

LAVWMA FY2017/18 Budget

**LIVERMORE-AMADOR VALLEY  
WATER MANAGEMENT AGENCY  
OPERATING AND CAPITAL BUDGET  
FISCAL YEAR 2017/18**

**Prepared April 14, 2017**

**Approved by the Board April 19, 2017**

# LAVWMA FY2017/18 Budget

## LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2017/18

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# LAVWMA FY2017/18 Budget

## LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2017/18

### EXECUTIVE SUMMARY

#### OPERATING BUDGET

The proposed operating budget of \$2,946,500 is a 4.50% increase from the FY2016/17 budget. The total revenue requirement of \$11,764,975 is a 1.11% increase from the FY2016/17 budget. Debt service payments consist of \$2,438,772 for the Repair Project, \$5,567,703 for the Expansion Project and \$412,000 for EBDA Capacity.

The proposed FY2017/18 operating budget considers projected FY2016/17 expenditures and is largely based on the detailed budget prepared by DSRSD pursuant to the Maintenance Agreement, copy attached. FY2016/17 O&M expenditures are projected to be above the approved budget by approximately 4.6%. This is almost entirely due to PG&E power costs related to high storm flows this winter and spring. DSRSD's budget is reflective of this. Significant water recycling efforts in the service area are continuing and should increase over time. The annual reconciliation process will collect any additional needed funds.

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.

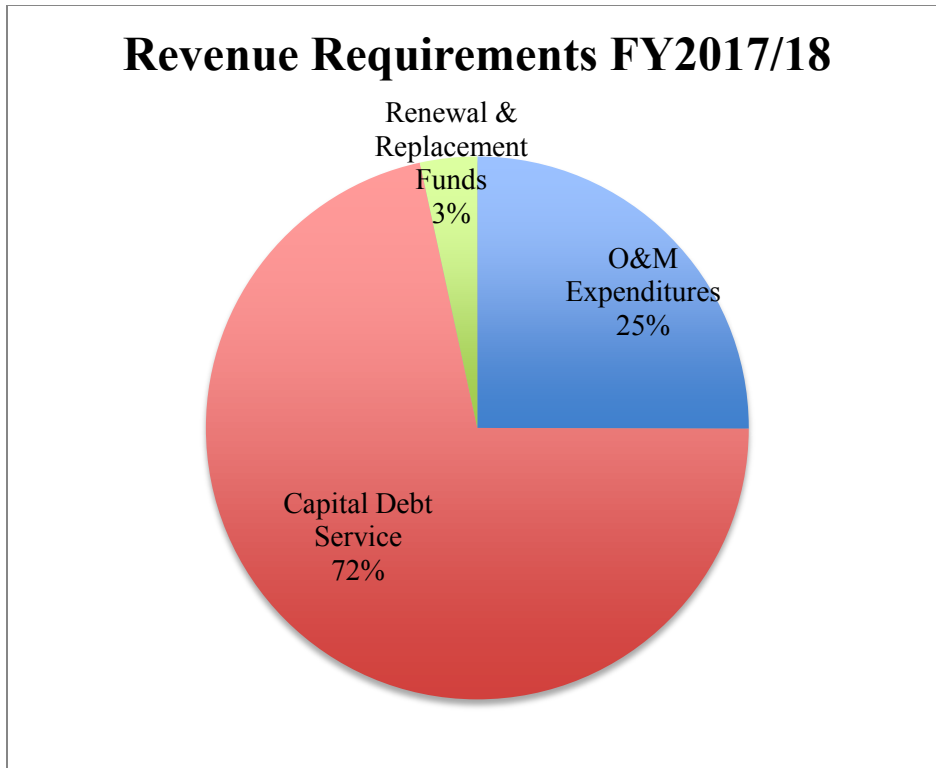
#### CAPITAL BUDGET

The FY2017/18 capital budget of \$677,000 is for the renewal and replacement of LAVWMA and EBDA facilities and includes the purchase of three new pumps, the repair of three pumps and, various other recommended projects. All of these major projects have been recommended by the Pump Station Evaluation Consultant and/or DSRSD staff.

#### REVENUE REQUIREMENTS

The FY2017/18 budget also includes the debt service (repair and expansion) for the 2011 Bonds and for 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 are 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 two years ago. Dual Use facilities are minimal and are currently adequately funded. The following pie chart illustrates the allocation of the \$11,764,975 in total revenue requirements for FY2017/18.

