Fiscal Year 2015-2016

Operations & Capital Adopted 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

VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
Table of Contents
Fiscal Year 2015-2016

Note: Hyperlinks are active. Please click on any line to go to the page. Please click on a blue circle icon at the bottom of each page to come back to the Table of Contents.

Section I: Introduction and Overview

- This page intentionally left blank -

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@vvwra.com

Budget Summary and Message from General Manager

Overview – Revenues and Expenses

This document includes the budget information for the fiscal year 2015-2016 (hereafter referred to as FY 2016) for Victor Valley Wastewater Reclamation Authority (VVWRA). The table of contents and glossary will help you locate information.

VVWRA 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. VVWRA 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 $13.7 million budgeted for FY 2016, $13.2 million represents user fee revenue. We process wastewater, on the average, of 60% from City of Victorville, around 15% each from Town of Apple Valley and City of Hesperia and the remaining 10% from the two areas of San Bernardino County Special Districts. Other income includes septage processing fees, high strength surcharge, industrial pretreatment fees, and reclaimed water sales. The new surcharge rates for FY 2016 are shown at page 28. In addition, we estimated connection fee revenue of $1.1 million to fund existing facility upgrades and the construction of new capital projects. We have budgeted the connection fee revenues for FY 2016 as 55% of $2.0 million that was budgeted for FY 2015 as we expect fewer connections to the wastewater system during FY 2016.

To address the capital project needs, we have included a $6.6 million grant for the Upper Narrows Replacement Project from the Federal Emergency Management Agency (FEMA) and the California Governor's Office of Emergency Services (Cal OES) and $3.5 million of Federal Bureau of Reclamation grant under Title 16, and $45.0 million of loans from the Clean Water State Revolving Fund (SRF). The total budgeted revenue is $69.9 million.

We have budgeted a total expense of $10.7 million for operations and maintenance expenses, $3.0 million for repairs and replacements, and $53.5 million for capital projects. These expenses and expenditures exclude non-cash item, such as depreciation expense. With total expenses of $67.2 million, we predict the total budgeted surplus for FY 2016 is $2.7 million. It is our challenge to achieve a 'balanced' budget where the operating and capital revenues equal or exceed the total expenses.

Capital Projects and their Expenditures

VVWRA's capital improvement program in the next five years allows VVWRA to utilize cutting-edge technologies to continue providing quality wastewater treatment services to the service areas. The anticipated capital projects can be classified into four general categories: Wastewater Treatment, Interceptor, Energy Efficiency, and Information Technology.

These projects are listed in the *Capital Projects and Debts at Section V* on pages 43 through 52 with the proposed funding through one of four sources: federal grants; SRF loans; and operating and capital cash reserves. These capital projects are listed in the order of priority, often overlapping several categories during the year.

Wastewater Treatment and Other Construction Projects

To continue providing quality wastewater treatment services for the community, VVWRA has started the construction of two sub-regional water reclamation plants during FY 2015 to increase its wastewater treatment capacity. The first and most critical project to reduce the hydraulic load on the Hesperia Interceptor will be the Hesperia Water Reclamation Plant (HWRP). This plant in the City of Hesperia will provide reclaimed water to residential communities and commercial businesses along the I-15 corridor. The second facility is the Apple Valley Water Reclamation Plant (AVWRP) located in the Town of Apple Valley. The AVWRP will provide reclaimed water to the town's public parks. In addition to the grant received from Bureau of Reclamation, United States Department of the Interior under Title 16, the majority of the HWRP and AVWRP construction costs will be financed through two SRF loans. The construction of these two sub-regional plants is expected to be complete at the end of FY 2017.

VVWRA has taken a step ahead to continue regulatory compliance Phase III-B project with its NPDES permit during FY 2015 following the completion of the Phase III-A upgrade project. In addition to this compliance effort, we have completed the construction of a biogas renewable energy project that enables us to generate electricity from the biogas otherwise wasted.

VVWRA has started ground work for the construction of a laboratory and administration building to replace the old building as the one of top priorities. This project will be funded through VVWRA's capital cash reserve. This laboratory and administration building will allow VVWRA staff to utilize new technologies and testing methods to monitor the wastewater treatment process, as well as providing the staff with modern laboratory environment. The laboratory and administration building project has been postponed to an unknown future period prioritizing other repair and capital projects.

Interceptor Projects

The majority of the wastewater from the surrounding cities in the service areas is transported to VVWRA's wastewater treatment plant through gravity interceptors. While VVWRA continues to upgrade its treatment facilities to handle the increased influent, we will also increase our influent transport capacities by constructing additional interceptors. VVWRA has begun constructing a permanent pipeline at the Upper Narrows of the Mojave River to replace the temporary bypass line that was set up to deal with 2010 federal disaster projects. These projects have been financed through FEMA and Cal OES grants and by an SRF loan. Another interceptor that VVWRA will construct during FY 2016 is the Nanticoke interceptor. This project will be financed through another SRF loan.

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. We have planned a series of energy efficiency projects in order to alleviate the high cost of power consumption. For example, VVWRA will initiate Aeration Energy Efficiency project including fat, oil and grease treatment in FY 2016. This project will be funded through the capital reserve fund. Both the design and construction of this project are underway during FY 2015.

Information Technology Projects

While continuing to provide the community with high quality wastewater services, VVWRA is also keeping up-to-date with new technologies by implementing a Computerized Maintenance Management

Capital Projects and their Expenditures (Continued)

System (CMMS) in its organization. A CMMS, computer software was funded through the operating cash reserve and has been utilized as a test case to mainly account for parts inventory during FY 2015.

Environmental and Regulatory

VVWRA is the regional sewer service provider, and as such, the State Water Code authorizes VVWRA to implement a regional reclaimed water permitting program similar to the existing Industrial Pretreatment Program. Once VVWRA has the Master Permit, it will be responsible for permitting and monitoring reclaimed water users. This effort will enable VVWRA to expedite the permitting process rather than relying on individual permits obtained through Lahontan Regional Water Quality Control Board, thus making our effort more efficient for our member agencies.

Debts – State Revolving Fund Loans

Given the state of the economy that closely relates to local housing development which in turn directly affects the connection fee revenues, a solution needs to be reached with the close cooperation of the member agencies. VVWRA must correct these fiscal issues (1) to have a sufficient cash reserve to meet the loan debt coverage ratio, (2) to implement the capital projects, (3) to identify a financing mechanism for the sub-regional facilities, and (4) to address the interceptor capacity issues for the City of Hesperia and the Town of Apple Valley. To address these issues, the Board of Commissioners adopted a revenue increase measure, "Balanced Alternative". This balanced alternative takes into account the rate variation and tries to smooth out the rate adjustments over five years starting FY 2014. This measure supports VVWRA's desire to minimize rate increases and uncertainty associated with the actual cost of the sub-regional projects.

Based on the comments from the member agencies regarding how to fund reserves and the discussions on the adopted Financial Plan and associated fee structure, the user fee has been adjusted over the period of time. The connection fee was also adjusted in FY 2015 and will remain until situations call for further consideration to fund the various construction projects. Reflecting member agencies' comments, our challenge includes **a balanced budget** where the operational expenses are covered by the user fees without relying on capital revenues. We have created the FY 2016 budget with this goal in mind.

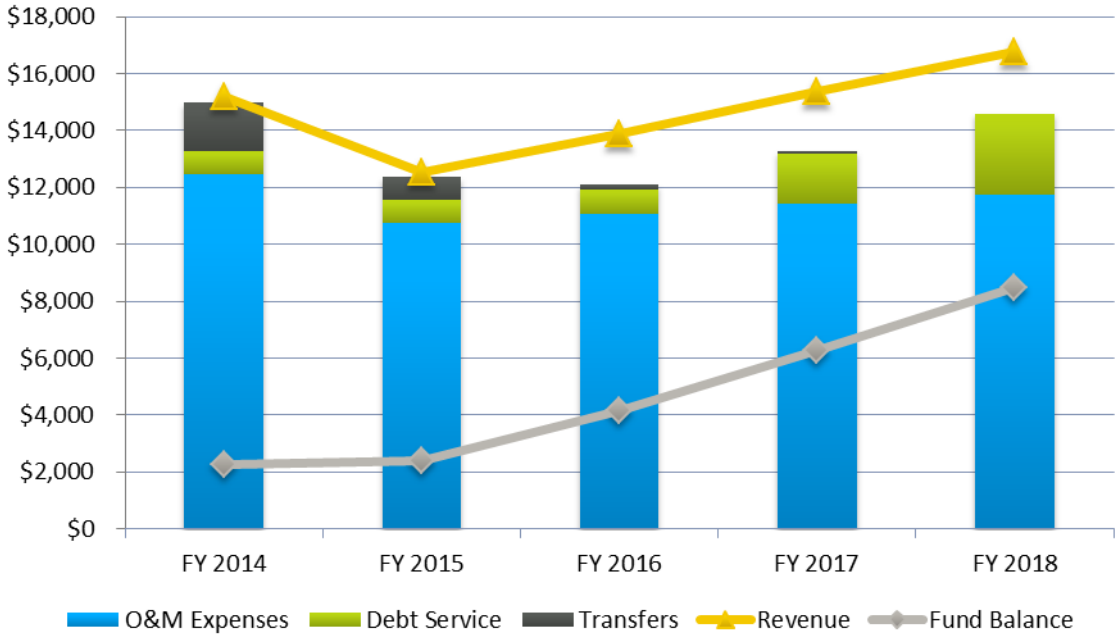
Although there are no applicable legal debt limits for VVWRA to adhere to other than maintaining the annual debt service amount per the SRF loan agreements, we are challenged with the financing for the construction of the Hesperia and Apple Valley facilities.

During the last few years we have experienced a reduction of connection fee income and higher operation costs. As a consequence, VVWRA has used the opportunity to spread out the implementation of its vital and required capital projects focusing on a long-term horizon.

Long Term Financial Plans

VVWRA utilizes a five year financial plan to identify future funding needs. The following graph shows a projection of cash flows during the five year period with the adoption of the balanced alternative.

Operating Cash Flow (Balanced Alternative) in Thousands of Dollars



The above graph and assumptions below are from 2014 Financial Plan Update dated February 12, 2014 prepared by Black & Veatch Corporation.

The financial plan and related cash flow assumptions include:

- The level of future revenue generated in the study is projected through a combination of an analysis of historical and future system growth in terms of number of equivalent dwelling units.
- Engineering Committee has reached consensus to use a moderate growth scenario for development of the financial plan and capacity fees.
- The moderate growth estimate is based on the number of building permits received over the last three years.
- For FY 2016, VVWRA believes the service areas will increase to 1,000 Equivalent Dwelling Units (EDUs), growing from the current projection at 500 EDUs per year.
- Future operating costs are estimated to escalate at the annual rate of 3%.
- By financing the cost of the projects, VVWRA is able to fund large capital projects immediately and spread the payment over a specified timeframe, helping to offset the impact on ratepayers.
- The majority of the capital need identified is associated with two sub-regional water reclamation plants.

The following assumption has been updated with current information.

- VVWRA projects a $79.2 million capital improvement program during FY 2016 through FY 2018, which includes both replacement and expansion projects. See pages 48 and 49.

Conclusion

For FY 2016, VVWRA has sought a funding increase to pay for the sub-regional Water Reclamation Plants. As the Upper Narrows replacement project will be winding down, the most significant financial issue to be addressed in FY 2016 is the financing of the sub-regional plants.

Logan Olds, General Manager

Victor Valley Wastewater Reclamation Authority
GFOA Distinguished Budget Presentation Award for the Fiscal Year Beginning July 1, 2014
Fiscal Year 2015-2016

Section II: Financial Structure, Policy and Process

- This page intentionally left blank -

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, 2015

Jeffrey Rigney
Chair
County of San Bernardino

Scott Nassif
Vice Chair
Town of Apple Valley

James Kennedy, CPA
Secretary
City of Victorville

Russ Blewett
Treasurer
City of Hesperia

Prepared by:

Logan Olds – General Manager
Finance Department

The mission of
Victor Valley Wastewater Reclamation Authority

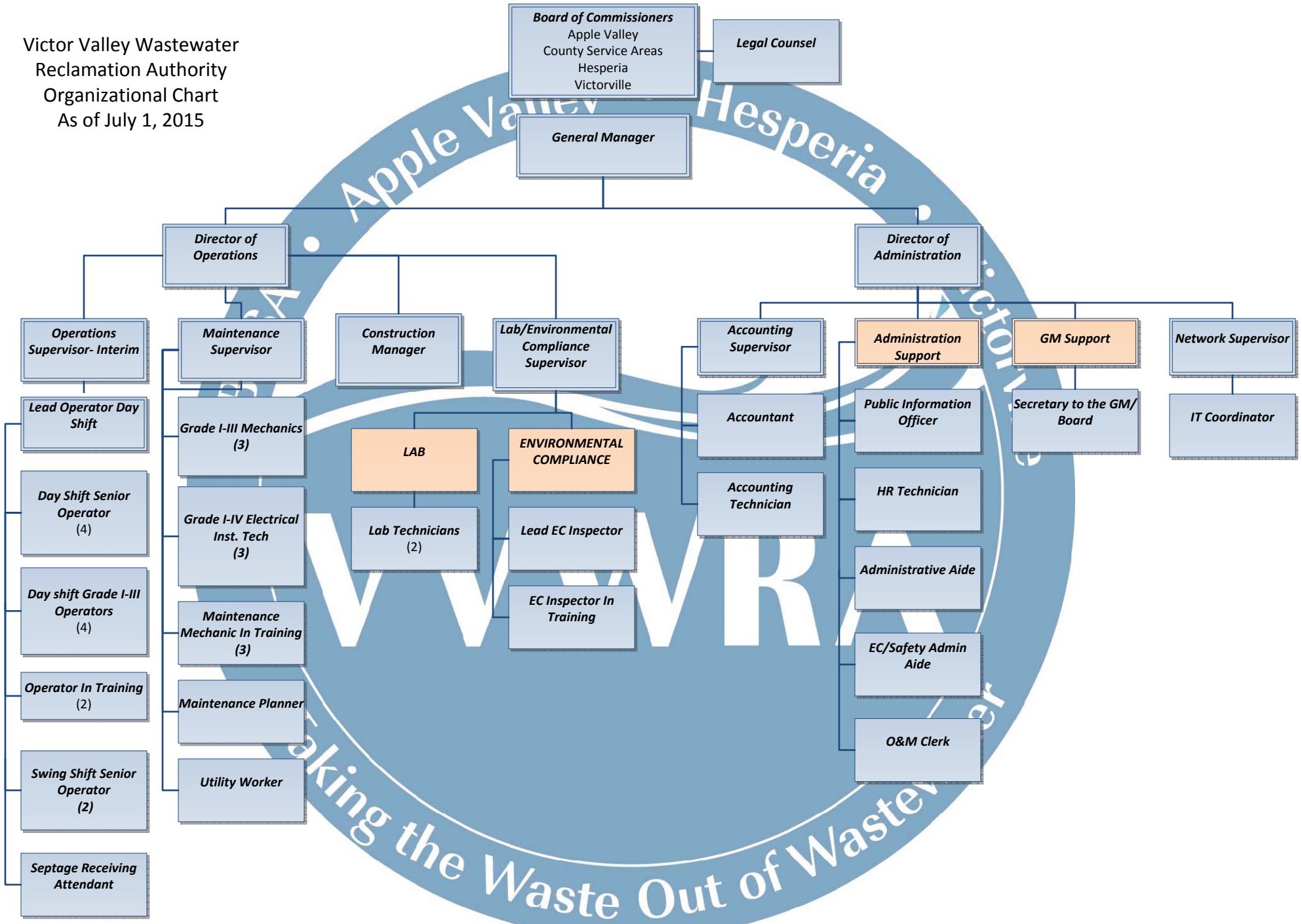
Is…
To cost-effectively provide professional, competent wastewater treatment, reclamation, recycling, and reuse,
To maintain the environment by providing clean effluent to the community,
To provide a service to our customers, and
To keep the public informed.

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
As of July 1, 2015



Victor Valley Wastewater Reclamation Authority
Our Organization
Fiscal Year 2015-2016

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 (VVWRA) is to receive wastewater from four member agencies and to process the wastewater then to discharge the cleaned water to the Mojave River. The VVWRA 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. The Repairs and Replacement Fund we have added for FY 2016 budget is to show periodical repairs and replacement costs separately from normal operations and maintenance. Our main revenues are fees generated from offering services to process wastewater and connection fees charged to connect to an existing system or to expand processing facilities. In addition to operation expenses, we incur large sums of capital expenditures to improve and expand the infrastructure to fulfill member agencies' needs.

The main functions for each department are:

- **Operations** to adhere to State and Federal rules and regulations with no overflow incidence.
- **Construction** to meet the member agency's expansion needs.
- **Laboratory and Environmental Compliance** to enforce regulatory compliance including safety compliance
- **Maintenance** to perform repairs and maintenance of equipment
- **Management Information System** to maintain computer integrity
- **Finance** to compile and publish award-winning Comprehensive Annual Financial Reports and annual budgets
- **Administration** to be in charge of personnel

Goals and objectives of each function

Here are goals and objectives of each function. See performances in FY 2015 at pages 21 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 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. VVWRA Operations staff is a highly dedicated group. The Operations department is staffed 24 hours a day 365 days per year by 12 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.*

Goals and objectives of each function (continued)

*The goal of **Laboratory and Environmental Compliance** (Lab/EC) is to ensure that the agency is in compliance with all local, state and Federal requirements.* The Lab/EC provides and coordinates all sampling, analysis and data reporting, under Environmental Laboratory Accreditation Program certification. 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 Lab/EC Department is staffed by skilled professionals, certified for Laboratory Analysis, Environmental Compliance Inspection, Collection System Maintenance, Industrial Pretreatment Plant Operation, Drinking Water Treatment and Drinking Water Distribution.

*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 through control of wasteful maintenance and operations practices and in the planning of all work activities. The maintenance department maintains the 300 plus acre wastewater treatment plant, in addition to two remote pump stations, vehicle fleet, portable auxiliary equipment and 40 miles of sewer pipeline. The maintenance department comprised of 10 highly skilled craftsmen who are responsible for maintaining the agency's capital assets worth of 149 million dollars, working effectively and efficiently to comply with local, state and Federal requirements.

*The goal of **Management Information System** (MIS) is to provide VVWRA with the latest technologies and support, educating its users and promoting the new technology as an integral component of VVWRA's vision.* This effort includes implementation of computerized maintenance management systems that would keep track of the maintenance inventory more efficiently.

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, we are 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 award-winning Comprehensive Annual Financial Reports.* In addition, its responsibilities include timely billing, fee collections, establishing and monitoring internal control systems, preparing award-winning budgets and various financial reports, and administration of general accounting including payroll.

