

AGENDA
1058th MEETING OF THE BOARD OF TRUSTEES
OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

JULY 11TH, 2018

TIME: 5:00 P.M.
PLACE: Office of the District, 23187 Connecticut Street, Hayward
TRUSTEES: Elisa Marquez, President, City of Hayward
Wendi Poulson, Vice-President, City of Alameda
Eric Hentschke, Secretary, City of Newark
Humberto Izquierdo, County-at-Large
P. Robert Beatty, City of Berkeley
Alan Brown, City of Dublin
Betsy Cooley, City of Emeryville
George Young, City of Fremont
James N. Doggett, City of Livermore
Jan O. Washburn, City of Oakland
Robert Dickinson, City of Piedmont
Kathy Narum, City of Pleasanton
Ed Hernandez, City of San Leandro
Subru Bhat, City of Union City

1. Call to order.
2. Roll call.
3. President Marquez invites any member of the public to speak at this time on any issue relevant to the District. (Each individual is limited to three minutes).
4. Approval of minutes of the 1057th meeting held June 13th, 2018 (**Board action required**)
5. Review of a sole-source purchase of an Ultra-low Volume (ULV) fogger from Leading Edge (**Board action required**)
6. Report from the Strategic Planning Committee (Information only)
7. General Manager Evaluation Committee Annual Evaluation Process (Information only).
8. Financial Reports as of June 30th, 2018 (Information only):
 - a. Journal entries
 - b. Income statement
 - c. Investments, Reserves, and Cash
9. Presentation of the Monthly Staff Report for July 2018 (Information only).
10. Presentation of the Manager's Report for July 2018 (Information only).
 - a. CSDA Annual Conference: September 24th-27th, Indian Wells, CA
 - b. AMCA Annual Conference: February 3rd, 2019 - February 5th, 2019, Burlingame, CA
 - c. MVCAC Annual Conference: February 25th, 2019 - March 1st, 2019, Orlando, FL

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

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

Please Note: A copy of this agenda is also available at the District website, www.mosquitoes.org or via email by request. Alternative formats of this agenda can be made available for persons with disabilities. Please contact the district office at (510) 783-7744, via FAX (510) 783-3903 or email at acmad@mosquitoes.org to request an alternative format.

MINUTES

1057th MEETING OF THE BOARD OF TRUSTEES OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

JUNE 13TH, 2018

TIME: 5:00 P.M.
PLACE: Office of the District, 23187 Connecticut Street, Hayward
TRUSTEES: Elisa Marquez, President, City of Hayward
Wendi Poulson, Vice-President, City of Alameda
Eric Hentschke, Secretary, City of Newark
Humberto Izquierdo, County-at-Large
P. Robert Beatty, City of Berkeley
Alan Brown, City of Dublin
Betsy Cooley, City of Emeryville
George Young, City of Fremont
James N. Doggett, City of Livermore
Jan O. Washburn, City of Oakland
Robert Dickinson, City of Piedmont
Kathy Narum, City of Pleasanton
Ed Hernandez, City of San Leandro
Subru Bhat, City of Union City

1. Board President Marquez called the regularly scheduled board meeting to order at 5:04 PM.
2. Trustees Marquez, Poulson, Hentschke, Izquierdo, Beatty, Brown, Cooley, Young, Doggett, Narum, Hernandez and Bhat were present. Trustees Dickinson and Washburn were absent.
3. Board President Marquez invited members of the public to speak on any issue relevant to the District. Accounting Associate Michelle Matthes was present for financial-related agenda items, Mosquito Control Technician Jeremy Sette was present to record the minutes.
4. Approval of minutes of the 1056th meeting held May 9th, 2018.
Motion: Trustee Beatty moved to approve the minutes
Second: Trustee Izquierdo
Vote: motion carries—unanimous.
5. The General Manager commented that the proposed tax rate will remain the same for the next fiscal year.
6. Approval of Resolution 1057-1, ordering the levy of assessments for fiscal year 2018-19 for the Alameda County Mosquito Abatement District Mosquito and Disease Control Assessment.
Discussion:
Trustee Hernandez asked if it was possible to lower the assessment at some point (yes, the Board can discuss when the budget for the next fiscal year is discussed)

Motion: Trustee Narum moved to approve Resolution 1057-1, ordering the levy of assessments for fiscal year 2018-19 for the Alameda County Mosquito Abatement District Mosquito and Disease Control Assessment.

Second: Trustee Cooley

Vote: motion carries—unanimous.

7. Approval of Resolution 1057-2 authorizing withdrawal of District funds from the Alameda County Treasury pursuant to CA Health & Safety Code Section 2077 and directing the investment and management of said funds.

Discussion:

Trustee Beatty asked who the District Treasurer would be (The General Manager). Doggett noted a typo in the Board Agenda Packet wrongfully designating The General Manager as “she.” Trustee Hernandez asked if ACMAD had an accountant or controller (ACMAD has an Accounting Associate but in regard to Resolution 1057-2, the General Manager would act as Treasurer). Trustee Beatty asked if the County would take issue to the removal of funds (ACMAD is not required to remain with County and has discussed the benefits of leaving with County officials). Trustee Izquierdo asked if there will be additional internal controls and tasks asked of Trustees (Trustees will now sign checks rather than requests for County funds). President Marquez asked who will sign the checks (a Board member and General Manager). Trustee Bhat asked what the advantages of this move would be (less administration fees, more rapid payment to vendors, increased transparency of fund activity, increased efficiency in completed the independent audit). Trustee Hentschke asked if this would be a one-time change (yes).

Motion: Trustee Beatty moved to approve Resolution 1057-2 authorizing withdrawal of District funds from the Alameda County Treasury pursuant to CA Health & Safety Code Section 2077 and directing the investment and management of said funds.

Second: Trustee Bhat.

Vote: motion carries—unanimous.

8. The Board entered closed session to discuss the General Manager’s twelve-month evaluation pursuant to Government Code Section 54957.6. The Board returned from closed session and President Marquez reported that no action was taken.
9. The Board discussed compensation of General Manager Ryan Clausnitzer based on a recommendation from the Manager Evaluation Committee and according to the employee contract.

Motion: Trustee Narum moved to approve the compensation recommendation of General Manager Ryan Clausnitzer based on a recommendation from the Manager Evaluation Committee and according to the employee contract which includes a 5% raise, and \$1,000 per month towards the General Manager’s 457 deferred compensation plan.

Second: President Marquez.

Vote: motion carries—unanimous.

10. The General Manager presented a review of bids for the purchase of a 2018 GMC Canyon Extra Cab SLE 4 Wheel Drive.

Discussion:

President Marquez added that she was glad to see quotes from Alameda County car dealerships.

Motion: Trustee Beatty moved to approve awarding of contract for the purchase of a 2018 GMC Canyon Extra Cab SLE 4 Wheel Drive from Dublin GMC.

Second: Trustee Cooley.

Vote: motion carries—unanimous.

11. Financial Reports as of May 31st, 2018.

Discussion:

The General Manager presented the financial reports as of May 31st, 2018. Trustee Beatty asked if depreciation was considered a warrant (no, but it is considered an expense). Trustee Cooley commented that she was not seeing the trustee payments (Michelle Matthes answered that it is now listed under the "Trustee in Lieu" row).

12. Presentation of the Monthly Staff Report for May 2018.

Discussion:

The General Manager presented the Monthly Staff Report for May 2018. Trustee Cooley asked how many birds were tested for West Nile Virus in May and how many were positive (out of many birds tested, only three were positive). Trustee Narum mentioned the 2014 adulticide events in Pleasanton and Livermore. The General Manager thanked Trustee Bhat for volunteering to attend ACMAD's recent adulticiding efforts in Union City. Trustee Bhat asked what ACMAD was doing to follow up in West Nile positive area of Union City (continued trapping and larval surveillance and treatments). Trustee Brown asked if there were any studies that focused on human carriers of West Nile Virus that travelled out of positive areas to other areas (yes, however, humans are a "dead end" host for West Nile Virus and cannot transfer it to others). Trustee Beatty further explained the West Nile virus disease transmission cycle. President Marquez recommended that Erika Castillo should contact city/county clerks with press releases relating to adulticiding efforts. Trustee Narum asked if it would be beneficial for residents not of the city of positive detection to see press releases (President Marquez answered yes, especially for those that work in various parts of the county or travel to those areas). Trustee Cooley mentioned that she sent the recent press release to her city council. Trustee Beatty commented that although ACMAD management felt that the recent adulticiding efficacy was not as successful as they would like, he emphasized that it was not a failure and there were positives to be drawn out of the experience.

13. Presentation of the Manager's Report for May 2018.

Discussion:

The General Manager presented the Manager's Report for May 2018. Trustee Beatty asked if the Board room would be expanding in the remodel project (yes, as one part of the project). President Marquez asked any Board member to email the General Manager if they were interested in becoming a member of the Board Subcommittee of the Remodel Project. Trustee Narum asked if the General Manager met with Senator Glazer for the CSDA Leg Day (no). President Marquez asked when Leg Day is normally held (in May, each year). Trustee Narum corrected that the upcoming Zone 7 meeting is in Livermore, not Pleasanton. Trustee Hernandez noted a possible discrepancy regarding the operating expenses in the income statement for 2016/2017 (Michelle Matthes would answer this by the subsequent meeting).

14. President Marquez asked for reports on conferences and seminars attended by Trustees.
None.

15. Board President Marquez asked for announcements from the Board. Trustee Narum announced the Cattle Drive occurring on June 15th, on Main Street in Pleasanton.

16. Board President Marquez asked trustees for items to be added to the agenda for the next Board meeting. President Marquez asked for an agenda item to approve a change in the General Manager evaluation as part of his contract.

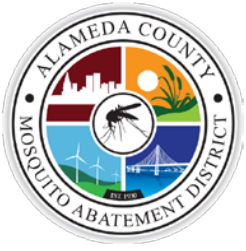
17. The meeting adjourned at 6:47 P.M.

Respectfully submitted,

Approved as written and/or corrected
at the 1058th meeting of the Board of
Trustees held July 11th, 2018

Elisa Marquez, President
BOARD OF TRUSTEES

Eric Hentschke, Secretary
BOARD OF TRUSTEES



23187 Connecticut Street
Hayward, CA 94545

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

acmad@mosquitoes.org

June 28, 2018

Board of Trustees

President

Elisa Marquez

Hayward

Vice-President

Wendi Poulson

Alameda

Secretary

Eric Hentschke

Newark

Humberto Izquierdo

County at Large

P. Robert Beatty

Berkeley

Alan Brown

Dublin

Betsy Cooley

Emeryville

George Young

Fremont

James N. Doggett

Livermore

Jan O. Washburn

Oakland

Robert Dickinson

Piedmont

Kathy Narum

Pleasanton

Ed Hernandez

San Leandro

Subru Bhat

Union City

Ryan Clausnitzer

General Manager

Re: Sole Source for ULV Fogger, Leading Edge

Item –

MapVision Mobile ULV unit with Flow Control System, installation and training, Web-Service set-up, and London Aire 18-20 ULV Sprayer.

Complete Cost \$29,835.00

It is the recommendation of the Mechanical Specialist to purchase this unit from Leading Edge, a Sole Source provider of the equipment that networks with our current database system.

Mark Wieland
Mechanical Specialist

Quote



675 S. Haywood St
Waynesville, NC 28786

Date: 2018-06-12

Bill To:	
Company:	Alameda County Mosquito Abatement District
Address:	23187 Connecticut St
City/State/Zip:	Hayward, Ca 94545
Phone:	510 783 7744
Contact Name:	Robert Ferdan
Email:	robert@mosquitoes.org

Ship To:	
Company:	
Address:	
City/State/Zip:	
Phone:	
FAX:	
Contact Name:	
Email:	

Payment Method		Exp Date	Security Code	Payment Terms
PO#	Credit Card Number			
	Card Holder Name:			
	Card Billing Address:	Same as above		
ITEM #	DESCRIPTION	QTY	UNIT PRICE	LINE TOTAL
MULTISPECTRAL IMAGERY FOR RPA				
1	MapVision Mobile ULV	1	\$ 6,995.00	\$ 6,995.00
2	MapVision ULV Flow Control System	1	\$ 5,695.00	\$ 5,695.00
	Includes: Pump, pump board controller, enclosure			
	All cables to make system complete			
	Installation & Training (this requires onsite installation of system and training)	1	\$ 3,800.00	\$ 3,800.00
3	Optional requirement wiring harness	1	\$ 150.00	\$ 150.00
4	MapVision Mobile ULV Web-Service Set up	1	\$ 2,500.00	\$ 2,500.00
	London Aire 18-20 ULV Truck Mounted Sprayer	1	\$ 9,995.00	\$ 9,995.00
	Sub-total			\$ 29,135.00
	Estimated Shipping	1	\$ 550.00	\$ 550.00
Notes:			Total Project:	\$ 29,835.00

Alameda County Mosquito Control required to provide Windows laptop, power supply for laptop (AC/DC converter or auxillary power plug in)

LONDON FOGGERS

Used everywhere in the world
since 1968



PISTOL GRIP
CAB CONTROL

MODEL 18-20 High Output ULV Aerosol Generator



HOOT
NOZZLE

Standard Features on the 18-20

- Teflon coated aluminum HOOT nozzle
- Pistol grip cab control with throttle down electric choke and start functions
- FMI formulation pump, 3/8" ceramic piston
- Triple V Belt drive
- Kohler 18hp OHV Command engine
- Fuel tank with gauge
- Silencer tube

Optional Features on the 18-20

- 1 or 2 years spares kits
- Tachometers / Hour meter
- GPS, tracking & recording features

The model 18-20 was first manufactured in 1990 and has been very well received in the market place. The designation originated because this model utilizes a 18 HP engine, which enables application of insecticides at vehicle speeds up to 20 miles per hour. The 18-20 produces the correct particle size to meet all insecticide label requirements at vehicle speeds up to 20 miles per hour.

Model 18-20 surpasses most other foggers for two important reasons. One, a new-generation overhead, V-twin cylinder engine (with throttle down feature) produces fewer emissions, consumes less fuel, and has longer service intervals than conventional 'L' head engines. Two, our Triple-V Belt Drive feature reduces blower RPM more than 25%. This design extends blower life and creates a quieter operating fogging machine.

The newest technology for use with ULV foggers utilizes G.P.S. for Speed Compensation Flow Control of insecticide output.

The Models 18-20 and XKE are available with these advancements, including monitoring and recording of adulticide applications and tracking of vehicles.



Specifications

Engine	18HP overhead valve, V-twin cylinder, electric start & choke
Formulation Pump	12 Volt DC adjustable output, positive displacement, 0-20 oz./min
Formulation Tank	15 gallon (56 liters), corrosion resistant
Particle Size	80% of droplets-less than 20 microns
Fuel Tank	7.5 gallon (28.38 litre) with gauge
Flush Tank	1 1/2 quart (1.43 liter) corrosion resistant
Blower	Rotary, positive displacement, up to 356 CFM
Weight	445 lbs (202 kg)
Length	37" (94 cm)
Width	46" (117 cm)
Height	39" (99 cm)

505 Brimhall Avenue
Long Lake, MN 55356

P. 952-473-5366

F. 952-473-5302

TF. 800-448-8525

E. salesupport@londonfoggers.com



*Used everywhere
in the world*

www.londonfoggers.com

© Copyright London Foggers 2007. All Rights Reserved

Search By: Product - Pest - Weed - Active...

Call (800) 479-6583

Mon-Fri 8am-5pm | Sat 9am-5pm

[HOME](#) > LONDON FOGGER MODEL 18-20-HIGH OUTPUT ULV AEROSOL GENERATOR

LONDON FOGGER MODEL 18-20-HIGH OUTPUT ULV AEROSOL GENERATOR

The model 18-20 was first manufactured in 1990 and has been very well received in the marketplace. The designation originated because this model utilizes an 18 HP engine, which enables application of insecticides at vehicle speeds up to 20 miles per hour.

