

Sacramento-Yolo
MOSQUITO & VECTOR
CONTROL DISTRICT

NOVEMBER 15, 2022

BOARD OF TRUSTEES

BOARD PACKET

10:00 A.M.

8631 BOND ROAD
ELK GROVE, CA 95624

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

8631 Bond Road
Elk Grove, CA 95624

**AGENDA
November 15, 2022
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 October 18, 2022 Board of Trustees Meeting**
 - b. **Expenditures for October 2022**
 - c. **2023 District Annual Operating Plan Pursuant to Section 8 of the MOU between the USFWS and SYMVCD**
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. **Closed Session – Conference with Labor Negotiators
(Government Code Section 54957.6 – Unrepresented
Employee: Assistant Manager)**
6. **Board/Staff General Discussion**
7. **Adjournment**

Sacramento-Yolo Mosquito and Vector Control District

November 15, 2022 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

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.

This authorization will be in effect for 30 days from approval.

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.

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

Sacramento-Yolo Mosquito and Vector Control District

November 15, 2022 Board Meeting

2. Items for Approval by General Consent:

- a. Minutes of the October 18, 2022 Board of Trustees Meeting;
- b. Expenditures for October 2022
- c. 2023 District Annual Operating Plan Pursuant to Section 8 of the MOU between the USFWS and SYMVCD

Recommendation:

Approve the Items by General Consent

MINUTES OF THE OCTOBER 18, 2022 MEETING OF THE BOARD OF TRUSTEES OF THE SACRAMENTO- YOLO MOSQUITO & VECTOR CONTROL DISTRICT

Location: Virtual Meeting via Zoom

Time: 10:00 a.m.

Call to Order: The meeting was called to order by Board President Marcia Mooney at 10:01 a.m.

Trustees Present:

Marcia Mooney	President	Galt
Gar House	Vice President	Winters
Sean Denny	Secretary	Woodland
Janell Darroch		West Sacramento
Craig Burnett		Folsom
Jayna Karpinski-Costa		Citrus Heights
Raymond LaTorre		Sacramento
Bruce Eldridge		Yolo County
Staci Gardiner		Isleton
Charles Duty		Sacramento County
Robert McGarvey		Rancho Cordova
Chris Barker		Davis

Trustee Hawkins was absent

Staff Present:

Gary Goodman	Manager
Jeni Buckman	Legal Counsel
Sarah Wheeler	Laboratory Director
Steve Ramos	Program Coordinator
Luz Robles	Public Information Officer
Tony Hedley	Fisheries Supervisor
Marty Scholl	Ecological Management Supervisor

Roll Call

This meeting was by video teleconference. Attendance was taken by Roll Call. All Trustees aside from Trustee Hawkins were in attendance and a quorum was present.

Pledge of Allegiance

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

1. Items for Approval by General Consent

On a motion by Trustee Burnett and seconded by Trustee Denny, the Board voted to approve the General Consent Items. The vote was taken by roll call and the motion passed by the following vote: Ayes: 12, Noes: 0, Absent: 1

- a. Minutes of the September 20, 2022 Board of Trustees Meeting
- b. Expenditures for September 2022
- c. District Investment Report for Period Ending June 30, 2022
- d. Annual Cooperative Agreement Between the California Department of Public Health and the Sacramento-Yolo Mosquito and Vector Control District

2. Opportunity for Public Comment

This item is reserved for members of the public who wish to speak on items not on the agenda.

No Public was present in the meeting

3. Reports to the Board

Manager's Report: General Manager Gary Goodman gave an update on West Nile virus activity and the District's response. He noted that the virus activity is still well below what the District tends to have although there was an uptick in virus over the last few weeks since the last meeting. He discussed the new invasive species finds and that the District will be aggressively targeting these locations in the next few weeks as the latter months of summer and early fall tends to be their peak activity. The District audit is expected to begin mid-October with the hopes of a report to the Board by the end of the year.

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, Sarah Wheeler provided an oral report in addition to her written report. The abundance of *Culex tarsalis* and *Culex pipiens* continues to trend down. West Nile virus (WNV) activity is higher in Yolo County than in Sacramento. Compared to the same week last year there are 8 more WNV-positive pools and 14 more WNV-positive dead birds in Yolo County. In Sacramento County, WNV activity continues to be low compared to 2021. There are 53 less WNV-positive dead birds, and 83 fewer WNV-positive pools. In total three of the five chicken flocks tested positive for WNV antibodies. The positive flocks were in Isleton, Knights Landing and Sacramento. The Flocks in Dunnigan and Rancho Murrieta have not tested positive for WNV antibodies. *Aedes aegypti* surveillance will continue through October and into November. Tick surveillance will begin in November.

Ecological Management: Ecological Management Supervisor, Marty highlighted the Department activities for the month leading up to the Board Report to include: Marty updated the Board on the wetland status on Twitchell and Sherman Islands while also providing a fall flooding update on water availability and early Fall Flood Cost Share program participants. Pool Warrants should be finished for the season, a big thank you to all the City and County Police and Code Enforcement Departments. Department access projects are still in full swing while dry conditions persist.

Biological Control: Fisheries Supervisor, Tony Hedley provided an oral report in addition to his written report. He explained the department activities including fish plants and the usage of solar aerators and dissolved oxygen levels, along with regular maintenance tasks. He discussed that wetlands including duck clubs are flooding up and technicians are stocking these areas with mosquitofish. During an average season, over two thousand acres of wetlands and duck clubs will be stocked with approximately one half to one pound per acre. Wetlands flood up slowly and the fish make a good inexpensive

alternative to using pesticides since they will move through the fields with the water as it spreads helping to control the mosquito larvae.

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. The beginning of fall flooding has begun and larvicide treatments are being coordinated and performed by Farm Air. WALs treatments are ongoing in various areas of the District and staff will continue monitoring and trapping as the area expands.

Public Outreach: Public Information Officer, Luz Maria Robles talked about the Districts outreach efforts being conducted in the newest areas where invasive mosquitoes have been detected within the city of Sacramento. She indicated that new events have been added as part of the outreach being done in the south Natomas area and in Winters because these continue to be the largest detection sites for invasive *Aedes*. Luz talked about the District's social media efforts, the end to the Fight the Bite advertising season for the year, and the ongoing efforts to distribute repellent and materials to local agencies that request them. Lastly she discussed the work currently being done as part of the MVCAC Public Relations Committee and submitting an abstract for the upcoming 2023 conference.

4. Board Review and Discussion of CalPERS Valuation Reports

The Manager discussed the most recent CalPERS valuation reports for both the classic plan and the PEPRA plan. The valuation reports highlight the current status of the District's unfunded liability as it relates to the retirement package for the employees. The reports are always one year behind and are current through June of 2021. While the numbers look very good for this valuation due to the positive returns seen during the 2021 fiscal year, the most recent year has not been as kind for CalPERS investments. CalPERS has been presenting various webinars over the last couple of months since these valuations were published with the sobering news to expect significant drops in the value of the portfolios over the next year. They were letting agencies know that the next valuations will not be as favorable and to expect higher normal costs and payments over the next 5 years. The District is in a good position with their commitment to paying the UAL down but we should be prepared for higher costs in the future.

The Board went into closed session at 11:02am.

5. Closed Session Conference with Labor Negotiators (Government Code § 54957.6-Unrepresented Employee: Assistant Manager)

The Board met in closed session to discuss the Assistant Manager's contract. The Board came out of closed session at 11:53am with direction given to the Manager to negotiate the Assistant Manager contract.

6. Board/Staff Reports and Requests

District Manager Gary Goodman discussed the dates of the upcoming MVCAC and AMCA annual meetings. Mr. Goodman gave an update on the recruitment process for the Administrative Manager and the Assistant Manager. He reminded the Board that the next Meeting of the Board will be on November 15th, 2022 and will be held via Zoom.

7. ADJOURNMENT

The meeting adjourned at 11:58am

I certify that the above minutes substantially reflect the general business and actions taken by the Board of Trustees at the October 18, 2022, meeting.

Gary Goodman, Manager

Approved as written, and/or corrected, by the Board of Trustees at the November 15th, 2022, meeting.

