SACRAMENTO-YOLO MOSQUITO & VECTOR CONTROL DISTRICT

OCTOBER 19, 2021

BOARD OF TRUSTEES REGULAR MEETING

BOARD PACKET

10:00 A.M.

8631 Bond Road
Elk Grove, CA 95624

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SACRAMENTO/YOLO MOSQUITO
& VECTOR CONTROL DISTRICT
BOARD OF TRUSTEES REGULAR MEETING

8631 Bond Road
Elk Grove, CA 95624

AGENDA

October 19, 2021
10:00 AM

In compliance with the Americans with Disability Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the District office at (916) 685-1022 or (916) 685-5464 (fax). Requests must be made as early as possible, and at least one-full business day before the start of the meeting.
Documents and materials relating to an open session agenda item that are provided to the SYMVCD Board less than 72 hours prior to a regular meeting will be available for public inspection and copying at 8631 Bond Road, Elk Grove, Ca 95624. The documents will also be available on the agency's website at www.fightthebite.net.

CALL TO ORDER:

- **Roll Call**
- **Pledge of Allegiance**

1. **Board Review and Consideration to Authorize the Board Meeting be Conducted by Teleconference**

2. **Items for Approval by General Consent:**
   a. **Minutes of the September 21, 2021 Board of Trustees Meeting**
   b. **Expenditures for September 2021**

3. **Opportunity for Public Comment**
   This item is reserved for members of the public who wish to speak on items not on the agenda

4. **Reports to the Board**
   a. **Manager's Report**
   b. **Reports from District Departments**
      - **Lab/Surveillance**
      - **Ecological Management**
      - **Biological Control**
      - **Larval and Adult Control**
      - **Public Outreach**

5. **Board Review and Discussion of CalPERS Valuation Report**

6. **Board Review of Candidates and Consideration of Support for the Special District Seat on the LAFCO Board**

7. **Closed Session- Provide Instruction to Designated Labor Representatives (Gov. Code s. 54957.6-Labor Negotiations) Agency Designated Representatives : [Gary Goodman, Janna McLeod, Samer Elkashef, Chris Voight] Employee Organization: [Operating Engineers Local Union #3]**

8. **Board/Staff Reports and Requests**

9. **Adjournment**

Sacramento-Yolo Mosquito and Vector Control District

October 19, 2021 Board Meeting

1. Board Review and Consideration to Authorize the Board Meeting be Conducted by Teleconference

Staff Report:

Consider finding by a majority vote under Gov. Code § 54953, subd. (e)(1)(B) that as a result of the COVID-19 emergency: (i) meeting in person would present imminent risks to the health or safety of attendees; and (ii) the meeting is authorized to be held by teleconference pursuant to Gov. Code, § 54953, subd. (e)(1)(C).

In light of the Governor's declaration that a state of emergency exists due to the incidence and spread of the novel coronavirus, and the pandemic caused by the resulting disease COVID-19, the Board should consider whether meeting in person would present imminent risks to the health or safety of meeting attendees.

The Centers for Disease Control indicates that COVID-19 is a highly transmissible virus that is spread when an infected person breathes out droplets and very small particles that contain the virus, and such droplets and particles are breathed in by other people.[1] Since June of 2021, a more infectious variant of the virus, known as the Delta Variant, has emerged and now accounts for the vast majority of COVID-19 cases.

Those who become infected with COVID-19 are at risk of serious illness and death. As of October 13, 2021, 716,834 Americans have died from the virus.[2] Many more have been hospitalized with serious illness.

Conducting meetings by teleconference would directly reduce the risk of transmission among meeting attendees, including members of the public and agency staff, which has the ancillary effect of reducing risk of serious illness and death as well as reducing community spread of the virus.

If the authorization to meet by teleconference is not approved by a majority vote, then the meeting will adjourn after this item and the remaining agenda items will be rescheduled to a future in-person meeting.

Recommendation:

Move that the board find that, as a result of the COVID-19 emergency, meeting in person would present imminent risks to the health or safety of attendees, and the meeting should be held by teleconference as authorized by subdivision (e)(1)(C) of section 54943 of the Government Code.

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[1] www.cdc.gov/cornonavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html

[2] Johns Hopkins University Coronavirus Resource Center https://coronavirus.jhu.edu/

Sacramento-Yolo Mosquito and Vector Control District

October 19, 2021 Board Meeting

2. Items for Approval by General Consent:

a. Minutes of the September 21, 2021 Board of Trustees Meeting;
b. Expenditures for September 2021.

Recommendation:

Approve the Items by General Consent

MINUTES OF THE SEPTEMBER 21, 2021
MEETING OF THE BOARD OF TRUSTEES OF THE
SACRAMENTO-YOLO MOSQUITO & VECTOR CONTROL DISTRICT

PLACE: 8631 Bond Road, Elk Grove, CA 95624
TIME: 10:00 a.m.

TRUSTEES PRESENT:

Craig Burnett	President	Folsom
Gar House	Vice President	Winters
Marcia Mooney	Secretary	Galt
Christopher Barker		Davis
Janell Darroch		West Sacramento
Sean Denny		Woodland
Bruce Eldridge		Yolo County
Lyndon Hawkins		Elk Grove
Jayna Karpinski-Costa		Citrus Heights
Raymond LaTorre		Sacramento
Susan Maggy		Sacramento County
Robert McGarvey		Rancho Cordova
Vacant		Isleton

TRUSTEES ABSENT:

None

LEGAL COUNSEL:

Jennifer Buckman

STAFF PRESENT:

Gary Goodman	Manager
Samer Elkashef	Assistant Manager
Janna McLeod	Administrative Manager
Marcia Reed	Laboratory Director
Marty Scholl	Ecological Management Supervisor
Tony Hedley	Fisheries Supervisor
Steve Ramos	Program Coordinator

CALL TO ORDER

The meeting was called to order at 10:00 a.m. by President Craig Burnett.

Roll Call

This meeting was held and attended by Video Teleconference. Attendance was taken by Roll Call. All Trustees were in attendance; therefore, a quorum was present. The Isleton Trustee position is vacant. The City of West Sacramento recently appointed Trustee Janell Darroch who joined the Board for her first meeting.

Pledge of Allegiance
All phones and electronic devices are requested to be silenced during the meeting.

1. ITEMS FOR APPROVAL BY GENERAL CONSENT

A correction made to item e., the Resolution, after initial posting of the packet was noted. On a motion by Trustee Denny seconded by Trustee LaTorre, the Board voted to approve General Consent Items a through e. The vote was taken by roll call and the motion passed by the following vote: Ayes: 12, Noes: 0, Absent: 0.

a. Minutes of the August 17, 2021 Board of Trustees Meeting;
b. Expenditures for August 2021;
c. District Investment Report for Period Ending June 30, 2021;
d. Annual Cooperative Agreement Between the California Department of Public Health and the Sacramento-Yolo Mosquito and Vector Control District;
e. Board Consideration of Resolution Honoring Raul DeAnda for His Years of Service.

2. OPPORTUNITY FOR PUBLIC COMMENT
This item is reserved for members of the public who wish to speak on items not on the agenda.

Felix Huerta, Representative of OE3, requested to speak to the Board. Mr. Huerta discussed the Union position as it relates to the Unfair Labor Charge filed with PERB to be discussed by the Board in the closed session (Items 6 and 7) later in the meeting. Mr. Huerta urged the Board to provide staff with direction to resolve the issue during the closed session.

3. REPORTS TO THE BOARD

a. Manager's Report:

The District's West Nile season started slowly but picked up at the end of August and into September. This is unusual as our peak of activity is usually 4 weeks earlier. The District continues to follow the Mosquito Borne Disease Management Plan with enhanced surveillance and control efforts in response to positive dead birds or positive mosquito collections. The District has continued to find invasive mosquitoes in some new areas this year (Elk Grove and Orangevale). We expect the numbers to begin to fall with the cooler weather in November so we still have a few weeks left to manage the populations. The District has received the CalPERS valuation and scheduled a meeting with their staff to discuss. An update to the valuation is expected by the end of September so we will have a report to the Board in October. The District Audit is ongoing and progressing well. We hope to have a report to the Board at the November meeting.

b. Reports from District Departments: Written reports were provided in the Board packet from each department. Department supervisors gave an oral presentation and were available to answer any questions.

Lab/Surveillance: Laboratory Director, Marcia Reed reported on department activity including mosquito surveillance and abundance, invasive Aedes detections, and collaborations. Marcia discussed weekly surveillance trap data and the vector index for the area of concern in Galt, North Sacramento, and Davis. The index in each area has reduced once control operations perform treatments where positive samples have been detected. Sentinel chickens in the Knight's Landing flock have tested positive for West Nile and have been replaced with new un-exposed chickens.

Invasive Aedes surveillance continues with detections in Elk Grove, Orangevale, Winters and Arden.

Ecological Management: Ecological Management Supervisor, Marty Scholl reported on department activity including the Wetland, Planning, Fall Flooding, UAS and Stormwater/creek programs. Staff contacted wetland and duck club owners to provide cost estimates prior to the beginning of the Fall Flooding program. Winter brush clearing projects are being identified for fall/winter completion once technicians become available. Pictures of projects being performed at Deadman's Gulch in Galt, and Dry Creek in Wilton.

Biological Control: Fisheries Supervisor, Tony Hedley reported on department activity including fish stocking in rice fields, regular fisheries maintenance activities and projects including dissolved oxygen levels, crayfish trapping, and testing of ideal stocking rates. Tony reviewed the process of pond rehabilitation and included pictures showing the cleaning of the bottom of the ponds once drained.

Larval and Adult Control: Program Coordinator, Steve Ramos reported on department activities including Aerial Applications, Trials, Culex and West Nile Virus control, and Invasive Aedes control. High mosquito abundance numbers can typically be seen this time of year in the rice fields which in turn keep our aerial adulticide and larvicide treatment planes busy. After fields are drained and harvested in September this will decrease while duck ponds and wetlands treatments will increase as fall approaches depending upon water availability due to ongoing drought conditions and curtailments. Control staff has been responding to Aedes detections and mailers are being sent to zip codes within the detection areas to inform residents why staff is in the area.

Public Outreach: Public Information Officer, Luz Robles provided a written report discussing department activities with the Board packet. As Aedes detections continue additional outreach efforts in the form of mailers and social media posts are being done for the areas where the invasive mosquitoes have been found. Staff is reaching out to local elected officials with informational materials and notices for these areas as well. Repellent wipes were distributed to the River City Food bank, Harm Reduction Services and a Galt Boy Scouts troop.

4. BOARD REVIEW AND CONSIDERATION OF MODIFICATIONS TO DISTRICT CAFETERIA PLAN DOCUMENT

In response to the continued impacts of the pandemic the Consolidated Appropriates Act of 2021 provides employers with additional options to amend their Flexible Spending Accounts (FSA) to provide further relief to employees who have FSA accounts. Manager Gary Goodman introduced the item and was available for questions. On a motion by Trustee Mooney seconded by Trustee Denny, the Board voted to approve the Amendment to the District Cafeteria Plan Document. The vote was taken by roll call and the motion passed by the following vote: Ayes: 12, Noes: 0, Absent: 0.

5. BOARD REVIEW AND CONSIDERATION FOR FENCING OF TWO PONDS

Manager Gary Goodman introduced the item and was available for questions. On a motion by Trustee Maggy seconded by Trustee Denny, the Board voted to authorize staff to contract with Stockton Fence & Material Company for the project not to exceed $80,000. The vote was taken by roll call and the motion passed by the following vote: Ayes: 12, Noes: 0, Absent: 0.

At approximately 11:07am President Burnett called for the adjournment of the Regular meeting to go into the closed session for items 6 and 7. Mr. Huerta requested to speak prior to the Board going into closed session. Mr. Huerta again discussed the Union position as it relates to the Unfair Labor Charge filed with PERB and urged the Board to direct staff to resolve the issues brought forth by the Union.

6. CLOSED SESSION-CONFERENCE WITH LEGAL COUNSEL – THREATENED OR ANTICIPATED LITIGATION (Gov. Code s. 54956.9 (d)(1), (d) (2)) - ONE (1) MATTER UNFAIR LABOR CHARGE FILED WITH PUBLIC EMPLOYMENT RELATIONS BOARD BY OPERATING ENGINEERS LOCAL NO. 3.

The Board went into closed session for Items 6 and 7 at approximately 11:08 am.

7. CLOSED SESSION-PROVIDE INSTRUCTION TO DESIGNATED LABOR REPRESENTATIVES (Gov. Code s. 54957.6-LABOR NEGOTIATIONS) – AGENCY DESIGNATED REPRESENTATIVES: [GARY GOODMAN, JANNA MCLEOD, SAMER ELKASHEF, CHRIS VOIGHT] EMPLOYEE ORGANIZATION: [OPERATING ENGINEERS LOCAL UNION # 3].

The closed session was adjourned and the Regular meeting restarted at 11:52am.

The Board reported they met in closed session on items 6 and 7 and provided direction to the labor negotiating team.

8. BOARD/STAFF REPORTS AND REQUESTS

Manager Goodman asked our new Trustee, Janell Darroch, to introduce herself and give the Board a brief description of her background and interests in mosquito control. President Burnett thanked her for joining the Board and welcomed her to the District.

The MVCAC Annual Conference will be held at the end of January 2022 and is planned to be an in person conference.

The AMCA Annual Conference will be held in Jacksonville in March of 2022.

The appointing agencies will be receiving a letter during the month of October regarding the Trustees whose appointments are expiring at the end of this calendar year.

Recruitment has begun to fill the Laboratory Director position due to retirement.

7. ADJOURNMENT

The meeting adjourned at 12:01 pm

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I certify that the above minutes substantially reflect the general business and actions taken by the Board of Trustees at the September 21, 2021 meeting.

____
Gary Goodman, Manager

Approved as written and/or corrected by the Board of Trustees at the October 19, 2021 meeting.

____
Marcia Mooney, Board Secretary

September 2021 Check Register
Activity From: 9/1/2021 to 9/30/2021
Sacramento Yolo MVCD (SYC)

Check Number	Check Date	Vendor Number	Name	Check
Bank Code: U US Bank				
055132	9/2/2021	0002411	California Trailers	5,055.88
055133	9/2/2021	0002412	Roseville Motorsports	8,189.00
055134	9/8/2021	0000006	Adapco Inc	343,275.80
055135	9/8/2021	0000014	Alhambra & Sierra Springs	53.40
055136	9/8/2021	0000015	All Star Glass	300.85
055137	9/8/2021	0000018	ANDKO Building Maintenance Inc.	4,804.94
055138	9/8/2021	0000034	AutoZone Inc	1,301.32
055139	9/8/2021	0001011	Buckmaster Office Solutions	125.49
055140	9/8/2021	0001019	Cintas Corporation	2,499.84
055141	9/8/2021	0000119	Clarke Mosquito Control Products Inc	165,556.41
055142	9/8/2021	0000126	Complete Welders Supply Inc	5,620.69
055143	9/8/2021	0000128	Consolidated Communications	2,394.06
055144	9/8/2021	0000186	Elk Grove Water District	348.78
055145	9/8/2021	0001054	Employment Developement Dept	1,712.00
055146	9/8/2021	0000502	ES Opco USA LLC	65,934.60
055147	9/8/2021	0000198	Factory Motor Parts Co	1,432.08
055148	9/8/2021	0000202	Ferrellgas	23.98
055149	9/8/2021	0000204	Fisher Scientific International Inc	222.17
055150	9/8/2021	0000240	Hunt & Sons Inc	10,857.69
055151	9/8/2021	0000938	Jim Hesseltine's Tire Service, Inc.	557.81
055152	9/8/2021	0002352	Kingsley Bogard, LLP	6,239.94
055153	9/8/2021	0000306	Maita Chevrolet	1,054.92
055154	9/8/2021	0000356	OReilly Automotive Stores Inc	478.69
055155	9/8/2021	0000367	PG & E	142.43
055156	9/8/2021	0000370	Pitney Bowes	292.60
055157	9/8/2021	0000388	Republic Services #922	93.55
055158	9/8/2021	0001012	Riebes Auto Parts	1,886.34
055159	9/8/2021	0001465	Sacramento Control Systems, Inc.	823.50
055160	9/8/2021	0000451	SMUD	5,005.73
055161	9/8/2021	0000454	Spark Creative Design	1,391.50
055162	9/8/2021	0000461	Stericycle Inc	86.36
055163	9/8/2021	0001234	T-Mobile	8,986.97
055164	9/8/2021	0000475	Target Specialty Products	29,541.41
055165	9/8/2021	0002407	Valley Fire & Security	24,990.71
055166	9/8/2021	0000515	Valley Tire Center	26.00
055167	9/8/2021	0000518	Vector Disease Control International	52,083.33
055168	9/8/2021	0000519	Vector Laboratories Inc	305.45
055169	9/8/2021	0000522	Verizon Wireless	3,186.03
055170	9/8/2021	0000526	VWR International Inc	247.05
055171	9/8/2021	0000529	Waste Management	167.45
055172	9/9/2021	0000199	Farm Air Flying Service	155,017.01
055173	9/14/2021	0000267	Kaiser Foundation Health Plan	49,263.84
055174	9/14/2021	0000357	P & A Administrative Services Inc	94.50
055175	9/14/2021	0000957	Sutter Health Plus	6,409.50
055176	9/14/2021	0000531	Western Health Advantage	6,289.35
055177	9/14/2021	0000531	Western Health Advantage	3,025.49
055178	9/24/2021	0000006	Adapco Inc	93,086.96
055179	9/24/2021	0000015	All Star Glass	380.59