Application

Model 18-20 surpasses most other foggers for two important reasons. One, a new-generation overhead, V-twin cylinder engine (with throttle down feature) produces fewer emissions, consumes less fuel, and has longer service intervals than conventional 'L' head engines. Two, our Triple-V Belt Drive feature reduces blower RPM more than 25%. This design extends blower life and creates a quieter operating fogging machine. The 18-20 produces the correct particle size to meet all insecticide label requirements at vehicle speeds up to 20 miles per hour.



Choose an Option...

Each \$12532.00

Quantity:

1



[My Account](#)



[Find a Store](#)



[Support](#)



[Shopping Cart](#)

Becker Underwood

BioSafe Systems

[View all](#)

NEWSLETTER

Sign up for our newsletter:

[Subscribe](#)

Fuel Tank	7.5 gallon (28.38 litre) with gauge
Flush Tank	1 1/2 quart (1.43 liter) corrosion resistant
Blower	Rotary, positive displacement, up to 356 CFM
Weight	445 lbs (202 kg)
Length	37" (94 cm)
Width	46" (117 cm)
Height	39" (99 cm)

2018 18-20 ULV Fogger Sprayer \$ 11,350.00

Early Order Program Pricing

	Begins	Ends	Savings
EOP-1	12/01/2017	1/20/2018	\$ 575.00
EOP-2	1/21/2018	2/20/2018	\$ 355.00
EOP-3	2/21/2018	3/20/2018	\$ 185.00

Early order program pricing ends 3/20/2018.



18-20 ULV Fogger Sprayer

18-20 ULV Fogger, first manufactured in 1990 and has been very well received in the market place. The designation originated because this model utilizes a 18 HP engine, which enables application of insecticides at vehicle speeds up to 20 miles per hour. The 18-20 produces the correct particle size to meet all insecticide label requirements at vehicle speeds up to 20 miles per hour.

TRUCK SHIP ONLY. Please call to arrange shipping

PRICE BREAKS - The more you buy, the more you save

Quantity	2+
Price	\$11,425.00

Delivery date: 2 weeks

\$11,525.00

Qty: 1 [Add to cart](#)

[Add to wishlist](#)

Product tags

[ULV \(32\)](#) , [Sprayer \(32\)](#) , [Fogger \(32\)](#) , [Ultra Low Volume \(32\)](#)

INFORMATION

- [Sitemap](#)
- [Shipping & Returns](#)
- [Privacy Notice](#)
- [Conditions of Use](#)
- [About us](#)
- [Contact us](#)

CUSTOMER SERVICE

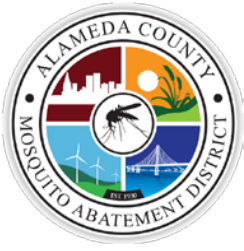
- [Search](#)
- [News](#)
- [Blog](#)
- [Recently viewed products](#)
- [Compare products list](#)
- [New products](#)

MY ACCOUNT

- [My account](#)
- [Orders](#)
- [Addresses](#)
- [Shopping cart](#)
- [Wishlist](#)

FOLLOW US

- [Facebook](#)
- [Twitter](#)
- [RSS](#)
- [YouTube](#)
- [Google+](#)



23187 Connecticut Street
Hayward, CA 94545

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

acmad@mosquitoes.org

Board of Trustees

President

Elisa Marquez

Hayward

Vice-President

Wendi Poulson

Alameda

Secretary

Eric Hentschke

Newark

Humberto Izquierdo

County at Large

P. Robert Beatty

Berkeley

Betsy Cooley

Emeryville

Alan Brown

Dublin

George Young

Fremont

James N. Doggett

Livermore

Jan O. Washburn

Oakland

Robert Dickinson

Piedmont

Kathy Narum

Pleasanton

Ed Hernandez

San Leandro

Subru Bhat

Union City

Ryan Clausnitzer

General Manager

ACMAD Manager Evaluation Committee Annual Evaluation Process

Annually in June, the General Manager (GM) is evaluated by the Manager Evaluation Committee (the "committee") which consists of the current Board President, the past Board President, and the future Board President. The following timeline will attempt to assist those Trustees assigned to this task:

1. May regular Board meeting (2nd Wednesday of May)

An information item in the Manager's report will remind the committee that the evaluation will be due by the June's meeting.

2. Post-May regular board meeting

The GM will contact the committee members with copies of a blank evaluation form, a self-evaluation, along with the signed evaluation from the prior year.

The committee, led by the current Board President, will coordinate a meeting time with the other committee members to discuss and complete the evaluation.

3. At least one week before June regular board meeting

The Board President will contact the GM to set up a meeting to discuss the completed evaluation, giving her/him time to review before the June Board meeting. The GM and the committee have the option to meet prior to the June meeting to sign off on the evaluation, and discuss any updates related to compensation which could include a salary survey based on the San Mateo, Contra Costa, Napa, and Marin/Sonoma mosquito districts.

4. Prior to the June regular Board meeting

The Board President, and/or the committee, will meet with the GM prior to the regular board meeting to agree on the evaluation and compensation agreement.

5. June regular Board meeting

After the GM leaves the board room, the committee will provide printed copies of the evaluation to the Board in a closed session for discussion, collecting them after. The committee will also recommend the compensation for the following fiscal year.

The Board will come out of closed session, rejoined by the GM, where the Board President will report out the compensation request and ask for a motion to approve this action.

Alameda County Mosquito Abatement Dist.
General Journal
For the Period From Jun 1, 2018 to Jun 15, 2018

Filter Criteria includes: Report order is by Date. Report is printed

Date	Account #	Vendor	Transaction Description	Debit Amt	Credit Amt
6/15/18	610461.1	Adapco	Vectobac #064418A	4,829.00	
6/15/18	100001		Vectobac #064418A		4,829.00
6/15/18	600001	Aetna	EE Contribution #063818	150.00	
6/15/18	100001		EE Contribution #063818		150.00
6/15/18	620141.1	Airgas	Dry ice #064418	684.28	
6/15/18	100001		Dry ice #064418		684.28
6/15/18	620021.1	All-Ways Green	Janitorial services #064318	410.00	
6/15/18	100001		Janitorial services #064318		410.00
6/15/18	610191.7	Appice, Nick	Reimbursement for college course #064518	1,291.43	
6/15/18	100001		Reimbursement for college course #064518		1,291.43
6/15/18	101110	Bank of America	Transfer funds to Bank of America #063618	68,470.55	
6/15/18	100001		Transfer funds to Bank of America #063618		68,470.55
6/15/18	610141	Bay Area Dist.	Shop supplies #064718	658.84	
6/15/18	100001		Shop supplies #064718		658.84
6/15/18	600601	Branan, Thomas	Reimbursement for retiree dental work #064618	238.00	
6/15/18	100001		Reimbursement for retiree dental work #064618		238.00
6/15/18	600001	CalPERS 457	EE Contribution #063918	2,570.00	
6/15/18	100001		EE Contribution #063918		2,570.00
6/15/18	101111	CalPERS Retirement	Contribution #063718		10,941.66
6/15/18	600001		EE Contribution #063718	18.00	
6/15/18	600001		EE Contribution #063718	4,815.64	
6/15/18	600201		ER Contribution #063718	6,108.02	
6/15/18	610141	Carquest	Parts for V#49 #065118	132.61	
6/15/18	100001		Parts for V#49 #065118		132.61
6/15/18	610191.7	CDPH	Re certification Fee #065218	134.00	
6/15/18	100001		Re certification Fee #065218		134.00
6/15/18	610011	Cintas	Laundry service #064818	431.37	
6/15/18	610001		Personal supplies #064818	346.21	
6/15/18	100001		Payment #064818		777.58
6/15/18	610461.1	Clarke	Pesticides #065018	20,783.12	
6/15/18	100001		Pesticides #065018		20,783.12
6/15/18	610122.1	Corporate Park	Landscape maintenance #064918	510.00	
6/15/18	100001		Landscape maintenance #064918		510.00
6/15/18	600601	Delta Dental	Dental insurance #064018	4,411.85	
6/15/18	100001		Dental insurance #064018		4,411.85
6/15/18	600001	EDD	EDD #065318	29.00	
6/15/18	100001		EDD #065318		29.00
6/15/18	610141	G.A Goodman	Work on V#43 #065518	244.65	
6/15/18	100001		Work on V#43 #065518		244.65
6/15/18	620261	Grainger	Shop supplies #065418	2,120.84	
6/15/18	100001		Shop supplies #065418		2,120.84
6/15/18	610021.3	Hayward Water	Hayward Water #065618	42.00	
6/15/18	100001		Hayward Water #065618		42.00
6/15/18	620021.2	Kimball Midwest	Shop supplies #065718	32.64	
6/15/18	100001		Shop supplies #065718		32.64
6/15/18	620042	Leading Edge	MapVision #065818	20,085.00	
6/15/18	100001		MapVision #065818		20,085.00
6/15/18	610451	Mar-Len	Supplies #065918	330.00	
6/15/18	610141		Supplies #065918	125.73	
6/15/18	100001		Payment #065918		455.73
6/15/18	610461.7	NBC Supply	Safety supplies #066018	356.69	
6/15/18	100001		Safety supplies #066018		356.69
6/15/18	600001	OnePoint	Payroll 06/15/18 #OnePoint	55,712.23	
6/15/18	600001		Federal W/H 06/15/18 #OnePoint	7,445.72	
6/15/18	600001		State W/H 06/15/18 #OnePoint	2,668.93	
6/15/18	600001		SDI W/H 06/15/18 #OnePoint	612.93	
6/15/18	600001		Medicare EE W/H 06/15/18 #OnePoint	1,015.37	

Alameda County Mosquito Abatement Dist.
General Journal
For the Period From Jun 1, 2018 to Jun 15, 2018

Filter Criteria includes: Report order is by Date. Report is printed

Date	Account #	Vendor	Transaction Description	Debit Amt	Credit Amt
6/15/18	600401		Medicare ER W/H 06/15/18 #OnePoint	1,015.37	
6/15/18	101110		Payroll 06/15/18 #OnePoint		68,470.55
6/15/18	610451	Out-Front	Billboard #066118	7,500.00	
6/15/18	100001		Billboard #066118		7,500.00
6/15/18	610261.11	PFM Asset	Investment advisory services #066318	1,743.35	
6/15/18	100001		Investment advisory services #066318		1,743.35
6/15/18	610021.2	PG&E	Utilities #066218	129.74	
6/15/18	100001		Utilities #066218		129.74
6/15/18	620021.3	Sonitrol	Monitoring and CCTV Fees #066418	720.00	
6/15/18	100001		Monitoring and CCTV Fees #066418		720.00
6/15/18	610451	Spark creative design	Biennial report design and set up #066518	400.00	
6/15/18	100001		Biennial report design and set up #066518		400.00
6/15/18	600601	The Hartford	Life insurance #064218	74.08	
6/15/18	100001		Life insurance #064218		74.08
6/15/18	620141.8	U.S Bank - Eric	Parallels - Desktop for Mac	99.99	
6/15/18	620141.5		Amazon - (3) Hard drives	362.13	
6/15/18	610021.4		Stericycle - Waste pick up	206.85	
6/15/18	610191.7		Seaglass - lunch for outing	21.46	
6/15/18	610191.3		California Burger - Dinner for EHS	23.40	
6/15/18	610191.3		California Burger - Dinner for EHS	17.01	
6/15/18	610191.3		Lake Tahoe Resort - Additional hotel charge	48.98	
6/15/18	620141.7		Lampire - Chicken blood	226.00	
6/15/18	610191.3		Lake Tahoe Resort - Credit		3.58
6/15/18	610141		Realtruck - Bak revolver	1,899.78	
6/15/18	620141.8		Amazon - (8) Ceramic magnets	131.57	
6/15/18	620141.8		Amazon - (8) light mounting holders	17.97	
6/15/18	620141.8		Amazon - (6) Battery packs	71.94	
6/15/18	620141.2		Fisher Scientific - Equipment	1,593.18	
6/15/18	620141.7		Lampire - Chicken blood	232.25	
6/15/18	620141.1		Tap plastics - Molded box	97.73	
6/15/18	620141.1		Bioquip - Catch basin net	214.93	
6/15/18	620141.1		FedEx - Shipping fee	44.99	
6/15/18	620141.5		Amazon - Sharpies	31.51	
6/15/18	620141.8		Fisher Scientific - Equipment	391.55	
6/15/18	620141.2		Fisher Scientific - Equipment	451.05	
6/15/18	620141.5		Amazon - Microscope	84.03	
6/15/18	620141.2		Fisher Scientific - Supplies	415.51	
6/15/18	800002		Dell Sales - Supplies for drone	3,520.02	
6/15/18	620141.1		Bioquip - Mosquito trap	1,247.33	
6/15/18	620141.5		Amazon - Monitor, external hard drive4	310.00	
6/15/18	620141.1		FedEx - Shipping fee	59.44	
6/15/18	610261.10		Boxwood - Job posting	105.00	
6/15/18	620141.2		Lifetech - Viral RNA isolation kit	1,486.25	
6/15/18	610141		Applied Biosystems - Quantstudio	4,044.60	
6/15/18	620141.1		Bioquip - EVS Trap	1,493.79	
6/15/18	800002		Amazon - Drone Supplies	13.94	
6/15/18	800002		Amazon - Drone Supplies	32.91	
6/15/18	100001		Payment		18,993.51
6/15/18	610191.7	U.S Bank - Erika	7-Eleven - Refreshments for training	13.97	
6/15/18	610451		Vista Print - Business Cards	217.39	
6/15/18	610191.3		Lake Tahoe Resort - Additional room charge	34.00	
6/15/18	610191.3		Stateline - Dinner for E.C	31.00	
6/15/18	610451		Quality Logo - Pencils for public outreach	965.20	
6/15/18	610191.3		Dalziel - Parking for meeting	15.00	
6/15/18	610451		Tattoo MFG - Temporary tattoos	137.10	
6/15/18	610451		Surewest - Internet Ads	2,540.00	
6/15/18	610451		Surewest - Internet Ads	4,000.00	

Alameda County Mosquito Abatement Dist.
General Journal
For the Period From Jun 1, 2018 to Jun 15, 2018

