



Coachella Valley  
Mosquito and Vector  
Control District

43420 Trader Place  
Indio, CA 92201  
Phone (760) 342-8287  
www.cvmvcd.org

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**Board of Trustees Meeting**  
**Tuesday, March 12, 2019**  
**6:00 p.m.**

**AGENDA**

Assistance for those with disabilities: If you have a disability and need accommodation to participate in the meeting, please call the Clerk of the Board at (760) 342-8287 for assistance so the necessary arrangement can be made.

1. **Call to Order** – Doug Hassett, President
2. **Pledge of Allegiance**
3. **Roll Call**
4. **Motion to Excuse Absences**
5. **Confirmation of Agenda**
6. **Closed Session**
  - A. **Closed Session:** Public Employee Discipline/Dismissal/Release (Government Code § 54957) One (1) matter.
7. **Public Comment**
  - Those wishing to address the Board should complete a Public Comment Card and provide it to the Clerk of the Board.
  - Non-Agenda Items: Anyone wishing to address the Board on items not on the agenda should do so at this time. Each presentation is limited to no more than 3 minutes.
  - Agenda Items: Comments should be made when the agenda item is called. Each presentation is limited to no more than 3 minutes.

8. **Recognition**  
Approval of Resolution 2019-02 in recognition of Ramon Gonzalez for his 25 years of service to the District – **Jeremy Wittie, MS, General Manager (Pg. 6)**
9. **Presentations**
  - 2019 Surveillance Plan and Environmental Reports – **Jennifer A. Henke, M.S., Laboratory Manager**
  - General Manager’s Report – **Jeremy Wittie, M.S., General Manager**
10. **Board Reports**
  - A. President’s Report – **President Hassett**
    - Executive Committee Oral Report and Minutes (**Pg. 10**)
  - B. Finance Committee – **Treasurer Weightman**
    - Finance Committee Minutes (**Pg. 14**)
11. **Items of General Consent**
  - The following items are routine in nature and may be approved by one blanket motion upon unanimous consent. Any member of the Board or the public may request an item be pulled from Items of General Consent for separate discussion.
  - A. Minutes for February 12, 2019, Board Meeting (**Pg. 17**)
  - B. Correspondence (**Pg. 22**)
  - C. Approval of Expenditures for February 13-28, 2019, and March 1-12, 2019 (**Pg. 25**)
  - D. Informational Items:
    - District Travel (**Pg. 26**)
    - Board Business Status Log (**Pg. 28**)
    - National Pollutant Discharge Elimination System (NPDES) Annual Report – **Jennifer A. Henke, M.S., Laboratory Manager (Pg. 30)**
    - EPA Pesticide Environmental Stewardship Program (PESP) – **Jennifer A. Henke, M.S., Laboratory Manager (Pg. 34)**
    - California Environmental Quality Act (CEQA) Mitigated Negative Declaration Annual Compliance Report – **Jennifer A. Henke, M.S., Laboratory Manager (Pg. 43)**
    - Staff reports from:
      - AMCA Annual Conference, February 25-March 1, 2019, in Orlando, FL (**Pg. 51**)
      - MVCAC Annual Conference, February 3-6, 2019, in Burlingame Trustee Reports (**Pg. 52**)
  - E. Department Reports (**Pg. 61**)
  - F. Approval for General Manager Jeremy Wittie, to sign a one year contract extension with Willdan Financial Services, to provide engineering support services for the

District's benefit assessment – **David l'Anson, Administrative Finance Manager (Pg. 93)**

G. Approval to contract with Ceja Security International for security services for the District headquarters for one year in an amount not to exceed \$975.00 per month, from Fund #7675.01.305.000, Contract Services – Budgeted; Funds Available **David l'Anson, Administrative Finance Manager (Pg. 94)**

H. Approval to renew annual maintenance contract with ESRI in an amount not to exceed \$19,000.00, from Fund #7675.01.210.000, Computer and Network Systems Maintenance Contracts – Budgeted; Funds Available **Edward Prendez, Information Systems Manager (Pg. 95)**

I. Approval of Resolution 2019-03 designating the week of April 21-27, 2019, as Mosquito Awareness Week – **Jill Oviatt, M.C.D.M., Public Information Manager (Pg. 96)**

J. Approval to contract with Aerial Services for aerial reconnaissance services of the Coachella Valley's urban areas for neglected water features, in the amount not to exceed \$18,500.00, from Fund #7575.01.210.000, Aerial Surveillance – Budgeted; Funds Available **Edward Prendez, Information Technology Manager (Pg. 100)**

12. **Old Business**

A. Discussion regarding the District's vacant land located adjacent to the District's main campus. **Jeremy Wittie, M.S., General Manager (Pg. 102)**

13. **New Business**

A. Approval to develop a new District website in an amount not to exceed \$15,000 from Capital Replacement Budget Fund 8415.13.210.000. – Budgeted; Funds Available **Jill Oviatt, M.C.D.M., Public Information Manager (Pg. 104)**

14. **Trustee Comments, Requests for Future Agendas Items, Travel, and/ or Staff Actions**

The Board may not legally take action on any item presented at this time other than to direct staff to investigate a complaint or place an item on a future agenda unless (1) by a majority vote, the Board determines that an emergency situation exists, as defined by Government Code Section 54956.5, or (2) by a two-thirds vote, the board determines that the need for action arose subsequent to the agenda being posted as required by Government Code Section 54954.2(a). Each presentation is limited to no more than 3 minutes.

15. **Adjournment**

At the discretion of the Board, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated and may be subject to action by the Board.

All public records relating to an agenda item on this agenda are available for public inspection at the time the record is distributed to all, or a majority of all, members of the Board. Such records shall be available at the District office located at 43420 Trader Place, Indio, California.

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**Certification of Posting**

I certify that on March 8, 2019, I posted a copy of the foregoing agenda near the regular meeting place of the Board of Trustees of the Coachella Valley Mosquito & Vector Control District and on the District's website, said time being at least 72 hours in advance of the meeting of the Board of Trustees (Government Code Section 54954.2)  
Executed at Indio, California, on March 8, 2019.

\_\_\_\_\_  
Grace Morales, Clerk of the Board

**SECTION**

**8**



# **RECOGNITION**



**Coachella Valley Mosquito and Vector  
Control District**

**March 12, 2019**

**Staff Report**

**Agenda Item:** Recognition

Approval of Resolution 2019-02 in recognition of Ramon Gonzalez for his 25 years of service to the District – **Jeremy Wittie, MS, General Manager**

**Background:**

*Ramon Gonzalez* began his employment at the District on February 7, 1994, as a *Jr. Operator*. He has since been promoted to *Vector Control Technician II*. Ramon has demonstrated a commitment and dedication to the District.

**Staff Recommendation:**

Staff recommends approval of Resolution 2019-02 in recognition of Ramon Gonzalez for his 25 years of service to the District.

**Attachment:**

- Resolution 2019-02

**RESOLUTION NO. 2019-02**

**A RESOLUTION OF THE BOARD OF TRUSTEES OF THE  
COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL  
DISTRICT IN RECOGNITION OF RAMON GONZALEZ'S  
TWENTY-FIVE (25) YEARS OF SERVICE TO THE DISTRICT**

**WHEREAS**, the Coachella Valley Mosquito and Vector Control District ("District") was established in 1928 as an independent special district by the Riverside County Board of Supervisors with the mission of reducing the risk of disease transmission by mosquitoes and other vectors and the protection of residents and visitors of the Coachella Valley; and

**WHEREAS**, Ramon Gonzalez has worked for the District and given continuous, faithful, and loyal service for 25 years; and

**WHEREAS**, Ramon Gonzalez was hired as a Jr. Mosquito Technician on February 7, 1994 and was promoted to Vector Control Technician II on May 2, 2001; and

**WHEREAS**, Ramon Gonzalez designed the current District logo adopted by the Board of Trustees in 1996 when the District expanded to a full vector control agency and changed the name to Coachella Valley Mosquito and Vector Control District; and

**WHEREAS**, Ramon Gonzalez's hard work and dedication to eye gnat control, mosquito surveillance and control, red imported fire ant control, and rodent control has contributed to protecting the public health of the Coachella Valley.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Trustees of the Coachella Valley Mosquito and Vector Control District that:

**Section 1. Recitals.**

The recitals set forth above are true and correct.

**Section 2. Recognition of Service.**

Ramon Gonzalez is hereby recognized upon his twenty-five (25) year anniversary for his outstanding contributions and dedication to the District and the citizens of the Coachella Valley.

**Section 3. Effective Date.**

This Resolution shall take effect upon its adoption.

**Section 4. Certification.**

The Clerk of the Board shall certify as to the adoption of this Resolution and shall cause the same to be processed in the manner required by law.

**PASSED, ADOPTED AND APPROVED, THIS 12th DAY OF MARCH, 2019.**

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Doug Hassett, President  
Board of Trustees

**ATTEST:**

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Graciela Morales, Clerk of the Board

**APPROVED AS TO FORM:**

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Lena D. Wade, General Counsel

**REVIEWED:**

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Jeremy Wittie, MS, General Manager

**SECTION  
10**



**BOARD REPORTS**

# COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

## Executive Committee Meeting Minutes

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**TIME:** 9:00 a.m. Monday, March 4, 2019

**LOCATION:** 43420 Trader Place, Indio, CA 92201

**TRUSTEES PRESENT:**

County at Large	Franz De Klotz	Palm Desert	Doug Walker
Indian Wells	Clive Weightman		

**ABSENT:**

La Quinta	Doug Hassett
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**OTHERS PRESENT:**

Jeremy Wittie, General Manager  
Grace Morales, Clerk of the Board  
Brad Anderson, Rancho Mirage resident

- 1. Call to Order:** Vice President De Klotz called the meeting to order at 9:01 A.M.
- 2. Roll Call:** Roll call indicated three (3) committee members out of four (4) were present.
- 3. Confirmation of Agenda:** The Agenda was confirmed as presented.
- 4. Public Comments:** Brad Anderson, Rancho Mirage resident, commented his statement given during the February 1, 2019 Executive Committee Meeting was incorrect. He submitted a letter to Clerk of the Board Morales requesting this is noted. Additionally, Mr. Anderson submitted a second letter to the Clerk of the Board in which he recommends that background materials related to meeting agendas are made available to the public, and that the District considers reviewing outside companies for future IT department duties. Both of Mr. Anderson's letters are included in the March 12, 2019 Board packet.
- 5. Review of Draft March 2019 Agenda:** The March 2019 Board meeting Agenda was reviewed by members of the committee. General Manager Jeremy Wittie gave a brief explanation of each item on the agenda. Vice President De Klotz asked how often the District seeks proposals or bids for the General Consent items. A discussion ensued. Members commented it is a good practice to go out to bid every three to four years. Members proposed that Administrative Finance Manager, David l'Anson, provides an overview of the Budget calendar/process at the March 12 Board meeting. A status update of the CV link easement was provided to Committee members. The standpipes and other items that are to be considered for the easement were discussed. General

Manager Wittie explained the main concerns include liability issues, parking, and others. He also shared staff is going to meet with City of Indio engineers this week to discuss the two roads that lead to the District's headquarters on Trader Place as they are the property of the District and in order to dedicate them to the City certain improvements must be completed. The Committee suggested the matter of the possible street dedication is individually discussed apart from the CV Link, as two different matters. General Manager Wittie stated there was one other item to add to the March Board meeting agenda for approval of the District's website redesign.