055180	9/24/2021	0000036	Awards by Kay	2,363.07
055181	9/24/2021	0000038	Bartkiewicz Kronick & Shanahan	1,120.00
055182	9/24/2021	0000976	Blanning & Baker	1,312.50
055183	9/24/2021	0001011	Buckmaster Office Solutions	155.49
055184	9/24/2021	0000091	Capital Public Radio Inc	1,750.00
055185	9/24/2021	0000117	City of Woodland	472.34
055186	9/24/2021	0000119	Clarke Mosquito Control Products Inc	198,121.16
055187	9/24/2021	0000126	Complete Welders Supply Inc	3,214.76
055188	9/24/2021	0000140	Crossings TV	4,785.62
055189	9/24/2021	0000181	Elk Grove Dodge	13.90
055190	9/24/2021	0000502	ES Opco USA LLC	43,889.81
055191	9/24/2021	0000958	GreatAmerica Financial Services	434.80
055192	9/24/2021	0000467	Home Depot Pro Institutional	381.42
055193	9/24/2021	0000240	Hunt & Sons Inc	14,984.63
055194	9/24/2021	0000242	iHeart Media	8,810.00
055195	9/24/2021	0002413	Inside Sacramento	509.00
055196	9/24/2021	0000272	KCRA TV 3	10,150.00
055197	9/24/2021	0000277	Kimball Midwest	208.99
055198	9/24/2021	0000942	KQCA My58	15,250.00
055199	9/24/2021	0002343	Leading Edge Aerial Technologies Inc.	36,000.00
055200	9/24/2021	0000293	Life Technologies Corporation	6,742.20
055201	9/24/2021	0000497	Magnegas Welding Supply - West	78.65
055202	9/24/2021	0000367	PG & E	1,223.35
055203	9/24/2021	0000377	Radial Tire of Elk Grove	23.77
055204	9/24/2021	0001012	Riebes Auto Parts	149.36
055205	9/24/2021	0001270	Rubicon Global, LLC	208.27
055206	9/24/2021	0000579	Salem Media Group	3,359.00
055207	9/24/2021	0000454	Spark Creative Design	6,019.47
055208	9/24/2021	0000459	Star Milling Co	3,079.96
055209	9/24/2021	0000475	Target Specialty Products	9,813.87
055210	9/24/2021	0000498	ULINE	117.49
055211	9/30/2021	0000043	Benefit Coordinators Corporation	3,234.49
055212	9/30/2021	0000084	CA State Disbursement Unit	350.00
055213	9/30/2021	0000339	Nationwide Retirement Solutions	2,925.00
055214	9/30/2021	0000339	Nationwide Retirement Solutions	1,550.00
055215	9/30/2021	0001035	Operating Engineers Local Union No. 3	1,188.00
055216	9/30/2021	0000373	Preferred Benefit Ins Administrators	8,681.00
W00214	9/30/2021	0000086	CalPERS 457 Plan	18,124.03
W00215	9/30/2021	0000087	CalPERS Financial Reporting & Accounting	79,141.96
W00216	9/30/2021	0000176	EDD	17,221.52
W00217	9/30/2021	0000561	United States Treasury	71,437.39
			Bank U Total:	1,649,460.26
			Report Total:	1,649,460.26

I hereby authorize the use of my signature plate on
the above-listed warrants,055132-055216,
and EFTs W00214-W00217

Signature Date
Craig Burnett, President of the Board

Sacramento/Yolo M.V.C.D.
STATEMENT OF OPERATION

	3Months Ended September30 2021	*Annual Budget*	*Unused*
Revenue			
REVENUE	10,394.44	0.00	10,394.44
TOTAL Revenue	10,394.44	0.00	10,394.44
Expenditures			
SALARIES/BENEFITS/WC			
SALARIES/BENEFITS/WC	5,428,656.53	9,136,769.78	3,708,113.25
TOTAL Salaries	5,428,656.53	9,136,769.78	3,708,113.25
OPERATIONAL			
LIABILITY INSURANCE	205,825.00	215,825.00	10,000.00
AUDITING/FISCAL	0.00	16,000.00	16,000.00
COMMUNICATIONS	20,454.62	93,500.00	73,045.38
PUBLIC INFORMATION	59,792.88	572,000.00	512,207.12
STRUCTURE & GROUNDS	19,042.68	83,000.00	63,957.32
MEMBER/TRAINING	33,828.00	119,000.00	85,172.00
DISTRICT OFFICE EXPENSES	3,642.34	17,500.00	13,857.66
PROFESSIONAL SERVICES	27,074.34	220,250.00	193,175.66
MATERIALS & SUPPLIES	5,074.27	22,000.00	16,925.73
RENTS & LEASES - Admin	2,422.14	11,550.00	9,127.86
SAFETY PROGRAM	390.00	5,000.00	4,610.00
UTILITIES	24,756.45	110,000.00	85,243.55
AIRCRAFT SERVICES	500,715.98	1,020,000.00	519,284.02
ECOLOGICAL MANAGEMENT	55.44	18,500.00	18,444.56
MICROBIAL	812,863.57	1,550,000.00	737,136.43
INSECT GROWTH REGULATOR	632,160.66	1,100,000.00	467,839.34
INSECTICIDES	372,832.75	1,100,000.00	727,167.25
FISHERIES	8,017.25	32,000.00	23,982.75
GEOGRAPHIC INFO SYSTEMS	868.00	9,000.00	8,132.00
INFORMATION TECHNOLOGY	17,102.35	66,680.00	49,577.65
CONTROL OPERATIONS	13,415.86	47,000.00	33,584.14
VEHICLE PARTS/LABOR	39,798.49	101,000.00	61,201.51
LAB SERVICES	75,135.69	185,000.00	109,864.31
GAS & PETROLEUM	82,596.21	170,000.00	87,403.79
TOTAL Total Operational	2,957,864.97	6,884,805.00	3,926,940.03

SYC Balance Sheet
As of 9/30/2021

Sacramento Yolo MVCD (SYC)

Assets		
Current Assets		
Cash in Bank-FSA	20,654.22	
Cash with LAIF	6,783,550.15	
Petty Cash	600.00	
US Bank	74,657.07	
Accounts Receivable	751.25	
Interest Receivable	30,439.00	
Assigned - Cash With VCJPA	1,665,077.00	
Inventory	1,347,050.17	
Total Current Assets:		9,922,778.86
Fixed Assets		
LAND, BLDG., IMPROVEMENT	1,175,092.88	
EQUIPMENT	4,715,197.45	
BOND ROAD	5,061,395.00	
WOODLAND FACILITY	708,574.00	
ACCUMULATED DEPRECIATION	(7,638,941.07)	
Total Fixed Assets:		4,021,318.26
Other Assets		
Deferred Outflows of Resources	5,285,357.00	
Deferred Outflows of Resources-GASB 75	950,064.00	
Total Other Assets:		6,235,421.00
Total Assets:		20,179,518.12
Liabilities		
Current Liabilities		
Accounts Payable	223,080.22	
Payroll Taxes Payable	(0.30)	
Voluntary TL & AD&D	(643.93)	
Voluntary STD	(459.92)	
FSA Deductions	151,958.34	
P.E.R.S. Deductions	(1.04)	
Safety Program	(1,530.00)	
Accumulated Vacation	395,995.26	
Total Current Liabilities:		768,398.63
Long-Term Liabilities		
Net Pension Liability	10,328,549.00	
Net OPEB Liability	1,790,183.00	
Deferred Inflow of Resources	3,197,032.00	
Deferred Inflow of Resources-GASB 75	90,090.00	
Total Long-Term Liabilities:		15,405,854.00
Total Liabilities:		16,174,252.63
Equity		
INVESTMENT IN FIX ASSETS	4,251,591.96	
RESERVED CASH (INS.)	1,607,140.00	
Committed-Capital Outlay	700,000.00	
Unassigned - Dry Financing	6,000,000.00	
Retained Earnings-Current Year	(8,535,622.06)	
GENERAL FUND	(2,017,844.41)	
Committed - Vector/Disease Response	2,000,000.00	
Total Equity:		4,005,265.49

Total Liabilities & Equity:	20,179,518.12

Sacramento-Yolo Mosquito and Vector Control District

October 19, 2021 Board Meeting

4. Reports to the Board

a. Manager's Report

b. Reports from District Departments

- **Lab/Surveillance (Marcia Reed)**
- **Ecological Management (Marty Scholl)**
- **Biological Control (Tony Hedley)**
- **Larval and Adult Control (Steve Ramos)**
- **Public Outreach (Luz Maria Robles)**

a. Manager's Report

The District's West Nile season is almost over. We typically only see a few positives throughout October and then will cease testing operations over the winter. Staff is following the Mosquito Borne Disease Management Plan to help respond to the remaining positive locations.

We are continuing to address the invasive species detection in Winters, Arden Arcade, Elk Grove, and most recently in South Sacramento. All of our invasive detections are being handled with increased surveillance, door to door inspections, and both larvicide and adulticide treatments where feasible. We anticipate that the behavior of the *Aedes aegypti* mosquito will slow down significantly as the weather cools.

The 2021 Budget Act appropriated $100 million one-time General Fund to provide fiscal relief to independent special districts for revenue losses or unanticipated costs incurred due to the COVID-19 public health emergency. While we did not see any revenue loss, we did have unanticipated costs and are in the process of compiling these costs and will submit before the deadline of October 15th. We may get all or a portion of our request as it will depend on the number of requests and value of the requests made by special districts.

The District auditors have completed the full audit and will present their findings to the Board at the November meeting.

The District is working with our benefit broker, Alliant, on open enrollment healthcare rates.

b. Reports from District Departments

- **Lab/Surveillance (Marcia Reed)**
- **Ecological Management (Marty Scholl)**
- **Biological Control (Tony Hedley)**
- **Larval and Adult Control (Steve Ramos)**
- **Public Outreach (Luz Maria Robles)**

LABORATORY
Monthly Report for the October 2021 Board Meeting

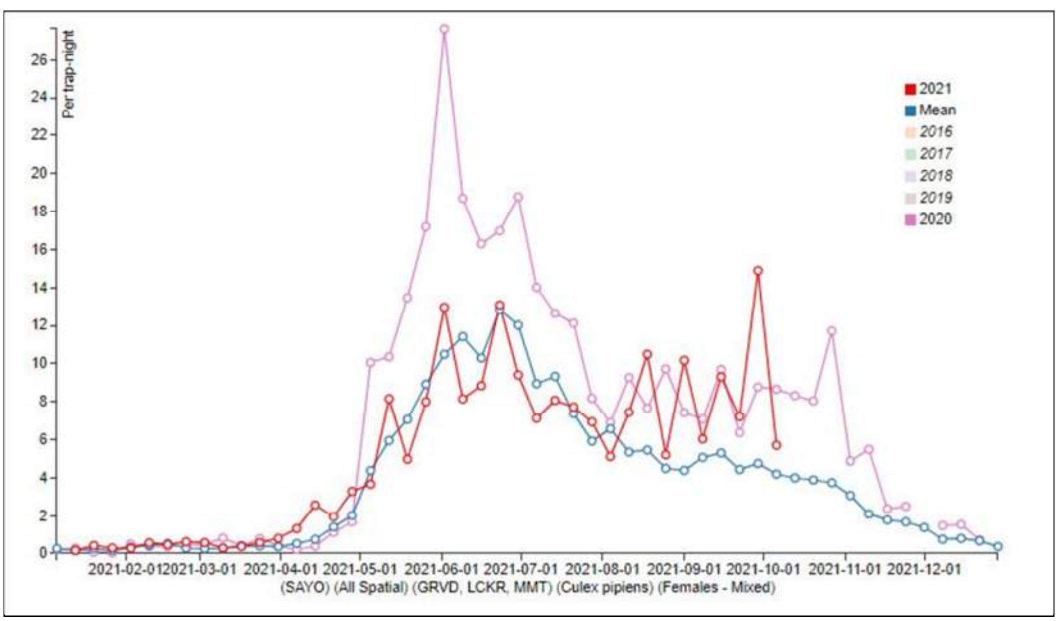
Insectary:

Colonies maintained: *Culex tarsalis* Kern National Wildlife (susceptible)
Culex quinquefasciatus Cq1 (susceptible)
Culex pipiens Woodland (resistant)
Culex tarsalis Vic Fazio (resistant)
Aedes sierrensis wild - Marin - Sonoma County

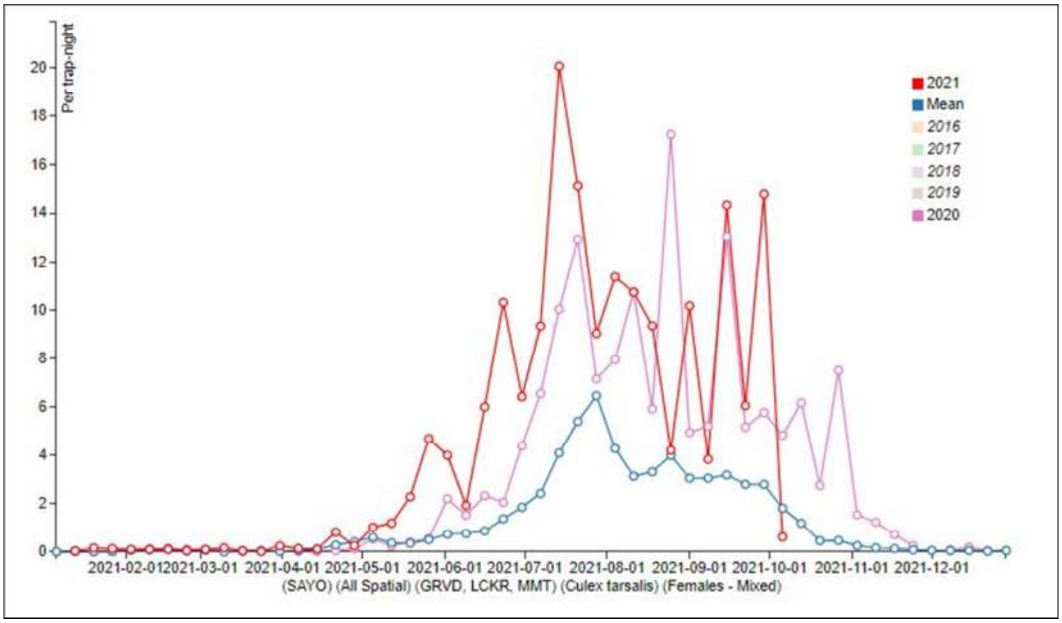
Surveillance:

Weekly collections - The abundance collections from locker and gravid traps set across the District are shown below. *Culex pipiens* and *Culex tarsalis* numbers are above the 5yr average, but very close to last year's numbers. As mentioned in previous reports, the switch from the less efficient Mosquito Magnet traps to the District locker traps has contributed to the 5 year average being lower than last year and this year's numbers.

