



**LIVERMORE-AMADOR VALLEY  
WATER MANAGEMENT AGENCY  
OPERATING AND CAPITAL BUDGET**

**MODIFICATION NO. 1**

**FISCAL YEAR 2021/22**

**Approved by the LAVWMA Board August 18, 2021**

# LAVWMA FY2021/22 Budget

## LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2021/22

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# LAVWMA FY2021/22 Budget

## LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2021/22

### EXECUTIVE SUMMARY

#### OPERATING BUDGET

The proposed operating budget of \$3,610,480 is a 3.65% increase from the FY2020/21 budget. The total revenue requirement of \$12,010,455 is a 1.02% increase from the FY2020/21 budget. Debt service payments consist of \$2,436,792 for the Repair Project, \$5,563,183 for the Expansion Project for a total of \$8,399,975. It should also be noted that the DSRSD proposed budget for LAVWMA proposes a modest 2% decrease for operations and maintenance. DSRSD costs were typically well below estimates such that LAVWMA's budget was less than their projections. DSRSD's current proposed budget is less conservative than in the past such that LAVWMA's budget will be closer to DSRSD's proposal.

The FY2020/21 Budget includes a few items that exceeded the approved budget including:

- PG&E power will be above budget based on projections for the first nine months of the year. However, low rainfall, water recycling, and the new time of use schedule may result in lower costs than projected.
- Labor will be above budget due to a number of projects and maintenance activities that were required this year.
- Management expenses will be above budget due to the number of capital projects, flow modeling for the EBDA agreement, EBDA negotiations, NPDES permit renewal, amendment to the maintenance agreement with DSRSD, and numerous contracts for projects.

The total EBDA O&M budget of \$839,880 is 4.73% above last year. In addition to the increase of approximately \$150,000 annually for the new Master Agreement, the increase is largely due to an increase in the NPDES permit fee and studies for the nutrient permit. LAVWMA owns 19.72 MGD of EBDA's 189.1 MGD capacity, or 10.43%. With the new Master Agreement the fixed cost will increase 18.6% to 26.1%. Costs for EBDA are based on fixed and variable (flow based) percentages. The flow-based percentage is currently 16.24% as compared to 17.9% last year. It is in LAVWMA's best interests to reduce variable costs through a combination of reducing flows through water recycling and flow management during wet weather. The EBDA Master Agreement has been extended through June 30, 2021. EBDA and LAVWMA have agreed to a term sheet for a new agreement. An Amended and Revised Master Agreement is going before both Boards for approval the week of May 17, 2021. EBDA costs for FY21/22 are now based on the new Master Agreement.

The proposed FY2021/22 operating budget considers projected FY2020/21 expenditures and is largely based on the detailed budget prepared by DSRSD pursuant to the Maintenance Agreement, copy attached. FY2020/21 O&M expenditures are projected to be above the approved budget by approximately 2.4%. This is primarily due to the increased costs for DSRSD labor and administrative costs as previously noted. The proposed budget includes no increase in

# LAVWMA FY2021/22 Budget

PG&E costs. The annual reconciliation process will collect any shortfall from the member agencies. Significant water recycling efforts in the service area are continuing and should increase over time, which will help to offset PG&E rate increases. Increased pumping efficiency will also help to offset rate increases. A new time of use rate structure that became effective in March 2021 could also prove beneficial. DSRSD staff has responded well to the new time of use schedule.

DSRSD's costs reflect a 2.75% cost of living adjustment. 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.

Items that are increasing in the FY2021/22 Budget include the following:

- DSRSD labor, 11.23%, due to the number of projects being undertaken and to more closely coincide with DSRSD's projections.
- EBDA O&M costs due to the new Master Agreement, permit fees, and regional monitoring program costs.
- Monitoring and testing due to implementation of the new NPDES permit, which will require more frequent monitoring for ammonia, and the need for the lab to obtain certification for the E. coli test.
- Management, Legal, and Treasurer costs due to the refunding, capital project management and contract preparation, and a thorough review of both the maintenance agreement and the Joint Powers Agreement. Both date to 1979 and have not been reviewed in many years.

Items that are decreasing in the FY2021/22 Budget include the following:

- Contractual services since the NPDES permit has been renewed and there is no need for technical assistance for the next four years.
- Services and supplies under Administration are decreasing since the vacant Administrative Assistant position has not been filled due to COVID-19, the completion of the website upgrade, and the completion of the records management project.

