

AGENDA
1101st MEETING OF THE BOARD OF TRUSTEES
OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT
MAY 11TH, 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/84041716616>
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. Introduction of new Board Member, Hope Salzer, representing the City of Piedmont (Information only)
5. Approval of the minutes of the 1100th Regular Meeting held April 13th, 2022 (**Board action required**).
6. Presentation and approval of the final budget for fiscal year 2022-23 (**Board action required**)
7. Presentation of the preliminary Engineers Report for fiscal year 2022-2023 by Melanie Guillory-Lee from SCI Consulting Group (Information only).
8. Resolution 1101-1 intending to continue assessments for fiscal year 2022-23, preliminarily approving the engineer's report, and providing for notice of hearing. (**Board action required**)
9. Pension Rate Stabilization Program Plan Client Review by Anthony Armas and Ryan Nicasio from Public Agency Retirement Services and Randy Yurchak from HighMark Capital Management (Information only).

10. Financial Reports as of April 30th, 2022: (Information only).

- a. Check Register
- b. Income Statement
- c. Investments, reserves, and cash report
- d. Balance Sheet

11. Presentation of the Monthly Staff Report (Information only).

12. Presentation of the Manager's Report (Information only).

- a. Staff Anniversary Recognition
- b. CSDA Annual Conference (in-person): Monday, August 22nd – Thursday, August 25th in Palm Desert
- c. Training due: AB 1234: Young & Beatty; AB 1825: Testa
- d. Facility 3/13/22 break-in verbal report

13. Board President asks for reports on conferences and seminars attended by Trustees.

14. Board President asks for announcements from members of the Board.

15. Board President asks trustees for items to be added to the agenda for the next Board meeting.

16. 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.

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# 840 4171 6616** followed by the pound (#) key.

Computer: Watch the live streaming of the meeting from a computer by navigating to <https://us02web.zoom.us/j/84041716616>

Mobile: Log in through the Zoom mobile app on a smartphone and enter **Meeting ID# 840 4171 6616**

HOW TO SUBMIT PUBLIC COMMENTS:

Before the Meeting: Please email your comments to 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.

MINUTES

1100th MEETING OF THE BOARD OF TRUSTEES OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

April 13th, 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/86174250179>
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 President Bhat called the regularly scheduled board meeting to order at 5:02 P.M.
2. Board President Bhat along with Trustees Hentschke and Kumagai were in-person at the district. Trustees Aguilar, Roache, Savage, Jordan, Beatty, Young, Márquez, Cox, and Testa were present on the Zoom conference. Trustees Washburn and Salzer were absent. Trustee Welch arrived in the Zoom conference at 5:25 P.M.
3. Board President Bhat invited members of the public to speak on any issue relevant to the district. Tom Tight and Brent Turner of Public Trust Advisors were present to give a presentation on California CLASS JPA. Rick Wood of CSDA was present to observe the California CLASS JPA agenda item. Accounting Associate Michelle Robles was present related to the budget. Information Technology Director Robert Ferdan was remote for technical support. Vector Biologist Jeremy Sette was present to record the minutes. No public comments were submitted.
4. Approval of the minutes of the 1099th meeting held March 9th, 2022. Trustee Beatty noted a typo on the minutes on item 3: "President Beatty" should be changed to "President Bhat" (the General Manager will send a corrected version).
Motion: Trustee Hentschke moved to approve the minutes with that change.

Second: Trustee Kumagai
Vote: motion carries: unanimous.

5. Resolution 1100-1 to oppose California Voters Initiative #21-0042A1.

Discussion:

The General Manager gave a background of the initiative and fielded the following discussion. President Bhat asked what the process would be to approve the initiative (explained that there is a deadline in late April to obtain enough valid signatures for the November 2022 ballot).

Motion: Vice-President Aguilar moved to approve Resolution 1100-1.

Second: Trustee Beatty

Vote: motion carries 12-0 with Trustee Savage abstaining.

6. Resolution 1100-2 to join California CLASS JPA as a founding participant.

Discussion:

The General Manager gave background to Resolution 1100-2 and introduced Thomas Tight and Brent Turner of Public Trust Advisors who gave a presentation on California CLASS JPA and fielded the following discussion. President Bhat asked how much lower the cost structure would be with California CLASS (Mr. Tight answered that each fund varies but California CLASS will be roughly a third lower). The General Manager asked the presenters for an explanation of a stable net asset value (Mr. Tight provided a definition). Trustee Jordan asked if any existing funds would be moved over to California CLASS (the General Manager answered yes, staff is recommending moving over the Public Health Emergency Reserve Fund in this budget cycle which has a current balance of over \$500,000). Trustee Hentschke asked for clarification on the timing of California CLASS (the General Manager explained that CSDA joined the newly formed JPA on 4/8/22 making ACMAD the 2nd member of the fund). Mr. Tight noted that California CLASS is experienced in managing California assets but this would be their first time managing a California JPA. Trustee Hentschke asked if the General Manager would be the representative of the JPA (The General Manager answered that all JPA members are eligible to be Trustees and that CSDA would be asking its executive committee to recommend two of its members to the CA Class Board of Directors).

Motion: Vice-President Aguilar moved to approve Resolution 1100-2.

Second: Trustee Jordan

Vote: motion carries: 11-0 with Trustees Beatty and Testa abstaining.

7. Proposal to partially reimburse ACMAD retirees for Medicare Plan B costs.

Discussion:

The General Manager provided background on retired District Manager John Rusmisl's request for ACMAD to reimburse retirees for Medicare Plan B costs from its OPEB account and fielded the following discussion. Trustee Cox asked if the reimbursement starts at a certain age (65) and if a retiree's spouse would receive an additional reimbursement (yes, per the vesting schedule based on years of service).

Motion: Trustee Beatty moved to approve the proposal to partially reimburse ACMAD retirees for Medicare Plan B costs with a fixed reimbursement amount.

Second: Trustee Márquez

Vote: motion carries: unanimous.

8. Reclassifying the Accounting Associate/Office Administrator position to a Financial & HR Specialist.

Discussion:

The General Manager gave background on the reclassification of the Accounting Associate/Office Administrator position and fielded the following discussion. President Bhat asked for the proposed salary (there is a proposed range reflected in the budget) and gave praise for Mrs. Robles' remarkable experience with the district. Trustee Cox asked if the reclassified position would need the same certifications as comparable accountants (yes, a degree in accounting or related field plus experience and direct reports to the GM) and asked for clarification surrounding the comparison to the IT Director (that comparison is only internally within the MOU).

Motion: Trustee Jordan moved to reclassify the Accounting Associate/Office Administrator position to a Financial & HR Specialist exempt employee.

Second: Trustee Hentschke

Vote: motion carries: unanimous. Trustee Testa was not present for the vote.

9. Presentation of the President's Award Plaque to Immediate Past President Robert Beatty, PhD by President Subru Bhat. President Bhat virtually presented the President's Award Plaque to Past President Robert Beatty with the General Manager thanking Trustee Beatty for his leadership.

10. First draft of the 2022-23 budget for discussion.

Discussion:

The Finance Committee Chair, Trustee Jordan, presented on behalf of the Finance Committee the first draft of the 2022-23 budget. The General Manager went over the budget and fielded the following discussion. President Bhat asked about which Committed Reserve Fund would be moved to the California CLASS fund (the CAMP: Public Health Emergency fund is recommended).

11. ACMAD's 2020-2021 Biennial Report.

Discussion:

The General Manager gave a background of the Biennial Report, praised Regulatory & Public Affairs Director Erika Castillo for her work on the Report, and fielded the following discussion. Trustee Márquez clarified that the Biennial Report staff photo was taken at the Hayward Interpretive Center. Trustee Testa noted a typo regarding Trustee Kumagai's name spelling (it has been changed for the current version).

12. Financial Reports as of March 31st, 2022.

Discussion:

The General Manager presented the Financial Reports as of March 31st, 2022 and thanked the Trustees who review and sign checks.

13. Presentation of the Monthly Staff Report.

Discussion:

The General Manager gave the Monthly Staff Report for March and thanked Trustee Hentschke for providing advice to Judith Pierce with the education program.

14. Presentation of the Manager's Report.

Discussion:

The General Manager presented the Manager's Report and fielded the following discussion. President Bhat asked if Tom McMahon is eligible for retirement health care vesting (Robles answered yes, his 22 years count for CalPERS health and retirement, but only 8 years count towards longevity salary increases). President Bhat recommended attending CSDA Legislature Day.

15. Board President Bhat asked for reports on conferences and seminars attended by Trustees. None.
16. Board President Bhat asked for announcements from the Board and then announced that Trustee Kumagai is currently running for California State Assembly for CA District 20.
17. Board President Bhat asked Trustees for items to be added to the agenda for the next Board meeting. The General Manager noted that the 2nd reading of the budget, a PARS presentation, and a benefit assessment presentation by SCI Consulting will be on the agenda.
18. The meeting adjourned at 6:39 P.M.

Respectfully submitted,

Approved as written and/or corrected
at the 1101st meeting of the Board of
Trustees held May 11th, 2022

Subru Bhat, President
BOARD OF TRUSTEES

Cathy Roache, Secretary
BOARD OF TRUSTEES

	Budget 22/23	Year to year % budget change	Budget 21/22	Actual 20/21	A vs B	Budget 20/21	Actual 19/20	Budget 19/20	Actual 18/19	Budget 18/19
REVENUES										
Ad Valorem Property Taxes	\$ 2,755,397	7%	\$ 2,580,814	\$ 2,624,188	14%	\$ 2,300,000	\$ 2,502,132	\$ 2,494,800	\$ 2,325,861	\$ 2,268,000
Special Tax & Benefit Assessment	\$ 1,981,814	0%	\$ 1,981,959	\$ 1,962,192	8%	\$ 1,821,600	\$ 1,951,959	\$ 1,986,806	\$ 1,939,212	\$ 1,994,499
Interest earned (restricted fund interest NOT included as revenue)	\$ 20,000	-33%	\$ 30,000	\$ 19,208	-36%	\$ 30,000	\$ 176,499	\$ 30,000	\$ 167,488	\$ 30,000
Sale of Property and Equipment & Misc.	\$ 2,500	-50%	\$ 5,000	\$ 1,038	-79%	\$ 5,000	\$ 14,775	\$ 5,000	\$ 2,289	\$ 5,000
Reimburses Retiree Health Benefits and fees from OPEB	\$ 140,946	-16%	\$ 168,091	\$ 163,355	-1%	\$ 164,913	\$ 163,355	\$ 163,630	\$ 170,667	\$ 179,229
Total Revenue	\$ 4,900,658	3%	\$ 4,765,864	\$ 4,769,981	10%	\$ 4,321,513	\$ 4,808,720	\$ 4,680,236	\$ 4,605,517	\$ 4,476,728
EXPENDITURES										
Salaries (including deferred comp.)	\$ 2,371,703	6%	\$ 2,236,282	\$ 2,037,043	-4%	\$ 2,116,177	\$ 1,980,518	\$ 2,035,791	\$ 1,894,209	\$ 1,933,182
CalPERS Retirement	\$ 534,559	13%	\$ 473,950	\$ 423,110	0%	\$ 423,350	\$ 378,833	\$ 360,538	\$ 310,838	\$ 301,812
Medicare & Social Security	\$ 38,763	17%	\$ 33,062	\$ 27,867	-11%	\$ 31,278	\$ 29,651	\$ 30,843	\$ 25,149	\$ 28,031
Fringe Benefits	\$ 564,969	-3%	\$ 579,596	\$ 502,898	-5%	\$ 527,031	\$ 465,466	\$ 502,043	\$ 452,960	\$ 508,680
Total Salaries, Retirement, & Benefits (pgs. 2,3)	\$ 3,509,995	6%	\$ 3,322,891	\$ 2,990,918	-3%	\$ 3,097,836	\$ 2,854,468	\$ 2,929,215	\$ 2,683,156	\$ 2,771,705
Service & Supplies (Clothing & Personal supplies)	\$ 9,000	-10%	\$ 10,000	\$ 4,859	-51%	\$ 10,000	\$ 6,214	\$ 8,000	\$ 8,899	\$ 6,000
Service & Supplies (Laundry services & supplies)	\$ 13,000	-13%	\$ 15,000	\$ 9,125	-39%	\$ 15,000	\$ 10,648	\$ 12,750	\$ 12,603	\$ 9,500
Utilities	\$ 21,700	28%	\$ 17,000	\$ 15,422	29%	\$ 12,000	\$ 25,962	\$ 12,600	\$ 30,161	\$ 36,500
Small tools and instruments	\$ 3,000	0%	\$ 3,000	\$ 2,189	-27%	\$ 3,000	\$ 2,056	\$ 3,000	\$ 2,211	\$ 2,500
Maintenance (Landscaping & Facility)	\$ 30,000	-14%	\$ 35,000	\$ 20,262	-19%	\$ 25,000	\$ 16,679	\$ 25,000	\$ 13,673	\$ 25,000
Maintenance (Equipment)	\$ 30,000	-14%	\$ 35,000	\$ 22,290	-36%	\$ 35,000	\$ 20,600	\$ 35,000	\$ 43,629	\$ 35,000
Transportation, travel, training, & board	\$ 119,840	-6%	\$ 127,630	\$ 74,653	-39%	\$ 122,400	\$ 95,814	\$ 134,260	\$ 98,433	\$ 134,210
Professional services	\$ 152,200	-25%	\$ 203,450	\$ 91,623	-48%	\$ 176,200	\$ 112,887	\$ 169,320	\$ 115,324	\$ 190,620
Memberships, dues, & insurance	\$ 37,000	54%	\$ 24,000	\$ 22,906	-2%	\$ 23,337	\$ 26,317	\$ 22,655	\$ 20,774	\$ 21,152
Insurance - VCJPA & EAP	\$ 179,436	19%	\$ 150,611	\$ 141,650	3%	\$ 137,524	\$ 134,834	\$ 133,546	\$ 124,688	\$ 123,351
Community education	\$ 55,000	39%	\$ 39,500	\$ 26,317	-32%	\$ 38,575	\$ 22,734	\$ 40,000	\$ 34,861	\$ 33,000
Operations	\$ 227,500	-5%	\$ 239,000	\$ 223,362	-7%	\$ 241,000	\$ 179,659	\$ 228,500	\$ 206,731	\$ 234,000
Household expenses	\$ 19,950	15%	\$ 17,350	\$ 15,881	-5%	\$ 16,750	\$ 14,817	\$ 15,850	\$ 18,594	\$ 19,000
Office expenses	\$ 12,000	0%	\$ 12,000	\$ 9,748	-19%	\$ 12,000	\$ 13,761	\$ 14,500	\$ 11,796	\$ 15,100
Information Technology/ Communication	\$ 107,400	-4%	\$ 112,400	\$ 71,771	-36%	\$ 111,400	\$ 83,135	\$ 117,100	\$ 108,886	\$ 122,200
Laboratory	\$ 132,500	-8%	\$ 144,000	\$ 64,136	-54%	\$ 139,000	\$ 100,878	\$ 137,000	\$ 118,148	\$ 118,148
Total Staff Budget (pg. 4)	\$ 1,149,526	-3%	\$ 1,184,941	\$ 816,194	-27%	\$ 1,118,186	\$ 866,995	\$ 1,109,081	\$ 969,411	\$ 1,125,281
Contingency	\$ 46,000	-8%	\$ 50,000	\$ -		\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000
Total Expenditures	\$ 4,705,521	3%	\$ 4,557,832	\$ 3,807,112	-11%	\$ 4,266,022	\$ 3,721,463	\$ 4,088,296	\$ 3,652,567	\$ 3,946,706
SURPLUS (DEFICIT)	\$ 195,136		\$ 208,032	\$ 962,869		\$ 55,491	\$ 591,940		\$ 530,021	
CASH CARRIED OVER (pg. 5)	\$ 882,264		\$ 1,530,673			\$ 161,656	\$ 485,003		\$ 1,269,782	
SURPLUS (DEFICIT) AFTER OPERATIONAL CASH NEEDS	\$ 1,077,400		\$ 1,738,705			\$ 217,147	\$ 1,076,943		\$ 1,799,803	
RESERVE ACCOUNT ALLOCATIONS										
VCJPA Contingency Fund	\$ (43,103)		\$ -			\$ -	\$ (51,332)	\$ (51,332)	\$ -	\$ -
PARS: Pension Rate Stabilization	\$ 269,350		\$ 434,676			\$ -	\$ 500,000	\$ 500,000	\$ 1,064,536	\$ 500,000
CAMP: Public Health Emergency	\$ (26,732)		\$ -			\$ -	\$ -	\$ -	\$ 516,771	\$ -
CAMP: Repair and Replace (pg. 6)	\$ 537,912		\$ 1,311,625			\$ 314,315	\$ 1,086,170	\$ 1,196,000	\$ 336,821	\$ 193,853
CAMP: Operating reserve	\$ -		\$ -			\$ (25,000)	\$ (619,057)	\$ (619,057)	\$ 1,909,413	\$ 855,950
CAMP: Capital reserve	\$ 339,974		\$ (7,596)			\$ (72,168)	\$ 155,162	\$ 51,332	\$ 231,329	\$ 131,752
Total reserve allocations (pg. 7)	\$ 1,077,400		\$ 1,738,705			\$ 217,147	\$ 1,690,000	\$ 1,076,943	\$ 4,058,870	\$ 1,799,803
SURPLUS (DEFICIT) AFTER RESERVE ALLOCATIONS	\$ -		\$ -			\$ -	\$ -	\$ -	\$ -	\$ -

Salaries 7/1/22 - 6/30/23

Date of hire	Position	2022-23	Longevity	Longevity Amount	New Salary	# mo	Subtotal	Deferred Comp.	(per pay period)
Jul-99	VS3	\$10,415.50	4%	\$ 416.62	\$ 10,832.12	12	\$ 129,985	\$ 649.93	\$ 27.08
Mar-14	VB2	\$9,819.50	1%	\$ 98.20	\$ 9,917.70	12	\$ 119,012	\$ 595.06	\$ 24.79
Aug-18	AS VC5	\$8,915.85	0%	\$ -	\$ 8,915.85	1	\$ 8,916	\$ 44.58	\$ 22.29
	VS1	\$9,447.17	0%	\$ -	\$ 9,447.17	6	\$ 56,683	\$ 283.42	\$ 23.62
	VS2	\$9,919.52	0%	\$ -	\$ 9,919.52	5	\$ 49,598	\$ 247.99	\$ 24.80
Apr-02	VB2	\$9,819.50	4%	\$ 392.78	\$ 10,212.28	12	\$ 122,547	\$ 612.74	\$ 25.53
Nov-03	VB2	\$9,819.50	3%	\$ 294.59	\$ 10,114.09	12	\$ 121,369	\$ 606.85	\$ 25.29
Mar-02	RPA5	\$10,527.69	4%	\$ 421.11	\$ 10,948.80	12	\$ 131,386	\$ 656.93	\$ 27.37
Jul-15	Mgr	\$15,617.58	1%	\$ 156.18	\$ 15,773.75	12	\$ 189,285		
Sep-15	VB2	\$9,819.50	1%	\$ 98.20	\$ 9,917.70	12	\$ 119,012	\$ 595.06	\$ 24.79
Jul-15	IT5	\$10,477.81	1%	\$ 104.78	\$ 10,582.59	12	\$ 126,991	\$ 634.96	\$ 26.46
Nov-19	MCT4	\$8,483.91	0%	\$ -	\$ 8,483.91	10.5	\$ 89,081	\$ 445.41	\$ 21.21
	MCT5	\$8,908.10	0%	\$ -	\$ 8,908.10	1.5	\$ 13,362	\$ 66.81	\$ 22.27
Jul-15	LAB5	\$11,740.05	1%	\$ 117.40	\$ 11,857.45	12	\$ 142,289	\$ 711.45	\$ 29.64
Jul-91	Sup 5	\$11,769.12	6%	\$ 706.15	\$ 12,475.27	12	\$ 149,703	\$ 748.52	\$ 31.19
Apr-14	VB2	\$9,819.50	1%	\$ 98.20	\$ 9,917.70	5	\$ 49,588	\$ 247.94	\$ 24.79
Jul-20	POC3	\$8,669.58	0%	\$ -	\$ 8,669.58	0.5	\$ 4,335	\$ 21.67	\$ 21.67
	POC4	\$9,103.06	0%	\$ -	\$ 9,103.06	11.5	\$ 104,685	\$ 523.43	\$ 22.76
Apr-16	NEW	\$9,350.00	1%	\$ 93.50	\$ 9,443.50	6	\$ 56,661	\$ 283.31	\$ 23.61
	NEW	\$9,817.50	1%	\$ 98.18	\$ 9,915.68	6	\$ 59,494	\$ 297.47	\$ 24.79
Sep-15	VB2	\$9,819.50	1%	\$ 98.20	\$ 9,917.70	12	\$ 119,012	\$ 595.06	\$ 24.79
May-15	VB2	\$9,819.50	1%	\$ 98.20	\$ 9,917.70	12	\$ 119,012	\$ 595.06	\$ 24.79
Feb-15	Mech 5	\$10,229.88	1%	\$ 102.30	\$ 10,332.18	12	\$ 123,986	\$ 619.93	\$ 25.83
NEW	AMCT	\$6,964.92	0%	\$ -	\$ 6,964.92	6	\$ 41,790	\$ 208.95	\$ 17.41
NEW	MCT1	\$7,328.72	0%	\$ -	\$ 7,328.72	3	\$ 21,986	\$ 109.93	\$ 18.32
							\$ 2,269,770	\$ 11,348.85	

Seasonals:

Rate (ave)	#	Hours	Salary	\$ 2,269,770
\$	19.00	4	CalPERS Ret.	\$ 534,559
		1,000	Seasonals	\$ 78,584
		\$76,000	Subtotal	\$ 2,882,914
Unemployment	\$ 12,000.00	\$2,584.00	Mgr 457	\$ 12,000.00
		\$78,584.00	Staff 457	\$ 11,349

CalPERS	Wages	Employer rate	Unfunded Liability Payment	Total PERS Payments	Medicare tax	Social Security	Grand Total
11.61% Classic	\$ 1,282,156.90	\$ 148,858.42	\$ 310,190.00	\$ 459,048.42	\$ 34,051	\$ 4,712	\$ 2,940,313.93
7.76% Pepra	\$ 928,119.50	\$ 72,022.07	\$ 3,489	\$ 75,511.07			
				\$ 534,559.49			

<u>Employee</u>	CaIPERS		Next Year		Dental Rates	Total Dental	Life Ins. Rates	Total Life Insurance	Vision Rates	Total Vision	SDI	Benefit Cost per person
	Plan Code	Current Year Health Rates	Health Rates (est)	Total Health Costs								
	5062	1,714.12	1,816.97	21,186.52	161.05	1,932.60	4.63	55.56	20.81	249.72		23,424.40
	5331	857.06	908.48	10,593.26	94.06	1,128.72	4.63	55.56	13.40	160.80		11,938.34
	5331	857.06	908.48	10,593.26	94.06	1,128.72	4.63	55.56	13.40	160.80		11,938.34
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5061	857.06	908.48	10,593.26	94.06	1,128.72	4.63	55.56	13.40	160.80		11,938.34
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5063	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5062	1,714.12	1,816.97	21,186.52	161.05	1,932.60	4.63	55.56	20.81	249.72		23,424.40
	5331	857.06	908.48	10,593.26	94.06	1,128.72	4.63	55.56	13.40	160.80		11,938.34
	5482	1,714.12	1,816.97	21,186.52	161.05	1,932.60	4.63	55.56	20.81	249.72		23,424.40
	5332	1,714.12	1,816.97	21,186.52	161.05	1,932.60	4.63	55.56	20.81	249.72		23,424.40
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5331	857.06	908.48	10,593.26	94.06	1,128.72	4.63	55.56	13.40	160.80		11,938.34
	5332	1,714.12	1,816.97	21,186.52	161.05	1,932.60	4.63	55.56	20.81	249.72		23,424.40
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
	5333	2,228.36	2,362.06	27,542.53	251.93	3,023.16	4.63	55.56	33.01	396.12		31,017.37
<i>Subtotal</i>		<i>30,682.78</i>		<i>379,239.16</i>	<i>3,290.99</i>	<i>39,491.88</i>	<i>83.34</i>	<i>1,000.08</i>	<i>435.13</i>	<i>5,221.56</i>	<i>22,174.11</i>	<i>447,126.79</i>
.5% Admin Cost				1,896.20								1,896.20
Staff Totals				381,135.36		39,491.88		1,000.08		5,221.56	22,174.11	449,022.98

<u>Annuitant</u>	CaIPERS		Next Year		Dental Rates	Total Dental	Life Ins. Rates	Total Life Ins.	Vision Rates	Total Vision	SDI	Benefit Cost per person
	Plan Code	Current Year Health Rates	Health Rates (est)	Total Health Costs								
	5361	302.53	320.68	3,739.27	-	1,500.00			33.01	396.12		5,635.39
		-	-	-	94.06	1,128.72			33.01	396.12		1,524.84
	5151	360.19	381.80	4,451.95	94.06	1,128.72			33.01	396.12		5,976.79
	6051	381.94	404.86	4,720.78	94.06	1,128.72			33.01	396.12		6,245.62
		-	-	-	94.06	1,128.72			33.01	396.12		1,524.84
	6082	763.88	809.71	9,441.56	161.05	1,932.60			33.01	396.12		11,770.28
	6051	381.94	404.86	4,720.78	94.06	1,128.72			33.01	396.12		6,245.62
	5331	857.06	908.48	10,593.26	161.05	1,932.60			33.01	202.80		12,728.66
	6041	381.94	404.86	4,720.78	94.06	1,128.72			33.01	396.12		6,245.62
	6051	381.94	404.86	4,720.78	-	1,500.00			33.01	396.12		6,616.90
	6052	763.88	809.71	9,441.56	161.05	1,932.60			33.01	396.12		11,770.28
	5362	605.06	641.36	7,478.54	161.05	1,932.60			33.01	396.12		9,807.26
	5362	605.06	641.36	7,478.54	161.05	1,932.60			33.01	396.12		9,807.26
	5362	605.06	641.36	7,478.54	161.05	1,932.60			33.01	396.12		9,807.26
<i>Subtotal</i>		<i>6,995.54</i>		<i>86,464.87</i>		<i>23,300.52</i>			<i>495.15</i>	<i>5,748.48</i>		<i>115,513.87</i>
.5% Admin Costs=				432.32								432.32
Annuitant Totals				86,897.20		23,300.52			5,748.48			115,946.20

Grand Total				468,032.56		62,792.40		1,000.08		10,970.04	22,174.11	564,969.18
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564,969.18

