

**AGENDA**  
1108<sup>th</sup> MEETING OF THE BOARD OF TRUSTEES  
OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT  
DECEMBER 14TH, 2022

TIME: 5:00 P.M.  
PLACE: Hybrid Meeting of the Board of Trustees  
Physically held at the Office of the District  
23187 Connecticut Street, Hayward, CA 94545 and  
Teleconferencing at <https://us02web.zoom.us/j/85196102244>  
**see below for additional details.**  
TRUSTEES: Subru Bhat, President, City of Union City  
Victor Aguilar, Vice-President, City of San Leandro  
Cathy Roache, Secretary, County-at-Large  
Tyler Savage, City of Alameda  
Preston Jordan, City of Albany  
P. Robert Beatty, City of Berkeley  
Shawn Kumagai, City of Dublin  
Courtney Welch, City of Emeryville  
George Young, City of Fremont  
Elisa Márquez, City of Hayward  
Steven Cox, City of Livermore  
Eric Hentschke, City of Newark  
Jan O. Washburn, City of Oakland  
Hope Salzer, City of Piedmont  
Julie Testa, City of Pleasanton

1. Call to order.
2. Roll call.
3. President Bhat invites any member of the public to speak at this time on any issue relevant to the district (each individual is limited to three minutes).
4. Approval of the minutes of the 1107<sup>th</sup> Regular Meeting held November 9<sup>th</sup>, 2022 (**Board action required**).
5. Ad-Hoc Nominating Committee nominates a slate of 2023 District Officers for Board approval (**Board action required**)
6. Financial Reports as of November 30<sup>th</sup>, 2022: (Information only).
  - a. Check Register
  - b. Income Statement
  - a. Investments, reserves, and cash report
  - b. Balance Sheet
7. Presentation of the Monthly Staff Report (Information only).
8. Presentation of the Manager's Report (Information only).
  - a. Staff Anniversaries
  - b. CDPH Weekly Arbovirus report
  - c. Upcoming council presentations: Alameda-1/3/23, Livermore-1/23/23
  - d. Operation staff personnel update
  - e. Training due: AB 1825: Kumagai

9. Board President asks for reports on conferences and seminars attended by Trustees.
10. Board President asks for announcements from members of the Board.
11. Board President asks trustees for items to be added to the agenda for the next Board meeting.
12. Adjournment.

ANYONE ATTENDING THE MEETING MAY SPEAK ON ANY AGENDA ITEM AT THEIR REQUEST.

**Please Note: Board Meetings are accessible to people with disabilities and others who need assistance. Individuals who need special assistance or a disability-related modification or accommodation (including auxiliary aids or services) to observe and/or participate in this meeting and access meeting-related materials should contact Ryan Clausnitzer at least 48 hours before the meeting at 510-783-7744 or [acmad@mosquitoes.org](mailto:acmad@mosquitoes.org).**

**IMPORANT NOTICE REGARDING MEETING PARTICIPATION:**

All members of the public seeking to observe and/or to address the local legislative body may participate in the meeting by attending in person at the address listed above, telephonically, or otherwise electronically in the manner described below.

**HOW TO OBSERVE THE MEETING:**

**In Person:** Attend in person at the Office of the District located at 23187 Connecticut Street, Hayward, CA 94545.

**Telephone:** Listen to the meeting live by calling Zoom at **(669) 900-6833** Enter the **Meeting ID# 851 9610 2244** followed by the pound (#) key.

**Computer:** Watch the live streaming of the meeting from a computer by navigating to <https://us02web.zoom.us/j/85196102244>

**Mobile:** Log in through the Zoom mobile app on a smartphone and enter **Meeting ID# 851 9610 2244**

**HOW TO SUBMIT PUBLIC COMMENTS:**

**Before the Meeting:** Please email your comments to [acmad@mosquitoes.org](mailto:acmad@mosquitoes.org), write "Public Comment" in the subject line. In the body of the email, include the agenda item number and title, as well as your comments. If you would like your comment to be read aloud at the meeting (not to exceed three minutes at staff's cadence), prominently write "Read Aloud at Meeting" at the top of the email. All comments received before 12:00 PM the day of the meeting will be included as an agenda supplement on the District's website under the relevant meeting date and provided to the Trustees at the meeting. Comments received after this time will not be read aloud but will be added to the record after the meeting.

**During the Meeting:** The Board President or designee will announce the opportunity to make public comments. Speakers will be asked to provide their name and city of residence, although providing this is not required for participation. Each speaker will be afforded up to 3 minutes to speak unless another time is specified. Speakers should remain silent and/or will be muted until their opportunity to provide public comment.

**In Person:** Members of the public may raise their hand and wait to be recognized by the Board President or designee.

**Telephone:** Press star (\*)9, which will alert staff that you have a comment to provide.

**Computer or Mobile:** Use the "raise hand" feature to alert staff that you have a comment to provide.

**PUBLIC RECORDS:**

Public records that relate to any item on the open session agenda for a meeting are available for public inspection. Those records that are distributed after the agenda posting deadline for the meeting are available for public inspection at the same time they are distributed to all or a majority of the members of the Board. The Board has designated the District's website located at <https://www.mosquitoes.org/board-of-trustees-regular-meetings> as the place for making those public records available for inspection. The documents may also be obtained by emailing [acmad@mosquitoes.org](mailto:acmad@mosquitoes.org).

## MINUTES

### 1107<sup>th</sup> MEETING OF THE BOARD OF TRUSTEES OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

November 9<sup>th</sup>, 2022

---

TIME: 5:00 P.M.  
PLACE: Hybrid Meeting of the Board of Trustees  
Physically held at the Office of the District  
23187 Connecticut Street, Hayward, CA 94545 and  
Teleconferencing at <https://us02web.zoom.us/j/85813339830>  
TRUSTEES: Subru Bhat, President, City of Union City  
Victor Aguilar, Vice-President, City of San Leandro  
Cathy Roache, Secretary, County-at-Large  
Tyler Savage, City of Alameda  
Preston Jordan, City of Albany  
P. Robert Beatty, City of Berkeley  
Shawn Kumagai, City of Dublin  
Courtney Welch, City of Emeryville  
George Young, City of Fremont  
Elisa Márquez, City of Hayward  
Steven Cox, City of Livermore  
Eric Hentschke, City of Newark  
Jan O. Washburn, City of Oakland  
Hope Salzer, City of Piedmont  
Julie Testa, City of Pleasanton

1. Board Vice-President Aguilar called the regularly scheduled board meeting to order at 5:03 P.M.
2. Board Vice-President Aguilar along with Trustees Hentschke and Roache were present in-person at the district. Trustees Savage, Jordan, Kumagai, Jordan, Márquez, Cox, and Testa were present on the Zoom conference. Trustees Beatty and Salzer logged into the Zoom meeting at 5:05 and 5:07 P.M., respectively. Trustees Bhat, Welch, Young, and Washburn were absent.
3. Board President Bhat invited members of the public to speak on any issue relevant to the district. Information Technology Director Robert Ferdan was present for technical support and Vector Scientist Dereje Alemayehu was present for item #8. Matt Smith from PFM was on the Zoom conference for item #7. No public comments were submitted.
4. Approval of the minutes of the 1106<sup>th</sup> meeting held October 12<sup>th</sup>, 2022.  
**Motion:** Secretary Hentschke moved to approve the minutes  
**Second:** Trustee Márquez  
**Vote:** motion carries: unanimous.
5. Second reading of revisions to ACMAD policy

**Discussion:** Secretary Roache asked what dates mark the ACMAD fiscal year (July 1<sup>st</sup>-June 30<sup>th</sup>).

**Motion:** Secretary Roache moved to approve revisions to ACMAD policy.

**Second:** Trustee Jordan

**Vote:** motion carries: unanimous.

6. Appointment of an ad-hoc committee to nominate candidates for 2023 Board offices

**Motion:** Secretary Roache moved to accept Trustees Beatty and Márquez as members of the ad-hoc committee

**Second:** Trustee Márquez

**Vote:** motion carries: unanimous

7. Presentation by Matt Smith, CFA Senior Managing Consultant at PFM Asset Management LLC.

**Discussion:** Trustee Jordan complimented Matt on the presentation and asked if the fund is actively managed (yes) and for clarification on the treasury yield curve slide. Trustee Savage asked if there is truly a 30-35% chance of recessing (likely a 60% chance). Trustee Salzer asked for clarification on the management fees (30-33 basis points which is the market rate) and why so much of the fund is allocated to fixed income (long-term projections with a targeted return). Vice-President Aguilar asked what the expected cap on interest rates is (5.25% is expected).