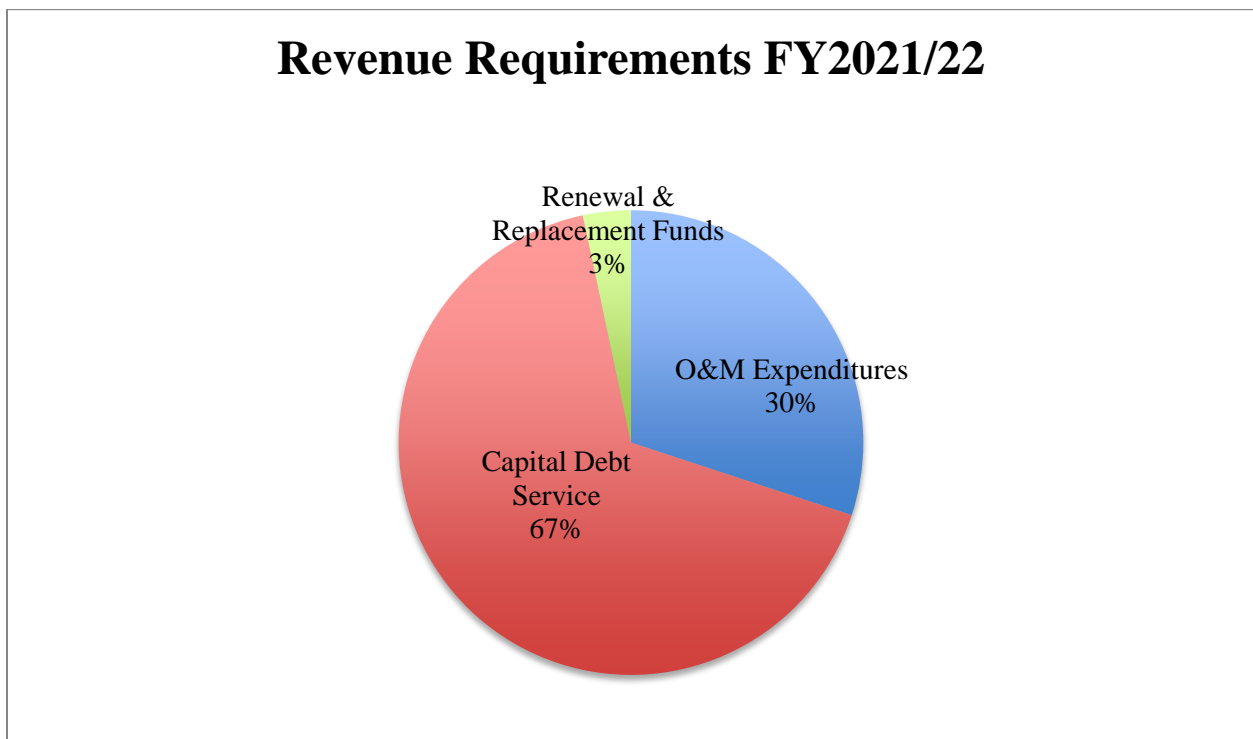
## **CAPITAL BUDGET**

The FY2020/21 capital budget was \$4,446,000, of which approximately \$584,000 is projected to be spent this fiscal year. Much of this is due to delays associated with COVID-19 issues, as well as hiring of new staff by DSRSD. In addition several of the projects are intended to span more than one fiscal year. The FY2021/22 capital budget of \$4,170,000 is for the renewal and replacement of LAVWMA and EBDA facilities and includes the purchase of three new pumps and rebuilding two motors, design improvements at the San Leandro Sample Station (SLSS), drainage improvements, continuation of the motor control center replacement project, cathodic protection improvements, and pipeline inspection. Pipeline inspection will now be an annual project with the intent of completing inspection of the entire system within five years. All of these major projects have been recommended by DSRSD staff. Please refer to the tables below which provide descriptions and summarize the costs.

# LAVWMA FY2021/22 Budget

## REVENUE REQUIREMENTS

The FY2021/22 budget also includes the debt service (repair and expansion) for the 2011 Bonds. Although repair and expansion of the existing pipeline is a capital cost, 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. It should be noted that refunding of the debt is underway and has the potential to save at least \$1,000,000 per year in debt payments. 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 five years ago. Due to the increased cost of the MCC and SLSS Projects, the contribution should be revisited next year. Dual Use facilities are minimal and are currently adequately funded. The following pie chart illustrates the allocation of the \$12,010,455 in total revenue requirements for FY2021/22.



### 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. A significant portion of member agency flows are kept within their service areas for water recycling purposes.

# LAVWMA FY2021/22 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

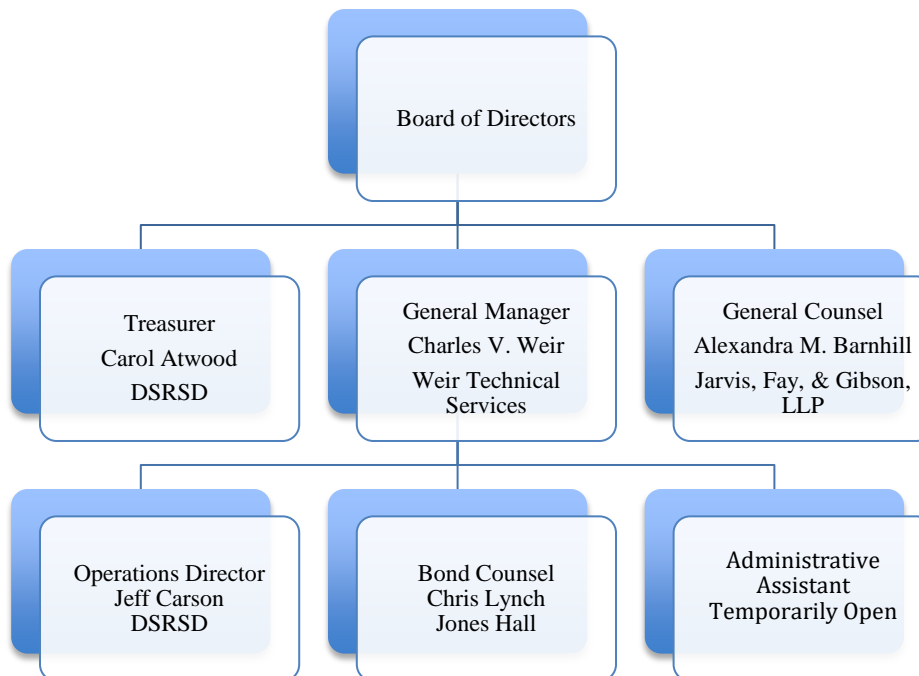
To carry out our Mission, LAVWMA will pursue the following goals:

- **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.

### 1.2 ORGANIZATION

The LAVWMA team proposed for FY2021/22 is shown in the following chart.

# LAVWMA FY2021/22 Budget



## 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 FY2021/22 Operating Budget on the following pages 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 FY2021/22 Budget

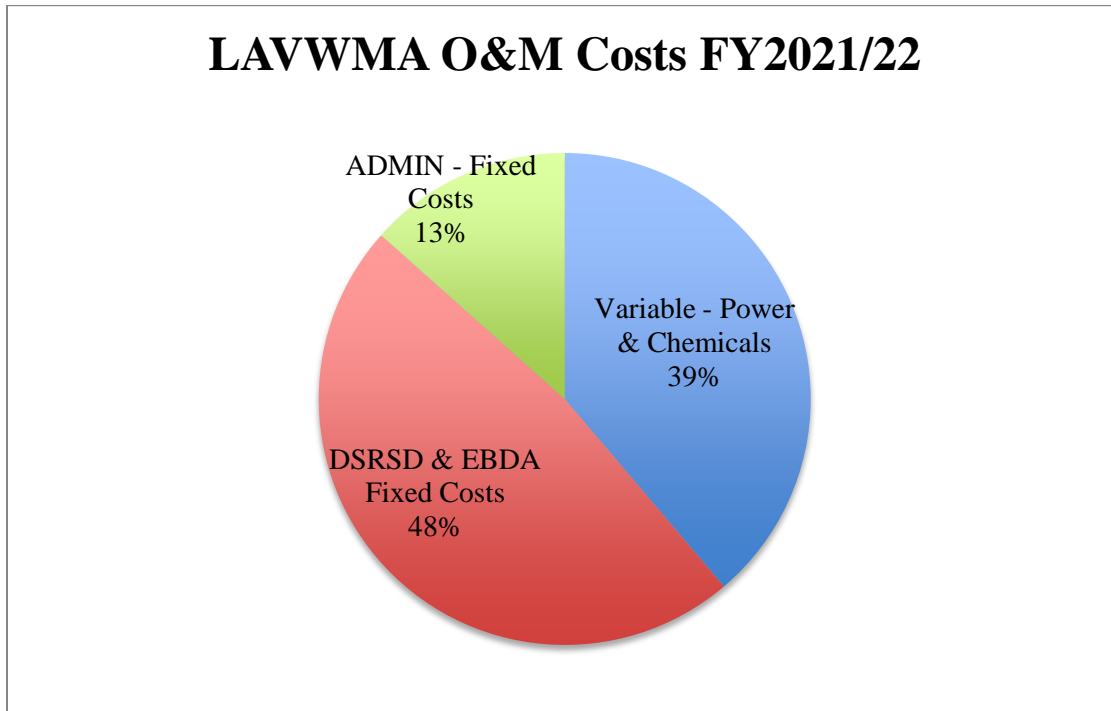
<b>FY2021/22 OPERATIONS BUDGET SUMMARY</b>							
			FY2020/21 Adopted Budget	FY2020/21 Projected Actual	FY2021/22 Proposed Budget	Change From Adopted FY2020/21	
<b>OPERATIONS AND MAINTENANCE</b>							
<b>VARIABLE COSTS</b>							
	DSRSD Maintenance Agreement (Power)		\$ 1,250,000	\$ 1,317,180	\$ 1,250,000	0.00%	
	EBDA O&M (See Table, Section 2.2.1)		157,000	141,273	150,828	-3.93%	
	Subtotal - O&M Variable Costs		1,407,000	1,458,453	1,400,828	-0.44%	
<b>FIXED COSTS</b>							
	DSRSD Maintenance Agreement						
	Labor		797,000	862,524	886,500	11.23%	
	Materials/Supplies		50,000	47,597	50,000	0.00%	
	Contractual		70,000	43,831	50,000	-28.57%	
	Monitoring/Testing		31,000	31,148	35,000	12.90%	
	Utilities (fixed)		7,000	9,507	7,000	0.00%	
	Non Routine		8,000	-	8,000	0.00%	
	EBDA O&M (See Table, Section 2.2.3)		645,000	651,529	689,051	6.83%	
	EBDA Total		802,000	792,803	839,880	4.72%	
	Subtotal - O&M Fixed Costs		1,608,000	1,646,135	1,725,551	7.31%	
<b>ADMIN/MGMT</b>							
	Mgr/Treas/Counsel/Board		273,000	329,366	312,600	14.51%	
	Services/Supplies/Misc		132,500	63,887	67,500	-49.06%	
	Permits/Insurance		62,900	76,396	104,000	65.34%	
	Subtotal Admin/Mgmt		468,400	469,648	484,100	3.35%	
	Subtotal All Fixed Costs		2,076,400	2,115,784	2,209,651	6.42%	
	<b>TOTAL O&amp;M COSTS</b>		<b>\$ 3,483,400</b>	<b>\$ 3,574,237</b>	<b>\$ 3,610,480</b>	<b>3.65%</b>	
<b>CAPITAL PROGRAM FUNDING</b>							
	Replacement Fund		400,000	400,000	400,000	0.00%	
	Repair Debt Service		2,438,658	2,438,658	2,436,792	-0.08%	
	Expansion Debt Service		5,567,442	5,567,442	5,563,183	-0.08%	
	SUBTOTAL		\$ 8,406,100	\$ 8,406,100	\$ 8,399,975	-0.07%	
<b>TOTAL REVENUE REQUIREMENTS</b>			<b>\$11,889,500</b>	<b>\$11,980,337</b>	<b>\$12,010,455</b>	<b>1.02%</b>	