*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 2015- 2016

Department	Position	2010 Budget	2011 Budget	2012 Budget	2013 Budget	2014 Budget	2015 Budget	2016 Budget
	Administration							
Administrative	Director of Administrative Services	1	1	0	0	0	0	1
Administrative	General Manager	1	1	1	1	1	1	1
Administrative	Administrative Aide	1	1	1	1	1	1	1
Administrative	Management Technician to General Manager	1	1	0	0	0	0	0
Administrative	Secretary - GM/Board	1	1	1	1	1	1	1
Administrative	Administrative Assistant	0	0	0	0	0	0	0
Administrative	Public Information Officer	0	0	1	1	1	1	1
Finance	Director of Finance	0	0	1	1	1	1	0
Finance	Accounting Supervisor	1	1	1	1	1	1	1
Finance	Accountant I	0	0	1	1	1	1	1
Finance	Account Technician	3	2	1	1	1	1	1
Finance	Purchasing Technician	1	1	0	0	0	0	0
Finance	Fiscal Clerk	0	0	1	1	0	0	0
Human Resource	Human Resource Technician	1	1	1	1	1	1	1
Human Resource	Director of Human Resource	0	0	0	0	0	0	0
Info System	Network Supervisor	1	1	1	1	1	1	1
Info System	IS Coordinator	1	1	1	1	1	1	1
Info System	Database Technician	0	0	0	0	0	0	0
Safety	Environmental Health Safety/Risk Coordinator	1	1	0	0	0	0	0
		14	13	12	12	11	11	11
	Operations							
Operations	Director of Operations	1	1	1	1	1	1	1
Operations	Operations Supervisor	1	1	1	1	1	1	1
Operations	Lead Operator	1	1	1	1	1	1	1
Operations	Operator I	2	2	3	2	2	2	0
Operations	Operator II	1	0	0	0	0	0	0
Operations	Operator III	4	4	3	5	5	5	6
Operations	Operator IV	1	1	2	0	0	0	0
Operations	Operator V	1	1	0	1	1	1	0
Operations	Operator-in-Training	1	2	2	2	2	2	2
Operations	Operator	0	0	0	0	0	0	4
Operations	Septage Receiving Attendant	0	0	0	0	0	0	1
Operations	O&M Clerk	0	0	0	0	1	1	1
Lab/Env Comp	Lab & Environmental Compliance Supervisor	1	1	1	1	1	1	1
Lab/Env Comp	Lab Tech I	1	1	0	1	2	2	1
Lab/Env Comp	Lab Tech II	0	0	1	1	0	0	1
Lab/Env Comp	Lab Tech	0	0	0	0	0	0	0
Lab/Env Comp	Lead Environmental Compliance Inspector	1	1	0	1	1	1	1
Lab/Env Comp	Environmental Compliance Safety Admin Aide	1	1	1	1	1	1	1
Lab/Env Comp	Environmental Compliance Inspector-in-Training	1	1	1	1	1	1	1
Lab/Env Comp	Environmental Compliance Supervisor	1	1	0	0	0	0	0
		19	19	17	19	20	20	23
	Maintenance							
Maintenance	Maintenance Supervisor	1	1	1	1	1	1	1
Maintenance	Electrical / Instrumentation Tech	2	1	3	3	2	2	2
Maintenance	Electrical / Instrumentation Tech IV	0	0	0	0	1	1	1
Maintenance	Maintenance Planner	0	0	1	1	1	1	1
Maintenance	Mechanical Tech I	2	1	1	1	1	1	1
Maintenance	Mechanical Tech III	2	2	0	2	2	2	2
Maintenance	Plant Maintenance Tech IV	1	1	3	0	0	0	0
Maintenance	Lead Mechanic	0	1	0	0	0	0	0
Maintenance	Maintenance Mechanic	0	0	0	0	0	0	0
Maintenance	Maintenance Mechanic in Training	0	0	1	1	1	1	3
Maintenance	Utility Worker I	1	1	0	0	0	0	0
Maintenance	Utility Worker II	1	1	1	1	1	1	1
		10	9	11	10	10	10	12
	Construction							
Construction	Project Construction Manager	1	1	0	0	0	0	0
Construction	Construction & Energy Efficiency Manager	0	0	1	1	1	1	1
Construction	Construction Inspector	0	1	0	0	0	0	0
		1	2	1	1	1	1	1
	Total Department	44	43	41	42	42	42	47

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

Operators	2
Maintenance in Training	2
Septage Receiving Attendant	1
	5

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, plant and building and interceptors. The SRF loan reserve is funded by both operating and non-operating revenues in order to maintain sufficient funds to meet the agreement provision of maintaining one fiscal year's debt service payments.

The Operations and Maintenance Reserve is $1.15 million and the Repairs and Replacement Reserve is $1.67 million as of June 30, 2015 to comply with the reserve requirements. The SRF loan reserve for the year ending June 30, 2016 is $2.13 million. VVWRA accumulates the additional SRF loan reserve for loans designated for two sub-regional and Upper Narrows Replacement projects for the future repayments.

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 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 & Energy Efficiency 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

***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 FY 2016 is $2.13 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 near or more than $5.00 million during peak years. See pages 50 and 51 for the detail 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://vvwra.com/index.aspx?page=69 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. See revenue assumptions used in the financial plan at page 6. 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 and 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 2015-2016

Basis of Budgeting

Victor Valley Wastewater Reclamation Authority (VVWRA) employs a fiscal year beginning July 1. VVWRA 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 2014 actual to FY 2014 Comprehensive Annual Financial Report at page 23.

Balanced Budget

A balanced budget is when VVWRA's operating revenues are equal to or exceed its operating expenses. The FY 2016 budget shows the balanced budget with a surplus for its operations and capital funds.

Budget Process

VVWRA supervisory staff inputs budgetary estimates for the following year with their departmental goals① 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.

VVWRA reviews and compares its performance to the budget at a mid-year point at around January. If any amendments are necessary, we revise the budget accordingly then present the revised budget to the Board for approval in February. The approved budgets are posted at VVWRA'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 2015-2016

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

Budget Calendar

VVWRA Budget Planning FYE 06/30/2015	Required By Date
Budget Kickoff Meeting	02/18/15
Update actual numbers and prepare for new budget cycle.	02/20/15
Present the budget draft at Supervisors' meeting.	03/03/15
Present the first draft budget to General Manager (GM) for review.	03/12/15
Hold a preliminary staff budget review meeting with Supervisors and GM.	03/26/15
Provide the draft changes to Accounting Supervisor.	04/01/15
Present the budget executive summary to Internal Finance Committee.	04/14/15
Finalize the draft budget.	04/21/15
Present the budget recommendations to Internal and External Finance Committee.	04/30/15
Present the second recommendations to Internal and External Finance Committee.	05/07/15
Place a public notice on local newspaper to invite public participation.	05/07/15
Circulate the budget document to the Board.	05/14/15
Board Meeting - Present the budget.	05/21/15
Board budget hearing and adoption	06/18/15
The second Board budget hearing and adoption, if needed.	06/25/15
Apply for GFOA Award for Excellence in Budget Reporting.	06/30/15

To summarize the major actions, we have:

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

- This page intentionally left blank -

Victor Valley Wastewater Reclamation Authority
Goals, Objectives and Strategies
Fiscal Year 2015-2016

Goals

The Victor Valley Wastewater Reclamation Authority (VVWRA) serves an arid region which has historically depleted its groundwater resources. For this reason, the effluent is valued for projects as diverse as groundwater replenishment, protecting riparian habitat and power plant cooling water. The energy stored in the organic matter delivered in the wastewater can also be used to provide heat and power for the operation of the wastewater treatment plant. Finally, the organic residual resulting from the treatment process can be beneficially reused in several ways, such as a soil amendment and energy for the manufacturing of cement thereby reducing greenhouse gas emissions. It is the goal of VVWRA to provide sustainable and cost effective solutions which benefit the communities we serve.

desert willow in bloom

Objectives

The objectives of VVWRA are met by pursuing four fundamental rules, General Manager's Rules, which guide the process by which staff evaluate the needs of the member agencies.

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

VVWRA strives to optimize the wastewater treatment process, while at the same time utilizing the resources on hand in an efficient manner.

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

VVWRA strives to establish rates, retain personnel, and procure equipment in a manner that supports Rule #1.

Rule #3: Manage liability.

It is every employee's responsibility to act in a professional manner and be mindful of safety protocols, thus avoiding potential liabilities.

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

The VVWRA Board determines the actions to be taken by the agency. The General Manager ensures that those actions are implemented.

By evaluating each issue to be addressed by these rules, the staff can prioritize the time and focus their energies on projects which will meet the goals of VVWRA.

Strategies

The two driving forces behind VVWRA's strategic plan relate to community growth and regulatory requirements. Each of these factors influences the resources required to address those issues. Additionally, the industry as a whole is changing with more focus on regional watershed-based decision making.

Through a series of capital projects, 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 and Omnivore projects 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 handle the increasing influent from the service areas, VVWRA is boosting its ability to transport wastewater by upgrading its sewer system capacity. VVWRA has already made significant progress by completing the construction of the Santa Fe interceptor to increase capacity in Hesperia's sewer collection system.

VVWRA will further its quest for sustainability by constructing additional sewer lines and Sub-regional water reclamation plants (WRPs) at different locations within the service areas. The Nanticoke Pump Station Bypass sewer line includes the construction of approximately 16,250 linear feet of 30" PVC sewer. It will eliminate the Nanticoke Pump Station and replace it with a gravity sewer to the existing Town of Apple Valley Otoe Pump Station. The construction of Hesperia and Apple Valley Sub-regional WRP allows VVWRA to have sufficient wastewater flow handling and to provide local water supplies. These WRPs represent the first step in preparing for the people, business, and industry that are both the cause and sustainers of regional growth. The sub-regional WRPs will reduce the overall load on the collection system by creating recycled water, which is a valuable and increasingly important resource in this region. Another benefit of locating the sub-regional WRPs farther up the watershed will result in reducing recycled water infrastructure and the subsequent energy costs of pumping the recycled water back up 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 and the public is more broadly aware of the direct injection of recycled water in to groundwater. VVWRA's strategic planning incorporates the elements of sustainability, innovation and successful marketing.

This is best exemplified in the building of the Wastewater Utility Brand publication 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 a utility.

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

Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2015-2016

Operations Performance

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

	2010	2011	2012	2013	2014
Removal Efficiency					
Biochemical Oxygen Demand	99.20%	98.90%	98.90%	98.90%	98.90%
Total Suspended Solids	99.50%	99.30%	99.40%	99.40%	99.20%
Ammonia Nitrogen	99.50%	99.40%	99.70%	99.12%	98.60%
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)	1,379.98	1,722.10	1,408.88	2,341.36	2,303.45
Tertiary Treatment (MG)	3,393.58	3,136.04	3,377.37	2,208.64	4,14.67
Average Influent (MGD)	13.44	13.25	13.17	12.41	12.01
Total Effluent (MG)	4,773.56	4,858.14	4,786.25	4,550.00	4,416.67
Miscellaneous Operations					
Bio-solids Storage (Tons)	11,159.00	14,930.00	15,850.00	13,622.35	15,280.00
Septage Waste Received (MG)	3.31	2.49	2.15	2.83	5.35
Recycled Water Sold (MG)	70.38	71.19	5.56	29.52	284.20

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 2010 to 2014, the number of sedimentation basins has remained at six (out of existing eight basins) and the number of aeration basins has increased from eight to twelve due to the increased 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 Southern California Logistic Airport for irrigation of the Westwinds Golf Course and to the High Desert Power Plant for cooling water.

Operations Department has:

The Operations Department has utilized external feed stocks to anaerobic digesters. These anaerobically digestible materials, such as food waste, fats, oil, grease and other can be added to the digesters, increasing the biogas productions to generate electrical energy. It also eliminated natural gas import resulting in $140,930 annual savings.

Under private and public partnership with Anaergia, the department installed two 2G biogas-powered heat and power generators to provide 1.6 megawatt electricity, utilizing biogas from anaerobic digester, making the facility 90% to 100% energy and carbon neutral (self-sustained). In addition, 5.4 million British thermal unit (BTU) per hour heat, available from the exhaust is transferred to water the flows through the system to heat the anaerobic digesters. Southern California Edison (SCE) Self Generation Incentive Program was $3.175 million for the Anaergia power generation facility.

The department installed the Omnivore Project which began as a research and development project with Anaergia, has now turned into a fully functional system. The Omnivore Project, a $2.6 million project was funded by the California Energy Commission (75%) and by Anaergia (the remaining 25%) resulting in no payment by VVWRA.

We have completed aeration system improvements by installing new turbo blowers to replace aeration diffusers with new fine bubble membrane diffusers. This project resulted in an increase in oxygen transfer, requiring less horsepower of energy. The reduced energy consumption is $291,182.40 per year. In addition, SCE awarded financial incentives in the amount of $96,903. Operational benefits include improved nitrification, reduced mixed liquor recycle rates, improved denitrification and alkalinity recovery, resulting in $151,935 savings per year to eliminate magnesium hydroxide injection.

We have implemented secondary (return) activated sludge improvements to the biological nutrient removal system (BNR). We have reduced number of operating secondary clarifiers from 10 to 4, reduced return activated sludge rate from 85% to 30%, increased detention time in the BNR system, and enhanced microbes' ability to effectively oxidize and convert carbon and nutrients to meet National Pollutant Discharge Elimination System (NPDES) and Waste Discharge Requirements (WDR) permit requirements. This project resulted in reducing overall electricity usage by $120,379 per year, extending service life of equipment, and reducing maintenance and operation man hours by 960 hours that enabled them to focus on other efficiency projects throughout the plant.

We have performed expanded spot-check bioassay to recently installed Ultra Violet (UV) Disinfection System. The sample results demonstrate the installed UV System has performed better than our expectation that warranted an approval for flow rates up to 22.2 million gallons per day (MGD) from 15.4 MGD before the UV System. This project resulted in savings of $912,050 per year from a designed maximum load. VVWRA received a $48,846 incentive from SCE on this project. In addition, the results of the expanded spot-check bioassay and approved capacity of 22.2 MGD have eliminated the need for installation of two additional banks to meet future peak flows of 20.5 MGD, saving the agency and rate payers $1.0 Million in today's economy.

Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2015-2016

Construction Department has:

The Construction Department has achieved the following progress during the year ended June 30, 2015.

	Project Name	Project Status
1	UV Containment Structure	– $80,000, Completed
2	Storage Facility	– $60,000, Completed
3	Administration Modular	– $20,000, Completed
4	Omnivore Pilot Study	– Third Party financed, Completed
5	Fog Treatment Project	– $20,000, Completed
6	WAS line connected to Decant Tank	– $10,000, Completed
7	Membrane Media Pilot Study	– Third Party financed, Completed December 2014
8	Ovivo Mixing System in Digesters 4/5	– $170,000, bid project and cost came in too high. Reevaluating with the soon-to-be complete Digesters Biogas to Energy Project impact.
9	Sludge Lagoon Lining Project	– $1,410,000, Completed May 2015
10	Sub-Regionals Projects, Apple Valley & Hesperia	– $65,890,000, Construction started February 2015 and will continue thru June 2017
11	Upper Narrows Pipeline Replacement Project	– $26,559,500, Construction started February 2014, anticipate completion September 2015
12	Tao Road, Apple Valley Interceptor Realignment	– $117,700, Anticipate completion June 2015
13	Yates Road Sampling Station	– $84,900, Construction 90%, anticipate completion August 2015
14	2014/2015 Manhole Rehabilitation Project	– $164,500, Construction started May 2015, anticipate completion July 2015
15	Digesters Biogas to Energy Project	– Third Party financed, Anticipate complete July 2015
16	Laboratory Building Replacement Project	– $2,100,000, Plans complete, working on City permits, anticipate construction 2016
17	Drying Beds Repair and Drainage Improvements	– $850,000, Anticipate construction 2016
18	Digesters 4 & 5 Supernatant Line	– $80,000, In Design, Anticipated construction 2016
19	Nanticoke Pump Station Bypass Sewer	– $5,700,000, Design 100%, Sending to Bid June 2015, anticipate construction complete June 2016
20	Shay Road Diversion Structure	– $50,000, Anticipate complete August 2015
21	Aeration Energy Efficiency Project	– $620,000, Bidding complete, anticipate contract award June 2015, anticipate construction complete January 2016
22	Desert Knolls Wash, Apple Valley Interceptor Realignment	– $500,000, Delayed until Upper Narrows complete. Anticipate Design beginning November 2015 with construction complete December 2016
23	Apple Valley Odor Control	– $650,000, Delayed until Upper Narrows complete. Anticipate Design beginning November 2015 with construction complete December 2016

Construction Department has: (Continued)

24	North Hesperia Relief Interceptor	– On hold until evaluation of impact from completed Sub-Regionals project
25	Spring Valley Lake Relief Interceptor	– On hold until evaluation of impact from completed Sub-Regionals project
26	Ossum Wash Interceptor	– $650,000, anticipate sending to bid November 2015, anticipate completion March 2016
27	Oro Grande Crossing of Mojave River	– $5,700,000, anticipate sending to bid May 2016, anticipate completion June 2016

Hesperia Subregional Water Reclamation Plant Project

Victor Valley Wastewater Reclamation Authority
Operations Performance Measure
Fiscal Year 2015-2016

Laboratory/Environmental Compliance Department has:

1. Maintained accurate laboratory sampling and testing.

   The Environmental Compliance group reviewed and updated sampling and testing to adhere to necessary requirements. During the process, the group decreased analytical costs by approximately $22,500 and reduced 200 man hours. The group successfully decreased the groundwater monitoring program analytical costs by 25% compared to FY 2014.

2. Updated regulatory compliance requirement reports.

   The Laboratory group continues to shorten the time and effort to generate reports with current software. The electronic report generation now takes about 2/3 the time as previously done. The group is currently evaluating various Laboratory Information Management Systems (LIMS) to further help this effort for the future.

Maintenance Department has been:

- ***Maintaining accurate inventory count using Computerized Maintenance Management System (CMMS)***
  Implementation of Lucity CMMS went live on May 26, 2015 which will enhance our ability to build and maintain an accurate inventory count.

- ***Performing preventative maintenance on plant equipment***
  UV ECO-RAY Lamp upgrade for reliability and efficiency ……$130,000 Complete
  MSB Switch Gear maintenance and repairs……. $35,000 Complete
  South RAS pump R&R……..$36,000 Complete
  Internal Recycle Pump rebuild……$18,000 Complete
  South Perc Pond Pump & Motor rebuild #1, #2……..$45,000 Complete
  South Perc Pond Pump & Motor rebuild #3……$33,000 Complete
  South Perc Pond Motor rebuild #4……$10,000 Complete
  TSS Probe insertion style for South RAS……$13,000 Complete
  Digester Transfer Pump replace……..$8,200 Complete
  Daft #1 recycle flow meter……$4,600 Complete
  DAFT #3 VFD……..$9,500 Complete
  Digs 4&5 sludge feed flow meter……$7,200 Complete
  Hach Partnership TSS and UVAS probes……..$5,200 Complete
  3rd party instrumentation calibrations……$20,000 Complete
  R&R PH and DO probes & caps……$12,500 Complete
  VFD replacement at AVPS……..$11,000 Complete

Maintenance Department has: *(Continued)*

OGPS pump station pump replacement……..$6,000 Complete
2G breaker operator……..$6,000 Complete
Flare 1 regulator kit……. $6,500 Complete
Natural gas flow meter……$8,000 Complete
2 A/C units for MCC's and 1 for IT……..$18,000 Complete
ADM VFD replacement……..$5,000 Complete
ISO ring replacements……. $5,000 Complete
WILO mixer rebuild……..$4,000 Complete
Gas Scrubber Service/Maintenance Media change out……. $60,000 Complete
UV influent MOV's……$16,000 Complete
Secondary clarifier rebuild……..$5,000 Complete
Waukesha Engine #3 rebuild……$10,000 Complete
CLA VAL Services……. $3,000 Complete
Septage Muffin Monster Rebuild……..$15,000 Complete
Misc. Hi-Way Fleet maintenance……..$10,000 Ongoing
Misc Non Hi-Way Vehicle Maintenance……. $15,000 Ongoing
Quarterly crane services and certifications……..$8,000 Complete
Annual Source testing MDAQMD……..$15,000 Complete
Septage EQ basin clean out…….$8,000 Complete

Management Information System Department (MIS) has:

GIS Implementation

The MIS has successfully implemented a complete Geographical Information System (GIS), to be integrated into the Computerized Maintenance Management System (CMMS). This implementation will eliminate the need to use an outside provider for GIS for an overall cost savings of $15,000 annually.

VVWRA Campus Wi-Fi System

The entire VVWRA main campus has been included in a Secure Wi-Fi system. This system is highly secured and is utilized to provide connectivity for VVWRA staff to the CMMS and Supervisory Control and Data Acquisition (SCADA) control systems from anywhere on the plant grounds.

Management Information System Department (MIS) has: *(Continued)*

Document Control System

The MIS has completed Phase I of the document control management system. Phase II and III to be completed in fiscal year 2016.

SCADA Performance

The Department has successfully implemented Omni Integration and 2G Integration into the SCADA system. The system reconfigured the Ultraviolet (UV) to run in a single channel operation mode instead of a dual channel mode assisting the Operations department to decrease energy consumption and operational cost.

SCADA Totalizer Project

The MIS department moved the SCADA totalizer project, which was originally planned to be completed by an outside MIS Consultant, to in-house staff. By doing the work ourselves, we have realized a cost savings of $50,000.

