

LAVWMA FY2018/19 Budget

**LIVERMORE-AMADOR VALLEY
WATER MANAGEMENT AGENCY
OPERATING AND CAPITAL BUDGET
FISCAL YEAR 2018/19**

Approved by the LAVWMA Board May 16, 2018

LAVWMA FY2018/19 Budget

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2018/19

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LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2018/19

EXECUTIVE SUMMARY

OPERATING BUDGET

The proposed operating budget of \$2,888,400 is a 2.04% decrease from the FY2017/18 budget. The total revenue requirement of \$15,795,059 is a 34.25% increase from the FY2017/18 budget. Debt service payments consist of \$2,437,973 for the Repair Project, \$5,565,877 for the Expansion Project and \$4,504,809 for EBDA Capacity. Last year the expense for EBDA Capacity was \$412,000.

The increase in the EBDA Capacity expense is to pay off the existing debt. Annual debt payments will not be completed until 2030. Paying off the debt early will save at least \$840,000 in interest. Paying off the debt is also a strategic move to better position LAVWMA to renegotiate the terms and conditions of the current agreement with EBDA. LAVWMA owns 19.72 MGD of EBDA's 189.1 MGD capacity, or 10.43%. LAVWMA's fixed cost percentage has been increasing per the terms of the agreement from the original 10.43% to the current level of 17.43%. The percentage increases to 18.60% on January 1, 2020. Costs for EBDA are based on fixed and variable (flow based) percentages. The flow based percentage is currently 19%. It is in LAVWMA's best interests to reduce both its fixed and variable costs through a combination of renegotiating the agreement, reducing flows through water recycling and flow management during wet weather.

The proposed FY2018/19 operating budget considers projected FY2017/18 expenditures and is largely based on the detailed budget prepared by DSRSD pursuant to the Maintenance Agreement, copy attached. FY2017/18 O&M expenditures are projected to be below the approved budget by approximately 11.2%. This is due to a combination of PG&E power and DSRSD labor savings. The annual reconciliation process will return any excess funds collected. Significant water recycling efforts in the service area are continuing and should increase over time. The proposed budget shows a \$50,000 decrease in power costs and a \$35,000 decrease in labor costs. Labor costs include additional hours for staffing the San Leandro Sample Station.

DSRSD's costs reflect a 3.5% increase in labor costs largely due to CPI increases. Other Fixed costs have been adjusted based on actual expenditures and anticipated needs for next year. Additional information is included in the remainder of the budget report.

CAPITAL BUDGET

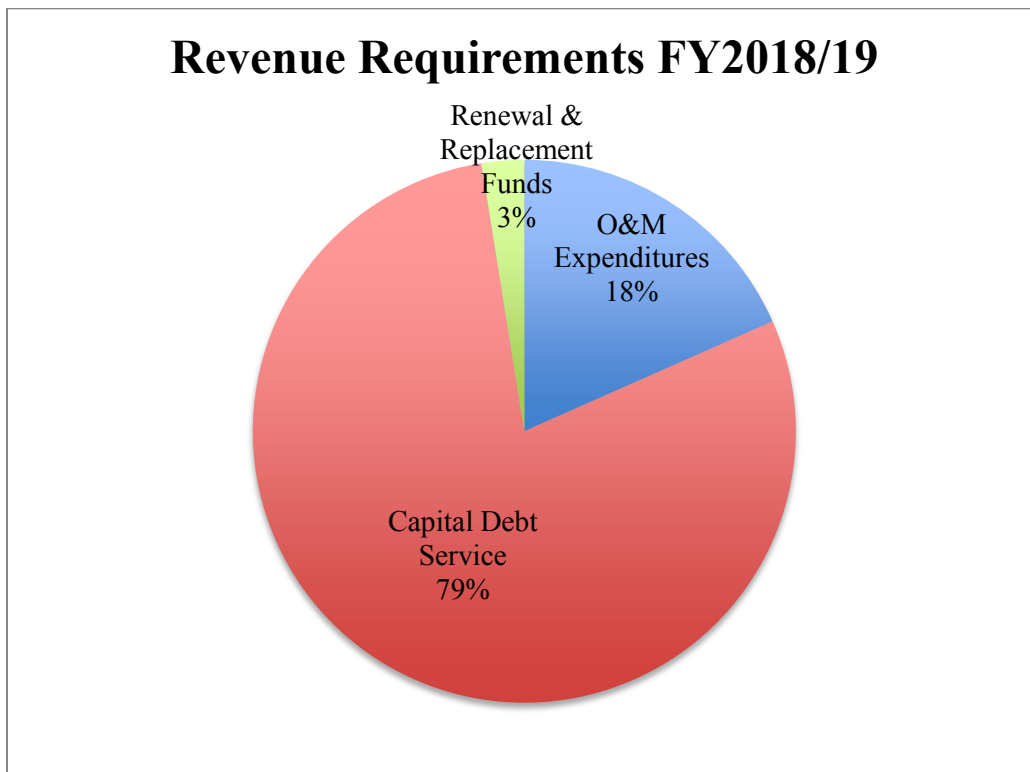
The FY2017/18 capital budget was \$677,000, of which only \$154,000 was spent. There were no expenses for the two largest items: pump purchase and repair; and snorkels and flow meters at the junction structure piping. The FY2018/19 capital budget of \$930,000 is for the renewal and replacement of LAVWMA and EBDA facilities and includes the purchase of three new pumps,