# LAVWMA FY2021/22 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 \$1,400,828 and make up approximately 38.8% of LAVWMA’s total operating budget. Pumping and chemical costs for FY2021/22 are projected to be 0.44% less than last year. PG&E’s new time of use schedule went into effect on March 1, 2021. As a consequence LAVWMA is not pumping during the peak times of 4:00 p.m. to 9:00 p.m. every day. LAVWMA and DSRSD believe that it may be possible to reduce costs through prudent management of the new time of use schedule. The FY2021/22 Budget is based on actual costs for the current year. The following table details the variable costs for EBDA.

Facility	Variable Cost	LAVWMA Cost, 16.24%
General Administration	\$21,500	\$3,492
Outfall & Forcemains	\$150,000	\$5,432 (22.3%)
Marina Dechlor Facility	\$457,000	\$74,216
Oro Loma Pump Station	\$465,000	\$75,515
Bay & Effluent Monitoring	\$55,000	\$8,932
<b>Total</b>	<b>\$1,148,500</b>	<b>\$167,587</b>

# LAVWMA FY2021/22 Budget

The total estimate for EBDA Variable O&M Costs is 90% of the above total, or \$150,828 or a 3.93% decrease from last year.

## 2.2.2 Fixed Costs - DSRSD Maintenance Agreement

Operation and maintenance of LAVWMA facilities for FY2021/22 is estimated to require 5,800 fully burdened labor hours. This is the slightly less last year. Costs for these items are based on projected costs for FY2020/21 and anticipated needs for FY2021/22.

## 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 than LAVWMA’s fixed cost percentage 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 23.29% for a total of \$65,209. LAVWMA’s share of the permit fee (\$593,483) 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 \$158,003.

LAVWMA’s share of EBDA Special Projects for FY2021/22 are less than \$5,000, which is much lower than in prior years.

LAVWMA is responsible for a portion of the forcemain system and will be billed accordingly. With the new Master Agreement LAVWMA will be responsible for 26.1% of the fixed costs for “shared” EBDA facilities. The new Master Agreement is retroactive to July 1, 2020. This year’s fixed cost budget is \$689,051, which is 6.83% more than last year. Total EBDA costs for variable and fixed costs for FY2021/22 are \$839,880 as compared with \$802,000 last year. The following table summarizes the Fixed and Special Projects costs for EBDA.

Facility and Total Variable Cost	Fixed Cost	LAVWMA Percent Cost	LAVMWA Estimated Cost
General Administration	\$1,318,975	26.1%	\$344,252
Outfall & Forcemains	\$25,000	26.1%*22.3%=5.8%	\$1,455
Marina Dechlor Facility	\$39,500	26.1%	\$10,310
Oro Loma Pump Station	\$36,000	26.1%	\$9,396
Bay & Effluent Monitoring	448,382	26.1%	\$117,028
NPDES Permit Fee	\$593,473	26.62%	\$158,003
RMP Fee	\$280,000	23.29%	\$65,209
Nutrients Fee	\$285,346	19.55%	\$55,783
Disinfection Master Plan & Contingency	\$25,726	16.24%	\$4,178
<b>Total</b>	<b>\$2,052,042</b>		<b>\$765,612</b>

# LAVWMA FY2021/22 Budget

Historically, EBDA has averaged approximately 90% of budget for the fixed costs listed above. Accordingly, \$689,051 is included in the FY20/21 Budget.