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## 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 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.

# LAVWMA FY2017/18 Budget

## 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.

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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

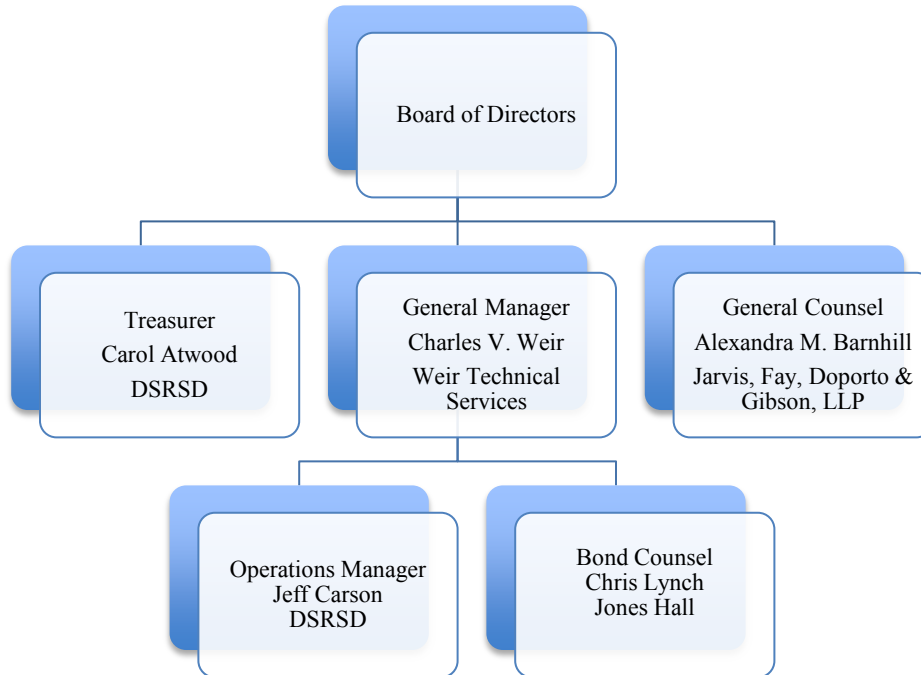
To carry out our Mission, LAVWMA will pursue the following goals:

- **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.

# LAVWMA FY2017/18 Budget

## 1.2 ORGANIZATION

The LAVWMA team proposed for FY2016/17 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 FY2017/18 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.