Culex pipiens in weekly abundance traps (LCKR, GT):



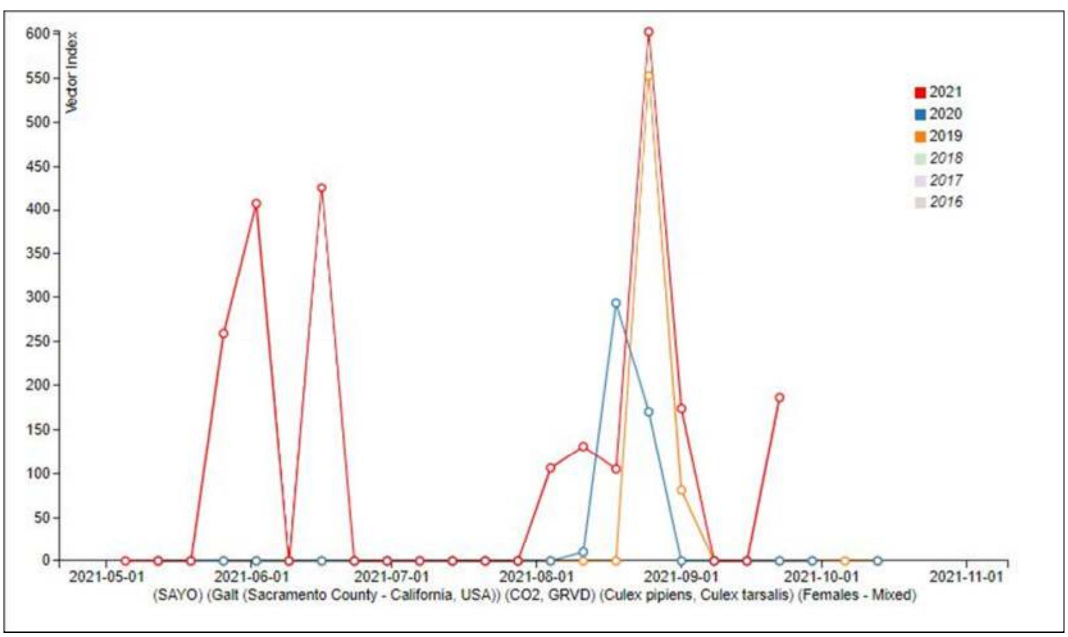
Culex tarsalis in weekly abundance traps (LCKR, GT):



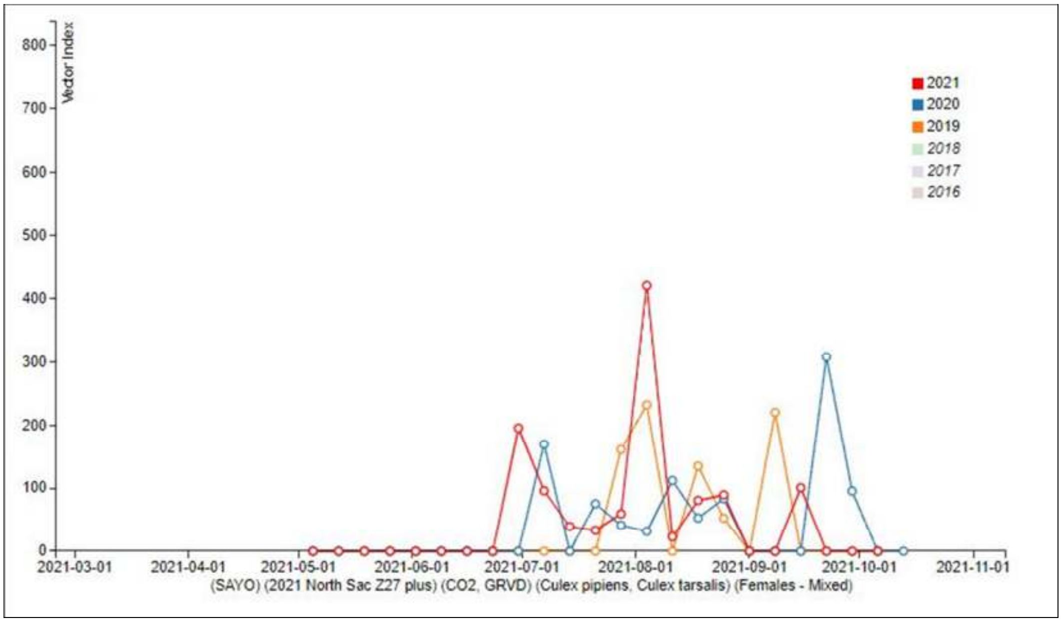
Encephalitis virus surveillance (EVS)

Vector Index graph for current areas of concern for this season:

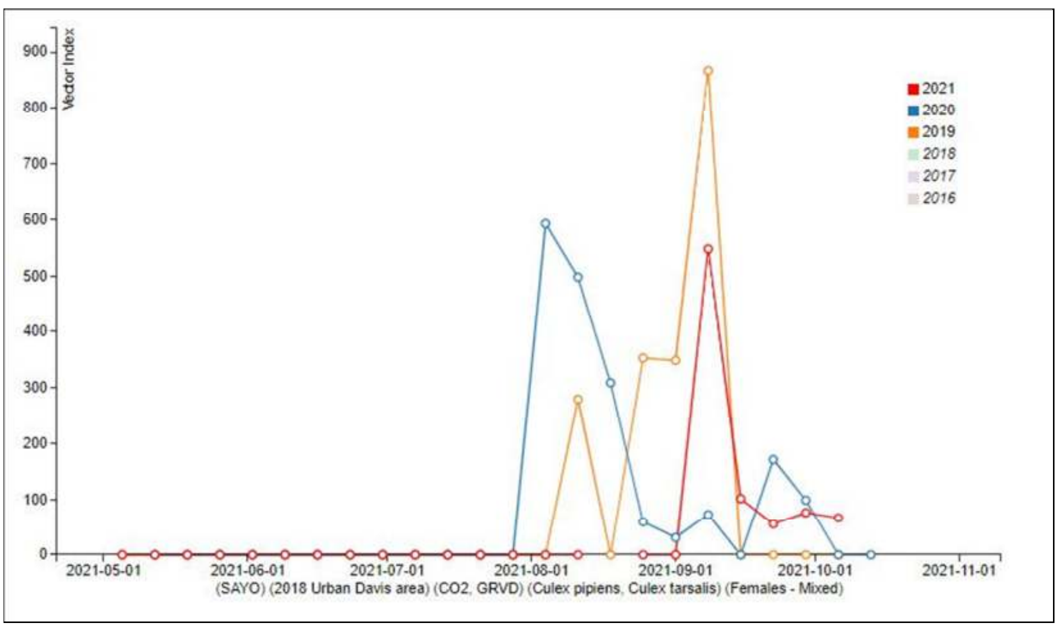
Galt



North Sacramento around Zone 27



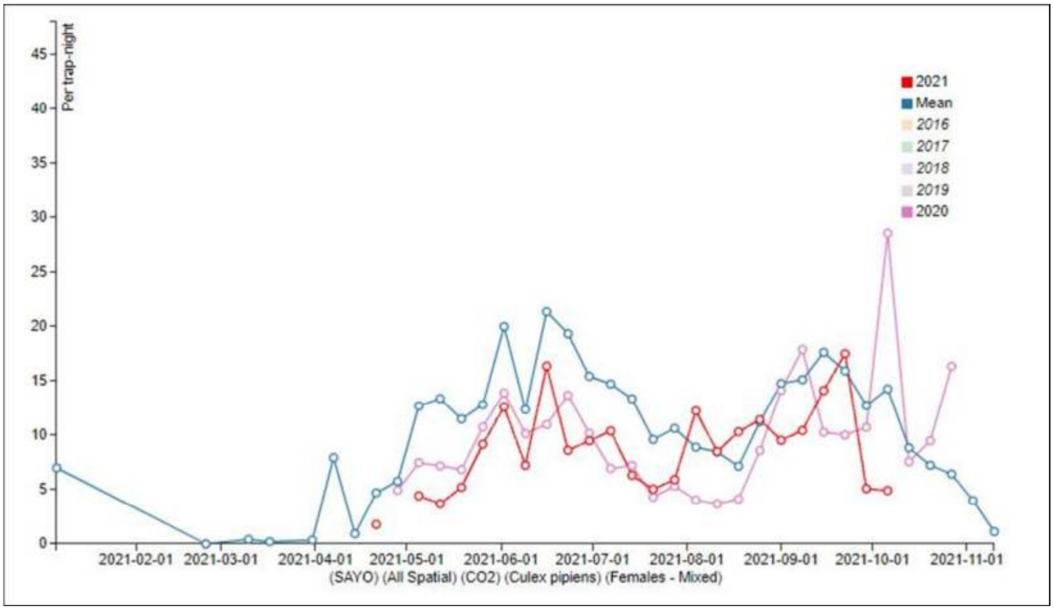
Davis



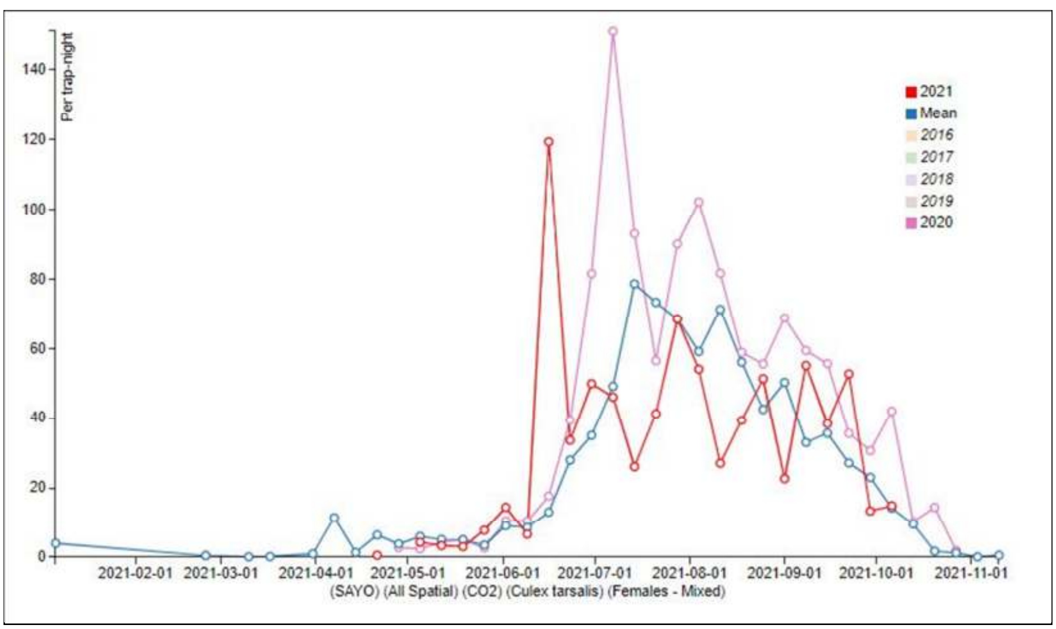
The vector index graphs shown are from the areas where we saw elevated risk this season. As is shown in the graphs, control responses repeatedly brought the vector index numbers down. Galt and Davis do still have a low level of West Nile Virus activity and control is responding as needed.

Encephalitis virus surveillance (EVS) – Mosquitoes –

***Culex pipiens* in CO_2 traps:**



***Culex tarsalis* in CO_2 traps:**



As of Oct 12th, we have tested 7102 pools (samples) and have found 196 positive mosquito pools. 131 of the positive pools are from Sacramento County and 65 are from Yolo County. The positives are quite widely spread in both Counties. As can be seen in the above graphs, abundance is declining for both species of interest as usual at the end of the summer.

Encephalitis virus surveillance (EVS) – **Sentinel Chickens** – We have had three chicken flocks with positive sentinel chickens. Three chickens from the Knight's Landing flock and one each from the Dunnigan and the Isleton flocks have tested positive for antibodies for West Nile Virus.

Encephalitis virus surveillance (EVS) – Dead Birds – We have picked up and tested 462 dead birds and have detected 109 positive carcasses. The majority of the positive dead birds are from Sacramento County, although we have now found 9 in Yolo County. The three top species which have resulted in positive West Nile results are American Crows (42), California Scrub Jays (29) and Yellow-billed Magpies (11).

Encephalitis virus surveillance (EVS) – Sugar Baits – We have tested 284 sugar bait samples and have found three positive samples that initiated regular EVS trapping. We will be evaluating how to utilize this surveillance tool for next season.

Invasive *Aedes spp.* Surveillance –

We now have six areas of known infestation of *Aedes aegypti* in the District. The two areas from last year, Winters and Arden have continued to show the presence of these invasive mosquitoes. This year we have added new areas in Orangevale, one in South Sacramento and two in Elk Grove. Control operations are working on inspections and treatments in these areas while the laboratory is attempting to trap in as many areas as possible before the winter arrives to locate any additional infestations. We will be maintaining a few permanent sites to monitor *Ae. aegypti* activity during the winter.

Tick and Lyme disease surveillance – We are evaluating the tick flagging sites for this winter and will begin our surveillance program the first week of November.

BG Counter Traps – We have concluded the rice surveillance program utilizing these traps. We are continuing to monitor a few sites of particular interest to control at this time. One of these sites is in Galt, where we have seen a lot of mosquito and West Nile Virus activity, and the other is in southern Yolo County at Prospect Slough.

Disease Response Surveillance – We had four malaria cases reported to us since the last board meeting. Three were in Elk Grove, and one was in Sacramento. The lab set CO_2 baited traps to detect any *Anopheles sp.* mosquitoes present in the areas. We did find one female *Anopheles freeborni* mosquito at one of the Elk Grove locations which tested negative.

Collaborations –

Deposition in larvicide and adulticide applications done with drones–

We look forward to seeing Jane Bonds' publication of the work we collaborated on regarding the use of drones in both larvicide and adulticide mosquito control applications.

Evergreen adulticide evaluation –

Our work with Adapco on the Evergreen 6 60 pyrethrin adulticide has shown that this material does work and it might be considered for use by control operations if warranted.

LVL (WALS) evaluation of Natular SC –

Clarke staff as well as ourselves are continuing to learn how to best utilize our truck mounted larvicide application equipment. This work was done with an experimental use permit since Natular SC is not a registered product in California. It shows promise as a product to use in this application method once it can be used.

Sentinel Cage Study –

Dr. Cornel and his staff from the University of California Davis are working on publishing their work on sentinel cages for mosquito control adulticide applications. They were able to complete all the trials necessary this season.

BG MAST –

We have pulled the MAST traps from the field and will be reviewing the data collected with Verily staff.

Sumilarv –

We are wrapping up this seasons work with the catch basin staff on this collaboration with MGK utilizing Sumilarv at different application rates in catch basins.

Valent's New Adulticide –

We have submitted an abstract for the annual AMCA conference to show the results of our trials with Valent on their new adulticide.

District Studies –

Vectoprime –

We treated different sections of the rice habitat in Natomas with *Bti* liquid only, *Bti* liquid switching to granular and Vectoprime (a *Bti* – methoprene product). This was a challenging evaluation and we are currently looking at the data collected. The product does show promise and further trials next season may highlight where it can fit into our control program.

Woodland –

We have completed extensive bench top cup larval bioassay evaluations of the *Culex pipiens* mosquitoes in Woodland. This data is being processed and will be presented at the annual mosquito control association meetings this winter.

California Arbovirus Surveillance Bulletin #24: week 40, Friday Oct. 8, 2021

2020 & 2021 YTD West Nile Virus Comparisons		
	2020	2021
Total # Dead Bird Reports	4,808	4,629
# Positive Counties	35	34
# Human Cases	93	70
# Positive Dead Birds / # Tested	273 / 1,349	205 / 1,542
# Positive Mosquito Pools / # Tested	2,388 / 35,284	2,224 / 35,139
# Seroconversions / # Tested	115 / 5,409	83 / 5,066

YTD WNV Activity by Element and County, 2021					
County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda			2		
Amador		1			
Butte	13		2	80	26
Colusa					1
Contra Costa	1		2	8	
Fresno	4	2		218	
Glenn	2				
Kern	3			103	
Kings	1	1		34	
Lake				4	4
Los Angeles	11		42	242	
Madera	3			129	
Merced	5	1	1	9	19
Napa				1	
Nevada			2		
Orange	1		7	48	
Placer	2		5	63	
Riverside				107	
Sacramento		2	100	117	
San Bernardino	1		1	9	
San Diego	2				
San Joaquin	2	3	17	388	
San Luis Obispo	2				
Santa Clara			1	5	
Shasta	3			28	3
Solano	1		2	21	
Sonoma			1	1	
Stanislaus	5	1	2	150	
Sutter			1	18	11
Tehama					5
Tulare	7		7	373	8
Ventura			1		
Yolo	1		9	56	4
Yuba		2		12	2
Totals	**70**	**13**	**205**	**2,224**	**83**

ECOLOGICAL MANAGEMENT DEPARTMENT
Monthly Report for the October 2021 Board Meeting

Wetland Program

Lower Yolo Ranch: Staff was approached by Aeroscn out of Folsom to test a new LiDAR imaging system on a small tidal area in an effort to locate the extent of tidal impoundments next season. Staff will analyze the data and formulate a plan for mapping the area in its entirety next season.

YBWA / MVCAC: As a participant of the MVCAC's AB 896 Workgroup, staff has been tasked to help the California Department of Fish and Wildlife (CDFW) identify areas where Mosquito Reducing Best Management Practices (BMPs) could be implement on CDFW owned lands statewide. Some extra funding has been made available to CDFW Wildlife Areas and is earmarked for maintenance projects that help to reduce mosquito breeding or reduce mosquito control costs. Staff presented a list of projects for further consideration.