Finance Department has:

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

1. Budgets: Distinguished Budget Presentation Award in the years started July 1, 2013 and 2014 and

2. Comprehensive Annual Financial Reports: Certificate of Achievement for Excellence in Financial Reporting for the years ended June 30, 2012, 2013 and 2014

- This page intentionally left blank -

Section IV: Financial Information and Trend Analyses

- This page intentionally left blank -

Victor Valley Wastewater Reclamation Authority
Consolidated Budget Statement of All Funds
Fiscal Year 2015-2016

Our goals, objectives and strategies are transformed into numbers for the budgets with a projection for the rest of FY 2015. The consolidated budget on this page shows all functions of the entire organization. The next page 29 demonstrates a reconciliation of FY 2014 actual to CAFR for the year ended June 30, 2014. The budget on page 30 is for the Operations and Maintenance Fund, the budget on page 32 is for the Repair and Replacement Fund, and the page 34 shows the budget for the Capital Fund.

	2014 Actual $2,528/MG	2014 Budget $2,528/MG	2015 Actual as of 3/31/2015	2015 Projected to the Year End	2015 Budget $2,756/MG	2016 Budget $3,004/MG
Operations & Maintenance Fund Revenues						
User Charges	$ 10,660,589	$ 11,133,312	$ 8,453,678	$ 11,271,571	$ 12,092,298	$ 13,157,520
Adelanto User Charges	-	-	-	-	-	-
High Strength Waste Surcharges	35,052	90,000	65,231	86,975	10,000	12,000
Septage Receiving Facility Charges	390,682	160,000	399,219	532,292	405,000	410,000
Reclaimed Water Sales	51,373	2,000	58,686	78,248	7,000	7,000
Interest	18	-	15	20	-	-
Pretreatment Fees	48,672	30,000	43,055	57,407	40,000	40,000
Miscellaneous	118,289	14,700	10,231	13,641	14,200	32,100
	$ 11,304,675	$ 11,430,012	$ 9,030,115	$ 12,040,154	$ 12,568,498	$ 13,658,620
Capital Fund Revenues						
Connection Fees	$ 1,524,577	$ 1,700,000	$ 918,299	$ 1,224,399	$ 2,040,000	$ 1,100,000
Interest	22,350	15,000	19,017	25,356	12,000	10,000
Grant - FEMA/Cal-OES	5,580,190	12,000,000	15,562,558	20,750,077	17,172,344	6,566,688
Grant - Water Recycling	-	-	-	-	1,166,676	-
Grant - SRF Forgiveness	-		-	-	-	-
Grant - Title 16	105,813	-	25,642	34,189	1,492,630	3,541,480
	$ 7,232,930	$ 13,715,000	$ 16,525,516	$ 22,034,021	$ 21,883,650	$ 11,218,168
Other Financing Sources						
SRF Loan Funding	$ 795,506	$ 27,717,964	$ 3,353,830	$ 3,353,830	$ 30,174,871	$ 44,984,109
	$ 795,506	$ 27,717,964	$ 3,353,830	$ 3,353,830	$ 30,174,871	$ 44,984,109
Total Revenues and Other Financing Sources	**$ 19,333,111**	**$ 52,862,976**	**$ 28,909,461**	**$ 37,428,005**	**$ 64,627,019**	**$ 69,860,897**
Operations and Maintenance Fund Expenses						
Personnel and Benefits	$ 4,117,404	$ 4,437,930	$ 3,196,758	$ 4,262,344	$ 4,600,986	$ 4,835,651
Maintenance	1,572,186	2,793,520	1,001,651	1,335,534	2,226,054	1,807,589
Operations	2,183,544	2,872,963	1,294,700	1,726,267	2,660,625	2,323,091
Administration	1,528,505	1,841,766	1,059,106	1,412,141	1,434,640	1,689,643
Construction	151,289	472,502	78,908	105,211	432,569	-
	$ 9,552,928	$ 12,418,681	$ 6,631,123	$ 8,841,497	$ 11,354,874	$ 10,655,974
Emergency Expenses						
Maintenance	$ 160,689	$ 136,321	$ 151,745	$ 202,327	$ 636,102	$ 36,000
Operations	663,377	906,512	392,759	523,679	473,400	123,260
FEMA Expenses	$ 824,066	$ 1,042,833	$ 544,504	$ 726,006	$ 1,109,502	$ 159,260
Expected FEMA/Cal-OES Grants	(676,379)	(977,656)	(1,068,809)	(1,425,079)	(969,498)	(927,253)
	$ 147,687	$ 65,177	$ (524,305)	$ (699,073)	$ 140,004	$ (767,993)
Repair and Replacement Fund Expenses						
Personnel and Benefits	$ -	$ -	$ -	$ -	$ -	$ -
Maintenance	66,990	-	389,159	518,879	-	1,215,940
Operations	-	-	-	-	-	136,650
Administration	-	-	-	-	-	24,600
Construction	68,573	-	310,419	413,892	-	1,625,000
	$ 135,563	$ -	$ 699,578	$ 932,771	$ -	$ 3,002,190
Capital Fund Expenses						
Personnel and Benefits	$ 358,035	$ 392,309	$ 277,979	$ 370,639	$ 392,862	$ 399,194
Maintenance	8,718	-	-	-	7,000	-
Operations	-	50,000	-	-	171	171
Administration	70,976	-	49,322	65,763	-	-
Construction	79,646	41,379,440	16,485,658	21,980,877	50,083,012	51,790,556
	$ 517,375	$ 41,821,749	$ 16,812,959	$ 22,417,279	$ 50,483,045	$ 52,189,921
Debt Services						
SRF Principal	$ 1,534,216	$ 1,504,684	$ 929,624	$ 1,556,688	$ 1,565,775	$ 1,603,164
SRF Interest	596,463	568,221	173,447	573,993	564,906	527,516
	$ 2,130,679	$ 2,072,905	$ 1,103,071	$ 2,130,681	$ 2,130,681	$ 2,130,680
Total Expenses and Debt Services	**$ 12,484,232**	**$ 56,378,512**	**$ 24,722,426**	**$ 33,623,155**	**$ 64,108,604**	**$ 67,210,772**
Total Agency Net Surplus or (Deficit)	**$ 6,848,879**	**$ (3,515,536)**	**$ 4,187,035**	**$ 3,804,850**	**$ 518,415**	**$ 2,650,125**

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, 2014
Fiscal Year 2015-2016

	2014 Actual on Page 28	Reconciliation to CAFR	2014 Per CAFR
Operating Revenues			
User Charges	$ 10,660,589	$ -	$ 10,660,589
Adelanto User Charges	-	-	-
High Strength Waste Surcharges	35,052	-	35,052
Septage Receiving Facility Charges	390,682	-	390,682
Reclaimed Water Sales	51,373	-	51,373
Pretreatment Fees	48,672	-	48,672
Miscellaneous	118,289	-	118,289
	$ 11,304,657	$ -	$ 11,304,657
Capital Revenues			
Connection Fees	$ 1,524,577	$ -	$ 1,524,577
Interest	22,368	-	22,368
Grant - FEMA/Cal-OES	5,580,190	-	5,580,190
Grant - SRF Forgiveness	-		-
Grant - Title 16	105,813	-	105,813
	$ 7,232,948	$ -	$ 7,232,948
Other Financing Sources			
SRF Loan Funding	$ 795,506	$ (795,506)	$ -
	$ 795,506	$ (795,506)	$ -
Total Revenues and Other Financing Sources	**$ 19,333,111**	**$ (795,506)**	**$ 18,537,605**
Operating Expenses			
Personnel and Benefits	$ 4,117,404	$ -	$ 4,117,404
Maintenance	1,572,186	-	1,572,186
Operations	2,183,544	-	2,183,544
Administration	1,528,505	-	1,528,505
Construction	151,289	-	151,289
	$ 9,552,928	$ -	$ 9,552,928
Emergency Expenses			
Maintenance	$ 160,689	$ -	$ 160,689
Operations	663,377	-	663,377
FEMA Expenses	$ 824,066	$ -	$ 824,066
Expected FEMA/Cal-OES Grants	(676,379)	-	(676,379)
	$ 147,687	$ -	$ 147,687
Depreciation Expense	$ -	$ 6,612,402	$ 6,612,402
Repair and Replacement Expense			
Personnel and Benefits	$ -	$ -	$ -
Maintenance	66,990	-	66,990
Operations	-	-	-
Administration	-	-	-
Construction	68,573	-	68,573
	$ 135,563	$ -	$ 135,563
Capital Expenses			
Personnel and Benefits	$ 358,035	$ -	$ 358,035
Maintenance	8,718	-	8,718
Operations	-	-	-
Administration	70,976	-	70,976
Construction	79,646	-	79,646
	$ 517,375	$ -	$ 517,375
Debt Services			
SRF Principal	$ 1,534,216	$ (1,534,216)	$ -
SRF Interest	596,463	-	596,463
	$ 2,130,679	$ (1,534,216)	$ 596,463
Total Expenses with Debt Services	**$ 12,484,232**	**$ 5,078,186**	**$ 17,562,418**
Total Net Surplus or (Deficit)	**$ 6,848,879**	**$ (5,873,692)**	**$ 975,187**

Victor Valley Wastewater Reclamation Authority
Budget Statement of Operations and Maintenance Fund
Fiscal Year 2015-2016

	2014 Actual $2,528/MG	2014 Budget $2,528/MG	2015 Actual as of 3/31/2015	2015 Projected to the Year End	2015 Budget $2,756/MG	2016 Budget $3,004/MG
Revenues						
User Charges	$ 10,660,589	$ 11,133,312	$ 8,453,678	$ 11,271,571	$ 12,092,298	$ 13,157,520
Adelanto User Charges	-	-	-	-	-	-
High Strength Waste Surcharges	35,052	90,000	65,231	86,975	10,000	12,000
Septage Receiving Facility Charges	390,682	160,000	399,219	532,292	405,000	410,000
Reclaimed Water Sales	51,373	2,000	58,686	78,248	7,000	7,000
Interest	18		15	20	-	-
Pretreatment Fees	48,672	30,000	43,055	57,407	40,000	40,000
Miscellaneous	118,289	14,700	10,231	13,641	14,200	32,100
	$ 11,304,675	**$ 11,430,012**	**$ 9,030,115**	**$ 12,040,154**	**$ 12,568,498**	**$ 13,658,620**
Expenses ①						
Personnel and Benefits	$ 4,117,404	$ 4,437,930	$ 3,196,758	$ 4,262,344	$ 4,600,986	$ 4,835,651
Maintenance	1,572,186	2,793,520	1,001,651	1,335,534	2,226,054	1,807,589
Operations	2,183,544	2,872,963	1,294,700	1,726,267	2,660,625	2,323,091
Administration	1,528,505	1,841,766	1,059,106	1,412,141	1,434,640	1,689,643
Construction	151,289	472,502	78,908	105,211	432,569	-
	$ 9,552,928	$ 12,418,681	$ 6,631,123	$ 8,841,497	$ 11,354,874	$ 10,655,974
Emergency Expenses						
Maintenance	$ 160,689	$ 136,321	$ 151,745	$ 202,327	$ 636,102	$ 36,000
Operations	663,377	906,512	392,759	523,679	473,400	123,260
FEMA OPERATING EXPENSES	$ 824,066	$ 1,042,833	$ 544,504	$ 726,006	$ 1,109,502	$ 159,260
Expected FEMA/Cal-OES Grants	(676,379)	(977,656)	(1,068,809)	(1,425,079)	(969,498)	(927,253)
	$ 147,687	$ 65,177	$ (524,305)	$ (699,073)	$ 140,004	$ (767,993)
Debt Services						
SRF Principal	$ 477,796	$ 455,647	$ 9,770	$ 477,796	$ 486,883	$ 500,019
SRF Interest	304,308	283,126	1,627	304,308	295,221	282,085
	$ 782,104	$ 738,773	$ 11,397	$ 782,104	$ 782,104	$ 782,104
Total Operations & Maintenance Expenses with Debt Services	**$ 10,482,719**	**$ 13,222,631**	**$ 6,118,215**	**$ 8,924,528**	**$ 12,276,982**	**$ 10,670,085**
Operations & Maintenance Net Surplus or (Deficit)	**$ 821,956**	**$ (1,792,619)**	**$ 2,911,900**	**$ 3,115,626**	**$ 291,516**	**$ 2,988,535**
Funds Available From Prior Year	-	-	-	-	-	**1,149,488**
To be Applied to Repairs & Replacement Fund	-	-	-	-	-	**(2,988,535)**
Operations & Maintenance Net Surplus or (Deficit)	**$ 821,956**	**$ (1,792,619)**	**$ 2,911,900**	**$ 3,115,626**	**$ 291,516**	**$ 1,149,488**

① Please see detailed expense information at page 31.

We have predicted the same inflows of 4,380 million gallons (MG) of wastewater to process during FY 2016 as we did for FY 2015 budget. The FY 2016 inflow quantity is multiplied by the rate of $3,004 per MG. Please refer to page 36 for the personnel expenses allocated between Operations & Maintenance (O&M) and Capital Funds. We have added five more positions to the O&M Fund as stated at Budgeted Position on page 14. We expect the emergency projects will be completed during the FY 2016. The Expected FEMA and Cal OES Grants revenue $927,253 is shown as a negative number to include the 10% retention that will be awarded at the completion of the projects. Please refer to Projected Cash Allocation per Fund at page 47 for the O&M projected cash at the end of FY 2016. Another reference to the operating cash flow prediction on page 6 may give you further information to see the cash trend based on the five-year financial plan. As for the State Revolving Fund (SRF) loan principal and interest payments for future years, please refer to pages 50 and 51 for the SRF loan payment schedule per maturities. Based on the predicted beginning fund balance, we apply any excess O&M revenues over expenses to Repairs and Replacement Fund needs. 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 2015-2016

	2014 Actual $2,528/MG	2014 Budget $2,528/MG	2015 Actual as of 3/31/2015	2015 Projected to the Year End	2015 Budget $2,756/MG	2016 Budget $3,004/MG
Personnel Expenses Allocations ①						
Allocation to Maintenance	$ 1,029,351	$ 1,116,891	$ 729,695	$ 972,926	$ 1,046,443	$ 1,270,355
Allocation to Operations	2,013,948	2,160,830	1,598,379	2,131,172	2,300,596	2,306,437
Allocation to Administrations	1,074,105	1,160,209	868,684	1,158,246	1,253,947	1,258,859
	$ 4,117,404	$ 4,437,930	$ 3,196,758	$ 4,262,344	$ 4,600,986	$ 4,835,651
Maintenance Expenses						
Maintenance Equipment	$ 550,676	$ 679,467	$ 419,094	$ 558,792	$ 703,200	$ 393,650
Instrumentation	393,655	659,203	259,195	345,593	568,214	524,489
Total Grounds Maintenance & Landscaping	391,246	966,750	183,359	244,479	488,790	392,950
Vehicle Repairs	68,989	96,600	44,320	59,093	141,100	129,500
Interceptor Sewer Maintenance	72,983	326,000	12,193	16,257	260,000	315,500
Maintenance Safety Equipment	35,947	50,000	11,065	14,753	54,000	35,500
Misc. Maintenance Expense	58,690	15,500	72,425	96,567	10,750	16,000
	$ 1,572,186	$ 2,793,520	$ 1,001,651	$ 1,335,534	$ 2,226,054	$ 1,807,589
Operations Expenses						
Process Chemicals	$ 221,865	$ 373,900	$ 164,161	$ 218,881	$ 219,900	$ 242,892
Utilities	1,204,480	1,586,566	677,704	903,605	1,548,400	1,187,200
Trash and Sludge	89,786	127,050	69,747	92,996	121,050	131,780
Fuel and Lubricants	105,263	98,800	49,142	65,523	113,000	113,000
Lab Supplies and Services	118,091	146,130	66,639	88,852	164,700	147,040
Outside Lab Services	146,727	182,650	91,491	121,988	187,400	219,475
Safety Equipment	29,317	71,385	17,915	23,887	90,876	83,429
Custodial Services and Supplies	38,803	46,782	26,340	35,120	59,299	55,222
Equipment Rental	40,243	32,200	63,782	85,043	46,300	44,553
Uniforms	34,243	35,500	15,604	20,805	20,000	20,000
Security	8,769	69,000	9,951	13,268	8,500	18,500
Permits	145,957	68,000	30,039	40,052	81,200	60,000
Misc. Operating Expense	-	35,000	12,185	16,247	-	-
	$ 2,183,544	$ 2,872,963	$ 1,294,700	$ 1,726,267	$ 2,660,625	$ 2,323,091
Administrations Expenses						
Telephone and Communications	$ 111,994	$ 85,560	$ 62,743	$ 83,657	$ 96,500	$ 105,000
Computer Supplies	60,914	62,000	56,859	75,812	45,000	99,825
Office Supplies	102,852	72,950	58,875	78,500	72,450	111,764
Travel, Meeting, Training	91,792	130,921	81,284	108,379	185,060	168,270
Employee and Community Events	20,218	36,640	14,046	18,728	14,609	23,445
Membership, Fees, Licenses	58,629	34,200	47,687	63,583	26,950	28,564
Professional Services	265,660	373,239	151,974	202,632	361,580	477,275
Legal Services and Fees	339,023	228,000	260,399	347,199	250,000	250,000
Temporary Labor	103,535	34,000	93,530	124,707	20,000	70,000
Bond & Liability Insurance	130,994	150,000	116,664	155,552	100,000	105,000
Finance Fees	133	-	205	273	-	-
Misc. Administration Expense	5,869	55,000	12,046	16,061	-	-
Permit Fees	28,269	195,500	71,680	95,573	224,000	212,000
Rent	93,655	61,150	31,114	41,485	38,491	38,500
Interest Accrual	89,959					
Supplemental Environmental Project Payment	25,009	322,606	-	-	-	-
	$ 1,528,505	$ 1,841,766	$ 1,059,106	$ 1,412,141	$ 1,434,640	$ 1,689,643
Construction Expenses	$ 151,289	$ 472,502	$ 78,908	$ 105,211	$ 432,569	$ -
Total Operations and Maintenance Fund Expenses Before Emergency	**$ 9,552,928**	**$ 12,418,681**	**$ 6,631,123**	**$ 8,841,497**	**$ 11,354,874**	**$ 10,655,974**

① Please see Allocations of Personnel Expenses at page 36.