8. Presentation by Dereje Alemayehu, Vector Scientist, on his trip to the Pan African Mosquito Control Association's Annual Conference on September 26th-28th in Kigali, Rwanda

**Discussion:** Trustee Hentschke asked if each African country has mosquito control districts (barely any control in Africa with instead a focus on research). Trustee Salzer asked what has been the results of the tractor projects (less time spent on labor, but this was in an unrelated church-sponsored project in Ethiopia, no mosquito-related project exists yet—this was an initial pitch), would the wealth generated by a tractor be distributed from farmers to workers (as subsistence family farmers, there are no employees, only families working plus the project is not yet launched for mosquito control yet), and how does malaria's mortality compare to other causes of death for African children (malaria is a leading cause of death for children in Africa, like access to clean water and nutrition, as noted). Trustee Márquez complimented Dereje on the contribution he is making to the global mosquito control industry as a representative of ACMAD.

9. Financial Reports as of October 31, 2022.

**Discussion:**

The General Manager presented the Financial Reports.

10. Presentation of the Monthly Staff Report.

**Discussion:**

The General Manager gave the monthly Staff Report.

11. Presentation of the Manager's Report.

**Discussion:**

The General Manager presented the Manager's Report and fielded the following questions. Trustee Cox asked if a Trustee could attend a meeting remotely during the non-emergency phase by posting the location at a public building, like a library (yes). Trustee Hentschke

suggested revising the organization chart to read 1 trustee from each 14 cities rather than 14 trustees from each city (yes).

12. Board Vice-President Aguilar asked for reports on conferences and seminars attended by Trustees. Trustee Hentschke mentioned that HASPA should meet prior the next regular ACMAD Board meeting.
13. Board Vice-President Aguilar asked for announcements from the Board, there were none.
14. Board President Bhat asked trustees for items to be added to the agenda for the next Board meeting. The General Manager mentioned that after the Trustee open house, the meeting will review the audit and board officers for 2023.
15. The meeting adjourned at 6:36 P.M.

**Respectfully submitted,**

Approved as written and/or corrected  
at the 1108<sup>th</sup> meeting of the Board of  
Trustees held December 14<sup>th</sup>, 2022

---

Subru Bhat, President  
BOARD OF TRUSTEES

---

Cathy Roache, Secretary  
BOARD OF TRUSTEES

## Alameda County Mosquito Abatement Dist.

## Check Register

For the Period From Nov 1, 2022 to Nov 15, 2022

Filter Criteria includes: Report order is by Date.

Check #	Date	Payee	Amount
3381	11/15/22	Airgas	494.43
3382	11/15/22	Alameda County LAFCO	514.00
3383	11/15/22	Alco Sheet Metal and Heating, Inc.	175.00
3384	11/15/22	Alemayehu, Dereje	102.49
3385	11/15/22	BARTKIEWICZ, KRONICK & SHANAHAN	160.00
3386	11/15/22	Bay Alarm	801.71
3387	11/15/22	Cintas	467.49
3388	11/15/22	Coverall North America, Inc.	495.00
3389	11/15/22	Element One Architecture	3,757.50
3390	11/15/22	Hentschke, Eric Armin	100.00
3391	11/15/22	Leading Edge Associate, Inc.	13,500.00
3392	11/15/22	PFM Asset Management LLC	1,508.48
3393	11/15/22	PG&E	96.76
3394	11/15/22	Testa, Julie	100.00
3395	11/15/22	UC Davis AR Lockbox	504.00
3396	11/15/22	U.S Bank Corporate Payment System	12,668.34
3397	11/15/22	Voya Institutional Trust Company	181.43
3398	11/15/22	Waste Management of Alameda County	297.04
ACH	11/15/22	Alameda County Mosquito Abatement Dist (Payroll)	85,789.76
ACH	11/15/22	Aguilar, Victor	100.00
ACH	11/15/22	Beatty, Robert .P	100.00
ACH	11/15/22	CalPERS Retirement	16,173.79
ACH	11/15/22	CalPERS 457	7,179.42
ACH	11/15/22	Cox, Steven	100.00
ACH	11/15/22	Jordan, Preston	100.00
ACH	11/15/22	Kumagai, Shawn	100.00
ACH	11/15/22	Marquez, Elisa	100.00
ACH	11/15/22	Roache, Cathy J Pinkerton.	100.00
ACH	11/15/22	Salzer, Hope	100.00
ACH	11/15/22	Savage, Tyler	100.00
<b>Total Expenditures - November 15, 2022</b>			<b>145,966.64</b>

Alameda County Mosquito Abatement Dist.  
**Check Register**  
For the Period From Nov 16, 2022 to Nov 30, 2022

Filter Criteria includes: Report order is by Date.

<b>Check #</b>	<b>Date</b>	<b>Payee</b>	<b>Amount</b>
3399	11/29/22	Airgas	477.83
3400	11/29/22	AT&T	83.83
3401	11/29/22	Bay Alarm	1,603.42
3402	11/29/22	Branan, Tom	164.00
3403	11/29/22	CarQuest	212.98
3404	11/29/22	Cintas	402.44
3405	11/29/22	Delta Dental	4,679.81
3406	11/29/22	Grainger	295.94
3407	11/29/22	Hayward Water System	505.68
3408	11/29/22	Leading Edge Associate, Inc.	7,410.00
3409	11/29/22	PG&E	307.14
3410	11/29/22	Rusmisl, Benjamin	110.00
3411	11/29/22	The Hartford	214.38
3412	11/29/22	Verizon	1,004.47
3413	11/29/22	Voya Institutional Trust Company	181.43
3414	11/29/22	VSP	639.42
3415	11/29/22	Washburn, Jan	1,862.16
3416	11/29/22	Waste Management of Alameda County	297.04
3417	11/29/22	WEX Bank	5,154.85
ACH	11/29/22	Alameda County Mosquito Abatement Dist (Payroll)	84,566.98
ACH	11/29/22	CalPERS Health	38,775.33
ACH	11/29/22	CalPERS Retirement	15,455.98
ACH	11/29/22	CalPERS 457	7,179.42
<b>Total Expenditures - November 30, 2022</b>			<b>171,584.53</b>

**Alameda County Mosquito Abatement District**  
**Income Statement**  
November 30, 2022. (5 of 12 mth, 42%)

REVENUES	Actual 2020/21	Actual 2021/22	Current Month	Year to Date 2022/23	Budget 2022/23	Actual vs Budget
<b>Total Revenue</b>	\$ 5,150,753.15	\$ 5,386,808.18	\$ 781.98	\$ 529,703.81	\$ 4,900,658.00	11%