Filter Criteria includes: Report order is by Date. Report is printed

Date	Account #	Vendor	Transaction Description	Debit Amt	Credit Amt
6/15/18	610451		Vista Print - Business Cards	32.35	
6/15/18	610451		Advanced Graphics - Design	239.70	
6/15/18	610451		Amazon - Kitchen scale	19.74	
6/15/18	610451		Amazon - Supplies for public outreach	104.15	
6/15/18	610451		Chewy.com - Aquarium starter kit	57.53	
6/15/18	100001		Payment		8,407.13
6/15/18	610461.4	U.S Bank - Mark	Amazon - Fish supplies	138.76	
6/15/18	610191.7		Seaglass - Lunch for outing	9.59	
6/15/18	610001		Amazon - Phone cases	64.18	
6/15/18	610141		The Ford Store - Work on V#35	241.26	
6/15/18	610141		The Ford Store - Work on V#53	80.22	
6/15/18	610001		Amazon - Men's boots	274.47	
6/15/18	610461.4		Amazon - (4) Ammonia and pH kits	139.80	
6/15/18	610461.4		Amazon - (2) Garden Hose	73.90	
6/15/18	610141		Amazon - Boxes	33.98	
6/15/18	620261		Amazon - Tape Measures	17.65	
6/15/18	610141		Amazon - Supplies for V#45	20.99	
6/15/18	620141.1		Kamps - Propane	61.57	
6/15/18	610141		The Ford Store - Work on V #46	151.64	
6/15/18	610461.4		Amazon - (2) Fish Feeders	87.78	
6/15/18	610461.4		Amazon - Fish Supplies	81.61	
6/15/18	100001		Payment		1,477.40
6/15/18	610191.7	U.S Bank - Michelle	Seismic - Lunch for outing X8	173.74	
6/15/18	620041		Amazon - Office supplies	59.07	
6/15/18	610451		PayPal - Payment for booth	550.00	
6/15/18	620041		Amazon - Office supplies	36.47	
6/15/18	620041		Sage - Sage Renewal	651.78	
6/15/18	100001		Payment		1,471.06
6/15/18	610191.7	U.S Bank - Robert	Noah's Bagels - Breakfast for staff training	29.98	
6/15/18	610191.7		Mountain Mikes - Lunch for training	260.90	
6/15/18	620042		JAMF software - Subscription	32.00	
6/15/18	610191.7		Seaglass - Lunch for outing	18.56	
6/15/18	620042		ESRI - Heat maps	5.00	
6/15/18	620042		Upwork - Freelance consultant	89.05	
6/15/18	620042		Amazon - (2) wireless keyboards	65.80	
6/15/18	620042		MSFT - Office 365	60.00	
6/15/18	620042		Jive - Polycom	418.87	
6/15/18	620042		Upwork - Freelance consultant	34.25	
6/15/18	620042		Jive - Telephone adaptor	59.01	
6/15/18	620042		Comcast - Internet	176.31	
6/15/18	610022.1		TPX - Communications	1,187.90	
6/15/18	620042		Amazon - Supplies, monitors	1,743.81	
6/15/18	620042		Upwork - Freelance consultant	191.80	
6/15/18	610191.7		ACE - Transportation to training	15.00	
6/15/18	620042		Dropbox - Drop box	99.00	
6/15/18	610191.7		Aramark - Lunch for training	14.50	
6/15/18	620042		Upwork - Freelance consultant	8.56	
6/15/18	100001		Payment		4,510.30
6/15/18	610191.1	U.S Bank - Ryan	Exxon - Fuel	26.00	
6/15/18	610191.7		Enterprise - Rental van for outing	186.73	
6/15/18	610191.7		Seawall - Parking for outing	15.00	
6/15/18	610191.7		Seawall - Parking for outing	15.00	
6/15/18	610191.7		Moon Restaurant - Lunch for meeting	23.69	
6/15/18	610191.1		Exxon - Fuel	10.30	
6/15/18	610191.7		Seaglass - Lunch for Outing X4	89.50	
6/15/18	610191.3		Lucky Beaver - Dinner for R.C	44.49	
6/15/18	610191.3		Gunbarrel - Lunch for R.C, E.C, J.H	57.57	

Alameda County Mosquito Abatement Dist.
General Journal
 For the Period From Jun 1, 2018 to Jun 15, 2018

Filter Criteria includes: Report order is by Date. Report is printed

Date	Account #	Vendor	Transaction Description	Debit Amt	Credit Amt
6/15/18	610191.3		Lake Tahoe Resort - Lunch for R.C, E.C, EHS	56.41	
6/15/18	610191.3		Lake Tahoe Resort - Hotel for R.C	166.98	
6/15/18	610191.7		Enterprise - Bridge toll for outing	16.70	
6/15/18	610191.4		Trader Joes- Board supplies	54.32	
6/15/18	610191.4		Lucky - Board supplies	2.69	
6/15/18	610191.7		Philz - Breakfast for R.C	11.87	
6/15/18	100001		Payment		777.25
6/15/18	610191.3	U.S Bank -Joseph	Lake Tahoe Resort - Additional Room Charges	37.00	
6/15/18	610001		The Cobblers - Boots for G.G	175.00	
6/15/18	100001		Payment		212.00
6/15/18	600601	Vision	Vision insurance #064118	651.36	
6/15/18	100001		Vision insurance #064118		651.36
6/15/18	610021.1	Waste Management	Garbage services #066618	277.38	
6/15/18	100001		Garbage services #066618		277.38

Total 256,178.16 256,178.16

	\$	256,178.16	
	\$	(68,470.55)	Duplicate payroll posting
	\$	(3.58)	Credits
	<u>\$</u>	<u>187,704.03</u>	Total 06/15/18 Warrants

Alameda County Mosquito Abatement Dist.

General Journal

For the Period From Jun 16, 2018 to Jun 30, 2018

Filter Criteria includes: Report order is by Date. Report is printed

Date	Account #	Vendor	Transaction Description	Debit Amt	Credit Amt
6/30/18	620141.1	Airgas	Dry ice #068518	738.11	
6/30/18	100001		Dry ice #068518		738.11
6/30/18	600001	Aetna	EE Contribution #067018	150.00	
6/30/18	100001		EE Contribution #067018		150.00
6/30/18	610501	Bank Fee	Bank Fee - County	5,062.87	
6/30/18	100001		Bank Fee - County		5,062.87
6/30/18	101110	Bank of America	Transfer funds to Bank of America #066818	71,443.70	
6/30/18	100001		Transfer funds to Bank of America #066818		71,443.70
6/30/18	610261.4	Bartkiewicz	Phone call with J.H #068718	70.00	
6/30/18	100001		Phone call with J.H #068718		70.00
6/30/18	610001	Beck's shoes	Boots for A.A	157.31	
6/30/18	100001		Boots for A.A		157.31
6/30/18	800007.1	CAMP	Interest	846.87	
6/30/18	800007.2		Interest	846.87	
6/30/18	800007.3		Interest	1,692.53	
6/30/18	440110		Interest		3,386.27
6/30/18	600001	CalPERS 457 plan	EE Contribution #067118	2,570.00	
6/30/18	100001		EE Contribution #067118		2,570.00
6/30/18	101110	CalPERS Health	Health insurance #067218		32,559.97
6/30/18	600601		Health insurance #067218	32,559.97	
6/30/18	101110	CalPERS Retirement	Contribution #066918		11,140.09
6/30/18	600001		EE Contribution #066918	18.00	
6/30/18	600001		EE Contribution #066918	4,911.83	
6/30/18	600201		ER Contribution #066918	6,210.26	
6/30/18	610001	Cardenas, Miguel	Boots #068918	189.51	
6/30/18	100001		Boots #068918		189.51
6/30/18	610378	Charles Katz	Drone insurance #069018	1,980.00	
6/30/18	100001		Drone insurance #069018		1,980.00
6/30/18	610011	Cintas	Laundry service #068818	218.94	
6/30/18	610001		Personal supplies #068818	219.39	
6/30/18	100001		Services #068818		438.33
6/30/18	800002	Element One	Design/Development	8,917.50	
6/30/18	100001		Design/Development		8,917.50
6/30/18	610141	Grainger	Shop supplies #069218	431.98	
6/30/18	610461.6		Shop supplies #069218	69.91	
6/30/18	610461.7		Shop supplies #069218	273.50	
6/30/18	100001		Shop supplies #069218		775.39
6/30/18	630001	June 2018 Dep	June 2018 Depreciation - Structure	15,547.01	
6/30/18	203301		June 2018 Depreciation - Structure		15,547.01
6/30/18	630001		June 2018 Depreciation - Equipment	6,442.60	
6/30/18	203303		June 2018 Depreciation - Equipment		6,442.60
6/30/18	610141	Liewer Enterprises	Shop supplies #069318	1,772.43	
6/30/18	100001		Shop supplies #069318		1,772.43
6/30/18	610141	Mar-Len supply	Shop supplies #069418	236.66	
6/30/18	100001		Shop supplies #069418		236.66
6/30/18	610141	NBC Supply	Supplies #069518	246.94	
6/30/18	610461.7		Supplies #069518	329.25	
6/30/18	100001		Supplies #069518		576.19
6/30/18	600001	OnePoint	Payroll 06/30/18 #OnePoint	57,643.43	
6/30/18	600001		Federal W/H 06/30/18 #OnePoint	8,081.46	
6/30/18	600001		State W/H 06/30/18 #OnePoint	2,961.14	
6/30/18	600001		SDI W/H 06/30/18 #OnePoint	641.95	
6/30/18	600001		Medicare EE W/H 06/30/18 #OnePoint	1,057.86	
6/30/18	600401		Medicare ER W/H 06/30/18 #OnePoint	1,057.86	
6/30/18	101110		Payroll 06/30/18 #OnePoint		71,443.70

Alameda County Mosquito Abatement Dist.

General Journal

For the Period From Jun 16, 2018 to Jun 30, 2018

Filter Criteria includes: Report order is by Date. Report is printed

Date	Account #	Vendor	Transaction Description	Debit Amt	Credit Amt
6/30/18	620042	PC Professional	IT Services #069618	4,498.65	
6/30/18	100001		IT Services #069618		4,498.65
6/30/18	610021.2	PG&E	Utilities #069718	1,726.28	
6/30/18	100001		Utilities #069718		1,726.28
6/30/18	610451	Petty Cash 2017/18	Twitter ad #E.C	50.00	
6/30/18	610451		Gift card for social media contest #E.C	50.00	
6/30/18	620141.1		Propane #M.B	32.75	
6/30/18	101400		Petty Cash - Fiscal Year 2017/2018		132.75
6/30/18	610191.3		Toll for bridge #E.C	5.00	
6/30/18	620041		Certificate for filing #E.C	5.00	
6/30/18	620041		DMV Print out #J.R	2.00	
6/30/18	610451		Public education - Animal food #J.H	6.99	
6/30/18	610191.3		Parking #E.H	9.50	
6/30/18	610191.3		Toll for bridge #M.M	5.00	
6/30/18	101400		Petty Cash - Fiscal year 2017/2018		33.49
6/30/18	610451		Crickets #J.H	12.98	
6/30/18	610451		Crickets #S.E	19.67	
6/30/18	620141.7		Return box #E.H.S	8.65	
6/30/18	620041		Poster tubes #E.H.S	20.76	
6/30/18	610461.7		Ear muffs #N.C	32.74	
6/30/18	610191.3		Breakfast for conference, gas #M.B	22.90	
6/30/18	610191.3		Conference #J.B	46.45	
6/30/18	610451		Crickets #E.C	4.39	
6/30/18	610191.3		Breakfast for conference #S.E	10.30	
6/30/18	620141.1		Lab supplies #M.B	9.96	
6/30/18	620041		Office supplies #M.M	7.79	
6/30/18	610451		Crickets #J.H	4.37	
6/30/18	610191.3		Parking for workshop #J.H	16.00	
6/30/18	101400		Petty Cash - Fiscal year 2017-2018		216.96
6/30/18	620141.1		Mini binder clips #E.H.S	4.82	
6/30/18	610191.3		Lyft to hotel #E.C	33.81	
6/30/18	610191.3		Lyft to airport #E.C	27.18	
6/30/18	610451		Crickets #E.C	2.20	
6/30/18	620141.2		Distilled water #M.B	13.08	
6/30/18	610451		Booth fee #E.C	40.00	
6/30/18	610191.3		Bridge toll #E.C	5.00	
6/30/18	610451		Crickets #E.C	3.29	
6/30/18	620041		DMV print out #A.M	5.00	
6/30/18	620041		DMV print out #G.G	5.00	
6/30/18	620141.8		Research project #S.E	11.31	
6/30/18	610191.7		CDPH test #M.W	28.00	
6/30/18	620141.5		Trash can #E.H.S	31.81	
6/30/18	610191.3		Bart parking #E.C	3.00	
6/30/18	610451		Fair prize #E.C	50.00	
6/30/18	101400		Petty Cash - Fiscal year 2017-2018		263.50
6/30/18	610261.10	Regional Government	Contract services for month #069818	395.00	
6/30/18	100001		Contract services for month #069818		395.00
6/30/18	600001	Revenue/ Refund	Refund		1,325.40
6/30/18	499990		Refund		1,449.00
6/30/18	411010		Revenue		171.79
6/30/18	411010		Revenue		8,405.70
6/30/18	411010		Revenue		207.92
6/30/18	411010		Revenue		11.42
6/30/18	411010		Revenue		187.18
6/30/18	411010		Revenue		7,768.86

Alameda County Mosquito Abatement Dist.

General Journal

For the Period From Jun 16, 2018 to Jun 30, 2018

Filter Criteria includes: Report order is by Date. Report is printed

Date	Account #	Vendor	Transaction Description	Debit Amt	Credit Amt
6/30/18	411010		Revenue		190.93
6/30/18	411010		Revenue		29.78
6/30/18	411010		Revenue		70.09
6/30/18	100001		Revenue/ Refund	19,818.07	
6/30/18	610191.5	Trustee in Lieu	Trustee in lieu #067318 - 068418	1,200.00	
6/30/18	100001		Trustee in lieu #067318 - 068418		1,200.00
6/30/18	610022.4	Verizon	Communication expenses #069918	1,858.36	
6/30/18	100001		Communication expenses #069918		1,858.36
6/30/18	610191.1	WEX	Statement ended 06-15-18 #070018	4,834.93	
6/30/18	100001		Statement ended 06-15-18 #070018		4,834.93

Total 270,575.63 270,575.63

\$	270,575.63	
\$	(71,443.70)	Duplicate payroll posting
\$	(21,989.61)	Amount Depreciated
\$	(5,062.87)	County Fee
\$	(846.87)	CAMP Interest
\$	(846.87)	CAMP Interest
\$	(1,692.53)	CAMP Interest
\$	(19,818.07)	Revenue Received
\$	(646.70)	Petty Cash 2017/18
\$	148,228.41	Total 06/30/18 Warrants

**Alameda County Mosquito Abatement District
Investment, Reserves, and Cash Balance Report
June 30, 2018. (12 of 12 mth, 100%)**

Account #	Budget Reserves	Beginning Balance	Deposit Withdrawals	Interest Earned	New Balance
800001	Working Capital (Dry Period Cash)	\$ 2,391,220.00			\$ 2,391,220.00
800002	Capital Replacement ¹	\$ 339,746.82	\$ 12,484.37		\$ 352,231.19
800003	Public Health	\$ -			\$ -
800004	Contingency	\$ 9,400.00			\$ 9,400.00
		\$ 2,740,366.82	\$ 12,484.37	\$ -	\$ 2,752,851.19
Account #	Investment Accounts	Beginning Balance	Deposit Withdrawals	Interest Earned	New Balance
800005	LAIF	\$ 7,048.29		\$ -	\$ 7,048.29
800006	OPEB Fund	\$ 4,288,933.42		\$ (6,487.34)	\$ 4,282,446.08
101106	VCJPA Member Contingency	\$ 336,801.00			\$ 336,801.00
101106.1	VCJPA Property Contingency	\$ 50,263.00			\$ 50,263.00
800007.1	CAMP: Repair and Replace	\$ 503,655.51	\$ -	\$ 846.87	\$ 504,502.38
800007.2	CAMP: Public Health Emergency	\$ 503,655.51	\$ -	\$ 846.87	\$ 504,502.38
800007.3	CAMP: Operating Reserve	\$ 1,006,588.56	\$ -	\$ 1,692.53	\$ 1,008,281.09
800007.4	CAMP: Capital Reserve Fund	\$ -	\$ -	\$ -	\$ -
800008	PARS: Pension Stabilization	\$ 499,016.94			\$ 499,016.94
Account #	Cash Accounts	Beginning Balance	Expenditures	Deposits/ Income	New Balance
101110	Bank of America (Payroll Account)	\$ 124,658.00			\$ 124,538.78
101111	Bank of The West (Transfer Account)	\$ 117,877.17		\$ 11,231.49	\$ 106,645.68
100001	County Account	\$ 4,329,153.18	\$ 281,290.72	\$ 14,755.20	\$ 4,062,617.66