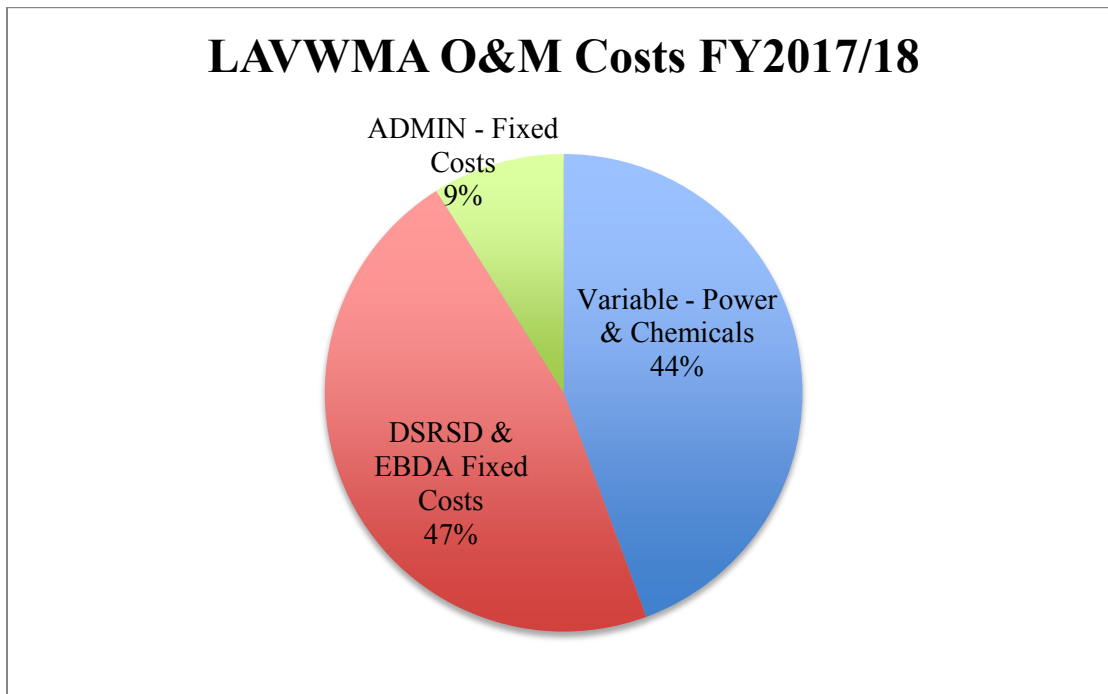
# LAVWMA FY2017/18 Budget

<b>FY2017/18 OPERATIONS BUDGET SUMMARY</b>							
			FY2016/17 Adopted Budget	FY2016/17 Projected Actual	FY2017/18 Proposed Budget	Change From Adopted FY2016/17	
<b>OPERATIONS AND MAINTENANCE</b>							
<b>VARIABLE COSTS</b>							
	DSRSD Maintenance Agreement (Power)		\$ 1,035,250	\$ 1,248,005	\$ 1,150,000	11.08%	
	EBDA O&M		155,000	158,080	157,500	1.61%	
	Subtotal - O&M Variable Costs		1,190,250	1,406,084	1,307,500	9.85%	
<b>FIXED COSTS</b>							
	DSRSD Maintenance Agreement						
	Labor/equip		760,000	699,745	760,000	0.00%	
	Materials/Supplies		30,000	33,792	35,000	16.67%	
	Contractual		82,000	82,122	60,000	-26.83%	
	Monitoring/Testing		22,000	20,730	22,000	0.00%	
	Utilities (fixed)		7,500	8,244	8,000	6.67%	
	Non Routine		12,000	-	-	-100.00%	
	EBDA O&M		450,000	453,058	490,000	8.89%	
	Subtotal - O&M Fixed Costs		1,363,500	1,297,691	1,375,000	0.84%	
<b>ADMIN/MGMT</b>							
	Mgr/Treas/Counsel/Board		131,000	142,475	141,000	7.63%	
	Services/Supplies/Misc		75,000	43,000	88,000	17.33%	
	Permits/Insurance		60,000	60,000	35,000	-41.67%	
	Subtotal Admin/Mgmt		266,000	245,475	264,000	-0.75%	
	Subtotal All Fixed Costs		1,629,500	1,543,165	1,639,000	0.58%	
	<b>TOTAL O&amp;M COSTS</b>		<b>\$ 2,819,750</b>	<b>\$ 2,949,250</b>	<b>\$ 2,946,500</b>	<b>4.50%</b>	
<b>CAPITAL PROGRAM FUNDING</b>							
	Replacement Fund		400,000	400,000	400,000	0.00%	
	Repair Debt Service		2,438,011	2,438,011	2,438,772	0.03%	
	Expansion Debt Service		5,565,964	5,565,964	5,567,703	0.03%	
	EBDA Debt Service		412,000	412,000	412,000	0.00%	
	SUBTOTAL		\$ 8,815,975	\$ 8,815,975	\$ 8,818,475	0.03%	
<b>TOTAL REVENUE REQUIREMENTS</b>			<b>\$ 11,635,725</b>	<b>\$ 11,765,225</b>	<b>\$ 11,764,975</b>	<b>1.11%</b>	

# LAVWMA FY2017/18 Budget

## 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 \$1,307,500 and make up approximately 47% of LAVWMA’s total operating budget. Pumping and chemical costs for FY2017/18 are projected to be 9.85% more than last year. DSRSD estimates a 3% increase in PG&E rates and that is reflected in the power costs. The drought conditions over the last five years resulted in underestimating power costs for FY2016/17. The FY2017/18 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 FY2017/18 is estimated to require 5,274 fully burdened labor hours. This is 50 hours more than last. 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 FY2016/17 and anticipated needs for FY2017/18.

### 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



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on different percentages that the LAVWMA's fixed cost in the agreement with 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%

EBDA Special Projects total \$375,000 next year. The special projects include the following for FY2017/18:

- Evaluation of the forcemain system, \$250,000
- Peracetic acid pilot test, \$75,000
- Strategic Planning for revising the Joint Powers Agreement, \$50,000

LAVWMA is responsible for a portion of the forcemain system and will be billed accordingly. If the peracetic acid test is successful, the current dechlorination system could be phased out and save EBDA and LAVWMA agencies substantial funds. LAVWMA will pay a negotiated flat fee of \$5,000 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 \$490,000 as compared with \$450,000 last year. The increase is largely based on the permit fee and special project costs. Total EBDA costs for variable and fixed costs for FY2017/18 are \$647,500 as compared with \$605,000 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 \$264,000 as compared with \$266,000 last year or a reduction of 0.75%. 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 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.