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snorkels and flow meters at the junction structure, resealing the storage basins, replacement of the SCADA system at the San Leandro Pump Station, replacement of leaking pipe for the water cannons, and various other recommended projects. All of these major projects have been recommended by the Pump Station Evaluation Consultant and/or DSRSD staff. Please refer to the tables below which summarize the costs.

REVENUE REQUIREMENTS

The FY2017/18 budget also includes the debt service (repair and expansion) for the 2011 Bonds and for the payoff of the EBDA capacity purchase agreement. Although repair and expansion of the existing pipeline and the EBDA capacity purchase are capital costs, the associated debt service is tabulated in the operating budget to assist member agencies with their rate and fee calculations. The projected debt service includes payment of principal and interest. This year's budget recommends that the annual deposit to the Joint Use Renewal Replacement Fund be continued at the \$400,000 level that was approved three years ago. Dual Use facilities are minimal and are currently adequately funded. The following pie chart illustrates the allocation of the \$15,795,059 in total revenue requirements for FY2017/18.



1.0 GENERAL

Livermore-Amador Valley Water Management Agency (LAVWMA) is a Joint Powers Agency comprised of the Cities of Livermore and Pleasanton, and Dublin San Ramon Services District (DSRSD). The City of Livermore collects and treats all city wastewater. DSRSD delivers water to the City of Dublin and the Dougherty Valley, and it collects and treats wastewater for Dublin and southern San Ramon, and treats additional wastewater under a contract with the City of

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Pleasanton. LAVWMA exports treated effluent from the LAVWMA Pumping Station west over the Dublin Grade, through Castro Valley, and the City of San Leandro, to a pipeline operated by the East Bay Dischargers Authority (EBDA). EBDA dechlorinates the effluent and discharges it through a deepwater outfall into San Francisco Bay. A significant portion of member agency flows are kept within their service areas for water recycling purposes.

1.1 Mission & Goals

LAVWMA'S MISSION

LAVWMA's mission is to support its member agencies: Dublin San Ramon Services District, City of Pleasanton, and City of Livermore by providing cost effective operation and maintenance of all of the Agency export facilities in full compliance with federal, state, and local requirements. LAVWMA supports its member agencies in their efforts to implement comprehensive water recycling programs.

We will complete our work primarily through consultants. We will invest in this diverse project team and promote a work ethic that recognizes and promotes teamwork and a positive work environment. We will practice fairness, provide challenges, and allow freedom of communication and thought to enable team members to make meaningful contributions to LAVWMA, the industry and our community.

Agency Goals & Objectives

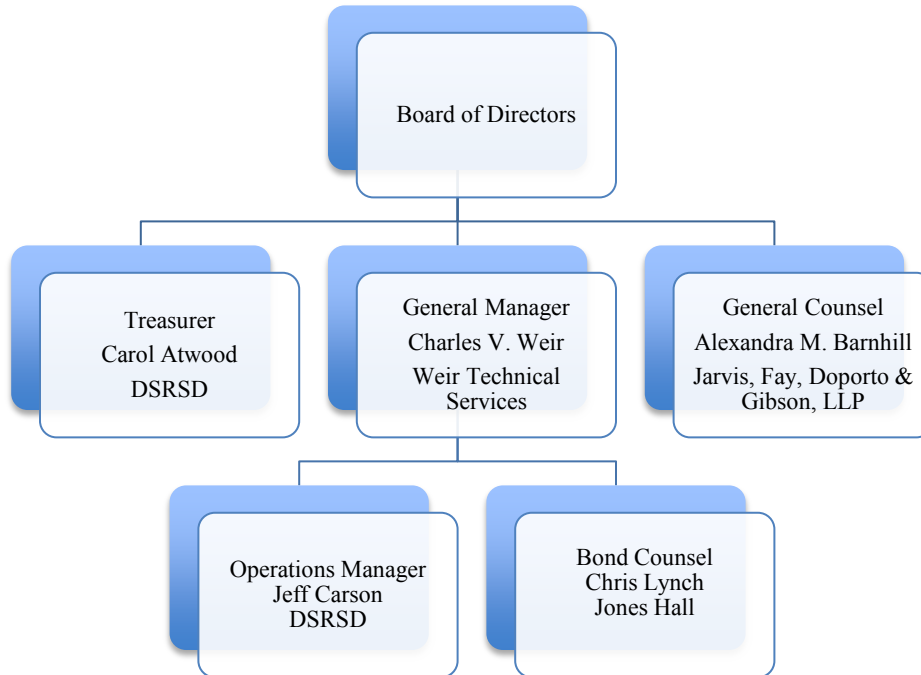
To carry out our Mission, LAVWMA will pursue the following goals:

- **Environmental Compliance.** Continue efficient operations of facilities to prevent wastewater overflows. Meet all CEQA mitigation requirements for new construction. Exceed requirements pertaining to community impacts.
- **Cost Effectiveness.** Continue to perform routine maintenance on existing facilities in a manner that promotes cost savings over the projected life of the facilities.
- **Technical Soundness.** Provide technically sound solutions that use the newest available technology without incurring excessive risk.
- **Customer Service.** Continue to comply with the 1997 Joint Exercise of Powers Agreement (JPA) and the October 2011 Sewer Service Contract with the LAVWMA member agencies.

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1.2 ORGANIZATION

The LAVWMA team proposed for FY2018/19 is shown in the following chart.



2.0 OPERATING BUDGET

2.1 Description of Services Provided

The Operations and Maintenance (O&M) budget includes all costs required to operate and maintain existing LAVWMA facilities. LAVWMA's existing facilities include the sole-use and dual-use interceptors, junction structure, Export and Livermore pumping stations, storage basins, export pipeline including appurtenances, and two emergency dechlorination stations. LAVWMA's facilities are operated and maintained by DSRSD pursuant to a Maintenance Agreement initially executed in 1979.

The FY2018/19 Operating Budget, shown below, includes costs for the following: O&M Variable Costs, O&M Fixed Costs, Admin/Mgmt. Costs, Total O&M Costs, Capital Program Funding, and Total Revenue Requirements.

