



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

FISCAL YEAR 2022/23

Approved by the LAVWMA Board June 29, 2022

LAVWMA FY2022/23 Budget

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2022/23

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LAVWMA FY2022/23 Budget

LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY OPERATING AND CAPITAL BUDGETS FISCAL YEAR 2022/23

EXECUTIVE SUMMARY

OPERATING BUDGET

The proposed operating budget of \$3,740,346 is a 3.60% increase from the FY2021/22 budget. The total revenue requirement of \$10,786,046 is a 10.19% decrease from the FY2021/22 budget. Debt service payments consist of \$2,024,280 for the Repair Project and \$4,621,420 for the Expansion Project for a total of \$7,045,700. Debt service has decreased by 16.12% due to the refunding that was completed last year. The DSRSD budget for LAVWMA includes an increase in labor costs to account for a 4.0% COLA adjustment as well as a 10.76% increase in their overhead factor. DSRSD estimated costs are typically well below actual expenses and this budget reflects actual costs. DSRSD's labor estimate includes costs for the pipeline inspection, which will be charged to a capital project and not O&M. As a consequence, the labor projections are not that different.

The FY2021/22 Budget includes a few items that varied from the approved budget including:

- PG&E power will be above budget based on total actual costs for the fiscal year. Despite DSRSD staff's outstanding efforts at managing pump operation to coincide with the new time of use schedule, costs will exceed the budget by 13.5%. This is primarily due to the ever increasing rates from PG&E. For the full fiscal year, the average cost was slightly less than \$.20/kWh. This compares favorably with EBDA and DSRSD who average \$0.24-\$0.25/kWh. Had there been any significant wet weather this year the costs would have been substantially higher.
- Labor is below budget and the proposed budget reflects that trend.
- Management expenses will be below budget as major projects such as the NPDES permit renewal, EBDA agreement renewal, and the debt refunding have been completed.

The total EBDA O&M budget of \$837,923 is effectively the same as last year. With the new Master Agreement the fixed cost increased 18.6% to 26.1%. Costs for EBDA are based on fixed and variable (flow based) percentages. The flow-based percentage is currently 15.3% as compared to 16.24% 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. An Amended and Revised Master Agreement was approved by both Boards in May 2021. The agreement was retroactive to July 1, 2021. EBDA costs for FY2022/23 are now based on the new Master Agreement.

The proposed FY2022/23 operating budget considers projected FY2021/22 expenditures and is largely based on the detailed budget, copy attached, prepared by DSRSD pursuant to the Maintenance Agreement. FY2021/22 O&M expenditures are projected to be below the approved budget by approximately 5.57%, due to lower than budgeted labor costs.

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DSRSD's costs reflect a 4.0% 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 FY2022/23 Budget include the following:

- PG&E power costs are increasing 20% to account for rate increases and actual costs.
- Monitoring/Testing is increasing to account for the priority pollutant monitoring of the effluent and both emergency receiving water stations. This testing must be done once during the permit cycle and it is best to complete it early to avoid having to rush things like in the last renewal.
- Permits and insurance are increasing since insurance will be nearly \$100,000 this year.

Items that are decreasing in the FY2022/23 Budget include the following:

- Labor costs are decreasing as noted above.
- Contract services for the General Manager and General Counsel are decreasing as noted above.
- Debt Service is decreasing due to the successful refunding process.

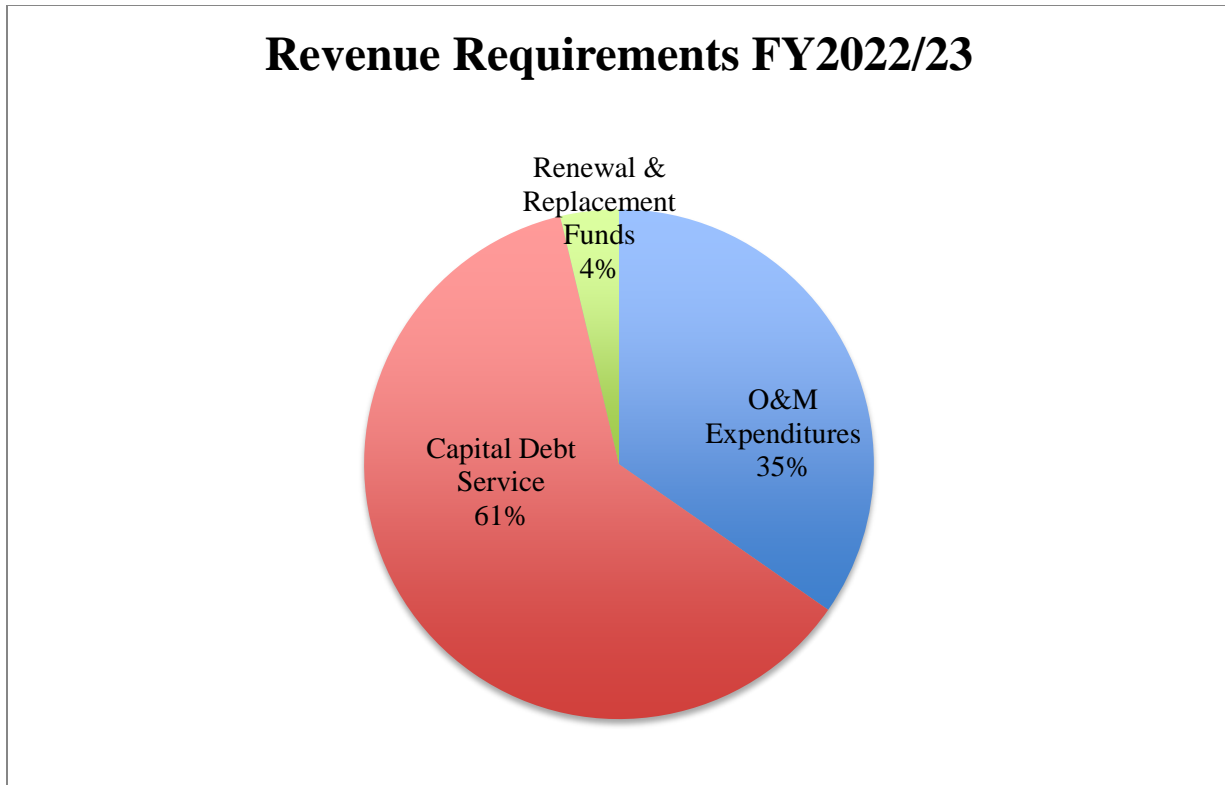
CAPITAL BUDGET

The FY2021/22 capital budget was \$4,220,000, of which approximately \$2,568,630 is projected to be spent this fiscal year. Much of this is due to delays associated with continued 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 FY2022/23 capital budget of \$2,326,000 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), cathodic protection improvements, replacement of valve actuators at the pump station, replacement of the flow meters at the junction structure, 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.

REVENUE REQUIREMENTS

The FY2022/23 budget also includes the debt service (repair and expansion) for the 2021 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. The refunding of the debt results in a savings of more than \$1.35 million. 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. The fund value remains at an acceptable level. The following pie chart illustrates the allocation of the \$10,786,046 in total revenue requirements for FY2022/23, which is a decrease of 10.19% from last year.

LAVWMA FY2022/23 Budget



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.

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.