A/C #	BUDGET CATEGORY	Budget 22/23	% change	Budget 21/22	% change	Actual 20/21	A vs B	Budget 20/21	Actual 19/20	Actual 18/19
SERVICE AND SUPPLIES										
5201	Clothing and personal supplies (purchased)	\$ 9,000	-10%	\$ 10,000	-10%	\$ 4,859	-51%	\$ 10,000	\$ 6,214	\$ 8,899
5202	Laundry service and supplies (rented)	\$ 13,000	-13%	\$ 15,000	0%	\$ 9,125	-39%	\$ 15,000	\$ 10,648	\$ 12,603
UTILITIES										
5301	Garbage (Waste Mgmt)	\$ 3,700	-8%	\$ 4,000	0%	\$ 3,113	-22%	\$ 4,000	\$ 3,367	\$ 3,080
5302	PG & E	\$ 13,500	59%	\$ 8,500	143%	\$ 8,915	155%	\$ 3,500	\$ 19,117	\$ 23,408
5303	Hayward Water & Sewage	\$ 4,500	0%	\$ 4,500	0%	\$ 3,394	-25%	\$ 4,500	\$ 3,478	\$ 3,673
5401	SMALL TOOLS AND INSTRUMENTS	\$ 3,000	0%	\$ 3,000	0%	\$ 2,189	-27%	\$ 3,000	\$ 2,056	\$ 2,211
MAINTENANCE										
5501	Landscaping service	\$ 5,000	0%	\$ 5,000	0%	\$ 5,012	0%	\$ 5,000	\$ 2,646	\$ 2,855
5502	Facility Maintenance	\$ 25,000	-17%	\$ 30,000	50%	\$ 15,250	-24%	\$ 20,000	\$ 14,033	\$ 10,818
5503	Maintenance of equipment	\$ 30,000	-14%	\$ 35,000	0%	\$ 22,290	-36%	\$ 35,000	\$ 20,600	\$ 43,629
TRANSPORTATION, TRAVEL, TRAINING, & BO										
5601	Fuel and GPS (WexMart)	\$ 55,000	2%	\$ 54,000	4%	\$ 38,922	-25%	\$ 52,000	\$ 41,906	\$ 45,040
5602	Meetings, conferences, & travel	\$ 30,000	-3%	\$ 31,000	0%	\$ 7,494	-76%	\$ 31,000	\$ 29,831	\$ 27,927
5603	Board meeting expenses	\$ 650	0%	\$ 650	0%	\$ -	-100%	\$ 650	\$ 295	\$ 620
5604	Board payments in lieu	\$ 16,000	-11%	\$ 18,000	20%	\$ 15,300	2%	\$ 15,000	\$ 13,000	\$ 13,200
5605	Board plaques and nameplates	\$ 190	6%	\$ 180	-28%	\$ 184	-26%	\$ 250	\$ 146	\$ 138
5606	Continuing Education fees	\$ 3,000	-21%	\$ 3,800	9%	\$ 2,863	-18%	\$ 3,500	\$ 3,660	\$ 2,327
5607	Staff Training (staff dev./ college courses)	\$ 15,000	-25%	\$ 20,000	0%	\$ 9,890	-51%	\$ 20,000	\$ 6,976	\$ 9,181
PROFESSIONAL SERVICES										
5701	Audit	\$ 15,000	0%	\$ 15,000	7%	\$ 14,156	1%	\$ 14,000	\$ 12,170	\$ 11,650
5702	Actuarial reports	\$ 4,200	-11%	\$ 4,700	0%	\$ 1,200	-74%	\$ 4,700	\$ 4,200	\$ 2,575
5703	Helicopter service	\$ 25,000	-29%	\$ 35,000	0%	\$ -	-100%	\$ 35,000	\$ -	\$ 5,154
5704	Legal Services	\$ 8,000	0%	\$ 8,000	60%	\$ 5,263	5%	\$ 5,000	\$ 35,146	\$ 3,363
5705	MVCAC Research Foundation	\$ -	-100%	\$ 5,000	0%	\$ -	-100%	\$ 5,000	\$ -	\$ 5,000
5706	Tax collection service (SCI)	\$ 37,000	6%	\$ 34,890	0%	\$ 35,545	2%	\$ 35,000	\$ 34,502	\$ 33,352
5707	Payroll service (OnePoint)	\$ 10,000	-9%	\$ 11,000	0%	\$ 8,835	-20%	\$ 11,000	\$ 8,537	\$ 8,544
5708	Environmental consultant/ EcoAtlas	\$ 22,000	-56%	\$ 50,000	100%	\$ 4,121	-84%	\$ 25,000	\$ -	\$ -
5709	HR Services (RGS & other)	\$ 2,500	-72%	\$ 9,000	-10%	\$ 221	-98%	\$ 10,000	\$ (1,688)	\$ 9,484
5710	OPEB management (PFM & US Bank)	\$ 25,000	3%	\$ 24,360	-3%	\$ 22,187	-11%	\$ 25,000	\$ 19,685	\$ 20,507
5711	Financial advising	\$ 2,500	-50%	\$ 5,000	0%	\$ -	-100%	\$ 5,000	\$ -	\$ 14,681
5712	Pre-employment physicals	\$ 1,000	-33%	\$ 1,500	0%	\$ 95	-94%	\$ 1,500	\$ 335	\$ 1,014
5801	MEMBERSHIPS, DUES & SUBSCRIPTIONS	\$ 37,000	54%	\$ 24,000	3%	\$ 22,906	-2%	\$ 23,337	\$ 26,317	\$ 20,774
5802	INSURANCE - VC/JPA	\$ 178,136	19%	\$ 149,311	9%	\$ 140,724	3%	\$ 136,644	\$ 133,744	\$ 124,034
5803	Employee Assistant Program	\$ 1,300	0%	\$ 1,300	48%	\$ 926	5%	\$ 880	\$ 1,090	\$ 654
5901	COMMUNITY EDUCATION	\$ 55,000	39%	\$ 39,500	2%	\$ 26,317	-32%	\$ 38,575	\$ 22,734	\$ 34,861
OPERATIONS										
6101	Pesticides	\$ 182,000	-4%	\$ 190,000	0%	\$ 174,993	-8%	\$ 190,000	\$ 145,342	\$ 168,430
6102	Field supplies (dippers etc)	\$ 3,500	-30%	\$ 5,000	0%	\$ 2,674	-47%	\$ 5,000	\$ 818	\$ 639
6103	Mosquitofish program	\$ 3,500	0%	\$ 3,500	0%	\$ 2,722	-22%	\$ 3,500	\$ 2,232	\$ 2,974
6104	Spray equipment	\$ 8,000	-20%	\$ 10,000	0%	\$ 7,620	-24%	\$ 10,000	\$ 3,104	\$ 5,212
6105	Safety	\$ 8,500	0%	\$ 8,500	0%	\$ 11,160	31%	\$ 8,500	\$ 6,819	\$ 8,148
6106	Aerial Pool Survey	\$ 20,000	0%	\$ 20,000	0%	\$ 20,000	0%	\$ 20,000	\$ 20,000	\$ 20,000
6107	Permits	\$ 2,000	0%	\$ 2,000	-50%	\$ 4,193	5%	\$ 4,000	\$ 1,344	\$ 1,328
HOUSEHOLD EXPENSES										
6201	Janitorial service	\$ 7,500	0%	\$ 7,500	0%	\$ 7,357	-2%	\$ 7,500	\$ 5,023	\$ 4,920
6202	Supplies (+ emergency)	\$ 2,850	0%	\$ 2,850	0%	\$ 2,235	-22%	\$ 2,850	\$ 2,012	\$ 1,688
6203	Alarm service	\$ 9,600	37%	\$ 7,000	9%	\$ 6,289	-2%	\$ 6,400	\$ 7,782	\$ 11,986
6301	OFFICE EXPENSES	\$ 12,000	0%	\$ 12,000	0%	\$ 9,748	-19%	\$ 12,000	\$ 13,761	\$ 11,796
IT/ COMMUNICATIONS										
6401	IT Expenses	\$ 70,000	0%	\$ 70,000	0%	\$ 42,997	-39%	\$ 70,000	\$ 52,813	\$ 74,516
6402	Telephone Service & Internet	\$ 11,000	0%	\$ 11,000	10%	\$ 9,778	-2%	\$ 10,000	\$ 8,951	\$ 10,297
6403	Website hosting	\$ 2,400	0%	\$ 2,400	0%	\$ 2,400	0%	\$ 2,400	\$ 2,400	\$ 2,400
6404	Cell phone service	\$ 18,000	-18%	\$ 22,000	0%	\$ 13,149	-40%	\$ 22,000	\$ 16,151	\$ 18,044
6405	Microsoft Office 365	\$ 5,000	0%	\$ 5,000	0%	\$ 3,240	-35%	\$ 5,000	\$ 2,820	\$ 3,510
6406	Azure Server Hosting	\$ 1,000	-50%	\$ 2,000	0%	\$ 207	-90%	\$ 2,000	\$ -	\$ 119
LABORATORY										
6501	Mosquito and pathogen monitoring	\$ 95,000	-10%	\$ 105,000	5%	\$ 50,024	-50%	\$ 100,000	\$ 69,571	\$ 86,000
6502	Insecticide resistance	\$ 15,500	-9%	\$ 17,000	0%	\$ 1,943	-89%	\$ 17,000	\$ 7,562	\$ 15,200
6503	Research	\$ 22,000	0%	\$ 22,000	0%	\$ 12,169	-45%	\$ 22,000	\$ 23,745	\$ 16,948
Total		\$ 1,149,526	-3%	\$ 1,184,941	6%	\$ 816,194	-27%	\$ 1,118,186	\$ 866,995	\$ 969,411

Estimate of Cash Carryover from Fiscal Year 21/22 to 22/23

	debits	credits	balance
LAIF, County, and BofW Balances as of January 31 2022			\$ 4,993,788
February check batch #1	\$ 134,000		\$ 4,859,788
February check batch #2	\$ 157,000		\$ 4,702,788
Balance as of February 28 2022			\$ 4,905,240
March check batch #1	\$ 137,000		\$ 4,768,240
<i>March check batch #2</i>	\$ 167,000		\$ 4,601,240
Balance as of March 31 2022			\$ 4,518,523
April check batch #1	\$ 147,000		\$ 4,371,523
Deposit		2,245,120	
April check batch #2	\$ 191,000		\$ 6,425,643
Balance as of April 30 2022			\$ 6,234,779
<i>May check batch #1</i>	\$ 150,000		\$ 6,084,779 <i>estimates below</i>
<i>May check batch #2</i>	\$ 150,000		\$ 5,934,779
Balance as of May 31 2022			\$ 5,934,779
June check batch #1	\$ 175,000		\$ 5,759,779
June check batch #2	\$ 175,000		\$ 5,584,779
Balance as of June 30 2022			
Totals	\$ 1,292,000	\$ 2,245,120	\$ 5,584,779
Unused capital funds (pg. 6)			\$ 30,000
Reserve transfers from prior year			\$ 1,746,301
Operational requirement (July-December)			\$ 2,986,215
<u>Estimated Cash Carried Over</u>			\$ 882,264

CAPITAL EXPENDITURES (Outlay)					
	2018-19	2019-20	2020-2021	2021-2022	2022-2023
	Unused capital funds				
Curation & Larval ID Room	\$61,199				
Remodel Project	\$21,550				
V35 Lab Truck	\$2,000				
Lab centrifuge					
Carports, Wash Rack, & Interior Paint	\$27,000				
Shop & Facility Inventory Program	\$5,000				
UAS	\$30,000				
18/19 Capital Expenditure Total	\$146,749				
19/20 Capital Reserve (new assets & non-capital projects)		Budgeted			
Treatment UAS		\$52,000			
Waterproof UAS		\$11,000			
Larvicide rig		\$17,000			
Lab centrifuge		\$10,500			
Exterior and interior painting		\$39,000			
Interior Flooring		\$75,000			
19/20 Capital Reserve Total		\$204,500			
19/20 Repair and Replace (replacement assets)					
V40		\$40,000			
V45		\$40,000			
19/20 Repair and Replace Total		\$80,000			
<i>Unused capital funds (cash carried over)</i>		\$103,500			
20/21 Capital Reserve (new assets & non-capital projects)					
Exterior & carport painting			\$39,000		
Lobby display			\$20,000		
20/21 Capital Reserve Total			\$59,000		
<i>Unused capital funds (cash carried over)</i>			\$20,500		
20/21 Capital Reserve (new assets & non-capital projects)					
Lobby display				\$ 30,000	
21/22 Repair and Replace (replacement assets)					
V42				\$ 40,000	
20/21 Repair and Replace Total				\$ 70,000	
<i>Unused capital funds (cash carried over)</i>				\$ 30,000	
22/23 Capital Reserve (new assets & non-capital projects)					
Fish Enclosure					\$ 250,000
Lobby Display					\$ 30,000
22/23 Capital Reserve Total					\$ 280,000
22/23 Repair and Replace (replacement assets)					
MapVision - Gen 3					\$ 70,000
Microscope					\$ 20,000
22/23 Repair and Replace Total					\$ 90,000
<i>Unused capital funds (cash carried over)</i>					\$ -

<u>Committed Reserve Funds</u>	<u>Target Level</u>	<u>As of April 30, 2022</u>	<u>Transfers⁴</u>	<u>Current Funded %</u>	<u>Proposed Funded %</u>
VCJPA Member Contingency fund ¹	\$327,918	\$371,021	-\$43,103	113%	100%
CAMP: Public Health Emergency	\$500,000	\$526,732	-\$26,732	105%	100%
CAMP: Repair and Replace	\$4,319,711	\$1,356,585	\$537,912	31%	44%
CAMP: Operating reserve	\$2,734,699	\$1,946,221	\$0	71%	71%
CAMP: Capital reserve ²	\$280,000	\$30,026	\$339,974	11%	100%
<u>Restricted Reserve Funds</u>					
PARS: Pension Rate Stabilization ³	\$3,952,022	\$1,772,594	\$269,350	45%	52%
Other Post Employment Benefit fund (OPEB) ⁴	\$2,776,000	\$4,728,224		170%	170%
<u>TOTAL</u>			\$1,077,400		

¹ Balance as of December 31, 2021.

² - Capital Reserve transferred at start of fiscal year to also include repair and replace purchases, all other transfers occur after the fiscal year.

³ - Balance as of March 31, 2022.

³ - Unfunded Accrued Liability as of June 30, 2020

⁴ - OPEB liability as of June 30, 2021.

Alameda County Mosquito Abatement District

Mosquito and Disease Control Assessment

Fiscal Year 2022-23
Engineer's Report

Pursuant to the Health and Safety Code, Government Code and
Article XIID of the California Constitution

Engineer of Work:



4745 Mangels Boulevard
Fairfield, California 94534
707.430.4300
www.sci-cg.com

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Alameda County Mosquito Abatement District

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Table of Contents

Introduction.....	1
Overview	1
Legislative Analysis	4
Assessment Process	7
General Description of the District and Services	9
About the Mosquito Abatement District	9
Description of Mosquito Abatement Program.....	9
Estimate of Cost.....	19
Method of Assessment	20
Discussion of Benefit	20
Mosquito and Disease Control Is a Special Benefit to Properties.....	22
Benefit Factors	23
Benefit Finding	30
General Versus Special Benefit	30
Calculating General Benefit.....	33
Zones of Benefit	37
Method of Assessment.....	38
Assessment Apportionment.....	40
Residential Properties	41
Commercial/Industrial Properties.....	42
Agricultural, Rangeland, and Cemetery Properties.....	43
Other Properties.....	44
Duration of Assessment	45
Appeals and Interpretation	45
Assessment.....	46
Assessment Diagram.....	49
Assessment Roll.....	51

List of Figures

Figure 1 – Cost Estimate – FY 2022-23..... 19

Figure 2– Residential Assessment Factors..... 42

Figure 3 – Commercial/Industrial Benefit Assessment Factors 43

Figure 4 – Other Land Benefit Assessment Factors 44

Figure 5– Summary Cost Estimate – FY 2022-23 46

Introduction

Overview

In 1930, the Alameda County Mosquito Abatement District was officially formed in accordance with local authority provided by the Mosquito Abatement Act of 1915. The District's services are further supported by the California Health and Safety Codes. The District is overseen by a Board of Trustees (the "Board") comprised of fifteen members. Each City Council within the District and the Board of Supervisors of Alameda County appoint one Trustee. A Trustee serves a two-year term and can be reappointed.

The Alameda County Mosquito Abatement District ("District") is an independent special District in Alameda County ("County"). The District's services encompass more than 800 square miles and are provided to properties accommodating over 1.6 million residents.

The District provides control for both disease carrying mosquitoes and non-disease carrying mosquitoes within its boundaries (the "Assessment Area" or "Assessment District"). The purpose of the Alameda County Mosquito Abatement District is to reduce the risk of mosquito-borne disease and mosquito nuisance to property and the inhabitants of property within the District. The District services are available to all properties within the established boundary of the District.

The District's core services are summarized as follows:

- Early detection of public health threats through comprehensive mosquito and disease surveillance.
- Elimination and control of mosquitoes to protect public health and to diminish the nuisance and harm caused by mosquitoes.
- Protection of public health by reducing mosquitoes or exposure to mosquitoes that transmit diseases on property
- Appropriate, timely response to customer requests to prevent/control mosquitoes and the diseases they can transmit.

The District currently provides a "baseline" level of mosquito and disease control services in the County. Over the past few years, costs of providing services have exceeded revenue, and without the additional assessment, services would have deteriorated. The services provided to the Assessment Area consist of maintaining the current level of services and in some cases expanded services, as listed below, above the existing baseline level of services.

The Assessment Area is narrowly drawn to include only properties that may request and/or receive direct and more frequent service, that are located within the scope of the mosquito surveillance area, that are located within flying or traveling distance of potential mosquito sources monitored by the District, and that will benefit from a reduction in the amount of mosquitoes reaching and impacting the property as a result of the enhanced mosquito surveillance and control. The Assessment Diagram included in this report shows the boundaries of the Assessment Area.

The following is an outline of the primary services, programs and related costs that are funded by the mosquito and disease control assessment:¹

- Mosquito control and abatement
- Surveillance for mosquito-borne diseases
- Mosquito inspections
- Response to service requests
- Mosquitofish for backyard fish ponds and other appropriate habitats
- Mosquito surveillance and disease testing
- Monitor mosquito populations and survey for mosquito-borne disease agents
- Upgrading of the equipment utilized by the District
- Presentations to schools and civic groups

This Engineer's Report ("Report") defines the benefit assessment, which provides funding for these improved mosquito and disease control services for property throughout the District, as well as related costs for equipment, capital improvements and services, facilities necessary and incidental to mosquito and disease control programs.

As used within this Report and the benefit assessment ballot proceeding, the following terms are defined:

"Vector" means any animal capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including, but not limited to, mosquitoes, flies, mites, ticks, other arthropods, and small mammals and other vertebrates (Health and Safety Code Section 2002(k)).

"Vector Control" shall mean any system of public improvements or services that is intended to provide for the surveillance, prevention, abatement, and control of vectors as defined in subdivision (k) of Section

¹ The improved mosquito and disease prevention services materially increase the usefulness, utility, livability and desirability of properties in the Assessment Area.

2002 of the Health and Safety Code and a pest as defined in Section 5006 of the Food and Agricultural Code (Government Code Section 53750(m)).

The District is the only dedicated agency controlling mosquitoes in Alameda County. There are however, other agencies dedicated to the control of other types of vectors. In any case, the California Code sections and other applicable citations within this report pertain specifically to mosquito and disease control even when the term vector is used.

The District is controlled by Mosquito Abatement and Vector Control District Law of the State of California. Following are excerpts from the Mosquito Abatement and Vector Control District Law of 2002, codified in the Health and Safety Code, Section 2000, et. seq. which serve to summarize the State Legislature's findings and intent with regard to mosquito abatement and other vector control services:

2001. (a) The Legislature finds and declares all of the following:

(1) California's climate and topography support a wide diversity of biological organisms.

(2) Most of these organisms are beneficial, but some are vectors of human disease pathogens or directly cause other human diseases such as hypersensitivity, envenomization, and secondary infections.

(3) Some of these diseases, such as mosquito borne viral encephalitis, can be fatal, especially in children and older individuals.

(4) California's connections to the wider national and international economies increase the transport of vectors and pathogens.

(5) Invasions of the United States by vectors such as the Asian tiger mosquito and by pathogens such as the West Nile virus underscore the vulnerability of humans to uncontrolled vectors and pathogens.

(b) The Legislature further finds and declares:

(1) Individual protection against the vector borne diseases is only partially effective.

(2) Adequate protection of human health against vector borne diseases is best achieved by organized public programs.

(3) The protection of Californians and their communities against the discomforts and economic effects of vector borne diseases is an essential public service that is vital to public health, safety, and welfare.

(4) Since 1915, mosquito abatement and vector control districts have protected Californians and their communities against the threats of vector borne diseases.

(c) In enacting this chapter, it is the intent of the Legislature to create and continue a broad statutory authority for a class of special districts with the power to conduct effective programs for the surveillance, prevention, abatement, and control of mosquitoes and other vectors.

(d) It is also the intent of the Legislature that mosquito abatement and vector control districts cooperate with other public agencies to protect the public health, safety, and welfare. Further, the Legislature encourages

local communities and local officials to adapt the powers and procedures provided by this chapter to meet the diversity of their own local circumstances and responsibilities.

Further the Health and Safety Code, Section 2082 specifically authorizes the creation of benefit assessments for vector control, as follows:

(a) A district may levy special benefit assessments consistent with the requirements of Article XIID of the California Constitution to finance vector control projects and programs.

This Engineer's Report (Report") was prepared by SCI Consulting Group (SCI) to describe the mosquito, disease surveillance and control services and related costs that are funded by the assessments, to establish the estimated costs for those services, to determine the special benefits and general benefits received by property from the services and to apportion the assessments to lots and parcels within the District based on the estimated special benefit each parcel receives from the services funded by the benefit assessment.

Legislative Analysis

Proposition 218

This assessment was formed consistent with Proposition 218, The Right to Vote on Taxes Act, which was approved by the voters of California on November 6, 1996, and is now Article XIIC and XIID of the California Constitution. Proposition 218 provides for benefit assessments to be levied to fund the cost of providing services, improvements, as well as maintenance and operation expenses to a public improvement which benefits the assessed property.

Proposition 218 describes a number of important requirements, including a property-owner balloting, for the formation and continuation of assessments, and these requirements are satisfied by the process used to establish this assessment. When Proposition 218 was initially approved in 1996, it allowed for certain types of assessments to be "grandfathered" in, and these were exempted from the property-owner balloting requirement.

Beginning July 1, 1997, all existing, new, or increased assessments shall comply with this article. Notwithstanding the foregoing, the following assessments existing on the effective date of this article shall be exempt from the procedures and approval process set forth in Section 4:

(a) Any assessment imposed exclusively to finance the capital costs or maintenance and operation expenses for sidewalks, streets, sewers, water, flood control, drainage systems or vector control.

Mosquito and vector control was specifically “grandfathered in,” underscoring the fact that the drafters of Proposition 218 and the voters who approved it were satisfied that funding for mosquito and vector control is an appropriate use of benefit assessments, and therefore confers special benefit to property.

Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority

In July of 2008, the California Supreme Court issued its ruling on the Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority (“SVTA vs. SCCOSA”). This ruling is the most significant legal document in further legally clarifying Proposition 218. Several of the most important elements of the ruling included further emphasis that:

- Benefit assessments are for special benefit to property, not general benefits²
- The services and /or improvements funded by assessments must be clearly defined
- Special benefits are directly received by and provide a direct advantage to property in the assessment district

This Engineer’s Report, and the process used to establish this assessment is consistent with the SVTA vs. SCCOSA decision.

Dahms v. Downtown Pomona Property

On June 8, 2009, the 4th Court of Appeal amended its original opinion upholding a benefit assessment for property in the downtown area of the City of Pomona. On July 22, 2009, the California Supreme Court denied review. On this date, Dahms became good law and binding precedent for assessments. In Dahms the Court upheld an assessment that was 100% special benefit (i.e. 0% general benefit) on the rationale that the services and improvements funded by the assessments were directly provided to property in the assessment district. The Court also upheld discounts and exemptions from the assessment for certain properties.

² Article XIII D, § 2, subdivision (d) of the California Constitution states defines “district” as “an area determined by an agency to contain all parcels which will receive a special benefit from the proposed public improvement or property-related service.”

Bonander v. Town of Tiburon

On December 31, 2009, the 1st District Court of Appeal overturned a benefit assessment approved by property owners to pay for placing overhead utility lines underground in an area of the Town of Tiburon. The Court invalidated the assessments on the grounds that the assessments had been apportioned to assessed property based in part on relative costs within sub-areas of the assessment district instead of proportional special benefits.

Beutz v. County of Riverside

On May 26, 2010, the 4th District Court of Appeal issued a decision on the Steven Beutz v. County of Riverside (“Beutz”) appeal. This decision overturned an assessment for park maintenance in Wildomar, California, primarily because the general benefits associated with improvements and services were not explicitly calculated, quantified and separated from the special benefits.

Golden Hill Neighborhood Association v. City of San Diego

On September 22, 2011, the San Diego Court of Appeal issued a decision on the Golden Hill Neighborhood Association v. City of San Diego appeal. This decision overturned an assessment for street and landscaping maintenance in the Greater Golden Hill neighborhood of San Diego, California. The court described two primary reasons for its decision. First, like in Beutz, the court found the general benefits associated with services were not explicitly calculated, quantified and separated from the special benefits. Second, the court found that the City had failed to record the basis for the assessment on its own parcels.

Compliance with Current Law

This Engineer’s Report is consistent with the requirements of Article XIIC and XIID of the California Constitution and with the *SVTA* decision because the services to be funded are clearly defined; the services are available to and will be directly provided to all benefiting property in the Assessment District; and the services provide a direct advantage to property in the Assessment District that would not be received in absence of the Assessments.

This Engineer’s Report is consistent with *Dahms* because, similar to the Downtown Pomona assessment validated in *Dahms*, the services will be directly provided to property in the Assessment District. Moreover, while *Dahms* could be used as the basis for a finding of 0% general benefits, this Engineer’s Report establishes a more conservative measure of general benefits.

The Engineer's Report is consistent with *Bonander* because the Assessments have been apportioned based on the overall cost of the services and proportional special benefit to each property. Finally, the Assessments are consistent with *Beutz* because the general benefits have been explicitly calculated and quantified and excluded from the Assessments.

Assessment Process

In order to allow property owners to ultimately decide whether additional funding should be provided for the District's mosquito and disease control services, the Board authorized by Resolution the Initiation of proceedings for a benefit assessment on February 13, 2008. In March and April of 2008, the District conducted an assessment ballot proceeding pursuant to the requirements of Article XIID of the California Constitution ("The Taxpayer's Right to Vote on Taxes Act") and the Government Code. During this ballot proceeding, owners of property in the District were provided with a notice and ballot for the proposed special assessment. A 45-day period was provided for balloting and a public hearing was conducted on April 30, 2008.

It was determined after the conclusion of the public input portion of the public hearing that 70.19% of the weighted ballots returned were in support of the assessment. Since the assessment ballots submitted in opposition to the proposed assessments did not exceed the assessment ballots submitted in favor of the assessments (with each ballot weighted by the proportional financial obligation of the property for which ballot was submitted), the District gained the authority to approve the levy of the assessments for fiscal year 2008-09 and to continue to levy them in future years. The authority granted by the ballot proceeding includes an annual increase in the maximum authorized

assessment rate equal to the annual change in the Consumer Price Index for the San Francisco Bay Area, not to exceed 3%. In the event that the annual change in the CPI exceeds 3%, any percentage change in excess of 3% can be cumulatively reserved and can be added to the annual change in the CPI for years in which the CPI change is less than 3%. The Board took action, by Resolution No.937-1 passed on May 14, 2008, to approve the levy of the assessments.

In each subsequent year for which the assessments will be levied, the Board must preliminarily approve an updated Engineer's Report for the upcoming fiscal year at a noticed public hearing. The Engineer's Report should include a budget for the upcoming fiscal year's costs and services and an updated assessment roll listing all parcels and their proposed assessments for the upcoming fiscal year.

If the Board approves the Engineer's Report and the assessments it establishes for fiscal year 2022-23, the assessments would be submitted to the County Auditor for inclusion on the property tax rolls for fiscal year 2022-23.