Fall Flooding

The Fall Flooding Cost share program ended on October 7th for all privately owned properties that started flooding in September. Four property owners will be receiving a bill for their portion of the treatment costs based upon when they started flooding in September. Staff has also been assisting the Yolo Supervisors with determining treatment acres, timing, and product selection.

Stormwater / Creek Program
Staff has been working to identify additional drainage and brush clearing projects for the off season to complete as conditions will allow. Due to the previous dry winter and hot summer, many areas did not grow as much as anticipated, and will be saved for spring maintenance.

Natomas Central Mutual Water Company, SAFCA: Staff met with representatives of Sacramento Area Flood Control Agency (SAFCA) and discussed cutting access notches into the overgrown borrow pit area just north of the Teal Bend Golf Course.

UAS Program
Staff has continued assisting control operations with compiling, submitting, and processing UAS treatment orders to Leading Edge Aerial Inc. As of this report writing, four thousand, one hundred thirty seven acres have been treated by Leading Edge between both counties.

Staff collected aerial imagery of all waterfowl hunted properties on key Fall Flooding dates to provide accurate documentation of the start of flooding to be included with each invoice.

BIOLOGICAL CONTROL
Monthly Report for the October 2021 Board Meeting

The District stocked a total 64.5 lbs. of mosquitofish in the month of September, with 50 lbs. stocked in wetlands by the Fisheries department. During an average season, we see over two thousand acres of wetlands and duck clubs requests for mosquitofish. Our treatment goal is to have a stocking rate of greater than one quarter pound per acre with an estimated fall stocking total of 500-1000 pounds of mosquitofish available. The Fisheries department also continued to gather weekly data for all of our ongoing projects including traditional fertilization techniques, crayfish control and the use of solar aerators to maintain dissolved oxygen levels. Daily activities such as medical treatments and tank cleaning were also performed as necessary to maintain the high quality of our fish population.

Log of Treatment Applied for September

Material	AMT	Area Treated	Rate	Treatments
Mosquitofish	64.564 lbs.	179.108 Acres	.36 lbs. /ac	158

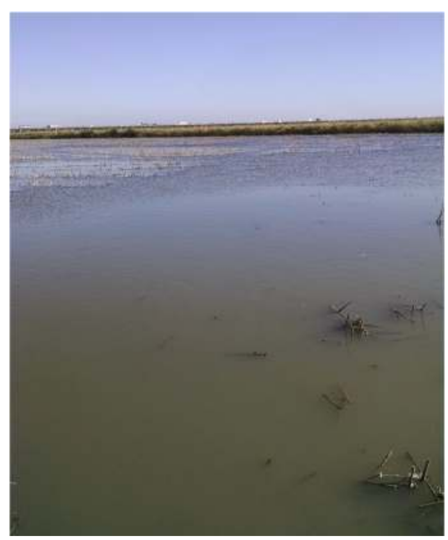
Log of Treatment Applied for the year 2021 running total.

Material	AMT	Area Treated	Treatments
Mosquitofish (*Gambusia affinis*)	2,718.061 lbs.	11,441.809 Acres	3,052
Guppies (*Poecilia reticulata*)	.65 lbs.	.046 Acres	13

Fisheries Budget

Total	Spent	Remaining	% Spent
32,000.00	10,599.02	21,400.98	33%

Fairly typical wetland, organic open water with dense vegetation along edges and dead vegetation throughout the wetland breaking down making ideal habitat for mosquito breeding.



CONTROL OPERATIONS
Monthly Report for the October 2021 Board Meeting

Aerial Applications

Planted rice fields began to be drained and prepped for harvest in September which means less rice habitat for larvae and adult mosquitoes. BG sentinel counter traps will remain in rice growing areas until mid-October to monitor adult counts as the season begins to wind down. September had 18 adulticide treatment blocks over rice growing areas in response to West Nile virus (WNV) positive trap results and high trap numbers, 60% of the September flights were over rice growing areas near Davis and Natomas.

Trials

September was the close of the trial season for the District. After multiple in-house and collaborative trial projects the District ended the trial season evaluating the efficacy of Fyfanon EW in urban applications using an all-terrain vehicle mounted fogging unit. The last of the monthly A1 mist blower blade pitch evaluations was performed which evaluated the correct blade pitch for applications as environmental conditions changed through the year.

Culex and West Nile Virus (WNV) Control

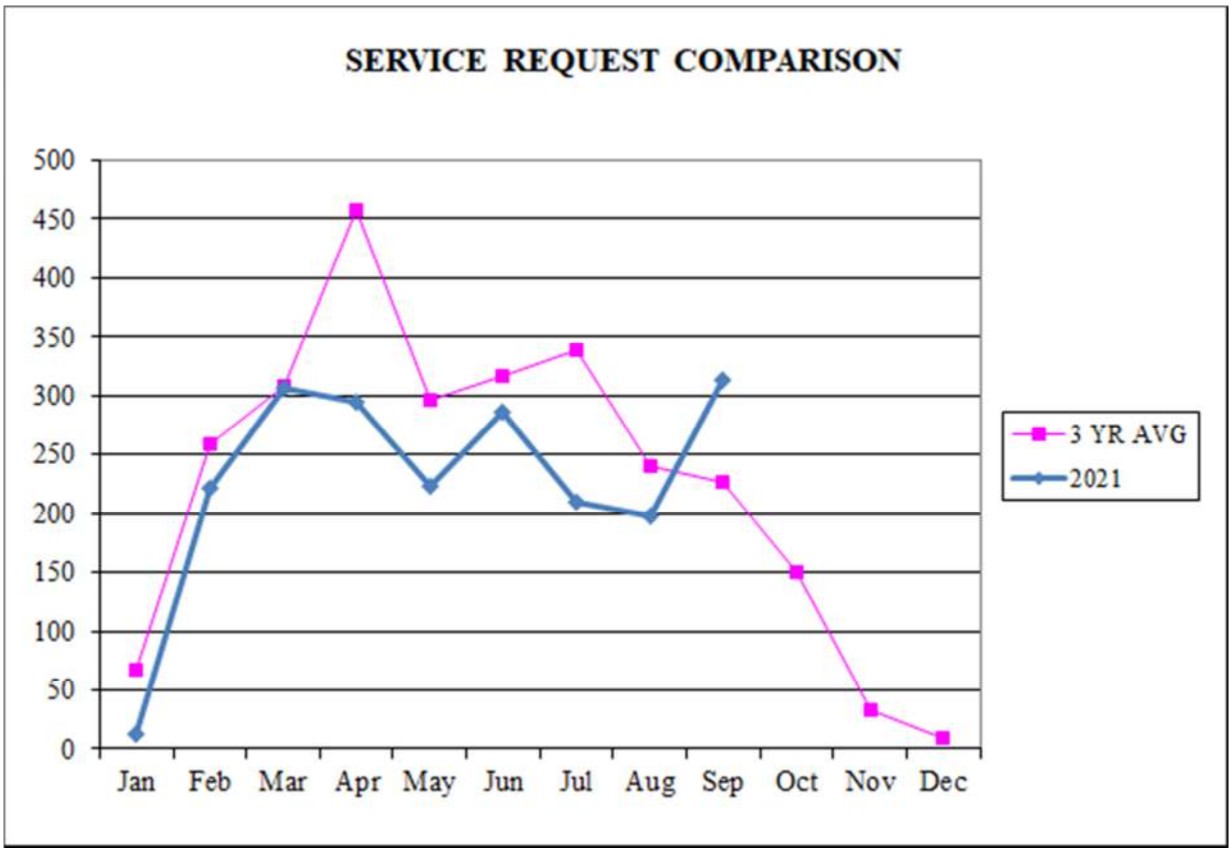
Virus activity continued throughout the month of September with crews responding to over 70 individual WNV positive mosquito pools (samples). During harvest season increased Culex mosquitoes in traps are expected as the mosquitoes' harborage is removed. Larvicide treatments of breeding habitats and some barrier treatments using a residual contact adulticide are employed during this time of year. Typically WNV activity will begin to diminish in October.

Invasive Aedes Control

The Orangevale area has had a total of ten positive Aedes detections in the month of September since the first detection in August. Detection areas in Elk Grove have expanded from the original detection area south of Bond road to the West side of Elk Grove near Franklin Blvd near the Laguna West neighborhood. Detections in Winters and the Arden/Arcade area continue; however, the adult and larval finds have slightly diminished in the month of September. Very recently new detections have been made south of Elder Creek, monitoring of this area will continue. WALS applications have continued through September and with variable weather conditions more likely in October, WALS applications will continue but may be less frequent.

Yellow Jackets

Yellow Jacket season began in mid-September with service requests increasing in Yellow Jacket breeding areas such as the American River trail, Folsom, Carmichael and the Sacramento Zoo. Service requests for Yellow Jackets have increased over 200% since the District issued a press release on the matter on September 28th which accounts for a large spike this month in services requests that is outside the trend for this time of year.



Larvicide Applications thru September 30th				
	2021		2020	
Locations/Roles	Treatments	Acres	Treatments	Acres
Sacramento County	6,849	12,835	8,323	7,869
Sac County Aerial	33 Orders	18,077	26 Order	20,962
Sac County Drone Treatments	32 orders	1,726	15 orders	593
Yolo County	1,479	7,606	1,930	6,045
Yolo County Aerial	66 Orders	126,970	69 Order,	111,202
Yolo County Drone Treatments	31 Order	2,298	11 Orders	699
CB Treated	181,110	--	150,0084	--
CB Inspected -not treated	166,043	--	149,188	--

Aerial Adulticide Summary thru September 30th				
	2021		2020	
County	# Applications	Acres	# Applications	Acres
Sacramento Ag	19	132,840	15	107,604
Sacramento Urban	0	0	0	0
Yolo Ag	49	418,243	64	475,124
Yolo Urban	0	0	0	0
Totals		551,083		582,728

Adulticide Summary through September 30th, 2021		**compared to: 2020**
Contract Acres (our portion) =	530,000	530,000
Acres used =	551,083	582,728
Acres remaining =	(-21,083)	(-52,728)
% Acres used =	104%	110%
% Acres remaining =	0%	0%

San Joaquin County MVCD has used 202,462 acres of their 190,000 acre contract commitment.
Placer MVCD has used 69,158 acres of their 100,000 acre commitment.
Turlock MAD has used 87,010 acres of their 180,000 acre commitment.

PUBLIC INFORMATION AND EDUCATION
Monthly Report for the October 2021 Board Meeting

Yellow Jacket Media Coverage

At the end of September we received extensive media coverage regarding the increased number of service requests relating to yellow jackets as well as the many nests found along the American River Parkway. A press release was issued on September 28th and media outlets were very interested in covering the story. We coordinated with Control Operations to be able to go out to the area along the river where more than 40 yellow jacket nests had been treated and removed in a single day. News crews were present to capture the footage of the nests being treated. The best media coverage was from the Sacramento Bee and it included a great video story and interview. This was a unique and interesting opportunity to showcase the work our District does with yellow jackets and highlight our expertise in other type of work outside of our traditional mosquito control efforts. In addition, due to the extensive coverage received, the number of service requests and emails regarding yellow jackets increased over the next few weeks.

Invasive Mosquitoes

As part of our outreach efforts we have sent out postcards to specific neighborhoods where invasive mosquitoes have been detected in order to increase awareness of the issue and to facilitate the work being done by Control Operations and the Lab as they conduct door-to-door inspections and set traps. As a result of the postcards, phone calls increased and District staff was able to enter more yards to conduct inspections and treatments. We updated the door hangers to include a new phone number specific to Aedes where residents can call/text to set up an appointment time for an inspection. Print ads also continue to be run in the Winters Express and Inside Arden.

Social media and Nextdoor

Our social media platforms also benefitted from the media stories regarding the peak of yellow jacket season. Not only did we promote and share the media stories we received, but we also captured great photos and videos to post.

As a result of the ongoing detections of invasive mosquitoes, social media messages specific to *Aedes aegypti* continue to be posted on all outlets along with Facebook posts that were boosted and targeted specifically to residents located within the detection areas. In addition, we used Nextdoor to post specific messages regarding the invasive mosquito findings and included photos of backyard sources and District staff interacting with residents.

Advertising Campaign

Since the advertising campaign has recently come to an end, we will begin evaluating the 2021 advertising buy with our media consultant Luken Benjamin. In addition, we are having preliminary meetings with advertising representatives from various media outlets to review the campaign and begin discussing ideas for next year.

Repellent Distribution

Repellent distribution continues as field technicians distribute repellent and other District materials at all service requests. We have recently provided repellent to the Creekside Christian Church in Elk Grove and the City of Sacramento District 6 for an upcoming movie night and other outdoor events that will be taking place throughout the month.

MVCAC Public Relations Committee

As part of the PR Committee standing charges, we have continued to work on Sterile Insect Technique educational videos. The script for the self-limiting technique and the Wolbachia videos has been translated into Spanish and the voice narration and recording will take place later in October. Once finalized, videos will be disseminated by MVCAC to all Districts.

Sacramento-Yolo Mosquito and Vector Control District

October 19, 2021 Board Meeting

5. Board Review and Discussion of CalPERS Valuation Report

Staff Report:
Each year CalPERS performs an Annual Valuation for each participating agency that is used to set the employer and employee contributions rates for each contracted benefit formula for the fiscal year. This report, dated as of June 30, 2020 (always one full year behind) is used to set the rates for the 2022-2023 fiscal year. In addition, the valuation report is used to update the unfunded liability that is invoiced as an annual amount rather than a percentage of the monthly payroll reported to CalPERS. This change was implemented by CalPERS in the 2015-2016 fiscal year.

Percentage of Payroll
The District has two tiers of retirement programs. Tier 1 is referred to as the classic plan and Tier 2 is for those employees hired after January 1, 2013 under the Public Employees Pension Reform Act (PEPRA).

The Tier 1 (2.5% at 55) employer normal cost rate for 22/23 will be 20.74%.

The Tier 2 (2% at 62) employer normal cost rate for 22/23 will be 7.37%. This number is significantly lower than the classic plan due to the fact that the District currently pays the employee portion of retirement (~8%) and the classic plan is a richer benefit plan that PEPRA.

Unfunded Accrued Liability (UAL)
The UAL is a significant concern for the District and its future finances, however the Board and staff have committed to trying to make additional payments on an annual basis to help reduce the uncertainty of the fund each year. This commitment was evidenced by the additional payment made to the fund in the current fiscal year of $2M and a $4M payment made in fiscal year 2018-2019. The District is mirroring our budgeted annual payment ($1.297M) to the expedited 15 year schedule versus the standard 20 year schedule in the report-currently listed on page 15. This will not only allow the District to predict and plan better for our annual budgets, it will also save nearly $2.5M in interest charges. The more aggressive 10 year plan would increase the payment to $1.68M per year and potentially save over $5M in interest and will be considered on an annual basis. The District has also worked to pay the UAL for Tier 2 off each year as the amount at the moment is still small and we don't want to see its growth get out of hand which will cost the District more interest in the future.

The UAL is not a fixed amount and will fluctuate every year due to the ever-changing investment returns and the profile of our plans. We currently have 41 active employees and 82 retirees in the Tier 1 fund while the Tier 2 fund has 24 active employees.

We received an update from CalPERS (letter dated October 5, 2021 for the classic plan and letter dated October 6, 2021 for the PEPRA plan) that highlights our current UAL including the additional discretionary payments to date. The Tier 1 UAL as listed on the first page of the attached letter is $9,630,932 which is significantly lower than the valuation report dated June 30, 2020 in the amount of $12,375,618. This reduction is due to the District's aggressive payment schedule to help reduce the liability and save money in interest. The Tier 2 UAL is $17,603 which is considerably less than the $93,095 listed in the valuation

The Tier 1 fund is currently 81.1% funded vs. 77% last year.

The Tier 2 fund is currently 98% funded vs. 90.5% last year.

The valuation report with the rates, the payment schedule and a brief discussion of any changes since the last valuation are included in the packet along with the recent reports received from CalPERS.

Recommendation:

Information Only

California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

October 5, 2021

CalPERS ID:	1375523307
Employer Name:	SACRAMENTO-YOLO MOSQUITO AND VECTOR CONTROL DISTRICT
Rate Plan:	MISCELLANEOUS PLAN [262]

Re: Lump Sum Payment to reduce the Unfunded Accrued Liability

Dear Requestor:

As requested, information on the fiscal year 2022-23 employer contribution requirement following your lump sum payment is shown below.

If you are aware of others interested in this information (e.g., payroll staff, county court employees, port districts), please inform them.