Sean Denny, Board Secretary

Check History Report
Sorted By Check Number
Activity From: 10/1/2022 to 10/31/2022

Sacramento Yolo MVCD (SYC)

Bank Code: U US Bank

Check Number	Check Date	Vendor Number	Name	Check Amount	Check Type
056131	10/6/2022	0000504	US Bank	28,399.27	Auto
056132	10/11/2022	0002592	Aaron Okada	2,170.00	Auto
056133	10/11/2022	0000006	Adapco Inc	130,860.65	Auto
056134	10/11/2022	0000014	Alhambra & Sierra Springs	75.40	Auto
056135	10/11/2022	0000018	ANDKO Building Maintenance Inc.	4,804.94	Auto
056136	10/11/2022	0000034	AutoZone Inc	1,367.33	Auto
056137	10/11/2022	0002541	Barnes Welding	858.39	Auto
056138	10/11/2022	0001011	Buckmaster Office Solutions	97.71	Auto
056139	10/11/2022	0001019	Cintas Corporation	2,448.37	Auto
056140	10/11/2022	0000117	City of Woodland	666.01	Auto
056141	10/11/2022	0000119	Clarke Mosquito Control Products Inc	23,744.63	Auto
056142	10/11/2022	0000128	Consolidated Communications	2,204.11	Auto
056143	10/11/2022	0000140	Crossings TV	4,485.54	Auto
056144	10/11/2022	0000168	Dignity Health Med Fdtn-Sacramento	312.00	Auto
056145	10/11/2022	0000181	Elk Grove Dodge	230.83	Auto
056146	10/11/2022	0000186	Elk Grove Water District	348.78	Auto
056147	10/11/2022	0000198	Factory Motor Parts Co	1,002.05	Auto
056148	10/11/2022	0000199	Farm Air Flying Service	31,059.00	Auto
056149	10/11/2022	0000202	Ferrellgas	31.93	Auto
056150	10/11/2022	0000204	Fisher Scientific International Inc	969.36	Auto
056151	10/11/2022	0002540	Hippensteel Group	2,210.00	Auto
056152	10/11/2022	0000240	Hunt & Sons Inc	15,858.91	Auto
056153	10/11/2022	0000293	Life Technologies Corporation	12,621.67	Auto
056154	10/11/2022	0002350	Linde Gas and Equipment INC.	505.96	Auto
056155	10/11/2022	0000306	Maita Chevrolet	765.31	Auto
056156	10/11/2022	0000320	Mettler Toledo Rainin LLC	162.27	Auto
056157	10/11/2022	0000356	O'Reilly Automotive Stores Inc	1,135.62	Auto
056158	10/11/2022	0000367	PG & E	444.79	Auto
056159	10/11/2022	0000388	Republic Services #922	116.16	Auto
056160	10/11/2022	0000401	Sac Co Dept. of Finance Secured Tax Unit	100.00	Auto
056161	10/11/2022	0001465	Sacramento Control Systems, Inc.	390.00	Auto
056162	10/11/2022	0000424	Safe Side Security	384.00	Auto
056163	10/11/2022	0000454	Spark Creative Design	801.19	Auto
056164	10/11/2022	0000462	Sterling May Co	49.73	Auto
056165	10/11/2022	0001234	T-Mobile	1,453.88	Auto
056166	10/11/2022	0000475	Target Specialty Products	20,257.00	Auto
056167	10/11/2022	0002407	Valley Fire & Security	69.50	Auto
056168	10/11/2022	0000518	Vector Disease Control International	52,083.33	Auto
056169	10/11/2022	0000073	Vector-Borne Disease Account	897.00	Auto
056170	10/11/2022	0000522	Verizon Wireless	2,428.97	Auto
056171	10/11/2022	0000526	VWR International Inc	903.38	Auto
056172	10/11/2022	0002590	Winters Chamber of Commerce	450.00	Auto
056173	10/11/2022	0002428	Benefit Coordinators Corp.	9,235.70	Auto
056174	10/11/2022	0000267	Kaiser Foundation Health Plan	46,751.91	Auto
056175	10/11/2022	0000141	PRISM	328.44	Auto
056176	10/11/2022	0000957	Sutter Health Plus	10,100.12	Auto
056177	10/11/2022	0000531	Western Health Advantage	6,411.49	Auto
056178	10/11/2022	0000531	Western Health Advantage	1,006.21	Auto
056179	10/24/2022	0000006	Adapco Inc	66,241.80	Auto
056180	10/24/2022	0002570	Afisha Media Group	1,300.00	Auto
056181	10/24/2022	0000192	Audacy, Inc.	23,005.00	Auto
056182	10/24/2022	0002541	Barnes Welding	2,625.31	Auto
056183	10/24/2022	0000038	Bartkiewicz Kronick & Shanahan	2,277.75	Auto
056184	10/24/2022	0001024	Bonneville International	10,770.00	Auto

Check History Report
Sorted By Check Number
Activity From: 10/1/2022 to 10/31/2022

Sacramento Yolo MVCD (SYC)

Bank Code: U US Bank

Check Number	Check Date	Vendor Number	Name	Check Amount	Check Type
056185	10/24/2022	0000057	BZ Service Station Maintenance Inc	798.64	Auto
056186	10/24/2022	0000083	CA Department of Tax and Fee Administration	443.00	Auto
056187	10/24/2022	0000119	Clarke Mosquito Control Products Inc	74,914.27	Auto
056188	10/24/2022	0000124	Effectv	11,931.87	Auto
056189	10/24/2022	0000193	Entravision Communications Corporation	9,037.50	Auto
056190	10/24/2022	0000958	GreatAmerica Financial Services	372.82	Auto
056191	10/24/2022	0000240	Hunt & Sons Inc	10,175.43	Auto
056192	10/24/2022	0000242	iHeart Media	7,235.00	Auto
056193	10/24/2022	0002593	Katherine L Waki	1,375.00	Auto
056194	10/24/2022	0000272	KCRA TV 3	7,600.00	Auto
056195	10/24/2022	0000279	KMAX TV	8,801.68	Auto
056196	10/24/2022	0000285	Lazer Broadcasting Corporation	4,940.00	Auto
056197	10/24/2022	0000299	Luken Benjamin Associates	1,500.00	Auto
056198	10/24/2022	0000497	MagneGas Welding Supply	86.24	Auto
056199	10/24/2022	0000273	NBCUniversal Owned TV Stations	9,250.00	Auto
056200	10/24/2022	0002547	Outfront	3,999.00	Auto
056201	10/24/2022	0000367	PG & E	2,575.97	Auto
056202	10/24/2022	0001497	Pure Water Partners	1,438.47	Auto
056203	10/24/2022	0001452	Results Radio - KCCL	2,550.00	Auto
056204	10/24/2022	0000562	RKL eSolutions, LLC	4,813.75	Auto
056205	10/24/2022	0000413	Sacramento County Utilities	960.54	Auto
056206	10/24/2022	0000579	Salem Media Group	2,000.00	Auto
056207	10/24/2022	0000461	Stericycle Inc	124.98	Auto
056208	10/24/2022	0000475	Target Specialty Products	28,239.11	Auto
056209	10/24/2022	0000515	Valley Tire Center	26.00	Auto
056210	10/24/2022	0001453	Via Media Cable	2,363.00	Auto
056211	10/24/2022	0000529	Waste Management	235.48	Auto
056212	10/27/2022	0000504	US Bank	26,059.62	Auto
056213	10/31/2022	0000043	Benefit Coordinators Corporation	3,339.42	Auto
056214	10/31/2022	0000084	CA State Disbursement Unit	350.00	Auto
056215	10/31/2022	0001035	Operating Engineers Local Union No. 3	1,206.00	Auto
W00301	10/31/2022	0000511	US Treasury Internal Revenue Service	65,731.51	Wire Transfer
W00302	10/31/2022	0000176	EDD	17,812.92	Wire Transfer
W00303	10/31/2022	0000339	Nationwide Retirement Solutions	3,425.00	Wire Transfer
W00304	10/31/2022	0000339	Nationwide Retirement Solutions	1,550.00	Wire Transfer
W00305	10/31/2022	0000086	CalPERS 457 Plan	17,114.46	Wire Transfer
W00307	10/31/2022	0000087	CalPERS Financial Reporting & Accounting Services	82,680.79	Wire Transfer
Bank U Total:				<u>947,336.17</u>	
Report Total:				<u><u>947,336.17</u></u>	

I hereby authorize the use of my signature plate on
the above-listed warrants, 056131-056215, and EFTs

Signature

Date

Marcia Mooney, President of the Board

Sacramento/Yolo M.V.C.D.

STATEMENT OF OPERATION

	<i><u>4Months Ended</u></i> <i><u>October31 2022</u></i>	<i><u>Annual</u></i> <i><u>Budget</u></i>	<i><u>Unused</u></i>
Revenue			
REVENUE	9,816.03	0.00	9,816.03
TOTAL Revenue	<u>9,816.03</u>	<u>0.00</u>	<u>9,816.03</u>
Expenditures			
SALARIES/BENEFITS/WC			
SALARIES/BENEFITS/WC	5,598,237.04	10,114,835.00	4,516,597.96
TOTAL Salaries	<u>5,598,237.04</u>	<u>10,114,835.00</u>	<u>4,516,597.96</u>
OPERATIONAL			
LIABILITY INSURANCE	240,624.00	240,624.00	0.00
AUDITING/FISCAL	10,000.00	18,000.00	8,000.00
COMMUNICATIONS	26,870.62	99,000.00	72,129.38
PUBLIC INFORMATION	247,908.31	595,500.00	347,591.69
STRUCTURE & GROUNDS	22,636.68	69,000.00	46,363.32
MEMBER/TRAINING	49,452.64	148,000.00	98,547.36
DISTRICT OFFICE EXPENSES	6,494.22	22,500.00	16,005.78
PROFESSIONAL SERVICES	147,542.60	297,000.00	149,457.40
MATERIALS & SUPPLIES	30,037.26	22,750.00	(7,287.26)
RENTS & LEASES - Admin	2,656.02	11,550.00	8,893.98
SAFETY PROGRAM	790.00	5,000.00	4,210.00
UTILITIES	36,365.66	120,000.00	83,634.34
AIRCRAFT SERVICES	328,005.34	1,074,000.00	745,994.66
ECOLOGICAL MANAGEMENT	229.87	14,700.00	14,470.13
MICROBIAL	698,109.42	1,200,000.00	501,890.58
INSECT GROWTH REGULATOR	733,532.68	1,133,000.00	399,467.32
INSECTICIDES	236,033.38	700,000.00	463,966.62
FISHERIES	7,057.88	36,000.00	28,942.12
GEOGRAPHIC INFO SYSTEMS	3,661.00	9,000.00	5,339.00
INFORMATION TECHNOLOGY	14,905.30	80,000.00	65,094.70
CONTROL OPERATIONS	11,811.31	66,000.00	54,188.69
VEHICLE PARTS/LABOR	65,445.01	121,000.00	55,554.99
LAB SERVICES	76,074.03	235,300.00	159,225.97
GAS & PETROLEUM	111,844.30	300,000.00	188,155.70
TOTAL Total Operational	<u>3,108,087.53</u>	<u>6,617,924.00</u>	<u>3,509,836.47</u>

2. Items for Approval by General Consent:

c. 2023 District Annual Operating Plan Pursuant to Section 8 of the MOU between the USFWS and SYMVCD

The District has an ongoing relationship with the Stone Lakes National Wildlife Refuge which is managed by the United States Fish and Wildlife Service. The MOU is introduced every year to highlight the relationship and the requirements of each agency to conduct mosquito control work on the Refuge property.