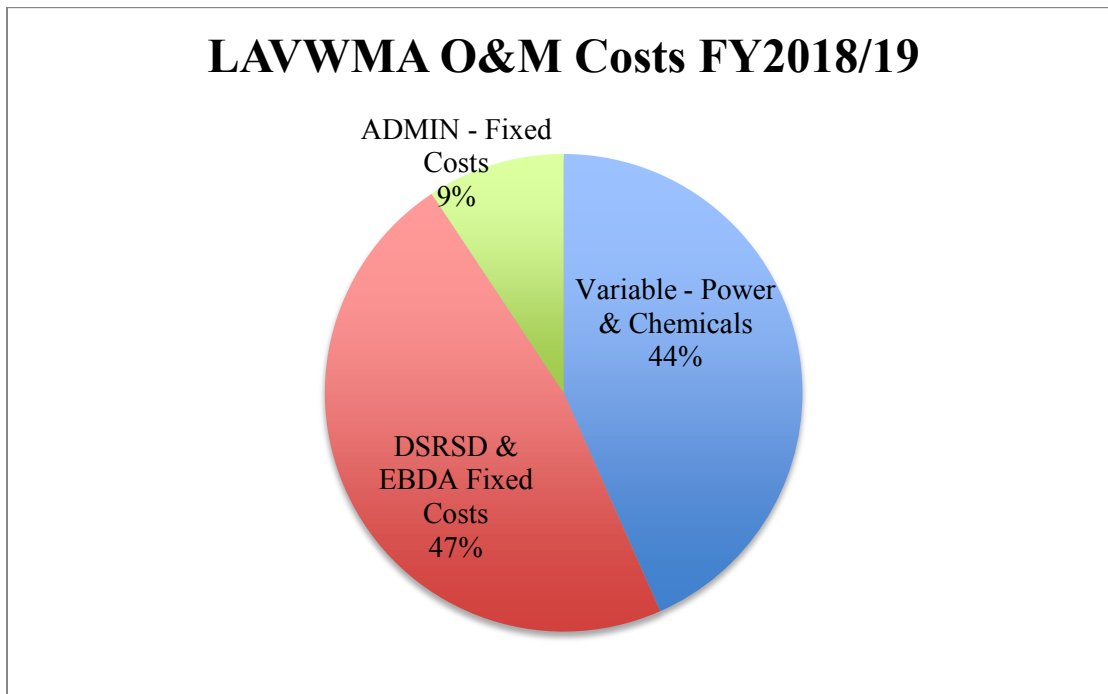
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FY2018/19 OPERATIONS BUDGET SUMMARY							
			FY2017/18 Adopted Budget	FY2017/18 Projected Actual	FY2018/19 Proposed Budget	Change From Adopted FY2017/18	
OPERATIONS AND MAINTENANCE							
VARIABLE COSTS							
	DSRSD Maintenance Agreement (Power)		\$ 1,150,000	\$ 1,003,103	\$ 1,100,000	-4.35%	
	EBDA O&M		157,500	157,713	152,000	-3.49%	
	Subtotal - O&M Variable Costs		1,307,500	1,160,816	1,252,000	-4.24%	
FIXED COSTS							
	DSRSD Maintenance Agreement						
	Labor/equip		760,000	611,831	725,000	-4.61%	
	Materials/Supplies		35,000	60,265	50,000	42.86%	
	Contractual		60,000	55,975	60,000	0.00%	
	Monitoring/Testing		22,000	27,969	28,000	27.27%	
	Utilities (fixed)		8,000	6,827	7,200	-10.00%	
	Non Routine		-	396	15,000	NA	
	EBDA O&M		490,000	468,963	480,000	-2.04%	
	Subtotal - O&M Fixed Costs		1,375,000	1,232,225	1,365,200	-0.71%	
ADMIN/MGMT							
	Mgr/Treas/Counsel/Board		141,000	138,314	145,200	2.98%	
	Services/Supplies/Misc		88,000	43,000	87,000	-1.14%	
	Permits/Insurance		35,000	41,857	37,000	5.71%	
	Subtotal Admin/Mgmt		264,000	223,171	269,200	1.97%	
	Subtotal All Fixed Costs		1,639,000	1,455,396	1,634,400	-0.28%	
	TOTAL O&M COSTS		\$ 2,946,500	\$ 2,616,213	\$ 2,886,400	-2.04%	
CAPITAL PROGRAM FUNDING							
	Replacement Fund		400,000	400,000	400,000	0.00%	
	Repair Debt Service		2,438,772	2,438,772	2,437,973	-0.03%	
	Expansion Debt Service		5,567,703	5,567,703	5,565,877	-0.03%	
	EBDA Debt Service		412,000	412,000	4,504,809	993.40%	
	SUBTOTAL		\$ 8,818,475	\$ 8,818,475	\$ 12,908,659	46.38%	
TOTAL REVENUE REQUIREMENTS			\$ 11,764,975	\$ 11,434,688	\$ 15,795,059	34.25%	

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2.2 Operating Budget Summaries

The following pie chart depicts the allocation of operating costs:



2.2.1 Variable Costs – Power and Chemicals

Variable costs for power (DSRSD/EBDA) and chemicals (EBDA) are directly tied to the volume of flow that LAVWMA discharges. They total \$1,252,500 and make up approximately 43.4% of LAVWMA’s total operating budget. Pumping and chemical costs for FY2018/19 are projected to be 4.24% less than last year. DSRSD estimates a 3% increase in PG&E rates, which will be offset by improved pumping efficiency due to the new pumps and that is reflected in the power costs. The FY2018/19 Budget is based on actual costs for the current year.

2.2.2 Fixed Costs - DSRSD Maintenance Agreement

Operation and maintenance of LAVWMA facilities for FY2018/19 is estimated to require 5,658 fully burdened labor hours. This is 383 hours more than last year and is due to increased staffing at the San Leandro Sample Station. Additional costs for materials/supplies, contractual, monitoring/testing, and other utilities are also listed under DSRSD’s fixed costs. Costs for these items are based on projected costs for FY2017/18 and anticipated needs for FY2018/19.

2.2.3 Fixed Costs - EBDA Agreement

This item covers EBDA’s fixed operational and maintenance costs that are billed to LAVWMA. It also covers costs to EBDA for various special projects including the Regional Monitoring Program (RMP) and LAVWMA’s share of EBDA’s permit fees. Some of these costs are shared on different percentages that the LAVWMA’s fixed cost percentage in the agreement with

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EBDA. As an example, the RMP cost is based on the mass of four metals, copper, chromium, nickel, and selenium. LAVWMA's share is 15.32% for a total of \$42,895. LAVWMA's share of the permit fee (\$450,000) is based on the permitted average dry weather flows for each agency that is part of the EBDA system. LAVWMA's share of this cost is 26.62%, or \$119,805.