The information is based on the most recent annual valuation and assumes payment by *July 30, 2021* and no further contractual or financing changes taking effect before June 30, 2022. The Unfunded Accrued Liability (UAL) will be reduced or eliminated by a lump sum payment in the amount of **$2,431,825**. The payment will be applied to the Investment (Gain)/Loss 06/30/2013 and Share Of Pre-2013 Pool Ual 06/30/2013 base(s).

There will be no change to your FY 2021-22 contributions.

Valuation as of June 30, 2020	Pre-Payment	Post-Payment
Projected 6/30/2022 Total Unfunded Liability	$ 12,218,445	
Payment on July 30, 2021	$ 2,431,825	
Revised 6/30/2022 Total Unfunded Liability		**$ 9,630,932**
FY 2022-23 Employer Contributions		
Base Total Normal Cost for Formula	19.55%	19.55%
Surcharges for Class 1 Benefit		
a) FAC 1	0.62%	0.62%
b) IDR BEN 75% FC	0.53%	0.53%
Phase out of Normal Cost Difference	0.00%	0.00%
Plan's Total Normal Cost	20.70%	20.70%
Formula's Expected Employee Contribution Rate	7.96%	7.96%
Employer Normal Cost Rate	12.74%	12.74%
Payment on Investment (Gain)/Loss 06/30/2013	$ 356,720	$ 197,333
Payment on Share Of Pre-2013 Pool Ual 06/30/2013	$ 34,834	$ 0
Payment on all other bases	$ 526,663	$ 526,663
Employer Unfunded Liability Payment	$ 918,217	$ 723,996

The attached schedule of the plan's amortization bases includes the additional discretionary payment(s) listed above.

		Fiscal Year
Required Employer Contribution		**2022-23**
Employer Normal Cost Rate		**12.74%**
Plus		
Required Payment on Amortization Bases		
Paid either as		
1) Monthly Payment	**$**	**60,333.00**
Or		
2) Annual Prepayment Option*	**$**	**699,913**

The total minimum required employer contribution is the ***sum*** *of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll)* ***plus*** *the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).*

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****.*

To initiate this payment, the enclosed Lump Sum Payment Request must be completed and returned to the CalPERS Fiscal Services Division with payment by Electronic Funds Transfer (EFT) or wire transfer by July 30, 2021. A copy should be sent to us.

If you have questions, please call (888) CalPERS (225-7377).

MAY SHUANG YU, ASA, MAAA
Senior Pension Actuary, CalPERS

Schedule of Amortization Bases

Reason for Base	Date Est.	Ramp Level 2022-23	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Expected Payment 2021-22	Balance 6/30/22	Minimum Required Payment 2022-23
SHARE OF PRE-2013 POOL UAL	06/30/13	No Ramp		2.75%	14	789,998	420,168	410,672	424,802	0	0
NON-INVESTMENT (GAIN)/LOSS	06/30/13	100%	Up/Down	2.75%	23	(45,939)	(3,116)	(45,932)	(3,202)	(45,835)	(3,290)
INVESTMENT (GAIN)/LOSS	06/30/13	100%	Up/Down	2.75%	23	4,980,779	337,881	4,979,927	2,493,708	2,749,010	197,333
NON-INVESTMENT (GAIN)/LOSS	06/30/14	100%	Up/Down	2.75%	24	4,205	278	4,212	286	4,211	294
INVESTMENT (GAIN)/LOSS	06/30/14	100%	Up/Down	2.75%	24	(3,680,592)	(243,386)	(3,686,473)	(250,079)	(3,685,842)	(256,956)
ASSUMPTION CHANGE	06/30/14	100%	Up/Down	2.75%	14	2,294,750	218,206	2,229,668	224,207	2,153,823	230,372
NON-INVESTMENT (GAIN)/LOSS	06/30/15	100%	Up/Down	2.75%	25	(192,798)	(10,084)	(195,863)	(12,952)	(196,176)	(13,308)
INVESTMENT (GAIN)/LOSS	06/30/15	100%	Up/Down	2.75%	25	2,255,281	117,960	2,291,132	151,505	2,294,793	155,672
NON-INVESTMENT (GAIN)/LOSS	06/30/16	100%	Up/Down	2.75%	26	(353,723)	(13,901)	(364,104)	(19,044)	(369,892)	(24,460)
INVESTMENT (GAIN)/LOSS	06/30/16	100%	Up/Down	2.75%	26	2,718,464	106,832	2,798,249	146,360	2,842,730	187,981
ASSUMPTION CHANGE	06/30/16	100%	Up/Down	2.75%	16	861,280	46,892	873,064	64,242	867,726	82,511
NON-INVESTMENT (GAIN)/LOSS	06/30/17	80%	Up/Down	2.75%	27	(73,061)	(1,942)	(76,166)	(2,993)	(78,402)	(4,101)
INVESTMENT (GAIN)/LOSS	06/30/17	80%	Up/Down	2.75%	27	(1,332,890)	(35,430)	(1,389,543)	(54,607)	(1,430,325)	(74,812)
ASSUMPTION CHANGE	06/30/17	80%	Up/Down	2.75%	17	952,721	34,741	983,475	53,545	996,931	73,357
NON-INVESTMENT (GAIN)/LOSS	06/30/18	60%	Up/Down	2.75%	28	209,756	2,865	221,475	5,887	230,889	9,074
INVESTMENT (GAIN)/LOSS	06/30/18	60%	Up/Down	2.75%	28	(395,996)	(5,408)	(418,122)	(11,114)	(435,894)	(17,130)
METHOD CHANGE	06/30/18	60%	Up/Down	2.75%	18	412,119	7,684	433,019	15,790	446,997	24,337
ASSUMPTION CHANGE	06/30/18	60%	Up/Down	2.75%	18	1,494,698	27,868	1,570,500	57,269	1,621,195	88,266
NON-INVESTMENT (GAIN)/LOSS	06/30/19	No Ramp		0.00%	19	204,691	0	219,019	19,986	213,677	19,986
INVESTMENT (GAIN)/LOSS	06/30/19	40%	Up Only	0.00%	19	200,515	0	214,551	4,691	224,717	9,382
NON-INVESTMENT (GAIN)/LOSS	06/30/20	No Ramp		0.00%	20	159,485	0	170,649	0	182,594	16,662
INVESTMENT (GAIN)/LOSS	06/30/20	20%	Up Only	0.00%	20	911,875	0	975,706	0	1,044,005	22,826
TOTAL						**12,375,618**	**1,008,108**	**12,199,115**	**3,308,287**	**9,630,932**	**723,996**

This schedule assumes an additional discretionary payment is made in the amount and by the date stated on page 1 of this letter.

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California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | **www.calpers.ca.gov**

July 2021

Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District
(CalPERS ID: 1375523307)
Annual Valuation Report as of June 30, 2020

Dear Employer,

Attached to this letter, you will find the June 30, 2020 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2022-23**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2020.

Section 2 can be found on the CalPERS website (calpers.ca.gov). From the home page, go to *"Forms & Publications"* and select *"View All"*. In the search box, enter *"Risk Pool"* and from the results list download the Miscellaneous Risk Pool Actuarial Valuation Report for June 30, 2020.

Your June 30, 2020 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

Required Contribution

The exhibit below displays the minimum employer contributions for fiscal year 2022-23 along with estimates of the required contributions for fiscal year 2023-24. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees**.

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2022-23	12.74%	$918,217
Projected Results		
2023-24	*12.7%*	*$1,003,000*

The actual investment return for fiscal year 2020-21 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. ***To the extent the actual investment return for fiscal year 2020-21 differs from 7.00%, the actual contribution requirements for fiscal year 2023-24 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through fiscal year 2027-28.

Changes from Previous Year's Valuation

There are no significant changes in actuarial assumptions or policies in your 2020 actuarial valuation. Your annual valuation report is an important tool for monitoring the health of your CalPERS pension plan. Your report contains useful information about future required contributions and ways to control your plan's funding progress. In addition to your annual actuarial report my office has developed tools for employers to plan, project and protect the retirement benefits of your employees. Pension Outlook is a tool to help plan and budget pension costs into the future with easy to understand results and charts.

You will be able to view the projected funded status and required employer contributions for pension plans in different potential scenarios for up to 30 years into the future — which will make budgeting more predictable. While Pension Outlook can't predict the future, it can provide valuable planning information based on a variety of future scenarios that you select.

Pension Outlook can help you answer specific questions about your plans, including:

- When is my plan's funded status expected to increase?
- What happens to my required contributions in a down market?
- How does the discount rate assumption affect my contributions?
- What is the impact of making an additional discretionary payment to my plan?

To get started, visit our Pension Outlook page at www.calpers.ca.gov/page/employers/actuarial-resources/pension-outlook-overview and take the steps to register online.

CalPERS will be completing an Asset Liability Management (ALM) review process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. In addition, the Actuarial Office will be completing its Experience Study to review the demographic experience within the pension system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A of the Section 2 report, "Actuarial Methods and Assumptions."

Questions

We understand that you might have questions about these results, and your assigned CalPERS actuary whose signature is on the valuation report is available to discuss. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary

Actuarial Valuation as of June 30, 2020

for the Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District

(CalPERS ID: 1375523307)

Required Contributions for Fiscal Year July 1, 2022 - June 30, 2023

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Section 1

Plan Specific Information for the Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District

(CalPERS ID: 1375523307)
(Rate Plan ID: 262)

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Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2020 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2020 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the risk pool containing your Miscellaneous Plan has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2020 and employer contribution as of July 1, 2022 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States with regard to pensions.

MAY SHUANG YU, ASA, MAAA
Senior Pension Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Employer Contributions**
- **Additional Discretionary Employer Contributions**
- **Plan's Funded Status**
- **Projected Employer Contributions**
- **Other Pooled Miscellaneous Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2020 actuarial valuation of the Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2022-23.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2020;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2022 through June 30, 2023; and
- Provide actuarial information as of June 30, 2020 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0% and 8.0%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current post- retirement mortality assumptions adopted in 2017.
- Pension Plan maturity measures quantifying the risks the employer bears.

Required Employer Contributions

	Fiscal Year
Required Employer Contributions	**2022-23**
Employer Normal Cost Rate	**12.74%**
Plus	
Required Payment on Amortization Bases[1]	**$918,217**
Paid either as	
1) Monthly Payment	**$76,518.08**
Or	
2) Annual Prepayment Option*	**$887,674**

The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****.*

	Fiscal Year 2021-22	Fiscal Year 2022-23
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	19.55%	19.55%
Surcharge for Class 1 Benefits[2]		
a) FAC 1	0.61%	0.62%
b) 75% IDR	0.53%	0.53%
Phase out of Normal Cost Difference[3]	0.00%	0.00%
Plan's Total Normal Cost	20.69%	20.70%
Formula's Expected Employee Contribution Rate	7.96%	7.96%
Employer Normal Cost Rate	12.73%	12.74%

[1] The required payment on amortization bases does not take into account any additional discretionary payment made after April 30, 2021.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

[3] The normal cost change is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2022-23 fiscal year is $918,217. CalPERS allows employers to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Employers can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during fiscal year 2022-23 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

If you are considering making an ADP, please contact your actuary for additional information.

Minimum Required Employer Contribution for Fiscal Year 2022-23

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
$503,071	$918,217	$0	$918,217	$1,421,288

Alternative Fiscal Year 2022-23 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP[1]	Total UAL Contribution	Estimated Total Contribution
20 years	$503,071	$918,217	$196,754	$1,114,971	$1,618,042
15 years	$503,071	$918,217	$378,679	$1,296,896	$1,799,967
10 years	$503,071	$918,217	$763,548	$1,681,765	$2,184,836
5 years	$503,071	$918,217	$1,962,624	$2,880,841	$3,383,912

[1] The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected Unfunded Accrued Liability as of June 30, 2022 as determined in the June 30, 2020 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Plan's Funded Status

	June 30, 2019	June 30, 2020
1. Present Value of Projected Benefits (PVB)	$55,335,473	$56,473,251
2. Entry Age Accrued Liability (AL)	49,570,862	50,975,497
3. Plan's Market Value of Assets (MVA)	38,146,773	38,599,879
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	11,424,089	12,375,618
5. Funded Ratio [(3) / (2)]	77.0%	75.7%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. Actual contribution rates during this projection period could be significantly higher or lower than the projection shown below.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2020-21)				
Fiscal Year	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**
	Rate Plan 262 Results					
Normal Cost %	12.74%	12.7%	12.7%	12.7%	12.7%	12.7%
UAL Payment	$918,217	$1,003,000	$1,093,000	$1,147,000	$1,197,000	$1,225,000

For some sources of UAL, the change in UAL is amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section.

Our online pension plan modeling and projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook is a tool to help plan and budget pension costs into the future with results and charts that are easy to understand.

Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown below, correspond to rate plan 262. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Miscellaneous Risk Pool are shown below and assume that the payroll for each rate plan will grow according to the overall payroll growth assumption of 2.75% per year for three years.

	Fiscal Year 2021-22	Fiscal Year 2022-23
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	$5,399,299	$5,455,103
Estimated Employer Normal Cost	$622,022	$614,089
Required Payment on Amortization Bases	$813,317	$920,938
Estimated Total Employer Contributions	$1,435,339	$1,535,027
Estimated Total Employer Contribution Rate (illustrative only)	26.58%	28.14%

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with fiscal year 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 5.5% over the 20 years ending June 30, 2020, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

Actuarial Methods and Assumptions

The are no significant changes to the actuarial methods or assumptions for the 2020 actuarial valuation.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2020. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

CalPERS will be completing an Asset Liability Management (ALM) process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. As part of the ALM process the Actuarial Office will be completing an Experience Study to review the demographic experience of the retirement system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2020-21 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2021. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Plan's Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	$17,422,963
Transferred Members	1,032,821
Terminated Members	963,785
Members and Beneficiaries Receiving Payments	31,555,928
Total	$50,975,497

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	$50,975,497
2.	Projected UAL balance at 6/30/2020	11,304,258
3.	Pool's Accrued Liability[1]	19,314,480,060
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2020[1]	4,306,566,797
5.	Pool's 2019/20 Investment (Gain)/Loss[1]	344,968,792
6.	Pool's 2019/20 Non-Investment (Gain)/Loss[1]	60,428,629
7.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (2)] ÷ [(3) - (4)] × (5)	911,875
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (3) × (6)	159,485
9.	Plan's New (Gain)/Loss as of 6/30/2020: (7) + (8)	1,071,360

[1] Does not include plans that transferred to Pool on the valuation date.