Recommendation:

Authorize the Manager to sign the MOU with the USFWS



MAILING ADDRESS

8631 BOND ROAD
ELK GROVE, CA 95624

1.800.429.1022
FIGHTtheBITE.net

Gary Goodman, MANAGER

2022 BOARD OF TRUSTEES

MARCIA MOONEY
PRESIDENT, GALT

GAR HOUSE
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SEAN DENNY
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CHRISTOPHER BARKER
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JAYNA KARPINSKI-COSTA
CITRUS HEIGHTS

RAYMOND LATORRE
SACRAMENTO

ROBERT J. MCGARVEY
RANCHO CORDOVA

CHARLES DUTY
SACRAMENTO COUNTY

Mr. Bart McDermott
Stone Lakes National Wildlife Refuge
U.S. Fish and Wildlife Service
1624 Hood Franklin Road
Elk Grove, CA 95758

November 15, 2022

Dear Mr. McDermott,

I am providing an anticipated annual operating plan for monitoring and control of mosquitoes over the calendar year 2023 on lands managed by the Service on the Refuge, pursuant to Section 8 of the Memorandum of Understanding ("MOU") between the Service and the Sacramento-Yolo Mosquito and Vector Control District ("District").

Access Requirements

The District will require access to all areas of Refuge land to ensure comprehensive and integrated mosquito control. The District will continue to work with you and your staff to identify areas of concern to avoid negatively affecting sensitive resources.

Monitoring Programs

Following the District's Mosquito and Mosquito-borne Disease Management Plan (Plan)*, the monitoring programs will consist of larval sampling, use of adult traps, such as BG Sentinel, Encephalitis virus surveillance ("EVS"), Gravid, and other adult traps as well as leg counts, chicken sera testing, and dead bird monitoring. Using these methods will enable us to quantify mosquito prevalence in and around the Refuge, as well as identify when virus activity, particularly West Nile virus ("WNV") is present. In addition, we ask for your help and support to monitor any unusual bird die-offs that may occur on the Refuge. As WNV is firmly established in the Sacramento Valley, your help and assistance in identifying any such bird die-offs may help provide an early warning system to address the mosquitoes responsible.

Genus and Species Thresholds

The District currently uses the larval density of 0.1 mosquito larva per 350 ml. dipper of water to initiate a larval control response. This threshold reduces nuisance levels of adult mosquitoes and has historically prevented the transmission of disease to the surrounding public. Adult mosquito thresholds are generally determined through historical levels of adult mosquitoes in the area. The District has established a standard goal of keeping *Culex tarsalis* female mosquitoes below threshold levels of 10 per light trap night or 100 per carbon

dioxide baited trap per night when virus has not been detected. When virus activity is detected these thresholds are reduced according to the District's Plan. When adult mosquitoes meet or exceed these established thresholds it may be necessary to implement an adulticiding program to reduce adult mosquitoes to acceptable levels.

Adult mosquitoes of the non-invasive genus *Aedes* are generally determined by landing (leg) and adult trap counts. Landing count thresholds are generally reached when two or more non-invasive *Aedes* species land on an individual during a one-minute time interval.

The District has a zero tolerance threshold for any detected invasive *Aedes* larval or adult mosquitoes, and may initiate additional surveillance if detected in nearby residential areas.

The District has created and sent monthly activity reports detailing all treatments made on Service lands during the 2022 season as well as submitting weekly trapping data. We will continue to submit monthly activity reports and will be happy to provide any additional information upon your request.

Physical, Cultural, Biological, and Chemical Control

The District uses an Integrated Pest Management ("IPM") approach when controlling mosquitoes or other vectors. We plant mosquito fish in appropriate bodies of water that may be a source of mosquito development to augment our biological control program. Our Ecological Management Department will continue to provide advice and assistance with implementation of Mosquito Reduction Best Management Practices ("BMPs"). In those areas where physical control or biological control cannot be performed, we use chemical control products designed for mosquitoes. The agents available for the District to use are listed as follows:

Larval Control Products (singular or in combination)

Bacillus thuringiensis israelensis (Bti)-All formulations

Bacillus sphaericus-All formulations

Methoprene -All formulations

Spinosad-All formulations

Adult Control Products

Pyrethroids –All liquid formulations

Pyrethrins –All liquid formulations

Naled -All liquid formulations

A list of individual product labels will be provided before the start of the mosquito season for the Refuge to submit individual Pesticide Use Proposals (PUPs).

The District will continue to pursue Refuge water and vegetation management techniques to help minimize larval development and prevent adult emergence wherever possible. Drawing on previous work by the Central Valley Joint Venture Working Group, The District has compiled a list of potential BMPs for a variety of land uses including managed wetlands, and irrigated agricultural fields. Our Ecological Management Department will continue to work to evaluate and assess the efficacy of these BMPs on the Refuge so that mosquito populations can continue to be reduced by physical and cultural practices. Continued communication and coordination will ensure the use of products that minimize impacts on important resources. Our first choice of materials will continue to be larvicides, with a particular focus on *Bacillus* based products and other insect growth regulators. The District will communicate with Refuge Management staff when Spinosad-based products must be utilized. The District will review the Refuge's annual management plans including BMP implementation and flooding schedules with your staff at the beginning of the mosquito season.

UAS (Drone) Operations

The District may utilize UAS units to provide aerial imagery, analysis and localized treatments to improve District operations. Any UAS use over Refuge lands will be pre-authorized and approved by Refuge and USFWS Management and will only be used aiding in mosquito control operations.

Timing of Mosquito Control Measures

All applications of mosquito control products are governed by the label, and to some degree meteorological conditions. While we cannot determine the exact time or day when mosquitoes reach levels that warrant control measures, we are determined to maintain the level of communication we have enjoyed with you and your staff to maximize our collaboration moving forward. Informing us prior to flooding or irrigation events minimizes the potential for conflict. We will continue to inform you when control activities involving adulticiding or the use of aerial applications are necessary. This type of open communication will enhance the operations, coordination, and effectiveness of both our Agencies.

We will continue to work with you and your staff to minimize any disturbances on the 457 acre Lewis Property between the dates of October 15 through February 15. The District should be able to work with the Service to limit disturbances during the time-frame mentioned; however, if we experience above-average temperatures, excessive mosquito counts that emanate from this area, and/or the presence of WNV in or around the site, the District may need to extend mosquito surveillance and control measures into these timeframes. We will coordinate in advance with Refuge staff to minimize any potential impact we may have.

The District will also work with your staff to minimize disturbances around all wetland areas between the dates of September 1st and April 1st when Sandhill Cranes are typically present on the property. The District will avoid these areas

before 9am (unless instructed otherwise) and will notify your staff if any District operations need to access the wetland areas before this time.

Please contact me if you require additional information at 685-1022 ext.2059.

Sincerely,

Gary Goodman
District Manager

*See District website for additional details and document downloads at www.FightTheBite.net

Sacramento-Yolo Mosquito and Vector Control District

November 15, 2022 Board Meeting

4. Reports to the Board

a. Manager's Report

b. Reports from District Departments

- **Lab/Surveillance (Sarah Wheeler)**
- **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 testing season is complete. We will begin testing again in late spring. We are continuing to monitor the invasive mosquito issue throughout the District as we have had a number of new detections found in 2022 along with the detection of *Aedes albopictus* last month. The colder weather should make surveillance efforts more difficult in finding these mosquitoes.

Staff will be working on winter projects including maintenance of equipment, the facility, and completing our annual training.

The District audit is still ongoing and we hope to have the final report presented to the Board in December or January.

The MVCAC Quarterly Meeting was held in person and online November 1st and 2nd. We have included a brief summary of the discussion points from each committee.

