

AGENDA

1045th MEETING OF THE BOARD OF TRUSTEES OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

JUNE 14TH, 2017

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

1. Call to order.
2. Roll call.
3. President Narum invites any member of the public to speak at this time on any issue relevant to the District. (Each individual is limited to five minutes).
4. Approval of the minutes of the 1044th meeting held May 10, 2017 (**Board action required**).
5. Public Hearing on the proposed tax rate. (Information only.)
6. Resolution 1045-1, a resolution ordering the levy of assessments for fiscal year 2017-18 for the Alameda County Mosquito Abatement District Mosquito and Disease Control Assessment. (**Board action required**)
7. Closed session to discuss the District Manager's twelve-month evaluation pursuant to Government Code Section 54957.6. (Information only)
8. Compensation recommendation of District Manger Ryan Clausnitzer, based on a recommendation from the Manager Evaluation Committee, according to the manager's employee contract. (**Board action required**)
9. Proposal to add an additional checking account specifically for ACH payment transfers. (Information only)
10. Resolution 1045-2, a resolution authorizing Bank of the West as an additional checking account (**Board action required**)

11. Amendment to existing investment advisory agreement with PFM Asset Management, LLC. **(Board action required)**.
12. **Review of bids and awarding of contract** for the purchase of two 2017 GMC Canyon trucks to replace the 2000 Ford Explorer and the 2003 Ford Ranger used by laboratory staff (Board action required).
13. **Request for Sole-Source Purchase** of an 2017 Argo Avenger 8x8 ST from Liewer Enterprises, INC. **(Board action required)**.
14. Financial Reports:
 - a. Review of warrants dated May 15, 2017 numbering 056217 through 059117 amounting to \$193,889.76 and warrants dated May 31, 2017 numbering 059217 through 0062617 amounting to \$130,387.55 (Information only).
 - b. Review of Budget as of May 31, 2017. (Information only).
 - c. Investments, Reserves, and Cash Balance as of May 31, 2017.
15. Presentation of the Monthly Staff Report for June 2017 (Information only).
16. Presentation of the Manager's Report for June 2017 (Information only).
 - a. Goldman School of Public Policy Master of Public Affairs update
 - b. Update on implementation of Map Vision
 - c. Update on construction of new pesticide shed
 - d. WNV activity in Alameda County
17. Board President asks for reports on conferences and seminars attended by Trustees.
18. Board President asks for announcements from members of the Board.
19. Board President asks trustees for items to be added to the agenda for the next Board meeting.
20. 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.

Agenda item: 1045.4

MINUTES

1044th MEETING OF THE BOARD OF TRUSTEES
OF THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

MAY 8TH, 2017

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

Board President Narum called the regularly scheduled Board meeting to order at 5:06 P.M.

Trustees Narum, Marquez, Izquierdo, Beatty, Guarienti, Cooley, Young, Doggett, Hentschke, Washburn, Dickinson, and were present; Trustee Quinn was absent. Trustee Hernandez arrived at 5:10, Trustee Poulson arrived at 5:19 P.M.

Board President Narum invited members of the public to speak on any issue relevant to the District, Melanie Guillory-Lee from SCI Consulting Group was present.

The Board approved the minutes of the 1043rd meeting held April 12th, 2017. (Beatty, Marquez)– unanimous.

The Finance Committee and District Manager presented the final 2017-18 budget and answered the following questions from Trustees: Trustee Marquez asked if the Finance Committee was involved in the budget process (yes, with the most recent version focusing on changes to pension liability funding). Trustee Cooley added that money in a pension stabilization fund can only be used for pension costs. Trustee asked if the mandated pension obligations payments are still made? Board President Narum answered that this cost is separated from the stabilization fund and included in the budget. Trustee Guarienti asked if human resource consulting is still budgeted (yes, but the amount is lowered as less projects are expected). A motion by Trustee Hernandez to approve the budget with the change of \$800,000 being placed in a pension stabilization fund rather than a lump sum payment. (Hernandez, Marquez) – unanimous; Trustee Washburn abstained because of his

upcoming assignment as temporary manager, included in the budget, is a conflict of interest.

Melanie Guillory-Lee from SCI Consulting Group presented the preliminary Engineers Report and fielded the following questions from Trustees: Trustee Beatty asked for history of the District's benefit assessment and the revenue explanation in general, which was answered by Melanie Guillory-Lee and the District Manager. Trustee Cooley asked if the benefit assessment would ever "sunset" (no, only if mosquitoes are eradicated or if the District requests more than the benefit assessment allows. Trustee Guarienti asked how the cost of benefit without the District is calculated, answered by Melanie Guillory-Lee. Trustee Hernandez asked if the benefit assessment increase aligns with increases in pension costs. Trustee Washburn responded that this revenue stream can specifically only be used for enhanced benefits to residents, not for increased, or increasing, employee benefits and costs.

The board approved resolution 1044-1 intended to continue assessments for fiscal year 2017-18, preliminary approving the engineer's report, and providing for notice of hearing (Washburn, Guarienti)– unanimous.

The Board reviewed warrants dated April 15, 2017 numbering 049617 through 052417 amounting to \$135,998.90 and warrants dated April 30, 2017 numbering 052517 through 056117 amounting to \$123,890.84 Trustee Hernandez asked if the extra health care reimbursements were included in this warrant batch and how staff reacted to this action. The District Manager responded that these payments were in a prior batch and that staff was appreciative for the generous gesture. Trustees Cooley and Hernandez also added that the tour given by their respective field staff members was very informative.

The Board reviewed the budget summary received as of April 30th, 2016. Trustee Cooley asked if the increase in our OPEB fund is because of deposits. Trustee Dickinson answered that the OPEB fund is fully-funded with no deposits for several years.

The District Manager presented the Staff report for April 2017. Trustee Dickinson asked if next year will produce more disease-ridden mosquitoes because of the amount of standing water left this year. The District Manager answered that diseases do increase in years of drought years more than wet years. Trustee Guarienti asked if new residents from outside the area know who to call and what they expect from biting mosquitoes. The District Manager answered that calls for service seem to depend on socio-economics and cultural beliefs. Trustee Cooley offered that east coast residents are generally more accustomed to aggressive and abundant mosquitoes. Trustee Marquez suggested that perhaps new developments could provide an insert in their water bill regarding mosquito control. Trustee Cooley asked why Los Angeles and San Francisco are high users in the Google analytics report? Trustee Beatty speculated that our common website address may be used as a general mosquito information resource.

The District Manager presented the Manager's report for April 2017. Trustee Guarienti asked what Easy Bay Regional Park District committee will the District be presenting (The Natural/ Cultural Resources Committee on May 17th at 12:30 P.M.)

Board President Narum asked for reports on conferences and seminars attended by Trustees. Trustee Washburn presented to gardeners of Santa Clara County. Trustee Guarienti asked for any updates at the recent ACSDA meeting (which were none, besides informational presentations).

Board President Narum asked for announcements from the Board and herself announced that the incumbent, Georgean Vonheeder-Leopold, was reelected at the Special District selection committee that morning.

Board President Narum asked trustees for items to be added to the agenda for the next Board meeting, there were none.

The meeting adjourned at 5:57 P.M.

Respectfully submitted,

Approved as written and/or corrected
at the 1045th meeting of the Board of
Trustees held June 14th, 2017

Kathy Narum, President
BOARD OF TRUSTEES

Wendi Poulson, Secretary
BOARD OF TRUSTEES

RESOLUTION NO. 1045-1

**A RESOLUTION APPROVING THE ENGINEERING'S REPORT, AND ORDERING THE LEVY OF
CONTINUED ASSESSMENTS FOR FISCAL YEAR 2017-18
FOR THE ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT
MOSQUITO AND DISEASE CONTROL ASSESSMENT**

WHEREAS, the Alameda County Mosquito Abatement District ("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 projects and services; and

WHEREAS, such mosquito surveillance and control projects and services provide tangible public health benefits, reduced nuisance benefits and other special benefits to the public and properties with the areas of service; and

WHEREAS, an assessment for mosquito and disease control projects and services has been given the distinctive designation of the "Mosquito and Disease Control Assessment" ("Assessment"), and is primarily described as encompassing the boundaries of Alameda County (excluding the City of Albany); 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 of Trustees of the Alameda County Mosquito Abatement District by Resolution No. 937-1 passed on May 14, 2008;

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

SECTION 1. SCI Consulting Group, the Engineer of Work, 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 for the Assessment (the "Report"). The Report have been made, filed with the District and duly considered by the Board and is hereby deemed sufficient and approved. The Report shall stand as the Engineer's Report for all subsequent proceedings under and pursuant to the foregoing resolution.

SECTION 2. On May 10, 2017, this Board adopted Resolution No. 1044-1 to continue to levy and collect the Assessments for fiscal year 2017-18, preliminarily approving the Engineer's Report, and providing for notice of hearing on June 14, 2017, at the hour of 5 o'clock p.m. at the Alameda County Mosquito Abatement District Office located at 23187 Connecticut Street, Hayward, California.

SECTION 3. At the appointed time and place the hearing was duly and regularly held, and all persons interested and desiring to be heard were given an opportunity to be heard, and all matters and things pertaining to the levy of Assessment were fully heard and considered by this Board, an all oral statements and all written protests or communications were duly heard, considered and

overruled, and this Board there by acquired jurisdiction to order the levy of Assessment prepared by and made a part of the Engineer's Report to pay the costs and expenses thereof.

NOW, THEREFORE, IT IS FOUND, DETERMINED, RESOLVED AND ORDERED, that:

SECTION 4. The above recitals are true and correct

SECTION 5. The public interest, convenience and necessity require that the levy be made.

SECTION 6. The assessment is levied without regard to property valuation.

SECTION 7. The Engineer's Report for the Assessment together with the proposed Assessment roll for fiscal year 2017-18 is hereby confirmed and approved.

SECTION 8. That based on the oral and documentary evidence, including the Engineer's Report offered and received at the public hearing, the Board expressly finds and determines that: (a) each of the several lots and parcels of land subject to the Assessment will be specially benefited by the services to be financed by the Assessment proceeds in at least the amount of the Assessment apportioned against such lots and parcels of land, respectively; and (b) that there is substantial evidence to support , and the weight of the evidence preponderates in favor of, said finding and determination as to special benefit to property from the mosquito and disease control services to be financed with Assessment proceeds.