Development of the Plan's Share of Pool's Market Value of Assets

10.	Plan's UAL: (2) + (9)	$12,375,618
11.	Plan's Share of Pool's MVA: (1) - (10)	$38,599,879

Schedule of Plan's Amortization Bases

Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2020.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2022-23.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level 2022-23	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Expected Payment 2021-22	Balance 6/30/22	Minimum Required Payment 2022-23
Share of Pre-2013 Pool UAL	6/30/13	No Ramp		2.75%	14	789,998	420,168	410,672	69,894	367,120	34,834
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	23	(45,939)	(3,116)	(45,932)	(3,202)	(45,835)	(3,290)
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	23	4,980,779	337,881	4,979,927	347,173	4,969,403	356,720
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	24	4,205	278	4,212	286	4,211	294
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	24	(3,680,592)	(243,386)	(3,686,473)	(250,079)	(3,685,842)	(256,956)
Assumption Change	6/30/14	100%	Up/Down	2.75%	14	2,294,750	218,206	2,229,668	224,207	2,153,823	230,372
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	25	(192,798)	(10,084)	(195,863)	(12,952)	(196,176)	(13,308)
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	25	2,255,281	117,960	2,291,132	151,505	2,294,793	155,672
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.75%	26	(353,723)	(13,901)	(364,104)	(19,044)	(369,892)	(24,460)
Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.75%	26	2,718,464	106,832	2,798,249	146,360	2,842,730	187,981
Assumption Change	6/30/16	100%	Up/Down	2.75%	16	861,280	46,892	873,064	64,242	867,726	82,511
Non-Investment (Gain)/Loss	6/30/17	80%	Up/Down	2.75%	27	(73,061)	(1,942)	(76,166)	(2,993)	(78,402)	(4,101)
Investment (Gain)/Loss	6/30/17	80%	Up/Down	2.75%	27	(1,332,890)	(35,430)	(1,389,543)	(54,607)	(1,430,325)	(74,812)
Assumption Change	6/30/17	80%	Up/Down	2.75%	17	952,721	34,741	983,475	53,545	996,931	73,357
Non-Investment (Gain)/Loss	6/30/18	60%	Up/Down	2.75%	28	209,756	2,865	221,475	5,887	230,889	9,074
Investment (Gain)/Loss	6/30/18	60%	Up/Down	2.75%	28	(395,996)	(5,408)	(418,122)	(11,114)	(435,894)	(17,130)
Assumption Change	6/30/18	60%	Up/Down	2.75%	18	1,494,698	27,868	1,570,500	57,269	1,621,195	88,266
Method Change	6/30/18	60%	Up/Down	2.75%	18	412,119	7,684	433,019	15,790	446,997	24,337
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	19	204,691	0	219,019	19,986	213,677	19,986

Schedule of Plan's Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2022-23	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Expected Payment 2021-22	Balance 6/30/22	Minimum Required Payment 2022-23
Investment (Gain)/Loss	6/30/19	40%	Up Only	0.00%	19	200,515	0	214,551	4,691	224,717	9,382
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	20	159,485	0	170,649	0	182,594	16,662
Investment (Gain)/Loss	6/30/20	20%	Up Only	0.00%	20	911,875	0	975,706	0	1,044,005	22,826
Total						**12,375,618**	**1,008,108**	**12,199,115**	**806,844**	**12,218,445**	**918,217**

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a Fresh Start, please consult with your plan actuary.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives (continued)

			Alternate Schedules			
	Current Amortization Schedule		15 Year Amortization		10 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2022	12,218,445	918,217	12,218,444	1,296,896	12,218,444	1,681,765
6/30/2023	12,123,925	1,003,470	11,732,215	1,296,896	11,334,104	1,681,765
6/30/2024	11,934,604	1,092,723	11,211,950	1,296,896	10,387,860	1,681,765
6/30/2025	11,639,704	1,146,884	10,655,267	1,296,896	9,375,379	1,681,765
6/30/2026	11,268,136	1,197,086	10,059,616	1,296,896	8,292,024	1,681,766
6/30/2027	10,818,630	1,225,214	9,422,269	1,296,895	7,132,833	1,681,765
6/30/2028	10,308,561	1,254,116	8,740,309	1,296,896	5,892,500	1,681,765
6/30/2029	9,732,890	1,283,811	8,010,611	1,296,895	4,565,344	1,681,766
6/30/2030	9,086,207	1,314,325	7,229,835	1,296,896	3,145,286	1,681,766
6/30/2031	8,362,693	1,345,682	6,394,404	1,296,895	1,625,824	1,681,765
6/30/2032	7,556,097	1,317,458	5,500,494	1,296,896		
6/30/2033	6,722,233	1,286,804	4,544,009	1,296,896		
6/30/2034	5,861,707	1,230,742	3,520,570	1,296,895		
6/30/2035	4,998,937	1,144,666	2,425,491	1,296,896		
6/30/2036	4,164,812	947,250	1,253,756	1,296,895		
6/30/2037	3,476,505	859,787				
6/30/2038	2,830,489	766,928				
6/30/2039	2,235,307	694,613				
6/30/2040	1,673,265	647,763				
6/30/2041	1,120,342	498,984				
6/30/2042	682,613	345,022				
6/30/2043	373,504	269,966				
6/30/2044	120,395	124,538				
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
6/30/2051						
Total		**21,916,049**		**19,453,435**		**16,817,653**
Interest Paid		**9,697,604**		**7,234,992**		**4,599,209**
Estimated Savings				**2,462,612**		**5,098,395**

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan. The amounts are based on the actuarial valuation from two years prior and does not account for prepayments or benefit changes made during a fiscal year. Additional discretionary payments before July 1, 2019 or after June 30, 2020 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment ($)	Additional Discretionary Payments
2016 - 17	10.657%	$524,072	N/A
2017 - 18	10.698%	623,794	N/A
2018 - 19	11.206%	764,980	N/A
2019 - 20	11.936%	918,232	0
2020 - 21	12.900%	655,963	
2021 - 22	12.73%	806,844	
2022 - 23	12.74%	918,217	

Funding History

The table below shows the recent history of the actuarial accrued liability, share of the pool's market value of assets, unfunded accrued liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2011	$35,167,407	$26,897,786	$8,269,621	76.5%	$4,310,871
06/30/2012	36,109,275	25,984,610	10,124,665	72.0%	4,159,769
06/30/2013	36,986,189	28,180,725	8,805,464	76.2%	4,069,939
06/30/2014	40,398,541	32,139,699	8,258,842	79.6%	3,857,061
06/30/2015	41,722,970	31,549,332	10,173,638	75.6%	3,653,363
06/30/2016	43,292,385	30,280,412	13,011,973	69.9%	3,695,877
06/30/2017	45,050,159	32,027,515	13,022,644	71.1%	3,737,267
06/30/2018	48,169,015	33,353,036	14,815,979	69.2%	3,790,313
06/30/2019	49,570,862	38,146,773	11,424,089	77.0%	3,851,971
06/30/2020	50,975,497	38,599,879	12,375,618	75.7%	3,640,106

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Hypothetical Termination Liability**

Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2020-21, 2021-22, 2022-23 and 2023-24). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

For fiscal years 2020-21, 2021-22, 2022-23, and 2023-24, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2024. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

Assumed Annual Return From 2020-21 through 2023-24	Projected Employer Contributions			
	2023-24	**2024-25**	**2025-26**	**2026-27**
1.0%				
Normal Cost	12.7%	12.7%	12.7%	12.7%
UAL Contribution	$1,061,000	$1,267,000	$1,496,000	$1,780,000
4.0%				
Normal Cost	12.7%	12.7%	12.7%	12.7%
UAL Contribution	$1,032,000	$1,181,000	$1,325,000	$1,498,000
7.0%				
Normal Cost	12.7%	12.7%	12.7%	12.7%
UAL Contribution	$1,003,000	$1,093,000	$1,147,000	$1,197,000
9.0%				
Normal Cost	13.0%	13.3%	13.5%	13.8%
UAL Contribution	$989,000	$1,050,000	$1,062,000	$1,054,000
12.0%				
Normal Cost	13.0%	13.3%	13.5%	13.8%
UAL Contribution	$960,000	$960,000	$875,000	$728,000

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.50% and 2.50%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2020 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2020	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	2.5%	2.5%	2.5%
Real Rate of Return	**3.5%**	**4.5%**	**5.5%**
a) Total Normal Cost	25.91%	20.70%	16.72%
b) Accrued Liability	$57,581,921	$50,975,497	$45,486,898
c) Market Value of Assets	$38,599,879	$38,599,879	$38,599,879
d) Unfunded Liability/(Surplus) [(b) - (c)]	$18,982,042	$12,375,618	$6,887,019
e) Funded Status	67.0%	75.7%	84.9%

Sensitivity to the Price Inflation Assumption

As of June 30, 2020	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	**1.5%**	**2.5%**	**3.5%**
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	22.10%	20.70%	19.06%
b) Accrued Liability	$53,581,383	$50,975,497	$47,534,660
c) Market Value of Assets	$38,599,879	$38,599,879	$38,599,879
d) Unfunded Liability/(Surplus) [(b) - (c)]	$14,981,504	$12,375,618	$8,934,781
e) Funded Status	72.0%	75.7%	81.2%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2020 plan costs and funded status under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2020	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	21.05%	20.70%	20.38%
b) Accrued Liability	$52,085,680	$50,975,497	$49,955,701
c) Market Value of Assets	$38,599,879	$38,599,879	$38,599,879
d) Unfunded Liability/(Surplus) [(b) - (c)]	$13,485,801	$12,375,618	$11,355,822
e) Funded Status	74.1%	75.7%	77.3%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan sponsor to tolerate risk is important in understanding how the pension plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. Since it is the employer that bears the risk, it is appropriate to perform this analysis on a pension plan level considering all rate plans. The following measures are for one rate plan only.

One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2019	June 30, 2020
1. Retired Accrued Liability	28,845,408	31,555,928
2. Total Accrued Liability	49,570,862	50,975,497
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.58	0.62

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the Support Ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures, and members retire, the ratio starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

Support Ratio	June 30, 2019	June 30, 2020
1. Number of Actives	50	45
2. Number of Retirees	77	78
3. Support Ratio [(1) / (2)]	0.65	0.58

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio (LVR)

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with LVR ratio of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The AVR, described above, will tend to move closer to the LVR as a plan matures.

Contribution Volatility	June 30, 2019	June 30, 2020
1. Market Value of Assets	$38,146,773	$38,599,879
2. Payroll	3,851,971	3,640,106
3. Asset Volatility Ratio (AVR) [(1) / (2)]	9.9	10.6
4. Accrued Liability	$49,570,862	$50,975,497
5. Liability Volatility Ratio (LVR) [(4) / (2)]	12.9	14.0

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.63	0.66	8.6	12.1
06/30/2018	0.61	0.65	8.8	12.7
06/30/2019	0.58	0.65	9.9	12.9
06/30/2020	0.62	0.58	10.6	14.0

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2020. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] at 0.75%	Funded Status	Unfunded Termination Liability at 0.75%	Hypothetical Termination Liability[1,2] at 2.50%	Funded Status	Unfunded Termination Liability at 2.50%
$38,599,879	$111,901,405	34.5%	$73,301,526	$85,082,837	45.4%	$46,482,958

[1] The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 1.18% on June 30, 2020, and was 1.68% on January 31, 2021.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	June 30, 2019	June 30, 2020
Active Members		
Counts	50	45
Average Attained Age	N/A	46.8
Average Entry Age to Rate Plan	N/A	30.8
Average Years of Credited Service	N/A	16.5
Average Annual Covered Pay	$77,039	$80,891
Annual Covered Payroll	$3,851,971	$3,640,106
Projected Annual Payroll for Contribution Year	$4,178,578	$3,948,749
Present Value of Future Payroll	$31,770,952	$30,628,975
Transferred Members	14	14
Separated Members	21	22
Retired Members and Beneficiaries		
Counts*	77	78
Average Annual Benefits*	N/A	$34,376

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)
- Increased IDR Allowance to 75% of Compensation (75% IDR)

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group			
Member Category	Misc	Misc	Misc	
Demographics				
Actives	No	Yes	No	
Transfers/Separated	Yes	Yes	No	
Receiving	Yes	Yes	Yes	
Benefit Provision				
Benefit Formula	2% @ 55	2.5% @ 55		
Social Security Coverage	No	No		
Full/Modified	Full	Full		
Employee Contribution Rate		8.00%		
Final Average Compensation Period	One Year	One Year		
Sick Leave Credit	Yes	Yes		
Non-Industrial Disability	Improved	Improved		
Industrial Disability	Increased	Increased		
Pre-Retirement Death Benefits				
Optional Settlement 2	Yes	Yes		
1959 Survivor Benefit Level	Level 3	Level 3		
Special	Yes	Yes		
Alternate (firefighters)	No	No		
Post-Retirement Death Benefits				
Lump Sum	$5000	$5000	$5000	
Survivor Allowance (PRSA)	No	No	No	
COLA	2%	2%	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

Section 2 may be found on the CalPERS website (calpers.ca.gov) in the Forms and Publications section

California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

October 6, 2021

CalPERS ID: 1375523307
Employer Name: SACRAMENTO-YOLO MOSQUITO AND VECTOR CONTROL DISTRICT
Rate Plan: PEPRA MISCELLANEOUS PLAN [26232]

Re: Lump Sum Payment to reduce the Unfunded Accrued Liability

Dear Requestor:

As requested, information on the fiscal year 2022-23 employer contribution requirement following your lump sum payment is shown below.

If you are aware of others interested in this information (e.g., payroll staff, county court employees, port districts), please inform them.

The information is based on the most recent annual valuation and assumes payment by *July 30, 2021* and no further contractual or financing changes taking effect before June 30, 2022. The Unfunded Accrued Liability (UAL) will be reduced or eliminated by a lump sum payment in the amount of **$26,721**. The payment will be applied to the Fresh Start 06/30/2018 and Investment (Gain)/Loss 06/30/2020 base(s).

There will be no change to your FY 2021-22 contributions.

Valuation as of June 30, 2020	Pre-Payment	Post-Payment
Projected 6/30/2022 Total Unfunded Liability	$ 46,035	
Payment on July 30, 2021	$ 26,721	
Revised 6/30/2022 Total Unfunded Liability		**$ 17,603**
FY 2022-23 Employer Contributions		
Base Total Normal Cost for Formula	14.22%	14.22%
Surcharges for Class 1 Benefit		
a) IDR BEN 75% FC	0.65%	0.65%
Phase out of Normal Cost Difference	0.00%	0.00%
Plan's Total Normal Cost	14.87%	14.87%
Formula's Expected Employee Contribution Rate	7.50%	7.50%
Employer Normal Cost Rate	7.37%	7.37%
Payment on Fresh Start 06/30/2018	$ 1,570	$ 0
Payment on Investment (Gain)/Loss 06/30/2020	$ 460	$ 180
Payment on all other bases	$ 691	$ 691
Employer Unfunded Liability Payment	$ 2,721	$ 871

The attached schedule of the plan's amortization bases includes the additional discretionary payment(s) listed above.

		Fiscal Year
Required Employer Contribution		**2022-23**
Employer Normal Cost Rate		**7.37%**
Plus		
Required Payment on Amortization Bases		
Paid either as		
1) Monthly Payment	**$**	**72.58**
Or		
2) Annual Prepayment Option*	**$**	**842**

The total minimum required employer contribution is the ***sum*** *of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll)* ***plus*** *the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).*

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****.*

To initiate this payment, the enclosed Lump Sum Payment Request must be completed and returned to the CalPERS Fiscal Services Division with payment by Electronic Funds Transfer (EFT) or wire transfer by July 30, 2021. A copy should be sent to us.

If you have questions, please call (888) CalPERS (225-7377).

MAY SHUANG YU, ASA, MAAA
Senior Pension Actuary, CalPERS

Schedule of Amortization Bases

Reason for Base	Date Est.	Ramp Level 2022-23	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Expected Payment 2021-22	Balance 6/30/22	Minimum Required Payment 2022-23
FRESH START	06/30/18	No Ramp		2.75%	13	66,251	48,656	20,558	21,266	0	0
NON-INVESTMENT (GAIN)/LOSS	06/30/19	No Ramp		0.00%	19	2,678	0	2,865	261	2,796	262
INVESTMENT (GAIN)/LOSS	06/30/19	40%	Up Only	0.00%	19	3,082	0	3,298	72	3,454	144
NON-INVESTMENT (GAIN)/LOSS	06/30/20	No Ramp		0.00%	20	2,724	0	2,915	0	3,119	285
INVESTMENT (GAIN)/LOSS	06/30/20	20%	Up Only	0.00%	20	18,360	0	19,645	12,361	8,234	180
TOTAL						**93,095**	**48,656**	**49,281**	**33,960**	**17,603**	**871**

This schedule assumes an additional discretionary payment is made in the amount and by the date stated on page 1 of this letter.

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California Public Employees' Retirement System
Actuarial Office
400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
888 CalPERS (or **888**-225-7377) | TTY: (877) 249-7442 | **www.calpers.ca.gov**

July 2021

PEPRA Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District
(CalPERS ID: 1375523307)
Annual Valuation Report as of June 30, 2020

Dear Employer,

Attached to this letter, you will find the June 30, 2020 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2022-23**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2020.

Section 2 can be found on the CalPERS website (calpers.ca.gov). From the home page, go to *"Forms & Publications"* and select *"View All"*. In the search box, enter *"Risk Pool"* and from the results list download the Miscellaneous Risk Pool Actuarial Valuation Report for June 30, 2020.

Your June 30, 2020 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

Required Contribution

The exhibit below displays the minimum employer contributions and the Employee PEPRA Rate for fiscal year 2022-23 along with estimates of the required contributions for fiscal year 2023-24. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees**.

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Employee Rate
2022-23	7.37%	$2,721	7.50%
Projected Results			
2023-24	*7.4%*	*$3,300*	*TBD*

The actual investment return for fiscal year 2020-21 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. ***To the extent the actual investment return for fiscal year 2020-21 differs from 7.00%, the actual contribution requirements for fiscal year 2023-24 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through fiscal year 2027-28.

Changes from Previous Year's Valuation

There are no significant changes in actuarial assumptions or policies in your 2020 actuarial valuation. Your annual valuation report is an important tool for monitoring the health of your CalPERS pension plan. Your report contains useful information about future required contributions and ways to control your plan's funding progress. In addition to your annual actuarial report my office has developed tools for employers to plan, project and protect the retirement benefits of your employees. Pension Outlook is a tool to help plan and budget pension costs into the future with easy to understand results and charts.

You will be able to view the projected funded status and required employer contributions for pension plans in different potential scenarios for up to 30 years into the future — which will make budgeting more predictable. While Pension Outlook can't predict the future, it can provide valuable planning information based on a variety of future scenarios that you select.