1 - Drone supplies and capital replacement project

Alameda County Mosquito Abatement District
Income Statement
Consolidated
June 30, 2018. (12 of 12 mth, 100%)

REVENUES	Actual 2015/16	Actual 2016/17	Current Month	Year to Date 2017/2018	Budget 2017/18	Actual vs Budget
Total Revenue	\$ 4,180,831.00	\$ 4,366,903.00	\$ 17,043.67	\$ 5,140,836.67	\$ 3,949,090.00	130%

EXPENDITURES	Actual 2015/16	Actual 2016/17	Current Month	Year to Date 2017/2018	Budget 2017/18	Actual vs Budget
Salaries	\$1,661,234	\$1,677,469	\$ 151,748.09	\$ 1,744,733.25	\$1,761,305	99%
CalPERS Retirement	\$205,340	\$219,892	\$ 12,318.28	\$ 255,617.30	\$253,662	101%
Medicare	\$21,160	\$21,368	\$ 2,073.23	\$ 23,563.57	\$25,881	91%
Fringe Benefits	\$554,630	\$453,877	\$ 37,935.26	\$ 449,738.40	\$506,368	89%
Total Salaries, Retirement, & Benefits	\$2,442,364	\$2,372,606	\$204,075	\$2,473,653	\$2,547,216	97%
Clothing and personal supplies (purchased)	\$7,169	\$8,955	\$ 1,426.07	\$ 4,599.53	\$8,500	54%
Laundry service and supplies (rented)	\$7,162	\$8,840	\$ 650.31	\$ 8,923.90	\$9,000	99%
Utilities	\$22,214	\$27,084	\$ 2,382.25	\$ 29,179.85	\$38,000	77%
Communications-IT	\$32,756	\$54,128	\$ 30,613.37	\$ 94,724.59	\$109,600	86%
Maintenance: structures & improvements	\$6,739	\$19,503	\$ 510.00	\$ 19,959.70	\$28,600	70%
Maintenance of equipment	\$24,175	\$27,051	\$ 10,322.31	\$ 37,943.34	\$45,000	84%
Transportation, travel, training, & board	\$75,326	\$124,827	\$ 9,210.26	\$ 126,152.78	\$156,810	80%
Professional services	\$159,499	\$82,082	\$ 2,313.35	\$ 93,329.04	\$184,770	51%
Memberships, dues, & subscriptions	\$14,540	\$20,191	\$ -	\$ 15,928.00	\$22,130	72%
Insurance - VCJPA	\$106,268	\$113,867	\$ 1,980.00	\$ 130,738.93	\$133,810	98%
Community education	\$12,450	\$40,222	\$ 17,337.05	\$ 28,746.47	\$53,000	54%
Operations	\$187,490	\$176,758	\$ 27,196.06	\$ 155,724.63	\$260,800	60%
Household expenses	\$13,790	\$17,373	\$ 1,162.64	\$ 16,092.88	\$20,010	80%
Office expenses	\$14,195	\$18,590	\$ 792.87	\$ 9,097.77	\$13,050	70%
Laboratory supplies	\$76,130	\$80,008	\$ 10,659.48	\$ 76,553.92	\$105,000	73%
Small tools and instruments	\$1,155	\$2,513	\$ 2,138.49	\$ 6,738.49	\$8,500	79%
Total Staff Budget	\$ 780,944.00	\$833,192	\$ 118,694.51	\$ 854,433.82	\$1,196,580	71%
Total Operating Expenditures	\$ 3,032,263.00	\$3,479,710	\$ 322,769.37	\$ 3,328,086.34	\$4,250,164	78%



23187 Connecticut Street
Hayward, CA 94545

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

acmad@mosquitoes.org

MONTHLY STAFF REPORT – June 2018

Board of Trustees

President

Elisa Marquez

Hayward

Vice-President

Wendi Poulson

Alameda

Secretary

Eric Hentschke

Newark

Humberto Izquierdo

County at Large

P. Robert Beatty

Berkeley

Betsy Cooley

Emeryville

Alan Brown

Dublin

George Young

Fremont

James N. Doggett

Livermore

Jan O. Washburn

Oakland

Robert Dickinson

Piedmont

Kathy Narum

Pleasanton

Ed Hernandez

San Leandro

Subru Bhat

Union City

Ryan Clausnitzer

General Manager

1. OPERATIONS REPORT

An upswing in West Nile virus detections during the month led to increased field activities, particularly in Union City, Hayward, and Castro Valley. This included inspections and treatments of catch basins, storm drains, unmaintained swimming pools, canals, and fresh water marshes. The risk of disease transmission in Union City led to an adulticiding treatment. This was one of the few adulticiding treatments conducted by ACMAD over the last few decades. Both our truck-mounted ULV (Ultra Low Volume) machine and ULV backpack were used on the night of June 8th. Operations worked closely with the lab to determine if the treatment produced effective results. Based on data from sentinel mosquitoes placed inside the treatment area, the treatment was not as effective as expected. Staff worked together in determining the reason why the treatment was not as effective as anticipated. The treatment process, the material (Pyrenone 25-5), the equipment, and the weather conditions during the operation were all scrutinized and reviewed. It was agreed that we would isolate the variables of the treatment process to determine what did not work as well as expected and to learn as much as possible from the operation. The goal was to be sure that our tool of last resort will be effective if and when we need it.

The lab tested the effectiveness of the adulticide product utilized in the operation as well as the potential of resistance in the sentinel mosquitoes used in the operation. Operations and the shop reviewed the treatment process and the equipment's calibration. It was determined that the Pyrenone 25-5 did kill mosquitoes in the lab, that resistance was not a factor, and that the equipment and calibration were functioning properly.

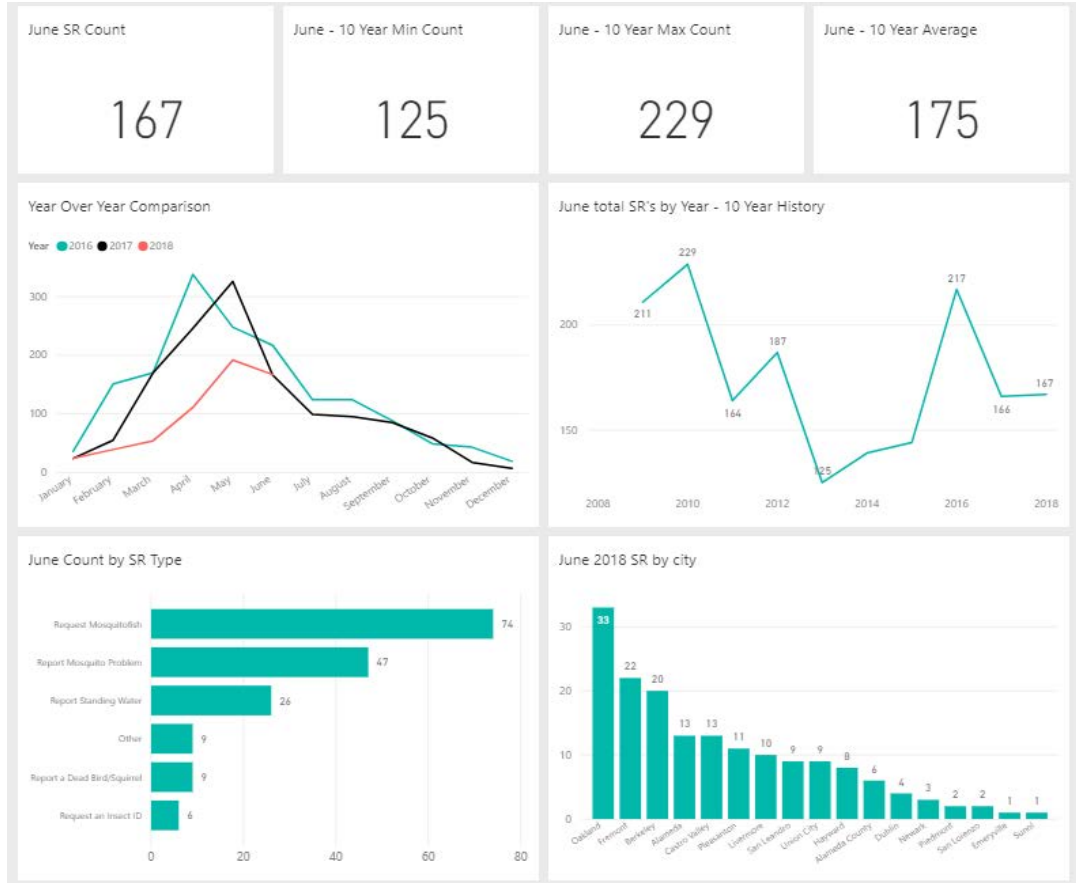
The next step was to conduct field trials. Early morning field tests were conducted on June 20th and 21st. A new velometer was also purchased and used to get an exact gauge on wind speed and direction. The results were encouraging: the equipment functioned well; it put out the correct amounts of material and the material killed adult sentinel mosquitoes that were exposed to it in weather conditions that were within the labeled application rates. Staff concluded that the main factor affecting the adulticiding operation was the weather. We feel confident that we will be able to perform more effective adulticiding operations moving forward.

Operations staff also continued inspections and larval treatments for *Culex tarsalis*, *Culex pipiens*, and *Culex erythrothorax* to help contain WNV activity. This included inspections and treatments of unmaintained swimming pools acquired from our aerial pool survey. Tidal marshes were also inspected and treated for *Aedes dorsalis*. Service requests were below the 10-year average but kept operations staff busy.

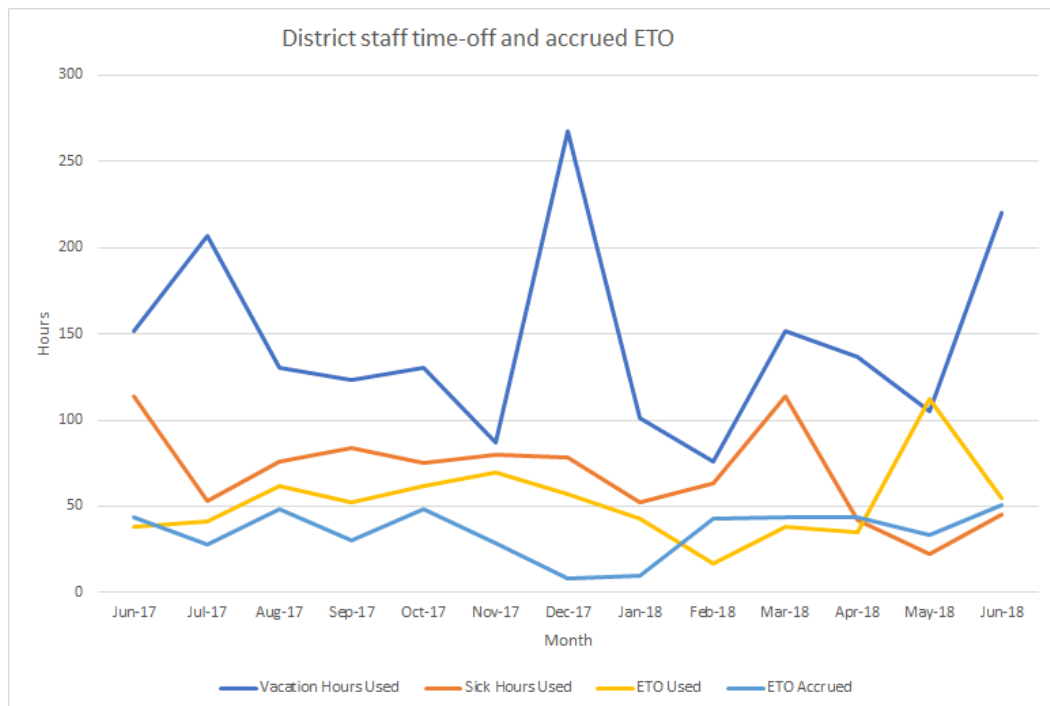
Joseph Huston
Field Operations Supervisor

A. Operational Data

1. Service Requests



2. Activity Report



2. LAB

Summary

- West Nile virus (WNV) was detected in 4 American Crows and 5 groups of mosquitoes that were collected in Union City during June 2018.
- Two of the WNV-positive mosquito groups were collected in Mosquito Magnet traps.
- The adulticide Pyrenone 25-5 was applied where two groups of WNV-infected mosquitoes were detected. Most of the sentinel mosquitoes that were placed in the treatment area did not die, suggesting that the treatment was not highly effective. Tests of mosquitoes collected in the region where the sentinel mosquitos were collected indicated they were susceptible to permethrin (the active ingredient in Pyrenone 25-5). Tests of Pyrenone 25-5 used in the application indicated it had high potency, and tests of the application equipment demonstrated it functioned correctly. The results of these studies suggest that unforeseeable circumstances such as anomalous microclimates in the treatment area affected the efficacy of the treatment.
- Mosquito abundance was moderately higher in June relative to the prior month, which is typical for the season.
- The ACMAD UAS was flown to capture aerial imagery of a marsh where *Culex erythrothorax* breed at high levels.

Arbovirus Monitoring

- During the month of June 2018, West Nile virus (WNV) was detected in four American Crows collected in Union City (Table 1). Both occurrences of WNV in these crows prompted enhanced mosquito trapping efforts for multiple trap nights in the area where the birds were collected. WNV containing mosquitoes were discovered in traps placed near Sea Breeze Park (Table 1 and described below). During the final week of May, a House Sparrow that was collected in Castro Valley was also found to contain WNV (Table 1). Mosquito traps placed in response to the WNV-infected bird in Castro Valley did not uncover any mosquitoes that contained WNV. To date, a total of six birds have been found to contain WNV during 2018.
- Routine trapping during the final week of May at the western end of the Alameda Creek Regional Trail resulted in the detection of one collection of *Culex tarsalis* that contained WNV (Table 1). Traps that were subsequently placed in the area uncovered two more collections of *Cx. tarsalis* that contained WNV (Table 1). Notably, one of the WNV-positive collections was from a Mosquito Magnet Trap (MMT) that was placed by the lab in the area to suppress mosquito abundance. The mosquito trapping response to the WNV-infected birds collected near Sea Breeze Park resulted in three collections of WNV-containing mosquitoes being detected (Table 1). The June 15 collection that contained WNV-positive *Culex erythrothorax* was made using an MMT that was placed by the lab to reduce mosquito abundance.
- Detection of WNV-infected mosquitoes that were collected in MMT is notable. MMT are placed in the field for multiple days, and trap contents typically collected once per week. The majority of the collected mosquitoes are not alive. It is thought that nucleic acids in arboviruses are not particularly stable once the mosquito is dead. The detection of WNV in mosquitoes collected in MMT suggests otherwise (or that WNV was present in mosquitoes that were alive at the time of collection). The detection of WNV in mosquitoes collected in MMT suggest this trap may be of use for both suppressing mosquito abundance and monitoring arbovirus prevalence in areas with high numbers of mosquitoes. Because the District does not routinely apply pesticides to control adult mosquitoes, the District may wish to employ more intensive use of MMT to reduce and survey adult mosquitoes when numbers are high or when mosquitoes are found to contain arbovirus. Additionally, it may be of value to conduct a study in which dead from live mosquitoes that are collected in MMT are separated before they are tested for the presence of arbovirus.

- None of the mosquitoes or birds that were collected during 2018 were found to contain Saint Louis encephalitis virus (SLEV) or Western equine encephalitis virus (WEEV).

Table 1. WNV in mosquitoes and birds collected in Alameda County during 2018.