SECTION 9. That Assessments for fiscal year 2017-18 shall be levied at the rate of two dollars and fifty cents (\$2.50) per single family equivalent benefit unit as specified in the Engineer's Report for fiscal year 2017-18 with estimated total annual Assessment revenues as set forth in the Engineer's Report; and

SECTION 10. That the mosquito and disease control project and services to be financed with Assessment proceeds described in the Engineer's Report are hereby ordered.

SECTION 11. No later than August 9th following such adoption, the Board shall file a certified copy of the Assessment and a certified copy of this resolution with the Auditor of the County of Alameda ("County Auditor"). Upon such filing, the County Auditor shall enter on the County assessment roll opposite each lot or parcel of land the amount of Assessment. The Assessments shall be collected at the same time and in the same manner as County taxes are collected and all the laws providing for collection and enforcement shall apply to the collection and enforcement of the Assessments. After collection by the County, the net amount of the Assessments, after deduction of any compensation due the County for collection, shall be paid to the Mosquito and Disease Control Assessment.

SECTION 12. All revenues from Assessments shall be deposited in a separate fund established under the distinctive designation of the Alameda County Mosquito Abatement District Mosquito, and Disease Control Assessment.

SECTION 13. The Assessment, as it applies to any parcel, may be corrected, cancelled or a refund granted as appropriate, by order of the Board of Trustees of the District. Any such corrections, cancellations or refunds shall be limited to the current fiscal year.

SECTION 14. The Board of Directors of the Alameda County Mosquito Abatement District hereby certifies that the assessments to be placed on the fiscal year 2017-18 property tax bills meet the requirements of Proposition 218 that added Articles XIII C and XIII D to the California Constitution.

PASSED and ADOPTED by the Alameda County Board of Trustees for the Alameda County Mosquito Abatement Program at a regular meeting thereof held on June 14, 2017, at 23187 Connecticut Street, Hayward, California, by the following vote:

AYES:

NOES:

ABSTAINED:

ABSENT:

President, Board of Trustees, Alameda County Mosquito
Abatement District

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

Proposal to open a new checking account

The purpose of new bank account:

As of July 1, 2017, two of our vendors (CalPERS and VCJPA) will no longer accept checks; instead ACH (Automated Clearing House) payments will be required for future contributions. While only two of our vendors are currently requiring ACH transfers, additional vendors will likely require ACH payments in the future. Currently, we have an account with Bank of America that is used exclusively for payroll. The payroll account should be kept separate from other District monies, and another account dedicated to payroll needs to be opened.

What services are needed:

The criteria for choosing a bank are: (1) the ability to process ACH (Automated Clearing House) transfers for the lowest price, (2) the maintenance of the payroll account with a minimum of monthly fees, and (3) the ability for the District to issue its own checks.

Account Options:

<u>Bank of America</u>	<u>Wells Fargo</u>	<u>Bank of the West</u>	<u>California Bank & Trust</u>
Minimum Account Balance needed for no monthly fee:			
\$500,000.00	\$7,500.00	\$3,000.00	\$4,000.00
Account fee for ACH Ability			
None	\$10/month	\$10/month	\$75.00 per month
Price for each individual ACH Transfer			
10 per month	\$3.00	\$0.50	\$0.20
Ability to write checks			
Yes	Yes	Yes	Yes

Recommendation:

Based on their fees and familiarity with ACH transfers, Bank of the West is the best option for our District.

RESOLUTION NO. 1045-2
AUTHORIZING FOR TRANSFER OF FUNDS IN A NEW CHECKING ACCOUNT, BANK OF THE WEST

WHEREAS, (1) Alameda County Mosquito Abatement District requires a bank account to allow ACH (Automated Clearing House) to vendors requiring non-paper payments

WHEREAS, (2) The Board of Trustees of the Alameda County Mosquito Abatement District does hereby find that this account will only be used for transferring between interest-earning funds and vendors requiring electronic transfers or in the interest of payment efficiency

WHEREAS, (3) Existing Internal controls will remain requiring all withdraws to obtain approval from the District Manager and a Trustee found in chapter 200 of the District policy manual. Updates will be made to reflect this resolution.

RESOLVED, (d) That the executive body appoint and direct, and it does hereby appoint and direct, the District Manager to file with the Board a verified copy of this resolution, and to perform on behalf of Alameda County Mosquito Abatement District all functions required of it under the Act.

Adopted at a regular meeting of the Board of Trustees at 23187 Connecticut Street, Hayward, CA 94545, this 14th day of June, 2017.

Signed: _____
Kathy Narum, Board President

Attest: _____
Wendi Poulson, Secretary

INSTRUCTIONS

This resolution form is the approved form designated by the California Public Employees' Retirement System (CalPERS). It should be used by a contracting agency subject to Public Employees' Medical and Hospital Care Act (PEMHCA) when the agency desires to change the monthly employer health contribution for employees and annuitants in accordance with Government Code Section 22892.

The resolution is **effective on the first day of the second month** following the month in which the resolution is filed (date stamped as received by CalPERS; See address below).

WHEREAS, (1) should be completed with full name of the contracting agency.

RESOLVED, (a) should be completed to specify the amount of the employer contribution toward the cost of enrollment for active employees and annuitants. The amount specified must be an amount equal to or greater than that prescribed by Section 22892(b).

Commencing January 1, 2009, the employer contribution shall be adjusted annually by the Board to reflect any change in the medical component of the Consumer Price Index, and shall be rounded to the nearest dollar.

RESOLVED, (b) should be completed with full name of the contracting agency.

RESOLVED, (c) should be completed with full name of the contracting agency.

RESOLVED, (d) requests the position title of the individual who handles the PEMHCA resolution for the contracting agency.

RESOLVED, (d) should be completed with full name of the contracting agency.

Because resolutions serve as a legally binding document, we require the original resolution, certified copy with original signatures, or a copy of the resolution with the agency's raised seal.

For resolution processing, deliver to the following:

Overnight Mail Service

California Public Employees' Retirement System
Health Contracts Unit, EAMD
400 Q Street
Sacramento, CA 95811

Regular Mail

California Public Employees' Retirement System
Health Contracts Unit, EAMD
PO BOX 942714
Sacramento, CA 94229-2714

The certification shown following the resolution is to be completed by those individuals authorized to sign for the contracting agency in legal actions and is to include the name of the executive body; i.e. Board of Directors, Board of Trustees, etc., the location and the date of signing.

INVESTMENT ADVISORY AGREEMENT

THIS AGREEMENT, entered into as of the 29th day of October, 2010 (the "Agreement"), by and between Alameda County Mosquito Abatement District, Alameda County, California (hereinafter the "Client") and PFM ASSET MANAGEMENT LLC, a Delaware limited liability company with an office in San Francisco, CA (hereinafter the "Advisor").

W I T N E S S E T H

WHEREAS, the Client has established the Alameda County Mosquito Abatement District OPEB Trust (the "Trust") by agreement with U.S. Bank as trustee (hereinafter the "Trustee") in order to provide funds for payment of health and other post-employment benefits to certain retired employees of the Client; and

WHEREAS, the Trust has funds available for investment purposes; and

WHEREAS, pursuant to the trust agreement among the Client, the Advisor, and the Trustee, the Trustee will invest the assets of the Trust in accordance with the investment policy adopted by the Client; and

WHEREAS, the Client desires to avail itself of the experience, sources of information, advice, assistance and facilities available to the Advisor; to have the Advisor undertake certain duties and responsibilities; and to perform certain services as investment advisor on behalf of the Trust, as provided herein; and

WHEREAS, the Advisor is willing to provide such services on the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, the parties hereto, intending to be legally bound, agree as follows:

1. SERVICES OF ADVISOR.

The Client hereby engages the Advisor to serve as investment advisor with respect to the Trust under the terms of this Agreement, and the Advisor accepts such engagement. The Advisor will determine the asset allocation of investments for the Trust (the "Investment Strategy" of the Trust) on the basis of information provided by the Client or other service providers, including the anticipated amounts of cash required by the Trust for distributions and other expenses, and the appropriate risk tolerance for the Trust based upon the cash needs of the Trust and the Client's resources. The Advisor will then execute the Investment Strategy of the Trust by buying and selling shares of the investment funds. Initially the Trust shall be invested in investment funds in specified proportions as set forth in a separate schedule delivered to the Client by the Advisor at or prior to the time the Trust is initially funded (as the same may be revised by the Advisor from time to time, the "Schedule").

The Advisor will reassess and may alter the Investment Strategy asset allocation at least annually and "rebalance" the investment funds as reflected in the Schedule at least annually to maintain the ratios of the Investment Strategy, and will consult with the Client at least annually to determine whether there are reasons to revise the Investment Strategy. The Advisor will conduct a review at least annually of the performance of the investment funds held by the Trust and, in its judgment, will add to or reduce allocations to each investment fund and will add or delete investment funds (within the parameters of the Investment Strategy). The Advisor will promptly advise the Client in writing of any revision of the Trust's Investment Strategy and any additions to or deletions from the investment funds held by the Trust. In addition, the Advisor will provide to the Client a quarterly analysis of the performance of the investment funds in which the Trust is invested together with notice of any reallocation of assets among investment funds; the asset balances and market values for such analysis shall be as supplied to the Advisor by the Custodian (as hereinafter defined). In connection with all of the foregoing, the Advisor will promptly give the Client written notice of any changes to the Schedule.

The Client agrees to legally appoint a custodian (the "Custodian"), which may be the Trustee, to take and have custody of cash, assets and securities of the Trust. The Custodian shall not be the Advisor and shall be independent of the Advisor. The Client agrees to enter, or that it has entered, into a custodian

agreement with the Custodian. The Advisor is authorized to give instructions to the Custodian with respect to the Trust as to deliveries of securities and payments of cash for the payment of securities and as otherwise provided in Section 2(b) of this Agreement. The Advisor shall not take possession of or act as custodian for the cash, securities or other assets of the Trust and shall have no responsibility in connection therewith. The Advisor agrees to recommend and to monitor the Custodian so that the Client's custodial and transaction costs are appropriate for the level and nature of services rendered by the Custodian to the Trust, the Client and the Advisor.

Authorized investments shall include only those investments which are permissible under applicable statutes and regulations and the Trust's written investment policy, established by the Client with the advice of the Advisor. Upon the written consent of the Client, the Advisor may select an investment fund for which the Custodian of an affiliate of the Custodian serves as investment advisor.

2. COMPENSATION.

(a) For all services provided by the Advisor to the Trust pursuant to this Agreement, the Trust shall incur an annual fee based on net assets under management in the Trust determined on a monthly basis as defined in the Investment Advisory Fee Schedule below. For purposes of this section, "net assets" means the net market value of all cash and investments assets as of the end of the most recent month.