## **2.2.5 Capital Program Funding**

This category includes the projected FY2017/18 debt service (repair and expansion) for 2011 bonds and the EBDA capacity purchase. 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 \$677,000 cost of capital projects in FY2017/18. Dual Use facilities are minimal and have adequate replacement funds. Funding requirements for the renewal and replacement of Sole Use facilities are currently being reviewed with the City of Livermore and will be presented to the Board at a later date.

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The Board has been kept informed of the pump purchase and repair project. The list also includes several other projects recommended by the consultant that prepared the Pump Station Evaluation Report or have been recommended by DSRSD staff. Major Capital Projects for FY2016/17 include the following:

<b>Project</b>	<b>Description</b>	<b>Cost</b>
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	\$402,000
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
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

### 2.3 Changes from FY2016/17 Budget

FY2017/18 expenditures are projected to come in over budget due primarily to power costs. The annual reconciliation process will resolve any over or under payments. The FY2017/18 Budget is 1.11% more than FY2016/17 in Total Revenue Requirement. This modest total increase is largely due to power costs and EBDA costs as detailed above.

## 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 FY2017/18.

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R & R Fund Balances	Joint	Dual	Sole	Total
Start of year	15,220,000	405,600	1,520,000	17,145,600
Deposits	400,000	0	0	400,000
Interest Earnings	36,000	1,000	4,000	40,000
Proposed Expenditures	666,000	1,000	10,000	677,000
End of Year	14,990,000	405,600	1,514,000	16,909,600

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 FY2016/17 and recommendations for FY2017/18 show that LAVWMA will have decreased the Joint Use R&R Fund by approximately \$274,500 since FY2010/11.

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	48,931	(353,404)	(4,473)
FY2013/14	300,000	36,396	(119,955)	216,441
FY2014/15	300,000	21,600	(439,073)	(117,473)
FY2015/16	400,000	35,000	(336,712)	98,288
FY2016/17	400,000	35,000	(600,000)	(165,000)
FY2017/18	400,000	35,000	(677,000)	(242,000)
<b>Total</b>	<b>2,400,000</b>	<b>263,553</b>	<b>(2,938,029)</b>	<b>(274,476)</b>

## 3.2 Discussion of Capital Expenditures Proposed for FY2017/18

The following table summarizes \$677,000 of anticipated FY2017/18 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.

### FY2017/18 Capital Program Expenditures

FY2017/18 Capital Program Expenditures	
Renewal/Replacement Program	
LAVWMA Export Pumps: 3 new plus repair of 3.	\$402,000
Snorkels and Flow Meters at Junction Structure Piping	\$125,000
Other Misc. LAVWMA Renewal/Replacements	\$50,000
Other Misc. LAVWMA Renewal/Replacements	\$50,000
CIP Planning/Mgmt/Contingency	\$50,000
<b>Total Expenditures</b>	<b>\$677,000</b>

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## 4.0 FY2017/18 Member Agency Cost Sharing & Schedule

<b>Member Agency Costs FY2017/18</b>			
	<b>Total</b>	<b>Livermore</b>	<b>DSRSD/Pleasanton</b>
Variable O&M	\$ 1,307,500	\$ 457,625	\$ 849,875
Fixed O&M	1,614,000	485,814	1,128,186
Sole Use Fixed O&M	25,000	25,000	
<b>Total O&amp;M</b>	<b>2,946,500</b>	<b>968,439</b>	<b>1,978,061</b>
Replacement Fund	400,000	120,400	279,600
Repair Debt	2,438,773	974,290	1,464,483
Expansion Debt	5,567,703	1,253,847	4,313,856
EBDA Debt	412,000	74,902	337,098
<b>Total Capital Costs</b>	<b>8,818,476</b>	<b>2,423,438</b>	<b>6,395,038</b>
<b>Total Revenue Required</b>	<b>\$ 11,764,975</b>	<b>\$ 3,391,877</b>	<b>\$ 8,373,098</b>
Semi Annual O&M Advance	1,473,250	484,220	989,030
Semi Annual Replacement Fund Advance	200,000	60,200	139,800
EBDA Debt Advance, July 1	412,000	74,902	337,098
July 1 Bond Debt Service Advance	6,078,863	1,691,698	4,387,165
Jan 1 Bond Debt Service Advance	1,927,613	536,439	1,391,174
<b>Total July 1 Advance</b>	<b>\$ 8,164,112</b>	<b>2,311,019</b>	<b>5,853,093</b>
<b>Total January 1 Advance</b>	<b>\$ 3,600,862</b>	<b>\$ 1,080,858</b>	<b>\$ 2,520,004</b>
<b>Percentages</b>			
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%