The MVCAC Planning Session will be held December 6th and 7th in Oakland.

b. Reports from District Departments

- **Lab/Surveillance (Sarah Wheeler)**
- **Ecological Management (Marty Scholl)**
- **Biological Control (Tony Hedley)**
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CalSurv-Dan Fisher

Chris Barker introduced recent hires to the VectorSurv team, and outlined a new strategic planning process in partnership with the UC Davis MBA program. Students of the program have scheduled interviews with agencies that use VectorSurv to collect feedback and develop a plan for strategic growth. An update on the information security review was given, outlining UC Davis specific and standardized federal audit processes that will be followed, with a report due back to the committee in about six months. An update on the VectorSurv development progress covered a planned open data portal, API and visualization tools. The open data portal will be an opt-in system for agencies to share aggregate data automatically 18 months after it is collected to streamline requests for research where specific detailed data is not required.

Integrated Vector Management Committee – Debbie Dritz

Discussion took place regarding the utility of very detailed and comprehensive species data being used in the creation of documents outlining MVCD's pollinator best management practices. The example referenced was Napa County MVCD's catalog of local bee species. Those who responded felt this comprehensive data exceeded the charge of outlining steps Districts take to protect pollinators during applications. The committee also addressed potential approaches for updates to the MVCAC manual "Test Procedures for Insecticide Resistance Monitoring in Mosquitoes" which was produced in 2016. Input from those in attendance revealed that rather than streamlining the document to include only certain procedures, creation of a single PDF document which includes the historical background, details on molecular and microplate assays, bench top cup larval assays, and the CDC bottle bioassay utilizing chemical standards and formulated products should be retained but organized into easily searchable sections. Inclusion of links to existing information such as video training tools on use of the CDC bottle bioassay kit and larval bioassays was suggested as a way to manage duplication of effort in updating our insecticide resistance manual. The committee also discussed avoidance areas for endangered species and invasive Aedes specific operational methods. Work on these two charges is ongoing. The mosquitofish and biocontrol subcommittee reported that they are planning a field trip to the Orange County MVCD to see their mosquitofish program at the 2023 Annual meeting. The subcommittee also reported that they are developing a workshop on water quality and pathogen analysis in the fall/winter of 2023 and is in the process of arranging guest speakers.

IT Committee – Dan Fisher

The CyberSecurity Best Practices document, created by the committee, was shared with MVCAC members in the October 15th newsletter. An update and discussion followed regarding conversations with Alliant regarding CyberSecurity Insurance. Committee members are concerned about compliance standards and cost, and a recommendation was made to investigate the costs of alternative CyberSecurity insurance policies to determine market value. An update was shared on the MyCommittee.com website which will collect meeting agendas, minutes, track tasks and store documents for MVCAC Committees. A

proposed training during the Fall Planning Meeting will be discussed with the board, and a short introduction document will be created. The Committee then discussed the State and Local Cybersecurity Grant Program (SLCGP). Through the Infrastructure Investment and Jobs Act, Congress established the State and Local Cybersecurity Improvement Act, appropriating \$1 billion to be awarded over four years. Currently the State of California is planned to act as arbitrator of the funding, and an update is expected in early 2023 from the State regarding how the funding will be used or distributed. Due to the large number of potentially eligible government organizations in the State, very little money is expected, however statewide CyberSecurity related programs and services could be made available with the funding. A current prerequisite of receiving funding from the Federal level is completing the Nationwide Cybersecurity Review (NCSR). SacYolo is currently enrolling in the review process to determine applicability for other MVCAC agencies. The Committee also discussed ongoing meetings with NearMap, an aerial imagery provider, on their development of artificial intelligence software to detect green swimming pools. Member agencies using NearMap are collaborating to provide training data for the AI software. Google has also been contacted and exploratory meetings have been held on developing a similar artificial intelligence program, but that could use other image sources such as drone video or satellite imagery.

Laboratory Technologies Committee – Kara Kelley

The committee discussed the workshop update during the annual MVCAC meeting. The workshop topic is ‘insect photography’ which will be held at Orange County MVCD on February 1st, 2023, from 1:00-4:00PM following the MVCAC board meeting. The committee then discussed the annual price negotiations with Thermo Fisher Scientific to establish the 2023 universal quote for lab consumables and chemistries. The cost of laboratory products continues to increase, the MVCAC needs to determine how best to improve our purchasing power. After a lengthy discussion, it was determined there is a need to establish the total costs each lab spends on common products. The universal quote will be reviewed to eliminate all rarely used items to help streamline negotiations, and we will meet with the vendor to discuss different purchasing options. Another strategy that was discussed was bulk purchasing, kits usually have shelf life of 18 months so purchasing in advance may have an advantage as well. The third item on the agenda was laboratory training videos. Chris Barker has worked closely with PacVec members on the development and the editing of the training videos. He said the training videos should be released sometime in 2023. It was pointed out that all videos must include the names of all agencies and participants so they can be properly credited. The committee also discussed the MVCAC Lab Safety Manual. The manual should be ready for committee review soon. Following the review, the manual will be available to the MVCAC members. The committee also discussed the WALs manuscript update. It was determined that because districts use differing WALs application protocols it would be better to submit individual papers on their trials rather than trying to pull the data into a single manuscript. Future items for consideration are developing a knowledgebase for lab software that would show all the software features that districts currently using. The database would provide detailed information on functions of the software so members could determine what needs might assist their district. A final discussion point was

reducing lab waste attributable to single-use plastics. The committee agreed to investigate and share potential innovations in reducing plastic lab waste.

Legislative Committee-Gary Goodman

The Legislative Committee was relatively quiet this year as MVCAC did not push any specific legislation. The association was very active in continuing the education of legislators for the continued support of Calsurv in the annual state budget. These efforts were successful last year and we hope to continue the appropriation every year. Other topics discussed for the upcoming legislative cycle were the ongoing development of Sterile Insect Techniques and engagement with CDFW to expand their budget to implement BMPs needed for vector control. The committee is also exploring possibilities for funding through the legislature to help with the increased costs of invasive mosquitoes as the expansion of invasives continue every year. The 2023 legislative day will probably be sometime in April or May and will more than likely go back to in person meetings. The committee will continue to look at introduced legislation after the new year and will respond with support or opposition as needed.

Public Relations Committee – Luz Maria Robles

The Public Relations Committee meeting included a variety of topics and began with announcements regarding the upcoming planning meeting in December and the MVCAC Conference in January. We then went into a discussion regarding a photography project. The executive committee recently approved funds for the project to take a variety of photos that can be used by all MVCAC member agencies. Currently we are gathering quotes and a vendor will be selected soon. Next, there was a discussion about improvements to the MVCAC website so all members are able to access resources and a new Best Management Practices project that members of the committee will begin in conjunction with other members of the Vector Control Research Committee. Other topics of discussion included: committee goals for 2023, availability of housing related toolkit materials and how to use Nextdoor as part of outreach efforts.

Regulatory Affairs Committee – Gary Goodman

The RAC discussed many items during the meeting including the MVCAC's engagement with CDPR on the upcoming statewide pesticide notification system. The RAC and our consultant, KP Public Affairs, have had numerous discussions with CDPR on the impact to vector control districts moving forward. They are also engaging with CDPR on the vector control exemption as it relates to pollinators by trying to update the language in the code to ensure that vector control applications are minimally impacted. The statewide NPDES permit was modified to include a new ingredient, pyriproxyfen to the list of acceptable materials. The permit will potentially go up for renewal sometime in 2023. The committee continues to engage with CDPR on the impacts of the cannabis industry and the interaction with public health applications. The emergence of Sterile Insect Technique is another ongoing issue with the RAC and the legislative committee working to educate those involved agencies and regulatory bodies on the specifics of the programs and demonstrate the need for new avenues for vector control moving forward.

Other longer standing issues being handled through the committee are storm water structures, irrigation run off, utility vault access by companies like PG&E, and working with CDFW on best management practices on wetlands.

Research Committee – Sarah Wheeler

The first agenda item was the MVCAC research priorities. The committee agreed that the best way to manage the priorities was to have an open comment period each year from October 1 – November 15th. Based on the feedback, the priorities will be revised and posted on the MVCAC website by January 1 the following year. PacVec will include a link to the MVCAC research priorities with the call for training grant applications. It was suggested that a list of each district interested in collaborating on given priorities is provided to help foster partnerships. The next item for discussion was the MVCAC Proceedings. The goal of the Proceedings is to have an abstract, extended abstract, or full paper submitted based on each presentation and poster given at the annual conference. The editor of the proceedings has had some issues soliciting submissions from speakers. The committee and MVCAC board of directors decided that in order to support the Editor all Proceedings communication will be transmitted to both the speaker and their District Manager or University Advisor. The intention is to include District Managers in the process so that presenters get the support they need in order meet Proceedings submission deadlines. The committee also discussed adding a charge for 2023 to investigate options to make the Proceeding searchable on the MVCAC website. Jodi Holeman from Consolidated Mosquito and Vector Control District and Trinidad Reyes from Madera Mosquito and Vector Control District presented their work on assessing breeding potential and control strategies for utility vaults. Utility vaults hold water, generate heat, and can be productive habitats for mosquito development. Controlling mosquitoes in vaults is challenging because vaults must be opened by properly trained utility personnel. Both Consolidated MVCD and Madera MVCD have formed partnerships with PG&E to enable control programs. These partnerships are not universal across the state, and the RAC is working toward a more comprehensive solution to address mosquito reproduction in utility vaults.