Investment Advisory Fee Schedule

First \$5 million in net assets.....	0.50%
Next \$5 million in net assets.....	0.40%
Next \$10 million in net assets.....	0.30%
Thereafter.....	0.25%

(b) At the end of each calendar month, the Advisor will prepare and submit to the Client for approval a monthly invoice for its fee. Such invoice will include a statement of the basis upon which the fee was calculated. Unless instructed otherwise within 15 calendar days of the postmark on the invoices, the Client authorizes the Advisor to charge such invoices to the Trust's account

and authorizes and instructs the Custodian to disburse funds from such account for the payment of the fees and costs to the Advisor. If sufficient funds are not available, the Client agrees to compensate the Advisor from other sources within 30 calendar days of the postmark date. If the Advisor shall serve for less than the whole month, the compensation shall be pro-rated.

(c) If and to the extent that the Client shall request the Advisor to render services other than those to be rendered by the Advisor hereunder, such additional services shall be compensated separately on terms to be agreed upon between the Advisor and the Client.

(d) Assets invested by the Advisor under the terms of this agreement may from time to time be invested in a money market mutual fund or local government investment pool managed by the Advisor. (either, a "Pool"), or in individual securities. Average daily net assets subject to the fees described in this section shall not take into account any funds invested in the Pool. Expenses of the Pool, including compensation for the Advisor and the Pool custodian, are described in the relevant prospectus or information statement and are paid from the Pool.

3. EXPENSES.

(a) The Advisor shall furnish at its own expense all necessary administrative services, office space, equipment, clerical personnel, telephone and other communication facilities, investment advisory facilities, and executive and supervisory personnel for managing the investments, inclusive of reasonable costs required to attend meetings with the Client.

(b) Except as expressly provided otherwise herein, the Trust shall pay all of its expenses including, without limitation, taxes, expenses (including front- or back-end charges) of an investment fund, fees and expenses of the Trust's independent auditors and legal counsel, if any, insurance premiums, fees and expenses of the Custodian appointed by the Client, as provided in Section 1, and the keeping of books and accounts.

4. REGISTERED ADVISOR; DUTY OF CARE.

The Advisor hereby represents it is a registered investment advisor under the Investment Advisers Act of 1940. The Advisor shall immediately notify the Client if at any time during the term of this Agreement it is not so registered or if its registration is suspended. The Advisor agrees to perform its duties and responsibilities under this Agreement with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims. The federal securities laws impose liabilities under certain circumstances on persons who are required to act in good faith. Nothing herein shall in any way constitute a waiver or limitation of any rights which the Client, the Trust, or the Advisor may have under any federal securities laws. The Client hereby authorizes the Advisor to sign an Internal Revenue Service Form W-9 on behalf of the Client and to deliver such form to broker-dealers or others from time to time as required in connection with securities transactions pursuant to this Agreement.

5. ADVISOR'S OTHER CLIENTS.

The Client understands that the Advisor performs investment advisory services for various other clients which may include investment companies, commingled trust funds and/or individual portfolios. The Client agrees that the Advisor, in the exercise of its professional judgment, may give advice or take action with respect to any of its other clients which may differ from advice given or the timing or nature of action taken with respect to the Trust. The Advisor shall not have any obligation to purchase, sell or exchange any security for the Client solely by reason of the fact that the Advisor, its principals, affiliates, or employees may purchase, sell or exchange such security for the account of any other client or for itself or its own accounts.

6. TERM.

This Agreement may be terminated by the Client in the event of any material breach of its terms immediately upon notice by certified mail, return receipt requested. This Agreement may be terminated by the Client at any time, on not less than thirty (30) days' written notice to the Advisor. The Advisor may

terminate this Agreement immediately upon any material breach of its terms by the Client, or at any time after one year upon thirty (30) days' written notice.

7. FORCE MAJEURE.

The Advisor shall have no liability for any losses arising out of the delays in performing or inability to perform the services which it renders under this Agreement which result from events beyond its control, including interruption of the business activities of the Advisor or other financial institutions due to acts of God, acts of governmental authority, acts of war, terrorism, civil insurrection, riots, labor difficulties, or any action or inaction of any carrier or utility, or mechanical or other malfunction.

8. DISCIPLINARY ACTIONS.

The Advisor shall promptly give notice to the Client if the Advisor shall have been found to have violated any state or federal securities law or regulation in any criminal action or civil suit in any state or federal court or in any disciplinary proceeding before the Securities and Exchange Commission or any other agency or department of the United States, any registered securities exchange, the Financial Industry Regulatory Authority, or any regulatory authority of any State based upon the performance of services as an investment advisor.

9. INDEPENDENT CONTRACTOR.

The Advisor, its employees, officers and representatives, shall not be deemed to be employees, agents (except as to the purchase or sale of securities described in Section 1), partners, servants, and/or joint ventures of the Client or the Trust by virtue of this Agreement or any actions or services rendered under this Agreement.

10. BOOKS.

The Advisor shall maintain appropriate records of all its activities hereunder. The Advisor shall use its best efforts to cause the Custodian to provide the Client with a statement, no less frequently than quarterly, showing deposits, withdrawals, purchases and sales (or maturities) of investments, earnings received, and the value of assets held on the last business day of the month all as provided for in the Custodian agreement between the Client and the Custodian.

11. ADVISOR'S DISCLOSURE STATEMENT.

The Advisor warrants that it has delivered to the Client, at least 48 hours prior to the execution of this Agreement, the Advisor's current Securities and Exchange Commission Form ADV, Part II, including, without limitation, Schedule H thereto (disclosure statement). The Client acknowledges receipt of such disclosure statement at least 48 hours prior to the execution of this Agreement.

12. MODIFICATION.

This Agreement shall not be changed, modified, terminated or discharged in whole or in part, except by an instrument in writing signed by both parties hereto, or their respective successors or assigns.

13. SUCCESSORS AND ASSIGNS.

The provisions of this Agreement shall be binding on the Advisor and its respective successors and assigns, provided, however, that the rights and obligations of the Advisor may not be assigned without the consent of the Client.

14. NOTICE.

Written notices required under this Agreement shall be sent by regular mail, certified mail, overnight delivery or courier, and shall be deemed given when received at the parties' respective addresses shown below. Either party must notify the other party in writing of a change in address.

Client's Address

Alameda County Mosquito Abatement District
23187 Connecticut Street
Hayward, CA 94545
Attn: John Rusmiser

Advisor's Address

PFM Asset Management LLC
50 California Street
Suite 2300

With a Copy to:

PFM Asset Management LLC
Two Logan Square, Suite 1600
18th & Arch Streets

San Francisco, CA 94111
Attn: Carlos Oblites

Philadelphia, PA 19103-2770
Attn: Controller

15. APPLICABLE LAW.

This Agreement shall be construed, enforced, and administered according to the laws of the State of California. The Advisor and the Client agree that, should a disagreement arise as to the terms or enforcement of any provision of this Agreement, each party will in good faith attempt to resolve said disagreement prior to filing a lawsuit.

16. APPROVAL; EXECUTION; SEVERABILITY.

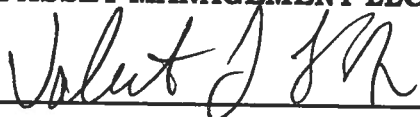
(a) This Agreement has been approved by the Board of Trustees (the "Governing Body") of the Client. The Governing Body hereby authorizes the OPEB Retirement Investment Trust Board (the Board) as described in Charter attached as Annex I hereto, acting on behalf of the Client, to interact with the Advisor regarding the Trust, and the Advisor may rely on any instructions received from such OPEB Retirement Investment Trust Board; provided however, that this Agreement may not be amended without the prior approval of the Governing Body. The Governing Body may designate additional Designated Persons or remove Designated Persons from time to time by written notice to the Advisor.

(b) Each party to this Agreement represents and warrants that the person or persons signing this Agreement on behalf of such party is authorized and empowered to sign and deliver this Agreement for such party.

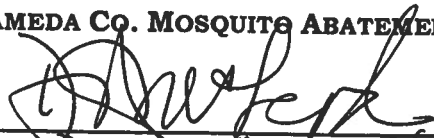
(c) The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their authorized representatives as of the date set forth in the first paragraph of this Agreement.

PFM ASSET MANAGEMENT LLC

By: 
Name: VALENTINE J. LINK, JR.
Title: MANAGING DIRECTOR

ALAMEDA Co. MOSQUITO ABATEMENT DIST.

By: 
Name: DENNY A. MCLEOD
Title: TRUSTEE

**FIRST AMENDMENT to
INVESTMENT ADVISORY AGREEMENT**

This First Amendment to Investment Advisory Agreement, effective the first day of June, 2017 (the “First Amendment”), by and between ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT, Alameda County, California (hereinafter the “Client”), and PFM ASSET MANAGEMENT LLC, a Delaware limited liability company, with an office in San Francisco, California (hereinafter the “Advisor”).

WHEREAS, the Client and the Advisor heretofore entered into an Investment Advisory Agreement, dated as of October 29, 2010 (the “Original Agreement,” and with this First Amendment, the “Agreement”), whereby the Client engaged the Advisor to perform investment advisory services as specified therein; and

WHEREAS, the parties have agreed, effective June 1, 2017, to adjust the fee schedule contained in the Original Agreement, as set forth herein.

NOW THEREFORE, in consideration of the premises and mutual covenants herein contained, it is agreed as follows:

1. Effective June 1, 2017, subsection 2(a) of the Original Agreement is amended and restated in its entirety as follows:
 - (a) For services provided by the Advisor pursuant to this Agreement, the Client shall pay the Advisor an annual fee, in monthly installments, based on the fee schedule below. For purposes of this section, “net assets” means the net market value of all cash and investments assets as of the end of the most recent month.

<u>Net Assets Under Management</u>	<u>Fees</u>
First \$10 million	45 basis points (0.45%)
Next \$10 million	35 basis points (0.35%)
Next \$30 million	25 basis points (0.25%)
Next \$50 million	20 basis points (0.20%)
Over \$100 million	15 basis points (0.15%)

2. This First Amendment embodies the whole understanding between the parties and supersedes any previous oral understanding by and between the parties as to the matters set forth herein. Except as amended hereby, the Original Agreement remains in full force and effect.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to be executed by their authorized representatives as of the date set forth in the first paragraph of this First Amendment.