**6. IT Security:** Treasurer Weightman shared background information as to why he requested this item be placed on the Agenda. He stated that during the MVCAC conference he attended Dan Fisher's (SacYolo MVCD) presentation on IT security and best practices and would like to see how the CVMVCD measures up in comparison. Committee members agreed this topic is relevant to today's cyber security threats and suggested staff reviews further to determine if improvements can be made. General Manager Wittie stated staff has requested Fisher's presentation and will follow-up again.

**8. Trustee/Staff Comments:**

Brad Anderson commented he believes an outside independent IT firm would add increased transparency and security and would help benefit the public's trust.

Vice President De Klotz asked Clerk of the Board if all Trustees were up-to-date on required trainings and Clerk of the Board Morales confirmed all Trustees are up-to-date. Secretary Walker shared he will not be attending the March 12, 2019 Board meeting. Treasurer Weightman will be absent if the meeting is held on May 6<sup>th</sup>.

**9. Confirmation of Next Meeting Date:** The next Executive Committee Meeting was tentatively scheduled for May 6, 2019, at 9:00 a.m. pending if Mr. Hassett can attend this day or May 2<sup>nd</sup> or May 3<sup>rd</sup> as alternates.

**10. Adjournment:** The meeting was adjourned by Vice President De Klotz at 9:41 a.m.

# COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

## Executive Committee Meeting Minutes

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**TIME:** 11:00 A.M. FEBRUARY 1, 2019

**LOCATION:** 43420 Trader Place, Indio, CA 92201

**TRUSTEES PRESENT:**

La Quinta	Doug Hassett	Palm Desert	Doug Walker
Indian Wells	Clive Weightman		

**ABSENT:**

County at Large      Franz De Klotz

**OTHERS PRESENT:**

Jeremy Wittie, General Manager  
Grace Morales, Clerk of the Board  
Brad Anderson, Rancho Mirage resident

- 1. Call to Order:** President Hassett called the meeting to order at 11:05 A.M.
- 2. Roll Call:** Roll call indicated three (3) committee members out of four (4) were present.
- 3. Confirmation of Agenda:** The Agenda was confirmed as presented.
- 4. Public Comments:** Brad Anderson, Rancho Mirage resident, commented he believes it is important that the District continues in being transparent in its RIFA and mosquito control activities.
- 5. Review of Draft February 2019 Agenda:** The February 2019 Board meeting Agenda was reviewed by members of the committee. President Hassett expressed he was glad to see recognition of former President and Trustees on the February Agenda. Secretary Walker asked for a detailed explanation to the Salton Sea agreement agenda item is included at the upcoming Board meeting. Additionally, Walker suggested a short verbal background of the dehumidifiers' project is given to Trustees at the upcoming February meeting. President Hassett asked that the item to purchase four carts is clearly stated they are *replacement* carts.
- 6. Discussion of CV Link Easement:** General Manager Wittie provided an overview on the proposed easement. A plan of the proposed easement was reviewed. A discussion ensued. Wittie explained the main concerns include liability issues, increased foot traffic, parking, and vandalism. He also pointed out the discovery of the two roads that lead to the District's headquarters on Trader Place as being the property of the District. Wittie instructed Clerk of the Board Morales to contact the City of Indio Engineers Department to get confirmation if this is accurate of if there is a right of way document on file. The Committee agreed with having Wittie look into this matter at more length and explore all the options including

planning for future parking needs and the implications this might pose to the District. This item will be tabled for the Board meeting in March.

**Public Comment:** Brad Anderson commented he is against granting the easement and he also handed Clerk of the Board Morales a letter to be recorded into the public record.

#### **7. Review and Discussion of Thermal Plans and Project Manager Proposals**

The Thermal plans were reviewed. A discussion ensued. The project costs were discussed as well as the contingency fee and the project timeline. Treasurer Wightman suggested we obtain a warranty on work as it is a remediation project that we are required to mitigate every ten years. General Manager Wittie is still reviewing proposals received for the Project Manager to oversee the project and will have more to report at the February Board meeting.

**Public Comment:** Brad Anderson stated he would like to see the District fix the problem as opposed to only capping the asphalt and that he believes this project should take precedence over any other. He also voiced his concern of the water run-off and it being contaminated. Mr. Anderson handed Clerk of the Board Morales a letter to be recorded into the public record.

#### **8. Trustee/Staff Comments:**

Secretary Walker talked about the seating location for the President in the dais. A discussion followed.

**9. Confirmation of Next Meeting Date:** The next Executive Committee Meeting was scheduled for March 4, 2019, at 9:00 A.M.

**10. Adjournment:** The meeting was adjourned by President Hassett at 12:12 P.M.

# COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

## Finance Committee Meeting Minutes

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**TIME:** 4:30 P.M. FEBRUARY 12, 2019

**LOCATION:** 43420 Trader Place, Indio, CA 92201

**TRUSTEES PRESENT:**

Clive Weightman                      Isaiah Hagerman  
Bito Larson                              President Doug Hassett

**TRUSTEES ABSENT:** None.

**OTHERS PRESENT:**

Jeremy Wittie, General Manager  
David l'Anson, Administrative Finance Manager  
Grace Morales, Clerk of the Board  
Rancho Mirage resident, Brad Anderson, arrived at 4:36 p.m.

1. **Call to Order:** Treasurer Weightman called the meeting to order at 4:34 p.m.
2. **Roll Call:** Roll call indicated three (4) committee members out of four (4) were present.

**3. Confirmation of Agenda**

**4. Public Comments:** None.

**5. Items of General Consent:**

**5A – Approval of Minutes from November 11, 2018, Finance Committee Meeting:** On motion from Trustee Larson seconded by President Hassett, the Committee approved item 5A. Treasurer Weightman pointed out Item 6B from the November, 2018 Finance Committee meeting (IID bills/usage charges) was not listed under Old Business on the current agenda. Staff provided a usage graph/information on this item. No further action resulted from this.

Ayes: Trustee Larson, Treasurer Weightman, President Hassett.

Noes: None.

Abstained: Trustee Hagerman.

Absent: None.

**6. Discussion and/or Approval:**

**6A. Review of Check Report from Abila MIP for the period of January 9, 2019 to February 7, 2019:** Reviewed by Committee. Trustee Hagerman asked what the current process is as he is a new member of the Finance Committee. Treasurer Weightman and Larson explained what they look for when reviewing reports. Administrative Finance Manager, David l'Anson, explained the purchasing policy approval limits. Several questions regarding certain checks were brought up and staff provided additional information.

**6B. CalCard Charges September 2018:** Reviewed by Committee. Several questions regarding certain charges were brought up and staff provided additional information.

**6C. Review of August 2018 Financials:** Reviewed by Committee. Treasurer Weightman mentioned he is pleased to see the additional changes to reports Mr. l'Anson has made. Staff informed Committee members the benefit assessment check was received by the District this week. OPEB prefunding and financials were also reviewed and discussed.

**7. Old Business:** None.

**8. New Business:** None.

**9. Confirmation of Next Meeting:** The next Finance Committee meeting was scheduled for Tuesday, March 12 at 4:30 p.m.

**10. Trustee and/or Staff Comments/Future Agenda Items:** None.

**11. Adjournment:** The meeting was adjourned by Treasurer Weightman at 4:57 p.m.

**SECTION**  
**11**



**ITEMS OF GENERAL CONSENT**

# COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

## Board of Trustees Meeting Minutes

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CALLED TO ORDER: 6:01 P.M. FEBRUARY 12, 2019

LOCATION: 43420 Trader Place, Indio, CA 92201

### TRUSTEES PRESENT:

PRESIDENT:	Doug Hassett	La Quinta
VICE PRESIDENT:	Franz De Klotz	County at Large

Coachella	Philip Bautista	Indian Wells	Clive Weightman
Palm Springs	Dr. Doug Kunz	Rancho Mirage	Isaiah Hagerman
Palm Desert	Doug Walker	Desert Hot Springs	Gary Gardner
Cathedral City	Sergio Espericueta	County at Large	Bito Larson

### TRUSTEES ABSENT:

Indio Ben Guitron

### OTHERS PRESENT:

Jeremy Wittie, General Manager  
Lena Wade, Legal Counsel, SBEMP  
Grace Morales, Clerk of the Board  
Edward Prendez, Information Technology Manager  
Anita Jones, Human Resources Manager  
Jill Oviatt, Public Information Manager  
Jennifer Henke, Laboratory Manager  
Wakoli Wekesa, Operations Manager  
Roberta Dieckmann, Field Supervisor  
Gonzalo Valadez, Lead Vector Control Technician  
Betty Sanchez, former Trustee  
Shelley Kaplan, former Trustee  
Brad Anderson, Rancho Mirage resident (left after submitting a public comment card)

1. **Call to Order:** President Hassett called the meeting to order at 6:01pm.
2. **Pledge of Allegiance:** Trustee Larson led the Pledge of Allegiance.
3. **Oath of Office:** Clerk of the Board, Grace Morales, administered the Oath of Office for Trustee Espericueta and Trustee Gardner.
4. **Roll Call:** Roll call indicated ten (10) Trustees out of eleven (11) were present.

## 5. Motion to Excuse Absences

On motion from Trustee Kunz seconded by Trustee De Klotz, and passed by unanimous vote, the Board of Trustees excused the absence of Trustee Guitron.

**Ayes:** President Hassett, Trustees Espericueta, Kunz, Klotz, Larson, Gardner, Hagerman, Bautista, Weightman and Walker.

**Noes:** None.

**Abstained:** None.

**Absent:** Trustee Guitron.

## 6. Confirmation of Agenda

**7. Public Comment:** Gonzalo Valadez, Lead Vector Control Technician, commented he was happy to attend the MVCAC Annual Conference and thanked the District and Trustees. Trustee Walker stated that Gonzalo had done a great job speaking at the conference.

**8. Recognition:** Vice President Hassett recognized former President Shelley Kaplan and former Trustee Betty Sanchez. He presented them each a plaque and expressed the District is very thankful for their service and dedication to the District.

## 9. Announcements:

**A. General Manager's Report:** General Manager Wittie reported on the following items: the District's Strategic Plan, GM 360 feedback, Board direction and additional goals for 2019, the 2018 Annual Report, the rearing room project, the MVCAC Annual Conference, and the Thermal property remediation.

## 10. Board Reports:

**A. President's Report:** Vice President Hassett welcomed new Trustees Espericueta and Gardner. He also welcomed their participation and thanked them for taking on a role on the Board and their responsibilities.