EXPENDITURES	Actual 2020/21	Actual 2021/22 <sup>1</sup>	Current Month <sup>2</sup>	Year to Date 2022/23	Budget 2022/23	Actual vs Budget
Salaries	\$ 2,029,103.97	\$ 2,129,077.24	\$ 195,554.04	\$ 996,865.21	\$2,371,703	42%
CalPERS Retirement	\$ 423,110.21	\$ 471,085.19	\$ 18,234.13	\$ 397,265.74	\$534,559	74%
Medicare & Social Security	\$ 27,866.82	\$ 30,025.60	\$ 2,920.04	\$ 16,023.42	\$38,763	41%
Fringe Benefits	\$ 502,898.39	\$ 484,487.10	\$ 44,472.94	\$ 264,717.56	\$564,969	47%
<b>Total Salaries, Retirement, &amp; Benefits</b>	<b>\$ 2,982,979.39</b>	<b>\$ 3,114,675.13</b>	<b>\$261,181</b>	<b>\$1,674,872</b>	<b>\$3,509,994</b>	<b>48%</b>
Clothing and personal supplies (purchased)	\$ 4,859.20	\$ 7,881.80	\$ 508.13	\$ 2,094.18	\$9,000	23%
Laundry service and supplies (rented)	\$ 9,124.98	\$ 10,417.41	\$ 869.93	\$ 5,078.48	\$13,000	39%
Utilities	\$ 15,421.56	\$ 18,134.35	\$ 1,503.66	\$ 3,878.93	\$21,700	18%
Communications-IT	\$ 71,771.02	\$ 74,950.03	\$ 22,771.66	\$ 48,148.56	\$107,400	45%
Maintenance: structures & improvements	\$ 20,261.51	\$ 26,671.36	\$ 1,609.00	\$ 3,998.67	\$30,000	13%
Maintenance of equipment	\$ 22,290.34	\$ 25,354.56	\$ 212.98	\$ 15,415.92	\$30,000	51%
Transportation, travel, training, & board	\$ 74,653.03	\$ 120,418.29	\$ 10,483.81	\$ 51,197.46	\$119,840	43%
Professional services	\$ 91,622.03	\$ 97,726.00	\$ 2,364.98	\$ 46,369.04	\$152,200	30%
Memberships, dues, & subscriptions	\$ 22,906.45	\$ 25,103.23	\$ 675.00	\$ 20,928.94	\$37,000	57%
Insurance - (VCJPA, UAS)	\$ 141,650.37	\$ 160,932.64	\$ -	\$ 177,227.16	\$179,436	99%
Community education	\$ 26,317.23	\$ 26,225.45	\$ 953.03	\$ 13,177.75	\$55,000	24%
Operations	\$ 223,362.22	\$ 182,575.57	\$ 167.77	\$ 31,842.27	\$227,500	14%
Household expenses	\$ 15,882.05	\$ 25,388.02	\$ 2,900.13	\$ 7,897.55	\$19,950	40%
Office expenses	\$ 9,747.67	\$ 7,002.84	\$ 60.90	\$ 1,858.12	\$12,000	15%
Laboratory supplies	\$ 64,135.55	\$ 82,354.03	\$ 7,900.05	\$ 54,219.07	\$132,500	41%
Small tools and instruments	\$ 2,189.34	\$ 1,963.31	\$ 235.69	\$ 378.11	\$3,000	13%
<b>Total Staff Budget</b>	<b>\$ 816,194.55</b>	<b>\$ 893,098.89</b>	<b>\$ 53,216.72</b>	<b>\$ 483,710.21</b>	<b>\$1,149,526</b>	<b>42%</b>
<b>Total Operating Expenditures</b>	<b>\$ 3,799,173.94</b>	<b>\$ 4,007,774.02</b>	<b>\$ 314,397.87</b>	<b>\$ 2,158,582.14</b>	<b>\$4,659,520</b>	<b>46%</b>

1 - As of June 30, 2021. Unaudited.

2 - Total Operating Expenditures in current month may not match the check register due to accounts receivable and petty cash transactions.



**Alameda County Mosquito Abatement District  
Investment, Reserves, and Cash Balance Report  
November 30, 2022. (5 of 12 mth, 42%)**

Account #	Investment Accounts	Beginning Balance	Deposits	Withdrawals	Earnings <sup>1</sup>	Ending Balance	
1004	LAIF	\$ 1,191,385.10	\$ -	\$ (142,000.00)	\$ -	\$ 1,049,385.10	
1005	OPEB Fund	\$ 4,201,004.39	\$ -	\$ -	\$ 227,655.59	\$ 4,428,659.98	
1006	VCJPA Member Contingency <sup>2</sup>	\$ 351,141.00	\$ -	\$ -	\$ (9,155.00)	\$ 341,986.00	
1008	CAMP: Repair and Replace	\$ 2,648,878.89	\$ -	\$ -	\$ 8,501.16	\$ 2,657,380.05	
1010	CAMP: Operating Reserve	\$ 1,965,348.68	\$ -	\$ -	\$ 6,307.48	\$ 1,971,656.16	
1011	CAMP: Capital Reserve Fund	\$ 372,723.68	\$ -	\$ -	\$ 1,196.20	\$ 373,919.88	
1012	PARS: Pension Stabilization <sup>3</sup>	\$ 1,960,914.19	\$ -	\$ -	\$ 23,759.38	\$ 1,984,673.57	
1013	California CLASS: Public Health Emergency Fund	\$ 531,355.19	\$ -	\$ -	\$ 1,662.87	\$ 533,018.06	
<b>Total</b>		<b>\$ 13,222,751.12</b>	<b>\$ -</b>	<b>\$ (142,000.00)</b>	<b>\$ 259,927.68</b>	<b>\$ 13,340,678.80</b>	
		Beginning Balance			Withdrawals	Activity	Ending Balance
Cash Accounts							
1001	Bank of America (Payroll Account) *	\$ 156,555.82			-	-	\$ 69,897.55
1002	Bank of The West (Transfer Account) *	\$ 370,519.20			-	-	\$ 336,209.07
1003	County Account	\$ 785,311.28	\$	-	\$ 781.98	\$	\$ 786,093.26
1013	Petty Cash	\$ 321.34	\$	-	\$ (32.70)	\$	\$ 288.64
<b>Total</b>		<b>\$ 1,312,707.64</b>	<b>\$</b>	<b>-</b>	<b>\$ 749.28</b>	<b>\$</b>	<b>\$ 1,192,488.52</b>

1 - Earnings are booked as unrealized gains/losses. These earnings would not be recognized as "realized" gains/losses until the accounts are liquidated.

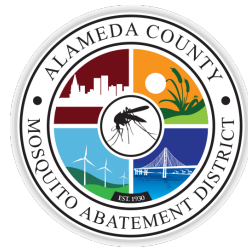
2 - VCJPA Member Contingency balance is as of September 30, 2022.

3- PARS - Pension Stabilization balance is as of November 30, 2022.