Training and Certification Committee- Luz Maria Robles

The committee discussed the archived Continuing Education Units (CEU's) in each of the categories. Currently there are a variety of videos to choose from; however additional videos need to be recorded. June 2023 is when all of the CEU's need to be completed for the certification. The committee also discussed a new platform called CE 21 Trident Package to be a repository for all of the videos in a single location. It was used during the past MVCAC conference with much success. There is an app available for the platform and it appears to be user friendly. Having the videos available on the app will allow technicians to access them when they are in the field. There was a discussion regarding live CEU events and meetings for the various regions. Currently everyone is in a holding pattern, but the hope is to bring back the live CE meetings. Recently the south San Joaquin valley held a small in person session with various work stations showcasing drones and WALS application equipment. Lastly the committee is working on Train the

Trainer videos on best management practices that will be recorded in the winter and will work to find a new board liaison.

Vector and Vector-Borne Disease Committee – Kara Kelley

The first agenda item was the arbovirus surveillance updates. Chris Barker updated the committee on mosquito pool testing for 2022. DART had tested 12,745 mosquito samples which was approximately 89% of the 5-year average for testing. Tina Feiszli from CDPH updated the committee on sentinel chicken testing and dead bird testing. A total of 4800 chicken samples had been tested from 20 counties with a total of 144 samples testing positive from 12 counties. The dead bird hotline fielded a total 4800 reports leading to 1219 dead samples tested. As of October 15th, a total 185 dead birds tested positive for WNV coming from 23 counties. For hantavirus testing, a total of 300 mice from 14 counties were tested and a total of 7 mice were positive. Plague surveillance included 23 counties where both fleas and rodents were tested for plague. The testing results showed no flea positives but 4.8% of the collected blood samples tested positive for plague with no human cases. Next tick surveillance was reviewed. For *Ixodes pacificus*, a total of 6000 adults and 1200 nymphs as well as 3000 *Dermacentor sp.* were tested. There are pending human cases with 24 positive Lyme disease, 10 positive Anaplasmosis and 5 positive relapsing tick fever cases. The last update by Leslie Foss covered Avian Influenza. The spread of HPAI is the highest since 2015 and is estimated to affect possibly as many as 48 million birds. The virus has been found in 35 counties with greatest infection levels in waterfowl species. The next item for discussion was reviewing of the committee charges. The first charge to be reviewed was how the committee can provide helpful references or SOPs for surveillance and control of invasive species to the Districts. A suggestion was to review current topics of interest either through research articles or Pro-Med updates, write a short paragraph on the topic and post it on the MVCAC website for the members to read. The responsibilities for the updates would rotate by region and then be posted to the MVCAC website. As part of updating information, the invasive species SOP template will be reformatted to provide a more structured flow of information. The template will have three sections, the first two sections will cover standard surveillance and control of vectors when no invasive species are present, and the last section will cover the surveillance and control methods used when invasive species are detected. Additional comments made on the importance of understanding the local *Aedes* population and the potential localized resistance issues that may be present. The next item for discussion was the need to develop a comprehensive list of the surveillance, control, and existing outreach materials for invasive *Aedes* species. It was suggested the files/templates used to distribute public information such as the doorhangers, information on the seasonality of invasive species, and ticks should be made available through a login on the MVCAC website. These links could allow Districts add their contact information to the files and help to distribute the message more quickly to the public. It was suggested that this committee, IVM and PR work together to make these template available to the Districts for distribution. The last topic on the agenda was the surveillance and control of vectors and vector borne diseases in homeless camps, more study is needed to better evaluate this situation.

LABORATORY

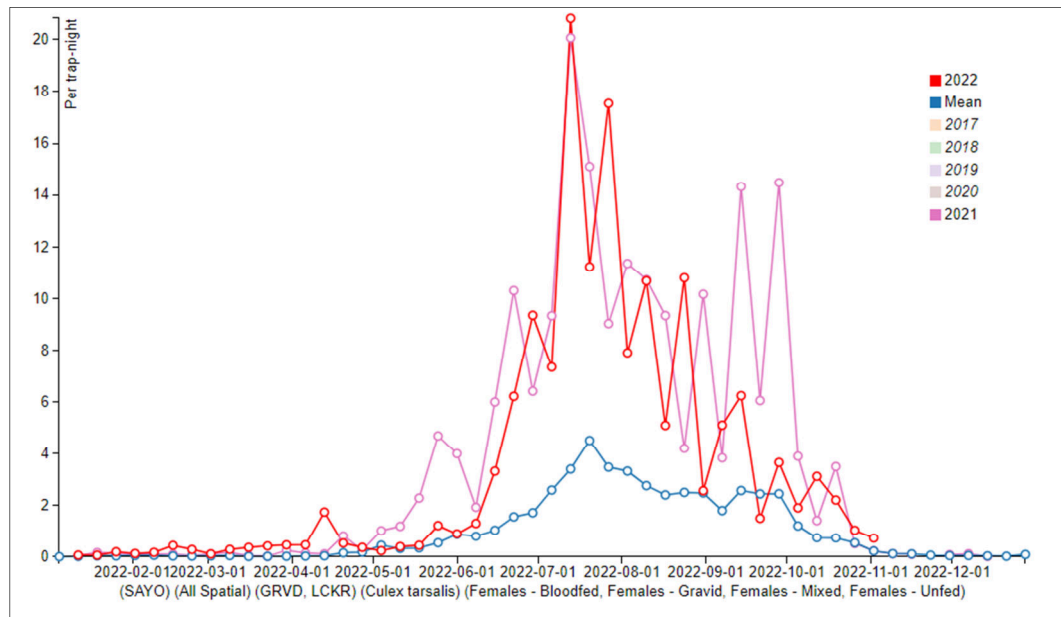
Monthly Report November 2022 Board Meeting

Insectary:

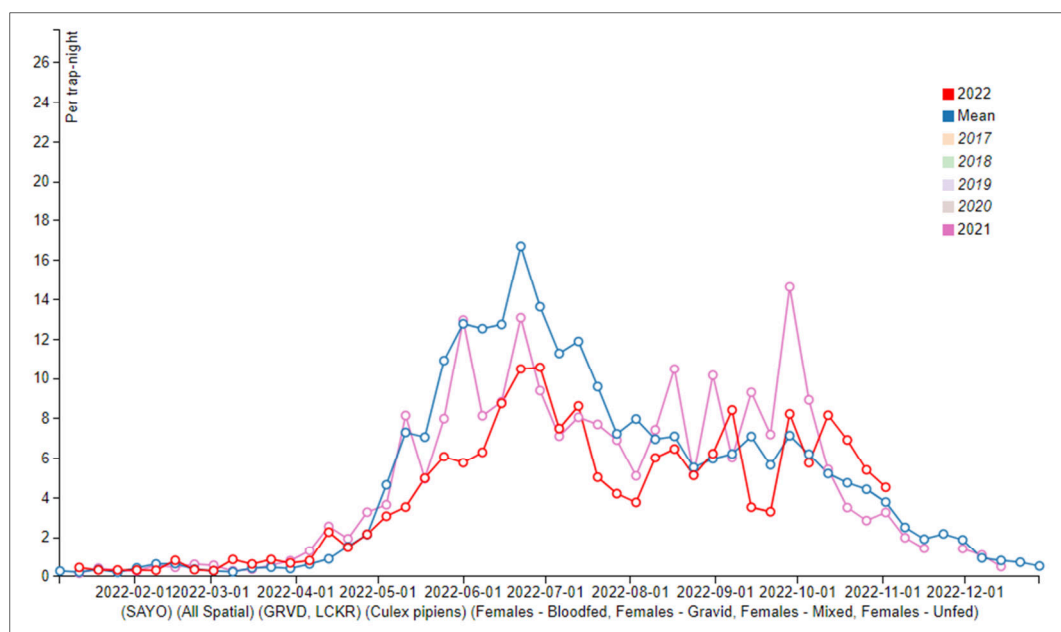
Species	Name	Origin	Resistance Status
<i>Culex tarsalis</i>	KNWR	Kern National Wildlife Refuge (2009)	susceptible
<i>Culex quinquefasciatus</i>	CQ1	Merced, CA (1950s)	susceptible
<i>Culex pipiens</i>	WCP	Woodland, CA (2017)	resistant: pyrethrins/pyrethroids, methoprene, and spinosad
<i>Culex tarsalis</i>	VFCT	Vic Fazio Yolo Wildlife Area (2020)	resistant: pyrethrins/pyrethroids
<i>Culex pipiens</i>		Elk Grove (2022)	status under investigation
<i>Aedes sierrensis</i>		Sonoma County (2016)	susceptible

2022 Surveillance update through 11/4/2022:

Weekly mosquito collections – The following graphs show overall *Culex tarsalis* and *Culex pipiens* abundance from gravid traps and locker traps placed in permanent locations throughout Sacramento and Yolo Counties.