**B. Finance Committee:** Treasurer Weightman reported that the Finance Committee met prior to the Board Meeting and that they had reviewed the check register and CalCard charges and had no issues to report. The District's P&L and Capital reports were also reviewed and they were clean. Further changes to reports were done by Mr. l'Anson and he stated he is doing a good job with them. Treasurer Weightman also reported the January 31 operational portion of the financials look good.

## 11. Items of General Consent:

A. Minutes for January 8, 2019 Board Meeting

B. Correspondence

C. Approval of Expenditures for January 9-31, 2019, and February 1-12, 2019

- D. Informational Items:
  - Board Business Status Log
  - District Travel
  - Staff reports from:
    - PacVec Center of Excellence Progress and Planning Meeting, January 23-24, 2019 in Davis, CA
    - Liebert Cassidy Whitmore Annual Conference, January 23-25, 2019 in Palm Desert, CA
    - MVCAC Annual Conference, February 3-6, 2019, in Burlingame, CA
- E. Approval of Resolution 2019-01 Adopting Employee Pay Schedule, in conformance with California Code of Regulations, Title 2, Sections 570.5 and 571
- F. Approval to surplus sale one decommissioned 2,000 gallon above ground tank through Public Surplus auction website
- G. Approval to renew the annual agreement with Salton Sea Aerial Services, Inc. to conduct both aerial adulticiding and larviciding aerial applications in an amount not to exceed \$1,500 per hour from fund 7800.01.500 – Aerial Applications

Item 11A - Minutes for January 8, 2019 Board Meeting. This item was pulled by Trustee Larson as he was absent from the January 8, 2019 Board meeting. Trustee Larson, Weightman, Gardner and Espericueta abstained from approving the minutes as they were either absent from the meeting or were not yet appointed to the Board.

On motion from Trustee Hagerman, seconded by Trustee Kunz, and passed by the following votes, the Board of Trustees approved item 11A.

**Ayes:** Trustees Hagerman, Kunz, Walker, De Klotz, Hassett, and Bautista.

**Noes:** None.

**Abstained:** Larson, Weightman, Gardner and Espericueta

**Absent:** Trustee Guitron.

Item 11G - Approval to renew the annual agreement with Salton Sea Aerial Services. Item was pulled by President Hassett to allow Wakoli Wekesa to give a presentation of the services the Salton Sea Aerial provides to the District.

On motion from Trustee Walker, seconded by Trustee Kunz, and passed by the following votes, the Board of Trustees approved item 11G.

**Ayes:** Trustees Walker, Kunz, Hagerman, De Klotz, Hassett, Larson, Weightman, Gardner, Espericueta and Bautista.

**Noes:** None.

**Abstained:** None.

**Absent:** Trustee Guitron.

On motion from Trustee Walker seconded by Trustee Kunz, and passed by the following votes, the Board of Trustees approved the remaining Items of General Consent.

**Ayes:** Trustees Walker, Kunz, De Klotz, Hagerman, Hassett, Espericueta, Larson, Weightman, Gardner, and Bautista.

**Noes:** None.

**Abstained:** None.

**Absent:** Trustee Guitron.

## **12. Old Business:**

Presentation, discussion and approval to enter into a Public Works contract with MAAS Companies, the lowest responsible bidder, for project manager services for the Thermal facility asphalt paving project in an amount not to exceed \$66,000 from the Thermal Capital Fund

On motion from Trustee Hagerman seconded by Trustee Walker, and passed by unanimous vote, the Board of Trustees approved Item 12.

**Ayes:** Trustees Hagerman, Walker, Bautista, De Klotz, Hassett, Kunz, Espericueta, Larson, Weightman, and Gardner.

**Noes:** None.

**Abstained:** None.

**Absent:** Trustee Guitron.

## **13. New Business:**

A. Approval of the new District logo. Public Information Manager, Jill Oviatt led a presentation of two new and proposed logos.

On motion from Trustee Walker seconded by Trustee Weightman, and passed by the following votes, the Board of Trustees approved logo #2 as presented.

**Ayes:** Trustees Walker, Weightman, Hagerman, Bautista, Espericueta, De Klotz, Hassett, and Gardner.

**Noes:** Trustees Larson and Kunz.

**Abstained:** None.

**Absent:** Trustee Guitron.

B. Approval to purchase four (4) replacement Cushman Hauler 800x Gas Powered Carts, in an amount not to exceed \$40,000.00 from fund 8415.13.300.000

On motion from Trustee Kunz seconded by Trustee Weightman, and passed by unanimous vote, the Board of Trustees approved Item 13B.

**Ayes:** Trustees Kunz, Weightman, Walker, De Klotz, Hassett, Bautista, Hagerman, Espericueta, Hagerman and Gardner.

**Noes:** None.

**Abstained:** None.

**Absent:** Trustee Guitron.

**14. Closed Session:** None.

**15. Trustee Comments, Requests for Future Agenda Items, Travel and/or Staff Actions:**

President Hassett commented he read the correspondence item regarding the work well done by Trinidad Haro and is pleased to learn he was commended in doing a great job. Trustee Walker welcomed new Trustees. Clerk of the Board Morales asked Trustees to submit their Form 700 by the deadline.

**15. Adjournment:** The meeting was adjourned by Vice President Hassett at 7:58 p.m.

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Doug Hassett  
President

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Doug Walker  
Secretary

Graciela Morales (CVMVCD - Clerk of the Board)  
Coachella Valley Mosquito and Vector Control District  
43420 Trader Pl.  
Indio, CA. 92201

RE: Public comment letter for Agenda Item: 13-A New Business – Implementing New District logo

Dear Coachella Valley Mosquito and Vector Control District,

Please submit this letter into the Public record for the CVMVCD Board of Trustees Meeting held on the date of February 12, 2019

Dear CVMVCD Board of Trustees and associated staff,

Please oppose the recommended logo changes and Re-branding suggested by the now Public Information Manager (Jill Oviatt MCDM). The current district logo was produced by current staff members, and is well known by Stakeholders and Residents throughout the areas that the CVMVCD services.

Any changes to the now establish districts logo may cause confusion and potential delay needed district services. The yet undetermined total costs to the district (from levied properties) for the proposed change of logo is unwarranted and unnecessary and burdens the California levied properties owners for what appears to be waste and out of control spending in Governmental agencies.

Please be aware for the Public record, that the subject of the "New District Logo" was discuss and reviewed in a non public Invited meeting (workshop) on the date of: January 8, 2019 (5:PM). And was voted on in the regular Board of Trustees Meeting held later that night (6:PM). Current request to the District for copies of the agenda and Information of any other topics that were discussed during the "Workshop" that was held on January 8, 2019 (5:PM) has not been produced by the District staff to date.

Sincerely,

Brad Anderson

March 04, 2019

Graciela Morales (CVMVCD - Clerk of the Board)

Coachella Valley Mosquito and Vector Control District

43420 Trader Pl.

Indio, CA. 92201

RE: Public Comment letter for Agenda Item: 6 ( IT Security )

Dear Coachella Valley Mosquito and Vector Control District,

Please submit this letter in to the Public record for the Executive Committee Meeting held on the date of March 04, 2019 (9:AM) Agenda Item: #6 "IT Security"

Please take notice that the only Item available for Public review of this Executive Committee Meeting is the general agenda that was listed on the CVMVCD website. If the CVMVCD committee member's have any other topic agendas, commonly referred to as "Board packet" that the CVMVCD committee member's have accessible to them beforehand. I would recommend that the CVMVCD make that Information (Board packet) also available to the Public in a timely manner.

Item #6 "IT Security" has not been defined in detail to suggest the complete focus on this topic in the general CVMVCD agenda. Because of the lack of administrative Information on this subject and having first hand knowage of the "IT Department" of the Coachella Valley Mosquito and Vector Control District of not having and or not producing services (documents/other Items) when requested in past hearings related to CVMVCD employment Policy's and of known documented procedures related to that department credibility to honesty act for the greater good of the Public trust.

I would like to recommend that the CVMVCD considers reviewing outside companies for future "IT department" duties to be performed for the CVMVCD. An outside Independent "IT firm" would add Increased transparency and security to a Public agency and potential would help benefit the Public Trust.

Sincerely,

Brad Anderson

Rancho Mirage, CA.

March 04, 2019

Graciela Morales (CVMVCD – Clerk of the Board)

Coachella Valley Mosquito and Vector Control District

43420 Trader Pl.

Indio, CA. 92201

RE: Public Comment letter for submission to the Executive Committee Meeting dated: March 04, 2019 – (9:AM) Incorrect written minutes of Executive Committee Meeting of: February 01, 2019

Dear CVMVCD Board Members and associated staff,

Please submit this letter into the Public record for the Executive Committee Meeting with out any editing by CVMVCD staff member's to delete or misrepresent critical Information to mislead reader's of it's true Interpretation. As discussed in a prior CVMVCD Board Meeting the action of the District Administration of editing correspondents received by the District is commonly performed.

Please address and correct the minutes of the CVMVCD Executive Committee Meeting of February 01, 2019 (11:AM Start time with Board Member's only lunch being provided)

Public Comments (Non-Agenda) that was made by me (Brad Anderson) was misrepresented by the Coachella Valley Mosquito and Vector Control District as stating that I said the CVMVCD "continues" in being transparent. Please correct this early misstatement to reflect the true statement of words that were spoken by me to the effect of "being transparent" and not having the word of "continues" added to my statement. Please consider the true nature of my comments of February 01, 2019 to this small governmental agency sub committee with regards to it's responsibilities to be transparent to it's Residents in a true non-bias, non-political matter.

Sincerely,

Brad Anderson

Rancho Mirage, CA.