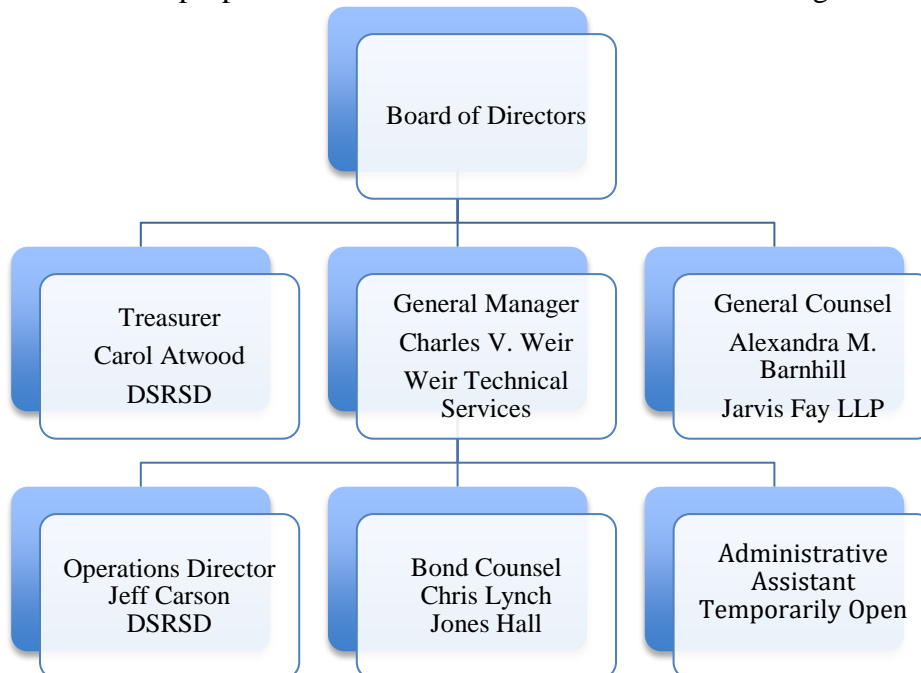
Agency Goals & Objectives

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 FY2022/23 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 FY2022/23 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.

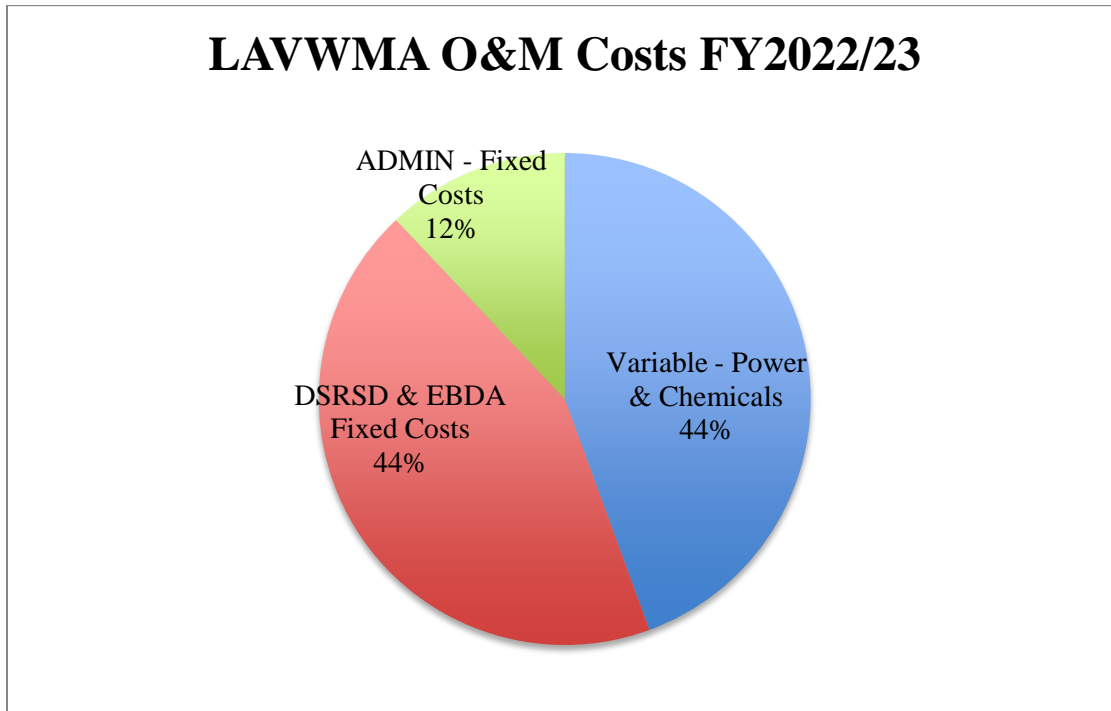
LAVWMA FY2022/23 Budget

FY2022/23 OPERATIONS BUDGET SUMMARY							
			FY2021/22	FY2021/22	FY2022/23	Change From	
			Adopted	Projected	Proposed	Adopted	
			Budget	Actual	Budget	FY2021/22	
OPERATIONS AND MAINTENANCE							
VARIABLE COSTS							
	DSRSD Maintenance Agreement (Power)		\$ 1,250,000	\$ 1,419,359	\$ 1,500,000	20.00%	
	EBDA O&M (See Table, Section 2.2.1)		150,828	150,828	160,959	6.72%	
	Subtotal - O&M Variable Costs		1,400,828	1,570,187	1,660,959	18.57%	
FIXED COSTS							
	DSRSD Maintenance Agreement						
	Labor		886,500	670,693	795,000	-10.32%	
	Materials/Supplies		50,000	46,003	50,000	0.00%	
	Contractual		50,000	41,439	50,000	0.00%	
	Monitoring/Testing		35,000	31,224	42,000	20.00%	
	Utilities (fixed)		7,000	7,293	7,500	7.14%	
	Non Routine		8,000	-	8,000	0.00%	
	EBDA O&M (See Table, Section 2.2.3)		689,051	686,789	676,965	-1.75%	
	EBDA Total		839,880	837,617	837,923	-0.23%	
	Subtotal - O&M Fixed Costs		1,725,551	1,483,441	1,629,465	-5.57%	
ADMIN/MGMT							
	Mgr/Treas/Counsel/Board		312,600	238,059	257,817	-17.52%	
	Services/Supplies/Misc		67,500	16,931	72,100	6.81%	
	Permits/Insurance		104,000	100,876	120,004	15.39%	
	Subtotal Admin/Mgmt		484,100	355,865	449,921	-7.06%	
	Subtotal All Fixed Costs		2,209,651	1,839,307	2,079,386	-5.90%	
	TOTAL O&M COSTS		\$ 3,610,480	\$ 3,409,494	\$ 3,740,346	3.60%	
CAPITAL PROGRAM FUNDING							
	Replacement Fund		400,000	400,000	400,000	0.00%	
	Repair Debt Service		2,436,792	2,436,792	2,024,280	-16.93%	
	Expansion Debt Service		5,563,183	5,563,183	4,621,420	-16.93%	
	SUBTOTAL		\$ 8,399,975	\$ 8,399,975	\$ 7,045,700	-16.12%	
TOTAL REVENUE REQUIREMENTS			\$12,010,455	\$11,809,469	\$10,786,046	-10.19%	

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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 \$1,660,959 and make up approximately 44.7% of LAVWMA’s total operating budget. Pumping and chemical costs for FY2022/23 are projected to be 18.57% more than last year. Although DSRSD has done an excellent job of managing the PG&E time of use schedule, the actual rates have increased such that those efforts have not kept costs below budget. LAVWMA’s kWh costs averaged slightly under \$0.20 this year. As a comparison DSRSD’s treatment plant averaged \$0.24 in 2021 and likely higher in 2022. EBDA has been averaging \$0.24-0.25. PG&E rates are expected to increase 5.2% per their documentation and that has been factored into the budget. The FY2022/23 Budget is based on actual costs for the current year. The following table details the variable costs for EBDA.