## 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 \$484,100 as compared with \$468,400 last year or an increase of 3.65%. The increases are due to the following: 1) numerous capital projects requiring management and contract preparation; 2) review and probable negotiation for both the DSRSD maintenance agreement and the Joint Powers Agreement; 3) and a projected 49% (42% last year) increase in insurance costs. The overall increase is modest since there is no need for technical assistance for the permit renewal, the website upgrade has been completed, and the records management project has been completed. The asset management program is linked to DSRSD's efforts for their own system. Asset Management made great strides this past year and will continue to 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. There will also be costs associated with the refunding effort. All outside costs will be covered by the bond proceeds.

## 2.2.5 Capital Program Funding

This category includes the projected FY2021/22 debt service (repair and expansion) for 2011 bonds. It is acknowledged that debt service payments will change when the refunding is completed. 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 \$4,170,000 cost of capital projects in FY2021/22. It is acknowledged that it may not be possible to complete all of the capital projects this fiscal year. However, it is best to get them on the list so that proper planning and scheduling can occur. Dual Use facilities are minimal and have adequate replacement funds.

The first table below lists the capital projects that will be completed by the end of FY2020/21. The second table lists all recommended projects for FY2021/22. All projects have been recommended and vetted by DSRSD staff.

<b>FY2020/21 Capital Program Expenditures</b>	
Purchase three new pumps and rebuild motors	\$14,000
Resealing of all Three Storage Basins	\$150,000
San Leandro Sample Station Design Improvements	\$0
MCCs and Soft Starters	\$250,000
Road Drainage Improvements	\$0
Pump Station and Pipeline Risk Analysis	\$184,000

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Cathodic Protection Projects	\$50,000
PLC / SCADA Upgrade at the Pump Station	\$0
Pipeline Inspection	\$75,000
Electrical Improvements to Main Switchgear	\$0
Smart Detectors on Air/Vac and Air Release Valves	\$20,000
Other Misc. LAVWMA Renewal/Replacements	\$20,000
Other Misc. EBDA Renewal/Replacements	\$5,000
CIP Planning/Management Contingency	\$0
<b>Total Expenditures</b>	<b>\$768,000</b>

<b>FY2021/22 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
Purchase three new pumps and rebuild two associated motors.	Due to COVID-19 issues, this project has been delayed from FYE21. Bids resulted in significantly higher pump costs than anticipated. This project is being increased through Modification No. 1 of the budget to account for the higher pump costs, five year warranty for the pumps, rebuilding two motors, and DSRSD staff time to remove the old pumps and install the new pumps and rebuilt motors.	\$510,000
San Leandro Sample Station (SLSS) Design Improvements	<p>This project has evolved from what was described for last year's budget and is being carried over. It also now includes:</p> <ol style="list-style-type: none"> <li>1. 24-inch flow control valve</li> <li>2. 20-inch flow control valve</li> <li>3. Two 30-inch flow meters</li> <li>4. Two chlorine residual analyzers</li> <li>5. Miscellaneous piping and fittings to accommodate different pipe sizes</li> <li>6. Improvements to the Programmable Logic Controller (PLC), Human Machine Interface (HMI), Supervisory Control and Data Acquisition System (SCADA), networking and programming</li> </ol> <p>The SLSS station has to be designed to measure chlorine residual and monitor pH continuously. These parameters have to be measured both when effluent is going to EBDA and when effluent is dechlorinated and diverted to San Lorenzo Creek during wet weather events or during system testing. Composite</p>	\$670,000

# LAVWMA FY2021/22 Budget

<b>FY2021/22 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
	<p>samples of LAVWMA’s effluent need to be taken when its directed to both EBDA and San Lorenzo Creek. Grab samples of LAVWMA’s Effluent also need to be collected for Bacteriological analysis in both situations. The design of the SLSS is complicated by the following factors: 1) The discharge to San Lorenzo Creek wet weather outfall is rare; 2) During normal daily operations the LAVWMA pumps shut off during peak demand periods and therefore the pipeline is not full during those times; 3) The station is not staffed continuously. The goal of this project is to work with operational staff and the RWQCB to design the station to meet operational, maintenance and regulatory expectations in a manner which creates as little day to day maintenance as possible. The project will now also address probable sea level rise at the discharge point and provide a design to ensure discharge will always be possible. A draft RFP for design engineering consulting services is under review.</p>	
Pump Station Motor Control Center (MCC) and Soft Starter Upgrades	<p>This project is underway. DTN Engineers is under contract for the design and technical support during construction. Royal Electric was selected for the construction. Psomas was selected for project management services. Royal Electric has submitted all the required documents and the MCC manufacturer has been given approval to manufacture the MCCs. Approximately \$250,000 has been spent in FYE21. Total Cost = \$2,500,000.</p>	\$2,250,000
Road Drainage Improvements at the LAVWMA Pump Station	<p>Included in last year’s budget, this project has been delayed due to COVID-19 and staffing issues. It will be combined with similar projects for DSRSD, which may result in some cost savings. This project will improve road drainage north of the storage basins.</p>	\$35,000