EBDA Special Projects total \$525,000 next year. The special projects include the following for FY2017/18:

- Evaluation of the forcemain system, \$125,000
- Strategic Planning for revising the Joint Powers Agreement, \$400,000

LAVWMA is responsible for a portion of the forcemain system and will be billed accordingly. LAVWMA will pay a negotiated flat fee of \$15,000 for the strategic planning effort. LAVWMA is currently responsible for 17.34% of the fixed costs for "shared" EBDA facilities. The percentage increased in January 2015 and will be capped at 18.60% in 2020. This year's budget is \$480,000, which is 2.54% less than last year. Total EBDA costs for variable and fixed costs for FY2018/19 are \$642,000 as compared with \$647,500 last year.

2.2.4 Fixed Costs - Administration & Management

This section includes general administration, program management, legal and financial services, consulting services, permits, insurance, etc. The proposed budget is \$269,200 as compared with \$264,000 last year or an increase of 1.97%. This year there are no costs for the NPDES permit renewal, but costs for consulting services are included for upgrading the website, records management, and assistance in enhancing the asset management program. The website updates and records management projects have been delayed by the pumps issue. The asset management program is linked to DSRSD's efforts for their own system. Asset Management will be a key project this year and will have an impact on the Capital Program Funding as discussed below. Costs for travel expenses for the General Manager for two CASA Conferences and other required training for the General Manager and Administrative Assistant are included in these costs.

2.2.5 Capital Program Funding

This category includes the projected FY2018/19 debt service (repair and expansion) for 2011 bonds and the EBDA capacity purchase. \$4,504,809 is included in Capital Program Funding to pay off the EBDA Debt. Although repair and expansion of the existing pipeline and the EBDA capacity purchase are capital costs, the associated debt service and funding program costs are tabulated in the operating budget to assist member agencies with their rate and fee calculations. The projected debt service includes payment of both principal and interest. It is recommended that the annual \$400,000 deposit to LAVWMA's capital facilities Joint renewal replacement account be continued to help cover the \$930,000 cost of capital projects in FY2017/18. Dual Use facilities are minimal and have adequate replacement funds.

The Board has been kept informed of the pump purchase and repair project. The first table below lists the capital projects that will be completed by the end of FY2017/18. The second table lists

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all recommended projects for FY2018/19. All projects were recommended by the consultant that completed the Pump Station Evaluation Report or have been recommended by DSRSD staff.

FY2017/18 Capital Program Expenditures (Projected)	
Renewal/Replacement Program	
LAVWMA Export Pumps: 3 new plus repair of 3.	\$0
Snorkels and Flow Meters at Junction Structure Piping	\$0
Fiber Optic Cable at the Pump Station	\$32,000
Motor Nos. 8 & 10 Rebuild	\$28,000
Replacement of street lights at pump station	\$21,500
Replacement of Pump Station Breakers	\$20,500
GPS Monitoring of Pump Station Storage Basin Elevations (to check for possible settling)	\$19,000
Replacement of Water Cannons at Storage Basins	\$18,000
Miscellaneous items	\$15,000
Total Expenditures	\$154,000

FY2018/19 Capital Program Expenditures		
Project	Description	Cost
Purchase of three export pumps and repair of three existing pumps	Estimated \$222,000 for three new pumps plus \$60,000 each for the repairs. Also included a deduction pursuant to the agreement for the three pumps	\$300,000
Snorkels and Flow Meters at Junction Structure	Snorkels were part of original design but not installed. This will improve flow measurement by keeping air out of the system along with standardizing the existing meters which are having problems and need replacing. Two snorkels at \$25,000 each plus three flow meters at \$25,000 each.	\$125,000
Resealing of all three Storage Basins	The basins need to be resealed approximately every ten years. Rebar is showing in some areas.	\$200,000
New SCADA System for San Leandro Sample Station (SLSS)	The existing San Leandro Sample Station (SLSS) control system is comprised of 15 year-old hardware. This project will replace and program a new programmable logic controller (PLC) at the SLSS and integrate the new PLC with the existing SCADA systems at the SLSS and LAVWMA PS. The new PLC will match the DSRSD standard of Allen Bradley Logix controllers	\$95,000