**Coachella Valley Mosquito and Vector Control District**

Checks Issued for the Period of:

February 13 - March 8, 2019

<b>Check No</b>	<b>Payable To</b>	<b>Description</b>	<b>Check Amount</b>	<b>Total Amount</b>
	Payroll Disbursement	February 8, 2019	184,363.00	
	Payroll Disbursement	February 22, 2019	186,990.02	
	Payroll Disbursement	March 8, 2019	187,809.02	
				<b>559,162.04</b>
<b>Pre-Approved Expenditures:</b>				
42093	CalPERS-Healthcare Acct	Healthcare Insurance Premiums: March 2019	76,544.36	
42094	ICMA Retirement Trust	Deferred Compensation: 1/25, 2/8 & 2/22	27,972.64	
42095	Principal Life Insurance Co.	Dental & Life Insurance Premiums: March 2019	10,916.48	
42096	Standard Insurance Company	LTD Insurance Premiums: March 2019	3,201.09	
42097	Vision Service Plan (CA)	Vision Insurance Premiums: March 2019	974.50	
				<b>119,609.07</b>
<b>Cash - First Foundation Bank Checking</b>				
				<b>119,609.07</b>
<b>Cash - First Foundation Bank Checking</b>				
42098	4imprint	Promotion and Education	464.48	
42099	Advance Imaging Systems	Office Supplies	38.97	
42100	American Engraving Co.	Reproduction and Printing	1,123.38	
42101	Burrtec Waste Industries	Utilities	3.42	
42102	California Chamber Of Commerce	Office Supplies	385.02	
42103	CarQuest Auto Parts	Vehicle Parts & Supplies	86.50	
42104	Cintas Corporation #3	Uniform Expense	1,054.13	
42105	Clairemont Equipment	Repair & Maintenance	615.20	
42106	Daniel's Tire Service	Tire Services	746.45	
42107	Desert Resort Security Services	Contract Services	1,050.00	
42108	Desert Sun Publishing Co	Advertising	145.20	
42109	Eisenhower Occupational Health Serv	Physician Fees	200.00	
42110	Employee Relations Inc.	Recruitment/Advertising	204.50	
42111	Equipment Direct, Inc.	Safety Expense	189.81	
42112	Gempler's	Safety Expense	40.55	
42113	Grainger	Safety Expense	511.50	
42114	Hawk Designs	Offsite Vehicle Maint & Repair	145.00	
42115	Inland Power Equipment Co.	Operations Equipment	4,567.50	
42116	Interstate All Battery Center	Vehicle Parts & Supplies	129.80	
42117	Jauregui & Culver, Inc.	Repair & Maintenance	2,395.82	
42118	Jernigan's Sporting Goods, Inc.	Safety Expense	337.10	
42119	Liebert Cassidy Whitmore	Attorney Fees	5,525.62	
42120	Moreno, Crystal	Tuition Reimbursement	1,054.78	
42121	NAPA Auto & Truck Parts	Specialty Vehicle Parts & Supplies	188.01	
42122	Pipette.com/Accutech Laboratories	Internal Mosquito PCR	1,983.35	
42123	Rutan & Tucker, LLP	Attorney Fees	768.00	
42124	Shasta Fire Protection, Inc.	Repair & Maintenance	1,650.00	
42125	Spark Creative Design	Promotion and Education	1,500.00	
42126	Total Compensation Systems, Inc.	Professional Services	1,710.00	
42127	Valley Lock & Safe	Repair & Maintenance	116.09	
42128	Waterlogic Americas LLC	Employee Support	213.15	
42129	U.S. Bank	CalCard Statement - February 2019	148,237.04	
				<b>177,380.37</b>
<b>Cash - First Foundation Bank Check Run Total to be Approved</b>				
				<b>177,380.37</b>
<b>Total Expenditures: February 13 - March 8, 2019</b>				<b>856,151.48</b>

Doug Hassett, President

Clive Weightman, Treasurer



**Coachella Valley Mosquito  
and Vector Control District**

**Staff Report**

**March 12, 2019**

**Agenda Item:** Informational Item

District Travel – **Grace Morales, Executive Assistant/Clerk of the Board**

**Background:**

**April 2-3, 2019: MVCAC Spring Meeting and Legislative Day (Sacramento, CA)** ~ This year, the MVCAC will be combining their Spring Board and Planning meeting with Legislative Day. MVCAC Legislative Day provides an opportunity for District staff and trustees to meet with Legislators in Sacramento to foster relationships, share about the importance of mosquito and vector control in California, and discuss issues facing mosquito control in California and the Coachella Valley. The Spring MVCAC planning and Board meeting will be held on April 2. Legislative Day training will be held on April 2 and Legislator meetings on April 3.

**Requests to attend must be made by the MARCH 2019 BOARD MEETING.**

**September 25-28, 2019: CSDA Annual Conference (Anaheim, CA)** ~ “The CSDA Annual Conference & Exhibitor Showcase is the one conference special district Leaders can't afford to miss! It is the most densely packed educational and networking experience available to special districts. Come together with other special district leaders from across the state to meet with industry suppliers, hear from the best in special district-specific topics with over thirty breakout session options, network with your peers and more at the leadership conference for special districts.”

**Requests to attend must be made by the JUNE 2019 BOARD MEETING.**

**Workshops and Webinars Offered Through CSDA**

Type	Description	Dates & Times	Cost
Webinar	<p><i>Brown Act: Principles, Traps, and Avoiding Violation</i></p> <p><i>Brown Act violations, most often unintentional, impede the effective governance of special districts. This workshop will use entertaining hypotheticals to engage participants in a wide-ranging, hands-on overview of the Brown Act to help board members stay in compliance when it comes to closed sessions, public comments, serial meetings, and e-Communications. Newly elected and experienced board members alike will be equipped with the tools needed to avoid falling into Brown Act traps.</i></p>	On Demand	Free
Webinar	<p><i>Good Governance</i></p> <p>Every board wants to govern well. It's about serving the public well. This course offers the perspective of a seasoned decision maker and consultant that will make you consider best practices of good governance for special districts; what your role is and what it's not, where the lines get drawn, and where to be careful. Every board member should watch this concise primer on good governance. This course is meant to provide best practices for all board members both new and experienced.</p>	On Demand	Free

**If you would like to attend/view either one, please let me know.**

## Board Business Status Log 2019

Board Action Item / Description		Month	Status	Comment
<b>Contracts</b>				
	New General Counsel Agreement	January	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	Retainer \$4,000/ Month for all general counsel legal services; excluding litigation
	Approval of General Manager Employment Agreement Amendment	January	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	2% COLA; Special Merit Pay 3.5%
	Cleaning Services Agreement with CleanExcel	January	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	Agreement executed for \$3,496 per month
	Service Agreement with Salton Sea Aerial Services	February	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	
	Public Works contract with MAAS Companies for project manager services for the Thermal facility asphalt paving project	February	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	
	Agreement with Palm Springs Air Conditioning for Installation of Dehumidifiers Salton Sea		In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	
<b>Policies</b>				
<b>Purchases</b> Range = \$5k to \$10K				
<b>Purchases</b> Greater than \$10K				
	Supplies for arbovirus testing (Thermofisher)	January	In Progress <input checked="" type="checkbox"/> Completed <input type="checkbox"/>	
	Four replacement Cushman Hauler 800x Gas Powered Carts	February	In Progress <input checked="" type="checkbox"/> Completed <input type="checkbox"/>	
<b>Resolutions</b>				
	Resolution 2019-01 Adopting Employee Pay Schedule	February	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	
	Resolution 2019-02 In	March	In Progress <input checked="" type="checkbox"/>	

	Recognition of Ramon Gonzalez's 25 Years of Service to the District Employee Pay Schedule		Completed <input type="checkbox"/>	
	Resolution 2019-03 Designating the Week of April 21-27, 2019, as Mosquito Awareness Week	March	In Progress <input checked="" type="checkbox"/> Completed <input type="checkbox"/>	
<b>Other</b>				
	Chromebooks for Trustees	January	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	Chromebooks for Trustees for Board packet and other District use
	Approval of the new District logo	February	In Progress <input checked="" type="checkbox"/> Completed <input type="checkbox"/>	
	Surplus sale of one decommissioned 2,000 gallon above ground tank	February	In Progress <input checked="" type="checkbox"/> Completed <input type="checkbox"/>	
	Warrant Extension	February	In Progress <input type="checkbox"/> Completed <input checked="" type="checkbox"/>	



**Coachella Valley Mosquito and Vector  
Control District**

**Staff Report**

**March 12, 2019**

**Agenda Item:** Informational Item

National Pollutant Discharge Elimination System (NPDES) Annual Report – **Jennifer A. Henke, M.S., Laboratory Manager**

**Background:**

The District's application of pesticides to and adjacent to Waters of the United States are subject to compliance of the Clean Water Act. In California, the State Water Resources Control Board administers the Vector Control General Permit for the National Pollutant Discharge Elimination System (NPDES). The District must annually file a report with the State Water Board and the Colorado River Regional Water Quality Control Board. The report is required to address:

1. Applications of control products made to or near waters of the United States
2. Any proposed changes to our Best Management Practices for applications to or near waters of the United States
3. A map of our application and target areas which are waters of the United States

The executive summary of the report is attached.

**Exhibits:**

- 2018 NPDES annual report executive summary

2018 NPDES Annual Report

**1. Annual Report**

a. Executive Summary

The Coachella Valley Mosquito and Vector Control District (hereafter, the District) is a non-enterprise independent special district accountable to the citizens of the Coachella Valley, charged with the protection of public health through the control of vectors and vector-borne diseases within its boundaries. The District operates in the Colorado River Basin Regional Water Quality Control Board District (Region 7). The District operates under the Statewide National Pollutant Discharge Elimination System (NPDES) Permit for Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications (Water Quality Order No. 2011-0002-DWQ as amended by Water Quality Order No. 2012-0003-DWQ, 2014-0038-EXEC, and 2014-0106-DWQ) since it became effective on November 1, 2011. The District currently operates under Water Quality Order No. 2016-0039-DWQ since it became effective on March 1, 2016.

The District made 755 larvicide treatments to 156 waters of the U.S. in 2018. The District also made 12 ULV applications of adulticides near private duck club ponds and 3 barrier applications of adulticides to vegetation adjacent to a water of the U.S. in 2018. The District complied with the instructions on the labels of the pesticides and continued to follow the guidelines of its Pesticide Application Plan (PAP) to minimize biological and residual pesticides. Per Order 2016-0039-DWQ, the monitoring and reporting requirements of the Vector Control Permit were modified to consist of reporting of any visual adverse effects or reporting of non-compliant applications as well as monitoring and reporting of pesticide application rates for all applications. The District continued to follow the guidelines of its Pesticide Application Plan (PAP).

b. Summary of Monitoring Data

No adverse impacts from vector control applications were noticed or reported by any of the individual applicators. No non-compliant applications were performed. The annual report tables have been modified to include the application rate for each application reported.

The Coalition will provide information on the incidence of West Nile virus and other similar public health threats in the Coalition's annual report. The District detected West Nile virus in 24 mosquito pools and St. Louis encephalitis virus near the Salton Sea in 56 mosquito pools.

- c. Identification of Current Best management Practices (BMPs)  
The District uses the BMPs outlined in the District's PAP. These include: training employees to prevent and respond to chemical spills; keeping pesticides in secure locations; calibrating spray equipment; checking the accuracy of use on a daily basis; maintaining certification of staff as State Certified Public Health Vector Control Technicians; and use of biological and physical methods of control mosquitoes when appropriate.
- d. BMP Modifications Addressing Violations  
No violations of the General Permit were observed.
- e. Map of Applications  
See Attachments A, B and C. Attachment A was made using our Mosquito Mobile application to show larvicide applications. Sites in the application are either points or polygons (polys) depending on the size of the site when it was digitized. Attachment B is the route where aerial ULV for adult mosquitoes took place. Attachment C is the maps of the barrier routes.
- f. Log of Applications made to Waters of the U.S.  
See Pesticide Application Log (Attachment D). The application log includes 755 applications of larvicide made to waters of the U.S. It also includes 12 ULV applications of adulticide adjacent to waters of the U.S. and 3 barrier applications to vegetation situated near waters of the U.S.
- g. General Information on Applications.  
See Pesticide Application Log. Dosage, concentration, and quantity of pesticide used are derived from District recommended rates based upon biological research and are within pesticide label rates. In some cases, the division of the application amount by the area applied makes it appear as if there was an exceedance per the label. The District discussed with the Riverside County Agricultural Commissioner the inaccuracy of measuring small amounts of liquid for application to small areas. The District adopted a standard procedure of measuring no less than 0.5 mL of liquid larvicide to be applied at small acreage sites.
- Examining the ownership of properties within the District, several parcels are owned by Native American tribes. To be compliant with NPDES, the District has obtained permission to treat and an EPA NPDES permit for coverage of these areas. This may mean that there is a reduction in the number of locations or in the locations themselves that are reported to the California Water Resources Control Board when compared to previous years.
- h. Visual Monitoring Data  
No adverse impacts from vector control applications were seen or reported by individual applicators.

i. Monitoring Program, BMPs and PAP Recommendations  
The District has no recommendations for improving the current PAP and monitoring and reporting program.

j. Pesticide Application Log  
See 1f.