General Description of the District and Services

About the Mosquito Abatement District

The Alameda County Mosquito Abatement District (the “District”) is an independently funded public agency that controls and monitors mosquitoes and the diseases they carry in Alameda County. The District protects the usefulness, desirability and livability of property and the inhabitants of property within its jurisdictional area by controlling and monitoring disease-carrying and public nuisance mosquitoes. In addition, the District regularly tests for diseases carried by mosquitoes and educates property owners and the occupants of property in the District about how to protect themselves from mosquito-borne diseases.

The District staff consists of 18 employees including a General Manager, Field Operations Supervisor, Lab Director, Mechanical Specialist, Regulatory & Public Affairs Director, IT Director, Accounting Associate, Public Outreach Coordinator, seven Vector Biologists and one Mosquito Control Technician, a Vector Scientist, Associate Vector Scientist, and seasonal staff.

The District is governed by the Alameda County Mosquito Abatement District Board of Trustees. The Board meetings are held at 5:00 p.m. on the second Wednesday of every month, and residents are welcome to attend.

Description of Mosquito Abatement Program

As mentioned earlier, the District currently provides a “baseline” level of services in the County as permitted with the limited funding available. The Assessment provides the additional funding to operate the program and expand the services provided in the Assessment Area to an optimum level necessary to protect the usefulness, utility, desirability and livability of property within its jurisdictional area.

Introduction

Following are the services and resulting level of service for the Assessment Area. As previously noted, the District provides a baseline level of service in the County. These services are over and above the current baseline level of service. The formula below describes the relationship between the final level of service, the existing baseline level of service, and the enhanced level of service to be funded by the assessment.

Final Level of Service	=	Baseline Level of Service	+	Enhanced Level of Service
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The assessment provides funding for the continuation and enhancement of the service, surveillance, disease prevention, abatement, and control of mosquitoes within the District boundaries. Such mosquito abatement and disease prevention projects and programs include, but are not limited to, source reduction, biological control, larvicide applications, adulticide applications, disease monitoring, public education, reporting, accountability, research and interagency cooperative activities, as well as capital costs, maintenance, and operation expenses (collectively “Services”). The cost of these Services also includes capital costs comprised of equipment, capital improvements and facilities and other expenses necessary and incidental to the mosquito control program.

Vectors and Vector-Borne Diseases in the District Service Area

Mosquitoes

Mosquitoes generally occur where there is adequate vegetation for harborage and where water is standing and/or stagnant. Although mosquitoes have seasonal cycles, some species reproduce continuously while conditions are suitable. The mosquito species listed in the table below can be generally described as floodwater, permanent water, and container-breeding mosquitoes and they are currently important in the District:

GENUS & SPECIES	LARVAL HABITAT	ABUNDANCE	HOSTS	DISEASE ASSOCIATIONS
<i>Aedes dorsalis</i> (Salt marsh mosquito)	Salt marshes	All year	Humans and other mammals	Serious Pest
<i>Aedes sierrensis</i> (Tree hole mosquito)	Tree holes, Tires, Miscellaneous Containers	Spring, Summer	Humans and other large mammals	Serious pest; Vector of Canine Heartworm
<i>Aedes squamiger</i> (Winter salt marsh mosquito)	Salt marshes	Spring	Humans and other large mammals	Serious pest
<i>Aedes washinoi</i> (Woodland pool mosquito)	Temporary woodland ponds	Spring, Summer	Humans and other large mammals	Serious Pest
<i>Anopheles freeborni</i> (Western malaria mosquito)	Seepages, Streams, Lakes, Gravel Pits	Summer	Humans and other large mammals	Vector of Malaria

<i>Anopheles punctipennis</i>	Cool, shaded grassy pools in creeks and lake seepages	Summer	Humans and other large mammals	Vector of Malaria
<i>Culex erythrothorax</i> (Tule mosquito)	Ponds, lakes, marshes with tules and cattails	Spring, Summer	Humans, Other Mammals, and Birds	Serious Pest; Vector of Encephalitis
<i>Culex pipiens</i> (House mosquito)	Storm Drain Systems, Septic Tanks, Roadside Ditches, Utility	Spring, Summer, Fall, Winter	Humans, Other Mammals, and Birds	Serious Pest; Vector of Encephalitis, West Nile Virus
<i>Culex stigmatosoma</i> (Foul water mosquito)	Foul Water, Sewage, Temporary Pools	Spring, Summer, Fall, Winter	Birds	Vector of West Nile Virus
<i>Culex tarsalis</i> (Encephalitis mosquito)	Creeks, Marshes, Temporary Pools, Roadside Ditches, Fresh Water	Spring, Summer, Fall, Winter	Birds, humans, and other mammals	Moderate Pest; Vector of Encephalitis, West Nile Virus
<i>Culiseta incidens</i> (Fish pond mosquito)	Fish Ponds, Temporary Pools, Catch Basins, Roadside Ditches	Spring, Summer, Fall, Winter	Humans and other large mammals	Serious Pest; Possible Vector of Canine Heartworm
<i>Culiseta inornata</i> (Winter salt marsh mosquito)	Marshes, Temporary Pools, Roadside Ditches	Fall, Winter, Spring	Humans and other large mammals	Serious Pest

Mosquitoes that lay their eggs in damp soil that might be flooded several years later occupy floodwater habitats. Once the area floods, most of the eggs hatch, producing a large number of mosquitoes that emerge as adults around the same time. The District has several floodwater species of concern. These include all of the *Aedes* species. Floodwater mosquitoes are most active at dawn and dusk, but they also bite during the day. *Aedes dorsalis* and *Aedes squamiger* produce multiple generations due to recurring tidal and rainwater flooding and resulting in high abundance. These species are strong flyers that can travel many miles from their source.

Mosquitoes that lay their eggs on the surface of standing water occupy permanent water habitats. Such habitats include both temporary and long-lasting standing water. Eggs are laid while mosquitoes are active and usually hatch within two to three days. *Anopheles*, *Culex*, and *Culiseta* mosquitoes inhabiting the District breed in these types of sources and have multiple generations. All of these mosquitoes are active at dawn and dusk, but *Culex* and *Culiseta* will bite well into the night. *Anopheles* and *Culex erythrothorax* can also bite during the day under shade.

Outdoor containers that hold standing water are common mosquito habitats in Alameda County. Containers include naturally occurring holes in trees, discarded buckets, cans, jars and tires; neglected swimming pools, wading pools, spas and boats; ornamental ponds, bird baths, cemetery flower cups, crumpled plastic and plugged rain gutters. *Aedes sierrensis* breeds in many species of tree holes, especially oaks, sycamores and cottonwoods, but can also inhabit artificial containers full of leaf litter. Eggs are deposited above the water line and hatch after sufficient rain accumulates to reach them. *Ae. sierrensis* normally produces one generation per year. It is an aggressive biter and can reach great abundance locally but does not fly far.

Mosquito-transmitted diseases in the District are caused by several pathogens. These include the following viruses: St. Louis encephalitis (SLE), Western equine encephalitis (WEE) and West Nile virus (WNV); the protozoan parasite of malaria, *Plasmodium falciparum* or *P. vivax*; or the nematode parasite of canine heartworm, *Dirofilaria immitis*. This region has historically had sporadic detections of WEE and SLE, two arboviruses (arthropod-borne) that have been established in California for decades. Starting in 2004, WNV was found in wild birds, sentinel chicken flocks, mosquito pools and horses. To date there have been no human cases of West Nile Virus locally acquired in Alameda County.

Malaria is not locally transmitted in California at this time, but it used to be a major health problem in the Central Valley. Trappers, miners and other immigrants introduced malaria into California in the 1800's from areas where malaria was common. Effective mosquito control and drugs to cure malaria in humans led to the eradication of malaria in California in the 1950's. Consistent reintroduction by humans from areas where the disease is

endemic creates a constant threat from malaria. In addition, some strains of malaria found in the world today are resistant to drugs that helped to eradicate the disease in the 1950's. The mosquitoes that can spread malaria are still abundant in our region and are capable of redistributing this serious health threat if the virus should somehow be reintroduced to the area.

Canine heartworm is a disease that infects wild and domestic dogs and occasionally cats. Although it can be life-threatening, pet owners can protect their animals by giving them medicine that kills the parasites. Heartworm medication is available through veterinary facilities.

Mosquito-borne diseases of most concern in the District are: Western equine encephalitis (WEE), St. Louis encephalitis (SLE), West Nile virus (WNV), and malaria, which are all transmitted by indigenous mosquitoes and for which no human vaccines exist. Vaccines are available to protect horses from WEE and WNV. Among the principal threats to which the Alameda County Mosquito Abatement District currently responds are:

- Human and animal diseases associated with mosquitoes
- Annoyance and economic disruption caused by mosquitoes
- Potential introduction of invasive mosquito species and/or diseases.

Integrated Pest Management

As noted, the District's services address several types of mosquitoes and share general principles and policies. These include the identification of mosquito problems; responsive actions to control existing populations of mosquitoes, prevention of new sources of mosquitoes from developing, and the management of habitat in order to minimize mosquito production; education of land-owners and others on measures to minimize interaction with mosquitoes; and provision and administration of funding and institutional support necessary to accomplish these goals.

In order to accomplish effective and environmentally sound mosquito management, control of mosquitoes must be based on careful surveillance of their abundance, habitat (potential abundance), pathogen load, and potential contact with people and animals; the establishment of treatment criteria (thresholds); and appropriate selection from a wide range of control methods. This dynamic combination of surveillance, treatment criteria, and use of multiple control activities in a coordinated program is generally known as Integrated Pest Management (IPM).

The Alameda County Mosquito Abatement District's Mosquito Management Program, like any other IPM program, involves procedures for minimizing potential environmental impacts. The District employs IPM principles by first determining the species and abundance of mosquitoes through evaluation of public service requests and field surveys, trapping of immature and adult pest populations, and, if the populations exceed predetermined criteria, using the most efficient, effective, and environmentally sensitive means of control. For all mosquito species, public education is an important control strategy. In appropriate situations, water management or other physical control activities (historically known as "source reduction" or "physical control") can be instituted to reduce mosquito-breeding sites. The District also uses biological control such as the stocking of mosquitofish in ornamental ponds, unused swimming pools and other artificial water bodies. When these approaches are not effective or are otherwise inappropriate, materials that have been approved and labeled by the U.S. Environmental Protection Agency and the California Department of Pesticide Regulation are used to treat specific pest-producing or pest-harboring areas. The District chooses materials that are highly specific, have the lowest impact on nontargets, selectively applied to places where mosquitoes occur. These materials are considerably more expensive than less specific pesticides and are labor intensive to apply.

The District's approach is organized into two principle sections to accomplish IPM. First, the administrative element provides leadership, expertise, public relations/education, and interface with other governmental authorities. Second, the operational and laboratory sections include technicians that perform IPM in the field. The technicians perform control and surveillance functions by responding to complaints from individual residents and by extensive examination of aquatic sites for mosquito larvae. The technicians and lab staff also monitor the treated areas to be sure that their control efforts have been successful.

The District has the capability of applying liquid and granular larvicides to treat sources of immature mosquitoes and aerosolized adulticides for area treatment of adult mosquitoes. Adulticiding is used to reduce significant populations of adult mosquitoes and to prevent or to reduce the spread of mosquito-borne disease in the environment.

Applications are made by personnel licensed by the California Department of Public Health (or under the direct supervision of certified personnel) who are trained in the proper use of the products and specialized equipment used for this type of public health pest control. All insecticide products employed by the District are used with consideration of existing environmental conditions in order to minimize the impact on non-target organisms.

General Surveillance and Control Procedures

Surveillance: Surveillance of mosquitoes in the District is accomplished by a combination of methods. First, technicians actively examine potential sites by sampling water, collecting larvae, and identifying the larvae to species. Second, a variety of trap types are placed throughout the District for collecting adult mosquitoes (e.g. visual attractant Fay-Prince and New Jersey Light traps to monitor male and female mosquito abundance, and carbon dioxide- or human scent baited traps that attract host-seeking females or the eggs deposited by mosquitoes (e.g. ovitrap cups). The traps are set throughout the year, and the collected mosquitoes or eggs are enumerated and identified to species for adults and at least to genus for eggs. The majority of the collected mosquitoes that can transmit WNV, SLE or WEE are tested for the presence of these viruses. Finally, individual residents and property owners call the District directly to report mosquitoes or to provide information about the locations of standing water that could produce mosquitoes.

Mosquito sources are scattered throughout the District. All properties within the District are within mosquito-flying range of one or more mosquito sources. Alameda County has 22 species of mosquitoes, each with a unique breeding source, and several of which are capable of vectoring diseases to humans and animals.

Mosquito populations are surveyed using a variety of field methods and traps. Surveillance is conducted in a manner based upon an equal spread of resources throughout the District boundaries, focusing on areas of likely sources. Treatment strategies are based upon the results of the surveillance program, and are specifically designed for individual areas. The surveillance traps are located and spread throughout the District in a balanced approach such that the traps measure mosquito levels throughout the District.

Viruses transmitted by mosquitoes are surveyed by testing mosquito vectors, and bird or mammal reservoirs, for WNV, SLE and WEE. The Davis Arbovirus Research and Training Lab at UC Davis or the Mosquito Lab at the District headquarters tests mosquitoes, birds or mammals using quantitative reverse transcription polymerase chain reaction or an immunoassay. The District participates in the statewide dead bird surveillance program for WNV, responding to reports of dead birds from the public and testing these birds deemed appropriate. Various County, State and private laboratories throughout California and elsewhere test humans and horses for WNV. DPH obtains and compiles results from all testing facilities and reports them to the appropriate local mosquito control agencies.

Control: The District's objective is to provide the properties a District-wide level of consistent mosquito control such that all properties would benefit from equivalent reduced levels of mosquitoes. Surveillance and monitoring are provided on a District-wide basis. The District, though, cannot predict where control measures will be applied because the type and location of control depends on the surveillance and monitoring results. However, the control thresholds and objectives are comparable throughout the District.

The District uses several techniques to control mosquito larvae and pupae (immatures), including biological, chemical, and physical control. The District uses the mosquitofish, *Gambusia affinis*, for biological control. These mosquito-eating fish work particularly well during warm months in a variety of permanent water sources. Artificial water sources are stocked at the request of the property resident or in other situations where biological control is judged to be the best action to be taken. Other methods of biological control include the use of mosquito pathogens, parasites and predators.

Chemical control agents employed by the District to control immature mosquitoes include stomach toxins bacterial derived control agents, insect growth regulators (IGR's) and other contact pesticides. Stomach toxins are products of natural bacteria that are commercially manufactured and formulated as bacterial larvicides. The District employs two agents, *Bacillus thuringiensis israelensis* (Bti) and *Bacillus sphaericus* (Bs). The spores of these bacteria can be applied as either a liquid or a granule. The stomach toxin is activated after the spores are eaten by larvae, restricting use of these agents to the feeding stages of larval development. Bti has the advantage of specificity, only affecting mosquitoes and related groups of flies. Bs has the added advantage over Bti of effectively controlling larvae in highly polluted water and sometimes reproducing, extending the duration of its effectiveness. Another product utilized by ACMAD is Spinosad, derived from the fermentation of the naturally occurring soil bacterium, *Saccharopolyspora spinosa*. It causes the excitation of the mosquito nervous system, ultimately leading to paralysis and death. Its action on the target organism is either by contact or by ingestion. This product can be applied in liquid or granular formulations.

The IGR used by the District is methoprene. Methoprene mimics a natural insect hormone that prevents successful development of larvae. It is available as a short-lived liquid and longer-acting granules and briquets. The product is absorbed into the larva, disrupting the hormone system and preventing successful completion of the life cycle. Methoprene must be applied prior to development of fourth instar larvae to ensure effectiveness. This product can be applied in liquid or granular formulation.

Additionally, the District uses surface active agents to control immature mosquitoes. The surface active agent is an oil combined with surfactants. Surface agents are effective against immature mosquitoes when inhaled at the water surface or by physically forming a surface film that drowns the mosquito. Surface active agents have the advantage of killing both larvae and pupae and are used in situations where other materials will not work.

Chemical control agents employed by the District to control adult mosquitoes contain pyrethrin, a natural plant-based insecticide, or pyrethroids, synthetic analogues of pyrethrin. These products provide rapid knockdown and kill of adult mosquitoes.

The District uses physical control as required; its application can temporarily or permanently alter habitats so that they do not produce mosquitoes. Technicians are educated to use physical control when it is appropriate. Examples of physical control include clearing vegetation around pond or stream banks, improving drainage by maintenance and debris removal from channels and waterways, removing water from containers, and providing access for other types of control work. All physical control and source reduction activities are accomplished in a way that does not impact mature trees, threatened or endangered species, or sensitive habitat areas.

Monitoring: For the most part, monitoring is the continuation of surveillance activities. District personnel specifically check treatment sites to be sure that applications were successful. In addition to physically checking the site, traps can be utilized to evaluate the success of the program.

Public Relations, Outreach, and Education

The public health risks of West Nile Virus mosquito-borne diseases create a need for regular and extensive media contacts, outreach and education. This includes making press releases, publishing brochures, responding to requests for interviews from all media, informing other government agencies, and giving presentations. The District participates in a wide variety of special events including Home and Garden shows, the Alameda Country Fair, government information events, “Bug Days” at nature centers, or presentations to garden clubs, city councils, etc.

The District maintains a web site to provide mosquito control and related information on the internet. The District web site address is www.mosquitoes.org. The District has most of its publications on the site, Board of Trustee documents (agendas, minutes, financial, laboratory, and operational reports), specialized technical information (mosquito biology, mosquito-borne diseases, and technical reports), press releases, upcoming events, and additional general information about District services and links to other related web sites.

The District currently interacts professionally at many levels with other agencies. The District is a member of the Mosquito and Vector Control Association of California (MVCAC); employees attend meetings at both the regional and state level. District employees also attend and receive periodic continuing education programs designed to reinforce surveillance and control protocols and learn about new and emerging technologies. The District is a member of the American Mosquito Control Association; District staff participates in national programs relating to mosquito and disease control. The District is also an active member in the California Special Districts Association (CSDA), the Entomological Society of America (ESA), and the Society of Vector Ecologists (SOVE).

Research and Testing

The District cooperates with and conducts research in collaboration with other academic and government agencies located in California (e.g. University of California and California State University). The outcomes of this research presented at scientific conferences and published in scientific journals.

Service Requests

The District responds to service requests within its boundaries. Any property owner, business or resident in the District may contact the District to request mosquito control related service or inspection and a District field technician will respond promptly to the particular property to evaluate the property and situation and to perform appropriate surveillance and control services. The District responds to all service requests in a timely manner, (typically, within 24 hours), regardless of location, within its boundaries.

Estimate of Cost

Figure 1 – Cost Estimate – FY 2022-23

Alameda County Mosquito Abatement District Mosquito and Disease Control Assessment	
Mosquito Control Services and Related Expenditures	
Mosquito Control and Disease Prevention Operations	\$3,509,994
Materials, Utilities and Supplies ¹	\$1,149,526
Capital Expenditures	\$370,000
Contingency	\$46,000
Total Mosquito Control Services and Related Expenditures	\$5,075,520
Total Benefits of Mosquito and Disease Control	\$5,075,520
Single Family Equivalent Units (SFEs)	458,353
Benefit Received per SFE Unit	\$11.07
Less	
Contributions from Other Sources²	
Revenue from property taxes/ other sources	(\$3,929,638)
Total Mosquito & Disease Control Services and Incidentals	\$1,145,883
Budget Allocation to Property	
Total Assessment Budget³	\$1,145,883
Total SFE Units ⁴	458,353
Assessment Rate per SFE⁵	\$2.50

Consolidated ER Notes:

1. Includes assessment administration costs including county collection charges for placement on the annual property tax bills.
2. Contributions from other sources to cover the costs of any general benefits and special benefits not funded by the assessments.
3. The assessment amounts are rounded down to the even penny for purposes of complying with the collection requirements from the County Auditor. Therefore, the total assessment amount for all parcels subject to the assessments may vary slightly from the net amount to be assessed.
4. SFE Units means Single Family Equivalent Benefit Units. See method of assessment in the following Section for further definition.
5. The assessment rate per SFE is the total amount of assessment per Single Family Equivalent benefit unit.

Note: For fiscal year 2022-23, the District has allocated \$280,000 for capital improvements to include the following: exterior & carport painting and lobby display.

Method of Assessment

This section of the Report explains the benefits to be derived from the Services provided for property in the District, and the methodology used to apportion the total assessment to properties within the Mosquito and Disease Control Assessment area.

The Mosquito and Disease Control Assessment area consists of the Assessor Parcels within the Alameda County Mosquito Abatement District.

The method used for apportioning the assessment is based upon the proportional special benefits to be derived by the properties in the District over and above general benefits conferred on real property in the Assessment District. Special benefit is calculated for each parcel in the Assessment District using the following process:

1. Identification of total benefit to the properties derived from the Services
2. Calculation of the proportion of these benefits that are special vs. general
3. Determination of the relative special benefit within different areas within the Assessment District
4. Determination of the relative special benefit per property type and property characteristic
5. Calculation of the specific assessment for each individual parcel based upon special vs. general benefit; location, property type and property characteristics

Discussion of Benefit

In summary, the assessments can only be levied based on the special benefit to property. This benefit is received by property over and above any general benefits. This special benefit is received by property over and above any general benefits from the additional Services. With reference to the engineering requirements for property related assessments, under Proposition 218 an Engineer must determine and prepare a report evaluating the amount of special and general benefit received by property within the Assessment District as a result of the improvements or services provided by a local agency. That special benefit is to be determined in relation to the total cost to that local entity of providing the service and/or improvements.

Proposition 218 as described in Article XIID of the California Constitution has confirmed that assessments must be based on the special benefit to property:

"No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel."

The below benefit factors, when applied to property in the Assessment Area, confer special benefits to property and ultimately improve the safety, utility, functionality and usability of property in the Assessment Area. These are special benefits to property in the Assessment Area in much the same way that storm drainage, sewer service, water service, lighting, sidewalks and paved streets enhance the safety, utility and functionality of each parcel of property served by these improvements, providing them with more utility of use and making them safer and more usable for occupants.

It should also be noted that Proposition 218 included a requirement that existing assessments in effect upon its effective date were required to be confirmed by either a majority vote of registered voters in the Assessment Area, or by weighted majority property owner approval using the new ballot proceeding requirements. However, certain assessments were excluded from these voter approval requirements. Of note is that in California Constitution Article XIII D Section 5(a) this special exemption was granted to assessments for sidewalks, streets, sewers, water, flood control, drainage systems and vector control. The Howard Jarvis Taxpayers Association explained this exemption in their Statement of Drafter's Intent:

"This is the "traditional purposes" exception. These existing assessments do not need property owner approval to continue. However, future assessments for these traditional purposes are covered."³

Therefore, the drafters of Proposition 218 acknowledged that mosquito control assessments were a "traditional" and therefore acknowledged and accepted use.

Since all assessments, existing before or after Proposition 218 must be based on special benefit to property, the drafters of Proposition 218 inherently found that mosquito and disease control services confer special benefit on property. Moreover, the statement of drafter's intent also acknowledges that any new or increased mosquito control assessments after the effective date of Proposition 218 would need to comply with the voter approval requirements it established. This is as an acknowledgement that additional assessments for such "traditional" purposes would be established after Proposition 218 was in effect. Therefore, the drafters of Proposition 218 clearly recognized mosquito and

³ Howard Jarvis Taxpayers Association, "Statement of Drafter's Intent", January 1997.

disease control assessments as a “traditional” use of assessments, acknowledged that new mosquito and disease assessments may be formed after Proposition 218 and inherently were satisfied that mosquito control services confer special benefit to properties.

The Legislature also made a specific determination after Proposition 218 was enacted that mosquito control services constitute a proper subject for special assessment. Health and Safety Code section 2082, which was signed into law in 2002, provides that a district may levy special assessments consistent with the requirements of Article XIII D of the California Constitution to finance mosquito and disease control projects and programs. The intent of the Legislature to allow and authorize benefit assessments for mosquito and disease control services after Proposition 218 is shown in the Assembly and Senate analysis the Mosquito Abatement and Vector Control District Law where it states that the law:

Allows special benefit assessments to finance vector control projects and programs, consistent with Proposition 218.⁴

Therefore the State Legislature unanimously found that mosquito and disease control services are a valuable and important public service that can be funded by benefit assessments. To be funded by assessments, mosquito and disease control services must confer special benefit to property.

Mosquito and Disease Control Is a Special Benefit to Properties

As described below, this Engineer’s Report concludes that mosquito and disease control is a special benefit that provides direct advantages to property in the Assessment District. For example, the assessment provides reduced levels of mosquitoes on property throughout the Assessment District. Moreover, the assessment will reduce the risk of the presence of diseases on property throughout the Assessment District, which is another direct advantage received by property in the Assessment District. Moreover, the assessment funds Services that improve the use of property and reduce the nuisance and harm created by mosquitoes on property throughout the Assessment District. These are tangible and direct special benefits that are received by property throughout the specific area covered by the Assessment.

The following section, Benefit Factors, describes how and why mosquito control services specially benefit properties in the Assessment Area. These benefits are particular and distinct from its effect on property in general or the public at large.

⁴ Senate Bill 1588, Mosquito Abatement and Vector Control District Law, Legislative bill analysis

Benefit Factors

In order to allocate the assessments, the Engineer identified the types of special benefit arising from the aforementioned mosquito and disease control Services and that would be provided to property within the District. The following benefit factors have been established that represent the types of special benefit to parcels resulting from the Services financed with the assessment proceeds. These types of special benefit are as follows:

Reduced mosquito populations on property and as a result, enhanced desirability, utility, usability and functionality of property in the Assessment District.

The assessments provide enhanced services for the control and abatement of nuisance and disease-carrying mosquitoes. These Services will materially reduce the number of mosquitoes on properties throughout the Assessment District. The lower mosquito populations on property in the Assessment District is a direct advantage to property that will serve to increase the desirability and “usability” of property. Clearly, properties are more desirable and usable in areas with lower mosquito populations and with a reduced risk of mosquito-borne disease. This is a special benefit to residential, commercial, agricultural, industrial and other types of properties because all such properties will directly benefit from reduced mosquito populations and properties with lower mosquito populations are more usable, functional and desirable.

Excessive mosquitoes in the area can materially diminish the utility and usability of property. For example, prior to the commencement of mosquito control and abatement services, properties in many areas in the State were considered to be nearly uninhabitable during the times of year when the mosquito populations were high.⁵ The prevention or reduction of such diminished utility and usability of property caused by mosquitoes is a clear and direct advantage and special benefit to property in the Assessment District.

The State Legislature made the following finding on this issue:

“Excess numbers of mosquitoes and other vectors spread diseases of humans, livestock, and wildlife, reduce enjoyment of outdoor living

⁵ Prior to the commencement of modern mosquito control services, areas in the State of California such as the Alameda County, San Mateo Peninsula, Napa County, Lake County and areas in Marin and Sonoma Counties had such high mosquito populations that they were considered to be nearly unlivable during certain times of the year and were largely used for part-time vacation cottages that were occupied primarily during the months when the natural mosquito populations were lower.

spaces, both public and private, reduce property values, hinder outdoor work, reduce livestock productivity; and mosquitoes and other vectors can disperse or be transported long distances from their sources and are, therefore, a health risk and a public nuisance; and professional mosquito and vector control based on scientific research has made great advances in reducing mosquito and vector populations and the diseases they transmit.”⁶

Mosquitoes emerge from sources throughout the Assessment District, and with an average flight range of two miles, mosquitoes from known sources can reach all properties in the Assessment District. These sources include standing water in rural areas, such as marshes, pools, wetlands, ponds, drainage ditches, drainage systems, tree holes and other removable sources such as old tires and containers. The sources of mosquitoes also include numerous locations throughout the urban areas in the Assessment District. These sources include underground drainage systems, containers, unattended swimming pools, leaks in water pipes, tree holes, flower cups in cemeteries, over-watered landscaping and lawns and many other sources. By controlling mosquitoes at known and new sources, the Services will materially reduce mosquito populations on property throughout the Assessment District.