Victor Valley Wastewater Reclamation Authority
Budget Statement of Repairs and Replacement Fund
Fiscal Year 2015-2016

	2014 Actual $2,528/MG	2014 Budget $2,528/MG	2015 Actual as of 3/31/2015	2015 Projected to the Year End	2015 Budget $2,756/MG	2016 Budget $3,004/MG
Revenues						
User Charges	$ -	$ -	$ -	$ -	$ -	$ -
Adelanto User Charges	-	-	-	-	-	-
High Strength Waste Surcharges	-	-	-	-	-	-
Septage Receiving Facility Charges	-	-	-	-	-	-
Reclaimed Water Sales	-	-	-	-	-	-
Interest	-	-	-	-	-	-
Pretreatment Fees	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -
Expenses ①						
Personnel and Benefits	$ -	$ -	$ -	$ -	$ -	$ -
Maintenance	66,990	-	389,159	518,879	-	1,215,940
Operations	-	-	-	-	-	136,650
Administration	-	-	-	-	-	24,600
Construction	68,573	-	310,419	413,892	-	1,625,000
	$ 135,563	$ -	$ 699,578	$ 932,771	$ -	$ 3,002,190 ①
Emergency Expenses						
Maintenance	$ -	$ -	$ -	$ -	$ -	$ -
Operations	-	-	-	-	-	-
FEMA OPERATING EXPENSES	$ -	$ -	$ -	$ -	$ -	$ -
Expected FEMA/Cal-EMA Grants	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -
Debt Services						
SRF Principal	$ -	$ -	$ -	$ -	$ -	$ -
SRF Interest	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -
Total Repair and Replacement Expenses with Debt Services	**$ 135,563**	**$ -**	**$ 699,578**	**$ 932,771**	**$ -**	**$ 3,002,190**
Repair and Replacement Net Surplus or (Deficit)	**$ (135,563)**	**$ -**	**$ (699,578)**	**$ (932,771)**	**$ -**	**$ (3,002,190)**
Funds Available From Prior Year	-	-	-	-	-	**1,852,996**
Applied From Operations and Maintenance to Repairs & Replacement Fund	-	-	-	-	-	**2,988,535**
Repair and Replacemen Net Surplus or (Deficit)	**$ (135,563)**	**$ -**	**$ (699,578)**	**$ (932,771)**	**$ -**	**$ 1,839,341**

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 2016, 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. See page 47 for further analysis of funds. These R&R projects include:

Aeration energy efficiency	900,000
Computer hardware	24,600
Drying beds repair/drainage	150,000
Electrical equipment	254,940
Electrical supplies	70,000
Instrumentation	100,000
Lab equipment repairs	26,650
Ossum Wash interceptor	650,000
Process equipment	230,000
Pumps, motors and valves	356,000
SCADA software support	40,000
SCADA system equipment	60,000
Security repairs & supplies	50,000
Shay Road diversion structure	75,000
Water system maintenance	15,000
①	3,002,190

Victor Valley Wastewater Reclamation Authority
Repairs and Replacement Fund Expenses
Fiscal Year 2015-2016

	2014 Actual $2,528/MG	2014 Budget $2,528/MG	2015 Actual as of 3/31/2015	2015 Projected to the Year End	2015 Budget $2,756/MG	2016 Budget $3,004/MG
Personnel Expenses Allocations						
Allocation to Maintenance	$ -	$ -	$ -	$ -	$ -	$ -
Allocation to Operations	-	-	-	-	-	-
Allocation to Administrations	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -
Maintenance Expenses						
Maintenance Equipment	$ 62,726	$ -	$ 304,590	$ 406,120	$ -	$ 601,000
Instrumentation	4,159	-	-	-	-	464,940
Total Grounds Maintenance & Landscaping	105	-	-	-	-	150,000
Vehicle Repairs	-	-	-	-	-	-
Interceptor Sewer Maintenance	-	-	84,569	112,759	-	-
Maintenance Safety Equipment	-	-	-	-	-	-
Misc. Maintenance Expense	-	-	-	-	-	-
	$ 66,990	$ -	$ 389,159	$ 518,879	$ -	$ 1,215,940
Operations Expenses						
Process Chemicals	$ -	$ -	$ -	$ -	$ -	$ -
Utilities	-	-	-	-	-	-
Trash and Sludge	-	-	-	-	-	-
Fuel and Lubricants	-	-	-	-	-	-
Lab Supplies and Services	-	-	-	-	-	26,650
Outside Lab Services	-	-	-	-	-	-
Safety Equipment	-	-	-	-	-	-
Custodial Services and Supplies	-	-	-	-	-	-
Equipment Rental	-	-	-	-	-	-
Uniforms	-	-	-	-	-	-
Security	-	-	-	-	-	50,000
Permits	-	-	-	-	-	-
Misc. Operating Expense	-	-	-	-	-	60,000
	$ -	$ -	$ -	$ -	$ -	$ 136,650
Administrations Expenses						
Telephone and Communications	$ -	$ -	$ -	$ -	$ -	$ -
Computer Supplies	-	-	-	-	-	24,600
Office Supplies	-	-	-	-	-	-
Travel, Meeting, Training	-	-	-	-	-	-
Employee and Community Events	-	-	-	-	-	-
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	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ 24,600
Construction Expenses	$ 68,573	$ -	$ 310,419	$ 413,892	$ -	$ 1,625,000 ①
Total Repair and Replacement Fund Expenses	**$ 135,563**	**$ -**	**$ 699,578**	**$ 932,771**	**$ -**	**$ 3,002,190**

Repair & Replacement Projects:

Plant&Admin	900,000
Ossum Wash Interceptor	650,000
Misc Repairs	75,000
	1,625,000 ①

Victor Valley Wastewater Reclamation Authority
Budget Statement of Capital Fund
Fiscal Year 2015-2016

	2014 Actual $3,750/EDU ①	2014 Budget $3,750/EDU ①	2015 Actual as of 3/31/15	2015 Projected to the Year End	2015 Budget $4,000/EDU ①	2016 Budget $4,000/EDU ①
Revenues						
Connection Fees	$ 1,524,577	$ 1,700,000	$ 918,299	$ 1,224,399	$ 2,040,000	$ 1,100,000
Interest	22,350	15,000	19,017	25,356	12,000	10,000
Grant - FEMA/Cal-EMA	5,580,190	12,000,000	15,562,558	20,750,077	17,172,344	6,566,688
Grant - Water Recycling	-	-	-	-	1,166,676	-
Grant - SRF Forgiveness	-	-	-	-	-	-
Grant - Title 16	105,813	-	25,642	34,189	1,492,630	3,541,480
	$ 7,232,930	$ 13,715,000	$ 16,525,516	$ 22,034,021	$ 21,883,650	$ 11,218,168
Other Financing Sources						
SRF Loan Funding	$ 795,506	$ 27,717,964	$ 3,353,830	$ 3,353,830	$ 30,174,871	$ 44,984,109
	$ 795,506	$ 27,717,964	$ 3,353,830	$ 3,353,830	$ 30,174,871	$ 44,984,109
Total Capital Revenues and Other Financing Sources	**$ 8,028,436**	**$ 41,432,964**	**$ 19,879,346**	**$ 25,387,851**	**$ 52,058,521**	**$ 56,202,277**
Expenses						
Personnel and Benefits	$ 358,035	$ 392,309	$ 277,979	$ 370,639	$ 392,862	$ 399,194
Maintenance	8,718	-	-	-	7,000	-
Operations	-	50,000	-	-	171	171
Administration	70,976	-	49,322	65,763	-	-
Construction	79,646	41,379,440	16,485,658	21,980,877	50,083,012 ③	51,790,556 ②
	$ 517,375	$ 41,821,749	$ 16,812,959	$ 22,417,279	$ 50,483,045	$ 52,189,921
Debt Services						
SRF Principal	$ 1,056,420	$ 1,049,037	$ 919,854	$ 1,078,892	$ 1,078,892	$ 1,103,145
SRF Interest	292,155	285,095	171,820	269,685	269,685	245,431
	$ 1,348,575	$ 1,334,132	$ 1,091,674	$ 1,348,577	$ 1,348,577	$ 1,348,576
Total Capital Expenses with Debt Services	**$ 1,865,950**	**$ 43,155,881**	**$ 17,904,633**	**$ 23,765,856**	**$ 51,831,622**	**$ 53,538,497**
Capital Net Surplus or (Deficit)	**$ 6,162,486**	**$ (1,722,917)**	**$ 1,974,713**	**$ 1,621,995**	**$ 226,899**	**$ 2,663,780**
Funds Available From Prior Year	**-**	**-**	**-**	**-**	**-**	**6,118,806**
Capital Net Surplus or (Deficit)	**$ 6,162,486**	**$ (1,722,917)**	**$ 1,974,713**	**$ 1,621,995**	**$ 226,899**	**$ 8,782,586**

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

Capital Projects	**FY 2015**	**FY 2016**
Tertiary Filter Enclosure	-	50,000
Anaerobic Digester	-	65,000
Naticoke Interceptor	3,420,000	5,000,000
Upper Narrows Replacement	18,317,168	2,490,738
Yates Road Sampling	-	84,900
Hesperia Subregional	12,915,422	21,684,959
Apple Valley Subregional	13,165,422	21,684,959
Phase IIIB	1,200,000	-
Lab/Admin Building	1,065,000	-
Biogas Solids Project	-	500,000
Construction Total	**50,083,012**	**51,560,556**
Engineering Services	-	230,000
Total	**$ 50,083,012** ③	**$ 51,790,556** ②

Among the various capital projects listed above, VVWRA has begun the construction of sub-regional water reclamation plants in the City of Hesperia and the Town of Apple Valley during FY 2015. The construction costs of these plants are estimated as $41.2 million and $41.1 million, respectively. These projects are funded mostly by Clean Water State Revolving Fund (SRF) from the California State Water Resources Control Board (SWRCB) and the remaining by Title 16 Grant from the Federal Bureau of Reclamation, by Proposition 84 Round 2 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 will not impact the FY 2016 operating and maintenance budget, for the loan repayment process begins one year after the completion of the plant construction. We predict the construction will complete at the end of June 2017.

Please refer to pages 50 and 51 for other SRF loan payments that impact both Operations & Maintenance (O&M) and Capital fund activities. Per the five-year financial plan, the rate increases through FY 2018 should provide sufficient resources for the SRF loan repayments during those years. See page 6 for Operating cash flows.

With the predicted available fund balance at the beginning of FY 2016 and the SRF loan proceeds, we predict a positive ending fund balance. Please refer to further analysis of fund balances at page 47.

The future impact of these capital projects on the O&M and Capital budget is significant, as the loan repayment liability will increase from $2.1 million in FY 2016 to $4.9 million in FY 2018 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 in FY 2015. This reserve level will enable us to comply with the SWRCB's debt reserve and net revenue requirements. The user charge will gradually increase by 9% per year from FY 2015 through 2017 and by 7% in FY 2018. These rates are intended to absorb the additional operation and maintenance costs at the water reclamation plants in future years. Comparatively, the connection fee will remain from FY 2015 through FY 2018. The following rates were approved by the Board of Commissioners in FY 2014.

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

Victor Valley Wastewater Reclamation Authority
Allocations of Personnel Expenses
Fiscal Year 2015-2016

	2014 Actual $2,528/MG	2014 Budget $2,528/MG	2015 Actual as of 3/31/2015	2015 Projected to the Year End	2015 Budget $2,756/MG	2016 Budget $3,004/MG
Operations and Maintenance Salary Expenses						
Regular Salaries	$ 3,012,915	$ 3,121,847	$ 2,372,187	$ 3,162,916	$ 3,247,663	$ 3,298,868
Overtime	163,657	143,750	147,033	196,044	124,250	131,250
Call-Out Pay	40,289	32,000	30,470	40,627	33,000	33,400
Salaries Expense - Capital	(257,349)	(263,808)	(203,975)	(271,967)	(267,967)	-
	$ 2,959,512	$ 3,033,789	$ 2,345,715	$ 3,127,620	$ 3,136,946	$ 3,463,518
Operations and Maintenance Benefit Expenses						
Longevity	$ -	$ 34,502	$ -	$ -	$ 29,975	$ 28,255
Vehicle Allowance	-	-	-	-	12,046	12,092
Sick Leave Buy Back	-	35,000	-	-	35,000	35,000
Medicare	47,408	45,741	36,648	48,864	47,321	48,087
PERS / Health Insurance	336,338	288,638	252,551	336,735	294,754	409,139
Dental / Vision Insurance	26,379	27,797	17,366	23,155	27,807	30,510
Workers Comp Insurance	61,371	95,841	69,132	92,176	99,464	101,143
PERS / Retirement	616,834	768,311	487,648	650,197	804,519	488,335
PERS / Retirement-EUL	-	-	-	-	-	236,999
Life Insurance	11,257	16,684	9,937	13,249	17,315	17,607
Unemployment Insurance	19,623	15,134	20,982	27,976	14,206	17,658
Disability Insurance	25,376	22,069	13,269	17,692	22,903	23,290
Misc Personnel Expense	45,907	6,425	17,514	23,352	7,125	9,140
OPEB Expense	68,085	176,500	-	-	176,500	176,500
Benefits Expense - Capital	(100,686)	(128,501)	(74,004)	(98,672)	(124,895)	-
	$ 1,157,892	$ 1,404,141	$ 851,043	$ 1,134,724	$ 1,464,040	$ 1,633,755
Capital Salary and Benefits Expenses						
Salaries	$ 257,349	$ 263,808	$ 203,975	$ 271,967	$ 267,967	$ 116,137
Benefits	100,686	128,501	74,004	98,672	124,895	21,435
	$ 358,035	$ 392,309	$ 277,979	$ 370,639	$ 392,862	$ 137,572
Total Personnel Expenses	**$ 4,475,439**	**$ 4,830,239**	**$ 3,474,737**	**$ 4,632,983**	**$ 4,993,848**	**$ 5,234,845**
Allocations of Personnel Expenses						
1. Allocations to Operations and Maintenance Fund						
To Maintenance Department	$ (1,029,351)	$ (1,116,891)	$ (729,695)	$ (972,926)	$ (1,046,443)	$ (1,270,355)
To Operations Department	(2,013,948)	(2,160,830)	(1,598,379)	(2,131,172)	(2,300,596)	(2,306,437)
To Administration (other departments except Construction)	(1,074,105)	(1,160,209)	(868,684)	(1,158,246)	(1,253,947)	(1,258,859)
	$ (4,117,404)	$ (4,437,930)	$ (3,196,758)	$ (4,262,344)	$ (4,600,986)	$ (4,835,651)
2. Allocation To Capital Fund						
To Construction Department	$ (358,035)	$ (392,309)	$ (277,979)	$ (370,639)	$ (392,862)	$ (399,194)
Personnel Expenses After Allocations	$ -	$ -	$ -	$ -	$ -	$ -

Victor Valley Wastewater Reclamation Authority
High Strength Surcharge
Fiscal Year 2015-2016

User Charges from Member Agencies	$ 13,157,520
Unit User Charge per MG	**$3,004.00**
Estimated Treatment Flow (MG)	4,380

	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	472.00	47,238	5.22	522	46,715	17,051,100	35.0%	$4,605,132	$0.2701
TSS	389.00	38,931	3.01	301	38,630	14,099,906	25.0%	$3,289,380	$0.2333
NH3	40.77	4,080	0.58	58	4,022	1,468,109	30.0%	$3,947,256	$2.6887
Annual Flow - MG per Day									
4,380 MG / 365 days		12.00					10.0%	$1,315,752	
							100.0%	$13,157,520	

	BOD $/lb	TSS $/lb	NH3 $/lb
Surcharge Rates:	**$0.2701**	**$0.2333**	**$2.6887**
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

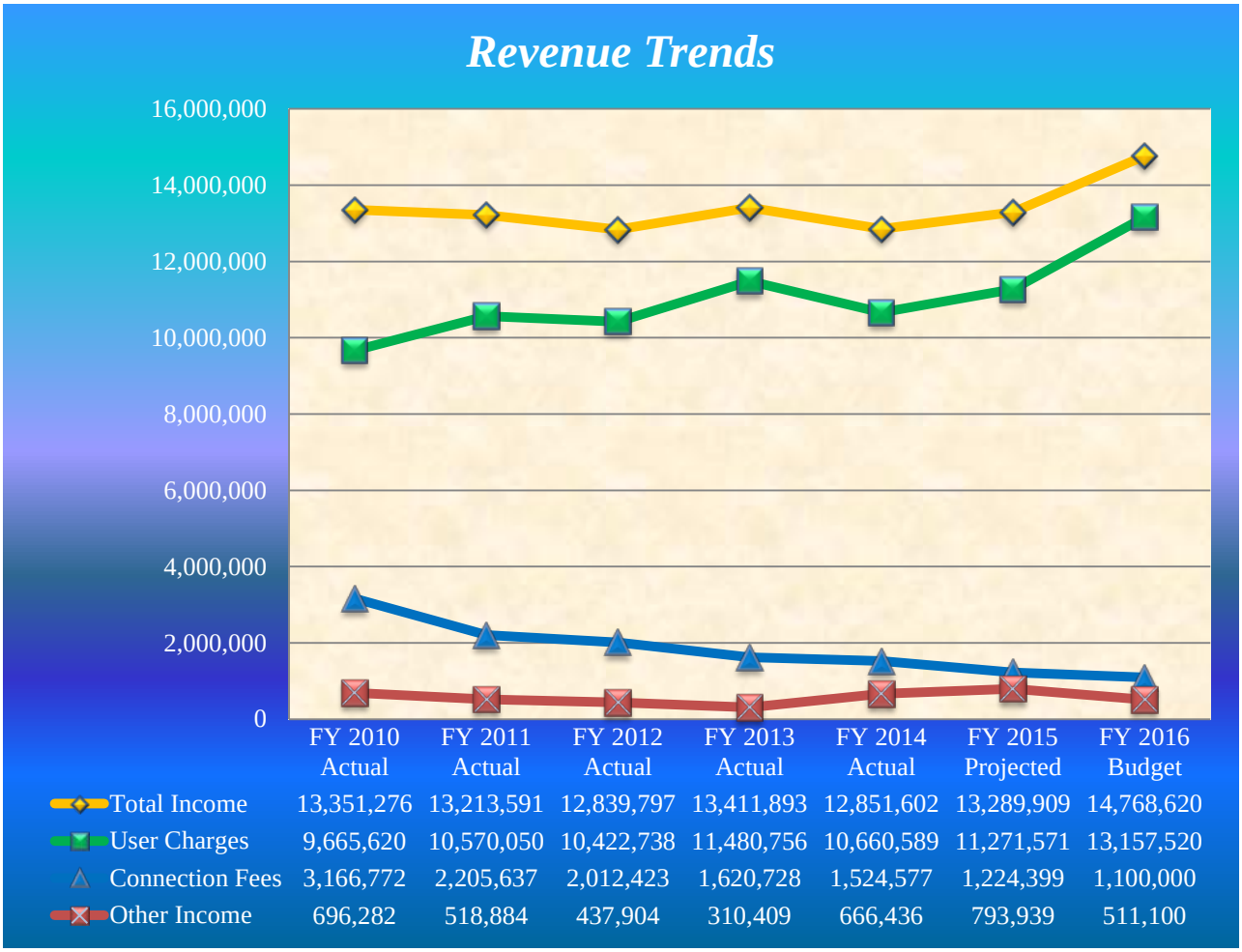
Per lb:	Total user cost x 35% = Removal cost/lb
Per unit:	Removal cost/lb / Removal lb/year

① From 2014 Annual Discharge Monitoring Report.

Victor Valley Wastewater Reclamation Authority
Revenue Trend Analysis
Fiscal Year 2015-2016

Revenue Analysis

Victor Valley Wastewater Reclamation Authority is recovering from the decrease of operating revenues since FY 2010. Connection fee revenues have decreased from $3.1 million in FY 2010 to a budgeted figure of $1.1 million in FY 2016 caused by fewer new housing developments in the service areas. In addition of the user fee and connection fee increase at the beginning of FY 2015, the overall revenues are expected to increase from $13.4 million in FY 2010 to $14.8 million in FY 2016.



	FY 2010 Actual	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Projected	FY 2016 Budget
Total Income	13,351,276	13,213,591	12,839,797	13,411,893	12,851,602	13,289,909	14,768,620
User Charges	9,665,620	10,570,050	10,422,738	11,480,756	10,660,589	11,271,571	13,157,520
Connection Fees	3,166,772	2,205,637	2,012,423	1,620,728	1,524,577	1,224,399	1,100,000
Other Income	696,282	518,884	437,904	310,409	666,436	793,939	511,100

Source: VVWRA FY = Fiscal Year ended June 30

Other income includes high strength surcharges, septage charges, reclaimed water sales, industrial pretreatment permits, and interest income. Grants are excluded in this analysis during FY 2011 through FY 2016.

The economic downturn has made a significant impact on VVWRA's connection fee revenues. Due to slow increase in the quantity of wastewater from member agencies and increased operating costs, VVWRA adjusted its user charges and connection fees during FY 2015 to mitigate the impact of the revenue reduction and increased regulatory expenses. How to handle the substantial decline in connection fees is another hurdle to face in near future.