Facility	Variable Cost	LAVWMA Cost, 15.3%
General Administration	\$66,000	\$10,098
Outfall & Forcemains	\$176,300	\$6,016 (22.3%)
Marina Dechlor Facility	\$381,000	\$61,551
Oro Loma Pump Station	\$520,000	\$82,818
Bay & Effluent Monitoring	\$120,000	\$18,360
Total	\$1,263,400	\$178,843

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The total estimate for EBDA Variable O&M Costs is 90% of the above total, or \$160,949 for a 6.72% increase from last year. One of the increases is LAVWMA’s share of sodium hypochlorite to meet bacteriological limits in EBDA’s effluent. Due to the long travel time in the pipeline the chlorine residual in LAVWMA’s effluent when it reaches EBDA is just slightly above zero. In order to ensure that bacteriological limits are met at the EBDA outfall, sodium hypochlorite is added at the Oro Loma Pump Station to ensure an adequate residual at the Marina Dechlorination Facility, and LAVWMA pays a 5% premium on those costs, or approximately \$5,000. This is far less expensive than DSRSD and Livermore increasing their sodium bisulfite dosage at their treatment plants.

2.2.2 Fixed Costs - DSRSD Maintenance Agreement

Operation and maintenance of LAVWMA facilities for FY2022/23 is estimated by DSRSD to require 5,800 fully burdened labor hours. This is the same as last year. Costs for these items are based on projected costs for FY2021/22 and anticipated needs for FY2022/23. DSRSD’s budget shows \$1,161,350 for labor, which is much greater than this year’s project costs of \$670,693. The proposed budget includes \$795,000 for DSRSD labor, which includes a 4.0% COLA and a 10.76% increase in the overhead rate. DSRSD’s budget includes time for the pipeline inspection and new pump installation, which will be a capital expense and not O&M. Accounting for this, the labor needs projections between DSRSD and LAVWMA are comparable.

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 17.58% for a total of \$51,395. LAVWMA’s share of the permit fee (\$656,019) 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 \$174,654. There is also a nutrient surcharge that provides funds to BACWA for studies related to nutrient control. LAVWMA’s share of this fee is 20.3%, or \$48,108. Lastly there is an Alternative Monitoring and Reporting fee related to Regional Board studies. LAVWMA’s share of this is 33.3% (2 LAVWMA plants/6 total plants in the EBDA system), or \$10,781.

LAVWMA is responsible for a portion of the forcemain system and will be billed accordingly. With the new Master Agreement LAVWMA is responsible for 26.1% of the fixed costs for “shared” EBDA facilities. The new Master Agreement was retroactive to July 1, 2020. 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	\$1,317,713	26.1%	\$338,509
Outfall & Forcemains	\$5,000	26.1%*22.3%=5.8%	\$291

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Facility and Total Variable Cost	Fixed Cost	LAVWMA Percent Cost	LAVMWA Estimated Cost
Marina Dechlor Facility	\$8,000	26.1%	\$2,088
Oro Loma Pump Station	\$11,000	26.1%	\$2,871
Bay & Effluent Monitoring	\$473,450	26.1%	\$123,570
NPDES Permit Fee	\$656,019	26.62%	\$174,654
RMP Fee	\$292,320	17.58%	\$51,395
Nutrients Fee	\$237,114	20.29%	\$48,108
Alternative Monitoring and Reporting	\$32,155	33.33%	\$10,718
Total	\$3,032,771		\$752,183

Historically, EBDA has averaged approximately 90% of budget for the fixed costs listed above. Accordingly, \$676,965 is included in the FY22/23 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 \$449,921 as compared with \$484,100 last year or a decrease of 7.06%. The decrease is due to the following: the NPDES permit renewal and renewal of the EBDA agreement have been completed. The total includes costs for a new DSRSD administrative staff person to provide assistance to LAVWMA, DERWA, and DSRSD's Assistant General Manager. 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 FY2022/23 debt service (repair and expansion) for the 2021 bonds. Although repair and expansion of the existing pipeline 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 \$2,236,000 cost of capital projects in FY2022/23. 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 FY2021/22. The second table lists all recommended projects for FY2022/23. All projects have been recommended and vetted by DSRSD staff.

LAVWMA FY2022/23 Budget

FY2021/22 Capital Program Expenditures	
Purchase three new pumps and rebuild motors	\$0
Resealing of all Three Storage Basins	\$150,000
San Leandro Sample Station Design Improvements	\$93,986
MCCs and Soft Starters	\$2,286,741
Cathodic Protection Projects	\$6,299
PLC / SCADA Upgrade at the Pump Station	\$0
Pipeline Inspection	\$0
Electrical Improvements to the Main Switchgear	\$0
Smart Detectors on Ari/Vac and Air Release Valves	\$2,618
Other Misc. LAVWMA	\$20,000
Other Misc. EBDA	\$34,574
Cip Planning / Management Contingency	\$3,986
Total Expenditures	\$2,598,204

FY2022/23 Capital Program Expenditures		
Project	Description	Cost
Purchase three new pumps and rebuild two associated motors.	This project has been delayed from FYE21. The costs include \$357,000 for the new pumps, rebuilding two motors, engineering services, and DSRSD staff time to remove the old pumps and install the new pumps and rebuilt motors. The projected delivery date for the new pumps is December 16, 2022	\$510,000
San Leandro Sample Station (SLSS) Design Improvements	This project has evolved from what was described for last year's budget and is being carried over. It also now includes: <ol style="list-style-type: none"> 1. 24-inch flow control valve 2. 20-inch flow control valve 3. Two 30-inch flow meters 4. Two chlorine residual analyzers 5. Miscellaneous piping and fittings to accommodate different pipe sizes 6. Improvements to the Programmable Logic Controller (PLC), Human Machine Interface (HMI), Supervisory Control and Data Acquisition System (SCADA), networking and programming The SLSS station has to be designed to measure chlorine residual and monitor pH continuously. These parameters have to	\$900,000

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FY2022/23 Capital Program Expenditures		
Project	Description	Cost
	<p>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 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. Approximately \$90,000 has been spent on design through the end of the fiscal year. The 75% plans and specifications have been received and are under review.</p>	
Cathodic Protection Projects	<p>This project is being carried over from FYE21. Corrpro 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 = \$135,000. This project has been delayed and is carried over from last year.</p>	\$135,000
PLC Upgrade at the Pump Station	<p>This project is being carried over from FYE21. The existing Programmable Logic Controller (PLC) at the pump</p>	\$300,000

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FY2022/23 Capital Program Expenditures		
Project	Description	Cost
	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.	
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 cost approximately \$35-40,000. The report also recommends continuing to inspect portions of the forcemains annually such that the entire pipeline will have been inspected within about five years. Much of this cost is for DSRSD staff. DSRSD staff has developed a plan that will be implemented this 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 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.	\$50,000
Replace seventeen valve actuators at the pump station	There are seventeen valves that have electric actuators at the pump station. All of the valves actuators were installed when the pump station was upgraded twenty years ago and they are at the end of their useful lives. The actuators will be replaced with the newest technology and	\$255,555

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FY2022/23 Capital Program Expenditures		
Project	Description	Cost
	will match the style that are commonly used at DSRSD. The actuators cost approximately \$9,000 each and will be installed by DSRSD staff. The total cost includes staff time for the installation.	
Replace three flow meters at the junction structure	The three flowmeters at the junction structure are at the end of their useful lives and are no longer as accurate as required for reporting purposes. The project will include replacing all three and then determine if further modifications, such as, snorkels, are required for the flow measurement accuracy required. The cost of the project includes the three meters plus installation and testing costs.	\$250,000
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		\$2,650,000

2.3 Changes from FY2021/22 Budget

FY2021/22 expenditures are projected to come in approximately 5.57% below budget due to labor and management activities. The annual reconciliation process will resolve any over or under payments. The FY2022/22 Budget is 10.19% less than FY2021/22 in Total Revenue Requirement. Total O&M costs are 3.60% more than 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 FY2022/23.