A recently increasing source of mosquitoes is unattended swimming pools:

“Anthropogenic landscape change historically has facilitated outbreaks of pathogens amplified by peridomestic vectors such as Cx. pipiens complex mosquitoes and associated commensals such as house sparrows. The recent widespread downturn in the housing market and increase in adjustable rate mortgages have combined to force a dramatic increase in home foreclosures and abandoned homes and produced urban landscapes dotted with an expanded number of new mosquito habitats. These new larval habitats may have contributed to the unexpected early season increase in WNV cases in Bakersfield during 2007 and subsequently have enabled invasion of urban areas by the highly competent rural vector Cx. tarsalis. These factors can increase the spectrum of competent avian hosts, the efficiency of enzootic amplification, and the risk for urban epidemics.”⁷

⁶ Assembly Concurrent Resolution 52, chaptered April 1, 2003

⁷ Riesen William K. (2008). Delinquent Mortgages, Neglected Swimming Pools, and West Nile Virus, California. Emerging Infectious Diseases. Vol. 14(11).

Increased safety of property in the Assessment District.

The Assessments result in improved year-round proactive Services to control and abate mosquitoes that otherwise would occupy properties throughout the Assessment District. Mosquitoes are transmitters of diseases, so the reduction of mosquito populations makes property safer for use and enjoyment. In absence of the assessments, these Services would not be provided, so the Services funded by the assessments make properties in the Assessment District safer, which is a distinct special benefit to property in the Assessment District.⁸ This is not a general benefit to property in the Assessment District or the public at large because the Services are tangible mosquito and disease control services that are provided directly to the properties in the Assessment District and the Services are over and above what otherwise would be provided by the District or any other agency.

This finding was confirmed in 2003 by the State Legislature:

“Mosquitoes and other vectors, including but not limited to, ticks, Africanized honey bees, rats, fleas, and flies, continue to be a source of human suffering, illness, death, and a public nuisance in California and around the world. Adequately funded mosquito and vector control, monitoring and public awareness programs are the best way to prevent outbreaks of West Nile Virus and other diseases borne by mosquitoes and other vectors.”⁹

Also, the Legislature, in Health and Safety Code Section 2001, finds that:

“The protection of Californians and their communities against the discomforts and economic effects of vectorborne diseases is an essential public service that is vital to public health, safety, and welfare.”

Reductions in the risk of new diseases and infections on property in the Assessment District.

Mosquitoes have proven to be a major contributor to the spread of new diseases such as West Nile Virus, among others. A highly mobile population combined with migratory bird patterns can introduce new mosquito-borne diseases into previously unexposed areas.

⁸ By reducing the risk of disease and increasing the safety of property, the Services will materially increase the usefulness and desirability of certain properties in the Assessment Area.

⁹ Assembly Concurrent Resolution 52, chaptered April 1, 2003

“Vector-borne diseases (including a number that are mosquito-borne) are a major public health problem internationally. In the United States, dengue and malaria are frequently brought back from tropical and subtropical countries by travelers or migrant laborers, and autochthonous transmission of malaria and dengue occasionally occurs. In 1998, 90 confirmed cases of dengue and 1,611 cases of malaria were reported in the USA and dengue transmission has occurred in Texas.”¹⁰

“During 2004, 40 states and the District of Columbia (DC) have reported 2,313 cases of human WNV illness to CDC through ArboNET. Of these, 737 (32%) cases were reported in California, 390 (17%) in Arizona, and 276 (12%) in Colorado. A total of 1,339 (59%) of the 2,282 cases for which such data were available occurred in males; the median age of patients was 52 years (range: 1 month--99 years). Date of illness onset ranged from April 23 to November 4; a total of 79 cases were fatal.”¹¹ (According to the Centers for Disease Control and Prevention on January 19, 2004, a total of 2,470 human cases and 88 human fatalities from WNV have been confirmed).

A study of the effect of aerial spraying conducted by the Sacramento-Yolo Mosquito and Vector Control District (SYMVCD) to control a West Nile Virus disease outbreak found that the SYMVCD’s mosquito control efforts materially decreased the risk of new diseases in the treated areas:

After spraying, infection rates decreased from 8.2 (95% CI 3.1–18.0) to 4.3 (95% CI 0.3–20.3) per 1,000 females in the spray area and increased from 2.0 (95% CI 0.1–9.7) to 8.7 (95% CI 3.3–18.9) per 1,000 females in the untreated area. Furthermore, no additional positive pools were detected in the northern treatment area during the remainder of the year, whereas positive pools were detected in the untreated area until the end of September (D.-E.A Elnaiem, unpub. data). These independent lines of evidence corroborate our conclusion that actions taken by SYMVCD were effective in disrupting the WNV transmission cycle and reducing human illness and potential deaths associated with WNV.¹²

¹⁰ Rose, Robert. (2001). Pesticides and Public Health: Integrated Methods of Mosquito Management. Emerging Infectious Diseases. Vol. 7(1); 17-23.

¹¹ Center for Disease Control. (2004). West Nile Virus Activity --- United States, November 9--16, 2004. Morbidity and Mortality Weekly Report. 53(45); 1071-1072.

¹² Carney, Ryan. (2008), Efficiency of Aerial Spraying of Mosquito Adulticide in Reducing the Incidence of West Nile Virus, California, 2005. Emerging Infectious Diseases, Vol 14(5)

The Services funded by the assessments help prevent on a year-round basis the presence of mosquito-borne diseases on property in the Assessment District. This is another tangible and direct special benefit to property in the Assessment District that would not be received in absence of the assessments.

Protection of economic activity on property in the Assessment District.

As demonstrated by the SARS outbreak in China and outbreaks of Avian Flu, outbreaks of pathogens can materially and negatively impact economic activity in the affected area. Such outbreaks and other public health threats can have a drastic negative effect on tourism, business and residential activities in the affected area. The assessments help to prevent the likelihood of such outbreaks in the District.

Mosquitoes hinder, annoy and harm residents, guests, visitors, farm workers, and employees. A mosquito-borne disease outbreak and other related public health threats would have a drastic negative effect on agricultural, business and residential activities in the Assessment District.

The economic impact of diseases is well documented. According to a study prepared for the Centers for Disease Control and Prevention, economic losses due to the transmission of West Nile Virus in Louisiana was estimated to cost over \$20 million over approximately one year:

The estimated cost of the Louisiana epidemic was \$20.1 million from June 2002 to February 2003, including a \$10.9 million cost of illness (\$4.4 million medical and \$6.5 million nonmedical costs) and a \$9.2 million cost of public health response. These data indicate a substantial short-term cost of the WNV disease epidemic in Louisiana.¹³

Moreover, a study conducted in 1996-97 of La Crosse Encephalitis (LACE), a human illness caused by a mosquito-transmitted virus, found a lifetime cost per human case at \$48,000 to \$3,000,000 and found that the disease significantly impacted lifespans of those who were infected. Following is a quote from the study which references the importance and value of active mosquito control services of the type that would be funded by the assessments:

¹³ Zohrabian A, Meltzer MI, Ratard R, Billah K, Molinari NA, Roy K, et al. West Nile Virus economic impact, Louisiana, 2002. Emerging Infectious Disease, 2004 Oct. Available from <http://www.cdc.gov/ncidod/EID/vol10no10/03-0925.htm>

*The socioeconomic burden resulting from LACE is substantial, which highlights the importance of the illness in western North Carolina, as well as the need for active surveillance, reporting, and prevention programs for the infection.*¹⁴

The Services funded by the assessments help prevent the likelihood of such outbreaks on property in the Assessment District and will reduce the harm to economic activity on property caused by existing mosquito populations. This is another direct advantage received by property in the Assessment District that would not be received in absence of the assessments.

Protection of Assessment District's agriculture, tourism, and business industries.

The agriculture, tourism and business industries will benefit from reduced levels of harmful or nuisance mosquitoes. Conversely, any outbreaks of emerging mosquito-borne pathogens such as West Nile Virus could also materially negatively affect these industries. Diseases transmitted by mosquitoes can adversely impact business and recreational functions.

*A study prepared for the United States Department of Agriculture in 2003 found that over 1,400 horses died from West Nile Virus in Colorado and Nebraska and that these fatal disease cases created over \$1.2 million in costs and lost revenues. In addition, horse owners in these two states spent over \$2.75 million to vaccinate their horses for this disease. The study states that "Clearly, WNV has had a marked impact on the Colorado and Nebraska equine industry."*¹⁵

*Pesticides for mosquito control impart economic benefits to agriculture in general. Anecdotal reports from farmers and ranchers indicate that cattle, if left unprotected, can be exsanguinated by mosquitoes, especially in Florida and other southeast coastal areas. Dairy cattle produce less milk when bitten frequently by mosquitoes*¹⁶

¹⁴ Utz, J. Todd, Apperson, Charles S., Maccormack, J. Newton, Salyers, Martha, Dietz, E. Jacquelin, Mcpherson, J. Todd, Economic And Social Impacts Of La Crosse Encephalitis In Western North Carolina, Am J Trop Med Hyg 2003 69: 509-518

¹⁵ S. Geiser, A. Seitzinger, P. Salazar, J. Traub-Dargatz, P. Morley, M. Salman, D. Wilmot, D. Steffen, W. Cunningham, Economic Impact of West Nile Virus on the Colorado and Nebraska Equine Industries: 2002, April 2003, Available from http://www.aphis.usda.gov/vs/ceah/cnahs/nahms/equine/wnv2002_CO_NB.pdf

¹⁶ Jennings, Allen. (2001). USDA Letter to EPA on Fenthion IRED. United States Department of Agriculture, Office of Pest Management Policy. March 8, 2001.

The assessments serve to protect the businesses and industries and the employees and residents that benefit from these businesses and industries. This is a direct advantage and special benefit to property in the Assessment District.

Reduced risk of nuisance and liability on property in the Assessment District

In addition to mosquito-borne disease risks, uncontrolled mosquito populations create a nuisance and health risk (e.g. allergic reactions, secondary infections from mosquito bites) for the occupants of property in the Assessment District. Properties in the Assessment District, therefore, benefit from the reduced nuisance factor that is created by the Services. Agricultural and rangeland properties also benefit from the reduced nuisance factor and harm to livestock and employees from lower mosquito populations.

Agricultural, range, golf course, cemetery, open space and other such lands in the Assessment District contain large areas of mosquito habitat and are therefore a significant source of mosquito populations. In addition, residential and business properties in the Assessment District can also contain significant sources.¹⁷ It is conceivable that sources of mosquitoes could be held liable for the transmission of diseases or other harm. According to CA Health and Safety Code 2061:

2061 (a) Whenever a public nuisance exists on any property within a district or on any property that is located outside the district from which vectors may enter the district, the board of trustees may notify the owner of the property of the existence of the public nuisance.

(b) The notice required by subdivision (a) shall do all of the following:

(1) State that a public nuisance exists on the property, describe the public nuisance, and describe the location of the public nuisance on the property.

(2) Direct the owner of the property to abate the nuisance within a specified time.

(3) Direct the owner of the property to take any necessary action within a specified time to prevent the recurrence of the public nuisance.

(4) Inform the owner of the property that the failure to comply with the requirements of the notice within the specified times may result in the district taking the necessary actions, and that the owner shall be liable for paying the costs of the district's actions.

(5) Inform the owner of the property that the failure to comply with the requirements of the notice within the specified times may result in the

¹⁷ Sources of mosquitoes on residential, business, agricultural, range and other types of properties include removable sources such as containers that hold standing water.

imposition of civil penalties of up to one thousand dollars (\$1,000) per day for each day that the public nuisance continues after the specified times.
(6) Inform the owner of the property that before complying with the requirements of the notice, the owner may appear at a hearing of the board of trustees at a time and place stated in the notice.

The Services serve to protect the businesses and industries in the Assessment District. This is a direct advantage and a special benefit to property in the Assessment District.

Improved marketability of property.

As described previously, the Services specially benefit properties in the Assessment District by making them more useable, livable and functional. The Services also make properties in the Assessment District more desirable, and more desirable properties also benefit from improved marketability. This is another tangible and direct special benefit to property which will not be enjoyed in absence of the Services.¹⁸

Benefit Finding

In summary, the special benefits described in this Report and the expansion of Services in the Assessment District directly benefit and protect the real properties in the Abatement District in excess of the assessments for these properties. Therefore, the assessment engineer finds that the cumulative special benefits to property from the Services are reasonably equal to or greater than the annual assessment amount per benefit unit.

General Versus Special Benefit

Article XIII C of the California Constitution requires any local agency proposing to increase or impose a benefit assessment to “separate the general benefits from the special benefits conferred on a parcel.” The rationale for separating special and general benefits is to ensure that property owners subject to the benefit assessment are not paying for general benefits. The assessment can fund the special benefits to property in the Assessment Area but cannot fund any general benefits. Accordingly, a separate estimate of the special and general benefit is given in this section.

¹⁸ If one were to compare two hypothetical properties with similar characteristics, the property with lower mosquito infestation and reduced risk of mosquito-borne disease will clearly be more desirable, marketable, and usable.

In other words:

Total Benefit	=	General Benefit	+	Special Benefit
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There is no widely-accepted or statutory formula for general benefit from mosquito and disease control services. General benefits are benefits from improvements or services that are not special in nature, are not “particular and distinct” and are not “over and above” benefits received by other properties. General benefits are conferred to properties located “in the district,¹⁹” but outside the narrowly-drawn Assessment District and to “the public at large.” SVTA vs. SCCOSA provides some clarification by indicating that general benefits provide “an indirect, derivative advantage” and are not necessarily proximate to the improvements and services funded by the assessments.

A formula to estimate the general benefit is listed below:

General Benefit	=	Benefit to Real Property Outside the Assessment District	+	Benefit to Real Property Inside the Assessment District that is Indirect and Derivative	+	Benefit to the Public at Large
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¹⁹ SVTA vs. SCCOSA explains as follows:
 OSA observes that Proposition 218’s definition of “special benefit” presents a paradox when considered with its definition of “district.” Section 2, subdivision (i) defines a “special benefit” as “a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large.” (Art. XIII D, § 2, subd. (i), italics added.) Section 2, subdivision (d) defines “district” as “an area determined by an agency to contains all parcels which will receive a special benefit from a proposed public improvement or property-related service.” (Art. XIII D, § 2, subd. (d), italics added.) In a well-drawn district — limited to only parcels receiving special benefits from the improvement — every parcel within that district receives a shared special benefit. Under section 2, subdivision (i), these benefits can be construed as being general benefits since they are not “particular and distinct” and are not “over and above” the benefits received by other properties “located in the district.”

Special benefit, on the other hand, is defined in the state constitution as “a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large.” The *SVTA v. SCCOSA* decision indicates that a special benefit is conferred to a property if it “receives a direct advantage from the improvement (e.g., proximity to a park).” In this assessment, the overwhelming proportion of the benefits conferred to property is special, since the advantages from the mosquito and disease control/protection funded by the Assessments are directly received by the properties in the Assessment District and are only minimally received by property outside the Assessment District or the public at large.

Proposition 218 twice uses the phrase “over and above” general benefits in describing special benefit. (Art. XIII D, sections 2(i) & 4(f).) There currently are some mosquito and disease control related services being provided to the Assessment District area. Consequently, there currently are some mosquito control related benefits being provided to the Assessment District and any new and extended service provided by the District would be over and above this baseline. Arguably, all of the Services funded by the assessment therefore are a special benefit because the additional Services would particularly and distinctly benefit and protect the Assessment District over and above the previous baseline benefits and service.

Nevertheless, arguably some of the Services would benefit the public at large and properties outside the Assessment District. In this report, the general benefit is conservatively estimated and described, and then budgeted so that it is funded by sources other than the assessment.

In the 2009 Dahms case, the court upheld an assessment that was 100% special benefit on the rationale that the services funded by the assessments were directly provided to property in the assessment district. Similar to the assessments in Pomona that were validated by Dahms, the Assessments described in this Engineer’s Report fund mosquito and disease control services directly provided to property in the assessment area. Moreover, as noted in this Report, the Services directly reduce mosquito and vector populations on all property in the assessment area. Therefore, Dahms establishes a basis for minimal or zero general benefits from the Assessments. However, in this report, the general benefit is more conservatively estimated and described, and then budgeted so that it is funded by sources other than the assessment.

Calculating General Benefit

Without this assessment the District would lack the funds to extend the additional Services to the Assessment District. The only additional service that is being provided is the vector control program assessment-funded Services. Consistent with footnote 8 of SVTA v. SCCOSA, and for the reasons described above, the District has determined that all parcels in the Assessment District receive a shared direct advantage and special benefit from the Services. The Services directly and particularly serve and benefit each parcel, and are not a mere indirect, derivative advantage. As explained above, Proposition 218 relies on the concept of “over and above” in distinguishing special benefits from general benefits. As applied to an assessment proceeding concurrent with the annexation this concept means that all mosquito and disease control services, which provide direct advantage to property in the Assessment District, are over and above the baseline and therefore are special.

Nevertheless, the Services provide a degree of general benefit, in addition to the predominant special benefit. This section provides a conservative measure of the general benefits from the Assessments.

Benefit to Property Outside the District

Properties within the Assessment District receive almost all of the special benefits from the Services because the Services funded by the Assessments are provided directly to protect property within the Assessment District from mosquitoes and mosquito-borne diseases. However, properties adjacent to, but just outside of, the District boundaries may receive some benefit from the Services in the form of reduced mosquito populations on property outside the Assessment District. Since this benefit, is conferred to properties outside the district boundaries, it contributes to the overall general benefit calculation and will not be funded by the assessment.

A measure of this general benefit is the proportion of Services that would affect properties outside of the Assessment District. Each year, the District will provide some of its Services in areas near the boundaries of the Assessment District. By abating mosquito populations near the borders of the Assessment District, the Services could provide benefits in the form of reduced mosquito populations and reduced risk of disease transmission to properties outside the Assessment District. If mosquitoes were not controlled inside the Assessment District, more of them would fly from the Assessment District. Therefore, control of mosquitoes within the Assessment District provides some benefit to properties outside the Assessment District but within the normal flight range

of mosquitoes, in the form of reduced mosquito populations and reduced mosquito-borne disease transmission. This is a measure of the general benefits to property outside the Assessment District because this is a benefit from the Services that is not specially conferred upon property in the assessment area.

The mosquito potential outside the Assessment District is based on studies of mosquito dispersion concentrations. Mosquitoes can travel up to two miles, on average, so this destination range is used. Based on studies of mosquito destinations, relative to parcels in the Assessment District average concentration of mosquitoes from the Assessment District on properties within two miles of the Assessment District is calculated to be 6%.²⁰ This relative mosquito population reduction factor within the destination range is combined with the number of parcels outside the Assessment District and within the destination range to measure this general benefit and is calculated as follows:

CRITERIA:

Mosquitoes may fly up to 2 miles from their breeding source.

38,786 parcels within 2 miles of, but outside of the District, MAY receive some mosquito and disease protection benefit

6% portion of relative benefit that is received of the
436,350 Parcels in the District

Calculations:

Total Benefit = 38,786 parcels * 6% = 2,327 parcels equivalents

Percentage of overall parcel equivalents = $2,327 / 436,350 = 0.53\%$

Therefore, for the overall benefits provided by the Services to the Assessment District, it is determined that 0.53% of the benefits would be received by the parcels within two miles of the Assessment District boundaries. Recognizing that this calculation is an approximation, this benefit will be rounded up to 1.0%.

²⁰ Tietze, Noor S., Stephenson, Mike F., Sidhom, Nader T. and Binding, Paul L., "Mark-Recapture of *Culex Erythrothorax* in Santa Cruz County, California", Journal of the American Mosquito Control Association, 19(2):134-138, 2003.

Benefit to Property *Inside* the District that is *Indirect and Derivative*

The “indirect and derivative” benefit to property within the Assessment District is particularly difficult to calculate. As explained above, all benefit within the Assessment District is special because the mosquito and disease control services in the Assessment District would provide direct service and protection that is clearly “over and above” and “particular and distinct” when compared with the level of such protection under current conditions. Further the properties are within the Assessment District boundaries and this Engineer’s Report demonstrates the direct benefits received by individual properties from mosquito and disease control services.

In determining the Assessment District area, the District was careful to limit it to an area of parcels that will directly receive the Services. All parcels directly benefit from the surveillance, monitoring and treatment provided on an equivalent basis throughout the Assessment District in order to maintain the same improved level of protection against mosquitoes and reduced mosquito populations throughout the area. The surveillance and monitoring sites are spread on a balanced basis throughout the area. Mosquito control and treatment is provided as needed throughout the area based on the

surveillance and monitoring results. The shared special benefit - reduced mosquito levels and reduced presence of mosquito-borne diseases - is received on an equivalent basis by all parcels in the Assessment District. Furthermore, all parcels in the Assessment District directly benefit from the ability to request service from the District and to have a District field technician promptly respond directly to the parcel and address the owner’s or resident’s service need.

The SVTA vs. SCCOSA decision indicates that the fact that a benefit is conferred throughout the Assessment District area does not make the benefit general rather than special, so long as the Assessment district is narrowly drawn and limited to the parcels directly receiving shared special benefits from the service. This concept is particularly applicable in situations involving a landowner-approved assessment-funded extension of a local government service to benefit lands previously not receiving that particular service. The District therefore concludes that, other than the small general benefit to properties outside the Assessment District (discussed above) and to the public at large (discussed below), all of the benefits of the Services to the parcels within the Assessment District are special benefits and it is not possible or appropriate to separate any general benefits from the benefits conferred on parcels in the Assessment District.

Benefit To The Public At Large

With the type and scope of Services provided to the Assessment District, it is very difficult to calculate and quantify the scope of the general benefit conferred on the public at large. Because the Services directly serve and benefit all of the property in the Assessment Area, any general benefit conferred on the public at large is small. Nevertheless, there is some indirect general benefit to the public at large.

The public at large uses the public highways, streets and sidewalks, and when traveling in and through the Assessment Area they will benefit from the Services. A fair and appropriate measure of the general benefit to the public at large therefore is the amount of highway, street and sidewalk area within the Assessment Area relative to the overall land area. An analysis of maps of the Assessment Area shows that approximately 6% of the land area in the Assessment Area is covered by highways, streets and sidewalks. This 6% therefore is a fair and appropriate measure of the general benefit to the public at large within the Assessment Area

Summary of General Benefits

Using a sum of the measures of general benefit for the public at large and land outside the Assessment Area, we find that approximately 7.0% of the benefits conferred by the Mosquito and Disease Control Assessment may be general in nature and should be funded by sources other than the Assessment.

General Benefit Calculation

	1.0%	(Outside the Assessment District)
+	0.0%	(Property within the Assessment District)
+	<u>6.0%</u>	(Public at Large)
=	7.0%	(Total General Benefit)

Although this analysis supports the findings that 7.0% of the assessment may provide general benefit only, this number is increased by the Assessment Engineer to 10% to conservatively ensure that no assessment revenue is used to support general benefit. This additional amount allocated to general benefit also covers general benefit to parcels in the Assessment Area if it is later determined that there is some general benefit conferred on those parcels.

The Mosquito and Disease Control Assessment total mosquito abatement, disease control, and capital improvement is \$5,075,520. Of this total budget amount, the District will contribute 77.42% of the total budget from sources other than the Mosquito and Disease Control Assessment. This contribution offsets any general benefits from the Mosquito and Disease Control Assessment Services.

Zones of Benefit

The District's mosquito and disease control programs, projects and Services that are funded by the Mosquito and Disease Control Assessment are provided in all areas within the District. Parcels of similar type in the District would receive similar mosquito abatement benefits on a per parcel and land area basis. Therefore, zones of benefit are not justified.

The SVTA vs. SCCOSA decision indicates:

In a well-drawn district — limited to only parcels receiving special benefits from the improvement — every parcel within that district receives a shared special benefit. Under section 2, subdivision (i), these benefits can be construed as being general benefits since they are not “particular and distinct” and are not “over and above” the benefits received by other properties “located in the district.”

We do not believe that the voters intended to invalidate an assessment district that is narrowly drawn to include only properties directly benefiting from an improvement. Indeed, the ballot materials reflect otherwise. Thus, if an assessment district is narrowly drawn, the fact that a benefit is conferred throughout the district does not make it general rather than special. In that circumstance, the characterization of a benefit may depend on whether the parcel receives a direct advantage from the improvement (e.g., proximity to park) or receives an indirect, derivative advantage resulting from the overall public benefits of the improvement (e.g., general enhancement of the district's property values).

In the Assessment Area, the advantage that each parcel receives from the Services is direct and the boundary for the Service Area is narrowly drawn so the Service Area includes parcels that receive the similar levels of benefit from the Services. Therefore, the even spread of assessment for similar properties in the narrowly drawn Service Area within the Program is indeed consistent with the OSA decision.

Method of Assessment

As previously discussed, the Assessments fund enhanced, comprehensive, year-round mosquito control, disease surveillance and control Services that will reduce mosquito populations on property and will clearly confer special benefits to properties in the Assessment Area. These benefits can also partially be measured by the occupants on property in the Improvement District because such parcel population density is a measure of the relative benefit a parcel receives from the Improvements. Therefore, the apportionment of benefit is partially based the population density of parcels. It should be noted that many other types of “traditional” assessments also use parcel population densities to apportion the assessments. For example, the assessments for sewer systems, roads and water systems are typically allocated based on the population density of the parcels assessed.

Moreover, assessments have a long history of use in California and are in large part based on the principle that any benefits from a service or improvement funded by assessments that is enjoyed by tenants and other non-property owners ultimately is conferred directly to the underlying property.²¹

With regard to benefits and source locations, the assessment engineer determined that since mosquitoes readily fly from their breeding locations to all properties in their flight range and since mosquitoes are actually attracted to properties occupied by people or animals, the benefits from mosquito control extend beyond the source locations to all properties that would be a “destination” for mosquitoes. In other words, the control and abatement of mosquito populations ultimately confers benefits to all properties that are a destination of mosquitoes, rather than just those that are sources of mosquitoes.

²¹ For example, in *Federal Construction Co. v. Ensign* (1922) 59 Cal.App. 200 at 211, the appellate court determined that a sewer system specially benefited property even though the direct benefit was to the people who used the sewers: “Practically every inhabitant of a city either is the owner of the land on which he resides or on which he pursues his vocation, or he is the tenant of the owner, or is the agent or servant of such owner or of such tenant. And since it is the inhabitants who make by far the greater use of a city’s sewer system, it is to them, as lot owners or as tenants, or as the servants or agents of such lot owners or tenants, that the advantages of actual use will redound. But this advantage of use means that, in the final analysis, it is the lot owners themselves who will be especially benefited in a financial sense.”

Although some primary mosquito sources may be located outside of residential areas, residential properties can and do generate their own, often significant, populations of mosquitoes and other organisms. For example, storm water catch basins in residential areas are a common source of mosquitoes. Since the typical flight range for a female mosquito, on average is 2 miles, most homes in the Assessment Area are within the flight zone of many mosquito sources. Moreover, there are many other common residential sources of mosquitoes, such as miscellaneous backyard containers, neglected swimming pools, leaking water pipes and tree holes. Clearly, there is a potential for mosquito sources on virtually all types of property. More importantly, all properties in the Assessment Area are within the destination range of mosquitoes and most properties are actually within the destination range of multiple mosquito source locations.