Alameda County Mosquito Abatement  
Balance Sheet Comparison  
November

ASSETS	11/30/2022	11/30/2021	11/30/2020
<b>Current Assets</b>			
Bank of America payroll	\$ 154,427.11	\$ 94,403.53	\$ 107,277.49
Bank of the West	263,857.95	248,559.05	294,109.96
County	786,093.26	741,762.37	717,606.64
Cash with LAIF	1,049,385.10	2,149,552.12	1,176,610.85
VCJPA- Member Contingency	341,986.00	373,765.00	375,883.00
CAMP - Repair and Replace	2,657,380.05	1,355,556.32	1,040,484.83
CAMP - Public Health Emergency <sup>1</sup>	-	526,333.15	525,967.76
CAMP - Operating Reserve	1,971,656.16	1,944,745.78	1,943,395.66
CAMP - Capital Reserve Fund	373,919.88	30,003.60	59,078.80
PARS	1,984,673.57	1,847,850.00	1,752,250.56
California CLASS: Public Health Emergency Fund	533,018.06	-	-
Accounts Receivable	534.35	1,026.16	-
Petty cash	288.64	306.04	405.78
	<b>10,117,220.13</b>	<b>9,313,863.12</b>	<b>7,993,071.33</b>
<b>Total Current Assets</b>			
<b>Property and Equipment</b>			
Acc Dep - equipment	(1,594,225.00)	(1,594,225.00)	(1,479,068.00)
Acc Dep - stru & improv	(2,604,632.00)	(2,604,632.00)	(2,485,267.00)
Construction in progress	3,757.50	-	-
Equipment	1,824,515.66	1,769,859.00	1,751,859.00
Structure/improvement	4,799,729.70	4,799,729.70	4,760,618.00
Land	61,406.00	61,406.00	61,406.00
	2,490,551.86	2,432,137.70	2,609,548.00
<b>Total Property and Equipment</b>			
<b>Other Assets</b>			
Net OPEB Asset	1,225,311.00	2,522,763.00	1,823,556.00
	1,225,311.00	2,522,763.00	1,823,556.00
<b>Total Other Assets</b>			
	<b>\$ 13,833,082.99</b>	<b>\$ 14,268,763.82</b>	<b>\$ 12,426,175.33</b>
<b>Total Assets</b>			
<b>LIABILITIES AND CAPITAL</b>			
<b>Current Liabilities</b>			
Accounts payable	\$ 99,334.85	\$ 150,197.53	\$ 129,217.83
Acc payroll/vacation	201,023.94	208,228.89	200,290.26
Def inflow - 75	1,046,869.00	1,254,695.00	931,786.00
Def inflow pen defer GASB 68	208,602.00	208,602.00	289,664.00
Defer outflow pen cont GASB 68	(936,411.00)	(936,411.00)	(1,056,534.00)
Net pension liability GASB 68	3,603,091.00	3,603,091.00	3,277,554.00
	4,222,509.79	4,488,403.42	3,771,978.09
<b>Total Current Liabilities</b>			
	<b>4,222,509.79</b>	<b>4,488,403.42</b>	<b>3,771,978.09</b>
<b>Total Liabilities</b>			
<b>Capital</b>			
Designated fund balances	3,362,131.25	4,451,757.25	4,440,057.25
Investment in general fixed as	7,871,707.15	6,677,881.96	5,296,151.61
Net Income	(1,623,265.20)	(1,349,278.81)	(1,082,011.62)
	9,610,573.20	9,780,360.40	8,654,197.24
<b>Total Capital</b>			
	<b>\$ 13,833,082.99</b>	<b>\$ 14,268,763.82</b>	<b>\$ 12,426,175.33</b>
<b>Total Liabilities &amp; Capital</b>			

1 - CAMP: Public Health Emergency Fund was closed September of 2022.



23187 Connecticut Street  
Hayward, CA 94545

T: (510) 783-7744  
F: (510) 783-3903

[acmad@mosquitoes.org](mailto:acmad@mosquitoes.org)

MOTHLY STAFF REPORT –1108

## Board of Trustees

### **President**

Subru Bhat

### **Union City**

### **Vice-President**

Victor Aguilar

### **San Leandro**

### **Secretary**

Cathy Roache

### **County at Large**

Tyler Savage

### **Alameda**

Preston Jordan

### **Albany**

P. Robert Beatty

### **Berkeley**

Shawn Kumagai

### **Dublin**

George Young

### **Fremont**

Courtney Welch

### **Emeryville**

Elisa Márquez

### **Hayward**

Steven Cox

### **Livermore**

Jan O. Washburn

### **Oakland**

Eric Hentschke

### **Newark**

Hope Salzer

### **Piedmont**

Julie Testa

### **Pleasanton**

### **Ryan Clausnitzer**

General Manager

## A. OPERATIONS REPORT

In November, operations staff started finding larvae of two of our four winter mosquito species: *Aedes washinoi* and *Culiseta inornata*. Enough rain fell to begin accumulating water in some of our winter sources. *Ae. washinoi* is closely associated with sources around willow trees. Eggs deposited on soil or leaves during prior seasons hatch as these areas fill with rainwater in the right conditions. This species is typically localized, and adults tend not to travel far from emergence sites. However, they are aggressive day-biting mosquitoes and can cause significant biting issues in these localized areas. Operations staff identify sources that will be conducive to treatments with the ACMAD UAS (drone) and the A-1 Super Duty mist blower as they are typically difficult to access and treat due their location in willow groves. *Cs. inornata* sequester over the summer months and tend to come out to find standing water to deposit eggs when temperatures drop, rain begins to fall, and the photoperiod shifts. The first indication that this species is active is through adult mosquito traps placed by the ACMAD lab. As soon as rainwater accumulates, eggs are deposited on the water surface in rafts, and the larvae hatch. This is one of our largest-sized mosquito species and will readily feed on humans. Operations staff have already begun treating larvae of both species and are expected to continue to do so at least into March.

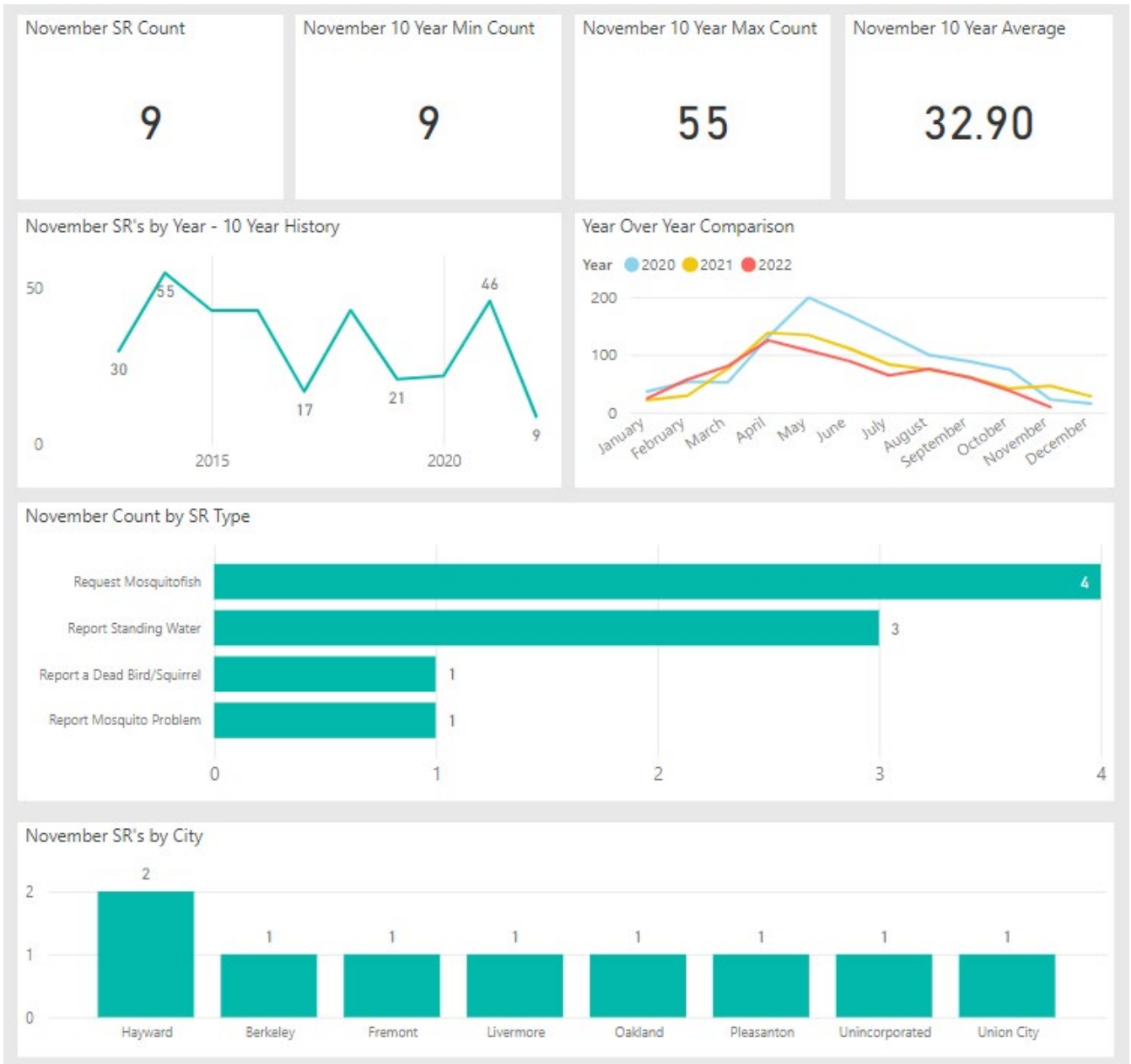
Eggs of our other two winter mosquito species; *Aedes squamiger* and *Aedes sierrensis* are expected to begin hatching as more rainfall accumulation occurs. Operations staff will be monitoring sources and focusing efforts on these four species for the months to come.