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 FY2021/22 and recommendations for FY2022/23 show that LAVWMA maintaining the

LAVWMA FY2022/23 Budget

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 annually.

R & R Fund Balances, 6/30/22	Joint	Dual	Sole	Total
Start of year	13,585,505	431,863	1,615,786	15,633,154
Deposits	400,000	0	0	400,000
Interest Earnings	46,152	1,425	5,332	52,909
ProJected Expenditures	2,650,000	0	0	2,650,000
End of Year	11,381,657	433,288	1,621,118	13,436,063

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
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
FY2020/21	400,000	65,407	(768,000)	(302,593)
FY2021/22	400,000	64,317	(2,598,204)	(2,133,887)
FY2022/23	400,000	64,317	(2,650,000)	(2,185,683)
Total	3,300,000	1,241,349	(8,209,628)	(3,668,279)

3.2 Discussion of Capital Expenditures Proposed for FY2021/22

The following table summarizes 2,326,000 of anticipated FY2022/22 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.

FY2022/23 Capital Program Expenditures *Carryover	
*Purchase three new pumps and rebuild two motors	\$510,000
*San Leandro Sample Station Design Improvements	\$900,000
*Cathodic Protection Projects	\$135,000
*PLC Upgrade at the Pump Station	\$300,000
*Electrical Improvements to Main Switchgear	\$50,000
*Pipeline Inspection	\$100,000
Replace 17 Valve Actuators at Pump Station	\$255,000
Replace three flow meters at Junction Structure	\$250,000

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Other Misc. LAVWMA Renewal/Replacements	\$50,000
Other Misc. EBDA Renewal/Replacements	\$50,000
CIP Planning/Mgmt/Contingency	\$50,000
Total Expenditures	\$2,650,000

4.0 FY2022/23 Member Agency Cost Sharing & Schedule

Member Agency Costs FY2022/23					
	Total	Livermore	DSRSD/Pleasanton	DSRSD	Pleasanton
Variable O&M	\$ 1,660,959	\$ 581,336	\$ 1,079,623		
Fixed O&M	2,054,386	618,371	1,436,016		
Sole Use Fixed O&M	25,000	25,000			
Total O&M	3,740,346	1,224,706	2,515,639		
Replacement Fund	400,000	120,400	279,600		
Repair Debt	2,024,280	808,700	1,215,580		
Expansion Debt	4,621,420	1,040,743	3,580,676		
EBDA Debt	-	-	-		
Total Capital Costs	7,045,700	1,969,843	5,075,857		
Total Revenue Required	\$ 10,786,046	\$ 3,194,549	\$ 7,591,496		
Semi Annual O&M Advance	1,870,173	612,353	1,257,820		
Semi Annual Replacement Fund Advance	200,000	60,200	139,800		
July 1 Bond Debt Service Advance	5,640,800	1,569,788	4,071,012	2,194,051	1,876,961
Jan 1 Bond Debt Service Advance	1,004,900	279,655	725,245	390,867	334,378
Total July 1 Advance	\$ 7,710,973	2,242,342	5,468,631		
Total January 1 Advance	\$ 3,075,073	\$ 952,208	\$ 2,122,864		
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%		

5.0 Budget Trends FY2013/14 – FY2022/23

The following charts show expense trends from FY2013/14 through FY2022/23. The charts show the following:

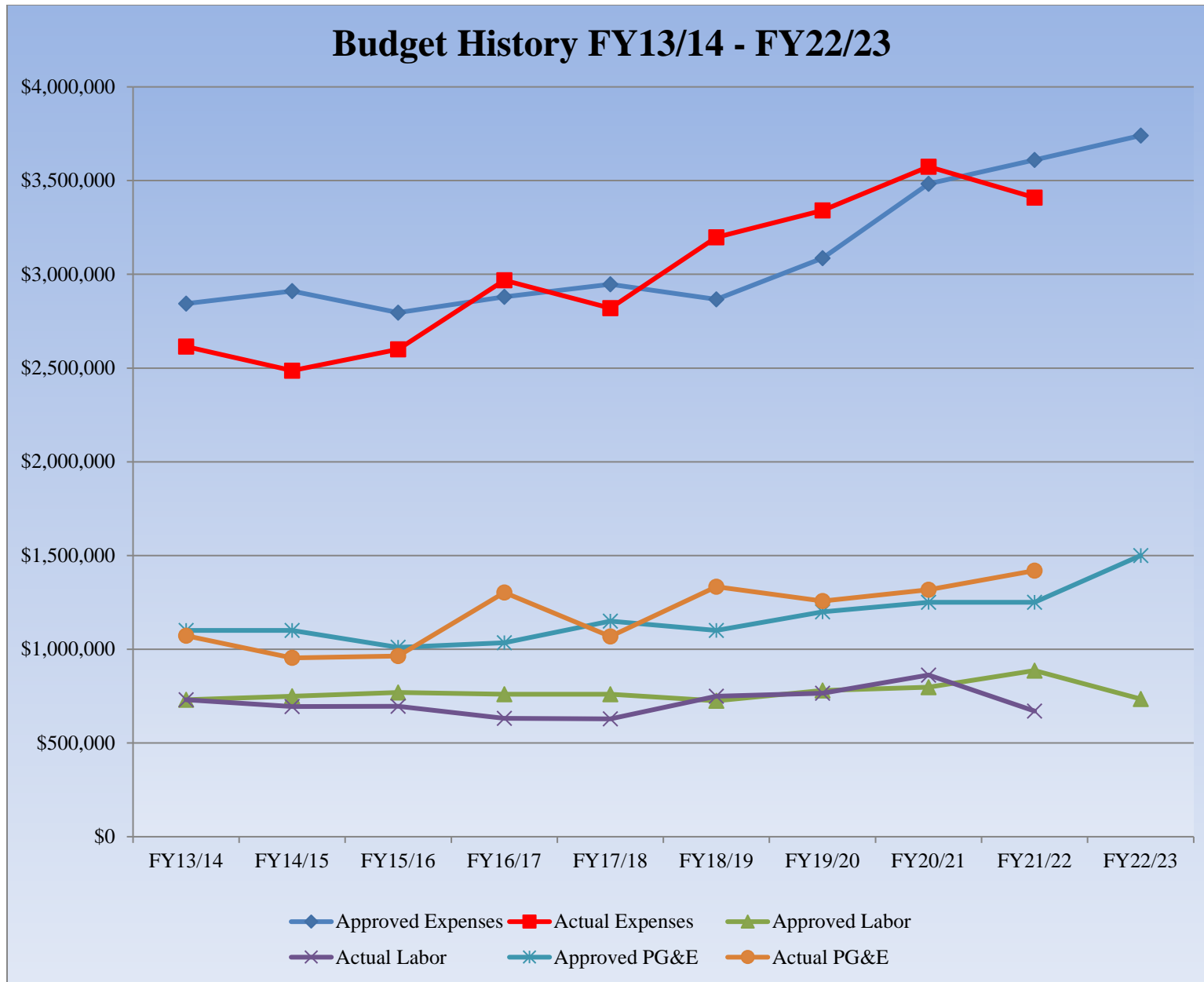
- Approved versus actual expenses for total expenses, labor costs, and PG&E power
- Estimated versus actual export flow
- Estimated versus actual cost per million gallons