Because the Services are provided throughout the Assessment District with the same level of control objective in each zone, mosquitoes can rapidly and readily fly from their breeding locations to other properties over a large area, and because there are current or potential breeding sources literally everywhere in the Assessment District, the Assessment Engineer determined that all similar properties in the Assessment District have generally equivalent mosquito “destination” potential and, therefore, receive equivalent levels of benefit throughout the Assessment District.

In the process of determining the appropriate method of assessment, the Engineer considered various alternatives. For example, a fixed assessment amount per parcel for all residential improved property was considered but was determined to be inappropriate because agricultural lands, commercial property and other property also receive benefits from the assessments. Likewise, an assessment exclusively for agricultural land was considered but deemed inappropriate because other types of property, such as residential and commercial, also receive the special benefit factors described previously.

A fixed or flat assessment was deemed to be inappropriate because larger residential, commercial and industrial properties receive a higher degree of benefit than other similarly used properties that are significantly smaller. (For two properties used for commercial purposes, there is clearly a higher benefit provided to a property that covers several acres in comparison to a smaller commercial property that is on a 0.25 acre site. The larger property generally has a larger coverage area and higher usage by employees, customers, tourists and guests that would benefit from reduced mosquito populations, as well as the reduced threat from diseases carried by mosquitoes. This benefit ultimately flows to the property.) Larger commercial, industrial and apartment parcels, therefore, receive an increased benefit from the assessments.

In conclusion, the assessment engineer determined that the appropriate method of assessment apportionment should be based on the type and use of property, the relative size of the property its relative population and usage potential, and its destination potential for mosquitoes. This method is further described below.

Assessment Apportionment

The special benefits derived from the Mosquito and Disease Control Assessment are conferred on property and are not based on a specific property owner's occupancy of property or the property owner's demographic status, such as age or number of dependents. However, it is ultimately people who do or could use the property and who enjoy the special benefits described above. The opportunity to use and enjoy property within the Assessment District without the excessive nuisance, diminished "livability" or the potential health hazards brought by mosquitoes and the diseases they carry is a special benefit to properties in the Assessment District. This benefit can be in part measured by the number of people who potentially live on, work at, visit or otherwise use the property, because people ultimately determine the value of the benefits by choosing to live, work and/or recreate in the area, and by choosing to purchase property in the area.²²

In order to apportion the cost of the Services to property, each property in the Assessment District is assigned a relative special benefit factor. This process involves determining the relative benefit received by each property in relation to a single family home, or, in other words, on the basis of Single Family Equivalents (SFE). This SFE methodology is commonly used to distribute assessments in proportion to estimated special benefit. For the purposes of this Engineer's Report, all properties are designated a SFE value, which is each property's relative benefit in relation to a "benchmark" parcel in the Assessment District. The "benchmark" property is the single family detached dwelling on a parcel of less than one acre. This benchmark parcel is assigned one Single Family Equivalent benefit unit or one SFE.

The special benefit conferred upon a specific parcel is derived as a sum function of the applicable special benefit type (such as improved safety (i.e. disease risk reduction) on a parcel for a mosquito assessment) and a parcel-specific attributes (such as the number of residents living on the parcel for a mosquito assessment) which supports that special

²² It should be noted that the benefits conferred upon property are related to the average number of people who could potentially live on, work at or otherwise could use a property, not how the property is currently used by the present owner.

benefit. Calculated special benefit increases accordingly with an increase in the product of special benefit type and supportive parcel-specific attribute.

The calculation of the special benefit per parcel is summarized in the following equation:

$$\text{Special Benefit}_{(\text{per parcel})} = \sum f(\text{Special Benefits, Property Specific Attributes}^1)_{(\text{per parcel})}$$

1. Such as use, property type, and size.

Residential Properties

Certain residential properties in the Abatement District that contain a single residential dwelling unit and are on a lot of less than or equal to one acre are assigned one Single Family Equivalent or 1.0 SFE. Traditional houses, zero-lot line houses, and town homes are included in this category of single family residential property.

Single family residential properties in excess of one acre receive additional benefit relative to a single-family home on up to one acre, because the larger parcels provide more area for mosquito sources and the mosquito and disease control Services. Therefore, such larger parcels receive additional benefits relative to a single-family home on less than one acre and are assigned 1.0 SFE for the residential unit and an additional rate equal to the agricultural rate described below of 0.0021 SFE per one-fourth acre of land area in excess of one acre. Mobile home parcels on a separate parcel and in excess of one acre also receive this additional acreage rate.

Other types of properties with residential units, such as agricultural properties, are assigned the residential SFE rates for the dwelling units on the property and are assigned additional SFE benefit units for the agricultural-use land area on the property.

Properties with more than one residential unit are designated as multi-family residential properties. These properties, along with condominiums, benefit from the Services in proportion to the number of dwelling units that occupy each property, the average number of people who reside in each property and the average size of each property in relation to a single-family home in the District. This Report analyzed Alameda County population density factors from the 2000 US Census as well as average dwelling unit size for each property type. After determining the Population Density Factor and Square Footage Factor for each property type, an SFE rate is generated for each residential property structure, as indicated in Figure 2 below.

The SFE factor of 0.46 per dwelling unit for multifamily residential properties applies to such properties with two to four units (duplex, triplex, fourplex). Properties in excess of 5 units typically offer on-site management, monitoring and other control services that tend to offset some of the benefits provided by the Mosquito Abatement District. Therefore, the benefit for properties in excess of 5 units is determined to be .32 SFE per unit for the first 20 units and 0.10 SFE per each additional unit in excess of 20 dwelling units.

Figure 2– Residential Assessment Factors

Type of Residential Property	Total Population	Occupied Households	Persons per Household	Pop. Density Equivalent	SqFt Factor	Proposed Rate
Single Family Residential	866,596	284,662	3.04	1.00	1.00	1.00
Condominium	103,373	37,417	2.76	0.91	0.66	0.60
Duplex, Triplex, Fourplex	144,626	57,815	2.50	0.82	0.56	0.46
Multi-Family Residential (5+ Units)	286,957	136,173	2.11	0.69	0.47	0.32
Mobile Home on Separate Lot	13,464	6,660	2.02	0.66	0.41	0.27

Source: 2000 Census, Alameda County, and property dwelling size information from the Alameda County Assessor data and other sources.

Commercial/Industrial Properties

Commercial and industrial properties receive relatively lower levels of benefit in comparison to a single-family home because they are generally open and operated for more limited times and employees of indoor businesses tend to spend less time outdoors. Since the hours of operation and the potential exposure to mosquitoes are measures of relative benefit, commercial and industrial properties receive lower relative levels of benefit. Therefore, commercial and industrial properties are determined to receive 0.50 SFE of benefit per one-quarter acre (10,890 square feet) of land area.

The SFE values for various commercial and industrial land uses are further defined by using average employee densities because the special benefit factors described previously are also related to the average number of people who work at commercial/industrial properties.

To determine employee density factors, this Report utilizes the findings from the San Diego County Association of Governments Traffic Generators Study (the “SANDAG Study”) because these findings were approved by the State Legislature which determined the SANDAG Study to be a good representation of the average number of employees per acre of land area for commercial and industrial properties. As determined by the SANDAG

Study, the average number of employees per acre for commercial and industrial property is 24. As presented in Figure 3, the SFE factors for other types of businesses are determined relative to their typical employee density in relation to the average of 24 employees per acre of commercial property.

Self-storage and golf course property benefit factors are similarly based on average usage densities. Figure 3 below lists the benefit assessment factors for such business properties.

Figure 3 – Commercial/Industrial Benefit Assessment Factors

Type of Commercial/ Industrial Land Use	Average Employees Per Acre ¹	SFE Units per Fraction Acre ²	SFE Units per Acre After 5
Commercial	24	0.500	0.500
Office	68	1.420	1.420
Shopping Center	24	0.500	0.500
Industrial	24	0.500	0.500

1. Source: San Diego Association of Governments Traffic Generators Study, University of California, Davis and other studies and sources.

2. The SFE factors for commercial and industrial parcels indicated above are applied to each fourth acre of building area or portion thereof. (Therefore, the SFE rate for any assessable parcel with 10,890 square feet or less in these categories is the SFE Units listed above.)

Agricultural, Rangeland, and Cemetery Properties

Utilizing research and agricultural employment reports from UC Davis and the California Employment Development Department and other sources, this Report calculated an average usage density of 0.05 people per acre for agriculture property, 0.01 for rangelands and timber and .10 for cemeteries. Since these properties typically are a source of mosquitoes and/or are typically closest to other sources of mosquitoes, it is reasonable to determine that the benefit to these properties is twice the usage density ratio of commercial and industrial properties. The SFE factors per 0.25 acres of land area are shown in the following Figure 4 below.

Figure 4 – Other Land Benefit Assessment Factors

<i>Other Types of Land Use</i>	<i>Average Employees Per Acre ¹</i>	<i>SFE Units per 1/4 Acre ²</i>
Self-Storage or Parking Lot	1.00	0.021
Wineries	12.00	0.250
Golf Course	3.00	0.063
Cemeteries	0.10	0.050
Agriculture / Vineyards	0.05	0.0021
Timberland / Dry Rangeland	0.01	0.00042

1. Source: San Diego Association of Governments Traffic Generators Study, University of California, Davis and other studies and sources.

2. The SFE factors for commercial and industrial parcels indicated above are applied to each fourth acre of land area or portion thereof. (Therefore, the minimum assessment for any assessable parcel in these categories is the SFE Units listed herein.)

Other Properties

Article XIIID stipulates that publicly owned properties must be assessed unless those properties are reasonably determined to receive no special benefit from the assessment. All properties that are specially benefited are assessed. Publicly owned property that is used for purposes similar to private residential, commercial, industrial or institutional uses is benefited and assessed at the same rate as such privately owned property.

Other public properties such as watershed parcels, parks, open space parcels are determined to, on average, receive similar benefits as a single-family home. Therefore, such parcels are assessed an SFE benefit factor of 1. Miscellaneous, small and other parcels such as roads, right-of-way parcels, and common areas typically do not generate significant numbers of employees, residents, customers or guests and have limited economic value. These miscellaneous parcels receive minimal benefit from the services and are assessed an SFE benefit factor of 0.

Church parcels, institutional properties, and property used for educational purposes typically generate employees on a less consistent basis than other non-residential parcels. Many of these properties with higher population factors provide on-site management, monitoring and other control services that tend to offset some of the benefits provided by the District. Therefore, these parcels are determined to, on average, receive similar benefits as a single-family home. Therefore, such parcels are assessed an SFE benefit factor of 1.

Miscellaneous, small and other parcels such as roads, right-of-way parcels, and common areas typically do not generate significant numbers of employees, residents, customers or guests and have limited economic value. These miscellaneous parcels receive minimal benefit from the Services and are assessed an SFE benefit factor of 0.

Duration of Assessment

It is proposed that the Assessment be levied for fiscal year 2022-23 and continued every year thereafter, so long as mosquitoes remain in existence and the Alameda County Mosquito Abatement District requires funding from the Assessment for its Services in the District. As noted previously, if the Assessment and the duration of the Assessment are approved by property owners in an assessment ballot proceeding, the Assessment can continue to be levied annually after the Alameda County Mosquito Abatement District Board of Trustees approves an annually updated Engineer's Report, budget for the Assessment, Services to be provided, and other specifics of the Assessment. In addition, the District Board of Trustees must hold an annual public hearing to continue the Assessment.

Appeals and Interpretation

Any property owner who feels that the assessment levied on the subject property is in error as a result of incorrect information being used to apply the foregoing method of assessment, may file a written appeal with the Manager of the Alameda County Mosquito Abatement District or his or her designee. Any such appeal is limited to correction of an assessment during the then current fiscal year or, if before July 1, the upcoming fiscal year. Upon the filing of any such appeal, the General Manager or his or her designee will promptly review the appeal and any information provided by the property owner. If the General Manager or his or her designee finds that the assessment should be modified, the appropriate changes shall be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with Alameda County for collection, the General Manager or his or her designee is authorized to refund to the property owner the amount of any approved reduction. Any dispute over the decision of the General Manager, or his or her designee, shall be referred to the District Board of Trustees. The decision of the District Board of Trustees shall be final.

Assessment

WHEREAS, the Alameda County Mosquito Abatement District Board of Trustees contracted with the undersigned Engineer of Work to prepare and file a report presenting an estimate of costs of Services, a diagram for the benefit assessment area, an assessment of the estimated costs of Services, and the special and general benefits conferred thereby upon all assessable parcels within the Alameda County Mosquito Abatement District - Mosquito and Disease Control Assessment;

NOW, THEREFORE, the undersigned, by virtue of the power vested in me under Article XIID of the California Constitution, the Government Code and the Health and Safety Code and the order of the Alameda County Mosquito Abatement District Board of Trustees, hereby make the following determination of an assessment to cover the portion of the estimated cost of the Services, and the costs and expenses incidental thereto to be paid by the Mosquito and Disease Control Assessment.

The District has evaluated and estimated the costs of extending and providing the Services to the Assessment District. The estimated costs are summarized in Figure 1 and detailed in Figure 5, below.

The amount to be paid for the Services and the expenses incidental thereto, to be paid by the Alameda County Mosquito Abatement District for fiscal year 2022-23 is generally as follows:

Figure 5– Summary Cost Estimate – FY 2022-23

Mosquito Abatement & Disease Control Services	\$3,509,994
Materials, Utilities and Supplies	\$1,149,526
Capital Equipment and Fixed Assets	\$370,000
Contingency	\$46,000
Total Mosquito Control Services & Expenditures	\$5,075,520
Less Contributions from Other Sources:	(\$3,929,638)
Net Amount To Assessments	\$1,145,883
General Contribution to Total Mosquito Control Services & Expenditures	77.42%

An Assessment Diagram is hereto attached and made a part hereof showing the exterior boundaries of the assessment area. The distinctive number of each parcel or lot of land in the Mosquito and Disease Control Assessment is its Assessor Parcel Number appearing on the Assessment Roll.

I do hereby determine and apportion the net amount of the cost and expenses of the Services, including the costs and expenses incidental thereto, upon the parcels and lots of land within the Mosquito and Disease Control Assessment, in accordance with the special benefits to be received by each parcel or lot, from the Services, and more particularly set forth in this Engineer's Report.

The assessment determination is made upon the parcels or lots of land within the assessment area in proportion to the special benefits to be received by the parcels or lots of land, from the Services.

The assessment is subject to an annual increase tied to the Consumer Price Index-U for the San Francisco Bay Area as of December of each succeeding year (the "CPI"), with a maximum annual increase not to exceed 3%. Any change in the CPI in excess of 3% shall be cumulatively reserved as the "Unused CPI" and shall be used to increase the maximum authorized assessment rate in years in which the CPI is less than 3%. The maximum authorized assessment rate is equal to the maximum assessment rate in the first fiscal year the assessment was levied adjusted annually by the minimum of 1) 3% or 2) the change in the CPI plus any Unused CPI as described above.

The change in the CPI from December 2020 to December 2021 was 4.244%. Therefore, the maximum assessment rate for fiscal year 2022-23 is the maximum rate for fiscal year 2021-22 (\$6.89) plus 3% was used to increase the maximum authorized assessment rate. Consequently, the maximum authorized Assessment rate for fiscal year 2022-23 is \$7.09 per single-family equivalent benefit unit. The estimate of cost and budget in this Engineer's Report proposes assessments for fiscal year 2022-23 at the rate of \$2.50, which is below the maximum authorized assessment rate.

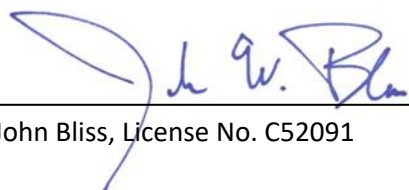
Each parcel or lot of land is described in the Assessment Roll by reference to its parcel number as shown on the Assessor's Maps of the County of Alameda for the fiscal year 2022-23. For a more particular description of the property, reference is hereby made to the deeds and maps on file and of record in the office of the County Assessor of the County of Alameda.

I hereby place opposite the Assessor Parcel Number for each parcel or lot within the Assessment Roll, the proposed amount of the assessment for the fiscal year 2022-23 for each parcel or lot of land within the Alameda County Mosquito Abatement District- Mosquito and Disease Control Assessment.²³

Dated: May 4, 2022



Engineer of Work

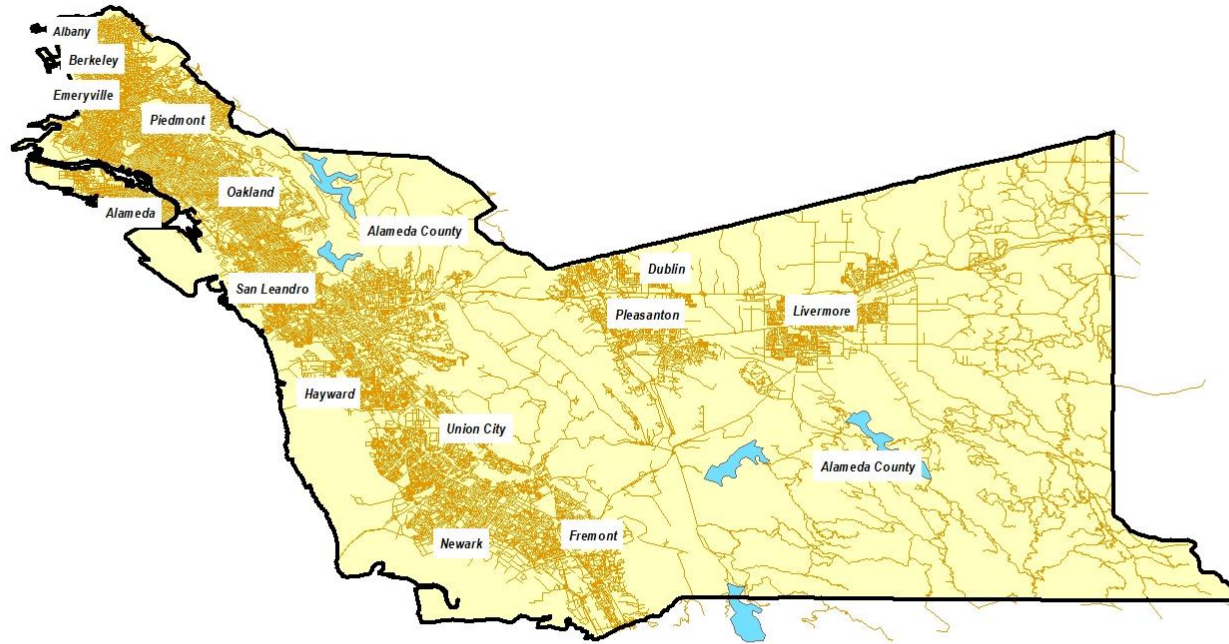
By  _____
John Bliss, License No. C52091

²³ Each parcel has a uniquely calculated assessment based on the estimated level of special benefit to the property as determined in accordance with this Engineer's Report.

Assessment Diagram

The Alameda County Mosquito Abatement District, Mosquito and Disease Control Assessment area includes all properties within the boundaries of the Alameda County Mosquito Abatement District.

The boundaries of the Mosquito and Disease Control Assessment Area are displayed on the following Assessment Diagram.



Note:
 REFERENCE IS HEREBY MADE TO THE MAPS AND DEEDS
 OF RECORD IN THE OFFICE OF THE ASSESSOR OF THE
 COUNTY OF ALAMEDA FOR A DETAILED DESCRIPTION OF
 THE LINES AND DIMENSIONS OF ANY PARCELS SHOWN
 HEREIN. THOSE MAPS SHALL GOVERN FOR ALL DETAILS
 CONCERNING THE LINES AND DIMENSIONS OF SUCH PARCELS.
 EACH PARCEL IS IDENTIFIED IN SAID MAPS BY ITS
 DISTINCTIVE ASSESSOR'S PARCEL NUMBER.

SCI Consulting Group
 4745 Mangles Blvd.
 Fairfield, CA 94534

**ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT
 MOSQUITO AND DISEASE CONTROL ASSESSMENT DIAGRAM**

Assessment Roll

Reference is hereby made to the Assessment Roll in and for the assessment proceedings on file in the office of the Alameda County Mosquito Abatement District, as the Assessment Roll is too voluminous to be bound with this Report.

RESOLUTION NO. 1101-1

A RESOLUTION INTENTION TO CONTINUE ASSESSMENTS FOR FISCAL YEAR 2022-23, PRELIMINARILY APPROVING THE ENGINEER'S REPORT, AND PROVIDING FOR NOTICE OF HEARING FOR THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT MOSQUITO AND DISEASE CONTROL ASSESSMENT

WHEREAS, on May 14th, 2008 by its Resolution No. 937-1, the Board of Trustees of the Alameda County Mosquito Abatement District (the "Board") authorized the levy of assessments for the Mosquito and Disease Control Assessment (the "Assessment") pursuant to the provisions of the Health and Safety Code section 2080 et seq. and Article XIID of the California Constitution; and

WHEREAS, such mosquito and disease control services provide tangible health benefits, reduced nuisance benefits and other special benefits to the public and properties within the areas of such services; and

WHEREAS, the purpose of the Assessment is for mosquito control projects and programs including projects, programs, public improvements and services intended to provide for the surveillance, prevention, abatement and control of mosquitoes and the diseases they carry throughout its boundaries ("Services"); and

WHEREAS, the Alameda County Mosquito Abatement District ("the District") is authorized, pursuant to the authority provided in Health and Safety Code Section 2082 and Article XIID of the California Constitution, to levy assessments for mosquito and disease control services; and

WHEREAS, the Assessment was authorized by an assessment ballot proceeding conducted in 2008 and approved by 70.19% of the weighted ballots returned by property owners, and such assessments were levied by the Board by Resolution No. 937-1, passed on May 14, 2008;

WHEREAS, an annual adjustment to the Assessment rate equal to the change in the Consumer Price Index-U for the San Francisco Bay Area as of December of each succeeding year (the "CPI"), with a maximum annual adjustment not to exceed 3%, was also authorized by the assessment ballot proceeding conducted in 2008;

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the Alameda County Mosquito Abatement District that:

1. SCI Consulting Group, the Engineer of Work, has prepared an Engineer's Report in accordance with Article XIID of the California Constitution and Section 2082, et. seq., of the Health and Safety Code (the "Report"). The Report has been made, filed with the secretary of the board and duly considered by the Board and is hereby deemed sufficient and preliminarily approved. The Report shall stand as the Engineer's Report for all subsequent proceedings under and pursuant to the foregoing resolution.
2. It is the intention of this Board to levy and collect the continued assessments for the Mosquito and Disease Control Assessment for fiscal year 2022-23 for the proposed projects and services set forth in the Report. Within the Service Area, the proposed projects, services and programs are generally described as surveillance, disease prevention, abatement, and control of mosquitoes within the District boundaries. Such mosquito control and disease prevention projects and programs include, but are not limited to, source reduction, biological control, larvicide applications, adulticide applications, disease monitoring, public education, reporting, accountability, research and interagency cooperative activities, as well as capital costs, maintenance, and operation expenses and incidental expenses (collectively "Services"). The cost of these Services also includes capital costs comprised of equipment, capital improvements and facilities necessary and incidental to the District's mosquito and disease control program.

3. The change in the CPI from December 2020 to December 2021 was 4.244%. Therefore, the maximum assessment rate for fiscal year 2022-23 is the maximum rate for fiscal year 2021-22 (\$6.89) plus 3% was used to increase the maximum authorized assessment rate. Consequently, the maximum authorized Assessment rate for fiscal year 2022-23 is \$7.09 per single-family equivalent benefit unit. The estimate of cost and budget in this Engineer's Report proposes assessments for fiscal year 2022-23 at the rate of \$2.50, which is below the maximum authorized assessment rate.
4. The estimated fiscal year 2022-23 cost of providing the Services is \$1,145,883. This cost results in a proposed assessment rate for fiscal year 2022-23 of TWO DOLLARS AND FIFTY CENTS (\$2.50) per single-family equivalent benefit unit. Reference is hereby made to the Report for a full and detailed description of the proposed assessments upon assessable lots and parcels of land.
5. Notice is hereby given that on June 8, 202022, at the hour of 5:00 p.m. at the Alameda County Mosquito Abatement District office located at 23187 Connecticut Street, Hayward, California; the Board will hold a public hearing to consider the ordering of the Services, and the levy of the continued assessments for fiscal year 2022-23..Residents may access meetings remotely, by Telephone: Listen to the meeting live by calling Zoom at (669) 900-6833 Enter the Meeting ID# 861 7425 0179followed by the pound (#) key.
Computer: Watch the live streaming of the meeting from a computer by navigating to o <https://us02web.zoom.us/j/86174250179> or Mobile: Log in through the Zoom mobile app on a smartphone and enter Meeting ID# 861 7425 0179.
6. The clerk of the board shall cause a notice of the hearing to be given by publishing a notice, at least ten (10) days prior to the date of the hearing above specified, in a newspaper circulated in the District.

PASSED and ADOPTED by the Board of Trustees of the Alameda County Mosquito Abatement District, State of California on May 11, 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

President, Board of Trustees, Alameda County Mosquito
Abatement District

ATTEST:

Secretary of the Board of Trustees, Alameda County
Mosquito Abatement District

PUBLIC
AGENCY
RETIREMENT
SERVICES

PARS

TRUSTED SOLUTIONS. LASTING RESULTS.



ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

PARS 115 Trust – Pension Rate Stabilization Program Plan Client Review

May 11, 2022

CONTACTS



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Vice President, Portfolio Manager
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Anthony Armas, CEBS
Client Services Coordinator
(800) 540-6369 x148
aarmas@pars.org

PARS 115 TRUST TEAM

Trust Administrator & Consultant



- Serves as record-keeper, consultant, and central point of contact
- Sub-trust accounting
- Coordinates all agency services
- Monitors plan compliance (IRS/GASB/State Government Code)
- Processes contributions/disbursements
- Hands-on, dedicated support teams

38	2,000+	1,000+	490+	500K+	\$6.3B
Years of Experience (1984-2022)	Plans under Administration	Public Agency Clients	115 Trust Clients	Plan Participants	Assets under Administration

Trustee



- 5th largest commercial bank and one of the nation's largest trustees for Section 115 trusts
- Safeguard plan assets
- Oversight protection as plan fiduciary
- Custodian of assets

159	\$9.0T
Years of Experience (1863-2022)	Assets under Trust Custody

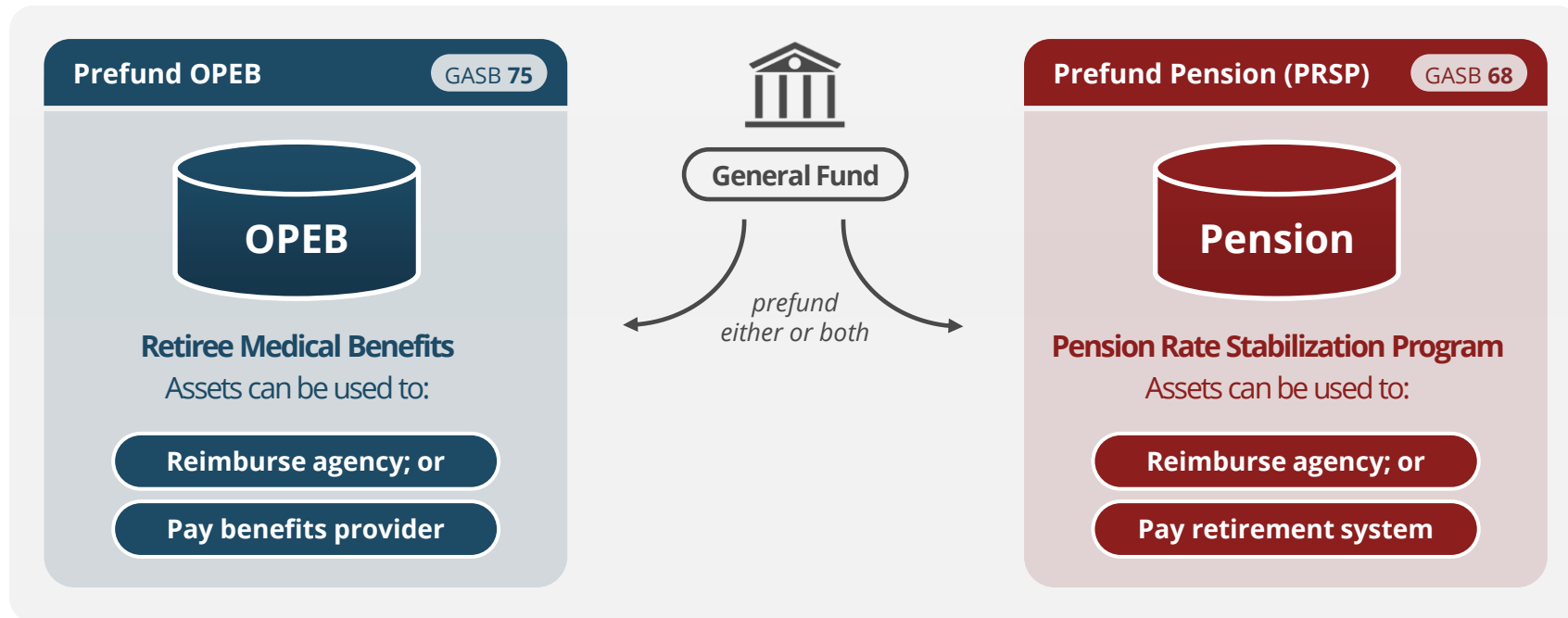
Investment Manager



- Investment sub-advisor to trustee U.S. Bank
- Investment policy assistance
- Uses open architecture
- Active and passive platform options
- Customized portfolios (with minimum asset level)

103	\$20.2B
Years of Experience (1919-2022)	Assets under Management & Advisement

PARS IRS-APPROVED SECTION 115 TRUST



Subaccounts
 OPEB and pension assets are individually sub-accounted, and can be divided by dept., bargaining group, or cost center.

Financial Stability
 Assets in the PARS Section 115 Combination Trust can be used to address unfunded liabilities.

Flexible Investing
 Allows separate investment strategies for OPEB and pension subaccounts.

Anytime Access
 Trust funds are available anytime; OPEB for OPEB and pension for pension.

Economies-of-Scale
 OPEB and pension assets aggregate and reach lower fees on tiered schedule sooner – saving money!

No Set Up Cost or Minimums
 No set-up costs, no minimum annual contribution amounts, and no fees until assets are added.

SUMMARY OF AGENCY'S PENSION PLAN

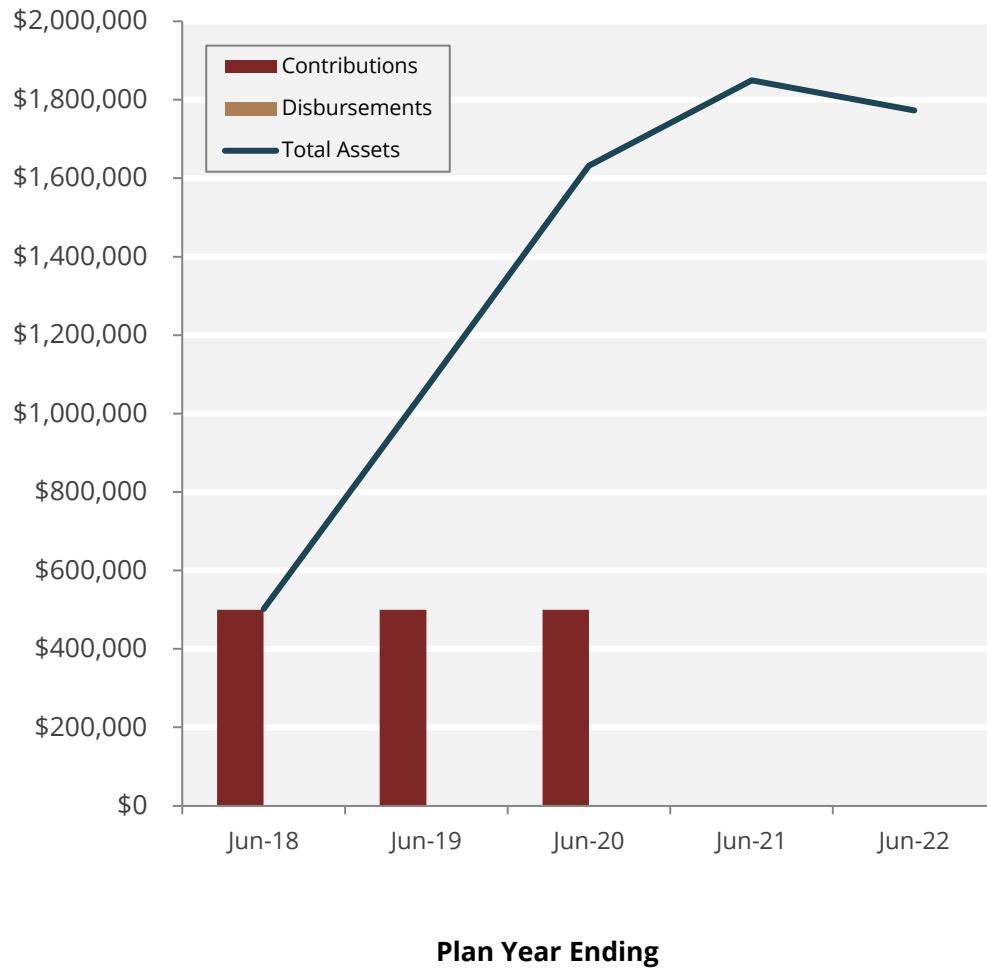
Plan Type:	IRC Section 115 Irrevocable Exclusive Benefit Trust
Trustee Approach:	Discretionary
Plan Effective Date:	December 13, 2017
Plan Administrator:	General Manager
Current Investment Strategy:	Moderately Conservative HighMark Plus (Active) Strategy; Pooled Account

AS OF MARCH 31, 2022:

Initial Contribution:	February 2018: \$500,000
Additional Contributions:	\$1,000,000
Total Contributions:	\$1,500,000
Disbursements:	\$0
Total Investment Earnings:	\$301,834
Account Balance:	\$1,772,594

SUMMARY OF AGENCY'S PENSION PLAN

HISTORY OF CONTRIBUTIONS, DISBURSEMENTS, AND TOTAL ASSETS AS OF MARCH 31, 2022:



Year	Contributions	Disbursements	Total Assets
Jun-18*	\$500,000	\$0	\$502,036
Jun-19	\$500,000	\$0	\$1,064,536
Jun-20	\$500,000	\$0	\$1,631,978
Jun-21	\$0	\$0	\$1,849,337
Jun-22**	\$0	\$0	\$1,772,594

*Plan Year Ending June 2018 is based on 5 months of activity.
 **Plan Year Ending June 2022 is based on 9 months of activity.



PENSION FUNDING STATUS

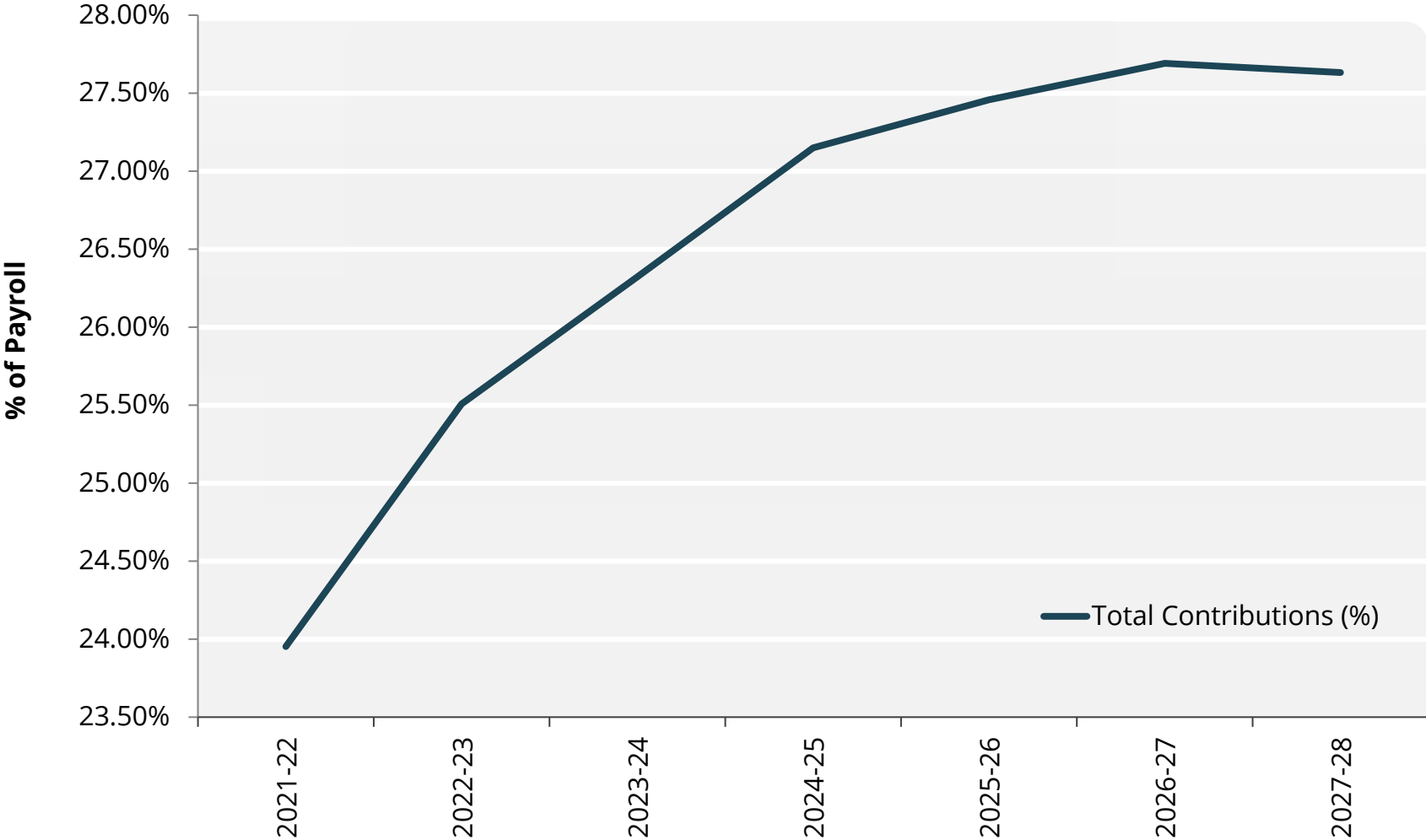
As of June 30, 2020, Alameda County Mosquito Abatement District's CalPERS pension plan is funded as follows*:

Combined Miscellaneous Groups	Valuation as of June 30, 2019	Valuation as of June 30, 2020	Change
Actuarial Liability	\$14.4 M	\$15.0 M	4.3% ↑
Assets	\$10.8 M	\$11.0 M	2.3% ↑
Unfunded Liability	\$3.6 M	\$4.0 M	10.3% ↑
Funded Ratio	74.8%	73.3%	1.9% ↓
Employer Contribution Amount	\$414.6 K (FY 20-21)	\$469.4 K (FY 21-22)	13.2% ↑
Employer Contribution Amount – Projected*	---	\$648.4 K (FY 27-28)	38.1% ↑

* Data through 2027-28 from Agency's latest CalPERS actuarial valuation.

PROJECTED EMPLOYER CONTRIBUTIONS (MISC.)

Projected misc. contributions increase from \$469.4K to \$468.4K* (38.1% ↑)



* Data through 2027-28 from Agency's latest CalPERS actuarial valuation.

HIGHMARK CAPITAL MANAGEMENT INVESTMENT REVIEW

Alameda County MAD

March 31, 2022

**Presented by
Randall Yurchak, CFA**

DISCUSSION HIGHLIGHTS – Alameda County MAD

Investment objective – Moderately Conservative HighMark Plus (Active)

Asset Allocation:

- Allocation: 29.1% stocks (20-40% range), 67.8% bonds (50-80% range), 3.1% cash (0-20% range)

Performance *(as of 03-31-2022, Net fund fees, gross investment management fees):*

- 3-month: -5.06%
- 1-year: -.37%
- 3-year: 5.82%
- Inception to date: (3/18): 5.24%

- Bonds: Higher inflation expectations and tightening monetary policy led to significant weakening in bonds and for 1Q22 - *one of lowest returning quarters for bonds in history.*
- Stocks: Equities weakened as sharply tighter monetary policies impacted sentiment and growth expectations.
 - Domestic markets: Small Cap outperformed as value manager significantly exceeded benchmark.
 - International: International underperformed domestic as Ukraine/Russia conflict weighed on growth in the EU.

12-Month Changes

- Stocks: modest underweight
- Bonds: modest overweight
- Cash: slight underweight

Outlook 2022

- Corporate profit growth expected to continue with S&P 500 earnings +8% FY22 est. vs. +65% FY21 est.
- Volatility likely to persist with flattening yield curve, higher inflation near-term, faster-than-expected Fed tightening, and Russia/Ukraine
- Potential tax law changes may cause volatility
- Geopolitical uncertainty: China, Middle East, Ukraine/Russia

Selected Period Performance
PARS/PRSP MODERATELY CONSERVATIVE HM
Account 6746050104
Period Ending: 3/31/2022

	Year to Date (3 Months)	1 Year	3 Years	Since Inception (49 Months)
Cash Equivalents	.01	.02	.63	.97
<i>Lipper Money Market Funds Index</i>	<i>.01</i>	<i>.01</i>	<i>.61</i>	<i>.93</i>
Total Fixed Income	-5.51	-3.67	1.88	2.40
<i>Bloomberg US Aggregate Bd Index</i>	<i>-5.93</i>	<i>-4.15</i>	<i>1.69</i>	<i>2.49</i>
Total Equities	-4.81	6.01	14.50	11.26
Large Cap Funds	-4.72	12.22	18.21	14.34
<i>S&P 500 Composite Index</i>	<i>-4.60</i>	<i>15.65</i>	<i>18.92</i>	<i>15.40</i>
Mid Cap Funds	-5.59	6.96	14.73	12.29
<i>Russell Midcap Index</i>	<i>-5.68</i>	<i>6.92</i>	<i>14.89</i>	<i>12.47</i>
Small Cap Funds	-3.59	-3.11	12.53	11.12
<i>Russell 2000 Index</i>	<i>-7.53</i>	<i>-5.79</i>	<i>11.74</i>	<i>9.38</i>
International Equities	-5.95	-4.94	7.91	3.78
<i>MSCI EAFE Index</i>	<i>-5.91</i>	<i>1.16</i>	<i>7.78</i>	<i>4.22</i>
<i>MSCI EM Free Index</i>	<i>-6.97</i>	<i>-11.37</i>	<i>4.94</i>	<i>1.20</i>
REIT Funds	-6.01	21.39	10.87	13.88
<i>Wilshire REIT Index</i>	<i>-3.87</i>	<i>29.14</i>	<i>11.94</i>	<i>14.57</i>
Total Managed Portfolio	-5.06	-.37	5.82	5.24

Performance Inception: 03/01/2018

Returns are gross of account level investment advisory fees and net of any fees, including fees to manage mutual fund or exchange traded fund holdings. Returns for periods over one year are annualized. The information presented has been obtained from sources believed to be accurate and reliable. Past performance is not indicative of future returns. Securities are not FDIC insured, have no bank guarantee, and may lose value.

Asset Allocation – Alameda County MAD

As of March 31, 2022

Current Asset Allocation		Investment Vehicle	
Equity		Range: 20%-40%	29.09%
Large Cap Core	COFYX	Columbia Contrarian Core Inst3	2.91%
	VGIAX	Vanguard Growth & Income Adm	5.44%
Large Cap Value	DODGX	Dodge & Cox Stock Fund	2.51%
	IVE	iShares S&P 500 Value ETF	1.19%
Large Cap Growth	HNACX	Harbor Capital Appreciation Retirement	1.66%
	PRUFX	T. Rowe Price Growth Stock Fund I	1.66%
Mid Cap Core	IWR	iShares Russell Mid-Cap ETF	3.00%
Small Cap Value	UBVFX	Undiscovered Managers Behavioral Val R6	2.23%
Small Cap Growth	VBK	Vanguard Small-Cap Growth ETF	2.28%
International Core	DFALX	DFA Large Cap International I	1.78%
International Value	DODFX	Dodge & Cox International Stock Fund	0.68%
International Growth	MGRDX	MFS® International Growth R6	0.69%
Emerging Markets	HHHFX	Hartford Schrodgers Emerging Mkts Eq F	2.01%
Real Estate	VNQ	Vanguard Real Estate ETF	1.06%
Fixed Income		Range: 50%-80%	67.85%
Short-Term	VFSUX	Vanguard Short-Term Investment-Grade Adm	13.32%
Intermediate-Term	DBLFX	DoubleLine Core Fixed Income I	17.77%
	PTRX	PIMCO Total Return Instl Fund	17.82%
	PTRQX	Prudential Total Return Bond Q	17.89%
High Yield	PHIYX	PIMCO High Yield Instl	1.04%
Cash		Range: 0%-20%	3.06%
	FGZXX	First American Government Oblig Z	3.06%
TOTAL			100.00%

ALAMEDA COUNTY MAD

For Period Ending March 31, 2022

LARGE CAP EQUITY FUNDS							
Fund Name	1-Month Return	3-Month Return	Year-to-Date	1-Year Return	3-Year Return	5-Year Return	10-Year Return
Columbia Contrarian Core Inst3	2.73	-2.96	-2.96	12.72	19.88	15.41	14.63
Vanguard Growth & Income Adm	3.67	-3.90	-3.90	16.04	18.83	15.78	14.65
Harbor Capital Appreciation Retirement	3.72	-13.59	-13.59	3.49	20.59	20.32	16.25
iShares S&P 500 Value ETF	2.95	-0.21	-0.21	12.39	13.93	10.96	11.71
Dodge & Cox Stock	1.53	1.01	1.01	14.85	17.30	13.27	14.25
T. Rowe Price Growth Stock I	0.56	-15.01	-15.01	-0.42	16.53	16.96	15.28
S&P 500 TR USD	3.71	-4.60	-4.60	15.65	18.92	15.99	14.64
MID CAP EQUITY FUNDS							
iShares Russell Mid-Cap ETF	2.54	-5.72	-5.72	6.72	14.70	12.46	12.68
Russell Mid Cap Index	2.56	-5.68	-5.68	6.92	14.89	12.62	12.85
SMALL CAP EQUITY FUNDS							
Undiscovered Managers Behavioral Val R6	-0.55	3.53	3.53	13.48	16.01	10.91	12.65
Vanguard Small-Cap Growth ETF	1.22	-11.95	-11.95	-9.25	11.84	12.64	11.92
Russell 2000 TR USD	1.24	-7.53	-7.53	-5.79	11.74	9.74	11.04
INTERNATIONAL EQUITY FUNDS							
Dodge & Cox International Stock	0.84	-0.59	-0.59	2.99	8.01	5.17	6.24
DFA Large Cap International I	0.46	-4.93	-4.93	2.53	8.60	7.23	6.36
MFS International Growth R6	0.78	-8.13	-8.13	0.02	9.67	10.69	7.69
MSCI EAFE NR USD	0.64	-5.91	-5.91	1.16	7.78	6.72	6.27
Hartford Schrodgers Emerging Mkts Eq F	-3.66	-8.76	-8.76	-16.23	5.92	6.85	4.18
MSCI EM NR USD	-2.26	-6.97	-6.97	-11.37	4.94	5.98	3.36
REAL ESTATE FUNDS							
Vanguard Real Estate ETF	6.32	-5.97	-5.97	21.45	11.40	9.65	9.69

Source: SEI Investments, Morningstar Investments

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ALAMEDA COUNTY MAD

For Period Ending March 31, 2022

BOND FUNDS							
Fund Name	1-Month Return	3-Month Return	Year-to- Date	1-Year Return	3-Year Return	5-Year Return	10-Year Return
DoubleLine Core Fixed Income I	-2.36	-4.88	-4.88	-3.19	1.64	2.22	2.87
PIMCO Total Return Instl	-3.43	-6.19	-6.19	-4.02	2.18	2.50	2.73
PGIM Total Return Bond R6	-2.43	-6.51	-6.51	-3.29	2.20	2.94	3.50
Vanguard Short-Term Investment-Grade Adm	-1.86	-3.80	-3.80	-3.67	1.49	1.78	1.96
Bloomberg US Agg Bond TR USD	-2.78	-5.93	-5.93	-4.15	1.69	2.14	2.24
PIMCO High Yield Instl	-0.89	-4.70	-4.70	-0.91	3.77	4.12	5.14
ICE BofA US High Yield Mstr II Index	-0.93	-4.51	-4.51	-0.29	4.40	4.56	5.74

Source: SEI Investments, Morningstar Investments

Returns less than one year are not annualized. Past performance is no indication of future results. The information presented has been obtained from sources believed to be accurate and reliable. Securities are not FDIC insured, have no bank guarantee and may lose value.

Alameda County Mosquito Abatement Dist.
Check Register
For the Period From Apr 1, 2022 to Apr 15, 2022

Filter Criteria includes: Report order is by Date.

Check #	Date	Payee	Amount
3082	4/13/22	Adapco	13,404.34
3083	4/13/22	Airgas	847.59
3084	4/13/22	All Bay Electric	874.19
3085	4/13/22	AT&T	70.39
3086	4/13/22	Bay Central Printing	771.93
3088	4/13/22	Cintas	402.58
3089	4/13/22	CompTIA	3,700.00
3090	4/13/22	Friends of Peralta Hacienda Historical	125.00
3091	4/13/22	Grainger	457.93
3092	4/13/22	Hayward Water System	572.71
3093	4/13/22	Industrial Park Landscape Maintenance	243.00
3094	4/13/22	KBA Docusys	528.97
3095	4/13/22	Mar-Len Supply, Inc.	125.00
3096	4/13/22	Oakland Zoo	50.00
3097	4/13/22	PFM Asset Management LLC	1,714.09
3098	4/13/22	PG&E	546.82
3099	4/13/22	Spark Creative Design	600.00
3100	4/13/22	Techniclean	190.52
3101	4/13/22	U.S Bank Corporate Payment System	14,568.09
3102	4/13/22	Veseris	8,035.81
3103	4/13/22	Voya Institutional Trust Company	179.93
3104	4/13/22	California Department of Public Health	2,941.00
ACH	4/13/22	Alameda County Mosquito Abatement Dist (Payroll)	79,044.12
ACH	4/13/22	CalPERS Retirement	15,201.20
ACH	4/13/22	CalPERS 457	2,723.86
Total Expenditures - April 15, 2022			147,919.07

Voided check:
3087

Alameda County Mosquito Abatement Dist.

Check Register

For the Period From Apr 16, 2022 to Apr 30, 2022

Filter Criteria includes: Report order is by Date.

Check #	Date	Payee	Amount
3106	4/27/22	Airgas	467.91
3107	4/27/22	Bay Alarm	8,373.88
3108	4/27/22	Cintas	469.69
3109	4/27/22	Clarke	1,859.72
3110	4/27/22	Hentschke, Eric Armin	100.00
3111	4/27/22	Jarvis, Fay, & Gibson, LLP	432.00
3112	4/27/22	Mar-Len Supply, Inc.	905.69
3113	4/27/22	PC Professional	2,886.00
3114	4/27/22	PG&E	201.55
3115	4/27/22	Regional Government	2,192.64
3116	4/27/22	Target Specialty Products	20,442.23
3117	4/27/22	Testa, Julie	100.00
3118	4/27/22	VCJPA	245.16
3119	4/27/22	Verizon	511.80
3120	4/27/22	Voya Institutional Trust Company	179.93
3121	4/27/22	VSP	693.24
3122	4/27/22	WEX Bank	6,287.22
3123	4/27/22	Young, George	100.00
ACH	4/27/22	Alameda County Mosquito Abatement Dist (Payroll)	81,915.87
ACH	4/27/22	Aguilar, Victor	100.00
ACH	4/27/22	Beatty, Robert .P	100.00
ACH	4/27/22	Bhat, Subrahmanya Y	100.00
ACH	4/27/22	CalPERS Health	38,744.41
ACH	4/27/22	CalPERS Retirement	15,201.20
ACH	4/27/22	CalPERS 457	3,223.86
ACH	4/27/22	Cox, Steven	100.00
ACH	4/27/22	Jordan, Preston	100.00
ACH	4/27/22	Kumagai, Shawn	100.00
ACH	4/27/22	Marquez, Elisa	100.00
ACH	4/27/22	Roache, Cathy J Pinkerton.	100.00
ACH	4/27/22	Savage, Tyler	100.00
ACH	4/27/22	Welch, Courtney	100.00
Total Expenditures - April 30, 2022			186,534.00

Voided check:

3105

Alameda County Mosquito Abatement District
Income Statement
April 30, 2022. (10 of 12 mth, 83%)

REVENUES	Actual 2019/20	Actual 2020/21	Current Month	Year to Date 2021/22	Budget 2021/22	Actual vs Budget
Total Revenue	\$ 4,986,220.87	\$ 5,150,753.15	\$ 2,026,083.23	\$ 5,161,258.59	\$ 4,765,864.00	108%

EXPENDITURES	Actual 2019/20	Actual 2020/21 ¹	Current Month ²	Year to Date 2021/22	Budget 2021/22	Actual vs Budget
Salaries	\$ 1,970,928.74	\$ 2,029,103.97	\$ 177,483.34	\$ 1,757,322.84	\$2,236,282	79%
CalPERS Retirement	\$ 378,832.61	\$ 423,110.21	\$ 17,826.04	\$ 435,250.26	\$473,950	92%
Medicare & Social Security	\$ 29,651.04	\$ 27,866.82	\$ 2,360.59	\$ 24,543.51	\$33,062	74%
Fringe Benefits	\$ 465,466.14	\$ 502,898.39	\$ 39,437.65	\$ 434,411.02	\$579,596	75%
Total Salaries, Retirement, & Benefits	\$ 2,844,878.53	\$ 2,982,979.39	\$237,108	\$2,651,528	\$3,322,890	80%
Clothing and personal supplies (purchased)	\$ 6,213.94	\$ 4,859.20	\$ 69.60	\$ 4,847.65	\$10,000	48%
Laundry service and supplies (rented)	\$ 10,648.44	\$ 9,124.98	\$ 872.27	\$ 8,089.03	\$15,000	54%
Utilities	\$ 25,962.21	\$ 15,421.56	\$ 1,321.08	\$ 16,050.31	\$17,000	94%
Communications-IT	\$ 80,735.47	\$ 71,771.02	\$ 4,722.33	\$ 52,244.30	\$112,400	46%
Maintenance: structures & improvements	\$ 16,678.86	\$ 20,261.51	\$ 1,365.79	\$ 21,071.43	\$35,000	60%
Maintenance of equipment	\$ 20,599.88	\$ 22,290.34	\$ 1,067.10	\$ 18,679.90	\$35,000	53%
Transportation, travel, training, & board	\$ 95,813.55	\$ 74,653.03	\$ 20,104.07	\$ 99,894.57	\$127,630	78%
Professional services	\$ 111,224.89	\$ 91,622.03	\$ 4,338.73	\$ 86,673.12	\$203,450	43%
Memberships, dues, & subscriptions	\$ 26,316.50	\$ 22,906.45	\$ -	\$ 20,402.00	\$24,000	85%
Insurance - (VCJPA, UAS)	\$ 134,833.60	\$ 141,650.37	\$ 245.16	\$ 160,687.48	\$150,611	107%
Community education	\$ 23,283.51	\$ 26,317.23	\$ 2,951.55	\$ 12,140.47	\$39,500	31%
Operations	\$ 179,304.00	\$ 223,362.22	\$ 42,016.07	\$ 107,261.55	\$239,000	45%
Household expenses	\$ 14,817.21	\$ 15,882.05	\$ 8,688.44	\$ 18,198.15	\$17,350	105%
Office expenses	\$ 13,760.57	\$ 9,747.67	\$ 770.13	\$ 4,598.32	\$12,000	38%
Laboratory supplies	\$ 100,794.23	\$ 64,135.55	\$ 8,749.88	\$ 62,154.94	\$144,000	43%
Small tools and instruments	\$ 2,055.54	\$ 2,189.34	\$ 93.15	\$ 1,182.05	\$3,000	39%
Total Staff Budget	\$ 863,042.40	\$ 816,194.55	\$ 97,375.35	\$ 694,175.27	\$1,184,941	59%
Total Operating Expenditures	\$ 3,707,920.93	\$ 3,799,173.94	\$ 334,482.97	\$ 3,345,702.90	\$4,507,831	74%

1 - As of June 30, 2021.