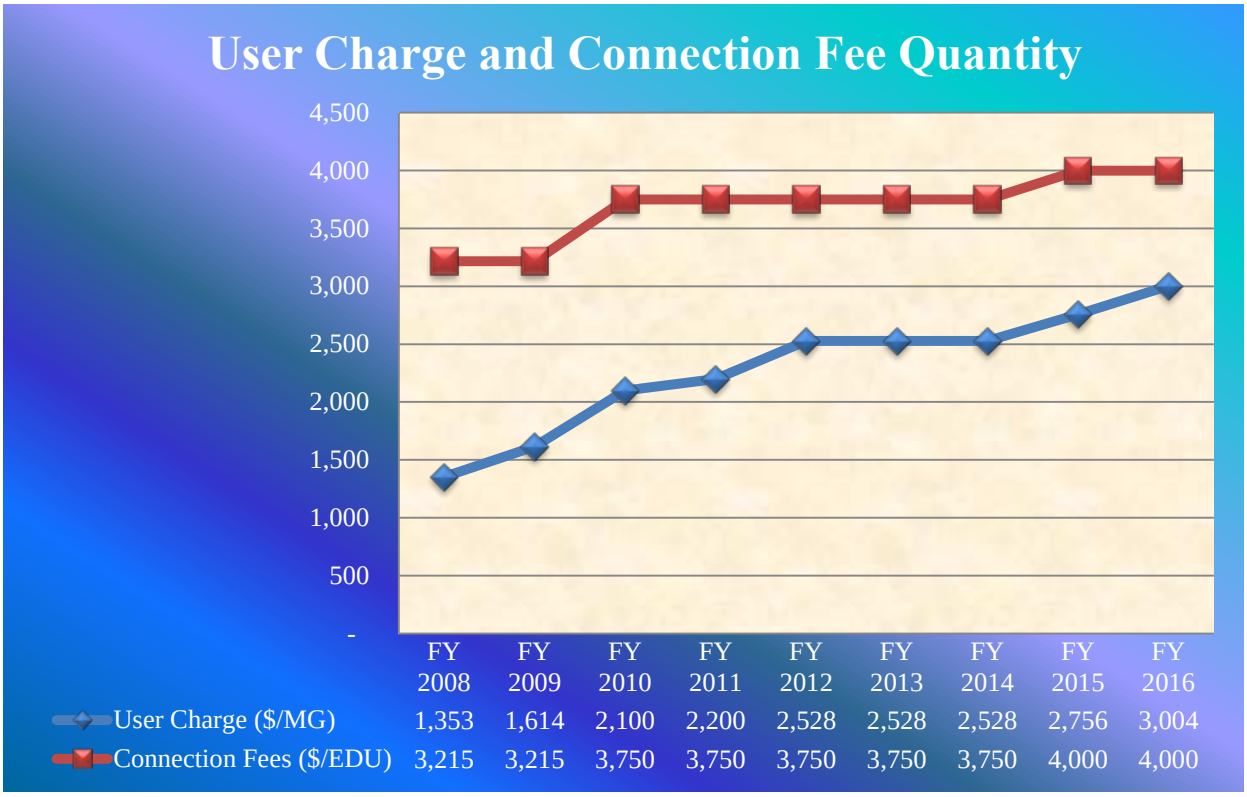
Victor Valley Wastewater Reclamation Authority
Revenue Trend Analysis
Fiscal Year 2015-2016

Revenue Analysis (Continued)

Both user charges and connection fees are determined multiplying quantity received by unit prices.

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 charge and connection fee from time to time as necessary to fund its operations, maintenance, repairs, replacements, and expansion of the regional system.



	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
User Charge ($/MG)	1,353	1,614	2,100	2,200	2,528	2,528	2,528	2,756	3,004
Connection Fees ($/EDU)	3,215	3,215	3,750	3,750	3,750	3,750	3,750	4,000	4,000

Source: VVWRA FY = Fiscal Year ended June 30

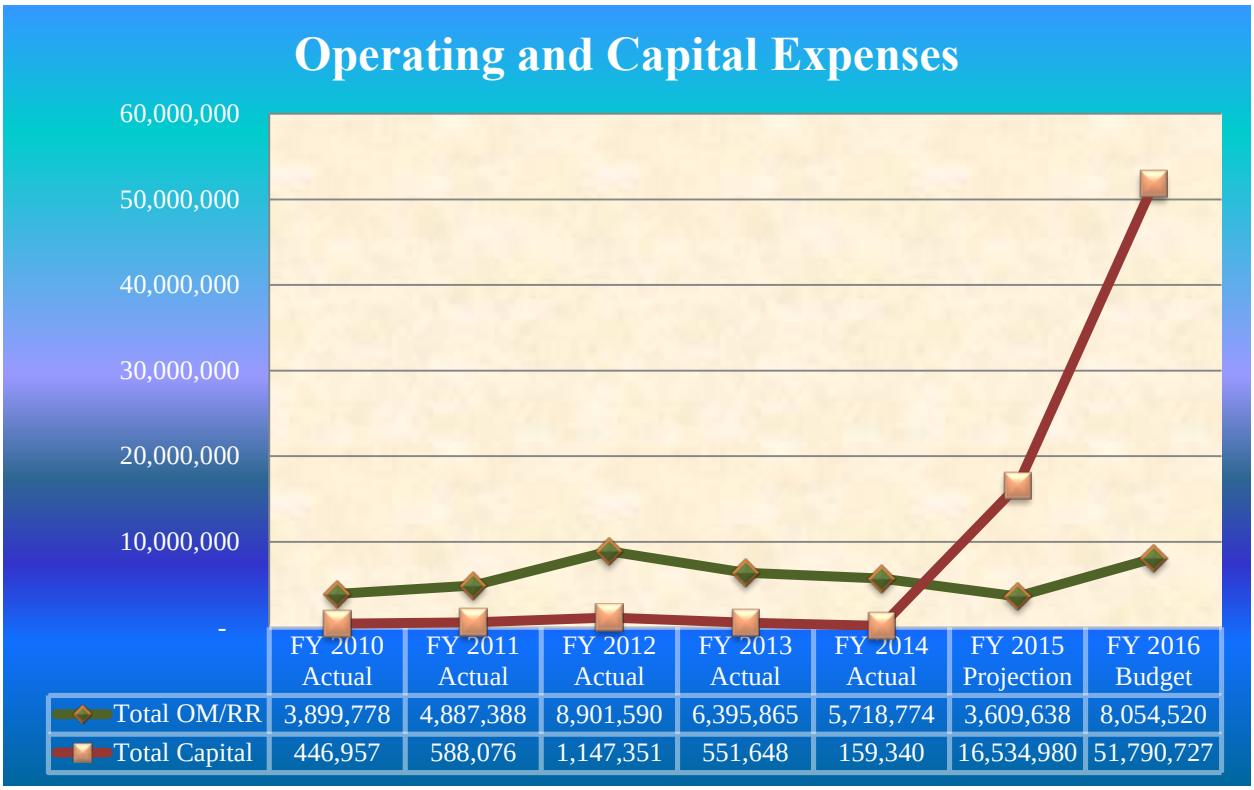
In order to fund various construction projects, VVWRA utilizes Clean Water State Revolving Fund (SRF). The SRF loans are to be paid back over 20 years with a relatively low interest rate. We have budgeted anticipated SRF loans of $44,984,109 for FY 2016 as other financing sources.

Victor Valley Wastewater Reclamation Authority
Expense Trend Analysis
Fiscal Year 2015-2016

Expense Analysis

Capital expenditures have remained at a steady level in FY 2010 due to relatively low construction activities. Capital expenditures have risen slightly during FY 2011, when VVWRA constructed an emergency temporary pipeline over the Mojave River that was damaged during the December 2010 storm. Although this storm was declared as a natural disaster by President Obama in January 2011, the graph below does not reflect grants given or expected to be obtained from Federal Emergency Management Agency and California Office of Emergency Services. The capital expenditures continued to increase during FY 2012 due to the construction of an ultraviolet light disinfection facility for the regulatory compliance upgrade project. The FY 2013 and FY 2014 capital expenditures came down to the level of 2011. For FY 2015 we have projected $22.0 million for construction of Phase III-B, Upper Narrow replacement and sub-regional projects. For FY 2016 we have budgeted $51.8 million for the construction of the Nanticoke interceptor, Upper Narrow replacement, and sub-regional projects. Please refer to page 48.

The year of FY 2010 was a period of stability prior to the facility capacity expansions coming online. The FY 2011 operating expenses increased when these facilities started operations. The FY 2012 operating expense reflects emergency operation costs without offsetting it by grants. The operating expenses during FY 2013 through FY 2016 are due to an increase in electricity cost when VVWRA has replaced the chemical disinfection process with the ultraviolet disinfection process.



	FY 2010 Actual	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Projection	FY 2016 Budget
Total OM/RR	3,899,778	4,887,388	8,901,590	6,395,865	5,718,774	3,609,638	8,054,520
Total Capital	446,957	588,076	1,147,351	551,648	159,340	16,534,980	51,790,727

Source: VVWRA - This graph excludes personnel costs. *FY = Fiscal Year ended June 30*

Victor Valley Wastewater Reclamation Authority
Expense Trend Analysis
Fiscal Year 2015-2016

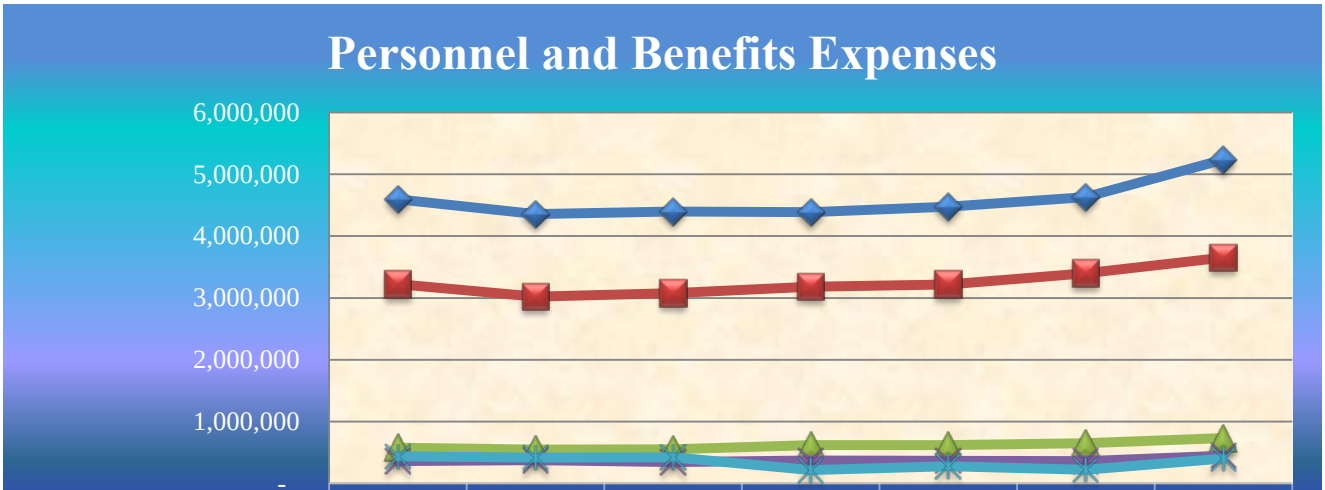
Expense Analysis (Continued)

Personnel costs have remained relatively stable from FY 2010 through FY 2014. Although personnel costs show stability over the six years, they are predicted to rise in FY 2016 including a 1.5% CPI addition and retirement contribution increase.

Cal PERS retirement cost has increased from $650,197 in FY 2014 to $732,367 in FY 2015 due to an adjusted rate by Cal PERS.

The health care cost has been kept at about the same level with slightly increased cost in FY 2016 budget utilizing a lower life insurance premium rate.

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.

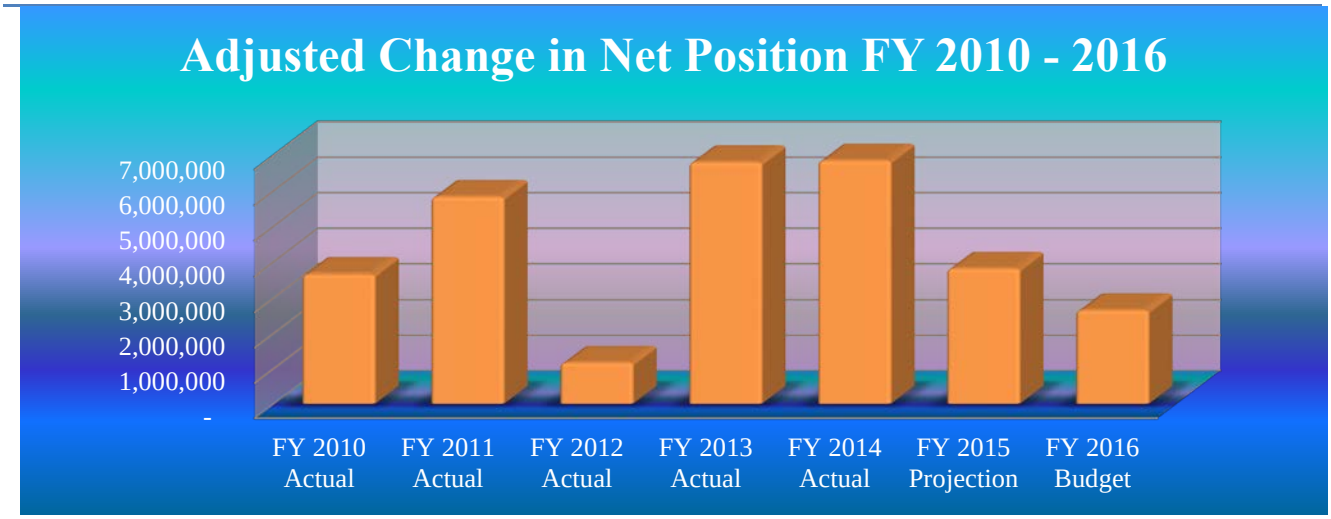


	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015 Projection	FY 2016 Budget
Total Personnel	4,596,477	4,356,129	4,398,077	4,386,713	4,475,438	4,632,000	5,234,845
Salaries and Wages	3,221,853	3,021,261	3,076,085	3,181,704	3,216,861	3,399,587	3,655,002
Retirement	578,255	545,510	553,612	619,724	616,834	650,197	732,367
Health Care	357,774	374,351	346,454	368,652	362,717	359,889	447,219
Other Personnel	438,594	415,007	421,927	216,633	279,026	222,327	400,257

Source: VVWRA. FY = Fiscal Year ended June 30

Victor Valley Wastewater Reclamation Authority
History of Change in Net Position
Fiscal Year 2015-2016

FY = Fiscal Year	Beginning Net Position	Change in Net Position per CAFR *=Per Budget	Ending Net Position	Interest Amortization and Depreciations Expense	Adjusted Change in Net Position	Adjusted Ending Net Position
FY 2010 Actual	106,525,376	(2,000,490)	104,520,886	5,664,279	3,659,789	110,185,165
FY 2011 Actual	104,520,886	152,113	104,672,999	5,674,684	5,826,797	110,347,683
FY 2012 Actual	104,672,999	(4,456,740)	100,216,259	5,620,847	1,164,107	105,837,106
FY 2013 Actual	100,216,259	485,853	100,702,112	6,315,893	6,801,746	107,018,005
FY 2014 Actual	100,702,112	975,187	101,677,299	5,873,692	6,848,879	107,550,991
FY 2015 Projection	101,677,299	3,804,850*	105,482,149	-	3,804,850	105,482,149
FY 2016 Budget	105,482,149	2,650,125*	108,132,274	-	2,650,125	108,132,274



Source: VVWRA *FY = Fiscal Year ended June 30*

History of change in net position

VVWRA's change in net position, or the total revenues over total expenses, has decreased dramatically from FY 2011 to FY 2012. The decrease is due to the sharp decline of connection fee revenues from member agencies. The connection fees are fees paid by new dischargers, such as houses and businesses to support the costs of facility expansions. The connection fee revenues are directly related to the housing market growth in the service areas as shown by a 52% decrease from $3,166,772 in FY 2010 to $1,524,577 in FY 2014. In contrast, the operating expenses have increased by 17%, from $8,638,434① in FY 2010 to $10,090,899① in FY 2014. The net positions during FY 2013 and FY 2014 have increased from FY 2012 mainly due to a user charge increase. However, the net positions in FY 2015 and FY 2016 are predicted lower than the previous two years due to construction and repair costs. Please see detailed discussions on capital improvement projects anticipated during FY 2016 and beyond at pages 48 and 49 and Projected Cash Allocation per Fund at page 47. Also please refer to page 6 for cash flow prediction for the five-year period.

To make the actual CAFR net positions more comparative to the budget net positions, non-cash depreciation and amortized interest expenses were added back to FY 2010 through FY 2014 CAFR net positions.

① CAFR operating expenses without depreciation expense.

- This page intentionally left blank -

Section V: Capital Projects and Debts

- This page intentionally left blank -

Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs – Overview and Project Descriptions
Fiscal Year 2015-2016

Overview

The Capital Improvement Programs (CIP) on pages 46 start with the new and continued capital projects funded in fiscal year (FY) 2016 budget. The presented budget includes a format for the presentation of the CIP that more accurately allocates resources and prioritizes the projects in four categories. These project categories include Wastewater Treatment, Interceptor, Energy Efficiency, and Information Technology.

These pages include all the project details and cash outflows for five years starting FY 2016. These pages focus on the Projects, the Funds and the type of Project Financing. To further clarify the cash resources of VVWRA, the Cash Allocation on page 47 was developed based on the prior year cash balance from Comprehensive Annual Financial Report (CAFR). This sheet details the available cash in the capital and operating funds at the beginning of the FY 2016. The following pages 48 and 49 summarize all the capital projects and related monthly cash flows for the projected years. Finally, the pages 50 and 51 show when our existing four State Revolving Fund loans mature with annual payment amounts and the page 52 describes how the funding will be applied during FY 2015 and FY 2016.

The capital expenditures include the CIP's, such as construction projects and major capital acquisitions that have an extended life. In some instances, these costs also include studies undertaken related to anticipated future capital projects. 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 budget, the term CIP is used to describe capital expenditures including projects that are in fact construction in progress. Capital expenditures for the CIP are separate from operating expenses. The operating expenses relate to the operations to provide wastewater services that are usually under $5,000 with less than one year of useful life.

To accomplish multiple goals in parallel, the prospective projects as listed below are ranked by priorities for each category. The level of priority of each project is determined by the individual timing of the project.

Project Descriptions

Wastewater Treatment	
1	Laboratory Replacement Project; 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	Drying Beds Repair and Drainage; During the summer of 2012 a heavy rainstorm caused significant damage to the bio-solids drying beds.
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.
5	Hesperia Subregional Water Reclamation Plant; Construction of a new water reclamation plant in the City of Hesperia.
6	Town of Apple Valley Water Reclamation Plant; Construction of a new water reclamation plant in the Town of Apple Valley.
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	Upper Narrows Interceptor Replacement; Construction of a permanent pipeline to replace the temporary pipeline through the Upper Narrows.
10	Nanticoke Pump Station (PS) bypass Sewer; Construction of a gravity interceptor to replace the obsolete Nanticoke Pump Station.
11	Ossum Wash; The double barrel interceptor that crosses Ossum Wash requires lining to ensure its structural integrity.
12	Oro Grande Interceptor; The line will replace the existing Oro Grande interceptor.
13	Yates Road sampling station; The Town of Apple Valley is constructing the Nisqualli Bridge which requires that the road be widened. The existing metering site needs to be relocated to accommodate the enlarged roadway.
14	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.
15	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.
16	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.
17	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.
18	Shay Road Diversion Structure; The diversion structure to replace the cover of the existing structure.
Energy Efficiency	
19	Aeration Energy Efficiency Project; The exact method for financing is to be determined however SCE's On Bill Financing Program at 0% interest appears to be the best option. This

	project will improve the oxygen transfer efficiency of the facility and reduce energy consumption.
20	Biogas Solids Project; This project is to enable VVWRA to generate electrical power from the biogas it produces from FOG, ADM and traditional waste streams.
Information Technology	
21	Document Management System; This system addresses digitalization and storage of all VVWRA files and O&M manuals as-built drawings. The solution will facilitate a secure document storage system which will be designed for the management and control of all document access in a secure and redundant format. The system is being re-designed to allow for integration into the new computerized Maintenance Management System (CMMS).