## LAVWMA FY2021/22 Budget

<b>FY2021/22 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
Cathodic Protection Projects	This project is being carried over from FYE21. Corpro is proceeding with this project. There were eleven tasks and the simplest eight have been completed. Three tasks require permitting, excavation and traffic control and are in development. Total Coat = \$185,000.	\$135,000
PLC Upgrade at the Pump Station	This project is being carried over from FYE21. The existing Programmable Logic Controller (PLC) at the pump station is almost 20 years old and is near the end of its useful life. It is an OPTO22 system and needs to be upgraded to Allen Bradley PLC to match the PLCs used by DSRSD. An upgrade to the OPTO22 system at the San Leandro Pump Station is already complete. This is a complex project that requires engineering design, equipment, installation, and construction support. Upon completion the system will be consistent with that of DSRSD improving operation and performance. It will also be helpful with managing the system under the likely terms of the new EBDA agreement. DSRSD staff has held scoping meetings with the various suer groups.	\$300,000
Pipeline Inspection	One of the recommendations from the risk analysis project was to inspect portions of the pipeline and provide a report with future recommendations. The report recommended repairs on one section that will coat approximately \$35-40,000. The repot also recommends continuing to inspection portions of the forcemains annually such that the entire pipeline will have been inspected within about five years. Mush of this cost is for DSRSD staff as we learned the complexity of pipeline inspection this past fall.	\$100,000
Electrical Improvements to the Main Switchgear at the Pump Station	This project is being carried over from FYE21. This project will improve the original equipment at the pump station. It includes upgrading to multi-function	\$50,000

## LAVWMA FY2021/22 Budget

<b>FY2021/22 Capital Program Expenditures</b>		
<b>Project</b>	<b>Description</b>	<b>Cost</b>
	relays at the main service switch gear, which will require some design and interfacing with PG&E. It also includes adding time delay/remote close/trip switches for the main breakers to reduce the arc flash hazard to staff. Both of these items were recommended by the 2016 Pump Station Evaluation Report.	
Smart Detectors on High Maintenance Air/Vac and Air Release Valves	This project would install Smart Detectors on pipeline vaults with high maintenance air/vac and air relief valves. The Smart Detectors would monitor the depth of the vault if an Air Relief Valve or Combination Valve fails or begins to leak water into the vault. The detector would recognize the level in vault is rising with water, and then send a signal/alarm to Operations which may prevent a spill to storm drains or creeks along the length of the pipelines. It will help to ensure compliance with Regional Board Sanitary Sewer Overflow requirements. Three detectors have been purchased and installed on at risk sites. Once those items are successfully tested additional detectors will be purchased.	\$20,000
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
<b>Total Expenditures</b>		<b>\$4,220,000</b>

### 2.3 Changes from FY2020/21 Budget

FY2020/21 expenditures are projected to come in approximately 2.6% above budget due labor, EBDA, and management activities. The annual reconciliation process will resolve any over or under payments. The FY2021/22 Budget is 1.02% more than FY2020/21 in Total Revenue Requirement. Total O&M costs are 3.65% more that was budgeted last year.

# LAVWMA FY2021/22 Budget

## 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 FY2021/22.

R & R Fund Balances	Joint	Dual	Sole	Total
Start of year	15,411,713	433,239	1,620,952	17,465,905
Deposits	400,000	0	0	400,000
Interest Earnings	56,922	1,560	5,835	64,317
Proposed Expenditures	(4,220,000)	(0)	(0)	(4,220,000)
End of Year	11,648,635	434,799	1,626,788	13,710,222

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 FY2020/21 and recommendations for FY2021/22 show that LAVWMA maintaining the Joint Use R&R Fund at a sustainable level since FY2010/11. Due to the total project costs and the low interest rates, the annual contribution should be reviewed in the next budget.

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	494,626	(309,115)	585,511
FY2019/20	400,000	500,000	(125,000)	775,000
FY2020/21	400,000	65,407	(768,000)	(302,593)
FY2021/22	400,000	64,317	(4,220,000)	(3,755,683)
<b>Total</b>	<b>4,000,000</b>	<b>1,780,163</b>	<b>(8,082,209)</b>	<b>(2,141,854)</b>



# LAVWMA FY2021/22 Budget

## 3.2 Discussion of Capital Expenditures Proposed for FY2021/22

The following table summarizes \$4,220,000 of anticipated FY2021/22 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.

<b>FY2021/22 Capital Program Expenditures</b>	
<b>*Carryover</b>	
*Purchase three new pumps and rebuild two motors	\$510,000
*San Leandro Sample Station Design Improvements	\$670,000
*MCCs and soft starters	\$2,250,000
*Road Drainage Improvements	\$35,000
*Cathodic Protection Projects	\$135,000
*PLC Upgrade at the Pump Station	\$300,000
Pipeline Inspection	\$100,000
*Electrical Improvements to Main Switchgear	\$50,000
*Smart Detectors on High Maintenance Pipeline Valves	\$20,000
Other Misc. LAVWMA Renewal/Replacements	\$50,000
Other Misc. EBDA Renewal/Replacements	\$50,000
CIP Planning / Management Contingency	\$50,000
<b>Total Expenditures</b>	<b>\$4,220,000</b>