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
April 30, 2022. (10 of 12 mth, 83%)**

Account #	Investment Accounts	Beginning Balance	Deposits	Withdrawals	Earnings	Ending Balance
1004	LAIF	\$ 3,953,778.59	\$ -	\$ (338,000.00)	\$ 1,900.33	\$ 3,617,678.92
1005	OPEB Fund	\$ 5,009,803.83	\$ -	\$ -	\$ (281,579.34)	\$ 4,728,224.49
1006	VCJPA Member Contingency ¹	\$ 371,021.00	\$ -	\$ -	\$ -	\$ 371,021.00
1008	CAMP: Repair and Replace	\$ 1,356,028.41	\$ -	\$ -	\$ 556.23	\$ 1,356,584.64
1009	CAMP: Public Health Emergency	\$ 526,516.46	\$ -	\$ -	\$ 215.97	\$ 526,732.43
1010	CAMP: Operating Reserve	\$ 1,945,423.06	\$ -	\$ -	\$ 798.00	\$ 1,946,221.06
1011	CAMP: Capital Reserve Fund	\$ 30,014.04	\$ -	\$ -	\$ 12.31	\$ 30,026.35
1012	PARS: Pension Stabilization ²	\$ 1,791,754.41	\$ -	\$ -	\$ (19,160.90)	\$ 1,772,593.51
Total		\$ 14,984,339.80	\$ -	\$ (338,000.00)	\$ (297,257.40)	\$ 14,349,082.40

Account #	Cash Accounts	Beginning Balance	Withdrawals	Activity	Ending Balance
1001	Bank of America (Payroll Account) *	\$ 90,033.89	-	-	\$ 89,340.03
1002	Bank of The West (Transfer Account) *	\$ 370,750.50	-	-	\$ 393,903.03
1003	County Account	\$ 197,114.25	\$ -	\$ 2,026,083.23	\$ 2,223,197.48
1013	Petty Cash	\$ 433.03	\$ -	\$ (29.90)	\$ 403.13
Total		\$ 658,331.67	\$ -	\$ 2,026,053.33	\$ 2,706,843.67

1 - VCJPA Member Contingency balance is as of December 31, 2021.

2 - PARS - Pension Stabilization balance is as of March 31, 2022.

* - Ending balance differs from beginning balance due to checks clearing the account.

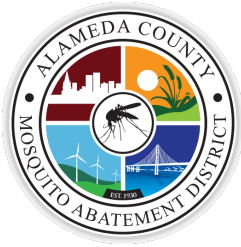
Alameda County Mosquito Abatement
Balance Sheet Comparison
April

ASSETS

	4/30/2022	4/30/2021	4/30/2020
Current Assets			
Bank of America payroll	90,033.45	104,593.18	108,270.63
Bank of the West	443,299.27	317,327.55	392,879.92
County	2,223,197.48	2,168,716.86	2,085,143.67
Cash with LAIF	3,617,678.92	2,741,033.93	1,305,188.85
VCJPA- Member Contingency	371,021.00	371,828.00	369,337.00
CAMP - Repair and Replace	1,356,584.64	1,040,894.57	975,548.35
CAMP - Public Health Emergency	526,732.43	526,174.88	524,889.95
CAMP - Operating Reserve	1,946,221.06	1,944,160.96	1,939,413.28
CAMP - Capital Reserve Fund	30,026.35	42,102.03	131,167.57
PARS	1,772,593.51	1,822,406.87	1,564,393.87
Petty cash	403.13	405.78	240.98
	<u>12,377,791.24</u>	<u>11,079,644.61</u>	<u>9,396,474.07</u>
Total Current Assets			
Property and Equipment			
Acc Dep - equipment	(1,479,068.00)	(1,479,068.00)	(1,285,336.98)
Acc Dep - stru & improv	(2,485,267.00)	(2,485,267.00)	(2,349,631.01)
Construction in progress	-	17,000.00	602,327.16
Equipment	1,751,859.00	1,751,859.00	1,699,506.64
Structure/improvement	4,799,729.70	4,760,618.00	4,638,621.62
Land	61,406.00	61,406.00	61,406.00
	<u>2,648,659.70</u>	<u>2,626,548.00</u>	<u>3,366,893.43</u>
Total Property and Equipment			
Other Assets			
Net OPEB Asset	2,522,763.00	1,823,556.00	690,338.00
	<u>2,522,763.00</u>	<u>1,823,556.00</u>	<u>690,338.00</u>
Total Other Assets			
Total Assets	<u>\$ 17,549,213.94</u>	<u>\$ 15,529,748.61</u>	<u>\$ 13,453,705.50</u>

LIABILITIES AND CAPITAL

Current Liabilities			
Accounts payable	\$ 109,894.08	\$ 159,393.57	\$ 133,128.24
Acc payroll/vacation	208,228.89	200,290.26	187,668.43
Def inflow - 75	1,254,695.00	931,786.00	49,810.00
Def inflow pen defer GASB 68	289,664.00	289,664.00	192,480.00
Defer outflow pen cont GASB 68	(1,056,534.00)	(1,056,534.00)	(1,208,279.00)
Net pension liability GASB 68	3,277,554.00	3,277,554.00	2,952,714.00
	<u>4,083,501.97</u>	<u>3,802,153.83</u>	<u>2,307,521.67</u>
Total Current Liabilities			
Total Liabilities	4,083,501.97	3,802,153.83	2,307,521.67
Capital			
Designated fund balances	4,816,355.25	4,440,057.25	4,763,137.19
Investment in general fixed as	6,894,403.96	5,296,151.61	4,637,374.11
Net Income	1,754,952.76	1,991,385.92	1,745,672.53
	<u>13,465,711.97</u>	<u>11,727,594.78</u>	<u>11,146,183.83</u>
Total Capital			
Total Liabilities & Capital	<u>\$ 17,549,213.94</u>	<u>\$ 15,529,748.61</u>	<u>\$ 13,453,705.50</u>



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General Manager

1. OPERATIONS REPORT

In April, operations staff continued inspections and treatments for our potential West Nile virus (WNV) vectoring species of mosquitoes: *Culex tarsalis*, *Culex pipiens*, and *Culex erythrothorax*. This season's first UAS (drone) treatment was conducted on a marsh in Union City. Changes in water distribution at this site have made access almost impossible for other operations equipment. The treatment also provided an opportunity for some of the newer district pilots to sharpen their UAS skills. Post-treatment inspections of the site indicated that the treatment was successful. Operations plan to continue using the UAS in this source and in others that are becoming progressively more difficult to access with conventional operations equipment.

Several rainfall events in April yielded both positive and negative results in terms of mosquito breeding. The positives were the flushing of catch basins, storm drains, creeks, and canals. This eliminated larvae of several *Cx. spp.* for many of these sources. The negative effect of rain for mosquito control were a recharging of standing water in several pond and marsh sources that were nearly dried down. This recharging of standing water resulted in an isolated hatch of eggs of *Aedes squamiger*. Thorough inspections of other sources for this species indicated no other hatches had occurred.

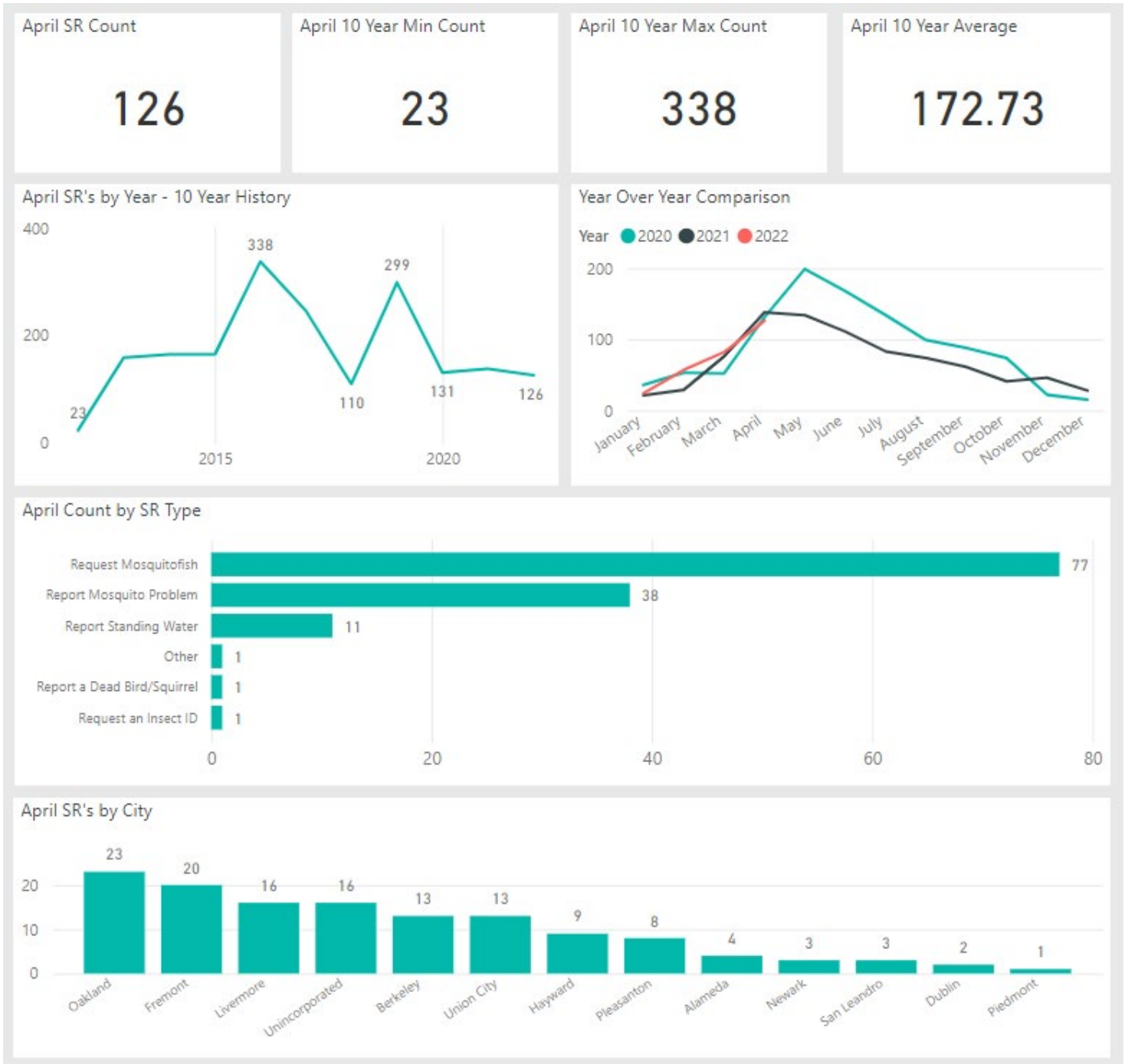
Operations staff also started regular inspections and treatments for our spring/summer *Aedes spp.*, *Ae. vexans*, around Lake Del Valle and *Ae. dorsalis* in several tidal marsh areas. Water levels at Lake Del Valle are close to peak levels, so no further larval habitat is available for inundation and hatching of eggs this season. Many high-tide events will occur over the next 5-6 months that will induce the hatching of *Ae. dorsalis* eggs. Operations staff have the dates of these tides charted and will conduct extensive inspections/treatments for this species in the months to come. The ACMAD A-1 Super Duty mist blower will again play a significant role in many treatments for this species. Operations staff also continued preparation for the arrival of invasive *Ae. spp.* by participating in training on identification of both larval and adult conducted by the ACMAD lab.

Requests for service received from the public in April were below the ten-year average for the month. Over 60% of the 126 requests were mosquito fish for ornamental ponds, unmaintained swimming pools, and livestock watering troughs. A trend that continues to gain traction this season in our county is the cultivation of water lilies/lotus plants. Around 25% of the requests for fish were for these mostly small pots or wine barrels that are not ideal habitat for mosquito fish. Operations staff educate callers on how to keep the fish alive to control mosquito larvae in these mini environments. Of the requests to "report a mosquito problem", 63% were attributed to non-biting "mosquito-like" insects, primarily midges, crane flies, and fungus gnats. Operations staff continues to educate the public on the biology of these insects and provides information on how to reduce potential sources for backyard mosquito breeding during these inspections. Only one dead bird was collected in April and tests by the ACMAD lab determined it was negative for WNV. No detections of WNV have been made in Alameda County so far this year.

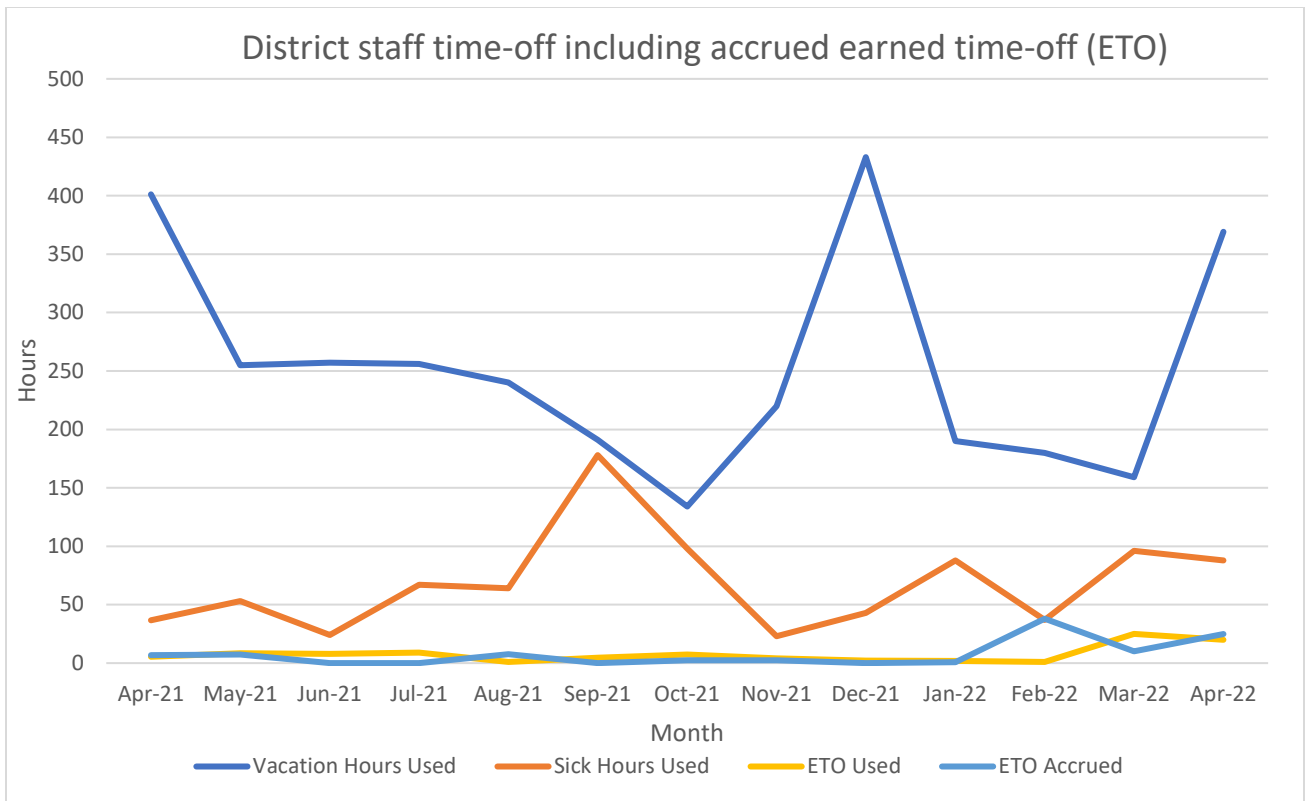
Field Operations Supervisor

Joseph Huston

Service Requests (April)

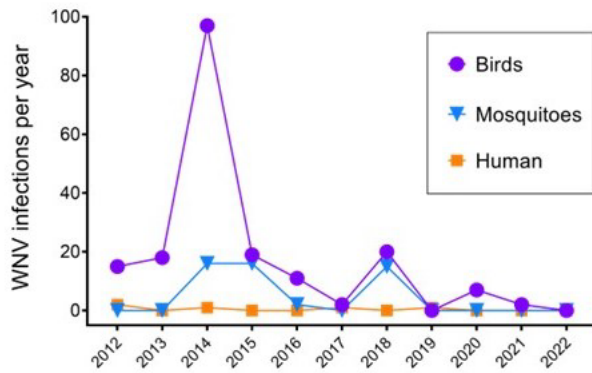


Activity Report

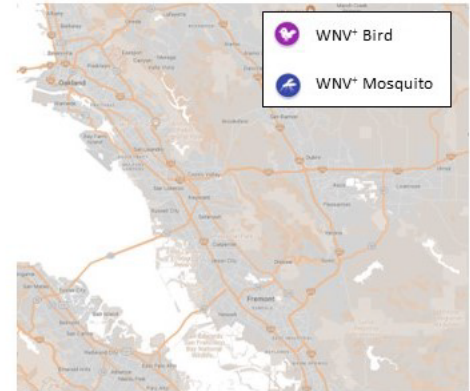


WNV Activity

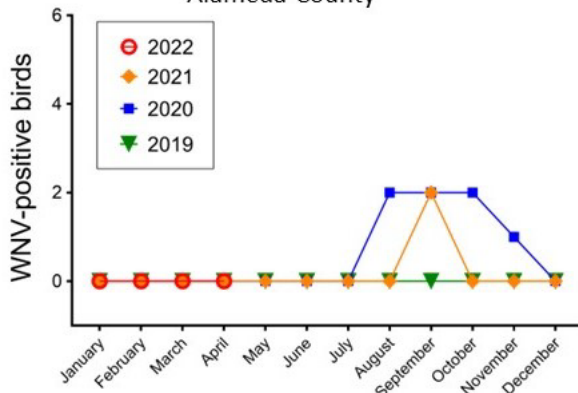
WNV infections detected in Alameda County
2012 – 2022



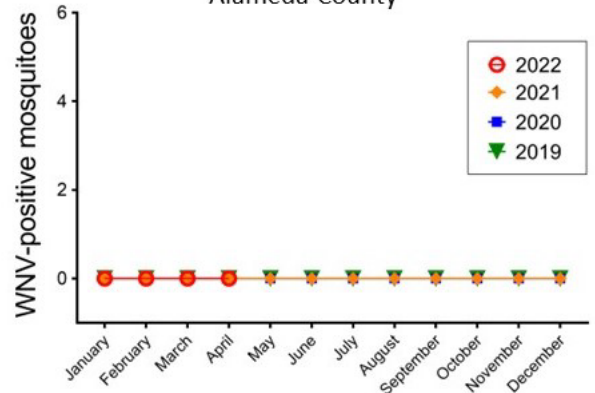
Locations of WNV-infected mosquitoes and birds
collected in Alameda County during 2022



WNV-infected birds collected in
Alameda County



WNV-infected mosquitoes collected in
Alameda County



2. LAB

Summary

- *Arboviruses*. West Nile virus (WNV) was not detected in birds during April 2022. Saint Louis encephalitis virus (SLEV) and Western equine encephalitis virus (WEEV) were not detected in Alameda County during the prior 5 years.
- *Native mosquitoes*. A total of 529 CO₂-baited encephalitis virus survey (EVS) traps were placed during April, catching 7,905 adult female mosquitoes (14.9 mosquitoes per trap night). Three New Jersey Light Traps (NJLT) captured 78 adult mosquitoes during the same period. The sentinel chicken flocks will be returned to service during mid-spring.
- *Invasive mosquitoes*. Invasive *Aedes* mosquitoes were not detected in Alameda County during 2022.

Arbovirus Monitoring

- WNV was not detected in birds or mosquitoes during April. WNV was last detected in birds collected in Alameda County during September 2021.
- WNV was last detected in mosquitoes during 2018. Although the lab tests all groups of mosquitoes for the presence of SLEV and WEEV, neither have not been detected in the County for over a decade.
- Sentinel chicken flocks will be returned to service during late spring of the year.

Native Mosquito Abundance

- Lab staff placed 529 CO₂-baited EVS traps during April that captured a total of 7,905 adult female mosquitoes, which was 17 % fewer mosquitoes compared to the prior month (Figure 1; 14.9 mosquitoes per trap night). Fifty of the EVS traps did not collect any mosquitoes (Figure 2A, lower right insert).
- EVS traps from northern region of the county (Albany to San Leandro) captured a low quantity of *Culex pipiens* and a moderate quantity of *Culex tarsalis* (vectors of WNV; Figure 2A, 2B), which is typical for the habitat and time of year. A very low quantity of adult female *Aedes squamiger* mosquitoes were collected during April (Figure 2A), indicating that the efficacy of the larvicide applications in marsh habitats was high for controlling this aggressively-biting species.
- Highest adult female mosquito abundance was observed around Coyote Hills Regional Park where *Aedes washinoi* was most common (Figure 2A, 2C). The abundance of *Culiseta inornata* was lower this month with *Culiseta particeps* becoming more common in the Bayside region of the county.
- The two most abundant species in the county during April were *Culex tarsalis* and *Aedes washinoi*, followed by *Culex erythrothorax* (Figure 3).
- The three NJLT in service that are located in the southern region of the county collected a total of 78 mosquitoes, with *Aedes washinoi* being most common (Figure 4).
- The lab compared the effectiveness of the Biogents BG-Pro EVS trap to the standard EVS trap from BioQuip that we've been using since 2015. Results show there was no difference in the number of mosquitoes collected when the two traps were placed at the same site (paired t-test, P = 0.7119). There also was no difference in the number of mosquito species collected by each trap type (paired t-test, P = 0.1308). Since the BG-Pro trap is less costly to purchase, we will replace irreparable BioQuip EVS traps with those from Biogents.

LAB FIGURES

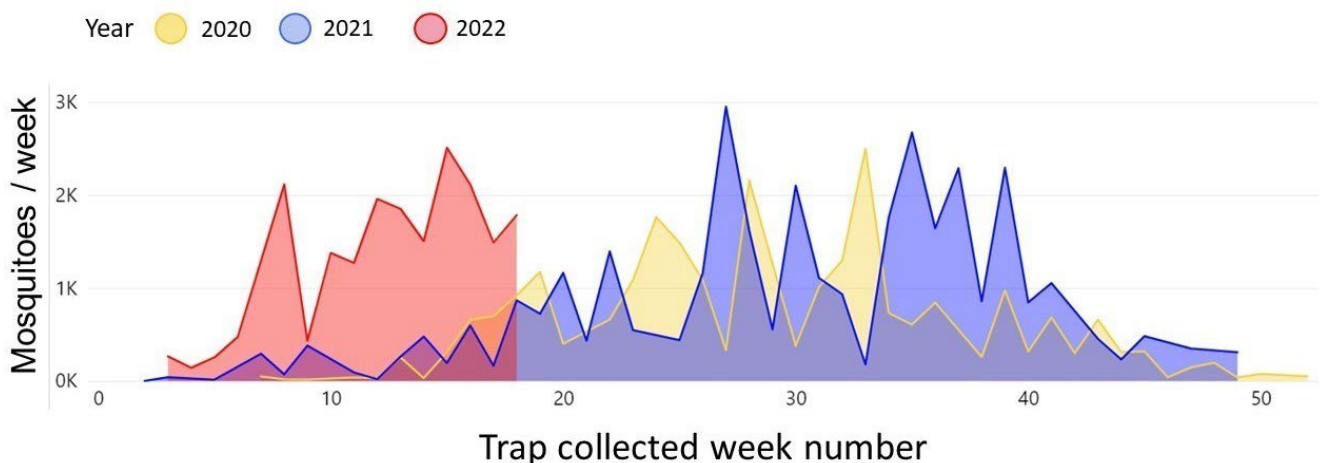


Figure 1. Mosquitoes captured in EVS CO₂ traps from 2020 – 2022. A total of 7,905 adult mosquitoes were captured in EVS CO₂ traps during April of 2022 and identified to species. Week 24 was excluded from the graph because the high anomalous abundance during 2021 skewed the y-axis.