**2. Updated PAP Components**

Not applicable.

**3. Self-Monitoring Reports**

The District was not asked to submit any self-monitoring reports by the State Water Board or by the Colorado River Regional Water Quality Control Board.

**4. Monitoring Reports**

The District is a member of the Mosquito and Vector Control Association of California's Monitoring and Reporting Coalition. The MVCAC Coalition Monitoring Annual Reports summarizes the direction and outcome of the conversations between MVCAC and the SWRCB on potential changes to the Vector Control Permit.



**Coachella Valley Mosquito and Vector  
Control District**

**Staff Report**

**March 12, 2019**

**Agenda Item:** Informational Item

EPA Pesticide Environmental Stewardship Program (PESP) – **Jennifer A. Henke, M.S.,  
Laboratory Manager**

**Background:**

In 1994, the Environmental Protection Agency (EPA), established the Pesticide Environmental Stewardship Program (PESP) to promote the use of Integrated Pest Management (IPM) among users of pesticides. The American Mosquito Control Association (AMCA) became a member in 1997 and has since become a Gold level member. AMCA tracks the methods that mosquito control districts across the United States reduce the risk of pesticide exposure to their employees and the members of their community.

The District became a Bronze level member in 2012. As part of its five-year strategy document, the District committed to tracking components of IPM that reduce the risk of pesticide exposure and that demonstrate that we are stewards of the environment. The District updated its five-year strategy in 2018 to account for the changing work. The summary of our annual report for 2018 is attached.

**Exhibits:**

- 2018 CVMVCD EPA PESP annual report

## **The Coachella Valley Mosquito and Vector Control District's EPA Pesticide Environmental Stewardship Program 2018 Report**

### **Introduction**

The Coachella Valley Mosquito and Vector Control District (hereafter, the District) is an independent special district in southern California. We have adopted an Integrated Vector Management (IVM) program to control mosquitoes and red imported fire ants, and to a lesser extent, eye gnats and filth flies. In addition, the District helps Coachella Valley residents to rodent-proof their property by carrying out property inspections and providing expert advice. The work is done in the 2,400 square miles of our District boundary. We learned of the EPA's Pesticide Environmental Stewardship Program (PESP) through the American Mosquito Control Association (AMCA), a Gold Tier PESP Member. The District chose to join in 2012 to engage with others to reduce "potential health and environmental risks associated with pests and pesticide use and in implementing pollution prevention strategies." In 2017, the District updated its Strategy Document to reflect changes in the work being completed to protect public health.

The District applies control products where people live, work, and play to protect public health. The District's IVM program involves procedures for minimizing potential environmental impacts, while providing the necessary level of public protection from vectors and the pathogens they can transmit. The District employs IVM principles by first determining the species and abundance of vectors through evaluation of public service requests and field surveys of immature and adult vector populations; and then, if the populations exceed predetermined criteria, use the most efficient, effective, and environmentally sensitive means of control. For all vector species, public education is an important control strategy, and for some species, it is the District's only control method. In some situations, the District also uses biological control such as the placing of mosquitofish in ornamental ponds. When these approaches are not effective or are otherwise inappropriate, then control products are used to treat specific vector-producing or harboring areas to reduce vector populations.

The principles for mosquito and red imported fire ant control apply similarly to other vectors or nuisance species, including assessing the proximity to populated regions; the threat to surrounding organisms; the use of control products in strict accordance with label requirements; the eradication of breeding sources to prevent future re-infestation; educating the general public on preventative measures to prevent future colonization; and the administration of funding and institutional support necessary to accomplish these goals.

The IVM program as a whole, including registration and continuing education of state-certified field personnel, is reviewed and approved by the California Department of Public Health Services through a formal Cooperative Agreement that is renewed annually. For work on state lands and riparian zones, wetlands or other sensitive habitats, the District coordinates and reviews activities with the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and the California State Lands Commission as Trustee Agencies. For chemical control activities, the District reports to and is periodically reviewed by the Riverside County Agricultural Commissioner.

The District's five-year strategy is to track the following criteria and to update the EPA PESP about our progress in our annual reports. What follows is the summary of our work in 2018, with a comparison to numbers reported in our 2017 report where appropriate.

**ACTIVITY 1: SOURCE REDUCTION AND WORKING WITH MANAGERS OF PUBLIC LANDS**The District will work with other public agencies to implement focused and environmentally sound mosquito control strategies where necessary. As part of our IVM program, these activities typically include source reduction, sanitation, and the use of biopesticides to control vectors early in their life cycle. In some cases, highly focused applications of chemical pesticides are directed at confirmed vector species to control populations and protect public health. Appropriate measures include:

**Measure 1:** A list of non-drainage source reduction and sanitation efforts conducted to prevent mosquito and fly breeding.

The District and the Coachella Valley Water District are cooperating in an effort to ensure property owners properly control artesian wells to comply with state code. In recent years, sufficient groundwater pressure has returned to areas within the eastern Coachella Valley to cause flowing conditions in artesian wells and indicates a healthy aquifer. Decreasing overdraft and returning artesian conditions are goals of the *Coachella Valley Water Management Plan*, which seeks to reduce pumping costs and protect groundwater quality. Replenishing the eastern portion of the Coachella Valley's aquifer with imported water is a crucial component of the valley-wide plan. It is important that the construction or repair of artesian wells is performed in a manner to prevent unchecked flowing conditions. Uncontrolled flows from artesian wells, can result in non-beneficial use of water, and may create standing pools that become unwanted breeding grounds for mosquitos. The Districts cooperated to work with property owners to repair wells and developed a rebate program to defer some of the costs for these repairs; 3 sites were repaired, impacting 61 acres of potential breeding sources. The District can provide a list of property owners and locations upon request. This is same as what was listed in 2016.

Some property owners in the eastern Coachella Valley operate duck hunting clubs in the winter. Water confined to ponds on the property can breed mosquitoes, but mosquito activity typically decreases as the water ages. Breaks in levees and release of water to desert flooding sites create new mosquito breeding sites which can be difficult to treat. In order to reduce desert flooding, the District implemented a policy in 2015 for duck clubs where any water not confined in a pond or designated drainage ditch system would result in charges for mosquito control products used to treat those areas. The duck clubs owners discussed their flooding plans and conducted conservation efforts which led to less mosquito production and fewer chemical treatments. In 2016, two clubs (Pintail and Tres Rios) did not flood, resulting in 51.7 acres of dry land. In 2017, five clubs did not flood (Adohr's, Middle Farms, Northwind, Pintail, and Tres Rios) resulting in 205.43 acres of dry land. In 2018, the same clubs did not intentionally flood, resulting in 186.49 acres of dry land.

**Measure 2:** A list of the drainage source reduction projects that are actively reducing mosquito breeding and therefore any risks that would have been associated with pesticide applications. This list may include projects completed in previous years that are still functioning.

The eastern half of the valley is primarily agricultural and contains 70 miles of open channels that convey water from the subsurface tile drain system and storm water to the Salton Sea. Between scheduled maintenance, channels grow vegetation which may create places for mosquitoes to breed. The Coachella Valley Water District is the agency primarily responsible for maintaining these channels. In 2012, we began working with CVWD to prioritize channel maintenance schedules. Seventeen

channels have been cleared or restored since 2012, consisting of 155,450 linear feet and impacting 169.2 acres of potential breeding.

**Measure 3:** A list of the names and numbers of municipalities, agencies, agricultural land owners, and other members of the public that are performing Best Management Practices to reduce vector development. This may include changes in irrigation to agricultural lands, water management practices on golf courses for ant control, and water and waste management practices at nurseries.

The District works with municipalities, agencies, agricultural land owners, and other members of the public to reduce vector development.

Mosquito issues: City of Cathedral City, City of Coachella, City of Desert Hot Springs, City of Indian Wells, City of Indio, City of La Quinta, City of Palm Desert, City of Palm Springs, City of Rancho Mirage, Community of Bermuda Dunes, Community of Mecca, Community of Northshore, Community of Oasis, Community of Thermal, Community of Thousand Palms, Coachella Valley Water District, County of Riverside, California Department of Public Health, California Department of Fish and Wildlife, University of California Extension Service, California Department of Food and Agriculture, Agua Caliente Band of Cahuilla Indians, Cabazon Band of Mission Indians, Torres Martinez Desert Cahuilla Indians, Twenty-Nine Palm Band of Mission Indians, US Fish and Wildlife, Artesian Duck Club, Coldwater Duck Club, Mecca Land Duck Club, Model A Duck Club, Sunrise Marsh, LLC, 26<sup>th</sup> Corporation, Adohr's Duck Club, Middlefarms Duck Club, Northwind Duck Club, North Shore Duck Club, Cocopah Date Farm, Hadley Dates, Oasis Dates, Bagdesarian Ranch, Desert Mist Ranch, Primetime Industries, Blue Beyond Fisheries, Desert Sea Farms, Golden Pond Fishery, Inc., Sunshine Forest, Inc., Kent Sea Tech Corp., Tres Rios Duck Club, Pintail Duck Club, 1 private homeowner, Palm Valley Country Club, the Desert Cities Homeowner Association Council, Outdoor Resorts Motorcoach Park and Safari Mobile Home Park.

Flies: C and R Farms, Living Desert, SA Recycling, University of California Extension Service, California Department of Food and Agriculture, Prime Time Farms, Andalusia at Coral Mountain Golf Course, The Palms Golf Club, and Trilogy Golf Club

## **ACTIVITY 2: VECTOR AND DISEASE SURVEILLANCE**

As part of the District's IVM program, surveillance is a key component that drives the use of pesticides in appropriate doses and locations. Prior to any pesticide application, confirmation is made of the number and species of vector. For mosquito control, surveillance is also conducted for the pathogens which cause disease in the public, e.g., the viruses that cause West Nile Encephalitis, St. Louis Encephalitis, and western equine encephalomyelitis. Detection of high numbers of adult mosquitoes and virus drives the District Risk Modeling and Operational Strategy, where focused applications of adulticides are made to protect vulnerable members of the public.