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Replacement of Leaking Pipe for Water Cannons	The plastic pipe that provides water for the water cannons is leaking and damaging the asphalt. This project will put the pipe above ground making it easier to repair. It also includes thrust blocks for connection to the 15 water cannons that were replaced in FY17/18.	\$60,000
Other Misc. LAVWMA Renewal/Replacements	As needed	\$50,000
Other Misc. EBDA Renewal/Replacements	As needed	\$50,000
CIP Planning/Mgmt./Contingency	As needed	\$50,000
Total Expenditures		

2.3 Changes from FY2017/18 Budget

FY2017/18 expenditures are projected to come in under budget due primarily to power and labor cost savings. The annual reconciliation process will resolve any over or under payments. The FY2018/19 Budget is 34.25% more than FY2017/18 in Total Revenue Requirement, due to the payoff of the EBDA debt. Total O&M costs are actually 2.04% less that was budgeted last year.

3.0 CAPITAL BUDGET

3.1 Description of Budget

The Capital budget includes all costs associated with renewal and replacement of existing capitalized facilities. From 2001 to 2010 the 2001 Series A bond funds were the primary source of LAVWMA's capital expenditures. The bond funds were closed out in June 2011. As of July 2011 and for the foreseeable future the only source of capital funding will be the Renewal & Replacement Funds that have been established for Joint Use, Dual Use and Sole Use Facilities. The table below depicts the projected fund balances during FY2018/19.

R & R Fund Balances	Joint	Dual	Sole	Total
Start of year	14,911,210	409,565	1,534,159	16,854,934
Deposits	400,000	0	0	400,000
Interest Earnings	256,100	7,372	27,615	291,087
Proposed Expenditures	919,000	1,000	10,000	930,000
End of Year	14,648,310	415,937	1,551,774	16,616,021

As discussed previously, it is recommended that the annual contribution to the R&R Fund be continued at the \$400,000 level. The following table for the last several years plus the estimated data for FY2017/18 and recommendations for FY2018/19 show that LAVWMA maintaining the Joint Use R&R Fund at a sustainable level since FY2010/11.

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R&R Joint Use History				
Fiscal Year	Contributions	Interest	Expenses	Net
FY2010/11	0	84,873	(245,065)	(160,192)
FY2011/12	300,000	51,626	(411,885)	(60,259)
FY2012/13	300,000	45,064	(353,404)	(8,340)
FY2013/14	300,000	36,396	(119,955)	216,441
FY2014/15	300,000	40,479	(439,073)	(98,594)
FY2015/16	400,000	62,652	(336,712)	125,940
FY2016/17	400,000	109,563	(600,000)	(90,437)
FY2017/18	400,000	225,160	(154,000)	471,160
FY2018/19	400,000	256,100	(930,000)	(273,900)
Total	2,800,000	911,913	(3,590,094)	121,819

3.2 Discussion of Capital Expenditures Proposed for FY2018/19

The following table summarizes \$930,000 of anticipated FY2018/19 capital expenditures on the renewal and replacement of LAVWMA and EBDA facilities. More detailed descriptions are included in Section 2.2.5, Capital Program Funding.

FY2018/19 Capital Program Expenditures	
Renewal/Replacement Program	
LAVWMA Export Pumps: 3 new plus repair of 3.	\$300,000
Snorkels and Flow Meters at Junction Structure Piping	\$125,000
Resealing of all three Storage Basins	\$200,000
New SCADA System for San Leandro Sample Station	\$95,000
Replacement of Leaking Pipe for Water Cannons	\$60,000
Other Misc. LAVWMA Renewal/Replacements	\$50,000
Other Misc. LAVWMA Renewal/Replacements	\$50,000
CIP Planning/Mgmt./Contingency	\$50,000
Total Expenditures	\$930,000

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4.0 FY2018/19 Member Agency Cost Sharing & Schedule

Member Agency Costs FY2018/19			
	Total	Livermore	DSRSD/Pleasanton
Variable O&M	\$ 1,252,000	\$ 438,200	\$ 813,800
Fixed O&M	1,609,400	484,430	1,124,970
Sole Use Fixed O&M	25,000	25,000	
Total O&M	2,886,400	947,630	1,938,770
Replacement Fund	400,000	120,400	279,600
Repair Debt	2,437,973	973,970	1,464,003
Expansion Debt	5,565,877	1,253,435	4,312,442
EBDA Debt	4,504,809	818,974	3,685,835
Total Capital Costs	12,908,660	3,166,780	9,741,880
Total Revenue Required	\$ 15,795,059	\$ 4,114,409	\$ 11,680,650
Semi Annual O&M Advance	1,443,200	473,815	969,385
Semi Annual Replacement Fund Advance	200,000	60,200	139,800
EBDA Debt Advance, July 1	4,504,809	818,974	3,685,835
July 1 Bond Debt Service Advance	6,182,613	1,720,571	4,462,042
Jan 1 Bond Debt Service Advance	1,821,238	506,836	1,314,402
Total July 1 Advance	\$ 12,330,621	3,073,559	9,257,062
Total January 1 Advance	\$ 3,464,437	\$ 1,040,850	\$ 2,423,587
Percentages			
Variable O&M		35.00%	65.00%
Fixed O&M		30.10%	69.90%
Replacement Fund		30.10%	69.90%
Repair Debt		39.95%	60.05%
Expansion Debt		22.52%	77.48%
EBDA Debt		18.18%	81.82%