Arbovirus	Collection Date	Species	Location	City
WNV	May 22	<i>Cx. pipiens</i>	Hayward Regional Shoreline	Hayward
WNV	May 24	American Crow	Pioneer Elementary School	Union City
WNV	May 29	<i>Cx. tarsalis</i>	Alameda Creek Trail	Union City
WNV	May 31	House Sparrow	Cold Water Drive	Castro Valley
WNV	June 5	American Crow	Sea Breeze Park Area	Union City
WNV	June 7	<i>Cx. tarsalis</i>	Sea Breeze Park Area	Union City
WNV	June 8	<i>Cx. tarsalis</i>	Alameda Creek Trail	Union City
WNV	June 8	American Crow	Sea Breeze Park Area	Union City
WNV	June 15	<i>Cx. tarsalis</i>	Alameda Creek Trail	Union City
WNV	June 15	<i>Cx. erythrothorax</i>	Sea Breeze Park Area	Union City
WNV	June 19	<i>Cx. tarsalis</i>	Sea Breeze Park Area	Union City
WNV	June 25	American Crow	Veteran's Memorial Park	Union City
WNV	June 25	American Crow	Veteran's Memorial Park	Union City

Native Mosquito Abundance

- For the month of June, there was no recorded rainfall, the average maximum temperature was 74 °F, (Hayward, CA). The prior two months had average maximum temperatures of 66 °F and 68 °F.
- Over the course of the month, 459 EVS CO₂ traps were placed; 19,600 mosquitoes were collected and identified to species (Figure 1). There was an average of 42.7 mosquitoes per trap night; a nearly 1.7-fold increase in the number of mosquitoes per trap night relative to the prior month. The increase in the number of mosquitoes can be attributed to collections of *Culex erythrothorax* that were made at Hayward Regional Shoreline and a marsh north of Sea Breeze Park. Of the vectors for WNV, *Cx. erythrothorax* collected from marsh habitats was the predominant species collected during June (77 % of the total), 17 % of the mosquitoes captured in the traps were *Culex tarsalis*, and 1 % were *Culex pipiens* (Figure 2). Five percent of the species that were collected in the EVS CO₂ traps were not vectors of WNV. The geospatial distribution of mosquito species collected at each trap site is displayed in Figure 3.
- Mosquito abundance, as measured using NJLT, was similar to the prior month (Figure 4; 1.09-fold higher relative to May; total of 1,900 mosquitoes over 840 trap nights; 2.26 mosquitoes / trap night).

Invasive Aedes Monitoring

- Invasive *Aedes* mosquitoes have not been detected in any mosquito trap placed in Alameda County during 2018.

Unmanned Air Systems (UAS)

- The District was informed that the application to fly UAS in the marsh regions of the county was favorably reviewed by contractors from the Federal Aviation Administration and has been forwarded to Air Traffic Controllers (ATC) in the area for final review. Comment from ATC is anticipated during July 2018.
- The ACMAD UAS was used during June to image the marsh and water impoundment BMP to the north of Sea Breeze Ponds where high numbers of *Cx. erythrothorax* were observed (Figure 5).

Assessment of Adulticide Treatment

- In response to WNV-containing mosquitoes detected at the western end of the Alameda Creek Trail, the adulticide Pyrenone 25-5 was applied by Operations staff in the area on the evening of June 8 (Friday). Pyrenone 25-5 contains 25 % piperonyl butoxide (PBO; inhibits the detoxification of pesticides) and 5 % pyrethrins (a mixture of permethrin-like compounds that kill insects). Both truck-mounted ultra low volume (ULV) and backpack ULV foggers were utilized. Although the weather conditions were reported to be within the label limits that permitted the treatment, unanticipated anomalies in the weather appear to have reduced the efficacy of the treatment.
- The day prior to the Pyrenone 25-5 treatment (Thursday, June 7), lab staff placed mosquito traps at Coyote Hills Regional Park (CHRP) to collect mosquitoes for placement in the fog area to determine if the application had the potential to kill mosquitoes (i.e. sentinel mosquitoes). In the hours leading up to the Pyrenone 25-5 treatment, lab staff placed the sentinel mosquito cages at sites in and outside of the treatment area (Figure 6). Five sentinel traps were placed within the treatment area 10 – 100 feet from the ULV equipment used to apply the Pyrenone 25-5. Four additional sentinel traps were placed from 600 – 1400 feet from the application site to determine if the Pyrenone 25-5 drifted farther than anticipated.
- The morning following the Pyrenone 25-5 treatment (Saturday, June 9), lab staff collected the sentinel traps and determined the proportion of mosquitoes in the traps that had been killed. On average, 11.5 ± 3.0 % of the mosquitoes in sentinel cages placed within the treatment area were dead while 5.7 ± 2.7 % of those placed outside of the treatment area had succumbed (Figure 7).
- The low proportion of sentinel mosquitoes that succumbed in the treatment area suggested that the treatment was not highly effective or the mosquitoes in the sentinel cages were resistant to Pyrenone 25-5. To test the latter hypothesis, bottle bioassays were conducted on Sunday June 10 using mosquitoes collected from the site where the sentinel mosquitoes were collected (CHRP) and bottles that contained permethrin and PBO. The results show that the mosquitoes collected at CHRP were highly susceptible to permethrin (Figure 8).
- Because the sentinel mosquitoes were susceptible to active ingredients contained in Pyrenone 25-5, it suggested that the equipment used to apply the Pyrenone 25-5 may have been faulty or that the Pyrenone 25-5 had degraded and did not contain a sufficiently high concentration of active pyrethroids. To test the latter hypothesis, bottle bioassays were conducted using the Pyrenone 25-5 that was in the truck mounted ULV tank, Pyrenone 25-5 from the product container, and technical grade permethrin with PBO. Dilutions of Pyrenone 25-5 that contained low quantities of permethrin and PBO were highly potent and killed the test mosquitoes (Figure 9).
- The high potency of the Pyrenone 25-5 used in the application western end of the Alameda Creek Trail coupled with high survivorship of the sentinel mosquitoes suggested that the equipment used for the application may have malfunctioned. To test this hypothesis, trial treatments using the truck mounted ULV were made at a remote and environmentally degraded site. Briefly, sentinel mosquito cages were placed 10 feet upwind of the ULV nozzles, and 10, 50, 100 and 150 feet downwind of the truck ULV nozzles. The maximum swath of the truck mounted ULV is reportedly 150 feet on both sides of the truck. Two trials applying Pyrenone 25-5 from the truck ULV were conducted. None of the sentinel mosquitoes that were placed 10 ft upwind of the truck ULV succumbed (Figure 10). A high proportion of the sentinel mosquitoes that were 10 ft downwind of the truck ULV succumbed to pyrethroid intoxication (Figure 10). However, there was a proportional reduction in the number of sentinel mosquitoes that died as the distance between the truck ULV and sentinel mosquitoes increased; none of the sentinel mosquitoes that were placed 150 ft from the truck succumbed (Figure 10). A wind meter used during the trial applications showed average wind speeds of between 6 and 8 mph, which is below the upper

limit indicated on the label for Pyrenone 25-5. During the trial applications, staff in the vehicle that was following behind the ULV truck noted that the Pyrenone 25-5 dispersed normally from the ULV nozzle. However, it did not settle to the ground and slowly rise, as had been anticipated. Instead, the Pyrenone 25-5 fog appeared to swirl and dissipate. Because the truck and backpack ULV were professionally calibrated by a vendor and the Pyrenone 25-5 exited the ULV nozzle as expected, subtle microclimate anomalies appear to have reduced the efficacy of the trial Pyrenone 25-5 treatments and the treatment applied near the western end of the Alameda Creek Trail.

- Mosquito abundance in the area around the western end of the Alameda Creek Trail did not change substantially after the treatment with Pyrenone 25-5 (Figure 11).

FIGURES

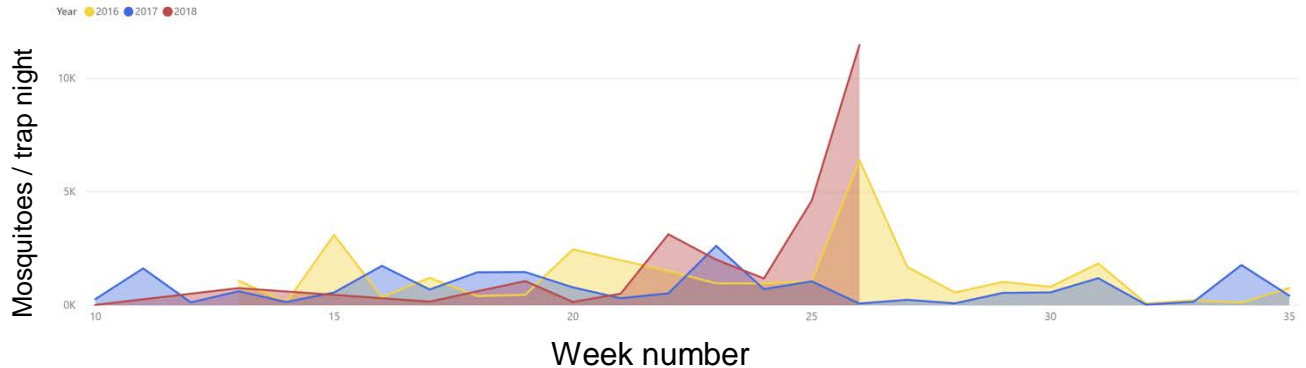


Figure 1. Mosquitoes captured in EVS CO₂ traps from 2016 – 2018. A total of 19,272 mosquitoes were captured in EVS CO₂ traps during June 2018 and identified to species. By comparison, 4,634 mosquitoes were captured during June 2017 and 10,960 during June 2016.

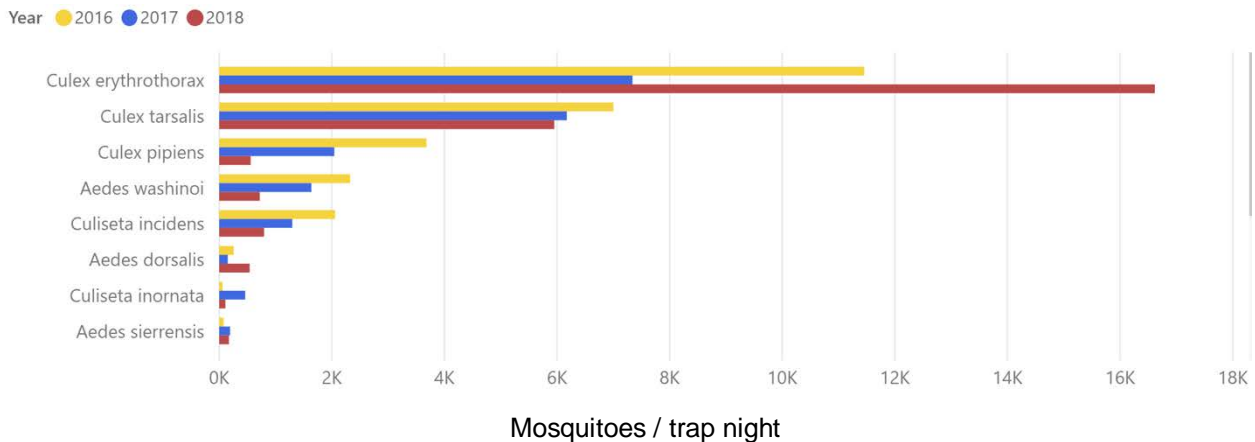


Figure 2. The eight-most abundant species of mosquito captured during June of 2016 – 2018 using EVS CO₂ traps.

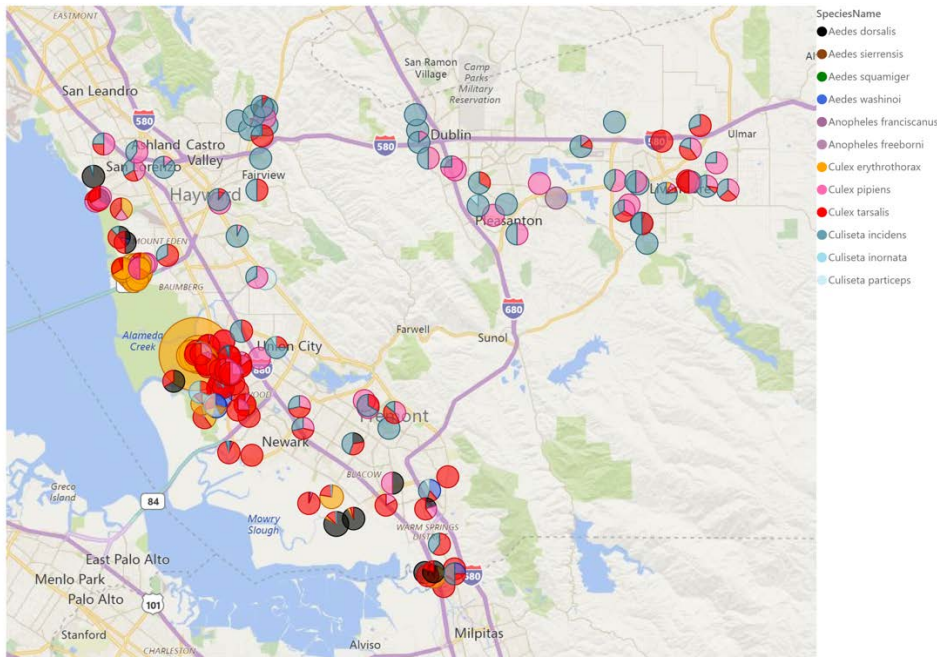


Figure 3. Mosquito abundance by trap site evaluated using EVS CO₂ traps. Pie charts over trap sites indicate the distribution of mosquito species collected at the trap site. The size of the pie charts indicates the relative number of mosquitoes at each site during June 2018. Sites with two or fewer mosquitoes collected in the traps are not shown on the map. The largest pie chart over Alameda Creek indicates 10,709 female *Culex erythrothorax* that were collected during the week of June 25.

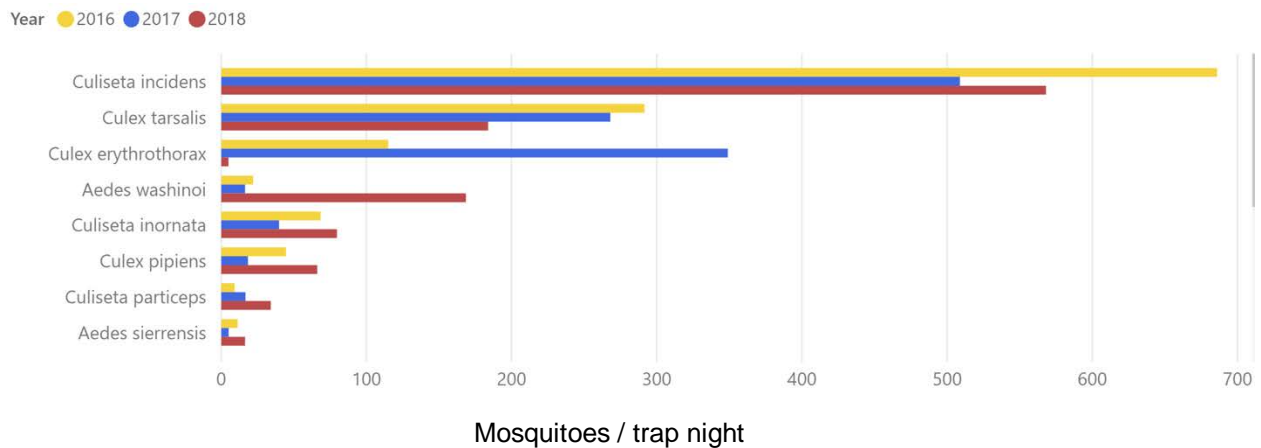


Figure 4. The eight-most abundant species of mosquito captured during June of 2016 – 2018 using NJLT.