**Measure 1:** The number of days we apply control products for adult mosquito control. For Ultra Low Volume (ULV), the amount of acreage covered and the amount of product used. For barrier applications, the linear feet covered or the acreage covered and the amount of product used. For catch basin adulticiding, the number of control application spots, the number of areas or neighborhoods covered, and the amount of product used.

In 2018, the District used adulticide products 233 days, 19 more days than in 2017. This has increased over the past few years as a result of *Aedes* mosquito treatments, primarily conducted at residences using small amounts.

We applied 42.78 gallons of Aqua-Reslin, 31.5 gallons of Scourge 18 + 54, and 34.8 gallons of EverGreen 5-25 to cover 22,200 acres on 12 nights using Ultra Low Volume methods through helicopter-mounted sprayers. We used ULV application methods on truck-mounted sprayers to cover 6,094.25 acres using 19.1 gallons of Aqua-Reslin and 10.85 gallons of EverGreen 5-25. In residential yards, we used 2.71 gallons of Aqua-Reslin using backpack sprayers for ULV applications for *Aedes* treatments, down from 4.64 gallons in 2017.

Using barrier sprays, we applied 0.84 gallons of Demand CS to 4.9 acres over 4 days in response to WNV and SLEV positive samples. We applied 1.68 gallons of Demand CS to backyards for control of *Aedes* mosquitoes, down from 2.76 gallons in 2017.

**Measure 2:** The number of nights we trapped for adult mosquitoes and the number of trap-nights, where a trap-night is one night for which a trap is set (for example, four traps set for three nights equals 12 trap-nights). Numbers will be specific to *Culex* mosquitoes and to invasive *Aedes* mosquitoes, as they vector different diseases and require different control strategies.

We trapped on 142 nights for *Culex* surveillance for a total of 5,633 trap nights where a trap night is one night for which a trap is set (for example, four traps set for three nights equals 12 trap nights). Additional surveillance for *Aedes* was performed on 338 nights for a total of 15,156 trap-nights. Because AGO traps were used, traps were set out for a week, leading to a large increase in the number of trap-nights. This brings us to a combined total of 341 nights of trapping (CO<sub>2</sub>, gravid, AGO, and BG-Sentinel traps) for 20,789 total trap nights.

**Measure 3:** The number of inspections made for larval mosquitoes.

We made 49,951 inspections for larval mosquitoes, a 24% increase.

**Measure 4:** The number of applications made for larval mosquitoes and the amount of chemical used.

We made 28,298 applications to control larval mosquitoes, which includes treatments as a result of invasive *Aedes* inspections. The total number of treatments is a 29.07% increase in individual treatments. Total acreage treated was 3,052.15 acres for the native (endemic) larval mosquitoes, and 658.75 acres for *Aedes aegypti*.

Product Name	EPA Registration Number	2018 Amount Used	Percent Change
Agnique MMF	53263-28	2.32 gallons	-87.55%
Altosid Briquets	2724-375	1,326 briquettes	284.35%
Altosid Liquid	2724-392	4.02 gallons*	-97.81%
Altosid Pellets	2724-448	3,340.29 pounds	19.67%
Altosid WSP	2724-448	4 pouches	-98.48%
Altosid XR Briquets	2724-421	1,503 briquettes	40.34%
Aquabac 200G	62637-3	144.82 pounds	-84.95%
Kontrol	73748-10	59.30 gallons	-15.05%
MetaLarv S-PT	73049-475	1,415.80 pounds	-38.61%
Natular 2EC	8329-82	6.18 gallons	38.5%
Natular G	8329-80	2,519.82 pounds	-28.97%

Natular G30	8329-83	6,482.77 pounds	0.38%
Natular T30	8329-85	411 tablets	96.65%
Natular XRT	8329-84	1,865 tablets	8.37%
Spheratax WSP	84268-2	8 pouches	-96.28%
VectoBac 12AS	73049-38	17.78 gallons	12.54%
VectoBac G	73049-10	1,168.32 pounds	-25.08%
VectoBac WDG	73049-56	210.96 pounds*	-85.15%
VectoLex WDG	73049-57	10.96 pounds	2,335.56%
VectoLex WSP	73049-20	0.08 pounds	100%
VectoMax FG	73049-429	4,005.53 pounds	75.07%
VectoMax WSP	73049-429	43 pouches	-78.39%
VectoPrime FG	73049-501	1,871.6 pounds*	7,168.35%

\* Agnique MMF is no longer being sold and the District is using its remaining supply as permitted under the registration. Altosid Liquid Larvicide was used in an aerial larvicide campaign against *Aedes aegypti* mosquitoes in 2017 but not in 2018. VectoBac WDG was used in an aerial larvicide campaign in both 2017 and 2018, but fewer applications were made in 2018. VectoPrime FG was first used in 2017.

**Measure 5:** The number of dead birds tested for virus and the number of dead birds positive for virus.

We tested 1 dead bird for WNV and found 0 positives. This is 2 fewer birds tested than in 2017.

**Measure 6:** The number and timing of mosquito pools collected for disease surveillance and the number and timing of positive mosquito pools.

Month	½ of month	Period	# pools tested	# WNV positive pools	# SLEV positive pools	# CHIK, Dengue, Zika positive pools
January	1	1	23	0	0	0
January	2	2	144	0	0	0
February	1	3	89	0	0	0
February	2	4	9	0	0	0
March	1	5	210	0	0	0
March	2	6	208	0	0	0
April	1	7	351	0	0	0
April	2	8	292	0	0	0
May	1	9	370	0	0	0
May	2	10	269	0	0	0
June	1	11	359	1	0	0
June	2	12	314	4	0	0
July	1	13	240	3	5	0
July	2	14	300	6	14	0
August	1	15	219	3	8	0
August	2	16	250	4	7	0

September	1	17	237	1	9	0
September	2	18	363	1	11	0
October	1	19	285	0	2	0
October	2	20	480	1	0	0
November	1	21	331	0	0	0
November	2	22	226	0	0	0
December	1	23	47	0	0	0
December	2	24	1	0	0	0
<b>Totals</b>			<b>5,617</b>	<b>24</b>	<b>56</b>	<b>0</b>

This is an 8% increase in the number of samples tested, and it includes 1,279 pools which were tested for arboviruses such as chikungunya, dengue, and Zika. The number of positive WNV samples decreased by 80% and the number of SLEV samples increased by 143%.

**Measure 7:** The percentage of infestation of red imported fire ants at inspected locations.

Inspections done to determine if treatment is needed showed that 99% of sites surveyed did have red imported fire ants. Follow-ups to sites showed that there was a 69% reduction in the fire ants.

**Measure 8:** The percent reduction of red imported fire ants at follow-up visits.

**Measures 9 and 10:** The number and location of traps used for fly surveillance. An estimate of the number and timing of flies trapped for the year.

Date	Location	City	Number of traps set	Total number of flies captured	Average number of flies/trap
3/16/2018	Trilogy HOA	La Quinta	9	1,970	219
5/10/2018	Trilogy HOA	La Quinta	9	12,750	1417
5/15/2018	Griffin HOA	La Quinta	8	710	89
6/21/2018	Trilogy HOA	La Quinta	9	1437	160
6/21/2018	Griffin HOA	La Quinta	8	57	7.1
7/25/2018	Trilogy HOA	La Quinta	9	1282	142
7/25/2018	Griffin HOA	La Quinta	8	51	6.4
8/24/2018	Trilogy HOA	La Quinta	9	315	35
8/24/2018	Griffin HOA	La Quinta	8	48	6
9/27/2018	Trilogy HOA	La Quinta	9	485	54
9/27/2018	Griffin HOA	La Quinta	8	70	8.8
10/31/2018	Trilogy HOA	La Quinta	9	543	60
10/31/2018	Griffin HOA	La Quinta	8	487	61
11/27/2018	Trilogy HOA	La Quinta	9	262	29
11/27/2018	Griffin HOA	La Quinta	8	45	5.6
12/19/2018	Trilogy HOA	La Quinta	9	350	39
12/19/2018	Griffin HOA	La Quinta	8	76	9.5

We collected on ten occasions in 2017, and we caught 4,064 more flies than in 2017.

**ACTIVITY 3: BIOLOGICAL CONTROL**

The District conducts biological control where feasible, using mosquitofish reared on site. Biological control agents are stocked on private property in accordance with California Department of Fish and Wildlife Policy.

**Measure 1:** The number of mosquitofish stocked.

We stocked **20,346** mosquitofish (a 79.10% decrease). In part, this decrease reflects the decision to no longer place mosquitofish at the duck club ponds as they are temporary habitat that can use other mosquito control methods.

**ACTIVITY 4: TRAINING VECTOR CONTROL STAFF**

District technicians are highly trained individuals who daily use techniques to reduce pesticide risk. As certified California Vector Control Technicians, staff receives training in biennial cycles on pesticides, mosquitoes, other invertebrates, and vertebrates of importance to public health as approved and required by the California Department of Public Health. In addition, staff is also trained in-house on standard operating procedures, including but not limited to, spill prevention and clean-up, identification of protected species, and calibration of equipment.

**Measure 1:** The number of certified VCTs on staff was **45** as of December 31, 2018. This is one fewer VCT than at the same time the previous year.

**Measure 2:** The type of training received annually. This may include annual conferences, college programs, special training, and in-house training.

Outside Training:

Training	Number of Attendees
Mosquito and Vector Control Association of California Annual Conference	13
American Mosquito Control Association Annual Conference	4
Imported Fire Ant Conference	2
Society for Vector Ecology Annual Conference	2
Entomological Society of America Annual Conference	2

In-house Training:

TRAINING	DATE	ATTENDEES
<b>Staff-wide Training (at Staff Meetings)</b>		
Evacuation Training	3/16/2018	45
Heat Safety and ULV Exposure	7/13/18	52
Earthquake Safety	10/19/2018	46
Active Shooter Online Training	12/13/2018	57
<b>Department Specific</b>		
N-Series - Annual Pesticide Handler Safety Training	1/9/2018	39
Labels and Safety Data Sheets	1/16/2018	37
Labels and Safety Data Sheets	1/23/2018	39
Control Product Use and Selection	2/6/2018	42
Resistance Management and Product Rotation	2/6/2018	42

Respirator Use and Fit	2/20/2018	44
Listed Species, CEQA, and NPDES	2/20/2018	41
Safe Pesticide Handling and Personal Protective Equipment	2/6/2018	42
Spill Prevention and Clean-up	2/6/2018	42
Recognizing and Preventing Heat Stress	3/6/2018	46

*\*The date above reflects when the initial training was given. Additional or make-up trainings may have occurred at later dates.*

#### **ACTIVITY 5: PUBLIC OUTREACH**

The District believes that educating members of public is important in reducing pesticide risk. As the public becomes better informed about vectors and vector control issues, vector populations will be reduced and applications of chemicals will be reduced.