Pension Outlook can help you answer specific questions about your plans, including:

- When is my plan's funded status expected to increase?
- What happens to my required contributions in a down market?
- How does the discount rate assumption affect my contributions?
- What is the impact of making an additional discretionary payment to my plan?

To get started, visit our Pension Outlook page at www.calpers.ca.gov/page/employers/actuarial-resources/pension-outlook-overview and take the steps to register online.

CalPERS will be completing an Asset Liability Management (ALM) review process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. In addition, the Actuarial Office will be completing its Experience Study to review the demographic experience within the pension system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A of the Section 2 report, "Actuarial Methods and Assumptions."

Questions

We understand that you might have questions about these results, and your assigned CalPERS actuary whose signature is on the valuation report is available to discuss. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (**888-225-7377**).

Sincerely,

SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary

Actuarial Valuation
as of June 30, 2020

for the
PEPRA Miscellaneous Plan
of the
Sacramento-Yolo Mosquito and Vector Control District

(CalPERS ID: 1375523307)

Required Contributions
for Fiscal Year
July 1, 2022 - June 30, 2023

Table of Contents

Section 1

Plan Specific Information for the PEPRA Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District

(CalPERS ID: 1375523307)
(Rate Plan ID: 26232)

Table of Contents

Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2020 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2020 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the risk pool containing your PEPRA Miscellaneous Plan has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2020 and employer contribution as of July 1, 2022 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States with regard to pensions.

MAY SHUANG YU, ASA, MAAA
Senior Pension Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Employer Contributions**
- **Additional Discretionary Employer Contributions**
- **Plan's Funded Status**
- **Projected Employer Contributions**
- **Other Pooled Miscellaneous Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2020 actuarial valuation of the PEPRA Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2022-23.

Purpose of Section 1

This Section 1 report for the PEPRA Miscellaneous Plan of the Sacramento-Yolo Mosquito and Vector Control District of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2020;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2022 through June 30, 2023; and
- Provide actuarial information as of June 30, 2020 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0% and 8.0%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current post- retirement mortality assumptions adopted in 2017.
- Pension Plan maturity measures quantifying the risks the employer bears.

Required Employer Contributions

Required Employer Contributions	Fiscal Year 2022-23
Employer Normal Cost Rate	**7.37%**
Plus	
Required Payment on Amortization Bases[1]	**$2,721**
Paid either as	
1) Monthly Payment	**$226.75**
Or	
2) Annual Prepayment Option*	**$2,630**

The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).

** Only the UAL portion of the employer contribution can be prepaid* ***(which must be received in full no later than July 31)****.*

	Fiscal Year 2021-22	Fiscal Year 2022-23
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	14.34%	14.22%
Surcharge for Class 1 Benefits[2]		
a) 75% IDR	0.54%	0.65%
Phase out of Normal Cost Difference[3]	0.00%	0.00%
Plan's Total Normal Cost	14.88%	14.87%
Plan's Employee Contribution Rate[4]	7.50%	7.50%
Employer Normal Cost Rate	7.38%	7.37%

[1] The required payment on amortization bases does not take into account any additional discretionary payment made after April 30, 2021.

[2] Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

[3] The normal cost change is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

[4] For detail regarding the determination of the required PEPRA employee contribution rate see Section on PEPRA Member Contribution Rates.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2022-23 fiscal year is $2,721. CalPERS allows employers to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Employers can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during fiscal year 2022-23 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

If you are considering making an ADP, please contact your actuary for additional information.

Minimum Required Employer Contribution for Fiscal Year 2022-23

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
$111,018	$2,721	$0	$2,721	$113,739

The minimum required contribution above is less than interest on the UAL. With no ADP the UAL is projected to increase over the following year. If the minimum UAL payment were split between interest and principal, the principal portion would be negative. This situation is referred to as "negative amortization."

Fiscal Year 2022-23 Employer Contribution Necessary to Avoid Negative Amortization

Estimated Normal Cost	Minimum UAL Payment	ADP[1]	Total UAL Contribution	Estimated Total Contribution
$111,018	$2,721	$394	$3,115	$114,133

Alternative Fiscal Year 2022-23 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP[1]	Total UAL Contribution	Estimated Total Contribution
20 years	$111,018	$2,721	$1,480	$4,201	$115,219
15 years	$111,018	$2,721	$2,165	$4,886	$115,904
10 years	$111,018	$2,721	$3,615	$6,336	$117,354
5 years	$111,018	$2,721	$8,133	$10,854	$121,872

[1] The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected Unfunded Accrued Liability as of June 30, 2022 as determined in the June 30, 2020 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Plan's Funded Status

	June 30, 2019	June 30, 2020
1. Present Value of Projected Benefits (PVB)	$2,240,096	$2,875,955
2. Entry Age Accrued Liability (AL)	648,653	870,781
3. Plan's Market Value of Assets (MVA)	586,733	777,686
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	61,920	93,095
5. Funded Ratio [(3) / (2)]	90.5%	89.3%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. Actual contribution rates during this projection period could be significantly higher or lower than the projection shown below.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2020-21)				
Fiscal Year	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**
	Rate Plan 26232 Results					
Normal Cost %	7.37%	7.4%	7.4%	7.4%	7.4%	7.4%
UAL Payment	$2,721	$3,300	$3,900	$4,400	$5,000	$5,000

For some sources of UAL, the change in UAL is amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section.

Our online pension plan modeling and projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook is a tool to help plan and budget pension costs into the future with results and charts that are easy to understand.

Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown below, correspond to rate plan 26232. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Miscellaneous Risk Pool are shown below and assume that the payroll for each rate plan will grow according to the overall payroll growth assumption of 2.75% per year for three years.

	Fiscal Year 2021-22	Fiscal Year 2022-23
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	$5,399,299	$5,455,103
Estimated Employer Normal Cost	$622,022	$614,089
Required Payment on Amortization Bases	$813,317	$920,938
Estimated Total Employer Contributions	$1,435,339	$1,535,027
Estimated Total Employer Contribution Rate (illustrative only)	26.58%	28.14%

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with fiscal year 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 5.5% over the 20 years ending June 30, 2020, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

Actuarial Methods and Assumptions

The are no significant changes to the actuarial methods or assumptions for the 2020 actuarial valuation.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2020. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

CalPERS will be completing an Asset Liability Management (ALM) process in November 2021 that will review the capital market assumptions and the strategic asset allocation and ascertain whether a change in the discount rate and other economic assumptions is warranted. As part of the ALM process the Actuarial Office will be completing an Experience Study to review the demographic experience of the retirement system and make recommendations to modify future assumptions where appropriate.

Furthermore, this valuation does not reflect any impacts from the COVID-19 pandemic on your pension plan. The impact of COVID-19 on retirement plans is not yet known and CalPERS actuaries will continue to monitor the effects and where necessary make future adjustments to actuarial assumptions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2020-21 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2021. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan’s Share of Pool’s Experience/Assumption Change**
- **Development of Plan’s Share of Pool’s Market Value of Assets**
- **Schedule of Plan’s Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	$773,974
Transferred Members	89,207
Terminated Members	7,600
Members and Beneficiaries Receiving Payments	0
Total	$870,781

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	$870,781
2.	Projected UAL balance at 6/30/2020	72,011
3.	Pool's Accrued Liability[1]	19,314,480,060
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2020[1]	4,306,566,797
5.	Pool's 2019/20 Investment (Gain)/Loss[1]	344,968,792
6.	Pool's 2019/20 Non-Investment (Gain)/Loss[1]	60,428,629
7.	Plan's Share of Pool's Investment (Gain)/Loss: [(1) - (2)] ÷ [(3) - (4)] × (5)	18,360
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: (1) ÷ (3) × (6)	2,724
9.	Plan's New (Gain)/Loss as of 6/30/2020: (7) + (8)	21,085

[1] Does not include plans that transferred to Pool on the valuation date.

Development of the Plan's Share of Pool's Market Value of Assets

10.	Plan's UAL: (2) + (9)	$93,095
11.	Plan's Share of Pool's MVA: (1) - (10)	$777,686

Schedule of Plan's Amortization Bases

Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2020.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2022-23.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level 2022-23	Ramp Shape	Escala-tion Rate	Amort. Period	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Expected Payment 2021-22	Balance 6/30/22	Minimum Required Payment 2022-23
Fresh Start	6/30/18	No Ramp		2.75%	13	66,251	48,656	20,558	6,140	15,646	1,570
Non-Investment (Gain)/Loss	6/30/19	No Ramp		0.00%	19	2,678	0	2,865	261	2,796	262
Investment (Gain)/Loss	6/30/19	40%	Up Only	0.00%	19	3,082	0	3,298	72	3,454	144
Non-Investment (Gain)/Loss	6/30/20	No Ramp		0.00%	20	2,724	0	2,915	0	3,119	285
Investment (Gain)/Loss	6/30/20	20%	Up Only	0.00%	20	18,360	0	19,645	0	21,020	460
Total						**93,095**	**48,656**	**49,281**	**6,473**	**46,035**	**2,721**

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative “fresh start” amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a Fresh Start, please consult with your plan actuary.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single “fresh start” base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives (continued)

			Alternate Schedules			
	Current Amortization Schedule		15 Year Amortization		10 Year Amortization	
Date	**Balance**	**Payment**	**Balance**	**Payment**	**Balance**	**Payment**
6/30/2022	46,035	2,721	46,035	4,886	46,035	6,336
6/30/2023	46,444	3,295	44,203	4,886	42,703	6,336
6/30/2024	46,286	3,870	42,243	4,886	39,138	6,336
6/30/2025	45,522	4,447	40,146	4,886	35,324	6,336
6/30/2026	44,108	4,954	37,902	4,886	31,243	6,337
6/30/2027	42,071	5,001	35,501	4,886	26,875	6,337
6/30/2028	39,843	5,053	32,932	4,886	22,201	6,336
6/30/2029	37,405	5,102	30,183	4,887	17,201	6,336
6/30/2030	34,745	5,153	27,241	4,887	11,851	6,337
6/30/2031	31,846	5,209	24,093	4,886	6,126	6,337
6/30/2032	28,687	5,263	20,725	4,886		
6/30/2033	25,251	5,318	17,122	4,887		
6/30/2034	21,517	5,377	13,265	4,887		
6/30/2035	17,460	3,203	9,138	4,886		
6/30/2036	15,368	3,204	4,724	4,887		
6/30/2037	13,130	3,203				
6/30/2038	10,736	3,206				
6/30/2039	8,171	3,202				
6/30/2040	5,430	3,204				
6/30/2041	2,496	2,581				
6/30/2042						
6/30/2043						
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
6/30/2051						
Total		**82,566**		**73,295**		**63,364**
Interest Paid		**36,531**		**27,260**		**17,329**
Estimated Savings				**9,271**		**19,202**

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan. The amounts are based on the actuarial valuation from two years prior and does not account for prepayments or benefit changes made during a fiscal year. Additional discretionary payments before July 1, 2019 or after June 30, 2020 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment ($)	Additional Discretionary Payments
2016 - 17	6.649%	$85	N/A
2017 - 18	6.628%	163	N/A
2018 - 19	6.946%	576	N/A
2019 - 20	7.494%	1,185	0
2020 - 21	7.526%	5,975	
2021 - 22	7.38%	6,473	
2022 - 23	7.37%	2,721	

Funding History

The table below shows the recent history of the actuarial accrued liability, share of the pool's market value of assets, unfunded accrued liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2013	$3,013	$4,042	($1,029)	134.2%	$110,340
06/30/2014	33,541	36,237	(2,696)	108.0%	421,622
06/30/2015	95,048	91,149	3,899	95.9%	516,123
06/30/2016	172,012	153,265	18,747	89.1%	664,592
06/30/2017	300,619	282,648	17,971	94.0%	736,081
06/30/2018	489,042	447,456	41,586	91.5%	873,325
06/30/2019	648,653	586,733	61,920	90.5%	1,125,307
06/30/2020	870,781	777,686	93,095	89.3%	1,388,614

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Hypothetical Termination Liability**

Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2020-21, 2021-22, 2022-23 and 2023-24). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

For fiscal years 2020-21, 2021-22, 2022-23, and 2023-24, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2024. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

Assumed Annual Return From 2020-21 through 2023-24	**Projected Employer Contributions**			
	2023-24	**2024-25**	**2025-26**	**2026-27**
1.0%				
Normal Cost	7.4%	7.4%	7.4%	7.4%
UAL Contribution	$4,500	$7,400	$11,000	$17,000
4.0%				
Normal Cost	7.4%	7.4%	7.4%	7.4%
UAL Contribution	$3,900	$5,600	$8,000	$11,000
7.0%				
Normal Cost	7.4%	7.4%	7.4%	7.4%
UAL Contribution	$3,300	$3,900	$4,400	$5,000
9.0%				
Normal Cost	7.6%	7.7%	7.9%	8.1%
UAL Contribution	$3,100	$3,200	$3,000	$0
12.0%				
Normal Cost	7.6%	7.7%	7.9%	8.1%
UAL Contribution	$2,500	$0	$0	$0

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.50% and 2.50%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2020 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2020	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	2.5%	2.5%	2.5%
Real Rate of Return	**3.5%**	**4.5%**	**5.5%**
a) Total Normal Cost	18.46%	14.87%	12.12%
b) Accrued Liability	$1,095,169	$870,781	$699,520
c) Market Value of Assets	$777,686	$777,686	$777,686
d) Unfunded Liability/(Surplus) [(b) - (c)]	$317,483	$93,095	($78,166)
e) Funded Status	71.0%	89.3%	111.2%

Sensitivity to the Price Inflation Assumption

As of June 30, 2020	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate
Discount Rate	**6.0%**	**7.0%**	**8.0%**
Inflation	**1.5%**	**2.5%**	**3.5%**
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	15.90%	14.87%	13.65%
b) Accrued Liability	$933,543	$870,781	$795,343
c) Market Value of Assets	$777,686	$777,686	$777,686
d) Unfunded Liability/(Surplus) [(b) - (c)]	$155,857	$93,095	$17,657
e) Funded Status	83.3%	89.3%	97.8%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2020 plan costs and funded status under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2020	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	15.15%	14.87%	14.61%
b) Accrued Liability	$889,508	$870,781	$853,504
c) Market Value of Assets	$777,686	$777,686	$777,686
d) Unfunded Liability/(Surplus) [(b) - (c)]	$111,822	$93,095	$75,818
e) Funded Status	87.4%	89.3%	91.1%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan sponsor to tolerate risk is important in understanding how the pension plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. Since it is the employer that bears the risk, it is appropriate to perform this analysis on a pension plan level considering all rate plans. The following measures are for one rate plan only.

One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	**June 30, 2019**	**June 30, 2020**
1. Retired Accrued Liability	0	0
2. Total Accrued Liability	648,653	870,781
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.00	0.00

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the Support Ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures, and members retire, the ratio starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

Support Ratio	**June 30, 2019**	**June 30, 2020**
1. Number of Actives	19	23
2. Number of Retirees	0	0
3. Support Ratio [(1) / (2)]	N/A	N/A

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio (LVR)

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with LVR ratio of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The AVR, described above, will tend to move closer to the LVR as a plan matures.

Contribution Volatility	June 30, 2019	June 30, 2020
1. Market Value of Assets	$586,733	$777,686
2. Payroll	1,125,307	1,388,614
3. Asset Volatility Ratio (AVR) [(1) / (2)]	0.5	0.6
4. Accrued Liability	$648,653	$870,781
5. Liability Volatility Ratio (LVR) [(4) / (2)]	0.6	0.6

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.00	N/A	0.4	0.4
06/30/2018	0.00	N/A	0.5	0.6
06/30/2019	0.00	N/A	0.5	0.6
06/30/2020	0.00	N/A	0.6	0.6

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2020. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability[1,2] at 0.75%	Funded Status	Unfunded Termination Liability at 0.75%	Hypothetical Termination Liability[1,2] at 2.50%	Funded Status	Unfunded Termination Liability at 2.50%
$777,686	$2,582,630	30.1%	$1,804,944	$1,537,811	50.6%	$760,125

[1] The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

[2] The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 1.18% on June 30, 2020, and was 1.68% on January 31, 2021.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	June 30, 2019	June 30, 2020
Active Members		
Counts	19	23
Average Attained Age	N/A	33.2
Average Entry Age to Rate Plan	N/A	29.9
Average Years of Credited Service	N/A	3.3
Average Annual Covered Pay	$59,227	$60,375
Annual Covered Payroll	$1,125,307	$1,388,614
Projected Annual Payroll for Contribution Year	$1,220,721	$1,506,354
Present Value of Future Payroll	$12,921,586	$16,314,197
Transferred Members	3	3
Separated Members	2	2
Retired Members and Beneficiaries		
Counts*	0	0
Average Annual Benefits*	N/A	$0

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- Increased IDR Allowance to 75% of Compensation (75% IDR)

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group	
Member Category	Misc	
Demographics		
Actives	Yes	
Transfers/Separated	Yes	
Receiving	No	
Benefit Provision		
Benefit Formula	2% @ 62	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	7.50%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Improved	
Industrial Disability	Increased	
Pre-Retirement Death Benefits		
Optional Settlement 2	Yes	
1959 Survivor Benefit Level	Level 3	
Special	Yes	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	$5000	
Survivor Allowance (PRSA)	No	
COLA	2%	

PEPRA Member Contribution Rates

The California Public Employees' Pension Reform Act of 2013 (PEPRA) established new benefit formulas, final compensation period, and contribution requirements for "new" employees (generally those first hired into a CalPERS-covered position on or after January 1, 2013). In accordance with Government Code Section 7522.30(b), "new members … shall have an initial contribution rate of at least 50% of the normal cost rate." The normal cost rate is dependent on the plan of retirement benefits, actuarial assumptions and demographics of the risk pool, particularly members' entry age. Should the total normal cost rate change by more than 1% from the base total normal cost rate, the new member rate shall be 50% of the new normal cost rate rounded to the nearest quarter percent.