November also saw a significant drop in our spring/summer mosquito species. Very few larvae of our three main *Culex spp.* were collected and treated this past month. The cooler temperatures, rainfall, and photoperiod shift induce females of these species to seek sheltered areas to ride out the winter—only coming out when spring-like conditions return and seek sources to deposit eggs upon. This transition signals a likely close to our 2022 West Nile virus (WNV) season. Only one dead bird was collected in November, and testing by the ACMAD lab indicated that it was WNV negative. There were no WNV positive birds or mosquitoes collected in Alameda County this year.

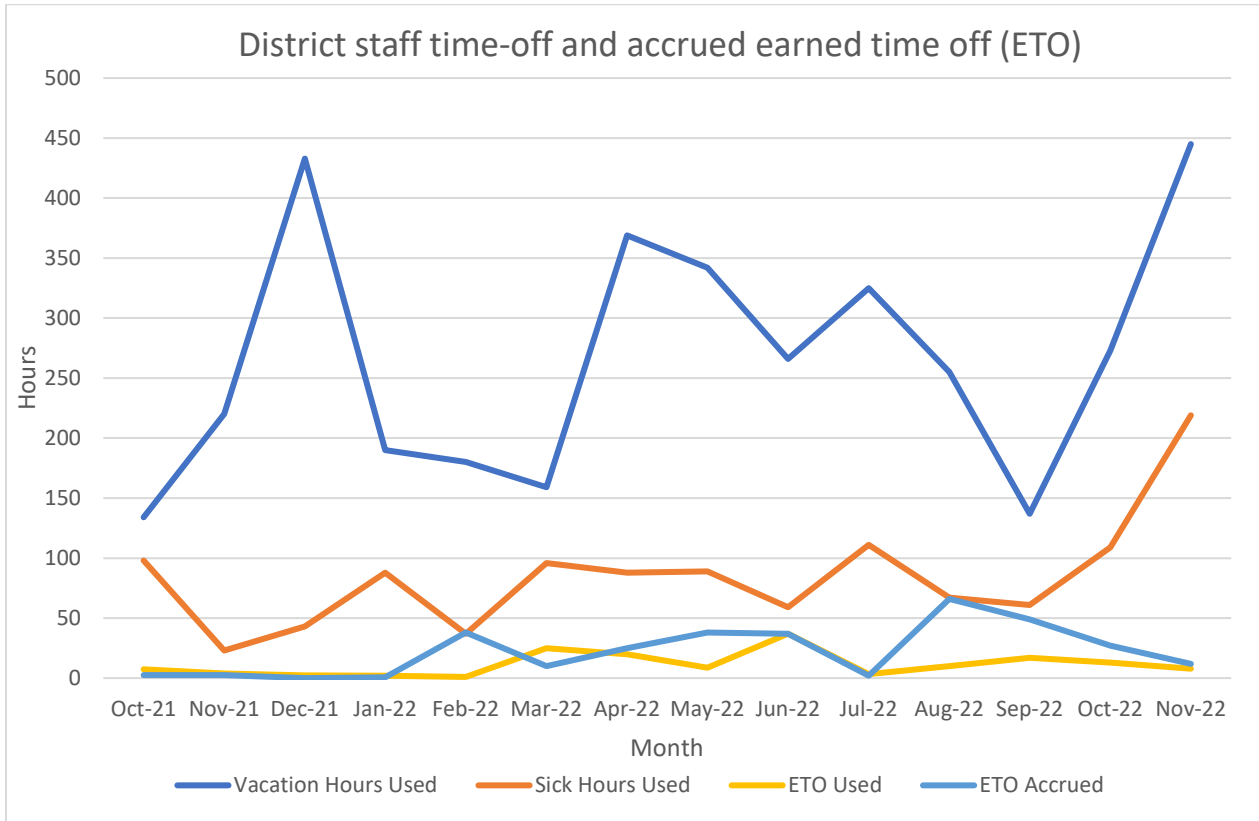
Requests for service from the public received in November were the lowest for the month in well over a decade. Four requests were received for mosquito fish, all for backyard ponds and water gardens. Three requests to “report standing water” were received. One was a homeowner who had a pond that was not conducive for mosquito fish survival, another was to report a neighbor’s pool that was not being maintained, and the final request was to report a neighboring property with a significant sewage leak. The pond was treated with a long-term larvicide with recommendations on getting the pond suitable for mosquito fish for long-term control. One request to “report a mosquito problem” was received and upon investigation, it was determined to be caused by a non-mosquito insect. The final request for service was to “report a dead bird” collected by the resident, who during interactions with field operation staff, was also given information about both mosquito biology and WNV.

*Field Operations Supervisor*  
*Joseph Huston*

## Service Requests November 2022

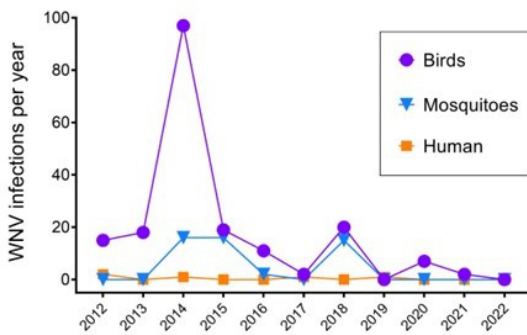


**Activity Report**

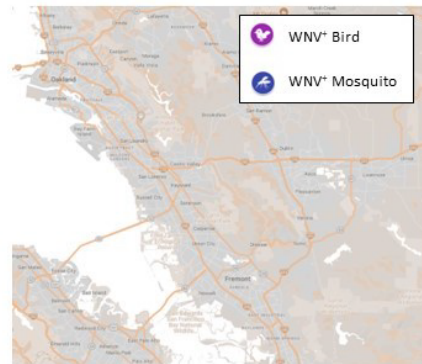


**WNV Activity**

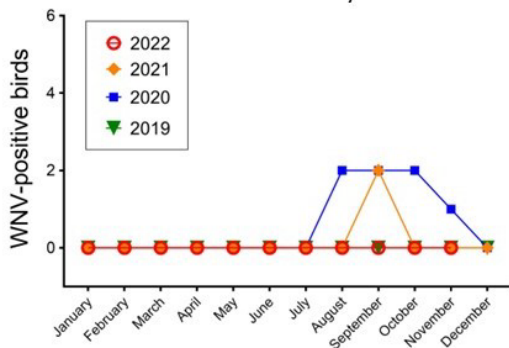
WNV infections detected in Alameda County 2012 – 2022



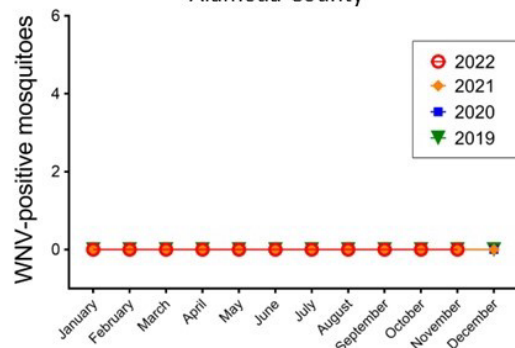
Locations of WNV-infected mosquitoes and birds in Alameda County during 2022



WNV-infected birds collected in Alameda County



WNV-infected mosquitoes collected in Alameda County



## **B. LAB**

- *Arboviruses*. The vector species of mosquito that were collected during the month were tested for the presence of West Nile virus (WNV), Saint Louis encephalitis virus (SLEV) and Western equine encephalitis virus (WEEV) and none were found to be infected with those viruses. Saint Louis encephalitis virus (SLEV) and Western equine encephalitis virus (WEEV) have not been detected in Alameda County during the prior 5 years.
- Cooler temperatures and rainfall limited the utility of placing mosquito traps in the field during November.
- *Native mosquitoes*. 96 CO<sub>2</sub>-baited EVS traps were placed during November. A total of 707 adult female mosquitoes were collected, which was 1.5-fold fewer than the prior month. The New Jersey Light Traps were removed from the field during November
- None of the sentinel chicken flocks in Livermore and Newark seroconverted during 2022, indicating that none were infected with WNV, SLEV, or WEEV. All sentinel chicken flocks were removed from the monitoring sites during November and new flocks will be returned to service during 2023.
- Invasive *Aedes* species of mosquito (e.g., *Aedes aegypti*) were not detected in Alameda County during 2022.