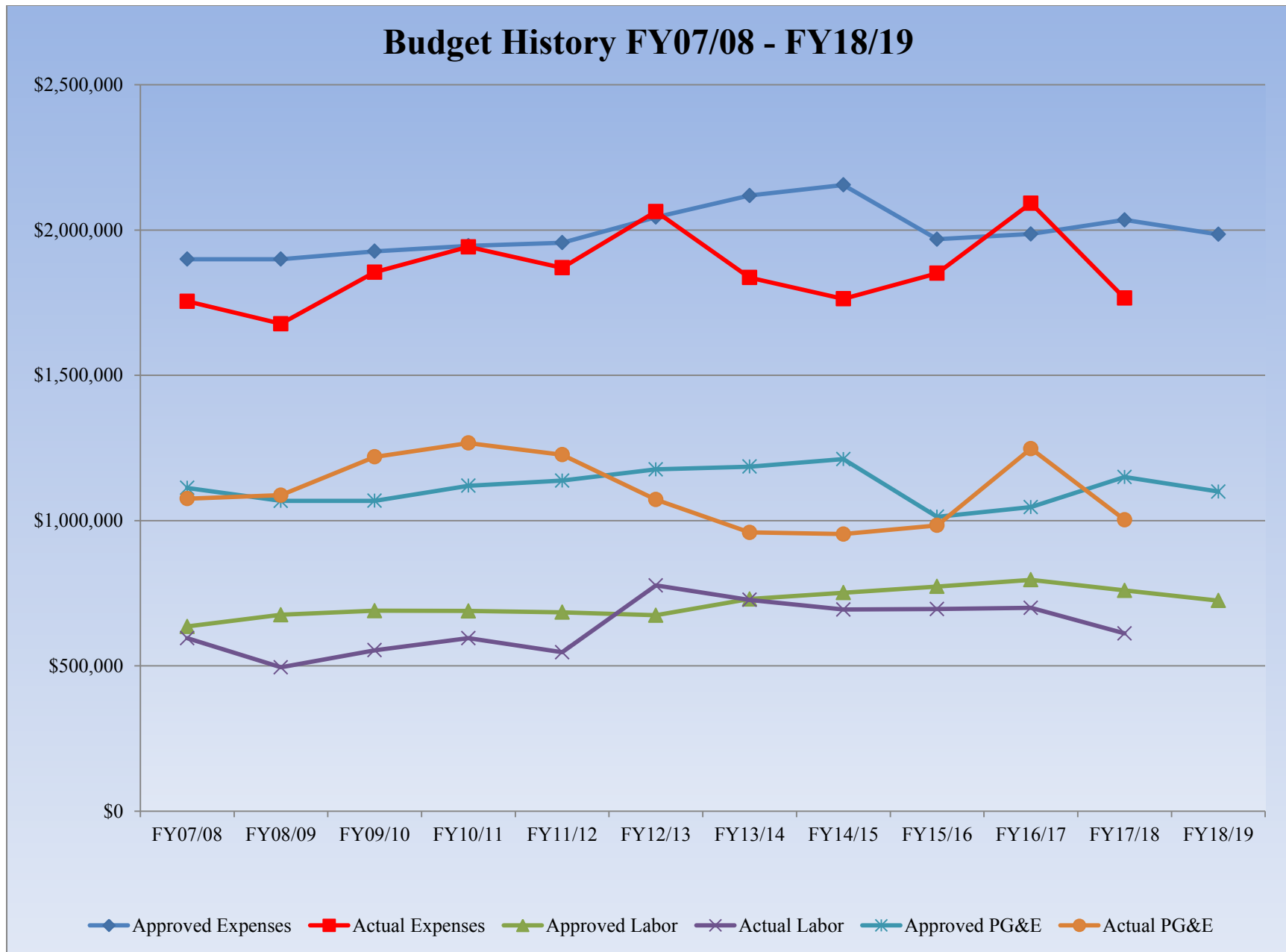
5.0 Budget Trends FY2007/08 – FY2018/19

The following charts show expense trends from FY07/08 through FY18/19. The charts show the following:

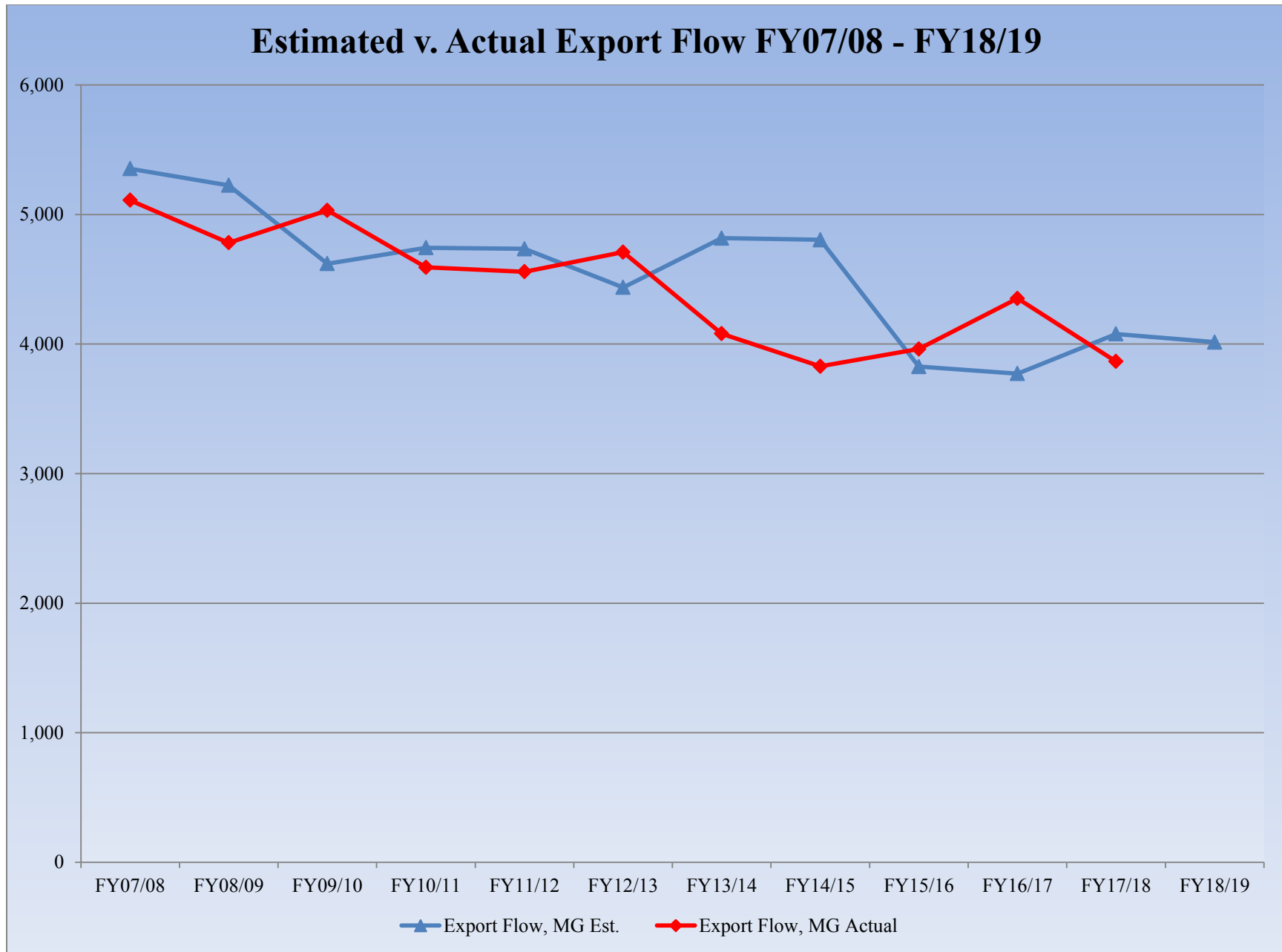
- Approved versus actual expenses for total expenses, labor costs, and PG&E
- Estimated versus actual export flow
- Estimated versus actual cost per million gallons

Although flow and PG&E costs are directly linked, other factors such as fixed costs for labor and equipment repair maintain relatively flat or slightly increasing cost curves. Export flow is decreasing over time due to water recycling efforts.

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Estimated v. Actual Cost / MG FY07/08 - FY18/19