PFM ASSET MANAGEMENT LLC

By: Monique Spyke
Title: Managing Director

**ALAMEDA COUNTY MOSQUITO
ABATEMENT DISTRICT**

By: _____
Title: _____

Agenda Item 12

Review of bids and awarding of contract for the purchase of two 2017 GMC Canyon trucks to replace the 2000 Ford Explorer and 2003 Ford Ranger that are used by the Lab. The Explorer and Ranger have both already been approved for disposal by the Board of Trustees. (Board action required.)

GMC Dealers Participating in Bidding

For two (2) New 2017 GMC Canyon SLE Extended Cab 4WD V6 with Forward Collision Alert and Lane Departure Sensors, and Rear Vision Backup Camera. Quoted prices are not inclusive of sales tax or registration fees.

For comparison, Edmunds.com lists the True Market Value of the vehicle as \$34,274

Dublin Automotive Group: \$32,962

Fremont Buick GMC Cadillac: \$33,315

Lowest Bidder:

Dublin Automotive Group: \$32,962

Alameda County Mosquito Abatement District

Mark Wieland
Mechanical Specialist
mechanic@mosquitoes.org

Ryan Clausnitzer
District Manager
acmad@mosquitoes.org

June 1, 2017

Re: Request for Sole-Source Purchase

LIEWER ENTERPRISES, INC.
2017 ARGO AVENGER 8X8 ST

ARGO- Board action

Budgeted Amt: \$27,000.00

Quote #4847 \$26,522.62

Prepared by Mark Wieland, Mechanical Specialist



ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT
LIST OF WARRANTS DATED **MAY 15 2017**.

WAR NO	PAYEE	ACCT NO	AMT OF CHARGE	AMT OF WARRANT
056217	Biological Specialist	Total salary less deductions for payroll period	600001 2,674.98	
056217	Mosq Control Tech	"	600001 2,254.66	
056217	Lab Seasonal	"	600001 848.95	
056217	Vector Biologist	"	600001 2,853.14	
056217	Vector Biologist	"	600001 2,881.09	
056217	Mosq Control Tech	"	600001 2,220.80	
056217	Regulatory & Public Affairs Director	"	600001 2,832.65	
056217	District Manager	"	600001 3,628.10	
056217	Asst Mosq Control Tech	"	600001 2,259.33	
056217	Lab Seasonal	"	600001 1,045.19	
056217	Field Seasonal	"	600001 1,247.30	
056217	IT Director	"	600001 3,033.87	
056217	Lab Director	"	600001 2,951.20	
056217	Field Operations Supervisor	"	600001 3,562.92	
056217	Office Assistant	"	600001 1,729.79	
056217	Vector Biologist	"	600001 3,539.76	
056217	Mosq Control Tech	"	600001 2,678.64	
056217	Mosq Control Tech	"	600001 2,225.01	
056217	Lab Seasonal	"	600001 96.09	
056217	Office Seasonal	"	600001 1,039.40	
056217	Mechanical Specialist	"	600001 3,228.47	
056217	Transfer funds to Bank of America	Transfer funds to Bank of America	600001 2,834.12	
056217	IRS	Federal tax withheld (payroll)	600001 7,903.73	
056217		Medicare Tax Withheld (payroll)	600001 914.77	
056217		District Contribution to Medicare (payroll)	600401 914.77	
056217	State of California	State Tax withheld (payroll)	600001 2,385.96	
056217	EDD	Ca Disability	600001 523.25	64,307.94
056317	Public Employees' Retirement System	Employee Contributions	600001 16.00	
		Employee Paid Member Contributions, 7% & 6.5%	600001 4,390.02	
		Employer Contribution 9.558% & 6.930%	600201 5,519.54	9,925.56
056417	Aetna Life & Annuity	Employee Contributions	600001 150.00	
056517	CALPERS 457 Plan	Employee Contributions - PERS 457	600001 2,530.00	
056617	Delta Dental Plan	Monthly Premium	600601 4,411.85	
056717	Vision Service Plan	Health premium	600601 651.36	
056817	The Hartford	Life Insurance	600601 78.71	
056917	Airgas	Dry ice cut block slab	620141.1 480.17	
057017	All-Ways Green Services	Janitorial Service	620021 410.00	
057117	Adapco	Vectolex, Altosid	610461.1 19,991.58	
057217	Bay Area Distributing	Shop supplies	610141 447.07	
057317	Cintas	Laundry service	610011 99.32	
		Personal supplies	610011 99.38	198.70
057417	Corporate Park Landscaping	Landscape maintenance	610122 195.00	
057517	Castillo, Erika	Reimbursement for application fee for Niles show	610451 35.00	
057617	Campbell, Cornelius Christopher	Reimbursement for gas	610191.1 20.04	
057717	CSDA	Training for M.M	610191.7 225.00	
057817	Donato Builders	Shed project	800002 29,062.00	
057917	Grainger	Shop supplies	610122.2 18.48	
		Shop supplies	610461.6 107.73	126.21
058017	Kimball Midwest	Shop supplies	610141 91.60	
058117	PFM Asset Management	Investment advisory services	610261.11 1,719.00	
058217	PG & E	Utilities	610021.2 209.95	
058317	Pitney Bowes	Postage	620041 134.31	
058417	Quench	Water machine rental	620021 98.72	
058517	Quill	Office supplies	620041 194.76	
058617	Techniclean	Towels	620021 124.85	
058717	Tire Treds	Tire Mount and Balance	610141 1,305.06	
058817	UC Regents	R.C School payment	610191.7 30,830.00	
058917	VCJPA	Annual workshop, meal for M.M	610191.3 38.00	
059017	Waste Management	Garbage, April Service	610021 218.67	

WAR NO	PAYEE	ACCT NO	AMT OF CHARGE	AMT OF WARRANT
059117	U.S Bank			
	Amazon - Boots for J.S	610001	153.59	
	Wal-Mart - Shower/ kitchen misc	620021	97.50	
	Smart N Final - Household supplies	620021	31.18	
	Office Depot - Batteries, key chain	620041	21.93	
	Herman Miller - Table for study room	620041	1,194.30	
	Office Depot - Tabs for personnel files	620041	23.23	
	Canon Financial - Canon copier rental	620041	340.23	
	Amazon - (2) packs of batteries	620041	27.50	
	Mozy - Desktop storage	620042.1	54.45	
	Amazon - Unifi switch	620042.1	1,037.11	
	Amazon - Cable matters (10 pack)	620042.1	160.17	
	Amazon - Laptop	620042.1	410.46	
	Apple store - Apple pen for D.A	620042.1	53.53	
	Amazon - (2) whiteboards	620042.1	116.32	
	Amazon - Security gateway pro	620042.1	298.51	
	Springstar - Tnk trap	620141.1	500.17	
	Bioquip - Chemical lure	620141.1	683.45	
	The Home Depot - Velcro dispenser	620141.1	19.72	
	Uline - Plastic pail	620141.1	433.23	
	Office Depot - Supplies for Aedes project	620141.1	39.49	
	Lifetech - Taqman Fast Virus	620141.3	2,892.54	
	Lifetech - Taqman Fast virus	620141.3	1,459.29	
	Applied Biosystems - Service agreement	620141.3	2,380.48	
	Amazon - Key holder	620141.3	32.28	
	Stericycle - Compliance solutions	620141.3	188.53	
	Apple store - Keyboard	620141.5	65.80	
	Lowes - Freezer	620141.5	738.62	
	Lampire - Chicken blood	620141.5	231.00	
	Rainin - Rapid charge stand	620141.8	286.67	
	Fisher Scientific - BG bio red	620141.8	128.97	
	Amazon - Tire pressure gauge	610141	26.95	
	Amazon - Air check gauge	610141	31.32	
	Kamps Propane - Pup Cyl exchange	610141	37.66	
	Guaranteed Auto - Engine service	610141	648.50	
	Telepacific - Communications	610022.1	1,200.00	
	Telepacific - Communications	610022.1	1,030.88	
	GoDaddy - Hosting linux renewal	610022.3	9.99	
	AMCA - AMCA membership	610351	2,100.00	
	Fastrak - Fastrak	610191.1	25.00	
	Hyatt Regency - Mistake on hotels part, will be refunded	610191.3	29.09	
	Hyatt Regency - Hotel for J.H	610191.3	470.79	
	Hyatt Regency - Hotel for B.R	610191.3	530.79	
	Hyatt Regency - Lunch for E.C & E.H	610191.3	18.46	
	Hyatt Regency - Hotel for A.E	610191.3	313.86	
	MVCAC- For Banquet	610191.3	55.00	
	Hyatt Regency - Hotel for E.C	610191.3	530.79	
	Hyatt Regency - Hotel for E.H	610191.3	470.79	
	Bo-Beau Kitchen - Dinner for E.H & E.C	610191.3	99.57	
	Hyatt Regency - Breakfast E.H	610191.3	12.00	
	Single Fin - Dinner for E.H, D.A, B.R, E.C	610191.3	124.76	
	Southwest - Flight for E.H	610191.3	117.90	
	Hyatt Regency - Breakfast R.F	610191.3	25.55	
	Luigis - Dinner for R.F	610191.3	26.40	
	Hyatt Regency - Breakfast R.F	610191.3	24.47	
	Hyatt Regency - Hotel for R.F	610191.3	470.79	
	Redwood Canyon - Dinner for meeting	610191.3	99.43	
	Hyatt Regency - Hotel for R.C	610191.3	156.38	
	Hyatt Regency - Breakfast R.C	610191.3	7.31	
	Lyft - Ride for R.C	610191.3	12.58	
	Hyatt Regency - Breakfast R.C	610191.3	12.36	
	Bankers - Lunch for R.C	610191.3	20.19	
	Lyft - Ride for R.C	610191.3	15.63	
	Hyatt Regency - Hotel for R.C	610191.3	470.79	
	The Market Poke - Lunch for R.C	610191.3	16.22	
	Philz coffee - Breakfast R.C	610191.3	9.00	
	Holiday Inn - Hotel for B.R	610191.3	280.42	
	Holiday Inn - Hotel for M.C	610191.3	280.42	
	The Fish Market - Dinner for D.A & B.R	610191.3	72.23	
	Hyatt Regency - Hotel for D.A	610191.3	470.79	
	Mi Pueblo - Board supplies	610191.4	17.37	
	Safeway - Board supplies	610191.4	5.78	
	Smart N Final - Board supplies	610191.4	6.63	
	Safeway - Refreshments for training	610191.7	43.68	