Figure 5. Aerial image of marsh with high *Cx. erythrothorax* abundance located north of Sea Breeze Park. Image captured using the ACMAD UAS (DJI 210RTK with Z30 camera).

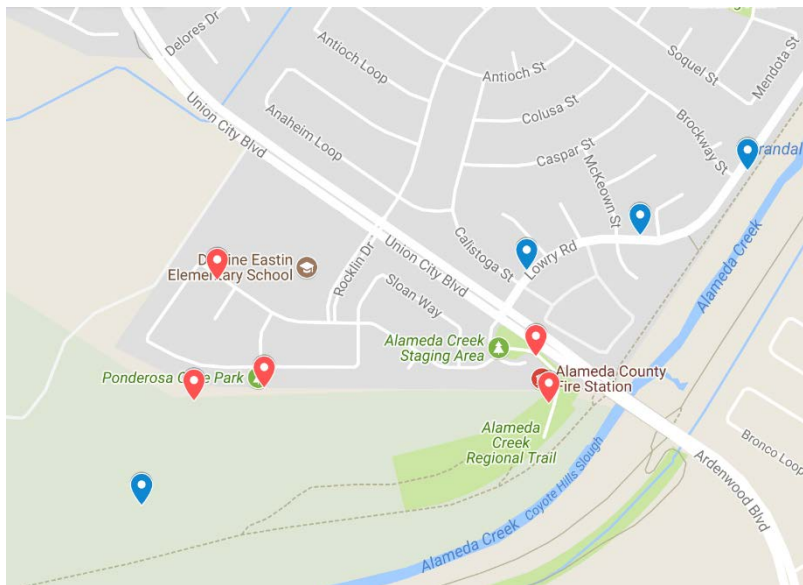


Figure 6. Locations of sentinel mosquito cages placed near the western end of the Alameda Regional Trail (Union City) on June 8, 2018 prior to treatment of the area with Pyrenone 25-5. Red inverted teardrop icons indicate location of sentinel mosquito cages placed within the treatment area and blue inverted teardrop icons denote sentinel cages placed outside of the treatment area. Mosquitoes in the sentinel cages were collected from Coyote Hills Regional Park.

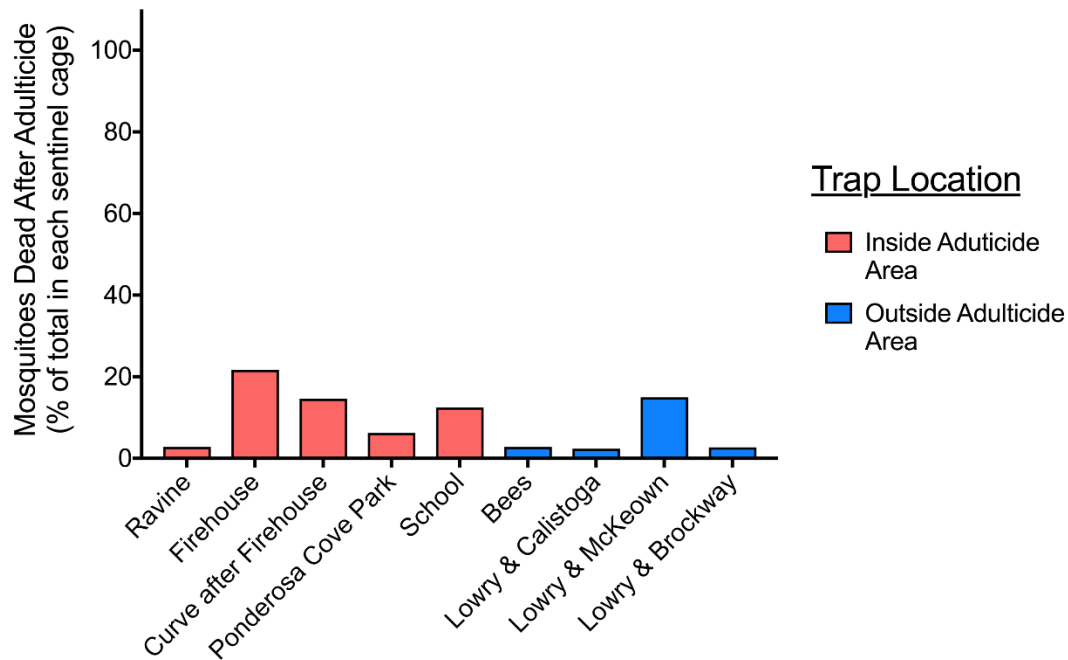


Figure 7. Proportion of sentinel mosquitoes killed inside and outside of the area in Union City that was treated with Pyrenone 25-5 on June 8, 2018. A low proportion of mosquitoes in the sentinel cages placed inside and outside of the treatment area were killed (11.5 ± 3.0 and 5.7 ± 2.7 %, respectively). There was no significant difference in the mortality of sentinel mosquitoes placed inside and outside of the treatment area (unpaired t test, $P = 0.2467$).

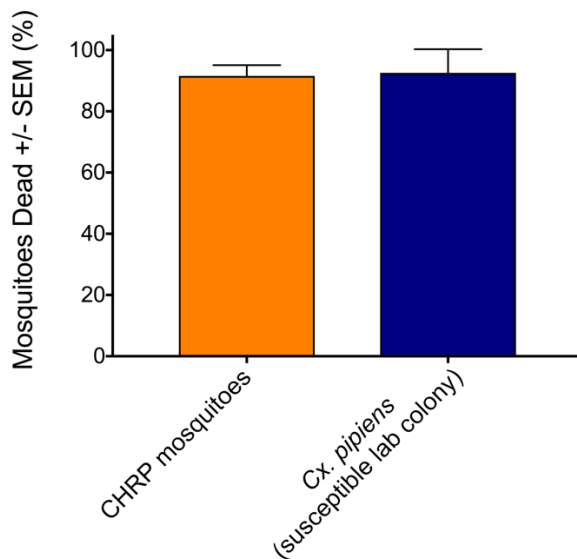


Figure 8. Bottle bioassays of mosquitoes collected for sentinel cages placed in the Pyrenone 25-5 treatment area. Bottle bioassays were conducted using mosquitoes collected at the site were the sentinel mosquitoes were collected (Coyote Hills Regional Park (CHRP)). CHRP mosquitoes were exposed to bottles that contained permethrin and PBO ($n > 30$ mosquitoes per bottle). There was no significant difference in the proportion of CHRP mosquitoes and *Cx. pipiens* that died in bottles that contained $2 \mu\text{g}$ permethrin + $20 \mu\text{g}$ PBO (91.5 ± 2.5 and 92.6 ± 3.2 %, respectively; unpaired t test, $P = 0.8608$). A higher concentration of permethrin ($20 \mu\text{g}$ per bottle) killed 100 % of the CHRP mosquitoes (not shown).

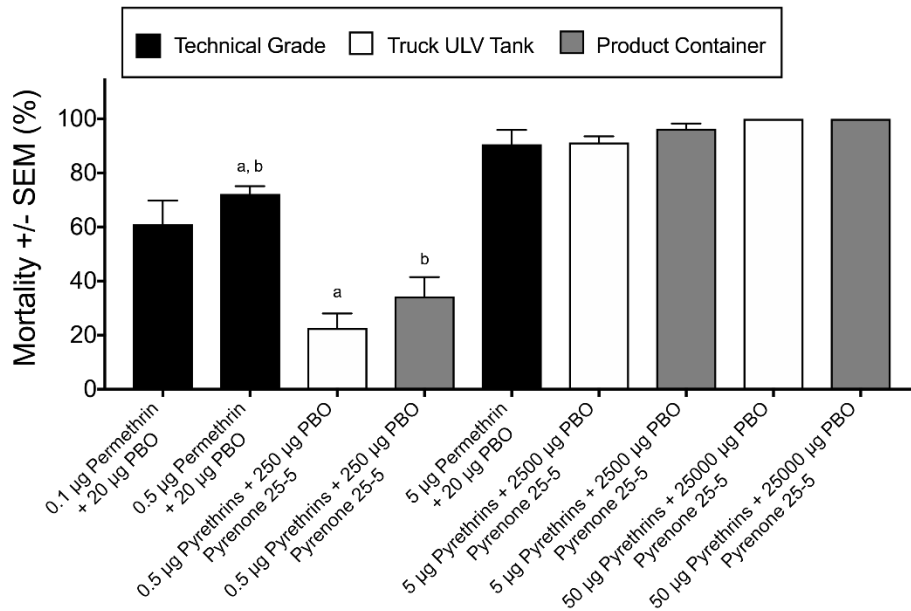


Figure 9. Bottle bioassays of mosquitoes exposed to technical grade permethrin and PBO, and diluted Pyrenone 25-5 that was collected truck ULV tank or product container. The mosquitoes used in the bottle bioassay were *Cx. erythrothorax* collected from a marsh habitat which had been shown previously to be highly susceptible to permethrin relative to a susceptible lab colony of *Cx. pipiens*. Because the proportion of permethrin to PBO in Pyrenone 25-5 cannot be adjusted, dilutions of Pyrenone 25-5 were made to adjust the concentration of only permethrin for the bottle bioassay. Pyrenone 25-5 from the truck ULV tank and product container that was diluted to contain 0.5 µg of permethrin + 250 µg PBO per bottle killed significantly fewer mosquitoes relative to bottles that contained 5 µg of technical grade permethrin and 20 µg PBO ($34.3 \pm 7.1\%$, $22.6 \pm 5.4\%$, and $72.2 \pm 2.9\%$, respectively; unpaired t test, $P < 0.008$). There was no significant difference in the proportion of killed mosquitoes that were exposed to Pyrenone 25-5 from the truck ULV tank or product container (unpaired t test, $P = 0.2621$).

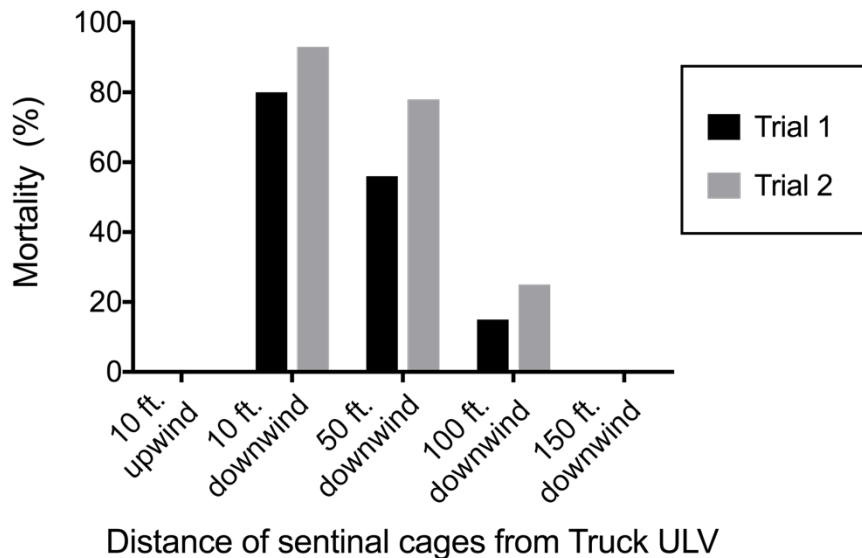


Figure 10. Effective distance of Pyrenone 25-5 released from the truck ULV during moderately windy conditions. Sentinel mosquitoes were placed in cages 10 ft. on either side of the truck ULV and 50, 100, and 150 ft downwind of the truck ULV. The maximum swath of the truck mounted ULV is reportedly 150 feet on both sides of the truck when weather conditions are ideal. The truck ULV was driven past the sentinel mosquito traps at 5 mph in two separate trials. The wind speed during these trials was measured at 6 – 8 mph. None of the

sentinel mosquitoes that were placed 10 ft. upwind or 150 ft downwind of the truck ULV were affected by the Pyrenone 25-5. At 10 ft, 50 ft. and 100 ft downwind of the truck, 87%, 67%, and 25% of the sentinel mosquitoes succumbed to pyrethroid intoxication.

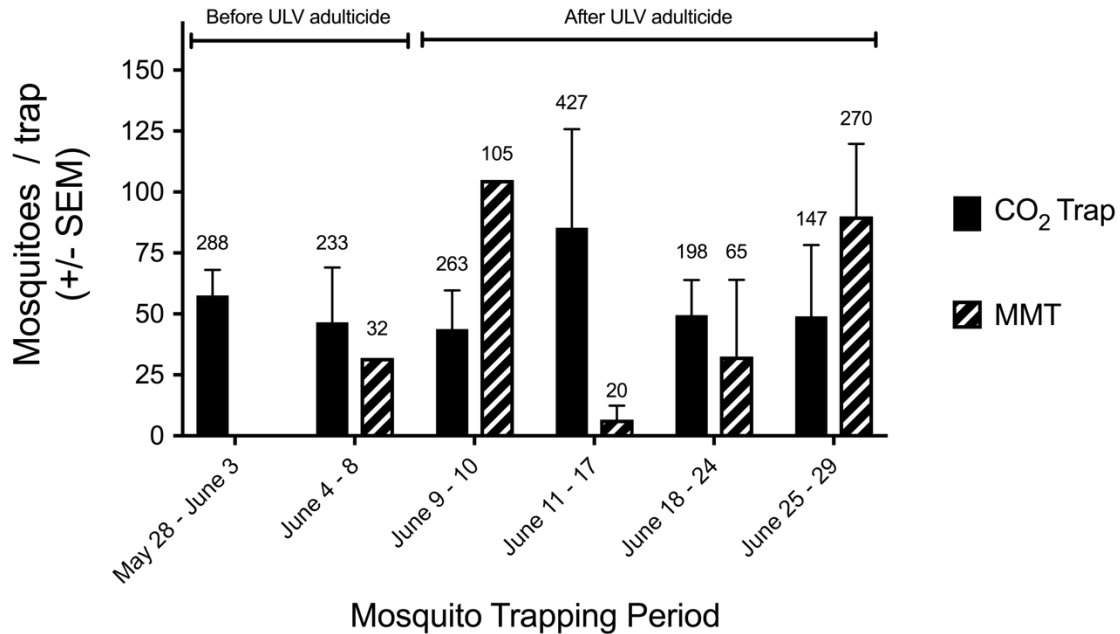


Figure 11. Mosquito abundance before and after Pyrenone 25-5 was applied in Union City. CO₂ and Mosquito Magnet traps (MMT) were placed in the area around the western end of Alameda Creek Regional Trail to monitor mosquito abundance before and after the area was treated with Pyrenone 25-5. Values above each bar indicate the total number of mosquitoes collected in each trap type during the periods indicated.

Submitted respectfully by Eric Haas-Stapleton, PhD on July 5, 2018.