## 4.0 FY2021/22 Member Agency Cost Sharing & Schedule

### Member Agency Costs FY2021/22

	<b>Total</b>	<b>Livermore</b>	<b>DSRSD/Pleasanton</b>
Variable O&M	\$ 1,400,828	\$ 490,290	\$ 910,538
Fixed O&M	2,184,651	657,580	1,527,071
Sole Use Fixed O&M	25,000	25,000	
Total O&M	3,610,480	1,172,870	2,437,610
Replacement Fund	400,000	120,400	279,600
Repair Debt	2,436,792	973,498	1,463,294
Expansion Debt	5,563,183	1,252,828	4,310,354
EBDA Debt	-	-	-

## LAVWMA FY2021/22 Budget

Total Capital Costs	8,399,975	2,346,727	6,053,248
<b>Total Revenue Required</b>	<b>\$ 12,010,455</b>	<b>\$ 3,519,597</b>	<b>\$ 8,490,858</b>
Semi Annual O&M Advance	1,805,240	586,435	1,218,805
Semi Annual Replacement Fund Advance	200,000	60,200	139,800
July 1 Bond Debt Service Advance	6,531,738	1,817,729	4,714,009
Jan 1 Bond Debt Service Advance	1,468,238	408,598	1,059,639
Total July 1 Advance	\$ 8,536,977	2,464,364	6,072,613
Total January 1 Advance	\$ 3,473,477	\$ 1,055,233	\$ 2,418,244
<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%

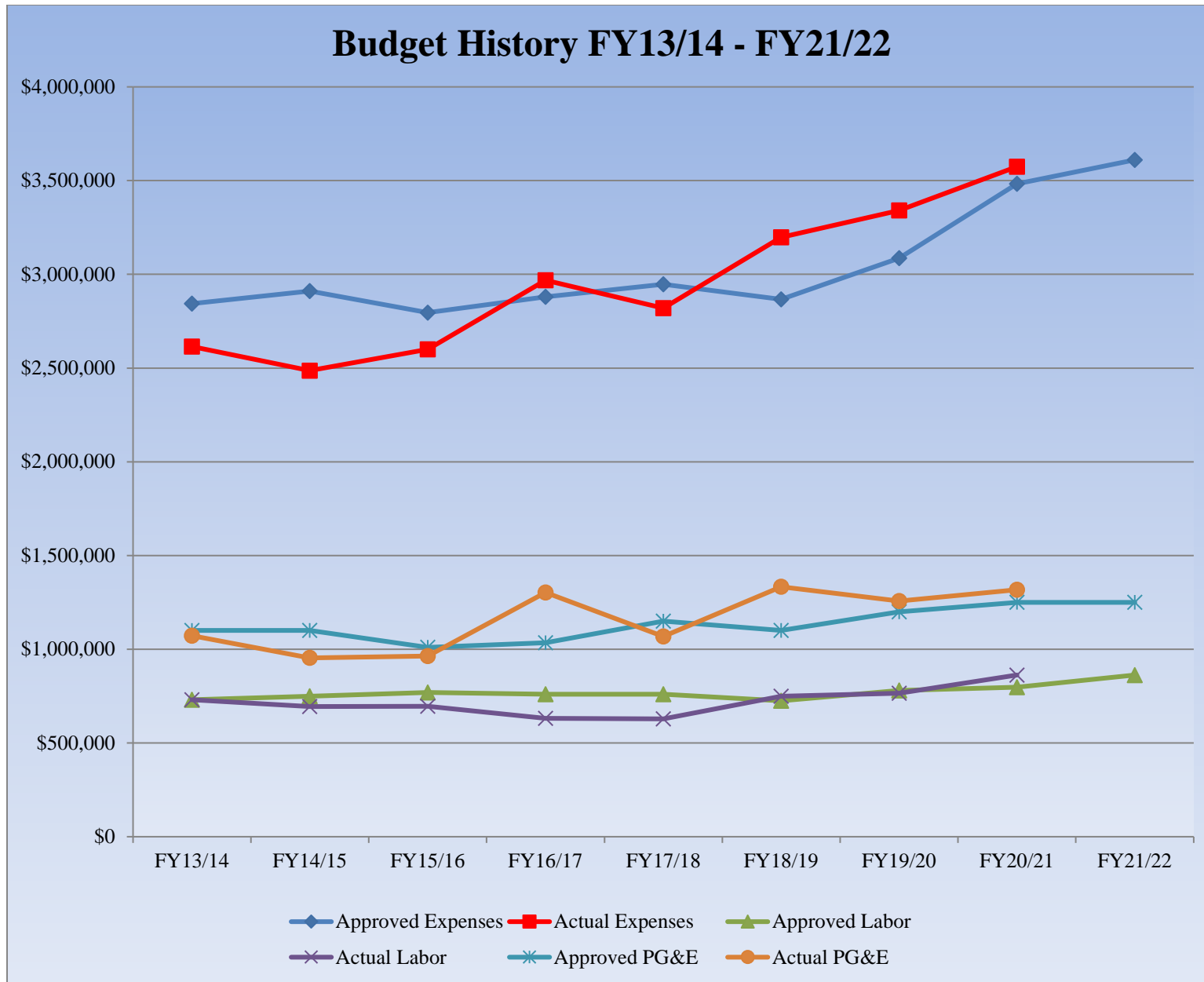
### 5.0 Budget Trends FY2013/14 – FY2021/22