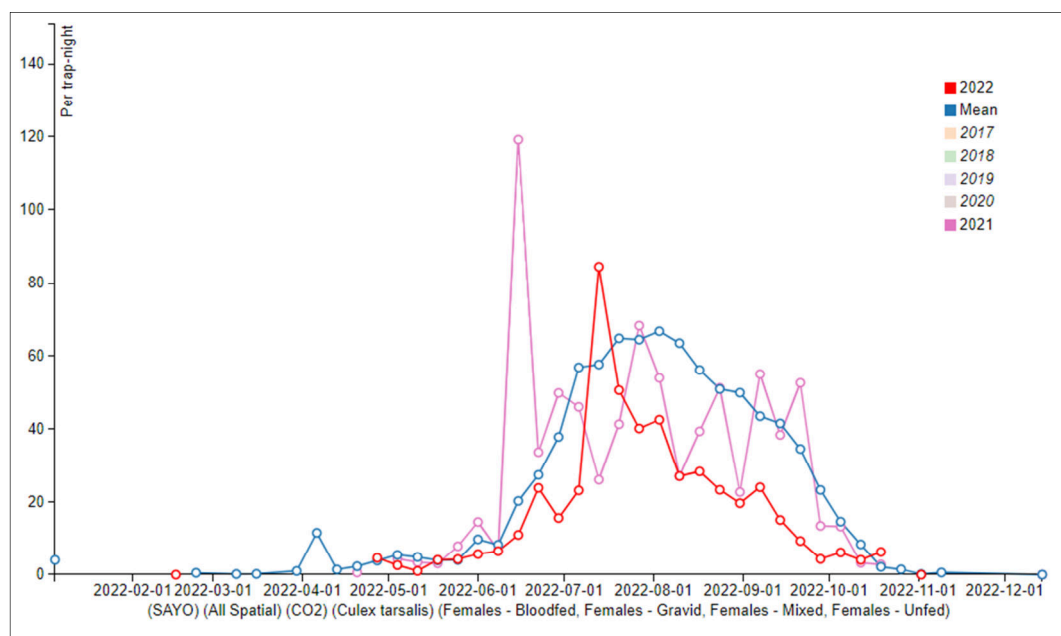


Weekly *Culex tarsalis* abundance traps in locker and gravid traps

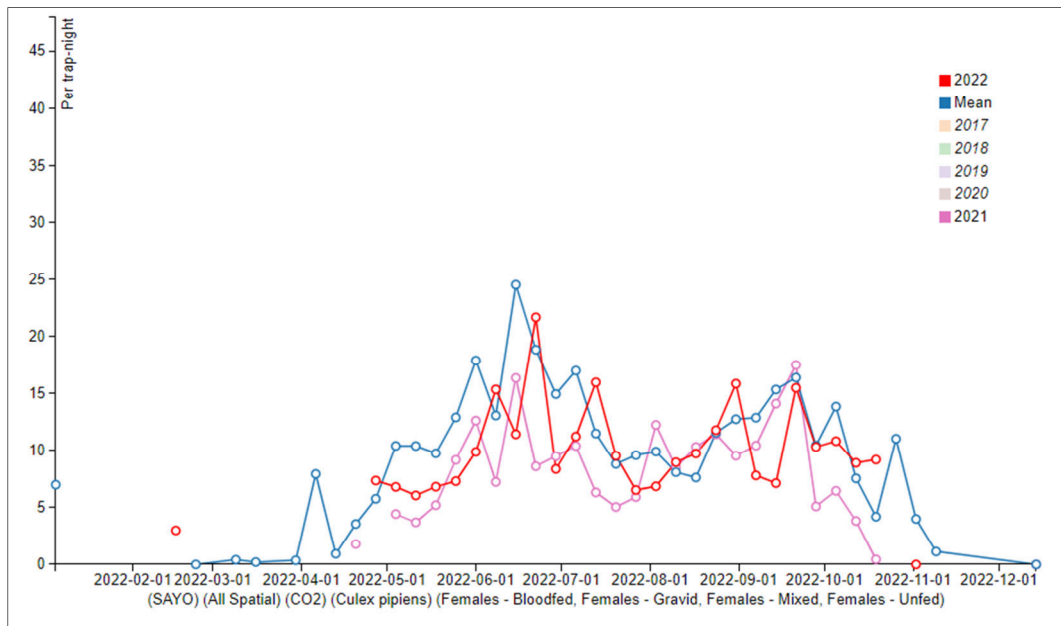


Weekly *Culex pipiens* abundance traps in locker and gravid traps

Encephalitis virus surveillance (EVS) – The following graphs show the number of *Culex tarsalis* and *Culex pipiens* that were collected in CO₂-baited EVS traps. Traps were run in established and West Nile virus response locations for a single night, then tested for West Nile virus. EVS trapping for WNV surveillance has now concluded for 2022 and will resume in April 2023.

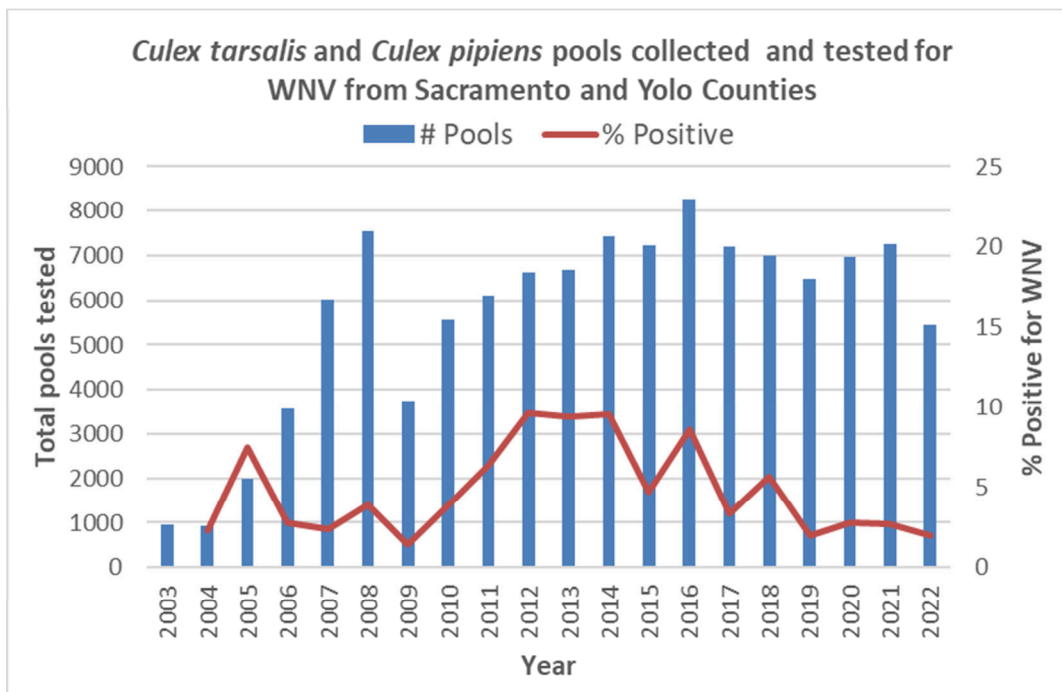


Culex tarsalis in CO₂ traps

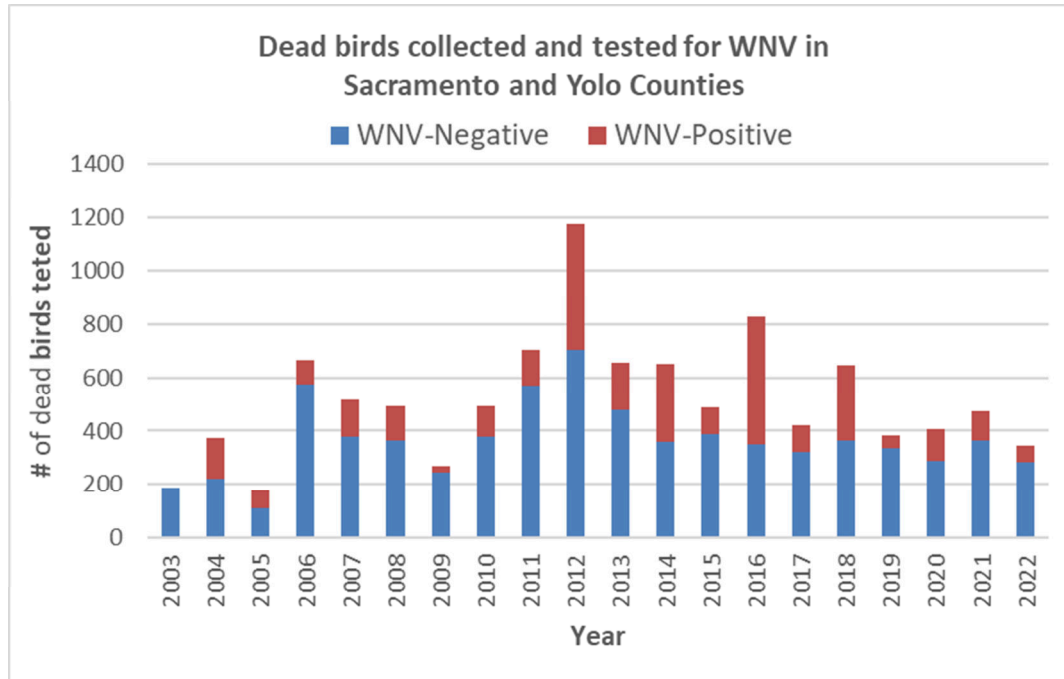


Culex pipiens in CO₂ traps

West Nile virus (WNV) testing – In total 5,385 mosquito pools of *Culex tarsalis* and *Culex pipiens* were tested for WNV during 2022. Overall, 42 and 65 pools were positive from Sacramento and Yolo County, respectively. The following figure shows the total number of mosquito pools tested and the percent positive for WNV each year since 2003 in Sacramento and Yolo Counties.