## **LAB FIGURES**

The recently updated database that stores mosquito abundance data could not connect to the software in time for publication of this report. We anticipate that the database will be reconnected to the software in time for the next report.

Analysis and report by Eric Haas-Stapleton, PhD, Laboratory Director

**C. PUBLIC EDUCATION**

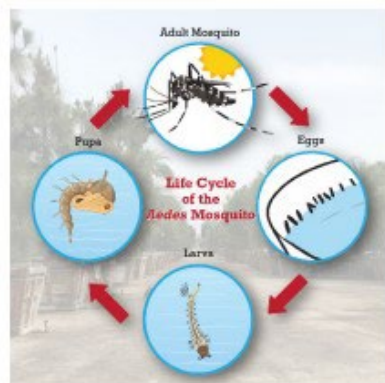


# Invasive Mosquitoes are in Your Community and We Need Your Help

A new type of mosquito—invasive *Aedes*—is in your neighborhood, and they like to bite! These mosquitoes are not normally found in California, so they don't thrive in natural areas, but they live and thrive in cities and can be an extreme nuisance. Controlling these mosquitoes will not harm the ecosystem, but WILL help prevent pesky mosquito bites and the possible spread of diseases to people such as Zika, dengue, chikungunya, and yellow fever.

Invasive *Aedes* mosquitoes live in close proximity to humans, often in people's backyards and patios—areas where mosquito control districts can't easily inspect. **That's where you come in!** Be on the lookout for:

- ✔ Small, black mosquitoes with white stripes (about 1/4 inch long)
- ✔ Mosquitoes that bite during the day and at night—even indoors!
- ✔ Mosquito larvae (wigglers) swimming in stagnant water
- ✔ Eggs that look like tiny black seeds found on the insides of water containers



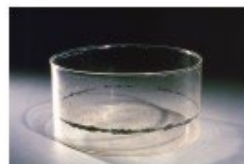
*Aedes aegypti* (Yellow Fever Mosquito)



*Aedes albopictus* (Asian Tiger Mosquito)



*Aedes notoscriptus* (Australian Backyard Mosquito)



*Aedes aegypti* mosquito eggs



*Aedes* mosquito larvae

Continued

In response to the detection of *Aedes aegypti* in Santa Clara County, we updated invasive *Aedes* flyers with accurate information and our logo. We sent out a press release to the public and hosted the Health Officer for Alameda County Department of Public Health, Dr. Nicholas Moss on November 30<sup>th</sup> to learn more about our work.



We attended one event, the A1 Housing Community Fair in Hayward on November 5<sup>th</sup> at Chabot College



### Upcoming Events and Presentations

- There are no events planned for December

### Google Analytics

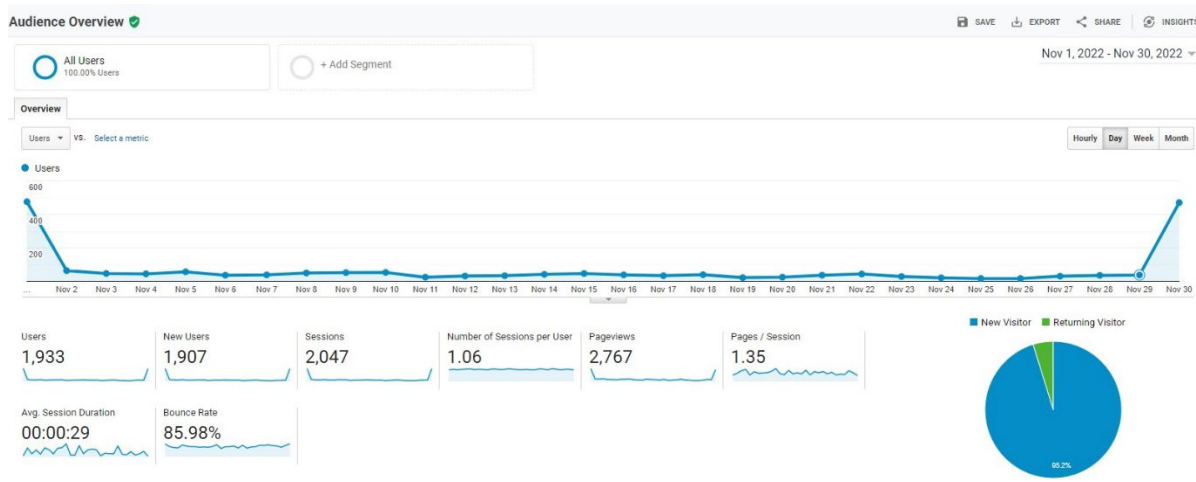
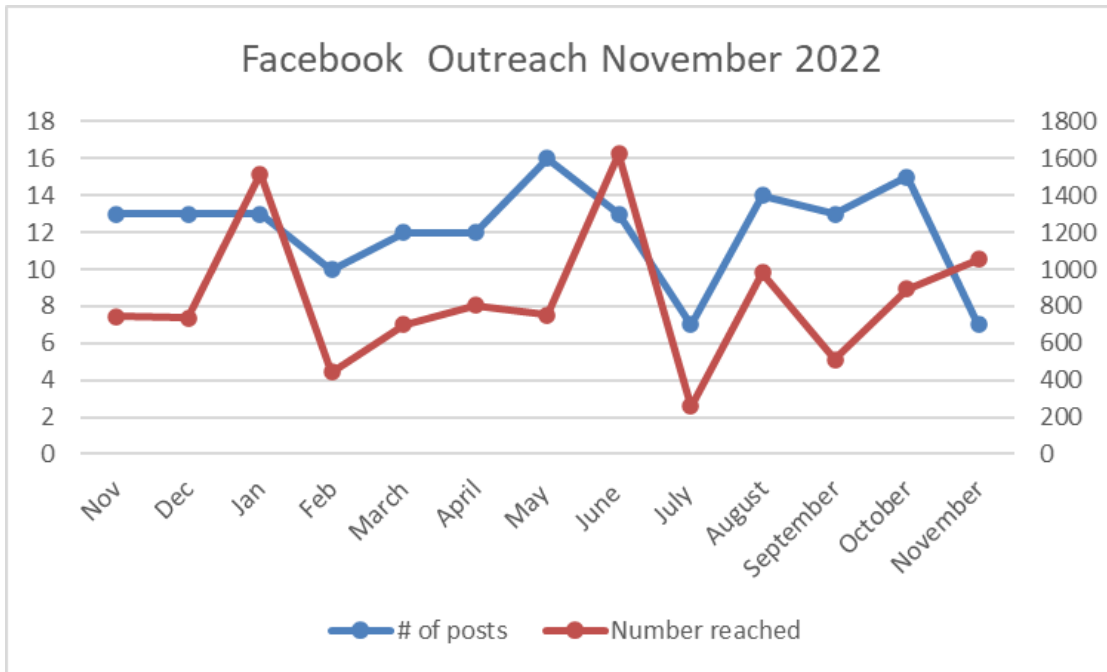


Figure 1: November website users 2022



**Facebook**



**November Data:** Posts-7

Reach - 1054

Followers – 381 (2 added)



WIRED.COM

**Turns Out Fighting Mosquitoes With Mosquitoes Actually Works**

New evidence indicates that an effort to stamp out disease-carrying insects is working. The ke...

**Top November Facebook Post:** A recent write up about Sterilized Insect Technology in Brazil in Wired: “Every time you have a complex problem, you need to expect a complex answer, and mosquito control is a perfect example of that.”