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2022, based on 50% of the total normal cost rate as of the June 30, 2020 valuation.

		Basis for Current Rate		Rates Effective July 1, 2022			
Rate Plan Identifier	**Benefit Group Name**	**Total Normal Cost**	**Member Rate**	**Total Normal Cost**	**Change**	**Change Needed**	**Member Rate**
26232	Miscellaneous PEPRA Level	15.026%	7.50%	14.87%	(0.156%)	No	7.50%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

Section 2 may be found on the CalPERS website (calpers.ca.gov) in the Forms and Publications section

Sacramento-Yolo Mosquito and Vector Control District

October 19, 2021 Board Meeting

6. Board Review of Candidates and Consideration of Support for the Special District Seat on the LAFCO Board

The District has the opportunity to select a candidate to sit on the LAFCO Board. Please find enclosed the information and resumes for the candidates.

Recommendation:
Pleasure of the Board

DATE: October 1, 2021

TO: Special Districts' Selection Committee

FROM: José C. Henríquez, Executive Officer
Sacramento Local Agency Formation Commission

RE: **Selection of Special District Commissioner and Alternate Special District Commissioner**
For the Sacramento Local Agency Formation Commission
Term of Office: **January 1, 2022 to December 31, 2025**

Pursuant to the provisions of Section 56332 of the Government Code, the Executive Officer has determined that a meeting of the Special District Selection Committee for the purpose of selecting a Special District Commissioner [Office No. 7] and Alternate Special District Commissioner [Office No. 6 & 7] to serve on the Sacramento Local Agency Formation Commission is not feasible. Based on past experience, due to the size of the Special District Selection Committee, it has been difficult to establish a quorum. Therefore, the business of the Special District Selection Committee will be conducted in writing, as provided in the cited section code.

Please see the attached Ballot

Please select one candidate for Special District Commissioner.

AND

Please select one candidate for Alternate Special District Commissioner.

Please return the ballot to the LAFCo office no later than:

4:00 P.M. on WEDNESDAY, NOVEMBER 17, 2021 To be valid, selection of a candidate must be done by a majority vote of the governing board of an Independent Special District in an official meeting of that board and certified by the secretary or clerk of the board.

Any ballot received after the date specified above shall not be valid. The candidate who receives the most votes will be determined the winner outright. In the event of a tie, there will be a run-off selection held in the same format as the initial selection. The LAFCo Executive Officer will announce the results of the selection within seven days of the specified date.

If you have questions regarding selection procedures, please contact the Sacramento LAFCo Commission Clerk, Diane Thorpe, at (916) 874-6458.

Return:
Sacramento LAFCo
1112 "I" Street; Suite 100
Sacramento, CA 95814

or e-mail:
Diane.Thorpe@SacLAFCo.org

Ballot

LAFCo Special District Commissioner & Alternate

Commissioner & Alternate Commissioner

Please select one candidate from each COLUMN

Ballot A

Commissioner - Office No. 7

Please select **ONE** candidate **BELOW**

Edward J. "Ted" Costa San Juan Water District	☐
Michael Hanson Arcade Creek Recreation & Park District	☐
Gay Jones (Incumbent) Sacramento Metropolitan Fire District	☐

Ballot B

Alternate Commissioner - for Offices No. 6 & 7

Please select **ONE** candidate **BELOW**

Michael Hanson Arcade Creek Recreation & Park District	☐
Charlea Moore (Incumbent) Rio Linda Elverta Recreation & Park District	☐

Ballot must be received by **4:00 pm on Wednesday November 17, 2021**

Special Districts must return the ballots to LAFCo by the date specified above. Any ballot received after the specified date shall not be valid. *The information below must be complete*

The candidate who receives the most votes will be determined the winner outright.

The LAFCo Executive Officer will announce the results of the election within seven days of the specified date.

Please mail completed ballot to LAFCo Commission Clerk at 1112 "I" Street, Suite 100; Sacramento CA 95814 or send via e-mail to: Diane.Thorpe@SacLAFCo.org

contact Diane Thorpe at (916) 874-6458 if you have any questions.

Name of Special District

Street Address

District Website Address

Date of Meeting

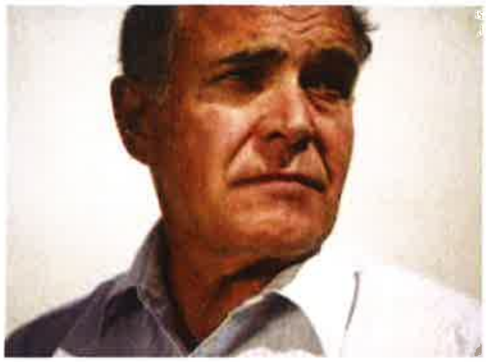
District Phone Number

Signature of Secretary or Clerk of the Board

Phone Number

Print Name

E-mail Address



Resume of Edward J. (Ted) Costa

TESTED AND TRUSTED

TED COSTA IS:

I was born and raised on a family farm in South Natomas and educated in local schools---American River College and UC Davis;

Mentored in politics by the late Paul Gann and Senator S.I. Hayakawa;

Intricately involved in thirteen state-wide initiatives----from Prop. 13 to Re-Redistricting Reform. I drafted three sections of the California State Constitution. I managed 16 lawsuits before the Court of Appeals and Supreme Court. We won 15.

I am currently a board member of the San Juan Water District, a Community Service District that takes American River water, treats it and sends it to water districts in the northeast part of Sacramento County AND at the lowest cost in the entire state.

I live in Citrus Heights with my wife Dr. Jayna and our many animals.

TED COSTA BELIEVES:

Special Districts are the backbone of government. When our water main breaks, we don't call a Legislator. When our power goes out, we don't call a Congressman. We call our Special Districts for all these services. It is so important our special districts are run as efficiently as possible and held accountable to the people. LAFCO is the agency that makes that happen.

LAFCO powers come straight from the Legislature and are rightfully divided up by counties, cities and special districts with the intent of making local governmental subdivisions work more efficiently for the people.

If you vote for me, I will work hard to be a good steward of your trust. Please feel free to contact me:
(916) 599-2986, tedcosta@tecosta.com

Michael Hanson, PMP

5668 Rolling Oak Drive
Sacramento, CA 95841

510-386-0345 mhanson2013@outlook.com
Sacramento, CA 95841

Dedicated Project manager and Technical Analyst bringing focus leadership, team building, relationship building, communication, technical skills, innovative approaches, and with critical thinking assess complex problems and work towards solutions. A self-starter with excellent communication skills and solid project management background in the areas of consulting, initiation, requirements gathering and validation, change management, staffing and team building, task estimation, and client interaction. Build strong teams with a focus on delivering on customer needs though teamwork, positive attitude, being well organized, using critical thinking, continuous improvement, conflict resolution, with a hands-on approach, and a single point of contact. Experience managing projects and teams in various environments including Insurance, Government, Technology, and Non-profit.

Experience

Arcade Creek Recreation and Park District
Director **12/2014 – present**

- Chair 2015
- Director leading the Master Plan project
- Secretary/Treasurer and member of the Finance committee 2017-2019
- Vice-Chair and member of search committee for new GM (2020)
- Served on Sacramento Special District Advisory Commission (2 terms)

Key accomplishments:

1) Worked to get ACRPD out of debt with CalPERS. In 2015, we had a debt with CalPERS of ~500K and today, we are current. This frees up financial capability to equipment and capabilities for our employees and begin to address community needs related to the Parks.
2) Part of the team to update a master plan that was 20+ years old. The district needs to have a direction so we can build a patchwork towards the common goal using available resources.
3) On the search committee to locate the replacement GM for the district. We found an ideal individual who has a wealth of experience, wanted to come to Sacramento, and would fit in with the current employees.
4) I was granted a scholarship to the CARPD Convention in Tahoe. This provided the impetus to pursue a Shine Grant resulting in lighting Arcade Creek Park with LED lighting powered by solar panels.

Benevolent and Protective Order of Elks
Officer Carmichael Elks Lodge #2103 **12/2014 – present**

Worked in various roles including being elected as "president" twice and elected as a trustee to the board of directors twice. I chaired the operational aspects of the 1300-member Lodge through the COVID-19 shutdowns, etc. Worked with members to keep the finances positive. While we lost ~100 members during COVID, we have recovered almost that many this year and are continuing to grow. The Lodge building was built in the 1960s, 1970s, and 1980s. It has a large footprint on the 9+ acre lot. We have been managing significant costs related to the air conditioning and general upkeep of the buildings.

30+ Years in Data Processing
During my years in data processing, I worked in varied industries: Government/Technical (Stanford Research Institute), Chip Manufacturing (Advanced Micro Devices), Education (University of California at Davis), Insurance (CSAA), and support/outsourcing companies (EDS, HP). During my time in these organizations, I was a developer, team lead, department manager and project manager. The opportunities afforded in these organizations provided the background to aid other organizations it their growth.

Highlights:

- At Stanford Research, I worked on the Headstart Project consolidation of data tracking children across years and schools. This helped provide the winning of the contract related to the Follow-Thru project.
- During my 10 years at AMD, I managed a team supporting Shipping and the fabrication units, managed one of the Computer Operations teams to streamline the processing, and started into Project Management. One of the efforts I completed cut computer report paper usage by over half by isolating the needed reports for the specific organization and eliminating superfluous copies of reports.
- At UC Davis, my team was responsible in supporting the HR/Payroll systems and Departmental Computing. While much of the actual data processing occurred at the Office of the President so all campus reporting was consistent, our role was to deliver the information and support to the various departments on campus. As part of the Departmental Computing effort, we won the contract with the Transportation and Parking Unit to replace their system with one that would be maintained and supported on campus.
- At CSAA, I lead a team supporting Membership systems, brought in new technologies, helped to test and discard one system replacement that did not work consistently, and moved into project management. During my time at CSAA I was part of an outsourcing effort to move all computing support to an external vendor (EDS) while the support team continued to sit at their current desks and support CSAA. This arrangement continued for over 20 years as I was either working for the vendor, EDS then HP, managing the work for CSAA or working for CSAA managing the work being performed by the vendor. We moved data centers, applications, and generally supported the work associated with CSAA until they were finally able to insource their data processing.

Fellow Special District Directors,

I respectfully request your vote to continue as Special District Commissioner, Seat # 7, on the Sacramento County Local Agency Formation Commission. Representing Special Districts on Sacramento LAFCO is a privilege and an honor.

Special Districts represent the most basic connection between citizens and their government. We really are the closest public entity to our community. We provide our neighborhoods with services and responsiveness that are found no where else. This close connection makes it imperative that the voice of Special Districts is heard and represented at our Local Agency Formation Commission. This is why I want to serve on LAFCO.

As the incumbent, there are several areas in which I want to continue to build upon.

The first is the Special District Advisory Committee (SDAC). As a member since inception, I have continued to expand the voice of Special Districts at Sacramento LAFCO. Emphasizing the importance of Municipal Service Reviews, maintaining an open dialogue among Special Districts in our county, and discussing the impacts of proposed LAFCO applications upon Districts are very important to me. Sharing information amongst ourselves contributes to our success, and SDAC facilitates this exchange.

The second is to continue to work closely with the California Special District Association (CSDA). A strong, professional and valuable relationship exists between us. It is very important to continue working together in areas of mutual concern to make Special Districts strong and successful.

A third area is the California Association of Local Agency Formation Commissions (CALAFCO). I have served on the Board of Directors of CALAFCO since 2006. This work informs me on statewide issues that can carry many implications for LAFCOs.

Thank you for your support. Please contact me with any questions or comments you may have.

Sincerely,

Gay Jones, Director
Sacramento Metropolitan Fire District

Special District Commissioner
Sacramento LAFCO.

916-208-0736

Gay Jones (Incumbent)

Sacramento Metropolitan Fire District
10545 Armstrong Avenue, Suite 200
Mather, CA 95655
Phone: (916) 208-0736

STATEMENT OF QUALIFICATIONS

My experience representing Special Districts continues to broaden and deepen. This is reflected by my service as a Sacramento Metropolitan Fire District Director, as a Sacramento County LAFCO Commissioner and as a CALAFCO Board Member.

The challenge to use critical thinking to make decisions never diminishes. It is hard work to investigate and study all aspects surrounding an issue. Asking questions and listening to the replies requires a commitment to weigh, measure and balance all the information. That analysis, in turn, must be informed by sound public policy.

My goal is to support this process where critical thinking joins sound public policy resulting in good decisions.

EXPERIENCE

- 2000 – Present: Director for Sacramento Metropolitan Fire District
- 1981 – 2006: Sacramento Fire Department (Retired Captain)
- 1973 – 1979: United States Peace Corps

LAFCo Experience

- 2006 – Present: Special District Commissioner for Sacramento LAFCo
- 2004 – 2006: Alternate Commissioner for Sacramento LAFCo

CALACFO State Level Experience

- 2006 – Present: Board Member for California Association of LAFCo (CALAFCO)

- 2013 – 2018 : Executive Board Member, CALAFCO
- 2015: Chair for CALAFCO Annual Conference

EDUCATION AND CERTIFICATES

- Master's Degree, California State University, Sacramento
- Bachelor of Science, Lewis and Clark College
- Associate Degree, American River Community College
- Chief Officer Certification, California State Board of Fire Service
- Special District Leadership and Management Certification, Special District Institute

COMMUNITY ACTIVITIES

- Chair, Cordova Community Planning Advisory Council, Sacramento County
- Steering Committee Member, Butterfield Riviera East Community Association (BRECA) since 1998
- Member, American River Parkway Coalition

Charlea R Moore

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Applicant Statement for the Special District LAFCO Representative

I moved from Glassboro New Jersey to Rio Linda Elverta in 1981, along with my 3 year old daughter and my husband.

Almost immediately I became involved with Sacramento County Service Area #3 which was the forerunner of our current independant Parks and Recreation District serving the Rio Linda Elverta Communities. This involvement was the result of reading a statement in the local paper, indicating that the Parks Advisory Board had determined that there were sufficient equestrian trails in the area. I was very happy to advocate for additional trails and in the process begin my education in local governance processes.

Over the next several decades I was appointed to numerous County and Local advisory boards, steering committees and ad hoc committees. My interest expanded to include growth issues, flood issues and agriculture/suburban/urban issues.

I learned a great deal about how government works and how Special Districts fit into the process. I became a strong advocate for local governance after going through 3 incorporation attempts in the Rio Linda Elverta communities and in the education process I switched from anti-incorporation to pro-incorporation for unincorporated communities.

In about 1992 I was appointed to the RLE CPAC in and served during the Community Plan Update. I am familiar with the governance process and with procedures for arriving at a decision as a board member. I have served several terms on CPAC under four different County Supervisors since that initial appointment. All of these experiences were very educational for me.

In 2002 I successfully ran for the Rio Linda Elverta Recreation and Parks District. I truly enjoyed and have greatly benefited from the experience of becoming an elected board member. I ran again in 2016 and am currently serving as Secretary for the RLE Recreation and Parks District.

I believe that my history in the community and experience as an elected public official will be an asset for Special Districts as a LAFCO Special District Board member.

Thank you,

Charlea R. Moore

Sacramento-Yolo Mosquito and Vector Control District

October 19, 2021 Board Meeting

7. **Closed Session- Provide Instruction to Designated Labor Representatives (Gov. Code s. 54957.6-Labor Negotiations) Agency Designated Representatives : [Gary Goodman, Janna McLeod, Samer Elkashef, Chris Voight] Employee Organization: [Operating Engineers Local Union #3]**

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