3. PUBLIC EDUCATION

A. Events

i. Upcoming

- **AT Presentation** – Wednesday, July 11th (Independent Elementary, Castro Valley)
- **Third Thursday Street Party** – Thursday, July 19th (Downtown Hayward)
- **Alameda Art & Wine Faire** – Saturday, July 28th - Sunday, July 29th (Downtown Alameda)

ii. Past

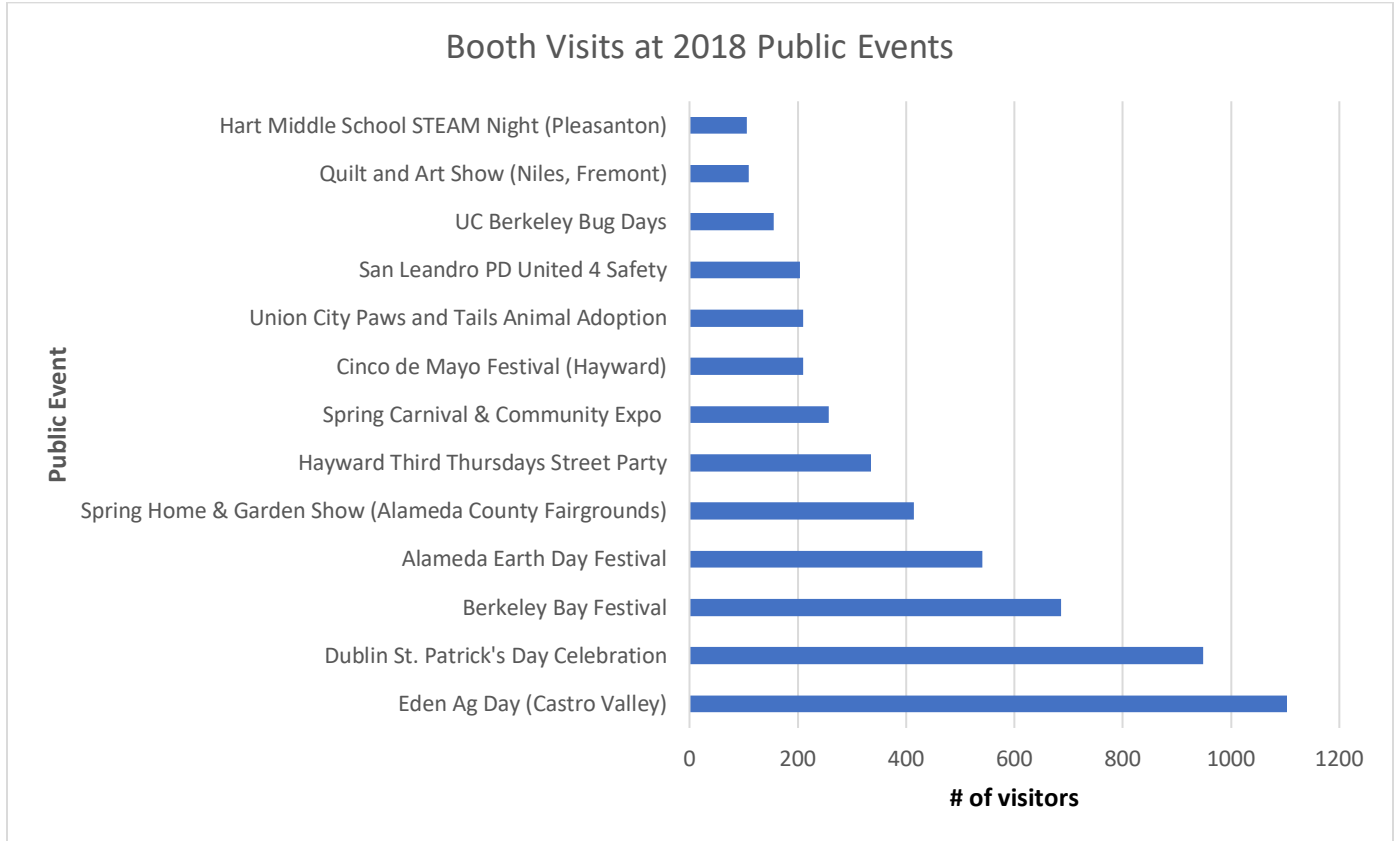
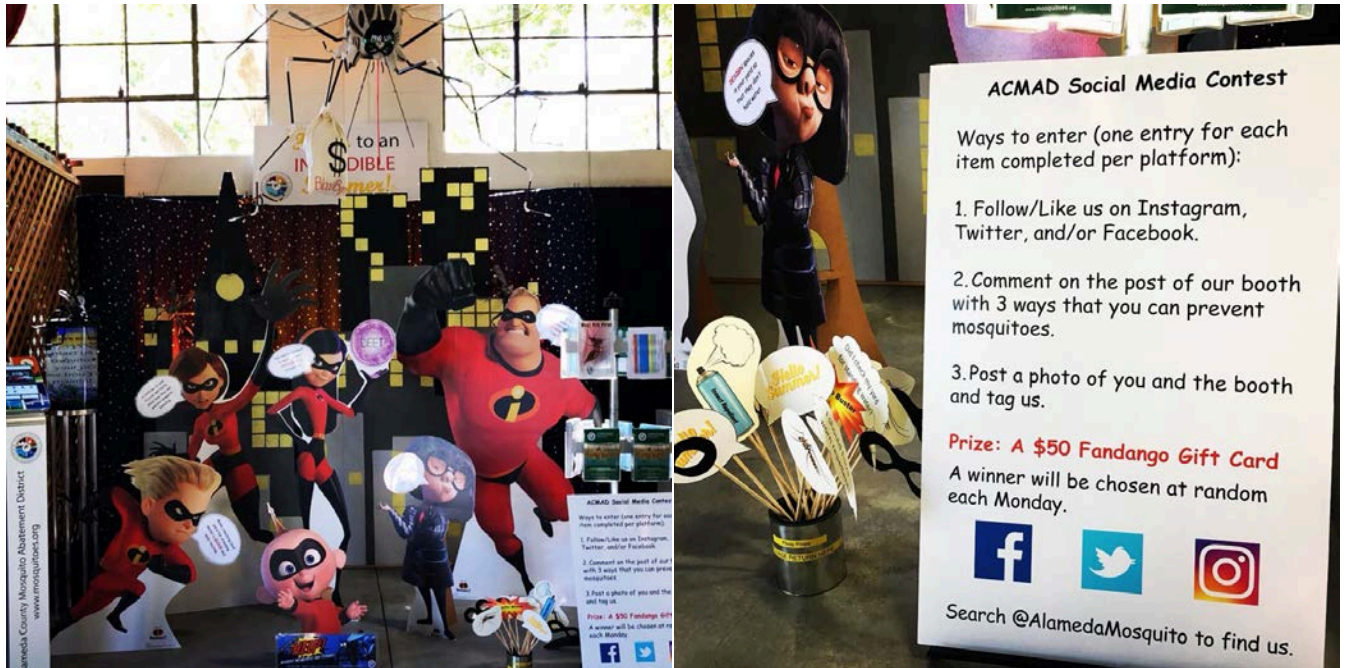


Figure 1. Number of visitors that attended each event as of July 1, 2018



Mark Weiland with family members driving the Argo at the Alameda fourth of July parade.

Alameda County Fair Booth and Social Media Contest



Our booth received four awards:

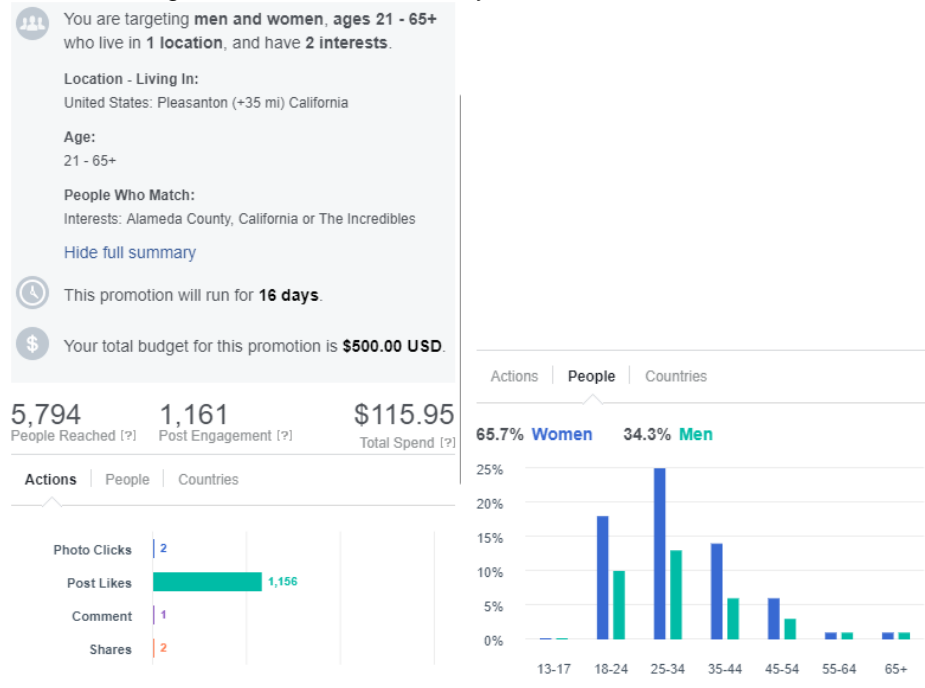
- Best of Class – 2nd place
- Use of Special Effects & Creativity – 2nd place
- Appearance – 3rd place
- Adherence to Theme – 3rd place

Some of the most notable social media contest entries:



B. Advertisement Campaigns

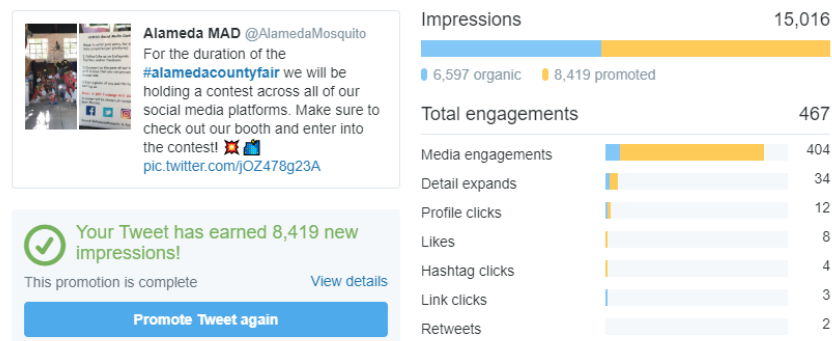
- i. Internet Ads for invasive *Aedes* mosquitoes (ELC funded)
 - Started May 20th and run through July 18th
 - Displayed 42,550 times in May
 - Displayed 110,058 times in June
- ii. East Bay Express Ads
 - Started May 30th and run through November 27th
- iii. Billboard Ad (ELC funded for 1 month)
 - Started June 1st and runs through July 28th
- iv. Movie Theater Ads
 - Started June 8th and run through August 15th
 - Theaters locations: Century 25 Union Landing 25 (Union City), Century Pacific Commons 16 (Fremont), Hacienda Crossings 21 (Dublin), NewPark 12 (Newark)
- v. ACMAD Internet Ads
 - Started June 24th and run through October 19th
 - Displayed 26,460 times in June (one week only)
- vi. Facebook/Instagram Ads
 - Started June 20th and ended June 25th
 - Promoting booth at Alameda County Fair