**Measure 1:** The number of IVM brochures and flyers distributed for the calendar year was **29,000**. This included mosquito-transmitted disease notifications, invasive Aedes detection notifications, and area-wide mosquito control notifications sent by mail or delivered door-to-door, and brochures and informational handouts distributed at talks and events, all including IVM messaging. This is an increase from 2017 when 22,000 IVM information materials were distributed.

**Measure 2:** The District conducted **72** outreach activities in 2018 that covered the topics of IVM, environmental stewardship, or PESP, reaching about **7,500** people. We performed 62 outreach activities in 2017.

**Measure 3:** The number of paid TV, radio, and newspaper spots was 1,429 in 2018, compared to 1,200 paid spots in 2017. When adding each media outlet’s reach, the total reach was about 800,000 about the same as the previous year. We also conducted an online digital campaign resulting in 85,000 digital impressions, compared to 160,000 digital impressions in 2017. We also ran a movie theater campaign on 60 cinema screens with 300,000 projected impressions. Twelve media releases were distributed in 2018 (three fewer than the previous year), resulting in more than 50 TV, radio, newspaper, and electronic news stories (about the same as the previous year). There were 15,000 visitor sessions logged on the District website in 2018. This compared to 11,000 sessions the previous years.



**Coachella Valley Mosquito and Vector  
Control District**

**Staff Report**

**March 12, 2019**

**Agenda Item:** Informational Item

California Environmental Quality Act (CEQA) Mitigated Negative Declaration Annual Compliance Report – **Jennifer A. Henke, M.S., Laboratory Manager**

**Background:**

On October 11, 2011, the Board of Trustees of the Coachella Valley Mosquito and Vector Control District approved a Mitigated Negative Declaration regarding District activities, specifically its Integrated Vector Management Program (Resolution 2011 – 18). Pursuant to Section 21081.6 of the Public Resources Code and the CEQA Guidelines Section 15097, a public agency is required to adopt a monitoring and reporting program for assessing and ensuring compliance with the required mitigation measures applied to a proposed project for which a mitigated negative declaration has been prepared. As stated in the Public Resources Code:

*“...the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.”*

The District is required to self-monitor continuously and to complete an annual Compliance Report. The summary of the report is attached.

**Exhibits:**

- 2018 CEQA annual report executive summary

**Coachella Valley Mosquito and Vector Control District  
43-420 Trader Place, Indio, CA 92201**

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**CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)  
MITIGATED NEGATIVE DECLARATION  
2018 ANNUAL COMPLIANCE REPORT**

**BACKGROUND**

The California Environmental Quality Act (CEQA) requires public agencies to conduct an environmental review to determine the cumulative impact of their activities on the environment. The Coachella Valley Mosquito and Vector Control District (hereafter, the District) conducted an Initial Study in July 2011 to determine the cumulative effects of its Integrated Vector Management Program to all parts of the District's jurisdiction (Project). In the Initial Study, the District determined that the Project could have a significant impact on the environment that could be made not significant through mitigation. Thus, the District prepared and adopted a Mitigated Negative Declaration on October 11, 2011.

As part of its Mitigated Negative Declaration, the District, in accordance with Section 21081.6 of the Public Resources Code and the *CEQA Guidelines* Section 15097, adopted a monitoring and reporting program for assessing and ensuring compliance with the required mitigation measures applied to its Project. This is the Annual Compliance Report detailing the monitoring which took place in 2018.

The District followed the Mitigation Monitoring and Reporting Program outlined in the Mitigated Negative Declaration. The District determined what actions would indicate compliance with the Mitigation Measure. What follows are the mitigation measures listed in the Mitigated Negative Declaration, the actions indicating compliance from the Mitigation Monitoring and Reporting Program, and a summary of what occurred in 2018. Overall, the District complied with the Mitigation Monitoring and Reporting Program, ensuring that its Integrated Vector Management Program did not have significant impact on the environment.

**Mitigation Measure 1:** *The District does not conduct routine control activities within 18 designated CVMSHCP conservation areas. The District conducts surveillance and control measures within the Coachella Valley Storm water Channel and Delta, and small residential communities found within the Thousand Palms and West Deception Conservation areas.*

Action indicating compliance: The District will maintain a map of the areas that may be impacted by surveillance and control measures. The Laboratory Manager will create a report using the Mosquito Mobile information to create a record of inspections and treatments made to the Coachella Valley Storm water Channel and Delta, Thousand Palms, and West Deception Conservation Areas. A copy of this report will be available upon request.

2018 activity: The District made 167 applications of larval mosquito control products to duck clubs and Salton Sea marshes (32 sites) within the Coachella Valley Storm Water Channel and Delta. Applications were made in accordance with the District's Larval Control Procedures and the District Recommended Rates. The District made 12 applications of adulticide products by ULV and 4 applications by barrier methods to duck club and Salton Sea marshes to areas within and adjacent to the Coachella Valley Storm Water Channel and Delta. Applications were conducted according to the District's Mosquito-borne Surveillance and Emergency Response Plan using the District Recommended Rates. The District made no applications for red imported fire ant (RIFA) control within the conservation areas.

**Mitigation Measure 2:** *The District shall comply strictly with control product labels that are written to ensure that no significant impact to biological resources can occur.*

Actions indicating compliance:

- An annual refresher course organized by the Operations Manager to discuss products and District recommended applications will be conducted.
- The Operations Manager, Field Supervisors, and Lead Technicians examine the Mobile information for discrepancies. These are then reviewed with the technician by the Field Supervisors. A file of these discrepancies and the recommendation for improvement is kept by the Operations Manager.
- Reports of non-compliance with control product labels are made to the Riverside County Agricultural Commissioner by the Operations Manager.
- Monthly reports of product usage are made by the Operations Manager to the Riverside County Agricultural Commissioner.

2018 activity: The District conducted training on products, including the N-Series (January 9, 2018), District recommended rates, Spill Prevention and Clean-up, and Safe Pesticide Handling (all three on February 6, 2018) Respirator Fit Test (February 20, 2018), and product labels and Safety Data Sheets (January 16 and 23, 2018). Monthly reports of product use were made to the County Agricultural Commissioner.

**Mitigation Measure 3:** *Project activities shall be highly selective in space and time, based on a detailed list of potential mosquito sources, pre-control surveillance for mosquito abundance, and threshold criteria for control applications.*

Action indicating compliance: A file will be made available for review at the front desk that will include the annual map of all known sources, the location of adult surveillance traps, the location of larval surveillance (using the mosquito inspections from the Mosquito Mobile), and the District thresholds for treatment (both larval and adult procedures).

2018 activity: Maps and thresholds are available on request.

**Mitigation Measure 4:** *The District's field technicians shall be certified by the California Department of Public Health Services as highly-trained control product applicators and required to complete frequent continuing education sessions sponsored by the District and by the Mosquito & Vector Control Association of California pursuant to State Regulations.*

Action indicating compliance: A file containing copies or scans of all technician certifications will be made and will be located at M:\CEQA. This file will include information on the continuing education sessions completed by the technicians.

2018 activity: Information on technician certification is available upon request.

**Mitigation Measure 5:** *The Project is routinely monitored for safety, efficacy, and environmental impact by the District's Supervisors and General Manager, by the Riverside County Agricultural Commissioner, and other Trustee and Responsible agencies.*

Action indicating compliance:

- The District's Supervisors and General Manager will review the annual safety report created by the Safety Officer of the District, the annual report on quality control created by the Biologist, and the annual report created by the Laboratory Manager.
- The District will keep a copy of the report made by the Riverside County Agricultural Commissioner on file.
- The District will keep a copy of the report made by the California Department of Public Health on file.

2018 activity: Reports on safety, quality control, and environmental compliance were made to the General Manager. The Vector-Borne Disease Section of the California Department of Public Health reviewed the District's Program on June 15, 2016; no recommendations were made. CDPH should make at least one inspection every two years. The District was inspected by the Riverside County Agricultural Commissioner on November 15, 2018; a copy of the report is available on request.

**Mitigation Measure 6:** *The District and the Mosquito & Vector Control Association of California will routinely fund and collaborate with researchers from the University of California and other academic institutions on research projects to evaluate activities and to ensure that practices are used with the least potential impact on biological resources consistent with operational requirements.*

Action indicating compliance: A copy of the annual budget and annual reports completed by these researchers will be available.

2018 activity: The District funded three researchers in 2018. Copies of their annual reports are available on request.

**Mitigation Measure 7:** *Project activities shall be consistent with the Riverside County General Plan's Conservation Element, and the Coachella Valley Multiple Species Habitat Conservation Plan, California and Federal Endangered Species Act and City General Plans in the Service Area.*

Action indicating compliance:

- The Laboratory Manager will review these plans and inform the District of any changes that need to be made to the Project's activities.
- The Laboratory Manager will conduct annual training of the District's employees to inform them of species that are listed as endangered.

2018 activity: The Laboratory Manager provided all field staff with training and updated manuals on Federal and State Listed Species on February 20, 2018.

**Mitigation Measure 8:** *District staff shall coordinate and consult with other responsible agencies, including the California Department of Health Services, the California Department of Fish and Game, and the Bureau of Land Management to ensure that Service Area activities do not result in significant impacts to biological resources.*

Actions indicating compliance:

- A copy of the cooperative agreement with California Department of Health Services is updated annually and available. This is coordinated by the General Manager.
- A copy of the permits awarded by the California Department of Fish and Wildlife (CDFW) is available. Permits are updated as needed by the Laboratory Manager
- The Laboratory Manager will obtain a MOU from the Bureau of Land Management if necessary.

2018 activity: When applying to the California Department of Fish and Wildlife for a permit for 2012, the District was informed that a permit was not needed to stock private water:

In California Code of Regulations, Title 14, Section 238.5 (f) the following is stated:

"In Inyo and Mono counties, and in public waters of San Bernardino, Riverside and Imperial counties, mosquitofish may not be planted without the written concurrence of the department".

No work was conducted requiring an MOU from the Bureau of Land Management. A copy of the agreement with the California Department of Public Health for 2018 is available on request.

**Mitigation Measure 9:** *The movement of All Terrain Vehicles (ATVs) shall be guided by the ground crew to avoid any damage to wildlife, if present. The use of ATVs by the District shall not*

*have a significant effect on the environment by limiting its activities to agricultural areas such as irrigated date gardens. In the spring months on the west side of the Salton Sea, use of the ATV's shall be limited to existing dirt roads around the flooded areas of fishery ponds. The District staff shall use existing dirt roads around the fish farm ponds and shall enter only those open areas under the salt grass in the vicinity of the fish farm ponds. In the fall months the use of ATVs shall be limited to sites such as duck club ponds that are man-made.*

Actions indicating compliance:

- The Shop Clerk will maintain a record of where District staff use ATVs from the key log of the Lead Technicians.
- The Field Supervisors and Fleet Maintenance Staff train the technicians annually on the proper use of ATVs as well as the appropriate habitats in which they should be used.