Dead birds – In total, 345 dead birds were collected and tested in Sacramento and Yolo County in 2022. Overall, 40 and 24 birds tested positive for WNV in Sacramento and Yolo counties, respectively. The dead bird collection and testing program is concluded for 2022 and will resume in April of 2023. The following figure shows the total number of dead birds collected and tested each year since 2003.



Sentinel chickens – The sentinel chicken program is completed for the year and will resume in April 2023. The following table shows the cumulative 2022 sentinel chicken results.

Flock location	County	Flock size	WNV seroconversions	Date of first seroconversion
Iselton	Sacramento	5	5	8/11/2022
Gibson Ranch	Sacramento	5	1	9/6/2022
Rancho Murieta	Sacramento	5	0	
Knights Landing	Yolo	5	3	8/8/2022
Dunnigan	Yolo	5	0	

Rice Surveillance – Counter traps have been collected from the rice fields. Surveillance will resume in May 2023.

Human disease response surveillance – There were no new human cases reported to the District in October 2022.

Tick surveillance – Tick flagging has begun; we are currently in the process of flagging each site. The first results will be available in the December board packet.

***Aedes aegypti* trapping effort in Sacramento and Yolo Counties** - Biogents (BG) Sentinel traps were primarily used for *Aedes aegypti* surveillance. Traps were run continuously within the cities where *Aedes aegypti* populations have established including: Elk Grove, Winters, and Sacramento (Arden/Arcade, Rosemont, and Elder Creek communities). BG traps were also set for a single night to detect new infestations and further define current infestations. The following table shows the cumulative 2022 BG trapping effort and *Aedes aegypti* and *Aedes albopictus* detections. Surveillance for these invasive species will run through the end of November, then resume in April-May 2023.

City	County	Total trap nights		# <i>Aedes aegypti</i> collected	# <i>Aedes albopictus</i> collected
		Single night	Constant operation		
Antelope	Sacramento	6			
Carmichael	Sacramento	89			70
Citrus Heights	Sacramento	59			
Courtland	Sacramento	3			
Davis	Yolo	71			
Elk Grove	Sacramento	267	1333	198	
Elverta	Sacramento	4			
Fair Oaks	Sacramento	94			
Folsom	Sacramento	68			
Galt	Sacramento	32			
Gold River	Sacramento	6			
Isleton	Sacramento	1			
Mather	Sacramento	2			
North Highlands	Sacramento	9			
Orangevale	Sacramento	74		1	
Rancho Cordova	Sacramento	25			
Rancho Murieta	Sacramento	50			
Rio Linda	Sacramento	32		40	
Sacramento	Sacramento	1106	1877	565	3
Sloughhouse	Sacramento	1			
Walnut Grove	Sacramento	4			
West Sacramento	Yolo	30			
Wilton	Sacramento	1			
Winters	Yolo	330	704	348	
Woodland	Yolo	78		1	

The California Arbovirus Surveillance Bulletin #26 Week 44 Friday, November 4, 2022

2021 & 2022 YTD West Nile Virus Comparisons		
	2021	2022
Total No. Dead Bird Reports	4,917	4,607
No. Positive Counties	37	32
No. Human Cases	98	109
No. Positive Dead Birds / No. Tested	209 / 1,660	185 / 1,233
No. Positive Mosquito Pools / No. Tested	2,258 / 37,432	3,151 / 39,829
No. Seroconversions / No. Tested	88 / 5,558	145 / 5,017

YTD WNV Activity by Element and County, 2022					
County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens
Butte	3		2	39	27
Colusa					3
Contra Costa			1	2	5
Fresno	14		2	296	
Glenn	1				
Imperial				1	
Kern	16	3		99	
Kings	6	1		105	
Lake			2	7	3
Los Angeles	16	1	46	566	33
Madera	3		2	132	
Merced	7		1	20	16
Napa				1	
Nevada		1	1		
Orange	3		1	39	
Placer	2		5	89	
Riverside			5	124	
Sacramento	1	2	40	42	6
San Bernardino			7	99	
San Joaquin	4	1	1	208	
San Luis Obispo		1			
Santa Clara	1		26	23	
Shasta	1		1	39	3
Solano	2		9	12	
Sonoma	1		1		
Stanislaus	11	1		70	
Sutter	1		4	31	16
Tehama	3	2			6
Tulare	9	3	2	1,030	10
Ventura			1		
Yolo	3		24	65	4
Yuba	1		1	12	13
Totals	109	16	185	3,151	145

ECOLOGICAL MANAGEMENT DEPARTMENT Monthly Report for the November 2022 Board Meeting

Marty recently attended and represented the District at the Public Safety Festival hosted by the City of Winters Police and Fire Departments. The event provided an opportunity to interface with the Police Department and general public regarding the local invasive *Aedes aegypti* outbreaks and treatments.



Wetland Program

The District's Fall Flooding program has concluded for the season. Invoices will be sent out shortly to five privately owned properties for their portion of the mosquito control costs during the program dates.

Re-flooded rice fields and newly flooded wetlands are still being monitored as temperatures cool.



Sandhill cranes and waterfowl on local re-flooded rice field

Agricultural Program

Staff continue work on multiple agricultural access projects around the greater south Sacramento and Yolo County areas utilizing District equipment. With the cooler temperatures District Technicians are able to leave their zones and help with some of the brush projects by removing smaller debris from opened up ditches.



Detention basin adjacent to Cache Creek

Staff have been working on opening access to an agricultural drain ditch on CA Department of Water Resources(DWR) owned property located to the West of Hwy 5 near the Cosumnes River Preserve. Water flow has been impeded and causes low areas on adjacent privately owned property to flood and breed mosquitoes during the corn and rice growing seasons.



Ditch access on CA DWR property

BIOLOGICAL CONTROL

Monthly Report for the November 2022 Board Meeting

In the month of October the Fisheries department finished stocking wetlands with mosquitofish for the year. A total of 34 wetlands, ponds and duck clubs were stocked with mosquitofish totaling just over 1114 pounds. As the weather changes and lack of water for wetland flood ups, we will continue to seine our open ponds and move remaining fish to our predatory exclusion ponds for overwintering. With the added improvements in additional predatory exclusion fencing and added aeration to our pond system we have achieved on average a fivefold yield increase in all of our ponds.

Daily activities such as tank cleaning, water quality monitoring and adding water from our well system were also performed to maintain the high quality of our fish population. The Fisheries department continues with many projects including monitoring dissolved oxygen levels, determining maximum pond holding capacity, crayfish trapping and trying to determine ideal stocking rates in rice fields and wetlands.

As the end of our main mosquito season ends, priorities will shift to maintenance. All nets will be inspected and repaired if needed along with all other necessary equipment.

Log of Treatment Applied for October

<u>Material</u>	<u>AMT</u>	<u>Area Treated</u>	<u>Treatments</u>
Mosquitofish	983.825 lbs	2,722.77 Acres	134

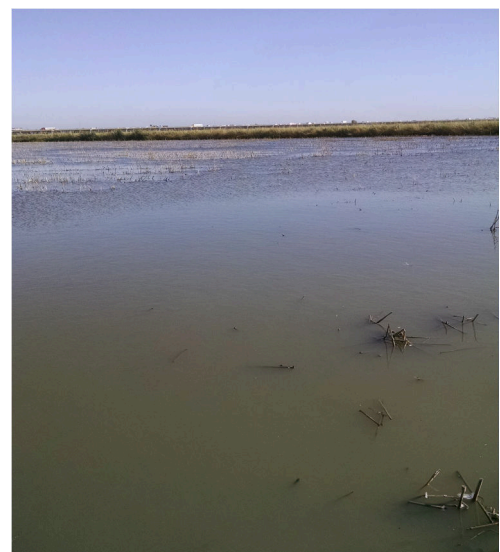
Log of Treatment Applied for the year 2022 running total.

<u>Material</u>	<u>AMT</u>	<u>Area Treated</u>	<u>Treatments</u>
Mosquitofish (<i>Gambusia affinis</i>)	3,808.00 lbs	14,286.89 Acres	2,944
Guppies (<i>Poecilia reticulata</i>)	.2 lbs	.011 Acres	3

Fisheries Budget

<u>Total</u>	<u>Spent</u>	<u>Remaining</u>	<u>% Spent</u>
36,000.00	11,466.83	24,533.17	32%

Vic Fazio 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 November 2022 Board Meeting

Culex and West Nile Virus (WNV) Control

The treatments and responses for both larval and adult mosquitoes started to decline in the month of October with cooler weather and a decline of irrigations. Pasture irrigations were on their final cycle or had already completed for the season allowing technicians to focus control efforts on fall sources like creeks, streams, reflooded rice fields and wetlands. There was an increase in *Aedes melanimon* adults that affected areas of both Sacramento and Yolo Counties. The District responded to service requests related to the *Ae. melanimon* with targeted barrier treatments and ULV adulticide treatments in parks and greenbelts. WNV response was limited to a handful of radii inspections generated from WNV positive dead birds and positive mosquito pools focusing on known sources like green pools and catch basins in the radii area. Catch basin crews switched to single brood treatments for any basins producing larva as rain was anticipated to begin in October.