**Alameda County Mosquito Abatement District**  
 Published by RL Ads · May 31 ·

Alameda County Mosquito Abatement District works for you! We provide free services to prevent and address mosquito issues in Alameda County. Learn more at our website, [www.mosquitoes.org](http://www.mosquitoes.org)

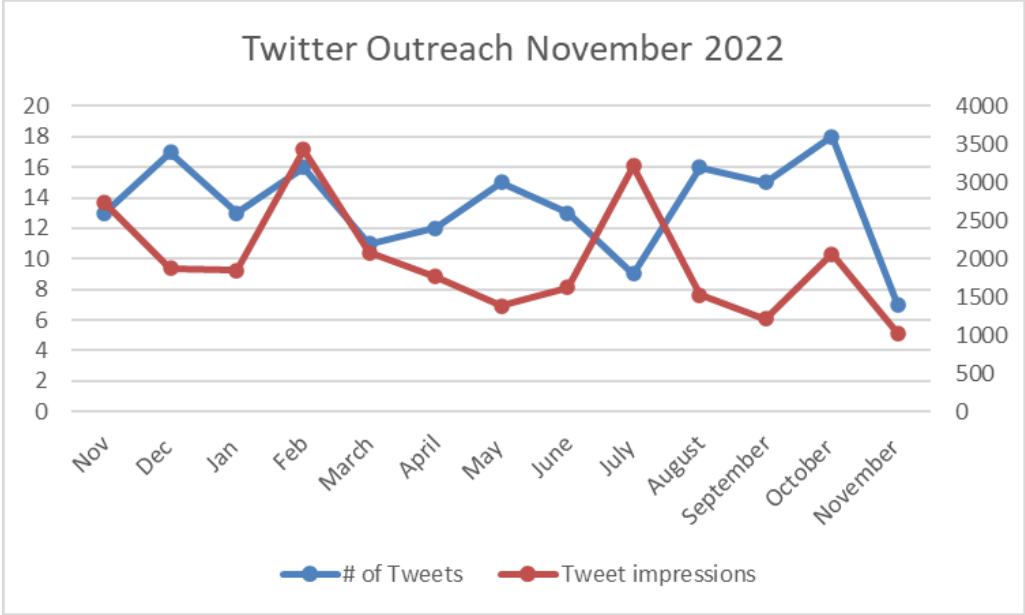


MOSQUITOES.ORG  
**Alameda County Mosquito Abatement District**

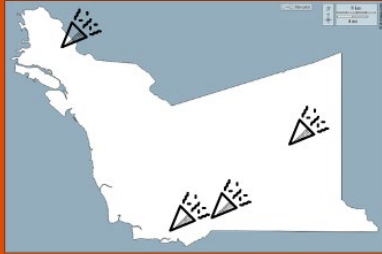
Learn more

**Facebook Ad:** In June we started a Facebook ad campaign through LocalIQ. The ad above, along with our video ad, received 1.4 million impressions on social media.

**Twitter**



**November Data:** Posts – 7 Impressions – 1,022 Followers – 793 (1 added)



# October Events

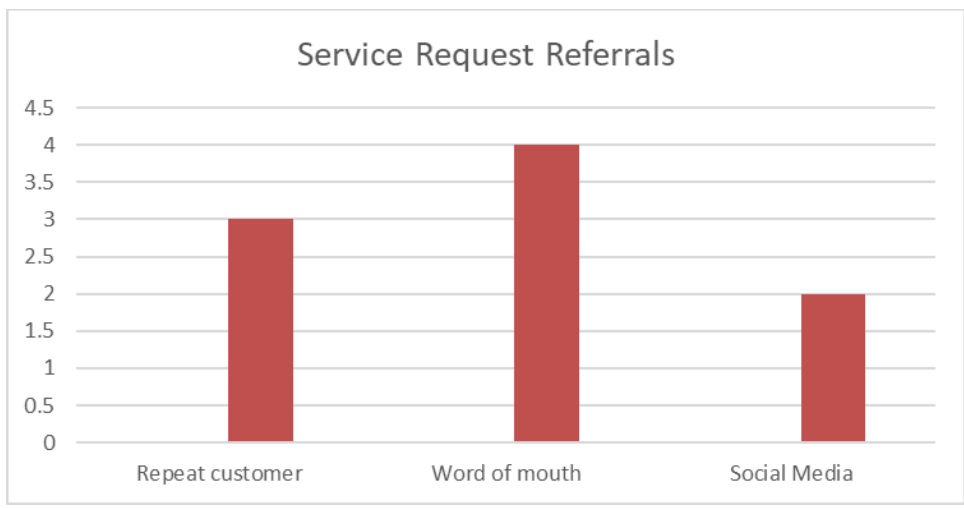
 **Event**

Don Edwards 50th Anniversary Celebration Oct 8, Fremont  
 Diwali Festival of Lights Oct 15, Fremont  
 Quest Center Science of Halloween Oct 29, Livermore  
 UC Berkeley Botanical Garden Animal Day Oct 30, Berkeley

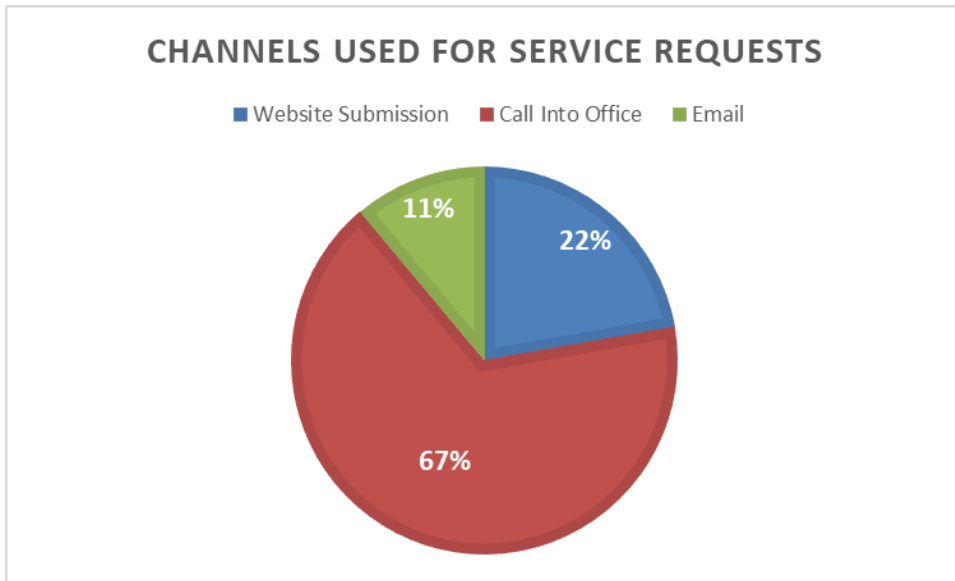


**Top November 2022 Twitter Post:** We had a busy October! We spoke with over 1,100 people in person about our work and how to decrease mosquitoes around where they live, work and play. If you would like our team of mosquito experts at your next event, give us a call at 510-783-7744 or email

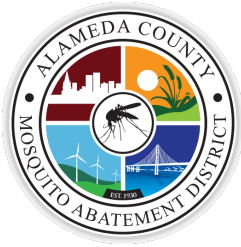
## Service Request Referral Summary for October



**Channels Used by Residents to Request Service**



**9 requests in total:** 6 calls, 2 website requests



23187 Connecticut Street  
Hayward, CA 94545

T: (510) 783-7744  
F: (510) 783-3903

[acmad@mosquitoes.org](mailto:acmad@mosquitoes.org)

## Staff Anniversary Recognitions:

ACMAD is pleased to recognize and thank the following employees on their anniversaries in November.