FoodMaxx - Food for driver training	610191.7	140.02
Amazon - Book for R.C	610191.7	59.03
Amazon - (3) Ammonia	610461.4	117.39
Amazon - Crushed coral	610461.4	21.39
Amazon - Ammonia Remover	610461.4	9.86
Amazon - Fish supplies	610461.4	64.68
Amazon - Fish screen	610461.4	20.00
Amazon - Replacement foam	610461.4	81.37
Amazon- Car mounts	610461.6	20.97
Amazon- Car mount	610461.6	2.40
Amazon - Car mounts	610461.6	90.42
Office Depot - Labels, sharpies	610451	18.68
Office Depot - Labels	610451	14.93
Shutterstock - 365 day images	610451	42.00
Constant Contract - Contract	610451	20.00
Tattoo MFG - Temporary tattoos	610451	311.74
City of San Leandro - Cherry festival application fee	610451	115.00

25,678.65

193,889.76

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT
LIST OF WARRANTS DATED **MAY 31, 2017**

WAR NO	PAYEE	FOR	ACCT NO	AMT OF CHARGE	AMT OF WARRANT
059217	Biological Specialist	Total salary less deductions for payroll period	600001	2,766.85	
059217	Mosq Control Tech	"	600001	2,254.66	
059217	Lab Seasonal	"	600001	857.45	
059217	Vector Biologist	"	600001	2,929.03	
059217	Vector Biologist	"	600001	2,881.08	
059217	Mosq Control Tech	"	600001	2,220.81	
059217	Regulatory & Public Affairs Director	"	600001	2,906.94	
059217	District Manager	"	600001	4,117.88	
059217	Asst Mosq Control Tech	"	600001	2,259.33	
059217	Lab Seasonal	"	600001	1,173.10	
059217	Field Seasonal	"	600001	1,263.38	
059217	IT Director	"	600001	3,144.64	
059217	Lab Director	"	600001	3,121.78	
059217	Field Operations Supervisor	"	600001	3,609.74	
059217	Office Assistant	"	600001	1,729.77	
059217	Vector Biologist	"	600001	3,539.76	
059217	Mosq Control Tech	"	600001	2,678.64	
059217	Mosq Control Tech	"	600001	2,225.01	
059217	Lab Seasonal	"	600001	970.23	
059217	Office Seasonal	"	600001	1,060.78	
059217	Mechanical Specialist	"	600001	3,317.69	
059217	IRS	Federal Tax Withheld	600001	8,457.89	
059217		Medicare Tax Withheld	600001	958.27	
059217		District Contribution to Medicare	600401	958.27	
059217	State of California	State Tax Withheld	600001	2,574.19	
059217	EDD	Ca Disability	600001	539.18	64,516.35
059317	Public Employees' Retirement System	Employees contributions	600001	16.00	
		Employee paid member contributions, 7%, 6.5%	600001	4,390.02	
		District contribution 9.558%, 6.930%	600201	5,519.54	9,925.56
059417	Aetna Life & Annuity	Employee contributions	600001		150.00
059517	CalPERS 457 Plan	Employees contributions - PERS 457	600001		2,530.00
059617	CalPERS	Health insurance	600601		31,685.40
059717	P. Robert Beatty	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
059817	Elizabeth Cooley	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
059917	James Doggett	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060017	Robert Dickinson	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060117	Richard Guarienti	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060217	Eric Hentschke	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060317	Ed Hernandez	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060417	Humberto Izquierdo	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060517	Elisa Marquez	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060617	Katherine Narum	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060717	Wendi Poulson	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
	Ronald Quinn	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060817	Jan Washburn	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
060917	George Young	Trustee in lieu expenses - 1044th meeting	610191.5		100.00
061017	Airgas	Dry ice pellets	620141.1		333.90
061117	Branan, Thomas	Dental Reimbursement	600601		238.00
061217	Beck's Shoes	Boots for K.S	610001		190.00
061317	Cintas	Personal supplies	610001	36.29	
		Laundry service	610011	664.03	
061417	CSDA	Financial Services	800004		789.24
061517	Cardenas, Miguel	Reimbursement for lunch M.C, E.C, B.R	610191.3		31.33
061617	EDD	EDD payments	600001		4,741.00
061717	Korbmacher Engineering Inc	Shed Project	800002		1,302.00
061817	Leading Edge Associates Inc	Drone Training	610191.7		3,960.00
061917	Mobile Modular Public Storage	Shed Project	800002		113.59
062017	Namakan West Fisheries	Mosquito Fish	610461.4		555.00
062117	Praxair	Lab supplies	620141.8		29.73
062217	PG & E	Utilities	610021		1,477.20
062317	PC Professional	Data base development	620042.3		1,125.00
062417	Sonitrol	Monitoring charges and CCTV Fees	620021		743.00
062517	Verizon	Communication expenses	610022.4		645.06
062617	Wright Express	Fuel expenses, statement ended 05-15-17	610191.1		3,305.87
Total Warrants					130,387.55
Total Warrants May 31st				\$	130,387.55
Total Warrants May 15th				\$	193,889.76
Total May Warrants				\$	324,277.31

Alameda County Mosquito Abatement District Budget Summary
As of May 31, 2017. (11 of 12 mth, 92%)

Account #		EXPENDED IN (May)	EXPENDED TO DATE	BUDGETED	BALANCE
SALARY & BENEFITS					
600001	Salary and Wages	\$ 145,864.29	\$ 1,528,222.23	\$ 1,700,594.00	\$ 172,371.77
600401	Contribution to Medicare	\$ 1,873.04	\$ 19,475.28	\$ 24,659.00	\$ 5,183.72
600201	Contribution to Retirement	\$ 11,039.08	\$ 408,852.70	\$ 422,589.00	\$ 13,736.30
600601	Contribution to Health Care	\$ 37,065.32	\$ 415,660.89	\$ 500,000.00	\$ 84,339.11
SERVICE AND SUPPLIES					
610001	Clothing and personal supplies	\$ 479.26	\$ 4,144.00	\$ 8,500.00	\$ 4,356.00
610011	Laundry services and supplies	\$ 763.35	\$ 7,309.40	\$ 9,000.00	\$ 1,690.60
610021	Utilities total	\$ 1,905.82	\$ 24,423.84	\$ 35,900.00	\$ 11,476.16
Communications					
610022.1	Telephone Service & Internet	\$ 2,230.88	\$ 10,199.45	\$ 13,800.00	\$ 3,600.55
610022.3	Website and email hosting	\$ 9.99	\$ 718.29	\$ 850.00	\$ 131.71
610022.4	Cell phone service (Verizon)	\$ 645.06	\$ 6,147.80	\$ 9,000.00	\$ 2,852.20
610141	Maintenance of equipment	\$ 2,588.16	\$ 21,332.53	\$ 45,000.00	\$ 23,667.47
Maintenance of structure and improvements					
610122.1	Landscaping service	\$ 195.00	\$ 2,145.00	\$ 3,600.00	\$ 1,455.00
610122.2	Building Maintenance and repairs	\$ 18.48	\$ 13,952.53	\$ 10,000.00	\$ (3,952.53)
610122.3	Yard Maintenance and repairs	\$ -	\$ 1,160.00	\$ 1,400.00	\$ 240.00
Transportation, travel, & training					
610191.1	Fuel and GPS (WexMart)	\$ 3,350.91	\$ 33,452.24	\$ 40,000.00	\$ 6,547.76
610191.3	Meetings, conferences, & travel	\$ 5,314.09	\$ 22,705.35	\$ 35,000.00	\$ 12,294.65
610191.4	Board meeting expenses	\$ 29.78	\$ 491.71	\$ 1,000.00	\$ 508.29
610191.5	Board payments in lieu	\$ 1,300.00	\$ 11,100.00	\$ 16,800.00	\$ 5,700.00
610461.53	Continuing Education fees	\$ -	\$ 145.00	\$ 4,000.00	\$ 3,855.00
610191.6	Training for trustees	\$ -	\$ -	\$ 1,000.00	\$ 1,000.00
610191.7	Staff Training (automotive, IT, staff development)	\$ 35,257.73	\$ 45,567.20	\$ 80,000.00	\$ 34,432.80
Professional services					
610261.1	Audit	\$ -	\$ 13,135.00	\$ 13,000.00	\$ (135.00)
610261.2	Actuarial reports	\$ -	\$ 1,300.00	\$ 3,000.00	\$ 1,700.00
610261.3	Helicopter service	\$ -	\$ -	\$ 30,000.00	\$ 30,000.00
610261.4	Legal services	\$ -	\$ 1,473.76	\$ 20,000.00	\$ 18,526.24
610261.5	MVCAC Research Foundation	\$ -	\$ -	\$ 5,000.00	\$ 5,000.00
610261.6	UC Davis Zika virus vector competency research	\$ -	\$ 7,500.00	\$ 7,500.00	\$ -
610261.7	Tax collection service - SCI	\$ -	\$ 32,371.98	\$ 35,000.00	\$ 2,628.02
610261.8	Payroll service	\$ -	\$ 49.95	\$ 6,000.00	\$ 5,950.05
610261.9	Environmental consultant services for regulatory issues	\$ -	\$ -	\$ 5,000.00	\$ 5,000.00
610261.1	HR Services (RGS)	\$ -	\$ 174.90	\$ 25,000.00	\$ 24,825.10
610261.11	OPEB service	\$ 1,719.00	\$ 16,461.21	\$ 22,100.00	\$ 5,638.79
610351	Annual memberships and dues total	\$ 2,100.00	\$ 19,350.00	\$ 22,935.00	\$ 3,585.00
610378	Insurance total	\$ -	\$ 113,867.00	\$ 140,138.00	\$ 26,271.00
610451	Community education total	\$ 557.35	\$ 10,776.16	\$ 35,000.00	\$ 24,223.84
Special expenses					
610461.1	Pesticides	\$ 19,991.58	\$ 96,724.06	\$ 200,000.00	\$ 103,275.94
610461.2	Field supplies (dippers etc)	\$ -	\$ 253.82	\$ 1,000.00	\$ 746.18
610461.4	Fish and Fish Maint.	\$ 869.69	\$ 3,009.98	\$ 4,000.00	\$ 990.02
610461.51	Aerial Pool Survey	\$ -	\$ -	\$ 17,000.00	\$ 17,000.00
610461.52	Permits	\$ -	\$ 3,232.00	\$ 3,000.00	\$ (232.00)
610461.54	Board plaques and nameplates	\$ -	\$ 215.80	\$ 1,000.00	\$ 784.20
610461.6	Spray equipment & Safety	\$ 221.52	\$ 9,231.03	\$ 14,000.00	\$ 4,768.97
620021	Household expenses total	\$ 1,505.25	\$ 16,058.05	\$ 14,480.00	\$ (1,578.05)
620041	Office supplies total	\$ 1,936.26	\$ 15,474.52	\$ 22,400.00	\$ 6,925.48
Information technology					
620042.1	Computers, supplies and software	\$ 2,130.55	\$ 10,223.07	\$ 15,000.00	\$ 4,776.93
620042.2	Contract services for Computer network	\$ -	\$ 475.00	\$ 4,000.00	\$ 3,525.00
620042.3	Database consultant	\$ 1,125.00	\$ 12,017.25	\$ 25,000.00	\$ 12,982.75
620141	Laboratory total	\$ 10,924.04	\$ 59,216.79	\$ 88,594.00	\$ 29,377.21
620261	Small tools and instruments	\$ -	\$ 2,118.93	\$ 2,500.00	\$ 381.07
650031.1	Capital expenditures	\$ -	\$ 165,088.37	\$ 295,000.00	\$ 129,911.63
TOTAL EXPENDITURES		\$ 293,010.48	\$ 3,187,004.07	\$ 4,039,339.00	\$ 852,334.93
TOTAL WARRANTS		\$ 324,277.31			
Discrepancy from Expenditures and Warrant list ¹		\$ 31,266.83			