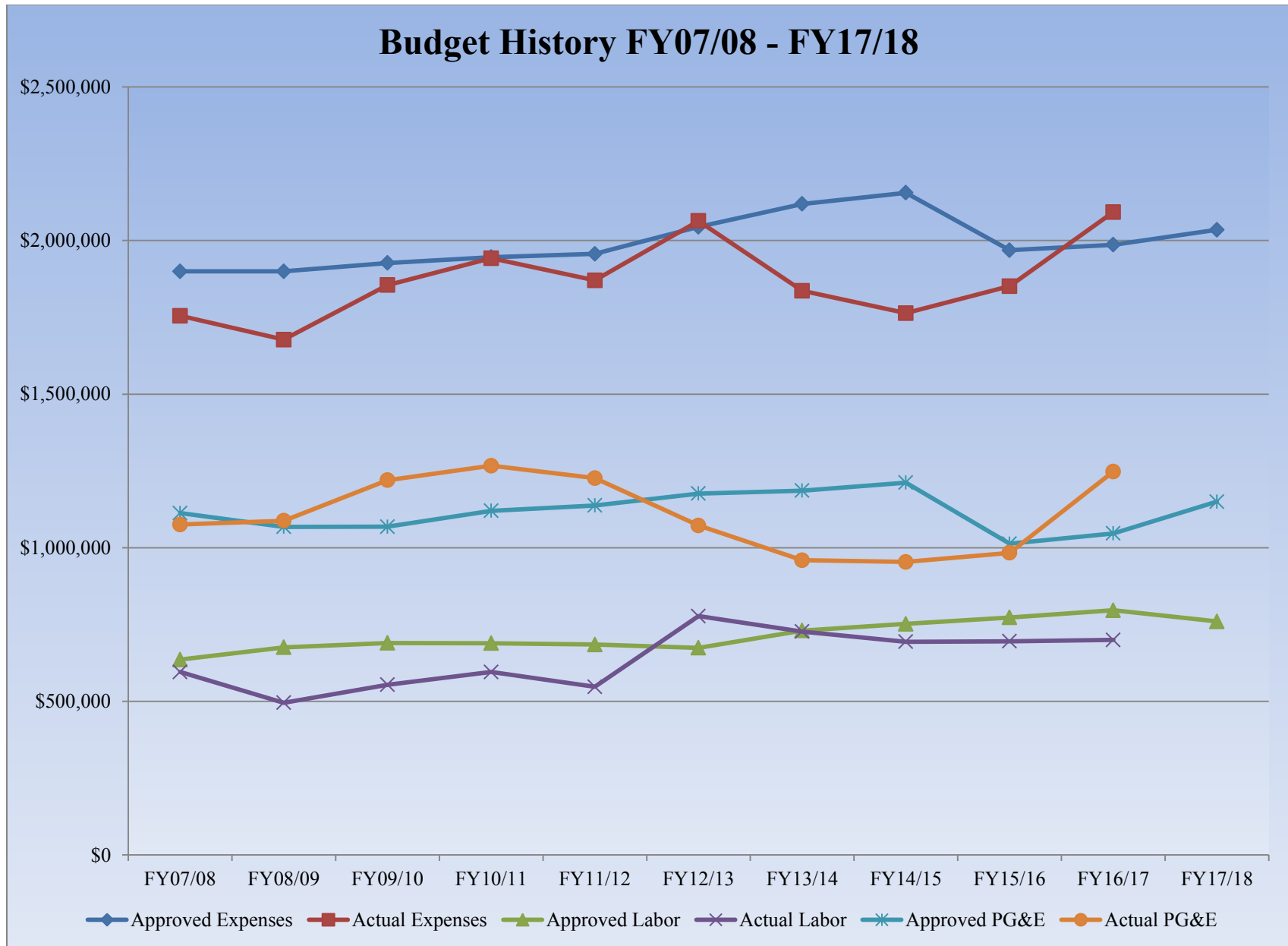
## 5.0 Budget Trends FY2007/08 – FY2017/18