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

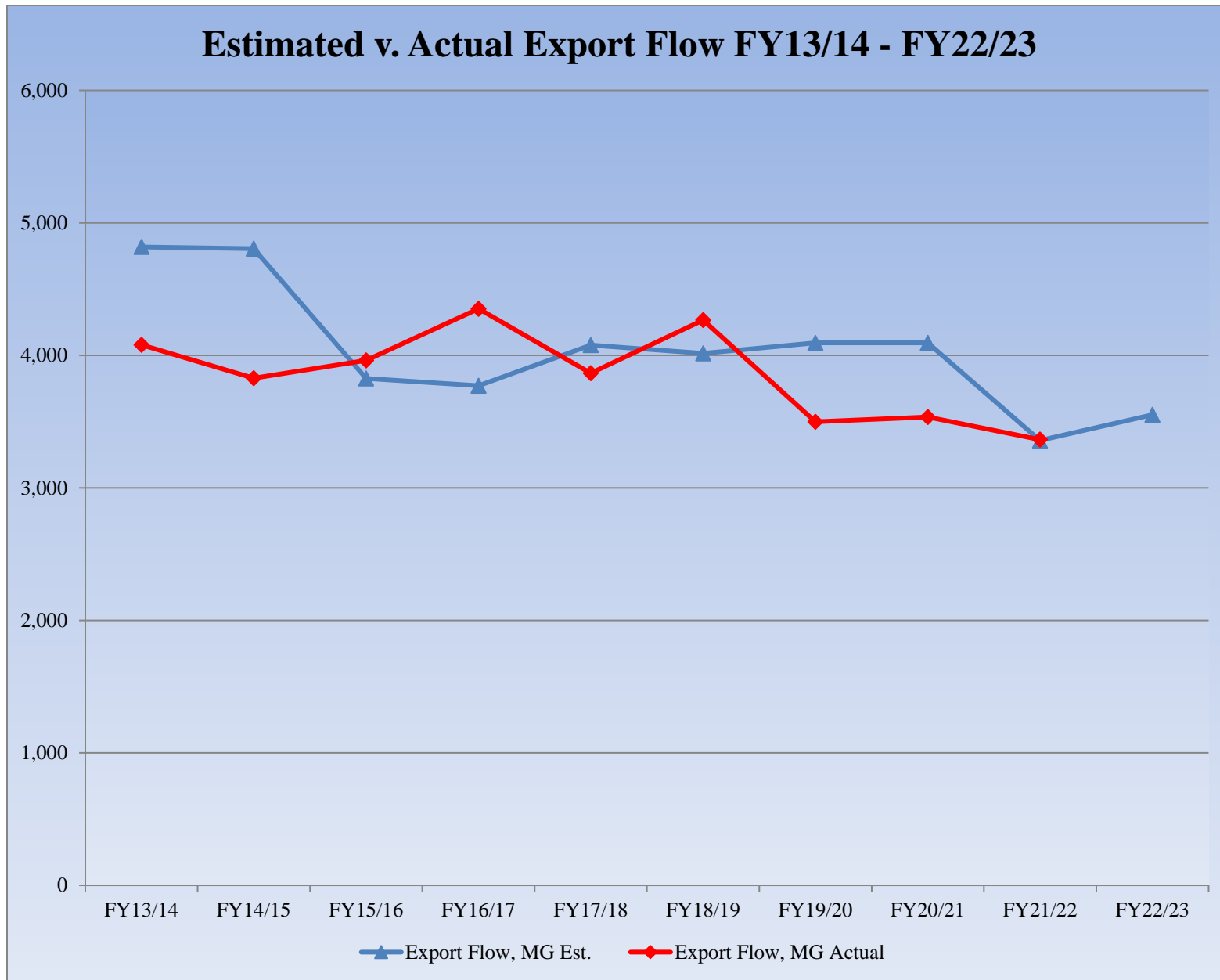
LAVWMA FY2022/23 Budget

electrical cost for just pumping over the Dublin Grade is approximately \$422/MG as compared with \$373/MG last year, while the full disposal cost, including EBDA costs is approximately \$1,053 versus \$1,075 last year. 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.

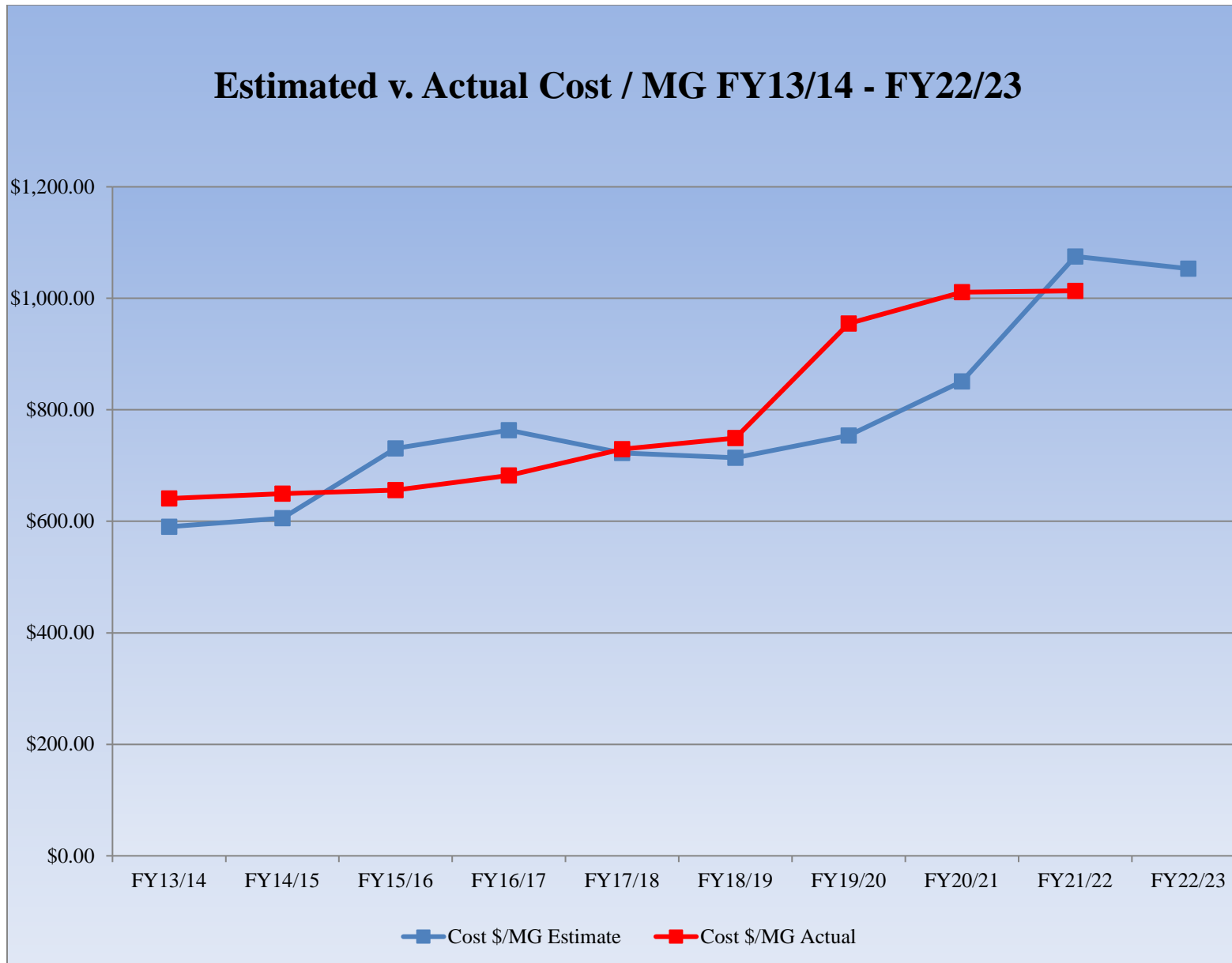
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LAVWMA FY2022/23 Budget