The following charts show expense trends from FY13/14 through FY21/22. The charts show the following:

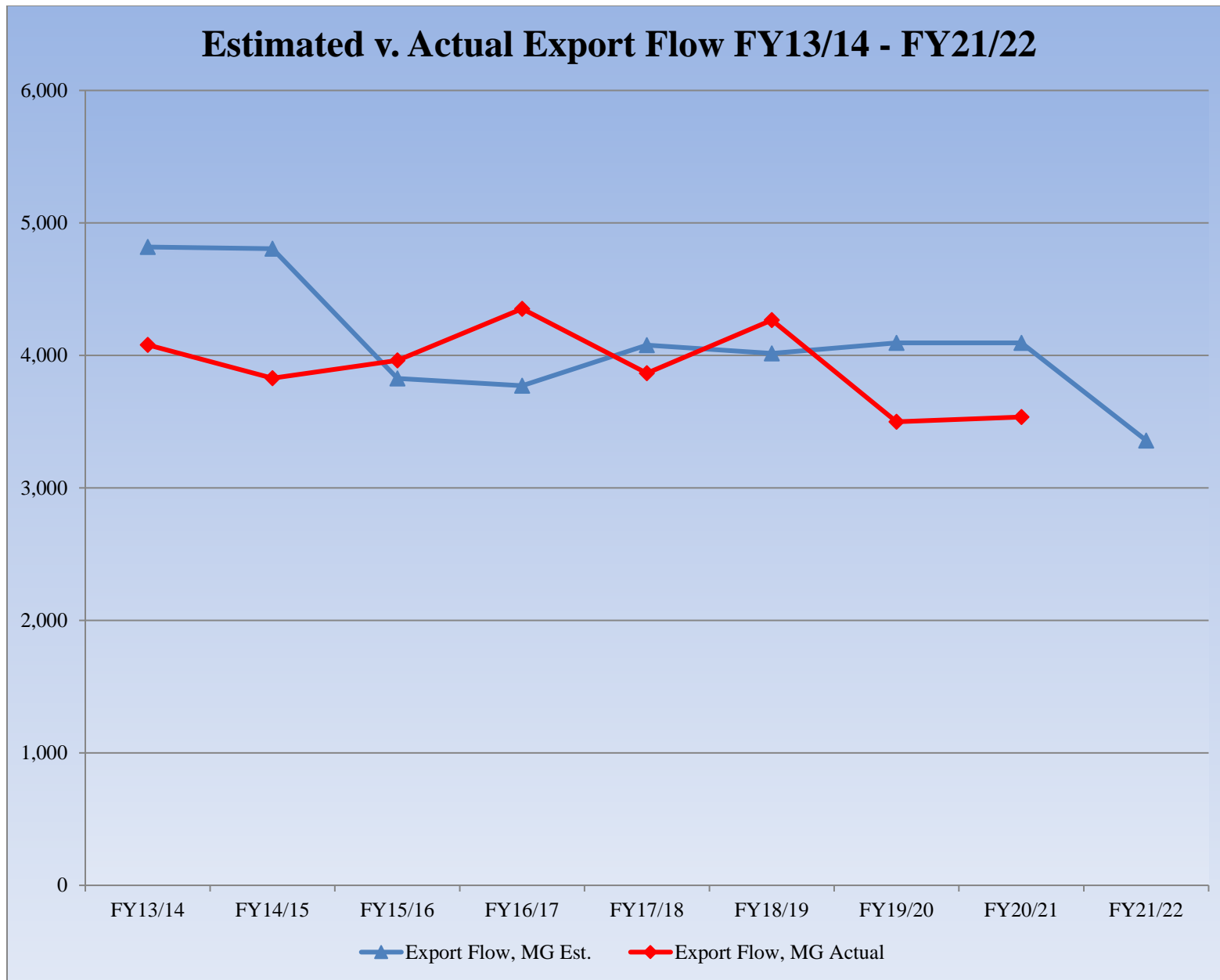
- Approved versus actual expenses for total expenses, labor costs, and PG&E power
- Estimated versus actual export flow
- Estimated versus actual cost per million gallons

Beginning with the FY2019/20 budget, these charts have been modified from previous presentations. The costs shown are total costs as in the approved budgets, which also include costs for EBDA. Previously, EBDA costs were not included. As a consequence, the cost per million gallons is going to be higher than the costs shown in DSRSD's Quarterly reports. The electrical cost for just pumping over the Dublin Grade is approximately \$373/MG, while the full disposal cost, including EBDA costs is approximately \$1,100. Although flow and PG&E costs are directly linked, other factors such as fixed costs for labor and equipment repair generally increase at the rate of inflation or CPI, resulting in increasing cost curves. Export flow is decreasing over time due to water recycling efforts.

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