The following charts show expense trends from FY07/08 through FY15/16. The charts show the following:

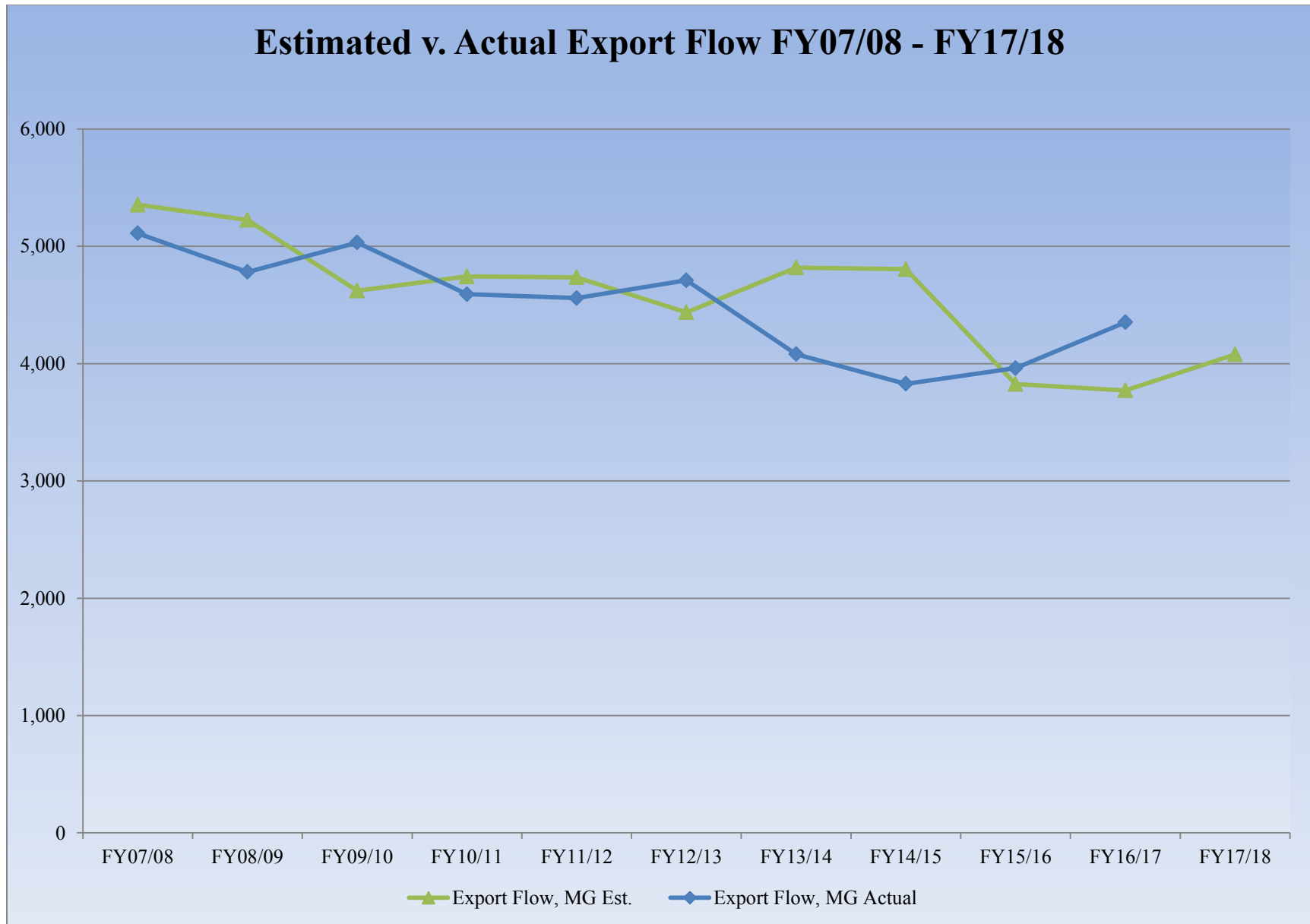
- Approved versus actual expenses for total expenses, labor costs, and PG&E
- Estimated versus actual export flow
- Estimated versus actual cost per million gallons

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.

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