Aerial Applications

The last aerial adulticide treatment was performed on October 20th. While there were far fewer planted rice acres this season than in previous seasons, treatment totals accounted for over half a million acres of treated rice habitat and buffer areas. The bulk of treatments were performed over Yolo county accounting for 68% of the treatment performed in 2022. As in previous years the District rotated products between Pyrethrin and Naled adulticides in an effort to observe our Integrated Pest Management goals. A Pyrethrin based product was used on 44% of the treated acres and a Naled based product on 56% of the treated acres. Larvicide treatments also concluded in October with the final treatments of the season being performed over wetland habitats in Yolo County. There are no aerial treatments anticipated for the remainder of the calendar year.

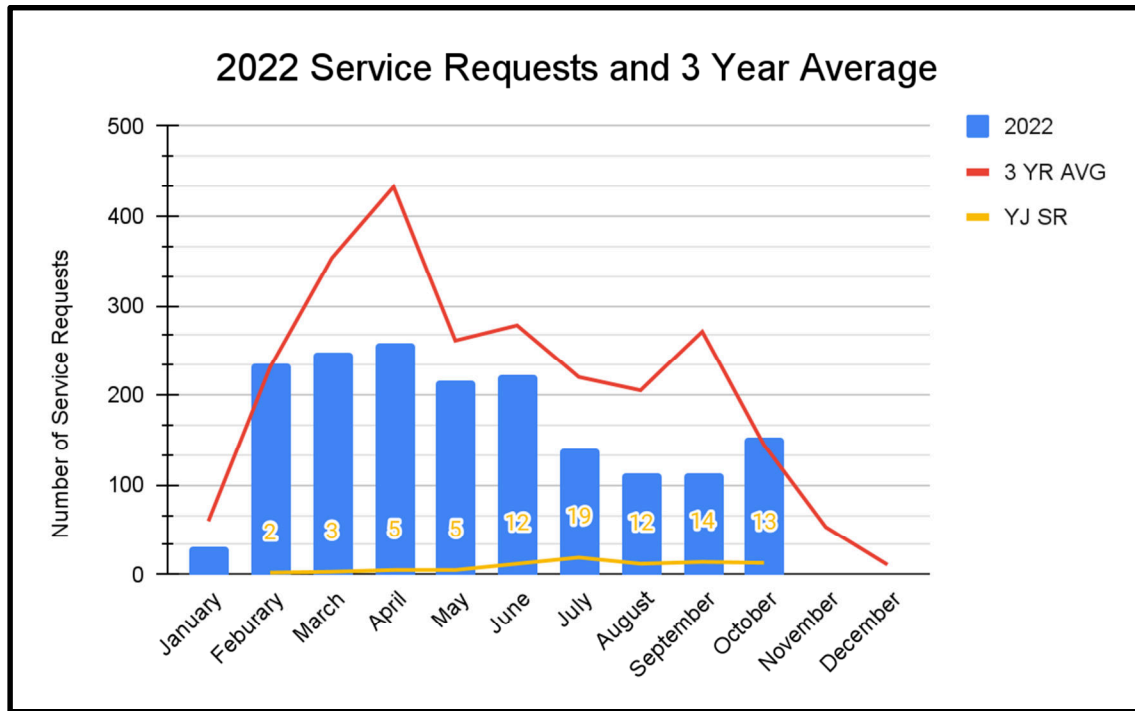
Invasive Aedes Control

The District's first detection of *Ae. albopictus* was discovered in the Carmicheal area of Sacramento County. The Aedes crew responded immediately to these detections by creating trapping grids in partnership with the lab, door to door inspections and performing larval and adult control efforts utilizing Wide Area Larvicide applications and ULV adulticide applications. Trapping efforts will continue in this area until rain events prevent further trapping. The end of October saw the decrease of detected *Ae. albopictus* adults in traps from counts of double digit adults in a night to zero or single digit adults being trapped. Efforts to monitor and control *Aedes aegypti* continue in the city of Winters and the Sacramento County area of Elder Creek.

Yellow Jacket Control

Crews continue to trap Yellow Jacket workers in the areas of the American River, Delta Meadows and Herald. In the month of October traps caught over 5,000 Yellow Jacket workers and removed 145 nests. Typically there is a decline in Yellow Jacket activity in the month of November.





Larvicide Applications thru October 31 st				
Locations/Roles	2022		2021	
	Treatments	Acres	Treatments	Acres
Sacramento County	7,285	15,886	7,057	14,908
Sac County Aerial	25 Orders	19,766	33 Orders	18,077
Sac County Drone Treatments	43 orders	2,104	40 orders	2,296
Yolo County	1,323	5,408	1,510	8,608
Yolo County Aerial	50 Orders	78,173	75 Orders	129,743
Yolo County Drone Treatments	20 Orders	2,415	39 Orders	2,849
CB Treated	95,763	--	204,104	--
CB Inspected -not treated	156,577	--	171,638	--

Aerial Adulticide Summary thru October 31st				
	<u>2022</u>		<u>2021</u>	
<u>County</u>	<u># Applications</u>	<u>Acres</u>	<u># Applications</u>	<u>Acres</u>
Sacramento Ag	24	167,464	20	139,765
Sacramento Urban	0	0	0	0
Yolo Ag	58	351,786	50	424,118
Yolo Urban	0	0	0	0

Adulticide Summary through October 31st, 2022 compared to: 2021

Contract Acres (our portion) =	530,000	530,000
Acres used =	519,250	563,883
Acres remaining =	(10,750)	(-33,883)
% Acres used =	98%	106%
% Acres remaining =	2%	0%

San Joaquin County MVCD has used 190,582 acres of their 190,000 acre contract commitment.

Placer MVCD has used 125,099 acres of their 100,000 acre commitment.

Turlock MAD has used 89,911 acres of their 180,000 acre commitment.

Merced MAD had used 31,407 acres

PUBLIC INFORMATION AND EDUCATION
Monthly Report for the November 2022 Board Meeting

Invasive Mosquitoes:

Invasive mosquitoes continue to be detected in new areas within Sacramento County. Most recently, the invasive mosquito *Aedes albopictus* was found for the first time in a Carmichael home. Upon the detection we issued a press release and obtained media coverage from the Sacramento Bee and other smaller print media. Unfortunately, we did not get much of a response from television stations, however they have covered the topic of invasive mosquitoes extensively in the past. The press release won *Aedes albopictus* was posted on our website and disseminated on social media.

Social media and Nextdoor

As a result of the new *Aedes albopictus* detection and the ongoing findings of *Aedes aegypti*, social media continues to be an instrumental channel to disseminate information. A Nextdoor post specific to the Carmichael zip code where invasive mosquitoes were found was sent out along with targeted Facebook ads. We also promoted and boosted the extensive article written by the Sacramento Bee across all our social media platforms. Aside from messaging on invasive mosquitoes, we have been promoting the use of repellent while spending time outdoors and other interesting mosquito related content.

Events:

We ended the season with two Fall Harvest events to be able to do outreach regarding invasive mosquitoes. One event was a multicultural event held in Old Sacramento that included a parade and a vendor fair. The other event was the Natomas Autumn Festival which was a great community event where we were able to speak to people of different ethnicities. We provided information regarding the finding of *Aedes aegypti* in south Natomas earlier in the season and the recent *Aedes albopictus* finding in Carmichael as well as our response activities. This was a great event and a wonderful way to end the season.

Outreach events will resume Spring 2023.

School Program:

To grow our school program, we are working with Red Shoe Productions on rolling out Fight the Bite “What Bugs You?” school assemblies that will serve to educate and inform the kids on our Be a Mosquito Buster program. The first school assembly took place at Caleb Greenwood Elementary which is also a school from one our 2022 contest winners. Approximately 300 children were in attendance for the 45-minute assembly that includes a variety of games and activities. Other assemblies will be scheduled for the upcoming months.

Repellent and Materials Distribution:

Repellent and other district materials were recently provided to the UC Davis and California AgrAbility Program for a health fair targeting migrant farm workers in Knights Landing. In addition, the North Laguna Creek Valley Hi community association also requested materials for an upcoming event.

Government affairs:

As part of our ongoing detection of invasive mosquitoes as well as WNV activity, we continue to keep local elected officials informed by sending them regular email updates with our findings and response activities.

Presentations:

A presentation was given to the Sacramento Breakfast Optimist Club on October 26th. The presentation was well received, and members indicated that the presentation was very interesting and informative. We will be reaching out to other Optimist chapters for future presentations.

MVCAC Public Relations Committee

As part of the PR Committee standing charges, I am involved in a new photography project that has the goal of working with a photographer to obtain high resolution and quality photos of mosquito control work. A survey was sent out to MVCAC members to assess needs and we will soon move forward with selecting a vendor to perform the work. We are also working on a toolkit to help with outreach to water districts and I recently translated a social media content calendar, text for graphics and a water bill insert.

Sacramento-Yolo Mosquito and Vector Control District

November 15, 2022 Board Meeting

5. **Closed Session – Conference with Labor Negotiators**
(Government Code Section 54957.6 – Unrepresented Employee:
Assistant Manager)