1- \$30,477.59 spent in Capital Replacement, account 800002
2- \$789.24 spent in Contingency account 800004

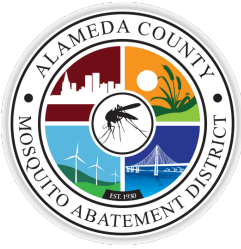
Investments, Reserves, and Cash Balance

Account #		Activity in May	Activity to Date	Beginning Balance 7/1/16	Current Balance	% change
Budget Reserves						
800001	Working Capital (Dry Period Cash)	\$ -	\$ -	\$ 2,427,743.00	\$ 2,427,743.00	0.0%
800002	Capital Replacement	\$ 30,477.59	\$ 51,528.39	\$ 544,731.00	\$ 493,202.61	-9.5%
800003	Public Health	\$ -	\$ -	\$ 500,000.00	\$ 500,000.00	0.0%
800004	Contingency	\$ 789.24	\$ 1,039.24	\$ 25,000.00	\$ 23,960.76	-4.2%
VCJPA Reserve						
800006	VCJPA Contingency	\$	\$ 77,000.00	\$ 210,282.00	\$ 287,282.00	36.6%

		April Balance	May Balance	% change
Investment Accounts				
800005	LAIF	\$ 150,887.49	\$ 150,887.49	0.0%
	OPEB Fund	\$ 4,097,643.97	\$ 4,170,360.48	-1.8%

	April Balance	April Expenditures	Deposits ¹	May Balance	% change
Bank of America (Payroll Account)				\$ 135,077.16	
County Account	\$ 6,316,702.42	\$ 324,277.31	\$ 8,264.79	\$ 5,984,160.32	\$ (0.06)

1- Deposits from the County



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MONTHLY STAFF REPORT – May 2017

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1. OPERATIONS

Large sources that had accumulated significant water from the rainy season continued to be inspected and treated during the month of May. Evaporation of standing water in these areas increased during May, allowing reduced control efforts for many mosquito breeding sites. This has allowed the field staff to shift focus to other *Culex tarsalis* sources such as ditches, canals, and unmaintained swimming pools.

Mosquito activity is currently shifting from the spring/summer to fall pattern. Weather conditions, temperature, and low rainfall totals have ushered in increased activity levels for *Culex pipiens*. During May, field staff focused their efforts on inspecting and treating for *C. pipiens* in catch basins, storm drains, sumps, and sewer plants. ACMAD's key focus from May until the first rains and cooler temperatures of the fall months will be control of *C. tarsalis* and *C. pipiens*, two important vectors of West Nile Virus in Alameda County. Both species can also be found in unmaintained swimming pools. In anticipation of the aerial survey data (expected in June), field staff have been diligent with inspecting unmaintained pools identified in previous inspections and service requests. Our goal is to treat as many pools as possible before the most recent flight data are processed. This should help reduce *Culex* populations, especially in key urban parts of the County that have been WNV "hotspots" in recent years. Pool treatments, coupled with early and consistent management of *C. pipiens* in catch basins and other source,s will be important in minimizing adult mosquito numbers.

Several marsh areas populated with tule and bulrush were monitored and treated for *Culex erythrothorax* during the month of May. This aggressive species of *Culex* is typically limited to marsh habitats and does not have a large flight range, but it is a competent vector of WNV. Operations are also considering some of the other *Culex*-vectored diseases such as SLE which have recently reappeared in parts of California. Controlling *Culex* species was a major priority during May, and this will continue during the summer months.

High tides and warmer weather toward the end of May led to significant hatches of *Aedes dorsalis* eggs in tidal marshes in Alameda County. Again, great team work on the part of field operations staff led to effective control of this aggressive, day-biting mosquito. Monitoring and treatments after high tides in months to come will continue in order to eliminate newly-emerged larvae.

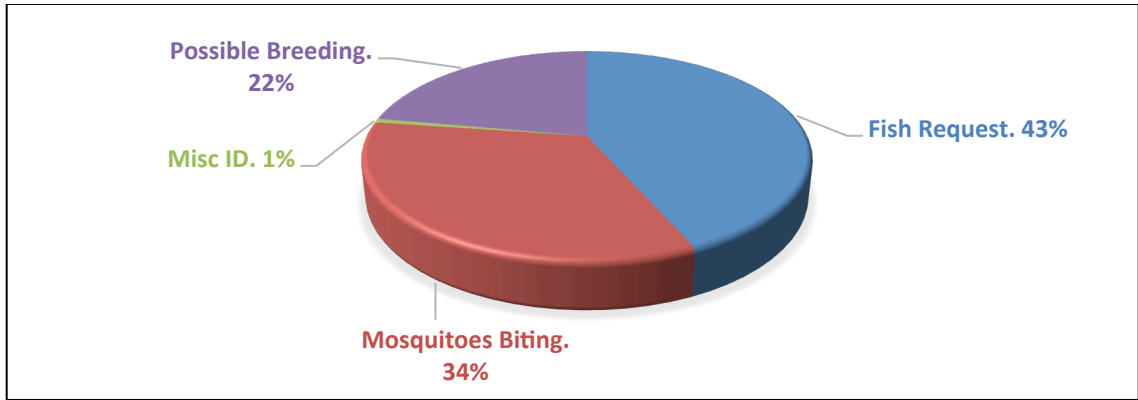
Two thirds of the adult and/or larval mosquitoes collected during service request inspections in May were *Culiseta incidens*. This species breeds year-round and is commonly encountered in back yard breeding sites. Larvae may be found in almost any source with relatively clean water (e.g., fish ponds, buckets, cans, tires and other containers, creek potholes, and even some of the cleaner catch basins). Because the sources for this mosquito are often in the back yards of residences, controlling this species can be complicated and time consuming.

During May, the District received an above average number of service requests compared to the ten year average. This was anticipated based on the weather conditions during March, April and May. Typically during May, residents spend more time out of doors where they encounter mosquitoes and other insects. The District received 34 service requests that yielded mosquito-like insects, including midges and crane flies. Operations personnel responded to 70 service requests where mosquito breeding was suspected. The District also received 137 requests for mosquito fish.

Joseph Huston
Field Operations Supervisor

A. Operational Data

1. Service Requests



May 2017 Managers Report Data	
Total service requests	316
May- Ten year average	241
May- Five year average	180
Last May	240
Range (10 yr) =	92 - 547
Mosquito species attributed to service request	#
<i>Ae. sierrensis</i>	7
<i>Ae. squamiger</i>	2
<i>Cs. incidens</i>	87
<i>Cs. inornata</i>	1
<i>Cx. pipiens</i>	19
<i>Ae. washinoi</i>	2
<i>Cx. tarsalis</i>	6

2. Other

Number of all injuries during 2017 = 2

3. Activity Report

Vacation Hours Used	162.5
Sick Hours Used	24.25
Workers Comp.	0
ETO Used	0
Total Leave	186.75
ETO Hours Accrued	27.94

2. LAB

Summary

- The Lab Director passed the Federal Aviation Administration Small Unmanned Aircraft Systems (sUAS; *i.e.* drone) Knowledge Test that is needed to obtain a sUAS Pilots License. The application for the license has been submitted to the FAA and should be issued during the month of June.
- The ACMAD Invasive *Aedes* Response Plan will be updated using what was learned by the Lab Director attending a Zika Tabletop Exercise that was coordinated by Orange County Mosquito and Vector Control District and Orange County Public Health Services.
- Two additional Seasonal Lab Staff were hired to deploy the invasive *Aedes* trap network in Alameda County.
- Weather was similar relative to the prior month, with the exception of no rainfall recorded for May (Figure 1), permitting the placement of 213 CO₂ traps during the month.
- No detections of arboviruses in birds or mosquitoes during 2017.
- No invasive *Aedes* mosquitoes detected in Alameda County during 2017.
- Highest mosquito abundance occurred in cities boarding San Francisco Bay. *Culex tarsalis* was predominant in northern cities, while *Culex erythrothorax* was most commonly collected in CO₂ traps located near Hayward Regional Shoreline (Figure 2)
- Mosquito abundance for May was higher than prior months of 2017, but was similar or lower than what was observed in May of the prior year (May of 2016; Figure 3).
- Nested PCR assay for identifying the species of animal that mosquitoes feed upon is being developed (Figure 4).
- Lab module of MapVision that permits simultaneous recording of mosquito abundance and arbovirus test collections is being developed (Figure 5).

Budget

As of May 30, 2017 (month 11 of 12, 92 % of the year), 67 % of the lab budget has been expended.