Hesperia Subregional Water Reclamation Plant Project

Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs - Expenditures by Projects
Fiscal Year 2015-2016

VVWRA's capital improvement programs in the five year range allow VVWRA to utilize cutting-edge technologies to continue providing quality wastewater treatment services to the service areas. The anticipated capital projects can be classified into four general areas: Wastewater Treatment, Interceptor, Energy Efficiency, and Information Technology. This "Capital Improvement Programs - Expenditures by Projects" shows the projects in a priority order for each category. These projects are or will be funded through 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

FY 15-16 Priority	Project Number	Project Title	Estimated Capital Cost Total	VVWRA	2015-16 Budget	2016-17 Budget	2017-18 Budget	2018-19 Budget	2019-20 Budget
1	1	Laboratory Building Replacement Project	2,100,000	2,100,000	-	1,656,420	443,580	-	-
2	2	Digesters 4 and 5 Supernatant Line	75,000	75,000	75,000	-	-	-	-
1	3	Drying Beds Repair and Drainage Improvements	150,000	150,000	150,000	-	-	-	-
3	4	Westside Plant Spill Containment System	250,000	250,000	-	250,000	-	-	-
1	5	Hesperia Subregional Water Reclamation Plant	41,158,000	30,073,161	21,684,959	8,388,202	-	-	-
1	6	TOAV Subregional Water Reclamation Plant	41,052,000	30,073,161	21,684,959	8,388,202	-	-	-
2	7	Tertiary Filter Enclosure	50,000	50,000	50,000	-	-	-	-
3	8	Eastside WWTP (Serving Northern Triangle, VV-TOAV)							
		Total Wastewater Treatment Projects	**$ 84,835,000**	**$ 62,771,322**	**$ 43,644,918**	**$ 18,682,824**	**$ 443,580**	**$ -**	**$ -**
1	9	Upper Narrows Interceptor Replacement Project	36,400,000	2,490,738	2,490,738	-	-	-	-
	10	Nanticoke PS Bypass Sewer	5,700,000	5,700,000	5,000,000	-		-	-
2	11	Ossum Wash	650,000	650,000	650,000	-	-	-	-
2	12	Oro Grande Interceptor	5,700,000	5,700,000		5,000,000	-	-	-
3	13	Yates Road Sampling Station	84,900	84,900	84,900	-	-	-	-
2	14	Apple Valley Odor Control	650,000	650,000	100,000	50,000	500,000	-	-
3	15	Apple Valley Interceptor Realignment Desert Knolls Wash	500,000	500,000	100,000	50,000	350,000	-	-
3	16	North Hesperia Relief Interceptor	-	-	-	-	-	-	-
3	17	Spring Valley Lake Relief Interceptor	-	-	-	-	-	-	-
1	18	Shay Road Diversion Structure	75,000	75,000	75,000	-	-	-	-
		Total Interceptor Projects	**$ 49,759,900**	**$ 15,850,638**	**$ 8,500,638**	**$ 5,100,000**	**$ 850,000**	**$ -**	**$ -**
1	19	Aeration Energy Efficiency Project	2,300,000	1,400,000	900,000	500,000	-	-	-
1	20	Biogas Solids Project	500,000	500,000	500,000	-	-	-	-
		Total Energy Efficiency Projects	**$ 2,800,000**	**$ 1,900,000**	**$ 1,400,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**
3	21	Document Management System	100,000	100,000	100,000	-	-	-	-
		Total Information Technology Projects	**$ 100,000**	**$ 100,000**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**
		TOTAL	**$ 137,494,900**	**$ 80,621,960**	**$ 53,645,556**	**$ 24,282,824**	**$ 1,293,580**	**$ -**	**$ -**

Victor Valley Wastewater Reclamation Authority
Projected Cash Allocation Per Fund
Fiscal Year 2015-2016

Year Ended 06/30/14			
Fund	Audit at 06/30/14	Targeted Board Reserves	Available Funds after Allocation
Operations and Maintenance	2,710,968	(1,248,386) ①	1,248,386
Repair and Replacement	-	(1,474,441) ②	1,462,582
Capital	5,891,907	-	5,891,907
	8,602,875	(2,722,827)	8,602,875

Year Ended 06/30/15				
Fund	Budgeted at 06/30/15	Budget Projected at 06/30/15	Targeted Board Reserves	Projected Available Funds
Operations and Maintenance	291,516	1,539,902 ①	(1,149,488)	1,149,488
Repair and Replacement	-	1,462,582 ②	(1,670,006)	1,852,996
Capital	226,899	6,118,806	-	6,118,806
	518,415	9,121,290	(2,819,494)	9,121,290

Year Ended 06/30/16						
Fund	Projected Funds at 06/30/15	Budgeted at 06/30/16	Projected Available Funds		Targeted Board Reserves	Projected Available Funds
Operations and Maintenance	1,149,488	2,988,535	1,149,488	①	(1,149,488)	1,149,488
Repair and Replacement	1,852,996	(3,002,190)	1,839,341	②	(1,670,006)	1,839,341
Capital	6,118,806	2,663,780	8,782,586		-	8,782,586
	9,121,290	2,650,125	11,771,415		(2,819,494)	11,771,415

Notes:

① O&M Reserve: 10% of prior year budgeted operating expenses

② R&R Reserve: 1% of land improvements, buildings and interceptors per prior year CAFR
The excess O&M fund is applied to R&R.

The purpose of this analysis is to forecast how much cash will be available at the end of FY 2016 for each fund. We have predicted the cash balance at June 30, 2016 based on the estimated beginning cash balance.

Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs - Summary and Cash Flows
Fiscal Year 2015-2016

FY 15/16 Priority	Project Number	Project Title	Project Financing	Account Code	Estimated Capital Cost Total	Estimated Capital Cost VVWRA	FY 15-16 July	August	September	October	November	December	January	February	March	April	May	June	Sum FY 15-16	General Ledger Accounts Construction Account	General Ledger Accounts Other Accounts
Wastewater Treatment Projects																					
1	1	Laboratory Building Replacement Project	Capital Cash Reserve	09-02-520-9000/9025, C115	2,100,000	2,100,000														-	-
							Planning/Design														
2	2	Digesters 4 and 5 Supernatant Line	Operating Cash Reserve	09-02-152-9025/9000, 9999, R132	75,000	75,000									10,000	35,000	30,000		75,000	65,000	10,000
															Planning/Design	Construction					
1	3	Drying Beds Repair and Drainage Improvements	Operating Cash Reserve	07-02-155-6090, R132	150,000	150,000							37,500	37,500	37,500	37,500			150,000		150,000
									Construction												
3	4	Westside Plant Spill Containment System	Operating Cash Reserve	09-02-162-9025/9000, C016	250,000	250,000													-		-
1	5	Hesperia Subregional Water Reclamation Plant	State Revolving Fund	09-54-80-9025/9110/9040/9000, C101	41,158,000	30,073,161	1,245,880	1,908,689	2,144,160	2,660,663	1,988,187	2,097,185	2,186,232	1,812,639	1,744,056	1,246,820	1,464,404	1,186,044	21,684,959	21,684,959	
							Construction														
1	6	TOAV Subregional Water Reclamation Plant	State Revolving Fund	09-55-80-9025/9110/9040/9000, C102	41,052,000	30,073,161	1,245,880	1,908,689	2,144,160	2,660,663	1,988,187	2,097,185	2,186,232	1,812,639	1,744,056	1,246,820	1,464,404	1,186,044	21,684,959	21,684,959	
		*Includes GC PS retrofit					Construction														
2	7	Tertiary Filter Enclosure	Capital Cash Reserve	09-02-121-9000, C130	50,000	50,000										25,000	25,000		50,000	50,000	
																Construction					
3	8	Eastside WWTP (Serving Northern Triangle, VV-TOAV)	State Revolving Fund	09-52-500-9000/9020/9022/9025/9030/9035/9040/9110																	
Total					**84,835,000**	**62,771,322**													**43,644,918**		
Interceptor Projects																					
1	9	Upper Narrows Interceptor Replacement Project	SRF, FEMA/Cal OES	09-05-20-9025/9000, E003	36,400,000	2,490,738	1,611,560	646,448	232,730										2,490,738	2,490,738	
							Construction														
1	10	Nanticoke PS Bypass Sewer	State Revolving Fund	09-05-20-9000, C104	5,700,000	5,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000			5,000,000	5,000,000	
							Construction														
2	11	Ossum Wash	Operating Cash Reserve	07-05-20-9000/9025, C127	650,000	650,000	325,000	325,000											650,000	650,000	
							Construction														
2	12	Oro Grande Interceptor	Operating Cash Reserve	09-27-05-9025/9000, C126	5,000,000	5,000,000															
3	13	Yates Road Sampling Station	Operating Cash Reserve	09-23-20-9000, R129	84,900	84,900		28,300	28,300	28,300									84,900	84,900	
								Construction													
2	14	Apple Valley Odor Control	Capital Cash Reserve	09-19-10-9025/9000, C113	650,000	650,000								20,000	20,000	20,000	20,000	20,000	100,000		100,000
														Planning/Design							
3	15	Apple Valley Interceptor Realignment Desert Knolls Wash	Capital Cash Reserve	09-19-20-9025/9000, C113	500,000	500,000								20,000	20,000	20,000	20,000	20,000	100,000		100,000
														Planning/Design							
3	16	North Hesperia Relief Interceptor[3]	State Revolving Fund	09-21-20-9000																	
3	17	Spring Valley Lake Relief Interceptor[3]	State Revolving Fund	09-23-20-9000																	
1	18	Shay Road Diversion Structure	Operating Cash	07-05-20-9000, R131	75,000	75,000	37,500	37,500											75,000	75,000	
							Construction														
Total					**49,059,900**	**14,450,638**													**8,500,638**		
Energy Efficiency Projects																					
1	19	Aeration Energy Efficiency Project	SCE On Bill Financing	07-02-112-9000, R132	2,300,000	1,400,000					150,000	150,000	150,000	150,000	150,000	150,000			900,000	900,000	
1	20	Biogas Solids Project	Operating Cash Reserve	09-02-605-9000, C124	500,000	500,000							100,000	100,000	100,000	100,000	100,000		500,000	500,000	
							Construction														
Total					**2,800,000**	**1,900,000**													**1,400,000**		
Information Technology Projects																					
3	21	Document Management System	Operating Cash Reserve	01-03-300-9125, R132	100,000	100,000	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	100,000		100,000
							Planning/Design			Implementation/Installation											
Total					**100,000**	**100,000**	3,463,316	4,756,914	4,839,499	5,857,959	4,634,707	4,852,703	5,168,297	4,461,111	4,333,945	3,389,473	3,132,141	2,420,421	**100,000**		
		TOTAL			**136,794,900**	**79,221,960**												**Total FY 15-16**	**53,645,556**	**53,185,556**	**460,000**
									FY15/16 to 17/18											53,645,556	

	Notes					
1	Planning/Design includes Right of Way (ROW), Environmental, Design, and Legal Activities	Sub-total	3,284,900	Operating Cash Reserve	3,284,900	Project Financing	Operating Cash Reserve	2,534,900
2	SRF Financing of 6.25% VVWRA share	Sub-total	3,300,000	Capital Cash Reserve3	3,300,000		Capital Cash Reserve	250,000
3	The timing of the construction of these facilities is dependent upon the decision to construct the subregionals.	Sub-total	72,637,060	State Revolving Fund	72,637,060		State Revolving Fund	50,860,656
		Total	**79,221,960**	**Total**	79,221,960		**Total FY 15-16**	**53,645,556**

Victor Valley Wastewater Reclamation Authority
Capital Improvement Programs - Summary and Cash Flows
Fiscal Year 2015-2016

	FY 16-17													FY 17-18											
Project Title	July	August	September	October	November	December	January	February	March	April	May	June	Sum FY 16-17	July	August	September	October	November	December	January	February	March	April	May	June	Sum FY 17-18
Wastewater Treatment Projects																									
Laboratory Building Replacement Project	5,000	5,000	5,000	100,000	350,000	200,000	200,000	200,000	147,857	147,857	147,856	147,850	1,656,420	147,857	147,857	147,866									443,580
Digesters 4 and 5 Supernatant Line																									
Drying Beds Repair and Drainage Improvements																									
Westside Plant Spill Containment System			15,000	15,000	40,000	100,000	40,000	40,000					250,000												
			Planning/Design		Construction																				
Hesperia Subregional Water Reclamation Plant	1,206,893	943,499	1,319,810	1,423,614	1,435,427	677,430	733,954	452,672	93,401	48,432	40,244	12,826	8,388,202												
TOAV Subregional Water Reclamation Plant	1,206,893	943,499	1,319,810	1,423,614	1,435,427	677,430	733,954	452,672	93,401	48,432	40,244	12,826	8,388,202												
*Includes GC PS retrofit																									
Tertiary Filter Enclosure																									
Eastside WWTP (Serving Northern Triangle, VV-TOAV)																									
Total													**18,682,824**												**443,580**
Interceptor Projects																									
Upper Narrows Interceptor Replacement Project																									
Nanticoke PS Bypass Sewer																									
Ossum Wash																									
Oro Grande Interceptor	416,300	416,700	416,700	416,700	416,700	416,700	416,700	416,700	416,700	416,700	416,700	416,700	5,000,000												
Yates Road Sampling Station																									
Apple Valley Odor Control	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,163	50,000	100,000	150,000	100,000	100,000	50,000							500,000
																Construction									
Apple Valley Interceptor Realignment Desert Knolls Wash	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,163	50,000	87,500	87,500	87,500	87,500								350,000
																Construction									
North Hesperia Relief Interceptor[3]																									
Spring Valley Lake Relief Interceptor[3]																									
Shay Road Diversion Structure																									
Total													**5,100,000**												**850,000**
Energy Efficiency Projects																									
Aeration Energy Efficiency Project	150,000	150,000	200,000										500,000												
Biogas Solids Project																									
Total													**500,000**												-
Information Technology Projects																									
Document Management System																									
Total	2,993,420	2,467,032	3,284,654	3,387,262	3,685,888	2,079,894	2,132,942	1,570,378	759,693	669,755	653,378	598,528	-	335,357	385,357	335,366	187,500	50,000	-	-	-	-	-	-	-	-
TOTAL											**Total FY16-17**		**24,282,824**											**Total FY 17-18**	**1,293,580**
											Project Financing													Project Financing	
											Operating Cash Reserve		750,000											Operating Cash Reserve	-
											Capital Cash Reserve		1,756,420											Capital Cash Reserve	1,293,580
											State Revolving Fund		21,776,404											State Revolving Fund	-
											Total FY 16-17		**24,282,824**											**Total FY 17-18**	**1,293,580**

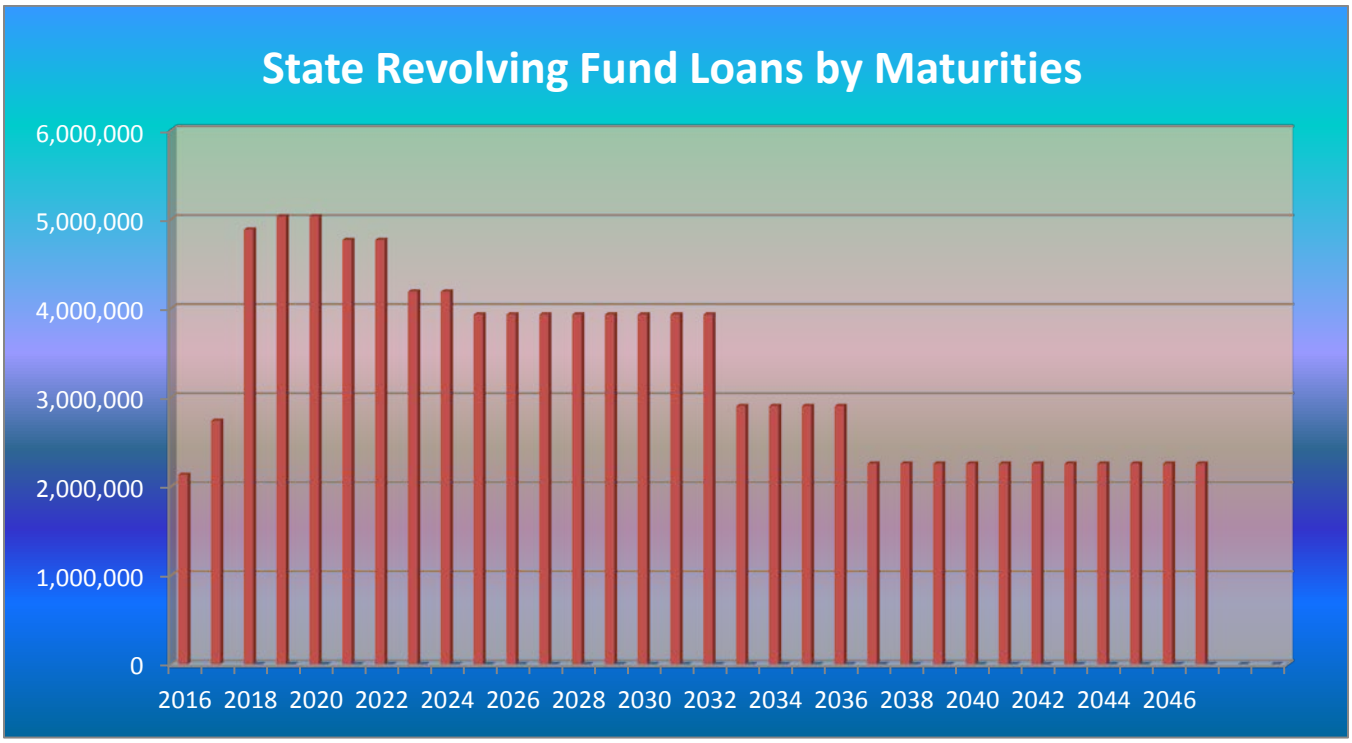
Victor Valley Wastewater Reclamation Authority
Existing State Revolving Fund Loans by Maturities
Fiscal Year 2015-2016

The table below represents our debt service payments for the Clean Water State Revolving Fund (SRF) loans. We have obtained an additional $58.2 million SRF loan to finance the construction of the Sub-regional Wastewater Reclamation Plants, $5,000,000 for the Upper Narrows Pipeline Repair and Replacement Project, and $5,700,000 for the Nanticoke Pump Station Bypass Sewer Project during FY 2015. 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 35 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	-	-	-	-	**2,130,680**
2017	265,049	579,870	258,151	1,027,610	301,917	304,674	-	-	**2,737,271**
2018	265,049	579,870	258,151	1,027,610	301,917	345,411	954,579	1,152,286	**4,884,873**
2019	265,049	579,870	258,151	1,027,610	301,917	345,411	954,579	1,301,091	**5,033,678**
2020	265,049	579,870	258,151	1,027,610	301,917	345,411	954,579	1,301,091	**5,033,678**
2021	-	579,870	258,151	1,027,610	301,917	345,411	954,579	1,301,091	**4,768,629**
2022	-	579,870	258,151	1,027,610	301,917	345,411	954,579	1,301,091	**4,768,629**
2023	-	-	258,151	1,027,610	301,917	345,411	954,579	1,301,091	**4,188,759**
2024	-	-	258,151	1,027,610	301,917	345,411	954,579	1,301,091	**4,188,759**
2025	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2026	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2027	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2028	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2029	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2030	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2031	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2032	-	-	-	1,027,610	301,917	345,411	954,579	1,301,091	**3,930,608**
2033	-	-	-	-	301,917	345,411	954,579	1,301,091	**2,902,998**
2034	-	-	-	-	301,917	345,411	954,579	1,301,091	**2,902,998**
2035	-	-	-	-	301,917	345,411	954,579	1,301,091	**2,902,998**
2036	-	-	-	-	301,917	345,411	954,579	1,301,091	**2,902,998**
2037	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2038	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2039	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2040	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2041	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2042	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2043	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2044	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2045	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2046	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
2047	-	-	-	-	-	-	954,579	1,301,091	**2,255,670**
Total	**1,325,245**	**4,059,090**	**2,323,359**	**17,469,370**	**6,038,340**	**6,867,483**	**28,637,370**	**38,883,925**	**105,604,182**

Victor Valley Wastewater Reclamation Authority
Existing State Revolving Fund Loans by Maturities
Fiscal Year 2015-2016



This graph presents the annual SRF loan repayments. At peak years, the repayment amount is close to or exceeds $5 million. During FY 2016 the impact on Operations and Maintenance (O&M) Fund is $782,105, while the effect on Capital Fund is $1,348,576. For FY 2017, the impact on O&M Fund is $1,312,527 and effect on Capital Fund is $1,424,745. Please refer to page 52 for the detail information.

Victor Valley Wastewater Reclamation Authority
State Revolving Fund Loans for FY 2016 and FY 2017
Fiscal Year 2015-2016

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 except Upper Narrows Replacement Project as of June 30, 2015. This page shows the next two years of principal and interest repayments per Operations & Maintenance and Capital Funds.

