.	5/1/2018	324,500	\$12,980.00
WES004	West Valley MRF, LLC Burrtec Waste Industries, Inc.	5/1/2018	0	\$0
HIT000	Hitt Plumbing	5/1/2018	0	\$0
Grand Totals			1,248,112	\$80,118.32

Septage/FOG/ADM receiving payments:

ID No	Business Name	Payments Received
ABS000	Absolute Pumping	\$7,146.36
ALP000	Alpha Omega Septic Service	\$16,916.80
BUR000	Burns Septic	\$11,980.80
HON001	Honest Johns Septic Service, Inc	\$7,279.46
ROT001	T.R. Stewart Corp. dba Roto Rooter	\$9,585.32
USA000	USA Septic	\$6,140.16
ALP000	Alpha Omega Septic Service (Nutro)	\$3,946.40
COW000	Co-West Commodities	\$8,000.00
LIQ000	Liquid Environmental Solutions of CA	\$0
SMC000	SMC Grease Specialist, Inc.	\$19,640.00
WES004	West Valley MRF, LLC Burrtec Waste Industries, Inc.	\$0
HIT000	Hitt Plumbing	\$274.80
Grand Total		\$91,874.65



Safety & Communications Report



VVWRA plant construction 1978

May 2018



Safety

STAFF SAFETY TAILGATE/ORIENTATION

- May 3- Heat illness prevention



- May 10--Blood Borne Pathogens



- May 17--Asbestos awareness



- May 31--fire extinguishers





Safety

SAFETY POLICY REVIEWS/ REVISIONS

- Annual Fire Policy Review
- Annual PPE Policy
- Annual CPR/First Aid/BBP

SAFETY EVENTS/ TRAINING

- Safety tailgates
- Confined space
- Fall protection
- Forklift refresher
- Electrical safety

UNSAFE CONDITIONS REPORTED/RESOLVED

- Ladders installed on 2G generators
- warning signs for UV maintenance
- tripping hazard at AV Subregional

DATE OF LAST REPORTABLE ACCIDENT/INJURY:
MARCH 25, 2018

DAYS SINCE LAST REPORTABLE ACCIDENT/INJURY:
67 DAYS



Safety

NEXT MONTH'S SCHEDULE OF STAFF TRAINING/SAFETY EVENTS :

- Safety Tailgates will be conducted at the Thursday weekly staff briefings.
- Safety Tailgates will be conducted at the monthly Administrative staff meetings.
- Staff classes schedule for fit testing, hearing testing and electrical safety.

Communications

- Prepped for marking VWRA's 40th anniversary including adjustments to website, social media etc.



- Attended PR Coalition





Communications

ACTIVITIES

- Represented VWRA at Commissioners Blewett's funeral
- Maintained new website and social media sites including Facebook & Twitter.
- Booked numerous Summer tours of the plant for foreign exchange students