Mosquito Abundance Monitoring

- **Native mosquito abundance monitoring.**
 - Outdoor temperatures for the month of May 2017 were slightly warmer relative to the prior month and no rain was recorded (minimum and maximum average temperatures of 52.4 °F and 90.7 °F, respectively; average temperature of 62.6 °F; 0 inches of rain; 93.8 heat degree days; data from Vantage Pro2 weather station installed at ACMAD headquarters was not collected from May 11 – 18 because of construction; Figure 1).
 - *CO₂ Traps.* Geographically, the highest number of mosquitoes for the month of May was observed in cities adjacent to the San Francisco Bay (Figure 2). Cities with highest abundance were: Hayward where *Culex erythrothorax* predominated, and Oakland and Alameda where *Culex tarsalis* (a West Nile virus vector) were the most common species captured in the CO₂ traps. The relatively high numbers of *Cx. erythrothorax* collected in Hayward were from the Hayward Regional Shoreline near to where the tule plants were removed from a retention pond in 2016. However, *Cx. erythrothorax* abundance at this site for May 2016 was substantially lower relative the May 2015 (Figure 3A), suggesting that the tule removal project had a positive impact on reducing the abundance of this mosquito. Across the county, an average of 24.5 +/- 53.3 mosquitoes were collected per CO₂ trap night (range of 0 – 375 mosquitoes / trap night, 213 traps). When only traps that contained

mosquitoes were included (n = 162 traps), during May there were 26.9 +/- 59.7 mosquitoes per trap night. Overall, mosquito abundance for May 2017 as measured using CO₂ traps was similar to or lower than the two prior years (2015 and 2016; Figure 3A).

- *New Jersey Light traps.* New Jersey Light traps (NJLT) are monitored each week of the year. During May, an average of 2.4 mosquitoes were captured per NJLT trap night (n = 490 trap nights; range of 0 – 179 mosquitoes per trap). Mosquito abundance, as measured using NJLT, was lower for 2017 relative to the prior two years (Figure 3B). Robust mosquito abundance data was not available for May 2015 because of a change in lab staff.

Invasive *Aedes* mosquito monitoring (prepared by Dereje Alemayehu, Biological Specialist). The Lab has continued to trap for invasive *Aedes* mosquitoes. To date there has been no detection of invasive *Aedes* mosquitoes collected in any of the invasive *Aedes* traps that have been deployed. For the month of May 2017, a total of 193 invasive *Aedes* mosquito traps were deployed throughout Alameda County. Out of these 53 traps were AGO (autocidal gravid oviposition) traps, 137 Ovi-bucket traps, 6 BG-Sentinel and 3 Mosquito Magnet traps. The number of invasive *Aedes* traps that were inspected during May 2017 is provided in Table 1.

Table 1. Invasive mosquito traps inspected in May 2017 throughout Alameda County.

TRAP TYPES	AGO	OVI-BUCKET	BG-SENTINEL	MOSQUITO MAGNET	TOTAL # OF TRAPS
PERMANENT TRAPS	13	96	6	3	118
TEMPORARY TRAPS FOR TRAVEL CASES	2	6	0	0	8
TOTAL # OF TRAPS INSPECTED IN THE MONTH OF MAY 2017	15	102	6	3	126

Arbovirus Monitoring

- **WNV in birds and mosquitoes.** No WNV-positive birds or mosquitoes were detected in Alameda County for the month of May. For the year 2017, no mosquitoes or birds have been found to contain WNV, SLE or WEE.

Development

- **Lab Module of MapVision Database Software.** In collaboration with Robert Ferdan (ACMAD IT Director) and the product development team at LeadingEdge, the Lab has contributed to the development of a module in MapVision that will allow Lab workers to simultaneously record abundance and combine mosquitoes from multiple CO₂ traps into a single pool for arbovirus testing. The lack of that capacity would have resulted in substantially increased work time needed to process mosquitoes that are collected in CO₂ traps. Moreover, combining mosquitoes from multiple traps into pools for arbovirus testing produces a tremendous cost savings to the District (e.g. \$1836 was expended for arbovirus testing during May 2017, compared to \$2964 had we not combined mosquitoes from multiple traps for arbovirus

testing). The newly developed MapVision data input screen (Figure 5) differs substantially from the simple data entry tables that were originally provided in MapVision in that it: (i) allows simultaneous abundance recording and pool management, (ii) provides an interactive map for visualizing the location of traps where mosquitoes were collected, (iii) provides a timer that alerts Lab staff when traps are scheduled for retrieval, and (iv) allows automatic tabulation of mosquitoes as they are moved from CO₂ traps to pools for arbovirus testing. Additionally, the Lab is working to assist MapVision in developing an iPad App that is similar to the Catchbasin iPad App that will be used for deploying and inspecting traps in the Invasive *Aedes* Trap Network.

- **Invasive *Aedes* response.** The ACMAD Lab Director attended a Zika Tabletop Exercise that was coordinated by Orange County Mosquito and Vector Control District and Orange County Public Health Services. The purpose of the Tabletop Exercise was to identify strengths and weaknesses in the county-wide response plans for local transmission of Zika by invasive *Aedes* mosquitoes. Outcomes include a recognition of increased need for advanced coordination between agencies and a cost-sharing plan. These concepts will be incorporated into the ACMAD Invasive *Aedes* Response Plan.

Research

- **Bloodmeal identification assay.** The lab is working to establish a nested PCR assay for determining the species of animal that mosquitoes feed upon using a report by Thiemann *et al.* as a guide (Mol Ecol Resour; 2012 12(2): 238–246). The first PCR step utilizes primers that amplify the tRNA regions that flank mitochondrial gene cytochrome c oxidase I (*mtCOI*) of mammals or bird. The second PCR step amplifies a smaller region within *mtCOI* that can be sequenced to identify the species animal that the mosquito fed upon. Positive controls included primers that amplified mammalian *GAPDH* and *ACTB*. The negative control was no template control (NTC). The gel image (Figure 4) shows DNA isolated from cultured human neuroblastoma cells (U87) using Qiagen columns (Q-DNA) or Mag MAX (MM-DNA). The *GAPDH* and *ACTB* primers produced PCR products using both Q-DNA and MM-DNA templates, suggesting that the DNA was not degraded during isolation. However, the *mtCOI* primers did not amplify a distinct PCR product of a size that is reported in Thiemann *et al.* (2012). Thus, more development effort is needed for establishing this assay in the ACMAD Lab.

Figures

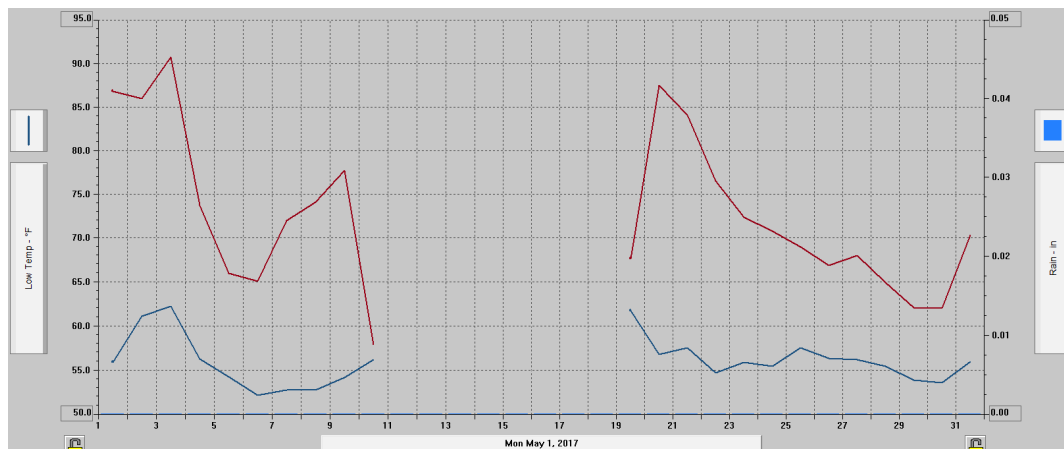


Figure 1. Temperature during the month of May 2017 (red line is daily high temperature, blue line is daily low temperature) and rainfall (blue bars).

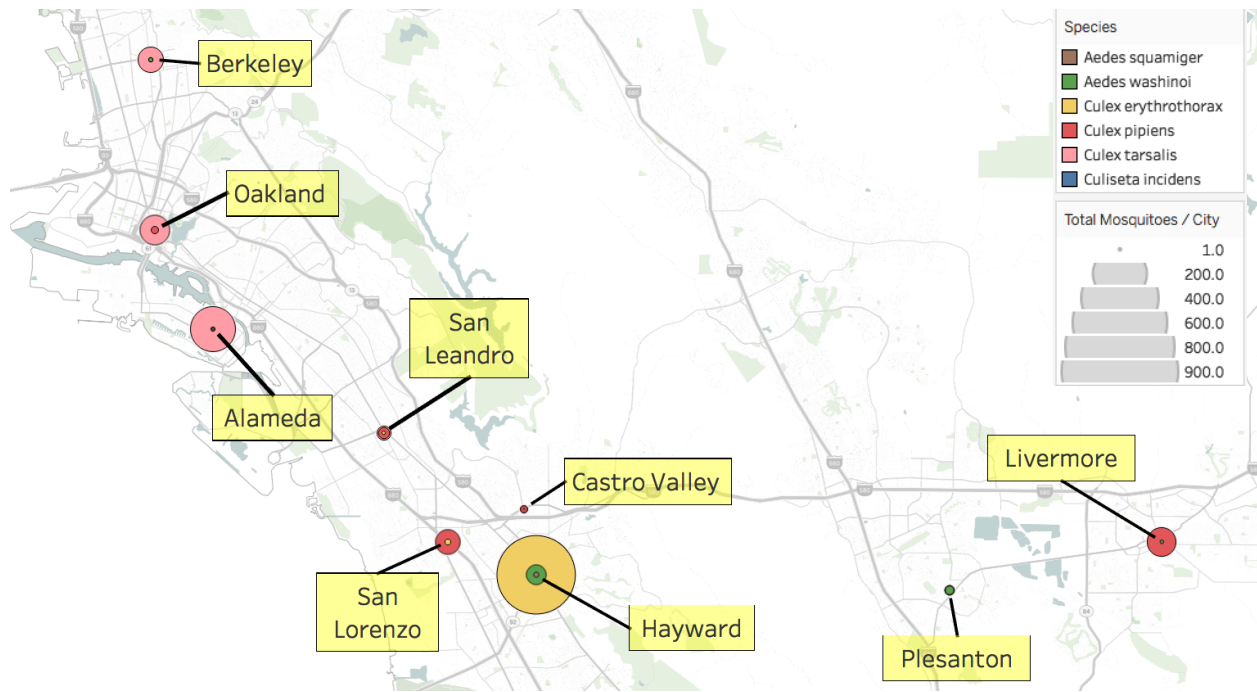


Figure 2. Geospatial distribution of the most prevalent mosquito species collected in each city during the month of May 2017. Larger diameter circles indicate higher numbers of mosquitoes while color of the nested circles indicate the species.