LAVWMA FY2022/23 Budget





Regional Wastewater Treatment Facility
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March 22, 2022

Mr. Chuck Weir
LAVWMA General Manager
7501 Dublin Blvd
Dublin, CA 94568

Subject: UPDATED Proposed LAVWMA Operations & Maintenance Budget for Fiscal Year Ending 6/30/2023 (FYE 2023)

Dear Chuck:

As you know, DSRSD previously submitted on April 13, 2021 the proposed budgets for the operation and maintenance (O&M) of the LAVWMA facilities for the two fiscal year periods of July 1, 2021 – June 30, 2022 (FYE 2022) and July 1, 2022 – June 30, 2023 (FYE 2023) to coincide with the District's two-year budget cycle. There has been no significant operational change over the past year as far as impacting budget. However, the District has made adjustments to the original proposed budget for the upcoming FYE 2023 and is hereby proposing an updated budget to address primarily the cost of inflation in labor and materials that have significantly gone up.

The original proposed budget used a 2.75% CPI increase in burden labor rates. The updated budget now has the District's published 2022 billing rates and is increased by \$167,290 from the original proposed labor budget. The District's general overhead factor for its 2022 billings rates increased from 139.44% to 154.44%. Also, to meet the cost of materials and services that has increased at an inflation rate higher than what was anticipated when the original 2-year budget was prepared, the updated budget includes \$80,950 increase (5% adjustment) to the materials and services budget.

Flows were updated to reflect actual 2021 data instead of estimates that were used in the preparation of the original budget. The updated estimated export flow for FYE 2023 is 3,552 MG compared to the original estimated flow of 3,340 MG.

Attachment 1 shows the updated proposed FYE 2023 budget of \$2,861,289. This amount will convey treated wastewater to the discharge point in San Francisco Bay for Livermore, Pleasanton, Dublin, and San Ramon customers at a rate of approximately \$805 per million gallons (MG) based on the revised estimated export flow of 3,552 MG. For your convenience, the expenses are separated by pumping costs (\$2,211,234 or \$622/MG) and pipeline maintenance costs (\$650,055 or \$183/MG).

These are "not-to-exceed" budgets submitted in accordance with the Maintenance Agreement, and the total budget for each fiscal year cannot be increased without the approval of the LAVWMA Board. However, per the terms of the Maintenance Agreement, the "not-to-exceed" amount applies only to District labor, materials and supplies; but does not apply to utilities, laboratory analysis, and contractual services (Article 3, paragraph F). Utility rates and costs, in particular, are essentially beyond the control

of the District and could vary substantially depending on utility rate initiatives and higher than normal flows resulting from above normal wet weather conditions.

Not included in the proposed O&M budget amount are EBDA charges, permit fees, insurance, debt service, Director's fees and expenditures for the LAVWMA General Manager, Treasurer, Counsel, Auditor, and administrative staff.

Attachment 2 provides detail on the 5,800 labor hours or equivalent to 2.5 full-time employees (FTE) that were used for the FYE 2022 budget and is the same for FYE 2023 budget. Labor costs are based on DSRSD's burden labor rates, which are adjusted annually.

Figure 1 shows the projected flow for FY 2022-2023 compared to the amount of recycled water for Pleasanton, EBMUD, and DSRSD.

Figure 2 shows a five-year historic variation in LAVWMA export flows from 2017 to 2021.

DSRSD staff is available at your convenience to discuss the proposed operating and maintenance budgets.

Sincerely,

Jeff Carson
Operations Manager

/gzl

Attachments

cc: Dan McIntyre, DSRSD General Manager
Jan Lee, DSRSD Assistant General Manager
Steve Delight, DSRSD Engineering Services Director
Carol Atwood, DSRSD Administrative Services Director
Virgil Sevilla, DSRSD Wastewater Treatment Plant Operations Superintendent
Maurice Atendido, DSRSD Principal Electrical Engineer, Supervisory
Shawn Quinlan, DSRSD Maintenance Superintendent
Diane Griffin, DSRSD Operations Support Services Manager
Gemma Lathi, Management Analyst II

FY 2022-2023 LAVWMA OPERATION & MAINTENANCE BUDGET

SUMMARY:			
	Total	Pumping	Pipeline
DSRSD Labor	\$1,161,350	\$662,589	\$498,760
Materials & Supplies	\$89,397	\$56,910	\$32,487
Laboratory Analysis	\$37,800	\$8,400	\$29,400
Contractual Services	\$134,243	\$54,075	\$80,168
Utilities	\$1,438,500	\$1,429,260	\$9,240
Non-Routine	\$0	\$0	\$0
Total	\$2,861,289	\$2,211,234	\$650,055

Assumptions:	Total	Pumping	Pipeline
Days of operation =	365		
Annual acre feet =	10,902		
Annual million gallons =	3,552		
Unit Costs:			
Cost/AF =	\$262	\$203	\$60
Cost/MG=	\$805	\$622	\$183

Detailed Breakdown:

	Hours	Rate	Labor	Pumping	Pipeline
LABOR					
DIVISION 51 - Field Operations					
Water-Wastewater Sys Senior Operator	30	\$206	\$6,175	\$0	\$6,175
Water-Wastewater Sys OP II	10	\$182	\$1,822	\$0	\$1,822
Subtotal	40		\$7,997	\$0	\$7,997
DIVISION 52 - WWTP					
Senior Process Operator	150	\$228	\$34,184	\$34,184	\$0
Senior WWTP Operator	720	\$207	\$148,824	\$148,824	\$0
Operator II	1,700	\$188	\$319,495	\$159,748	\$159,748
Operator in Training	400	\$149	\$59,578	\$29,789	\$29,789
Supervisor	110	\$355	\$39,074	\$19,537	\$19,537
Subtotal	3,080		\$601,156	\$392,082	\$209,074
DIVISION 53 - Mechanical					
Mechanic II - Crane Certified	60	\$212	\$12,691	\$6,345	\$6,345
Senior Mechanic	80	\$227	\$18,154	\$1,815	\$16,339
Mechanic II	980	\$206	\$202,179	\$48,523	\$153,656
Maintenance Worker II	60	\$179	\$10,728	\$5,364	\$5,364
Supervisor	50	\$338	\$16,882	\$8,441	\$8,441
Subtotal	1,230		\$260,634	\$70,489	\$190,145
DIVISION 54 - Electrical					
Senior Instrument/Controls Tech	30	\$226	\$6,793	\$3,397	\$3,397
Instrument Tech	300	\$193	\$57,860	\$28,930	\$28,930
OPS Control Sys Spec	300	\$206	\$61,754	\$46,316	\$15,439
Senior Electrician	30	\$208	\$6,254	\$6,254	\$0
Electrician II	440	\$189	\$83,013	\$83,013	\$0
Supervisor	30	\$328	\$9,825	\$4,913	\$4,913
Subtotal	1,130		\$225,500	\$172,822	\$52,678
DIVISION 56 - Safety					
Safety Officer	60	\$129	\$7,711	\$3,856	\$3,856
Subtotal	60		\$7,711	\$3,856	\$3,856
DIVISION 40 - Engineering					
Senior Civil Engineer-SME	100	\$286	\$28,633	\$11,453	\$17,180
Construction Inspector I	80	\$168	\$13,458	\$5,383	\$8,075
Engineering Technician II	40	\$174	\$6,975	\$2,790	\$4,185
GIS Analyst II	40	\$232	\$9,285	\$3,714	\$5,571
Subtotal	260		\$58,351	\$23,340	\$35,010
Total Labor FTE's	5,800		\$1,161,350	\$662,589	\$498,760

Note: FYE 2023 estimated labor rates is based on actual 2022 billing rates.

FY 2022-2023 LAVWMA OPERATION & MAINTENANCE BUDGET

	<u>Expense</u>	<u>Pumping</u>	<u>Pipeline</u>
<u>MATERIALS & SUPPLIES</u>			
Operations Supplies			
Calcium Thiosulfate dechlorinating agent	\$12,600	\$6,300	\$6,300
Supplies/Expenses (misc)	\$1,050	\$525	\$525
Subtotal	\$13,650	\$6,825	\$6,825
Mechanical Supplies			
Materials and supplies	\$11,550	\$10,500	\$1,050
Pump & equip repair parts	\$7,875	\$7,875	\$0
Air relief valve parts	\$5,250	\$0	\$5,250
Oils, lubricants	\$2,625	\$2,625	\$0
Subtotal	\$27,300	\$21,000	\$6,300
Electrical Supplies			
Instrument parts	\$4,830	\$2,415	\$2,415
Analyzer parts	\$18,060	\$13,125	\$4,935
MCC equipment/parts	\$11,645	\$4,830	\$6,815
SCADA parts	\$8,085	\$6,300	\$1,785
Soft-starter parts and repairs	\$5,828	\$2,415	\$3,413
Subtotal	\$48,447	\$29,085	\$19,362
Total Materials & Supplies	\$89,397	\$56,910	\$32,487
<u>LABORATORY ANALYSIS</u>			
Compliance Testing	\$10,500	\$8,400	\$2,100
Operational Support Testing	\$4,200	\$0	\$4,200
Special Sampling	\$23,100	\$0	\$23,100
Total Laboratory Analysis	\$37,800	\$8,400	\$29,400
<u>CONTRACTUAL SERVICES</u>			
Sub-surface and Surface Repairs	\$15,750	\$0	\$15,750
Street Sweeping	\$5,250	\$5,250	\$0
Cathodic Protection Survey and Repairs	\$31,500	\$0	\$31,500
Underground Service Alert	\$4,725	\$0	\$4,725
SCADA software maintenance contract and support services	\$17,850	\$12,495	\$5,355
Remote monitoring annual service for PS and Rectifier Panels	\$5,250	\$1,050	\$4,200
HVAC Maintenance/Repairs	\$788	\$525	\$263
Termite/Pest Control	\$945	\$945	\$0
Landscape/weed maintenance	\$10,500	\$7,875	\$2,625
Janitorial Service	\$9,975	\$9,975	\$0
Fire Extinguisher Maint	\$210	\$210	\$0
Professional Services, misc	\$31,500	\$15,750	\$15,750
Total Contractual Services	\$134,243	\$54,075	\$80,168
<u>UTILITIES</u>			
Electricity (PG&E)	\$1,430,205	\$1,424,115	\$6,090
Water & Sewer (Pleasanton)	\$945	\$945	\$0
Water (EBMUD)	\$1,050	\$1,050	\$0
Telephone/communications/T-1	\$6,300	\$3,150	\$3,150
Total Utilities	\$1,438,500	\$1,429,260	\$9,240
TOTAL O&M BUDGET (LABOR, MATERIALS & SERVICES)	\$2,861,289	\$2,211,234	\$650,055