### Board of Trustees

#### *President*

Subru Bhat

#### **Union City**

#### *Vice-President*

Victor Aguilar

#### **San Leandro**

#### *Secretary*

Cathy Roache

#### **County at Large**

Tyler Savage

#### **Alameda**

Preston Jordan

#### **Albany**

P. Robert Beatty

#### **Berkeley**

Shawn Kumagai

#### **Dublin**

Courtney Welch

#### **Emeryville**

George Young

#### **Fremont**

Elisa Marquez

#### **Hayward**

Steve Cox

#### **Livermore**

Eric Hentschke

#### **Newark**

Jan O. Washburn

#### **Oakland**

Hope Salzer

#### **Piedmont**

Julie Testa

#### **Pleasanton**

#### **Ryan Clausnitzer**

*General Manager*

Employee	Job Title	Years of Service	Anniversary Date
Neil Campbell	Vector Biologist	19	November 17 <sup>th</sup>
Erick Gaona	Mosquito Control Technician	3	November 19 <sup>th</sup>

## California Arbovirus Surveillance Bulletin #34

Week 48 Friday, December 2, 2022



### WEEKLY UPDATE

#### **Humans**

##### West Nile virus

A total of 17 human cases of West Nile virus (WNV) illness were reported this week from 6 counties: Fresno (8), Kern (3), Orange (1), Sacramento (3), Solano (1), and Stanislaus (1). In 2022, a total of 148 cases have been reported from 24 counties. Of the 148 cases, 115 (78%) had neuroinvasive illness and 12 (8%) were fatal. The median age of the cases was 60 years and 96 (65%) were male. The dates of symptom onset ranged from April 11 to November 2. In addition to the 148 WNV cases, 13 asymptomatic WNV-positive blood donors have been reported from 5 counties: Fresno (3), Kern (1), Los Angeles (7), Orange (1), and San Joaquin (1). At this time last year, 112 WNV cases had been reported from 27 counties.

##### St. Louis encephalitis virus

No new human cases of St. Louis encephalitis virus (SLEV) were reported this week. In 2022, 11 SLEV human cases have been reported from 6 counties: Fresno (1), Kern (3), Los Angeles (1), Sacramento (1), Stanislaus (1), and Tulare (4). At this time last year, 3 SLEV cases had been reported from 3 counties.

#### **Dead Birds**

One WNV positive dead bird was reported this week from Los Angeles County. In 2022, 186 WNV positive dead birds have been reported from 23 counties. At this time last year, 209 WNV positive dead birds had been reported from 19 counties.

#### **Mosquito Pools**

##### West Nile virus

No WNV positive mosquito pools were reported this week. In 2022, 3,165 WNV positive mosquito pools have been reported from 25 counties. At this time last year, 2,261 WNV positive pools had been reported from 25 counties.

##### St. Louis encephalitis virus

No SLEV positive mosquito pools were reported this week. In 2022, 153 SLEV positive mosquito pools from 10 counties have been reported: Fresno (14), Imperial (6), Kern (12), Kings (27), Los Angeles (1), Madera (18), Riverside (57), San Joaquin (1), Stanislaus (1), and Tulare (16). At this time last year, 45 SLEV positive pools had been reported from 8 counties.

#### **Sentinel Chickens**

No WNV positive sentinel chickens were reported this week. In 2022, 145 WNV positive chickens have been reported from 13 counties. At this time last year, 88 WNV positive chickens had been reported from 12 counties.

## California Arbovirus Surveillance Bulletin #34

Week 48 Friday, December 2, 2022

<b>2021 &amp; 2022 YTD West Nile Virus Comparisons</b>		
	<b>2021</b>	<b>2022</b>
Total No. Dead Bird Reports	5,086	4,802
No. Positive Counties	39	33
No. Human Cases	112	148
No. Positive Dead Birds / No. Tested	209 / 1,694	186 / 1,266
No. Positive Mosquito Pools / No. Tested	2,261 / 38,024	3,165 / 40,446
No. Seroconversions / No. Tested	88 / 5,823	145 / 5,229

<b>YTD WNV Activity by Element and County, 2022</b>					
<b>County</b>	<b>Humans</b>	<b>Horses</b>	<b>Dead Birds</b>	<b>Mosquito Pools</b>	<b>Sentinel Chickens</b>
Butte	3		2	39	27
Colusa	1				3
Contra Costa			1	2	5
Fresno	22		2	296	
Glenn	1				
Imperial				1	
Kern	20	3		99	
Kings	7	1		105	
Lake			2	7	3
Los Angeles	25	1	47	578	33
Madera	3		2	132	
Merced	7		1	20	16
Napa				1	
Nevada		1	1		
Orange	9		1	39	
Placer	2		5	89	
Riverside			5	125	
Sacramento	4	2	40	42	6
San Bernardino			7	100	
San Joaquin	4	1	1	208	
San Luis Obispo		1			
San Mateo	1				
Santa Clara	1		26	23	
Shasta	1		1	39	3
Solano	3		9	12	
Sonoma	1		1		
Stanislaus	15	1		70	
Sutter	1		4	31	16
Tehama	3	2			6
Tulare	10	3	2	1,030	10
Ventura			1		
Yolo	3		24	65	4
Yuba	1		1	12	13
<b>Totals</b>	<b>148</b>	<b>16</b>	<b>186</b>	<b>3,165</b>	<b>145</b>

**California Arbovirus Surveillance Bulletin #34**

Week 48 Friday, December 2, 2022

**TESTING SUMMARIES**

		WNV	SLEV	WEEV
<b>Human Cases</b>	Week	17	0	0
	YTD	148	11	0

Positive / Total Tested					
WNV	SLEV	WEEV	CHIK	DENV	ZIKA

<b>Dead Birds</b>	Week	1 / 4
	YTD	186 / 1,266

<b>Chicken Sera</b>	Week	0 / 75	0 / 75	0 / 75
	YTD	145 / 5,229	0 / 5,229	0 / 5,229

<b>Mosquito Pools</b>	Week	0 / 168	00 / 168	0 / 168	0 / 0	0 / 0	0 / 0
	YTD	3,165 / 40,446	153 / 36,682	0 / 35,267	0 / 666	0 / 666	0 / 666

**POSITIVES**

**Dead Birds**

County	Agency	City	Zip Code	Species	Date Reported	Virus
Los Angeles	Long Beach Department of Health	Long Beach	90814	American Crow	11/9/2022	WNV



## California Arbovirus Surveillance Bulletin #34

Week 48 Friday, December 2, 2022

### TEST PROTOCOLS

#### **Humans:**

Specimens are tested by local laboratories with an IgM or IgG immunofluorescent assay (IFA) and/or an IgM enzyme immunoassay (EIA). Specimens with inconclusive results are forwarded to the California Department of Public Health Viral and Rickettsial Disease Laboratory (VRDL) for further testing with a plaque reduction neutralization test (PRNT).

---

#### **Dead Birds**

Oral swab samples collected from bird carcasses are tested at the UC Davis Arbovirus Research and Training laboratory (DART) or at a local agency for West Nile virus by RT-qPCR.

---

#### **Sentinel Chickens:**

Dried blood spot samples from sentinel chickens are tested at the California Department of Public Health Vector-Borne Disease Laboratory for IgG antibodies to West Nile, St. Louis encephalitis, and western equine encephalomyelitis viruses by an EIA. Positive samples are confirmed by IFA, western-blot, or PRNT.

---

#### **Mosquito Pools:**

Mosquito pools are tested at DART or at a local agency for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a multiplex RT-qPCR. Invasive *Aedes* mosquitoes (*Ae. aegypti* and *Ae. albopictus*) are also tested at DART for chikungunya, dengue, and Zika viral RNA by a separate RT-qPCR.

---

*Website Information:* For updated information on WNV in California, please visit the California WNV website, <https://westnile.ca.gov>, or the California Vector-Borne Disease Surveillance System website, <https://maps.vectorsurv.org>.

Prepared by the Vector-Borne Disease Section (Infectious Diseases Branch), California Department of Public Health, 850 Marina Bay Parkway, Richmond, CA 94804. Questions concerning this bulletin should be addressed to Hannah Romo: [Hannah.romo@cdph.ca.gov](mailto:Hannah.romo@cdph.ca.gov)