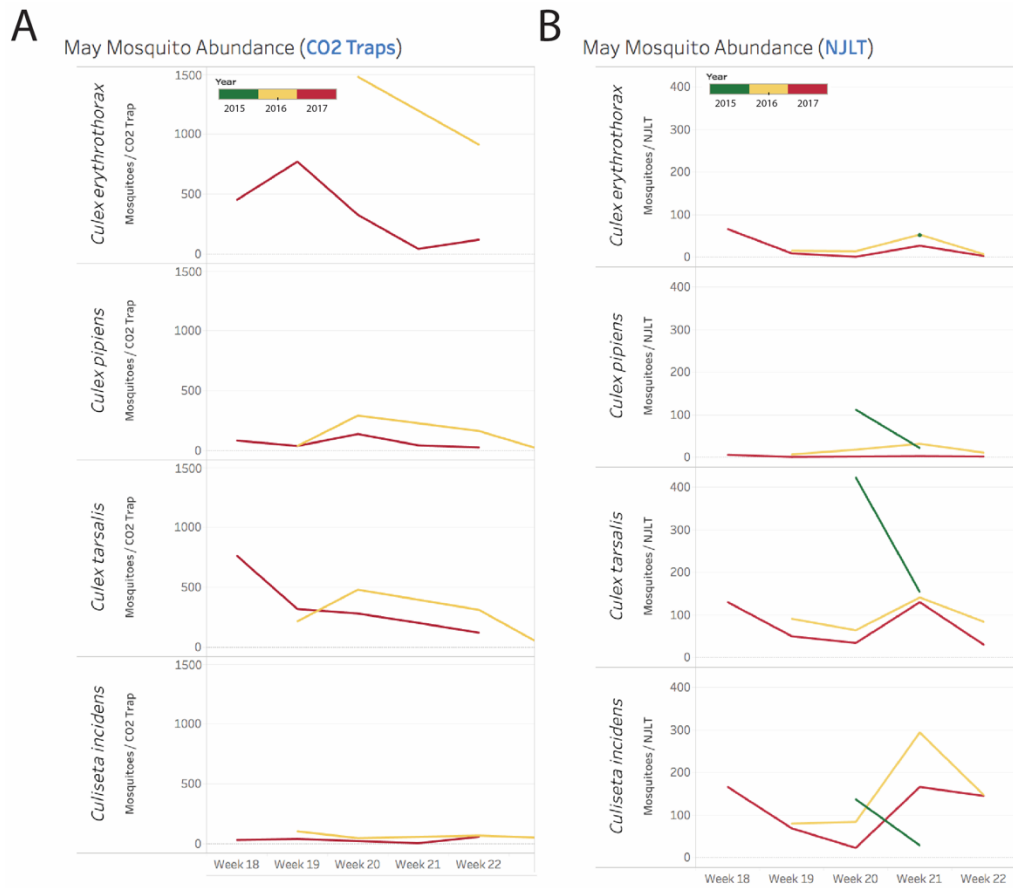


Figure 3. Abundance of the most prevalent mosquito species collected in Alameda County using CDC EVS CO₂ traps (A) and NJLT (B) during the month of May for 2015 (green line), 2016 (yellow line) and 2017 (red line).

2017 (red line). Limited mosquito trapping was conducted during May 2015 because of changes in lab staff.

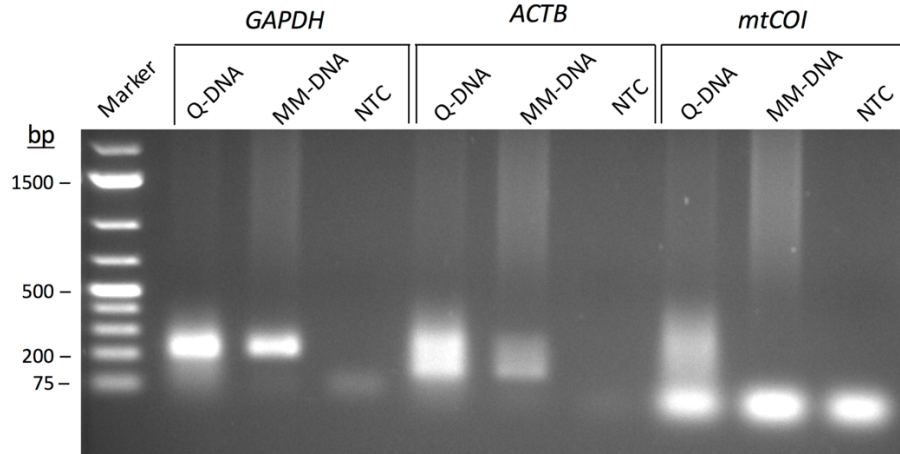


Figure 4. Bloodmeal identification assay. Image of an agarose gel showing PCR products amplified from DNA that was isolated from cultured human neuroblastoma cells (U87) using Qiagen columns (Q-DNA) or Mag MAX (MM-DNA) and primers for *GAPDH*, *ACTB* and *mtCOI*.

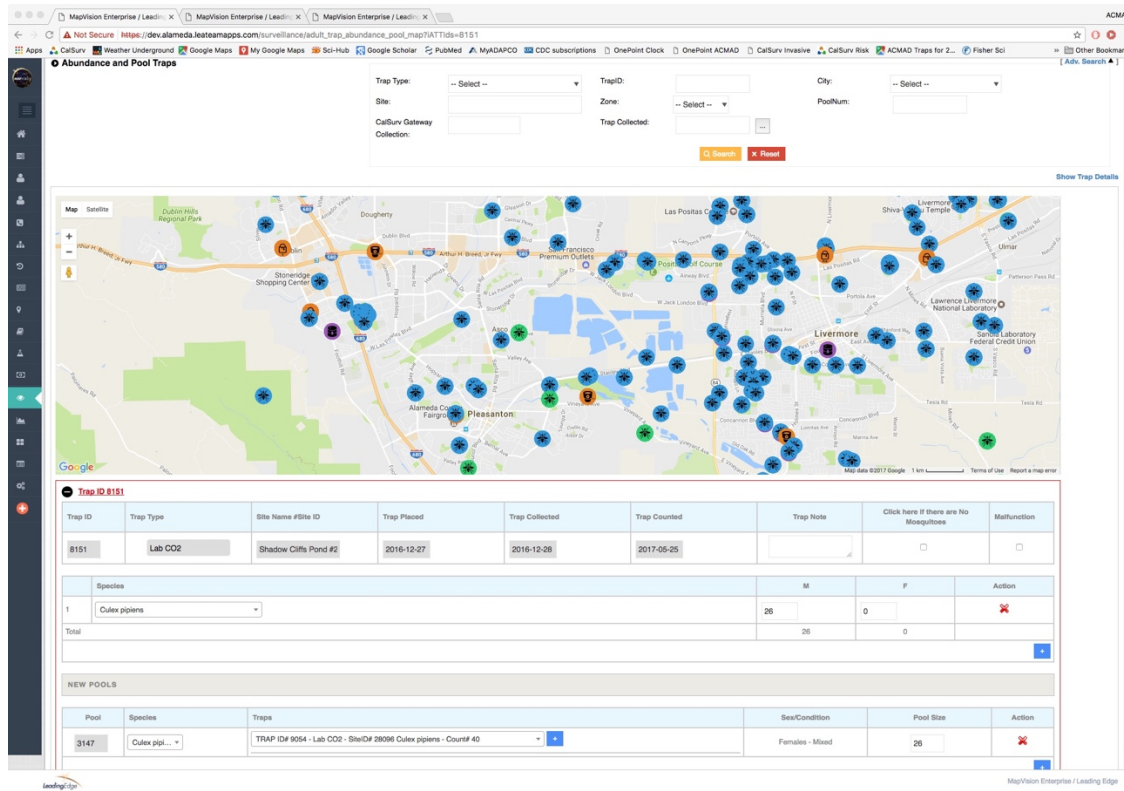


Figure 5. Redesigned MapVision web interface for simultaneous recording of mosquito abundance and arbovirus pooling data.

Submitted respectfully by Eric Haas-Stapleton, PhD on June 7, 2017.

3. PUBLIC EDUCATION

A. Upcoming Events

- **Alameda County Fair** – Friday, June 16th to Sunday July 9th, (Alameda County Fairgrounds, Pleasanton)
- **EBPRD Volunteer Hiking Patrol Presentation** – Tuesday, June 20th, 7pm (EBRPD Headquarters, Oakland)
- **United for Safety** – Saturday, July 8th, 9am-2pm (San Leandro Police Department)
- **School Presentation** – Monday, July 10th, 10am (Adventure Time – Independent Elementary School, Castro Valley)

B. Google Analytics

	May 2017	April 2017	May 2016
Users	1,662	2,075	1,643
Number of Sessions	1,967	2,479	1,892
Sessions by New Visitors	1,598 (81.2%)	2,029 (81.8%)	1,572 (83.1%)
Pageviews	4,037	4,774	3,680
Average Session Duration	2 minutes 2 seconds	1 minute 38 seconds	1 minute 29 seconds
Top Cities	San Francisco (8.4%), Oakland (7.6%), Berkeley (4.5%), Hayward (4.4%), Fremont (3.6%)	San Francisco (8.6%), Hayward (6.1%), Los Angeles (5.9%), Oakland (4.1%), Berkeley (4%)	San Francisco (8%), Oakland (5.4%), Not Set (5.1%), Hayward (4.3%), Fremont (3%)
Top Pages	Homepage (17.3%), CA Species (15.4%), Mosquitofish Request (8.1%), Education (6.8%), Report Mosquito Problem (6.7%)	CA Species (21.2%), Homepage (15.8%), Report Mosquito Problem (7.5%), Mosquitofish Request (6.6%), Education (5.3%)	Homepage (21.2%), CA Species (14.4%), Mosquitofish Request (8.1%), Report Mosquito Problem (6.4%), Mosquito Lifecycle (6%)

C. Facebook

	May 2017	April 2017
Total Posts	8	11
Number Reached	377	809
Most Popular	CDPH Press Release: CA urged to remove standing water	Spring and flying insects article
Total Number of "Likes"	123	123

D. Twitter

	May 2017	April 2017
Total Tweets	14	11
Tweet Impressions	1,674	1,643
Top Tweet (# Impressions)	Report dead birds to WNV hotline	Flooding causes explosion of mosquitoes in Stanislaus County
Profile Visits	38	108
New Followers (Total Followers)	7 (482)	5 (475)