vii. Twitter Ads

- Ran on June 21st and spent \$50
- Promoting booth at Alameda County Fair

Tweet Activity



C. Google Analytics

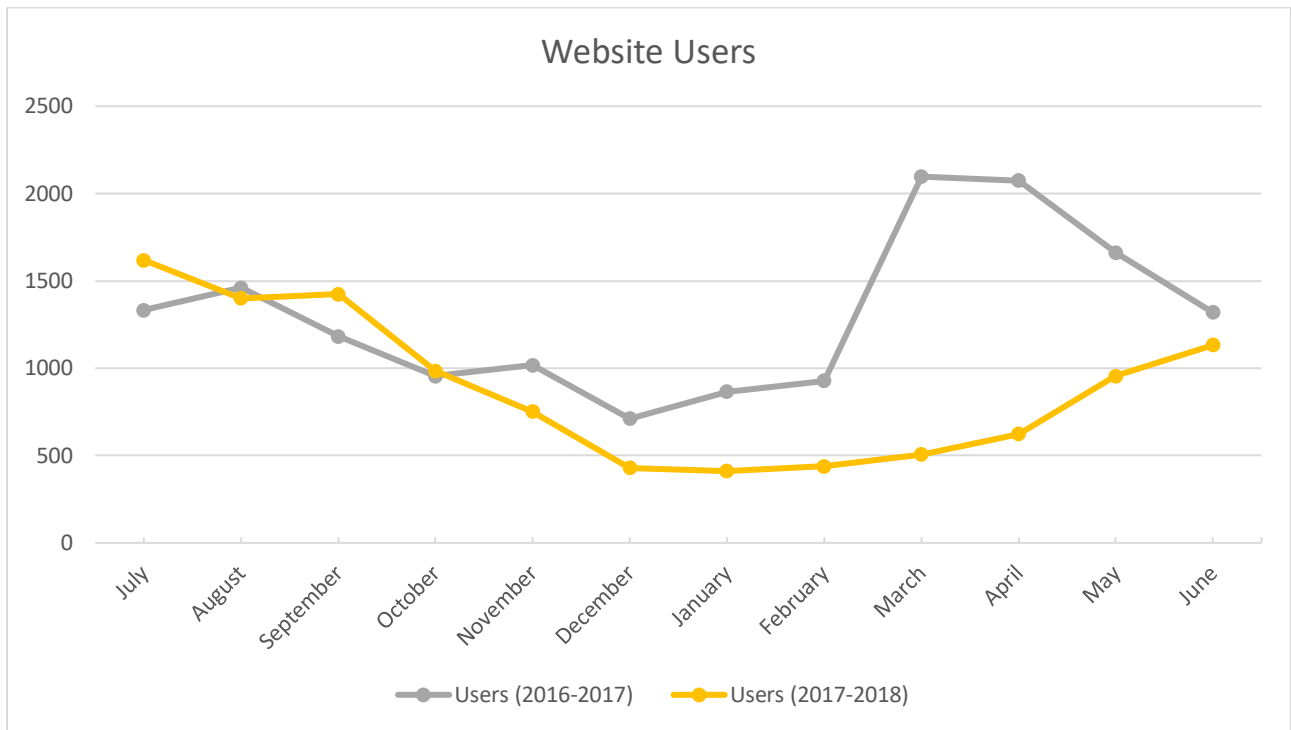


Figure 2. Comparison of website user over the past two years

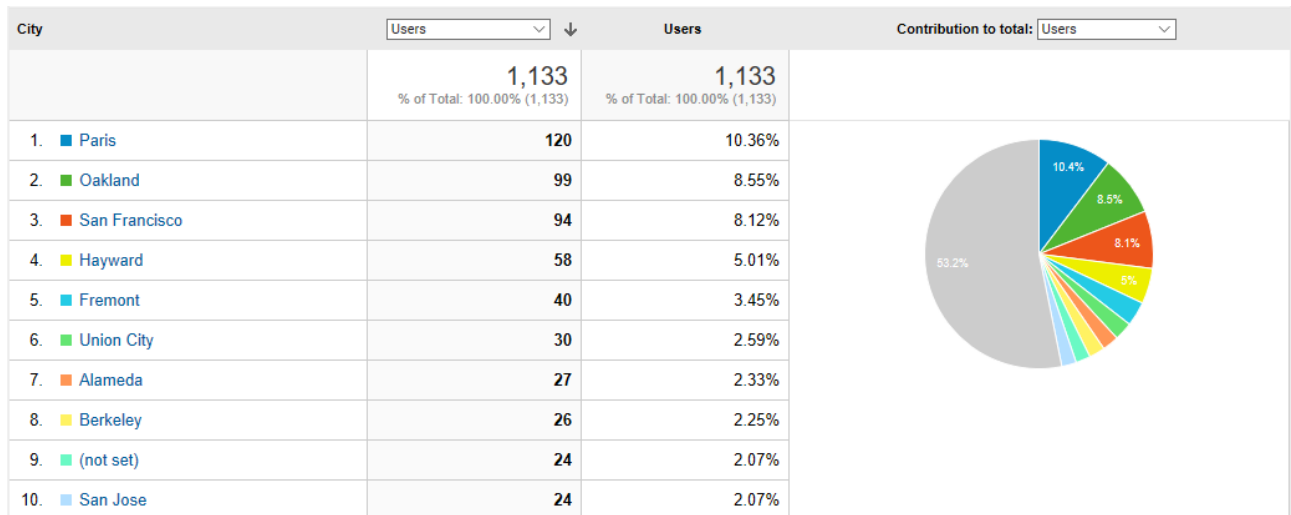


Figure 3. June visits to the website by city

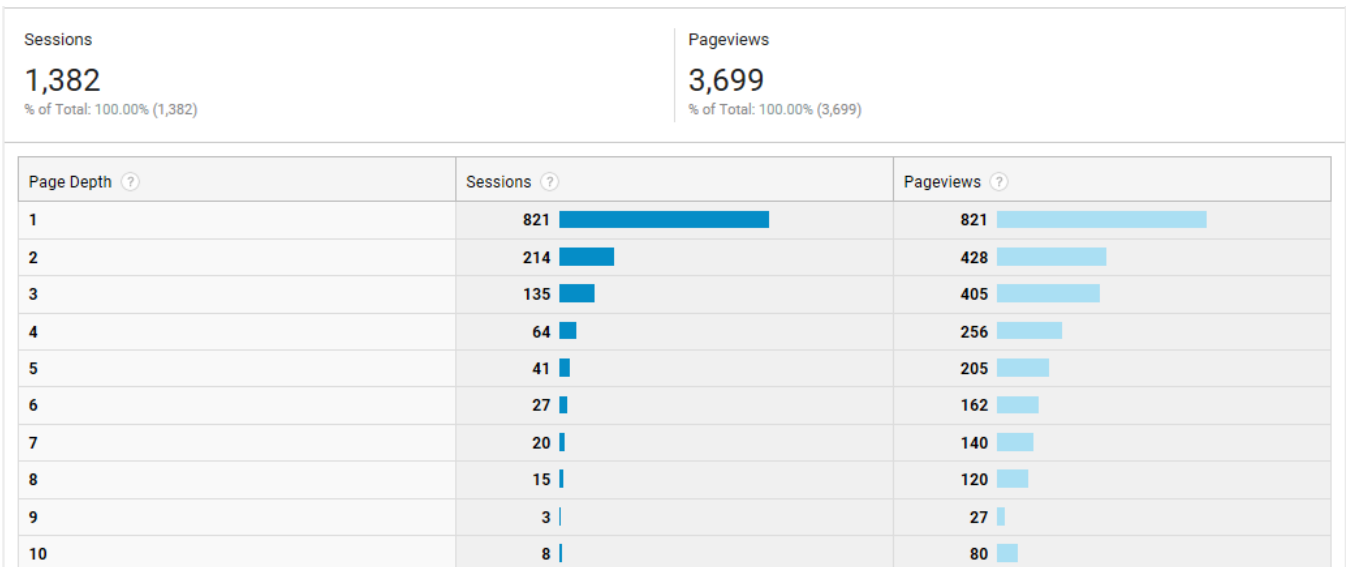


Figure 4. June breakdown of how many pages were viewed during each session

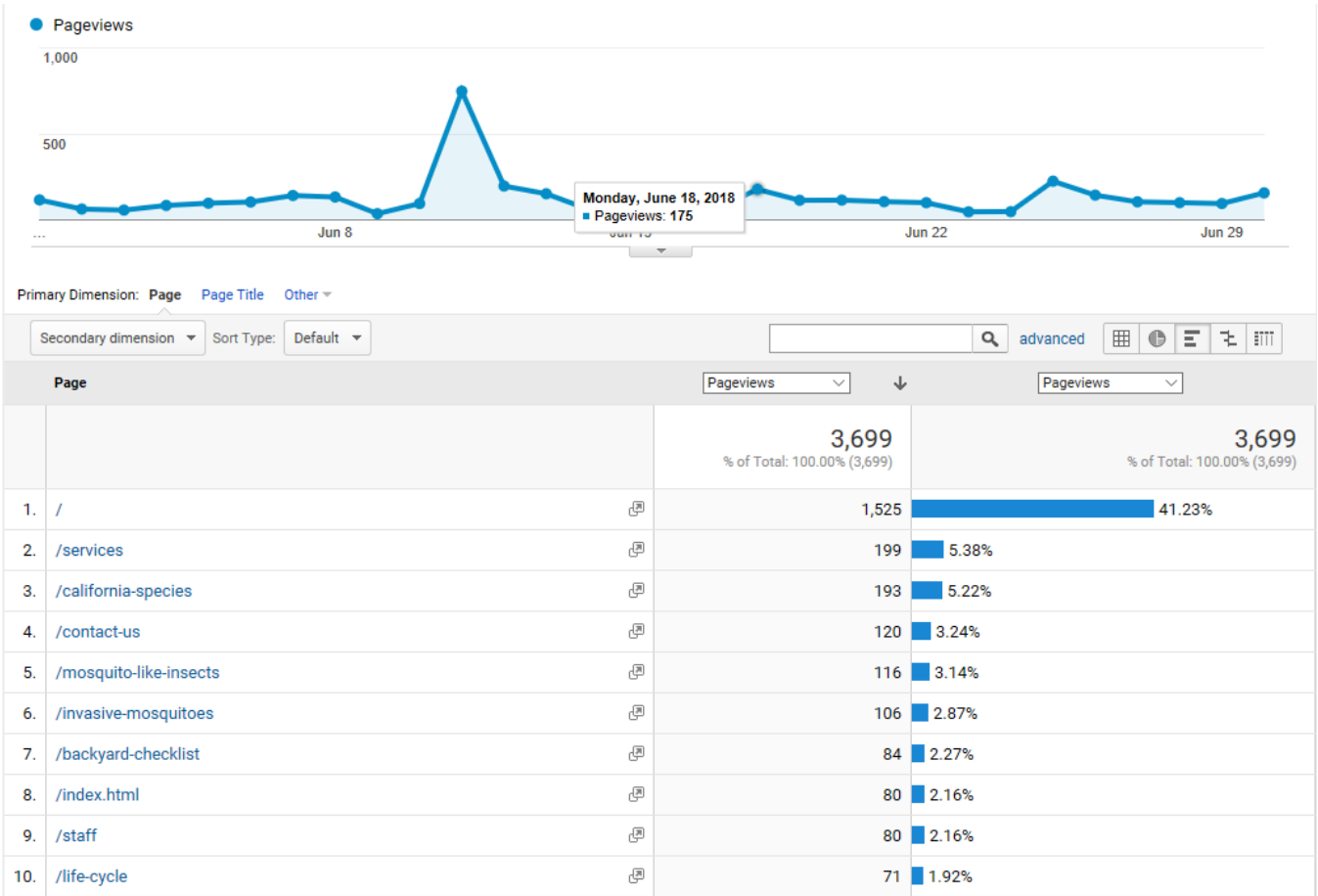
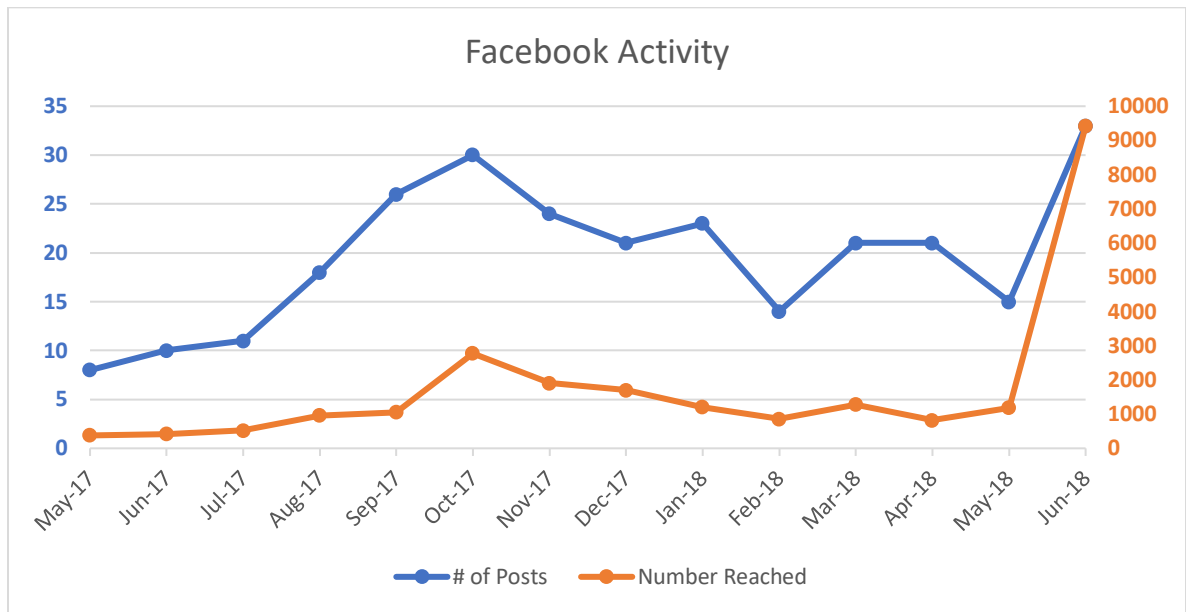


Figure 5. June breakdown of the top pages visited

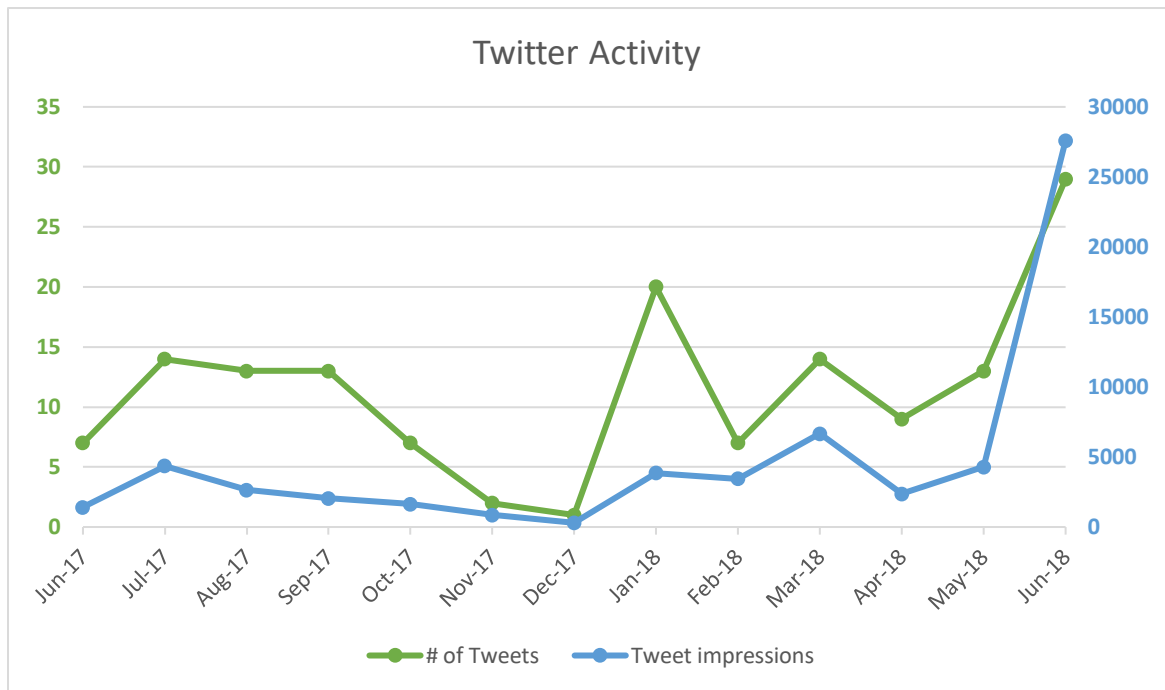
D. Facebook



Total Number of Followers: 165 (up from 159 in May)

June's Most Popular Post: For the duration of the [#alamedacountyfair](#) we will be holding a contest across all of our social media platforms. Make sure to check out our booth in Building Q (we share the space with the Beer and Wine Garden) and enter our contest! 🌞🍷

E. Twitter

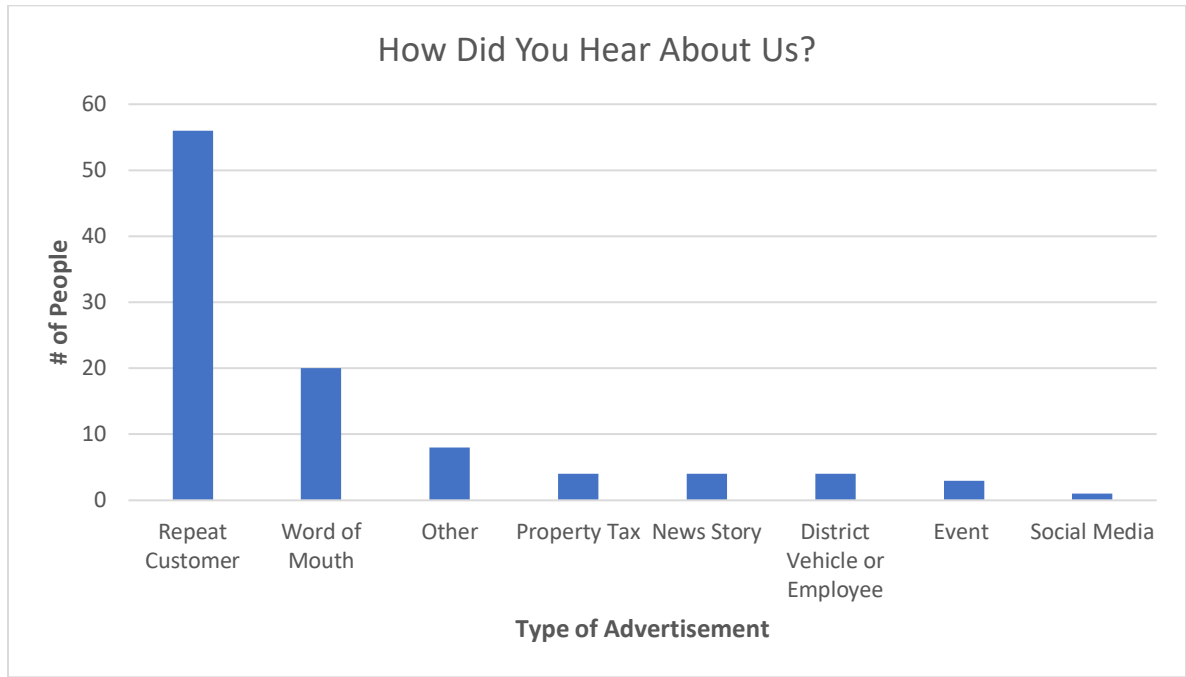


Number of Profile Visits in June: 238

Total Number of Followers (New This Month): 605 (9)

Top June Tweet: [#MosquitoWeek](#): For the duration of the [#alamedacountyfair](#) we will be holding a contest across all of our social media platforms. Make sure to check out our booth and enter into the contest! 🦟📸 [Picture]

F. Service Request Referral Summary



Note: Billboard Ad, Movie Theater Ad, Internet Ad, Phone Book, and Internet Search are also options for this question, but were not included on this chart, because they were not selected in the month of June. Three people that chose the Other option indicated that the East Bay Express, Newark Police Department, and the Alameda 4th of July Parade Meeting was how they heard about us.

4. LEGISLATIVE UPDATE:

	Bill Name	Status	ACMAD Position	ACMAD Action
MVCAC	AB 2892: Mosquito Abatement	Passed Assembly, in Senate	Support	Legislative Visits and support letter
CSDA	SB 929: Special Districts-Internet Websites	Passed Senate, in Assembly	Support	Support Letter
AMCA	S.340 Sensible Environmental Protection Act of 2017	Introduced	Support	None*
	H.R.953 Reducing Regulatory Burdens Act of 2017	Passed House	Support	Support Letter

* Bill is not accepting position letters