2016	9.5 MGD Capital Improvements	11 MGD Expansion	North Apple Valley Interceptor	Phase IIIA Regulatory Upgrades	Upper Narrows Replacement Project	Nanticoke Bypass	2016 Total
SRF Loan Amount	$ 4,069,859	$ 11,430,726	$ 4,084,688	$ 15,581,563	$ -	$ -	$ 35,166,836
Annual Payment	$ 265,049	$ 579,870	$ 258,151	$ 1,027,610	$ -	$ -	$ 2,130,680
						-	
1. Operations	4.30%	0.00%	0.00%	75.00%	100.00%	75.00%	
Original Loan	$ 175,004	$ -	$ -	$ 11,686,172	$ -	$ -	
Principal	$ 10,024	$ -	$ -	$ 489,995	$ -	$ -	$ 500,019
Interest	$ 1,373	$ -	$ -	$ 280,712	$ -	$ -	$ 282,085
Annual Payment	$ 11,397	$ -	$ -	$ 770,708	$ -	$ -	$ 782,105
2. Capital	95.70%	100.00%	100.00%	25.00%	0.00%	25.00%	
Original Loan	$ 3,894,855	$ 11,430,726	$ 4,084,688	$ 3,895,391	$ -	$ -	
Principal	$ 223,102	$ 510,003	$ 206,709	$ 163,332	$ -	$ -	$ 1,103,146
Interest	$ 30,550	$ 69,867	$ 51,442	$ 93,571	$ -	$ -	$ 245,430
Annual Payment	$ 253,652	$ 579,870	$ 258,151	$ 256,903	$ -	$ -	$ 1,348,576
Total Principal	$ 233,126	$ 510,003	$ 206,709	$ 653,327	$ -	$ -	$ 1,603,165
Total Interest	$ 31,923	$ 69,867	$ 51,442	$ 374,283	$ -	$ -	$ 527,515
Annual Payment	$ 265,049	$ 579,870	$ 258,151	$ 1,027,610	$ -	$ -	$ 2,130,680

2017	9.5 MGD Capital Improvements	11 MGD Expansion	North Apple Valley Interceptor	Phase IIIA Regulatory Upgrades	Upper Narrows Replacement Project	Nanticoke Bypass	2017 Total
SRF Loan Amount	$ 4,069,859	$ 11,430,726	$ 4,084,688	$ 15,581,563	$ 5,000,000	$ 5,700,000	$ 45,866,836
Annual Payment	$ 265,049	$ 579,870	$ 258,151	$ 1,027,610	$ 301,917	$ 304,674	$ 2,737,271
1. Operations	4.30%	0.00%	0.00%	75.00%	100.00%	75.00%	
Original Loan	$ 175,004	$ -	$ -	$ 11,686,172	$ 5,000,000	$ 4,275,000	
Principal	$ 10,285	$ -	$ -	$ 503,225	$ 222,450	$ 174,626	$ 910,586
Interest	$ 1,112	$ -	$ -	$ 267,482	$ 79,467	$ 53,879	$ 401,940
Annual Payment	$ 11,397	$ -	$ -	$ 770,708	$ 301,917	$ 228,505	$ 1,312,527
2. Capital	95.70%	100.00%	100.00%	25.00%	0.00%	25.00%	
Original Loan	$ 3,894,855	$ 11,430,726	$ 4,084,688	$ 3,895,391	$ -	$ 1,425,000	
Principal	$ 228,902	$ 519,438	$ 211,877	$ 167,742	$ -	$ 58,209	$ 1,186,168
Interest	$ 24,750	$ 60,432	$ 46,274	$ 89,161	$ -	$ 17,960	$ 238,577
Annual Payment	$ 253,652	$ 579,870	$ 258,151	$ 256,903	$ -	$ 76,169	$ 1,424,745
Total Principal	$ 239,187	$ 519,438	$ 211,877	$ 670,967	$ 222,450	$ 232,835	$ 2,096,754
Total Interest	$ 25,862	$ 60,432	$ 46,274	$ 356,643	$ 79,467	$ 71,839	$ 640,517
Annual Payment	$ 265,049	$ 579,870	$ 258,151	$ 1,027,610	$ 301,917	$ 304,674	$ 2,737,271

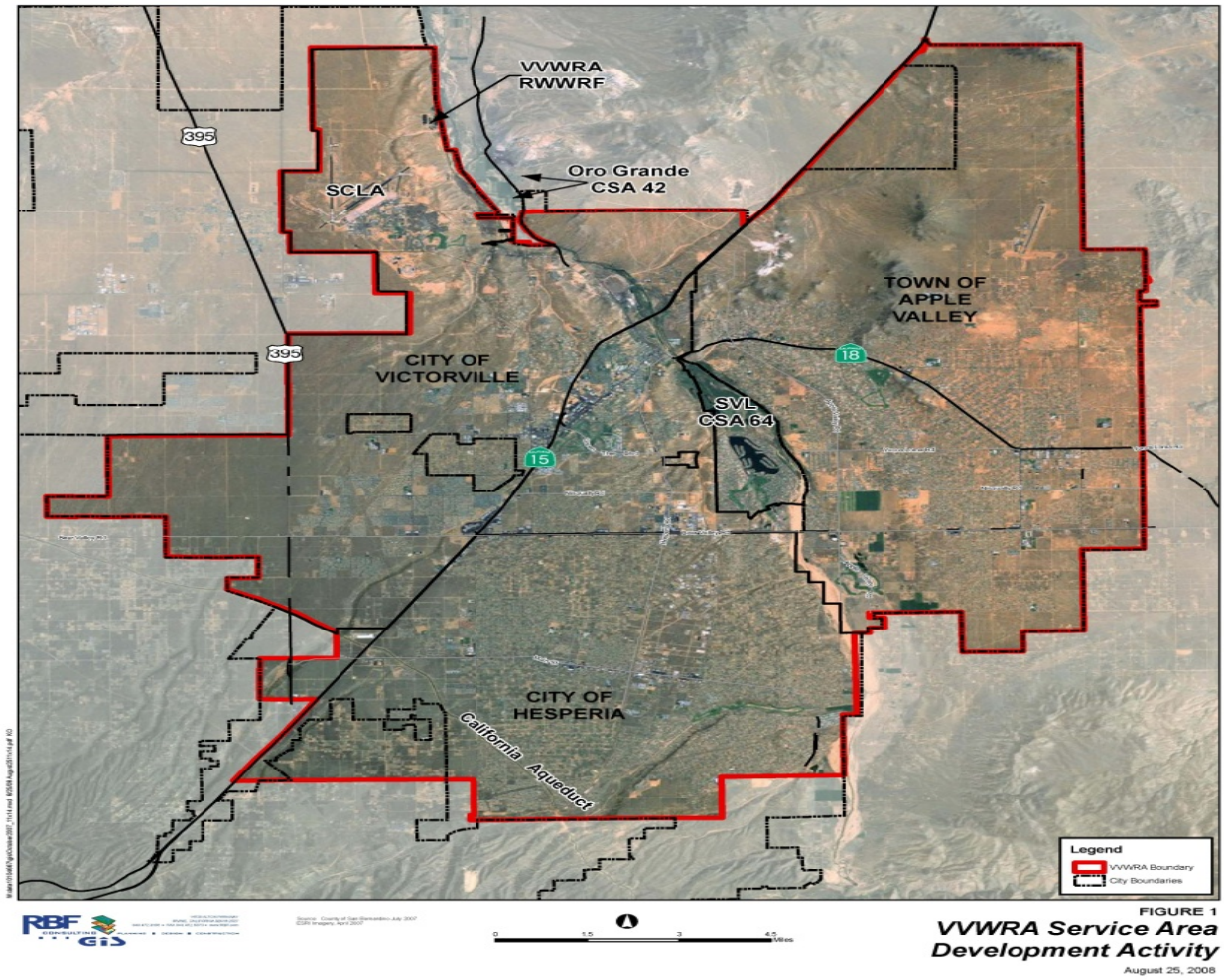
Section VI: History and Demographics

- This page intentionally left blank -

History

Victor Valley Wastewater Reclamation Authority (VVWRA) 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. VVWRA is now a joint powers public agency of the state of California handling 12.05 million gallons a day.

Over the years, VVWRA 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 and a smaller quantity is used to irrigate landscaping at the treatment plant and the nearby Westwinds Golf Course.



Provided by RBF Consulting, Inc.

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

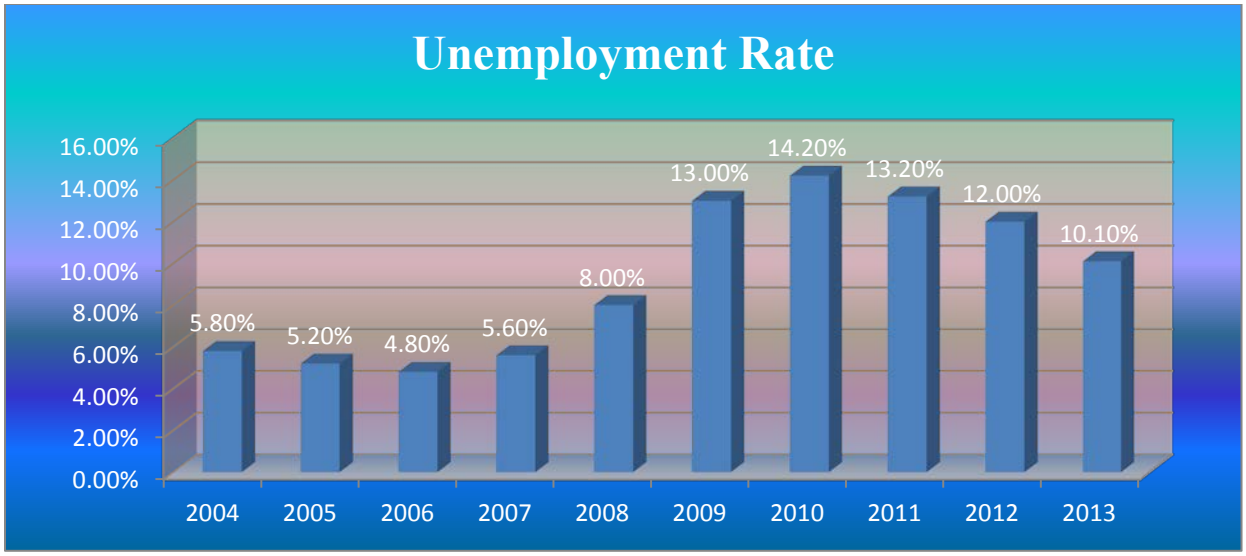
San Bernardino County is the largest county in the United States. According to the 2010 U.S. Census, the San Bernardino County has a population of 2,035,210. With an area of 20,160 square miles, the San Bernardino County is larger than the combined area of the four smallest states in the nation. Over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

Demographics

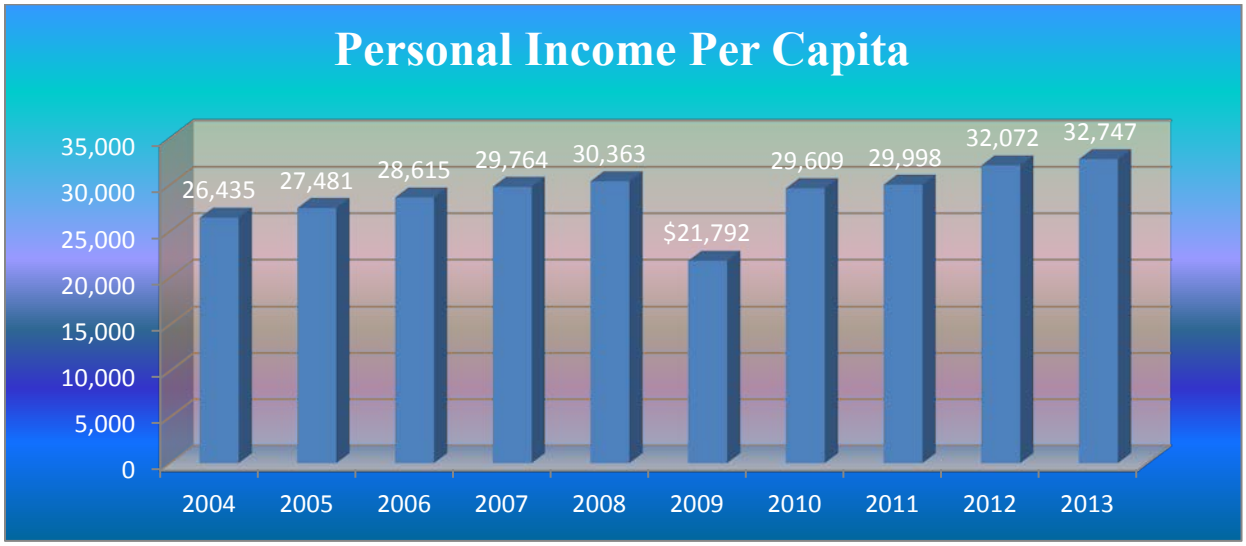
The service area has a population of 282,851 in 2013 with a slow and steady population growth from 2007 to 2013.

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 $32,747 in 2013.

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



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.

Sewer Overflow

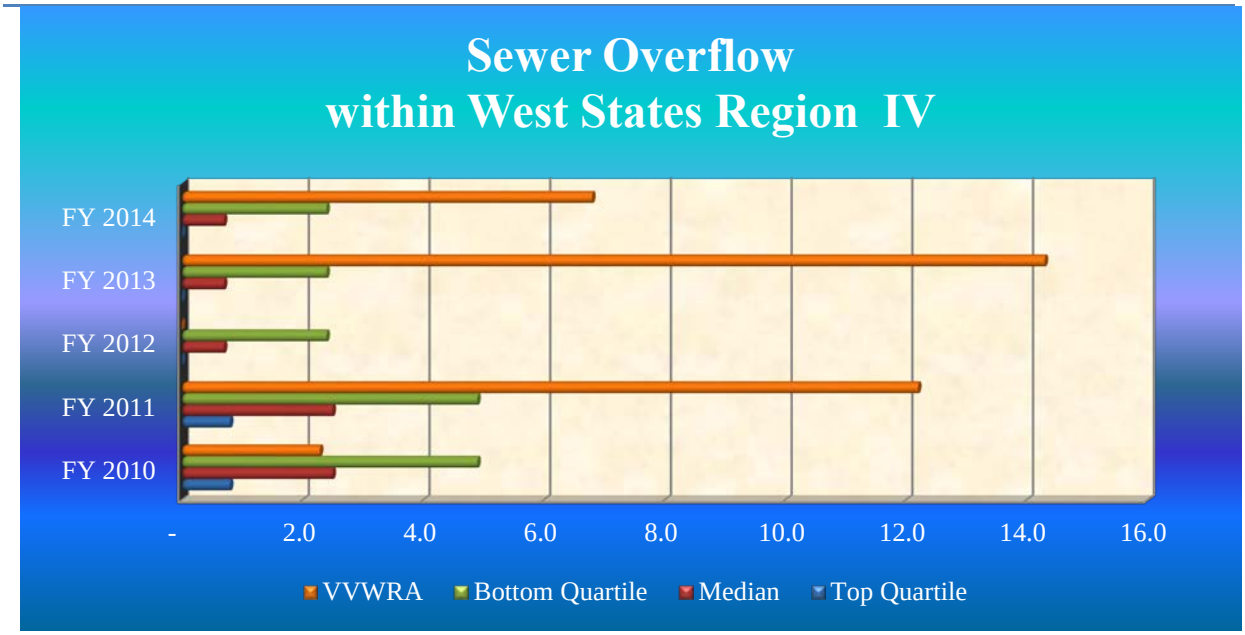
The sewer overflow rate is an indicator that tracks the condition and the effectiveness of the maintenance of the wastewater collection system.

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 "I" 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 spills at the Upper Narrows Emergency Bypass Sites during FY 2014 which resulted in a high sewer overflow rate of 6.8. VVWRA has initiated the construction of a permanent interceptor during March of FY 2014 to replace the temporary bypass line.

Sewer Overflow-West States Region IV Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2014	*Data Not Available*	0.70	2.40	6.80
FY 2013	*Data Not Available*	0.70	2.40	14.30
FY 2012	*Data Not Available*	0.70	2.40	0.00
FY 2011	0.80	2.50	4.90	12.20
FY 2010	0.80	2.50	4.90	2.29

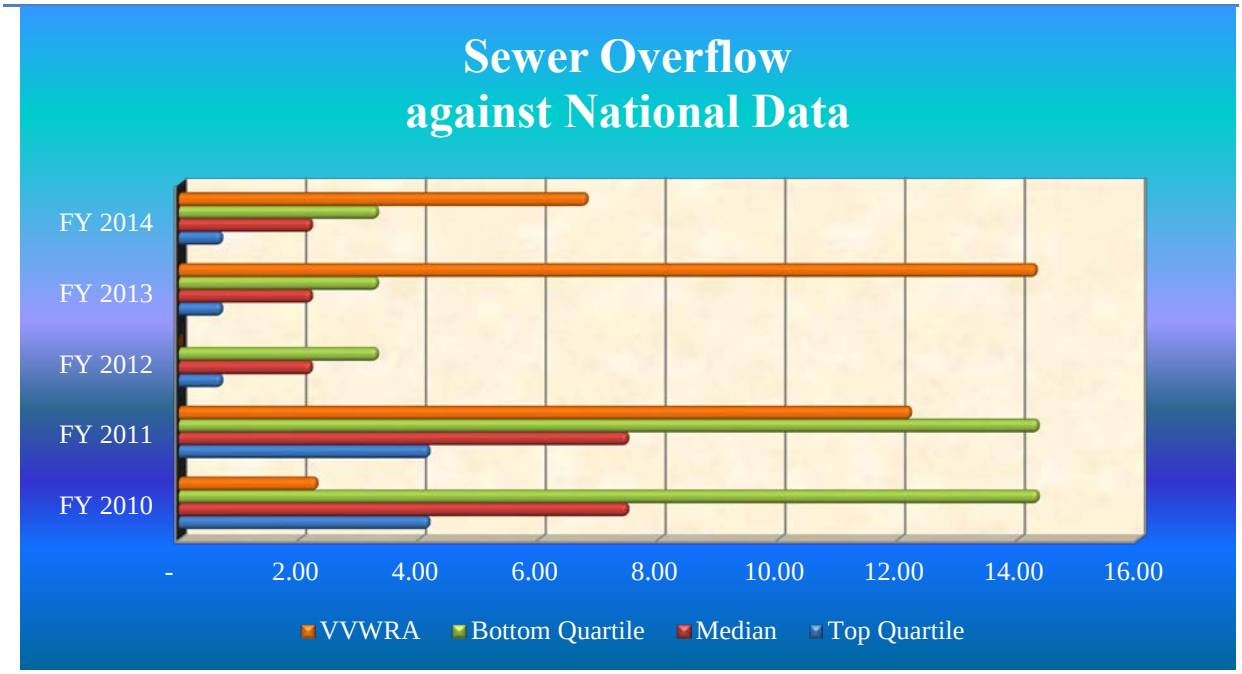


Source: 2012 American Water Works Association Benchmarking analysis *FY = Fiscal Year ended June 30*

Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2015-2016

Sewer Overflow-National Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2014	0.70	2.20	3.30	6.80
FY 2013	0.70	2.20	3.30	14.30
FY 2012	0.70	2.20	3.30	0.00
FY 2011	4.16	7.48	14.33	12.20
FY 2010	4.16	7.48	14.33	2.29



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

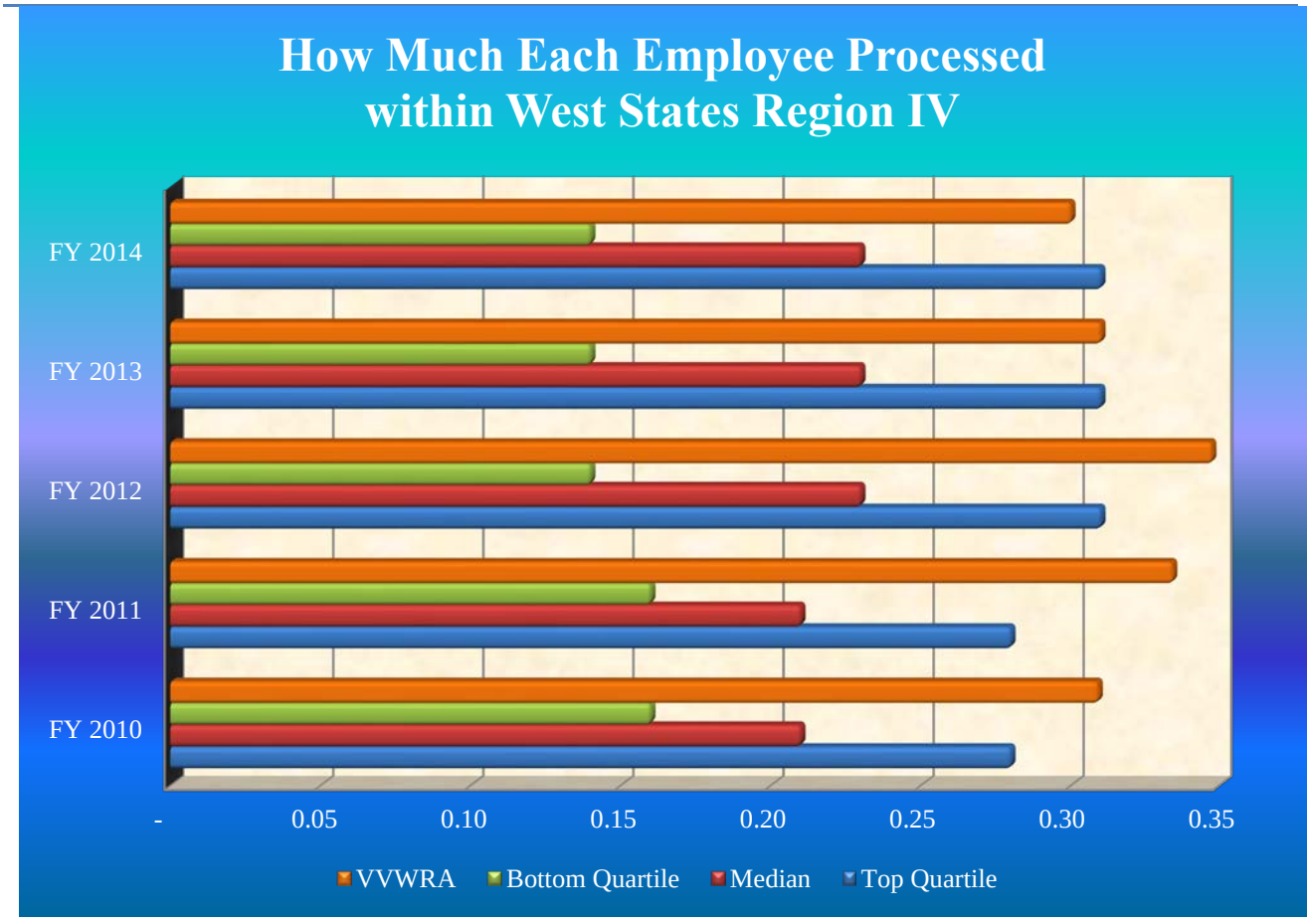
How Much Each Employee Processed

The quantity of wastewater processed by each employee has decreased from 0.31 million gallons per day (MGD) FY 2010 to 0.30 MGD in FY 2014. This decrease is not only due to the slowing growth in the population in the service area, but also the actual number of personnel has increased from 40 to 41 during FY 2010 and FY 2014.