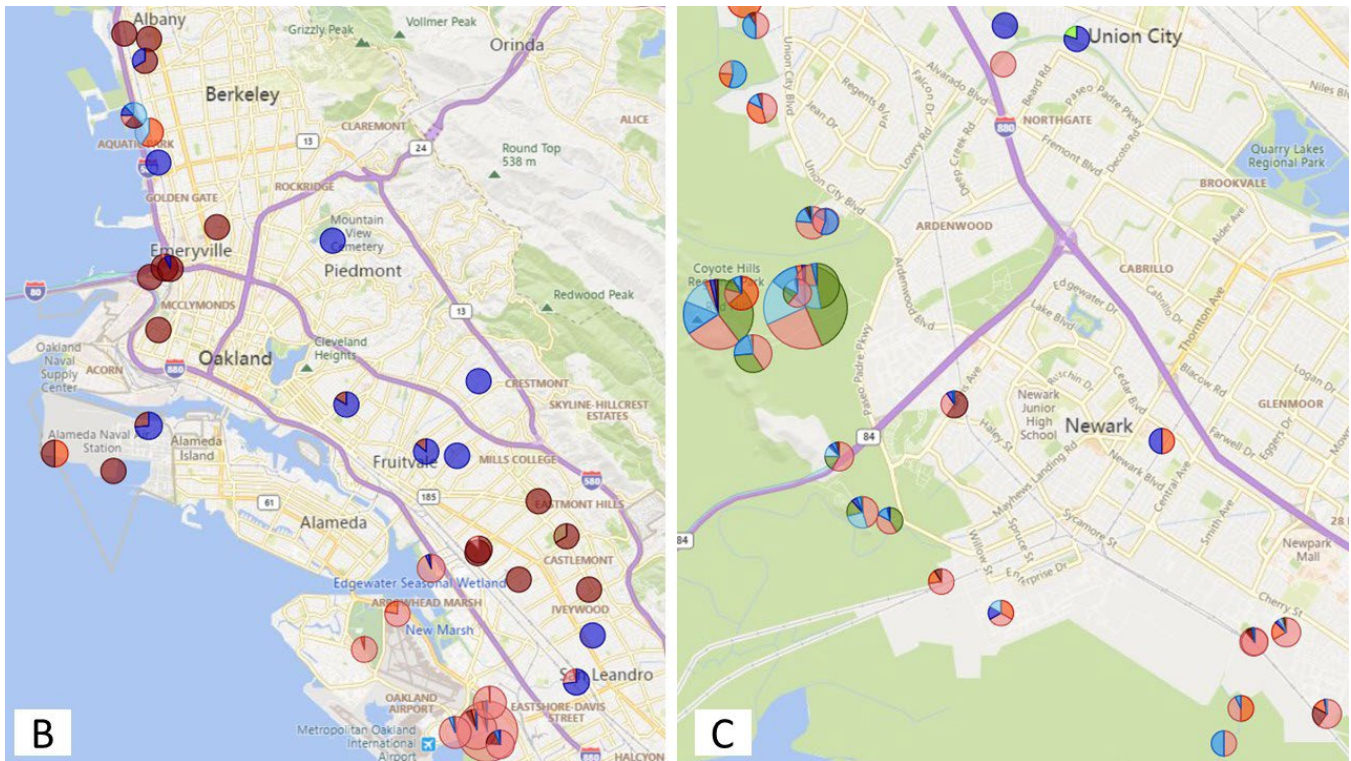
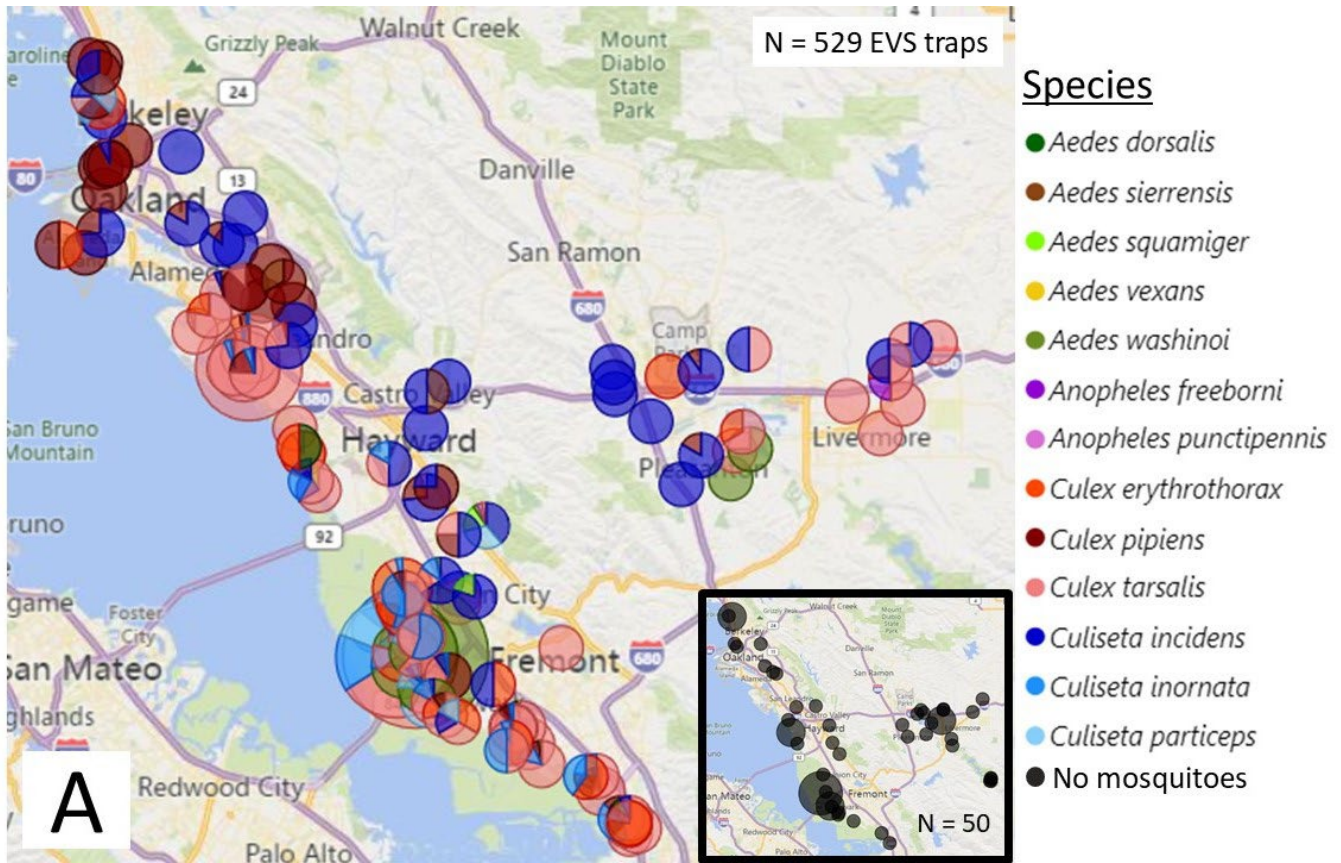


Figure 2. Mosquito abundance by trap site evaluated using EVS CO₂ traps. Pie charts over trap sites indicate the distribution of mosquito species collected at the trap site. The size of each pie chart indicates the relative number of

mosquitoes at each site during April of 2022. (A) Alameda County (the insert shows traps that were placed but did not collect mosquitoes), (B) the northern region of the county, and (C) the midwestern region.

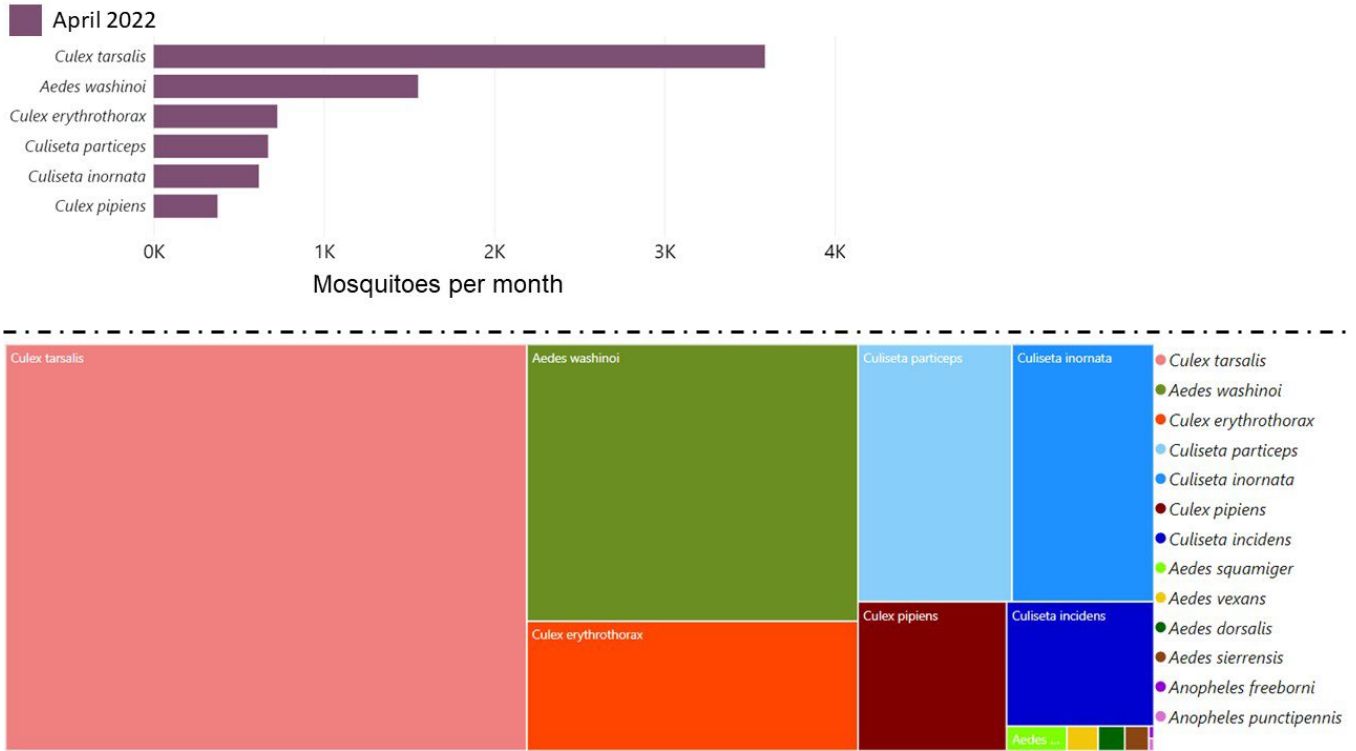


Figure 3. The most abundant species of mosquito captured using EVS CO₂ traps. Larger squares and rectangles indicate higher abundance of that species during April.

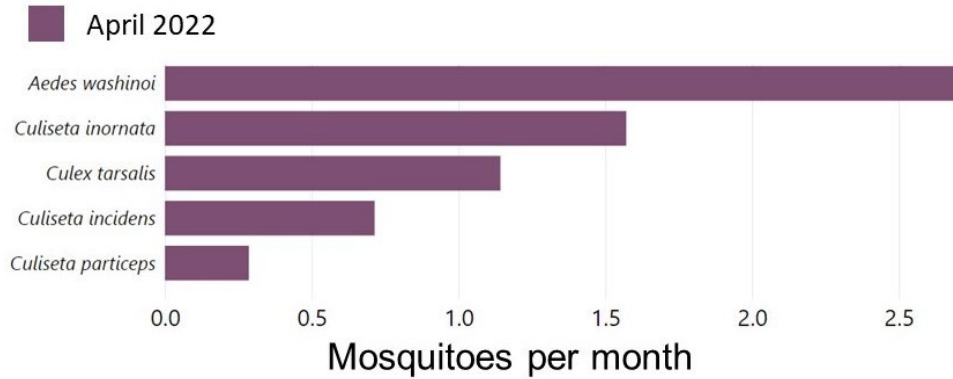



Figure 4. The most abundant species of mosquito captured in NJLT. A total of 78 mosquitoes were captured in NJLT.

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

3. PUBLIC EDUCATION

Completed Events in April


April Events and Presentations



Legend:

- Orange pin: Large Scale Event
- Yellow pin: In classroom education

Khmer New Year Festival in Oakland, April 2
Coyote Hills 3rd Grade Final Presentation April 11
Oakland Zoo Earth Day Celebration, April 15
James Monroe Elementary April 19
McKinley Elementary April 19
Agriculture Day for Livermore Schools, April 21
Family Science Day for Lincoln Elementary in Newark, April 29



Upcoming Events

- Mills Children's School Mosquitofish Day - May 11
- Downtown Livermore Fest - May 14 and 15
- Cherryland Parade in San Leandro - June 4
- Berkeley Juneteenth Festival - June 19

School Program

- Two new teachers in San Leandro have begun the curriculum, and plan to showcase findings at their end of the year Open House events.
- One teacher in Newark completed the entire curriculum.

Google Analytics

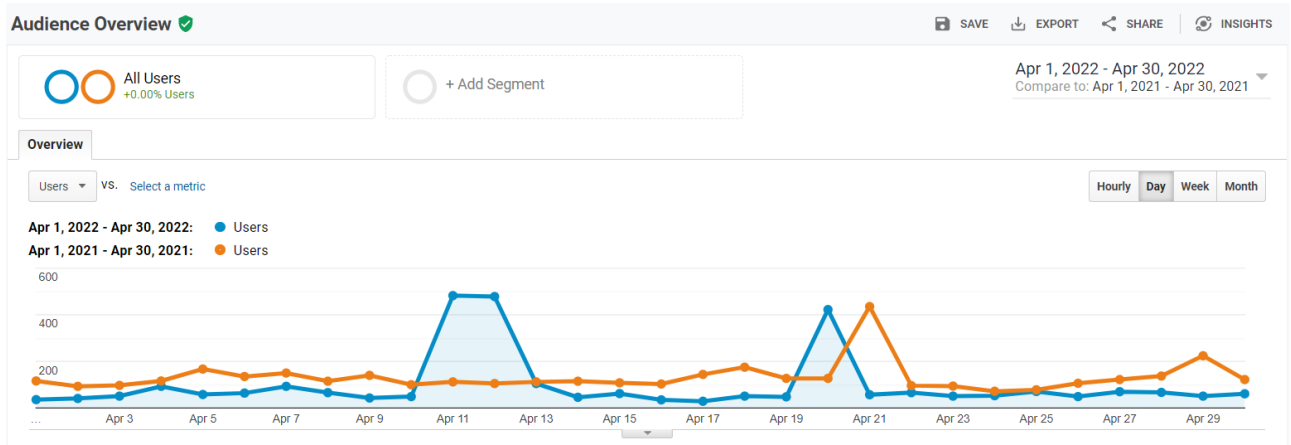


Figure 1: April website users 2022 compared to April 2021

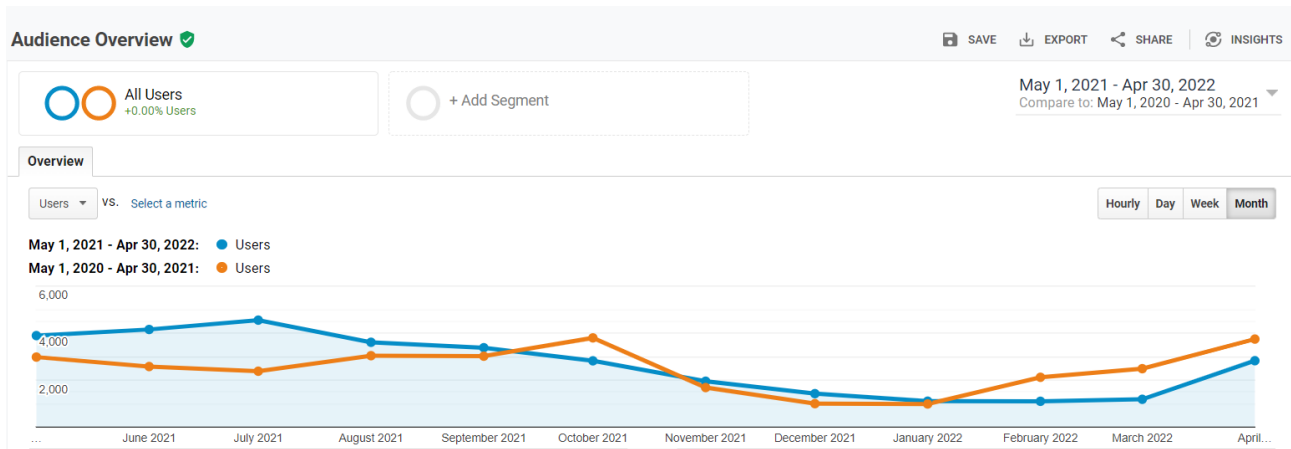
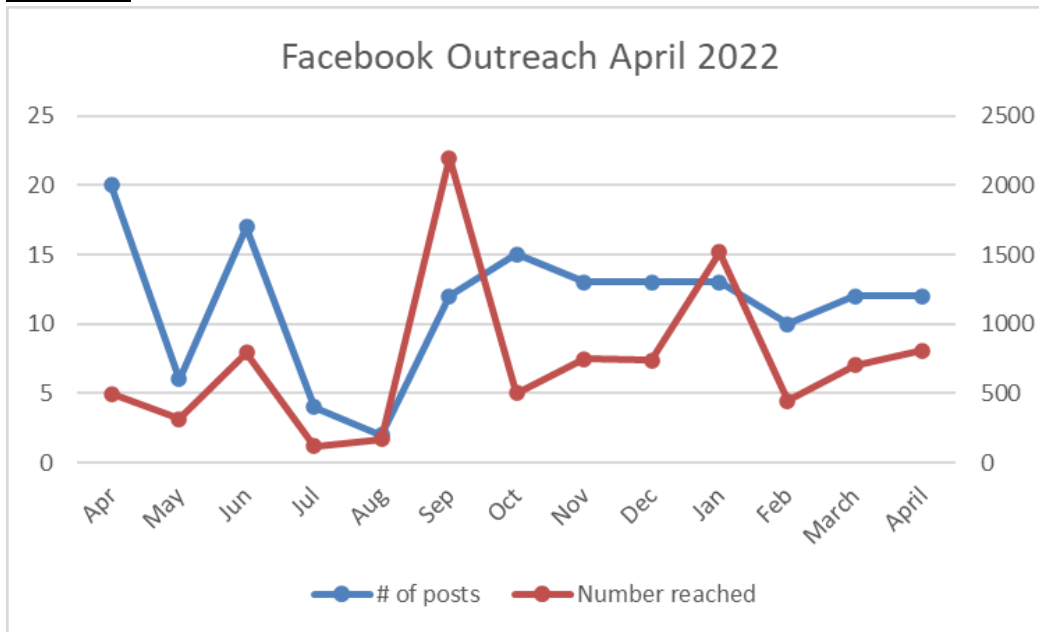


Figure 2. Comparison of website users over the past two years

Facebook



Number of Posts: 12 Reach: 806 Followers: 333

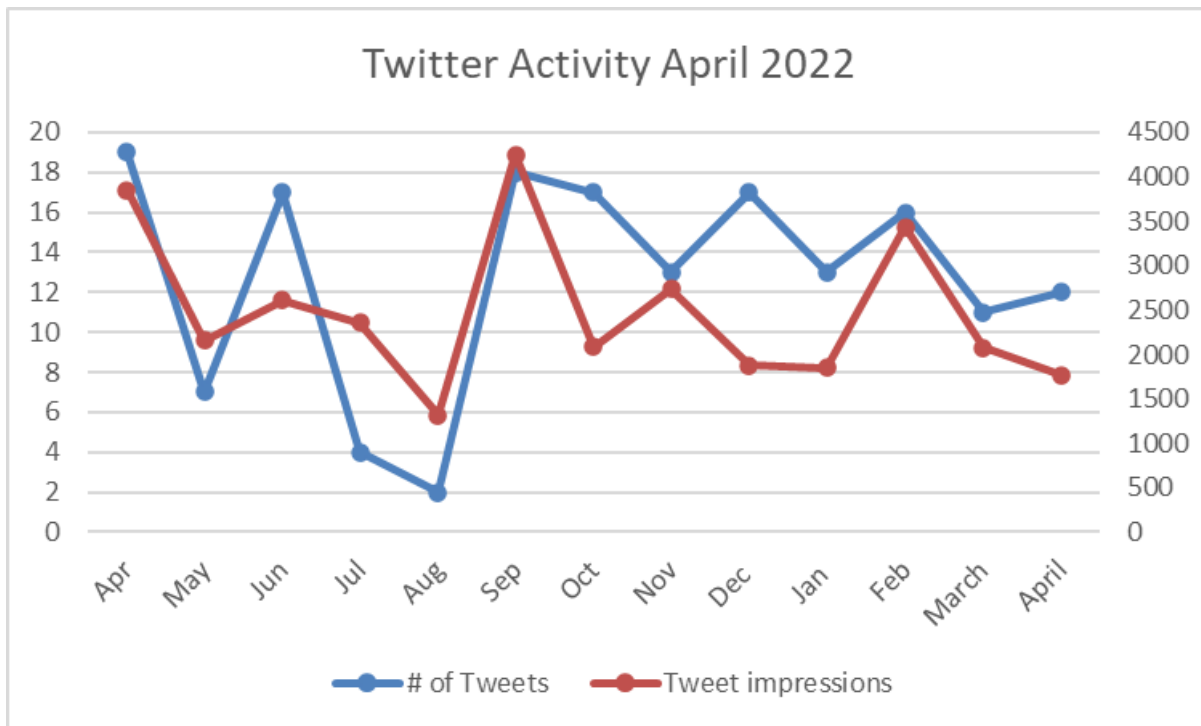


Top April Facebook Post: We had a great time at the Khmer New Year festival this past weekend. We demonstrated how mosquitofish eat larvae, showed how small saucers can hold water, and we LOVED the food. Thank you to the Peralta Hacienda Historical Park for hosting the event.

10th Annual Khmer New Year
Peralta Hacienda Historical Park
Oakland



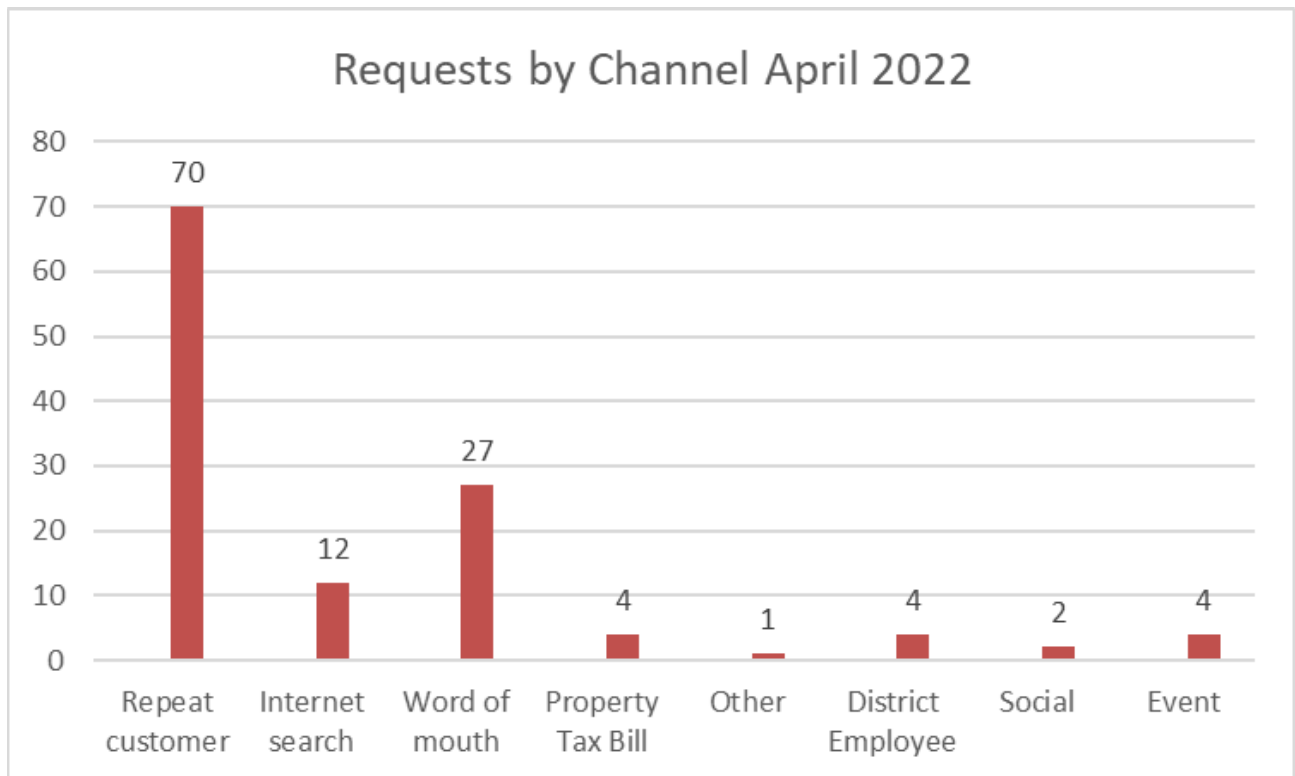
Twitter



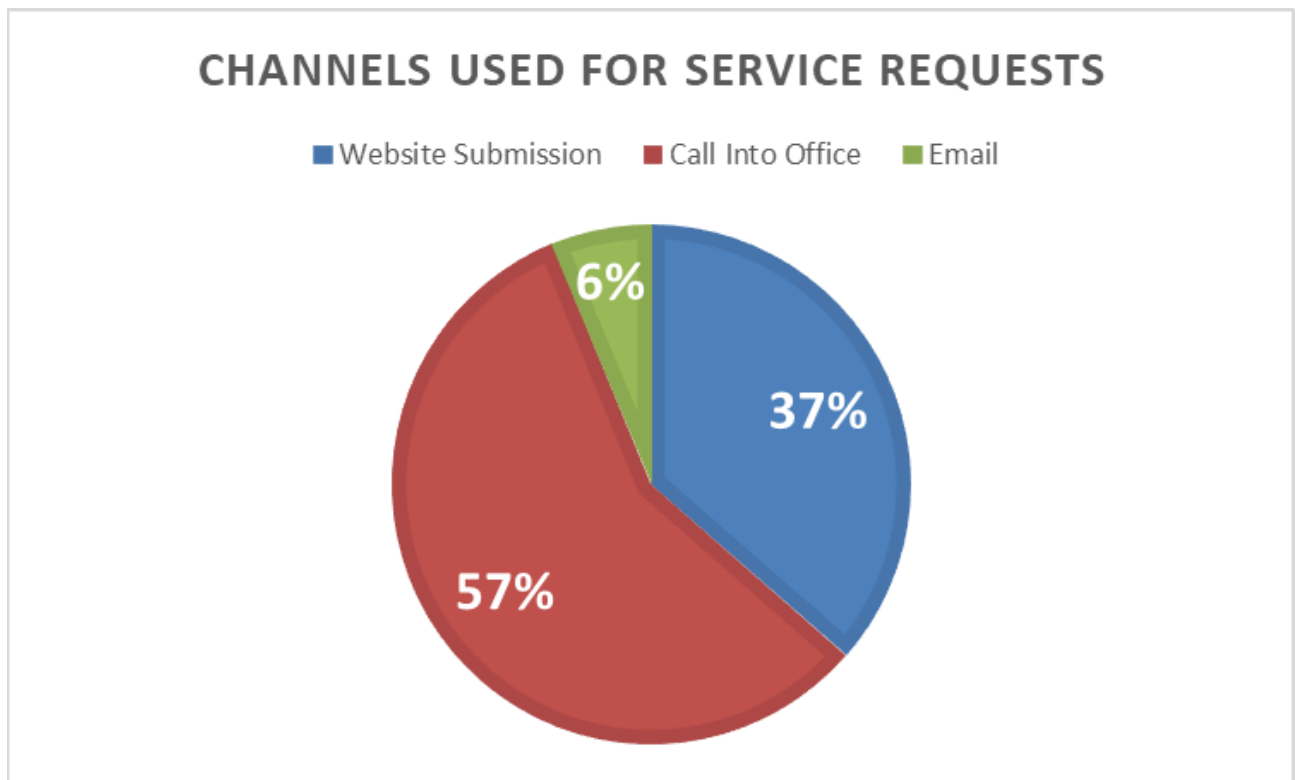
Number of Impressions: 1766 Total Number of Followers: 771 (3 added)

Top April Twitter Post: Same as Facebook Post above.

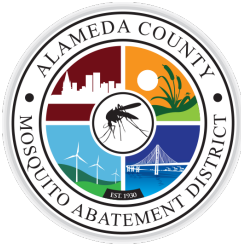
Service Request Referral Summary for April



Channels Used by Residents to Request Service in April



129 requests in total: 47 web submissions, 74 calls, 8 emails
Note: 3 website submissions requested multiple services



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Livermore

Jan O. Washburn

Oakland

Eric Hentschke

Newark

Hope Salzer

Piedmont

Julie Testa

Pleasanton

Ryan Clausnitzer

General Manager

ACMAD is pleased to recognize and thank the following employee on their anniversary in May.

Employee	Title	Years of Service	Anniversary Date
Jeremy Sette	Vector Biologist	7	May 18th