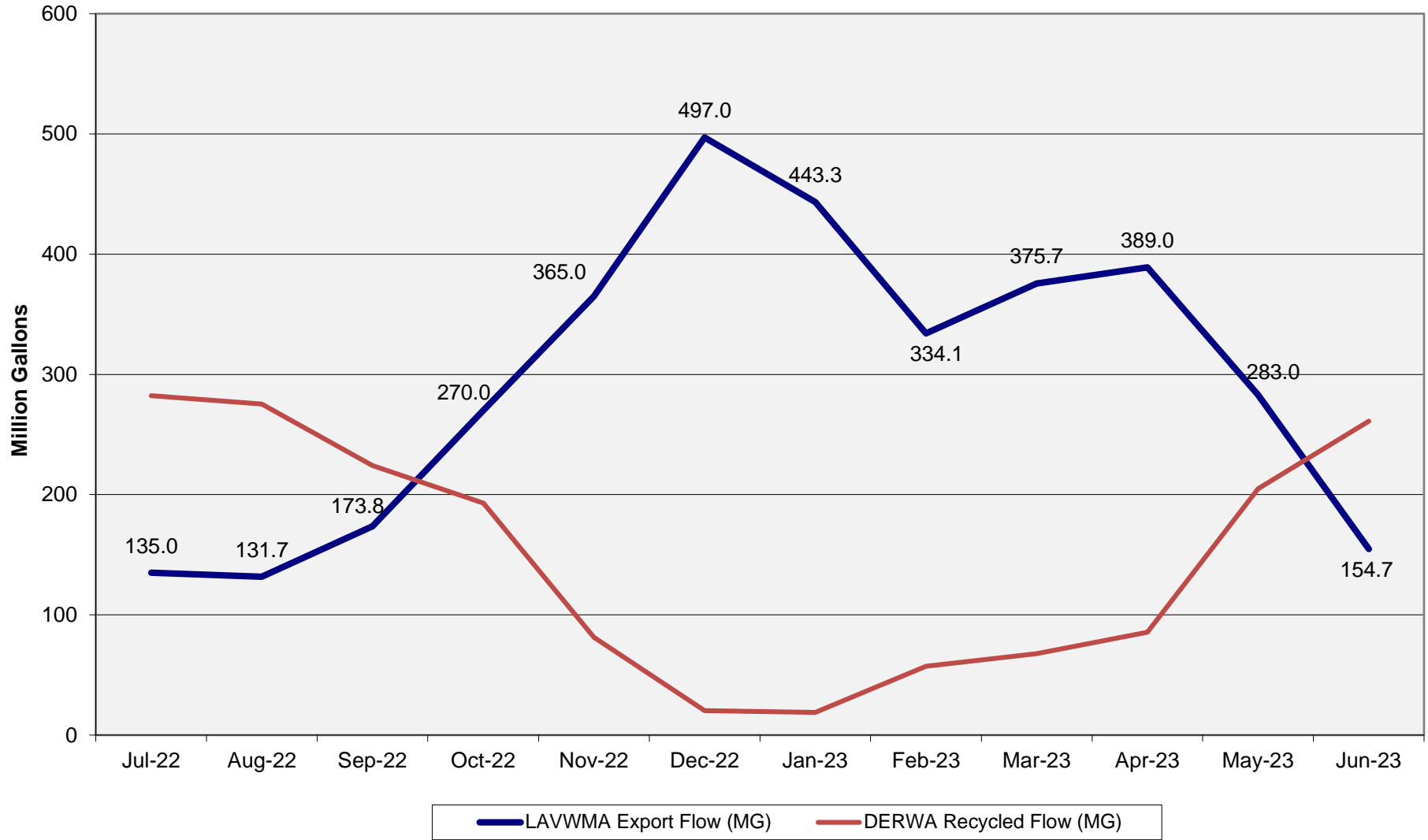
LAVWMA LABOR HOURS ESTIMATES

USED FOR BOTH
FYE 2022 & FYE 2023

PERSONNEL

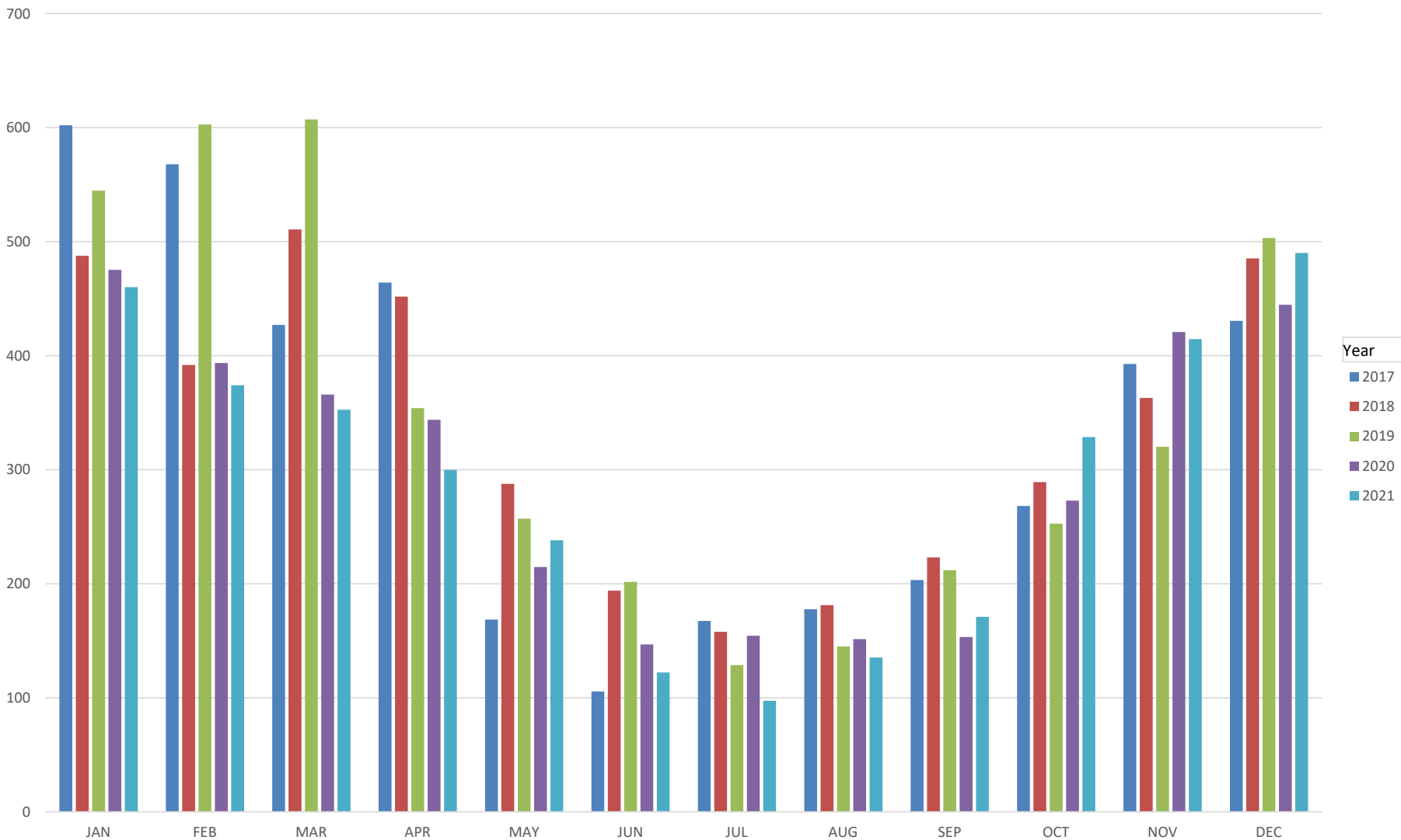
Division 51 - Field Operations (Distribution)		40
Water-Wastewater Sys OP IV	TV inspection of export pipe, 1/2 day/year, 2 Operators	10
Water-Wastewater Sys OP IV	Traffic control for vault entries, misc	10
Water-Wastewater Sys OP IV	Vacuum cleaning assistance at basins	10
Water/Wastewater Operator II	General tasks	10
Division 52 - Treatment Plant Operations		3080
Process Lead Operator V	Pump efficiency testing and SOP's, planning, inspections	150
Senior WWTP Operator III	Spot checks on off-shifts and weekends + hours for storms	100
Senior WWTP Operator III	Daily pump station operation/monitoring, 3 hrs/day 5 days per week	620
WWTP Operator II	General tasks	1700
WWTP Operator in Training	General tasks	400
Supervisor	Inspections/direction of staff and activities, 2 hours/week	110
Division 53 - Mechanical Maintenance		1230
Senior Mechanic-Crane Cert	Regular maintenance, 4 hrs/day, 2 days per week	60
Senior Mechanic (USA)	USA Marking, when other trained employees are not available	80
Mechanic II	PM's and misc repairs, as needed	320
Mechanic II (USA)	USA Marking, 1 hour per day, 5 days per week	260
Mechanic II	Confined space entries, 4 weeks/year, 2 employees	400
Maintenance Worker	General tasks	60
Supervisor	Inspections/direction of staff and activities, 1 hour/week	50
Division 54 - Electrical & Instrumentation Maintenance		1130
Senior Instrument/Controls Tech	Instrument replacement/SCADA troubleshooting	30
Instrument Tech	Instrument checks/calibration	300
OPS Control Sys Spec	SCADA system repairs/programming	300
Senior Electrician	Switchgear & electrical inspections and repair	30
Electrician	Switchgear & electrical inspection/repairs	440
Supervisor	Inspections/direction of staff and activities	30
Division 56 - Safety		60
Safety Officer	Special safety inspections of LAVWMA facilities	60
Division 40 - Engineering		260
Senior Civil Engineer-SME	Assistance with engineering, maintenance, and bidding issues	100
Construction Inspector I	Project construction inspection	80
Engineering Tech II	Plan checks on LAVWMA lines	40
GIS Analyst II	Plan checks on LAVWMA lines	40
TOTAL BILLABLE LABOR HOURS		5800
FTE's		2.79

Figure 1
FY 2022-2023 Flow Projection
Total 3552.23 MG



Sum of Flow in MG

Figure 2: LAVWMA Monthly Export Flow 5-Year History



Month