Compared to West States Region IV, VVWRA has surpassed the top quartile at 0.28 MGD since FY 2010. Compared nationally, the quantity of wastewater processed by each employee has surpassed the median since FY 2010.

How Much Each Employee Processed-West States Region IV Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2014	0.31	0.23	0.14	0.30
FY 2013	0.31	0.23	0.14	0.31
FY 2012	0.31	0.23	0.14	0.35
FY 2011	0.28	0.21	0.16	0.33
FY 2010	0.28	0.21	0.16	0.31

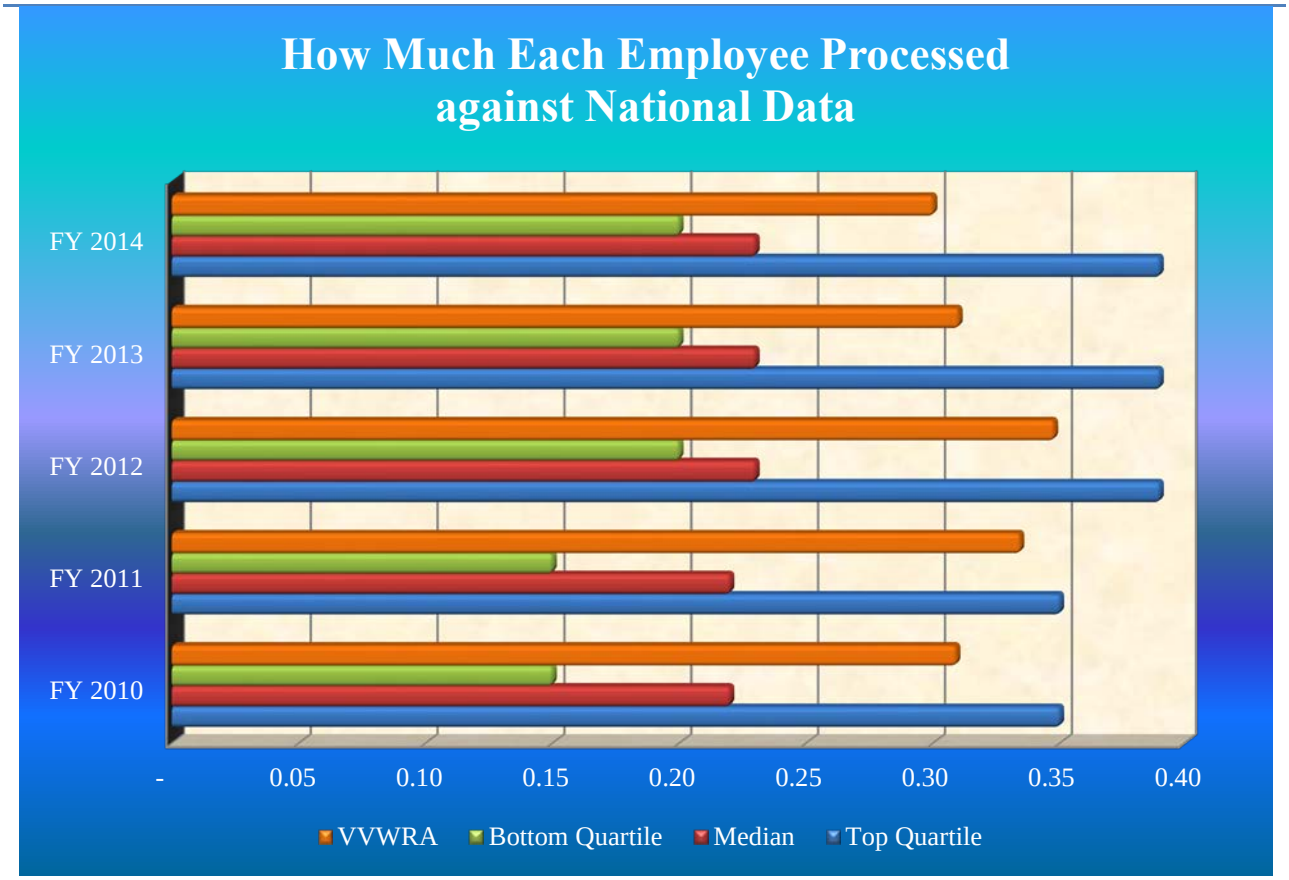


Source: 2012 American Water Works Association Benchmarking analysis *FY = Fiscal Year ended June 30*

Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2015-2016

How Much Each Employee Processed-National Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2014	0.39	0.23	0.20	0.30
FY 2013	0.39	0.23	0.20	0.31
FY 2012	0.39	0.23	0.20	0.35
FY 2011	0.35	0.22	0.15	0.33
FY 2010	0.35	0.22	0.15	0.31



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

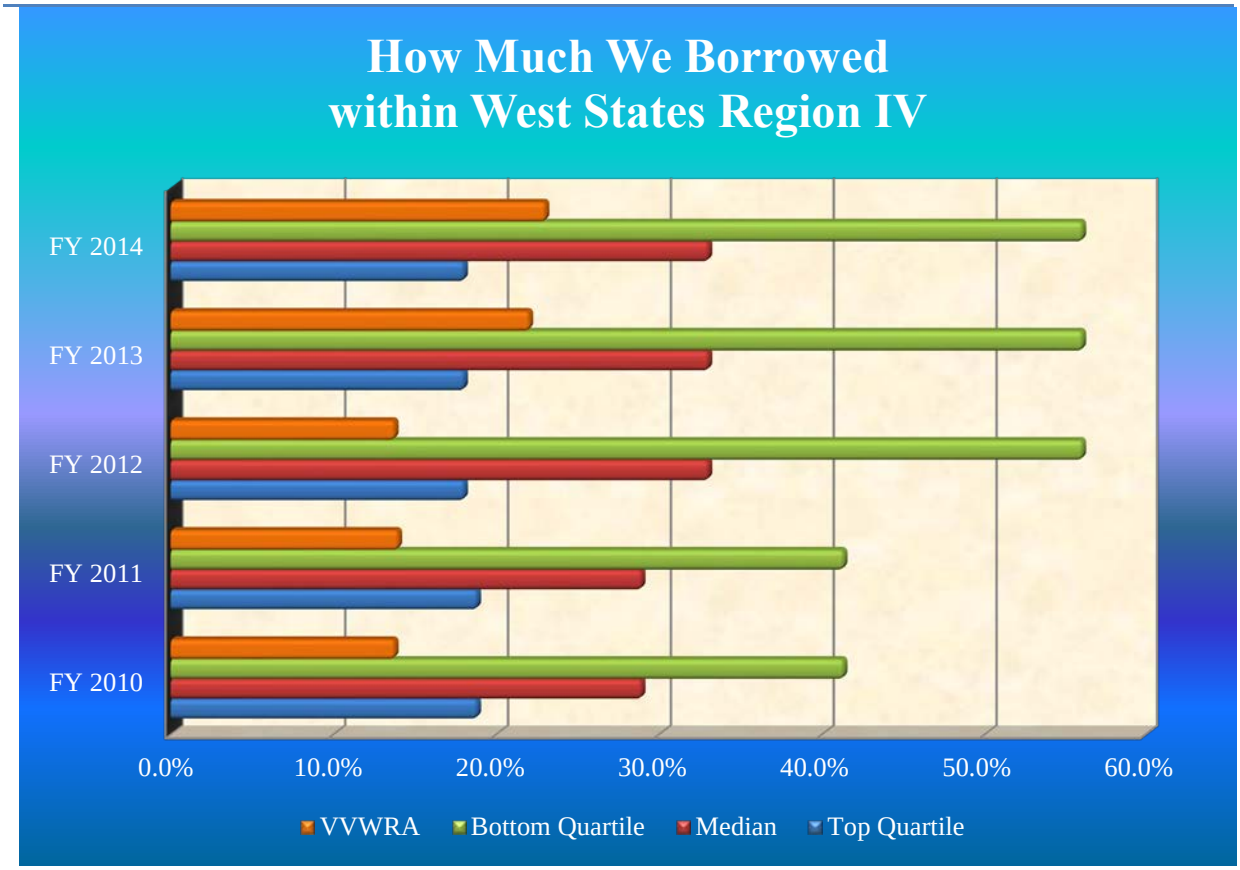
How Much We Borrowed

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 13.73% in FY 2010 to 23.00% in FY 2014 due to the growth in the amount of State Revolving Fund loans for the construction projects.

VVWRA is performing better than the median quartile of the West States Region IV throughout FY 2010 to FY 2014. Compared nationally, VVWRA is ranked between median and top quartiles for these years.

How Much We Borrowed-West States Region IV Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2014	18.0%	33.0%	56.0%	23.00%
FY 2013	18.0%	33.0%	56.0%	22.00%
FY 2012	18.0%	33.0%	56.0%	13.73%
FY 2011	18.8%	28.9%	41.3%	13.96%
FY 2010	18.8%	28.9%	41.3%	13.73%

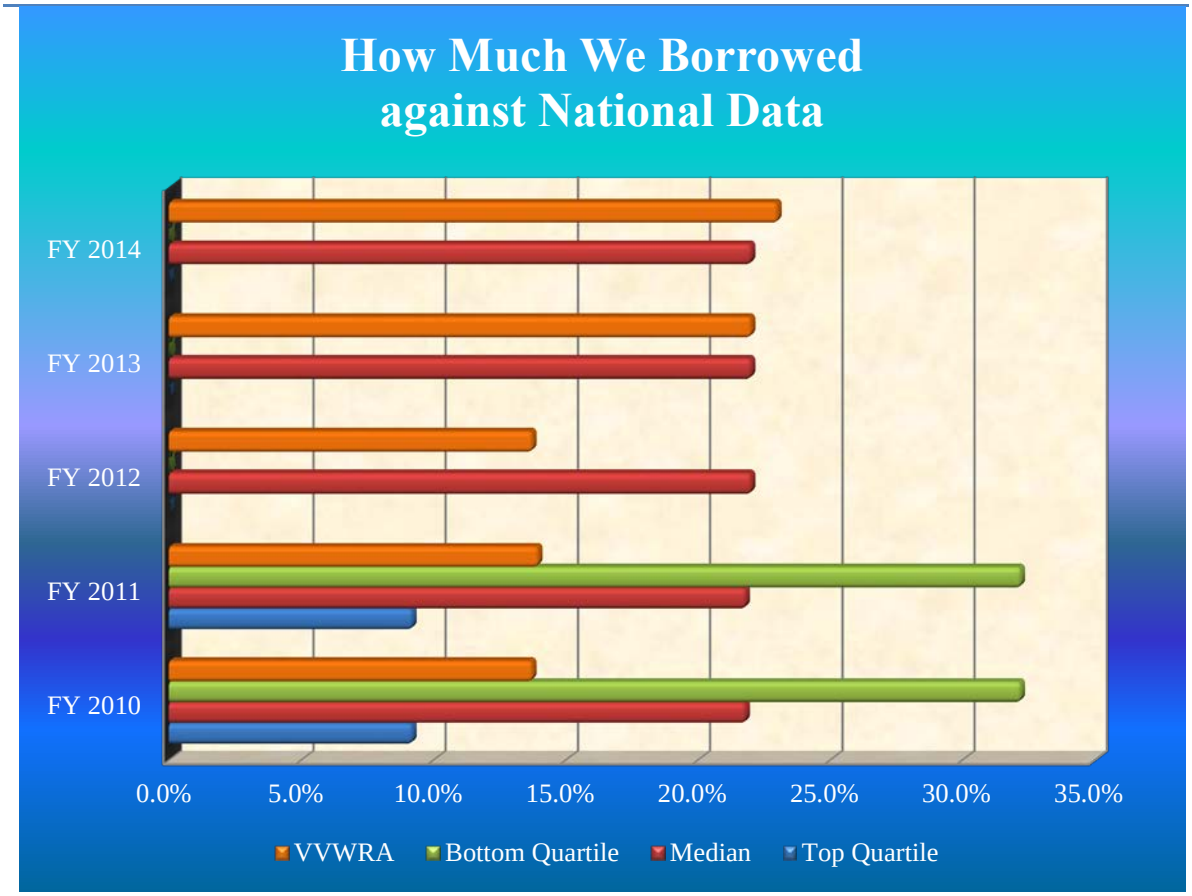


Source: 2012 American Water Works Association Benchmarking analysis *FY = Fiscal Year ended June 30*

Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2015-2016

How Much We Borrowed-National Benchmark

	Top Quartile	Median	Bottom Quartile	VVWRA
FY 2014	Data Not Available	22.0%	Data Not Available	23.00%
FY 2013	Data Not Available	22.0%	Data Not Available	22.00%
FY 2012	Data Not Available	22.0%	Data Not Available	13.73%
FY 2011	9.2%	21.8%	32.2%	13.96%
FY 2010	9.2%	21.8%	32.2%	13.73%



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

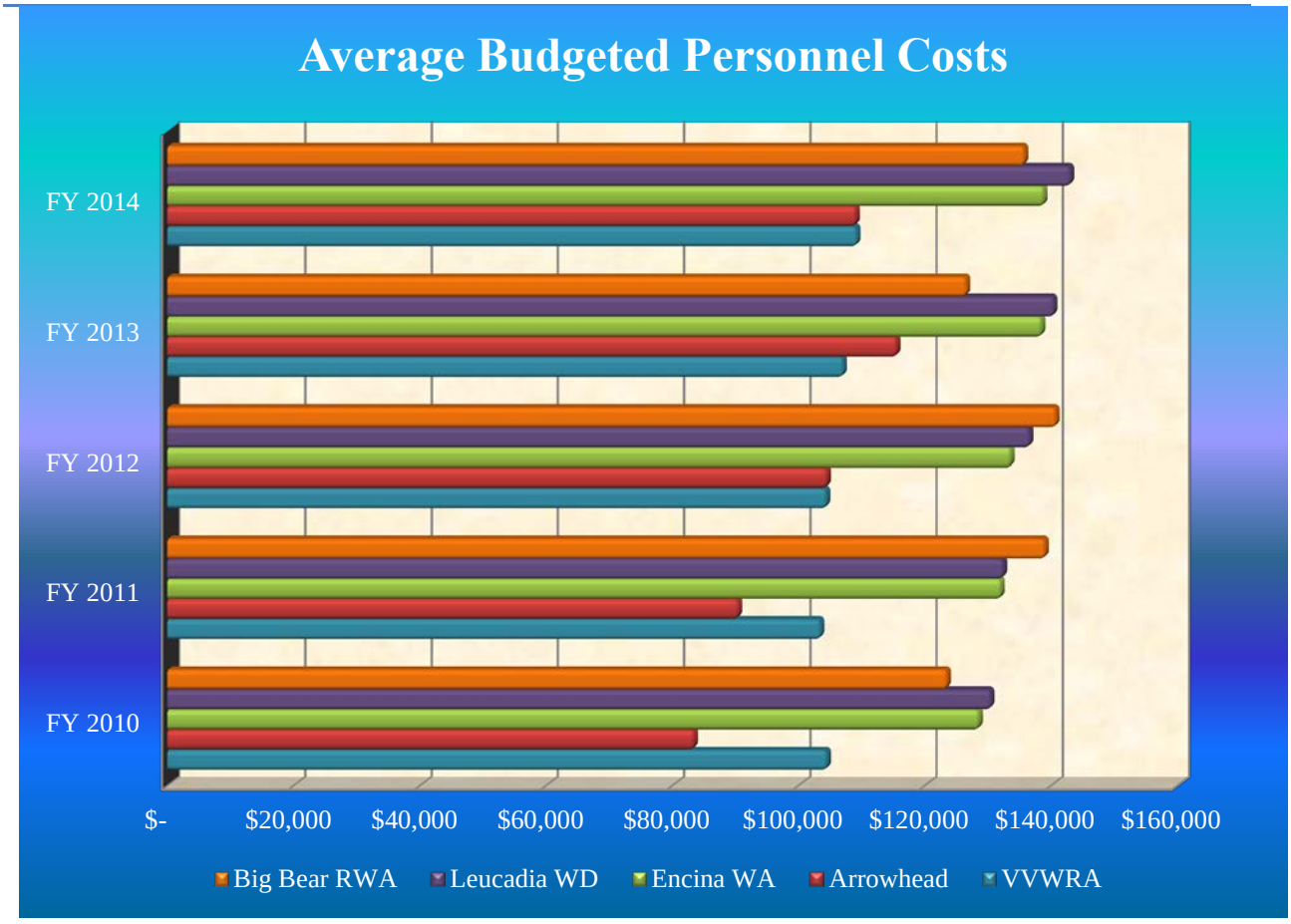
Victor Valley Wastewater Reclamation Authority
Performance Benchmarked against Industry
Fiscal Year 2015-2016

Average Budgeted Personnel Cost

Average budgeted personnel cost indicates the cost-effectiveness of an agency's overall personnel expense budget. It is calculated by dividing the total budgeted personnel costs by the total budgeted number of employees that the agency has within 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 2014	$ 109,157	$ 109,058	$ 138,791	$ 142,991	$ 135,720
FY 2013	$ 106,993	$ 115,469	$ 138,421	$ 140,339	$ 126,547
FY 2012	$ 104,338	$ 104,435	$ 133,566	$ 136,517	$ 140,704
FY 2011	$ 103,416	$ 90,403	$ 132,012	$ 132,364	$ 138,986
FY 2010	$ 104,465	$ 83,383	$ 128,519	$ 130,355	$ 123,485



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

Section VII: Glossary

- This page intentionally left blank -

Victor Valley Wastewater Reclamation Authority
Glossary
Fiscal Year 2015-2016

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 "*Standard Methods for the Examination of Water and Wastewater*" 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 "*Standard Methods for the Examination of Water and Wastewater*" published by the American Public Health Association.
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.
Interceptor	A pipeline that coveys 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.
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.
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 "*Standard Methods for the Examination of Water and Wastewater*" 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.