2018 activity: The District used ATVs fourteen times during breeding season (March – June) near the shoreline to examine the need for an aerial application. Use was restricted, and staff watched for signs of wildlife. Otherwise, ATV use in the spring and early summer was restricted to agricultural fields. ATVs were used in the duck clubs during the late summer, fall and winter. Staff was trained on appropriate use of ATVs on August 28, 2018.

**Mitigation Measure 10:** *The District shall use mosquitofish (*Gambusia affinis*) only in private man-made bodies of water for mosquito control – neglected pools.*

Action indicating compliance: The District Biologist will provide a report of the use and location of mosquitofish stocking.

2018 activity: Mosquitofish were stocked in neglected swimming pools, ornamental ponds, storm water structures, and duck clubs. Fish were used in man-made bodies of water for mosquito control. A map of treatments is available upon request.

**Mitigation Measure 11:** *The District shall maintain a California Department Fish and Game (CDFG) Permit for mosquitofish stocking.*

Action indicating compliance: A copy of the permit is available at the front desk.

2018 activity: See Mitigation Measure 8.

**Mitigation Measure 12:** *The District shall plant mosquitofish only in temporary man made wetlands that are covered by a CDFG permit which include Sections 19, 28, 29, 30, 31, Township 7, Range 9.*

Actions indicating compliance:

- A copy of the permit is available at the front desk.
- The District Biologist will provide a report of the use and location of mosquitofish stocking.

2018 Activity: See Mitigation Measures 8 and 10.

**Mitigation Measure 13:** *The District shall not plant mosquitofish in the following Desert Pupfish refugia ponds:*

- i. *McCallum/Simone pond and Visitor center pond or any water course at the Thousand Palms Preserve, along Thousand Palms Canyon Drive.*
- ii. *The Seep pond, the Oasis pond or the Cienega (Sonoran) pond located at the Living Desert Zoological Gardens.*
- iii. *The small pond behind the Salton Sea State Park Headquarters.*
- iv. *Any pond or watercourse located at the Dos Palmas Preserve.*

Action indicating compliance: The District Biologist will provide a report of the use and location of mosquitofish stocking.

2018 Activity: See Mitigation Measure 10.

**Mitigation Measure 14:** *When mosquito numbers exceed District control thresholds and other control methods would be ineffective, contrary to permits or other environmental protections, or otherwise inappropriate, the District shall utilize only those specific insecticides that are registered for use in California and that possess a current EPA label.*

Action indicating compliance: A copy of the current pesticide labels will be available.

2018 Activity: Current product labels are posted at [www.cvmvcd.org](http://www.cvmvcd.org).

**Mitigation Measure 15:** *The District shall maintain current and updated maps and other information from the California Department of Fish and Game Natural Diversity Data Base, the Coachella Valley Multiple Species Habitat Conservation Plan, the Bighorn Sheep Recovery Plan and similar sources on the location of Special Status Species and designated Natural Communities in the Service Area.*

Actions indicating compliance:

- The Laboratory Manager will review these plans and inform the District of any changes that need to be made to the Project's activities.
- Copies of these plans are located at the front desk.
- Information from these maps is used by the IT department to maintain digital records of these maps within ArcGIS.

2018 Activity: The District uses the maps available from the Coachella Valley Association of Governments (CVAG). All maps are up-to-date.

**Mitigation Measure 16:** *The District shall coordinate its activities with approved Habitat Conservation Plans and Species Recovery Plans.*

Actions indicating compliance:

- The Laboratory Manager will review these plans and inform the District of any changes that need to be made to the Project's activities.

- The Laboratory Manager will conduct annual training of the District's employees to inform them of species that are listed as endangered.

2018 Activity: See Mitigation Measure 7.

**Mitigation Measure 17:** *The District shall conduct all its activities consistent with the requirements of the California Department of Fish and Game, the Regional Water Quality Control Board, the US Fish and Wildlife Service and the US Army Corps of Engineers.*

Actions indicating compliance:

- Copies of permits that have been obtained from CDFW and from the State and the Regional Water Quality Control Boards are available at the front desk. These permits are updated as needed by the Laboratory Manager.
- The District will develop a plan for dealing with endangered species that will be submitted to the US Fish and Wildlife Service.
- The District currently does not have any activities that require input from the US Army Corps of Engineers.

2018 Activity: The District maintained its State and Regional Water Quality Control Board permits. The District has not developed a plan for dealing with endangered species, but it is involved in the American Mosquito Control Association which is creating a Federal position on vector control and endangered species. The District did file a document outlining its mosquito control efforts on property that is intended to be habitat for desert pupfish, *Cyprinodon macularius*, with US Fish and Wildlife Service in 2013 and continues to discuss the location of the pupfish with US and CA Fish and Wildlife Services. The District assisted the CA Fish and Wildlife Service with its population surveys for the desert pupfish, *Cyprinodon macularius*, in 2015 and did not find mosquitoes in areas where the pupfish were present.

**Mitigation Measure 18:** *The District shall maintain policies and programs for the continuing education of field personnel to ensure minimization of specific mosquito control activities and/or the use of alternative mosquito control methods which might impact Special Status Species or designated Natural Communities.*

Actions indicating compliance:

- The District will maintain records of in-house training sessions for staff as well as records of CEUs completed by staff. The District will maintain records of conferences attended by the staff.

2018 Activity: See Mitigation Measures 4 and 17. The freshwater and coastal marshlands are home to the desert pupfish, *Cyprinodon macularius*. According to the Recovery Plan, desert pupfish are omnivorous on algae, plants, invertebrates, and detritus. Desert pupfish prefer slow flowing water with some open vegetation, which is not a source of larval mosquitoes. Thus, there is no reason that mosquito control products would be used in habitats with desert pupfish. Even if they were used, the products are not toxic to fish.

	<p><b>Coachella Valley Mosquito and Vector Control District</b></p> <p><b>Staff Report</b></p>	<p><b>March 12, 2019</b></p>
<p><b>Agenda Item:</b> Informational Item</p> <p>Staff report from: AMCA Annual Conference, February 25 – March 1, 2019 in Orlando, FL</p>		
<p><b>Report:</b></p> <p>The annual meeting of the American Mosquito Control Association (AMCA) is an opportunity for staff to meet with leading mosquito workers from North America and other countries. This year’s plenary session had two presentations. The first discussed the use of <i>Wolbachia</i> in <i>Aedes aegypti</i> mosquitoes to limit the transmission of dengue, Zika, and chikungunya. The second discussed the use of foldscopes to have portable microscopes.</p> <p><i>Chris Cavanaugh</i> presented a poster on the use of BG-sentinel traps in temporary locations to examine the mosquito activity. <i>Kim Hung, Ph.D.</i> presented an evaluation of EverGreen ULV 5-25 (active ingredients: pyrethrins and piperonyl butoxide) to control adult mosquitoes. <i>Jennifer Henke, M.S.</i>, presented on the results of the truck larvicide applications made in 2018 as well as the work conducted for the Fight the Bite Block Party and Community Clean-up event in Mecca.</p> <p><i>Jennifer</i> was invited to speak in a Water Management Symposium on the partnership between MVCAC and the California Department of Fish and Wildlife to reduce mosquitoes while managing wildlife areas for waterfowl.</p> <p>This year the AMCA Annual Conference hosted sessions on:</p> <ul style="list-style-type: none"> <li>• Surveillance and control techniques for <i>Aedes aegypti</i> and <i>Aedes albopictus</i></li> <li>• Unmanned aerial systems in mosquito control</li> <li>• Beekeepers and mosquito control</li> <li>• Social media and public relations</li> <li>• Mosquito sterile insect technique</li> <li>• Water management</li> </ul> <p><b>ATTENDEES:</b>  <i>Bito Larson</i>, Trustee  <i>Jeremy Wittie</i>, General Manager  <i>Jennifer Henke</i>, Laboratory Manager  <i>Jill Oviatt</i>, Public Information Manager  <i>Kim Hung</i>, Vector Ecologist  <i>Chris Cavanaugh</i>, Biologist</p>		



**Coachella Valley Mosquito and Vector  
Control District**

**Staff Report**

**March 12, 2019**

**Agenda Item:** Informational Item

Staff report from:

- MVCAC Annual Conference, February 3-6, 2019

This year the MVCAC Annual Conference hosted sessions on:

- Community outreach and engagement
- Past research and control practices
- Operations
- Disease and biology of vectors
- Fleas, ticks, and vertebrates
- Public policy and administration

Reports from Trustees who attended the MVCAC Conference are attached.

**TRUSTEE ATTENDEES:**

Doug Walker, Secretary

Clive Weightman, Treasurer

Doug Kunz, Trustee

Bito Larson, Trustee

MVCAC Conference  
February 3 – 6, 2019  
Trustee's notes Doug Kunz, DVM

Dear Graciela,

As I have reviewed my notes there was so much great information. I have attached my notes which reflect what I learned at the conference. The important perspective that I gained from the conference is how necessary the district is to prevent vector transmitted disease to the populace of the valley. By maintaining a high level of surveillance and implementing controls the district can accomplish this mandate. I also gained an understanding of new technologies that can benefit the district in accomplishing its goals.

Doug Kunz

**Ed Manning Legislative Update**

Cal Surv and the importance of tacking mosquito surveillance and research programs.

Concerns with anticoagulant products in the environment and their impact on wildlife.

AB527 allowing the use of drones for aerial spraying.

Etofenprox residues from cannabis production.

**Dr. William Walton Pacific Southwest Center of Excellence in Vector-Borne Diseases**

AMCA membership important to help guide legislation on the national level

Endangered Species Act and compliance with products using the USFW handbook.

Training opportunities with e learning at [www.mosquito.org](http://www.mosquito.org).

Emphasized the importance of controlling vector borne disease.

**Benjamin DeMasi-Sumner**

Co2 and skin odor are the greatest attractants for mosquitos.

**Dr. Jay Gan**

Adulticide residues were not found when used on organically farmed rice.

**Dr. Aviva Goldman**

Showed Bromeliads as a common breeding habitat for Aedes. Aedes albipictus was found more commonly than Aedes aegypti.

**Dr. Yaosook Lee**

Looked and genomic drift with Aedes Aegypti as a means to source the geographic location.

**Daniele Swetnam**

St. Louis encephalitis virus in California may be sourced to Argentina rather than a re-emergence of the virus.

**Karen C. Holcomb**

Aerial spraying was effective in limiting the abundance of vectors for West Nile Virus in Sacramento-Yolo MCVD. Effectiveness varied with mosquito species.

**Tara Thiemann**

Pyrethroid resistance was noted in *Culex tarsalis* a vector for West Nile Virus and other arbovirus'. Pymethrin was found to have high resistance in wild populations, but adding PBD increased efficiency.

**Samantha Sambado**

*Borrelia miyamotoi*, a tick borne pathogen has been found in *Ixodes Pacifica*. Rodents serve as the reservoir.

**Adam Probolsky**

Presented data on public perceptions of vector control districts. Districts should target populations that have poorer responses. Outreach is the best method to change attitudes.

**Dr. Ronald Rosenberg**  
**Vector borne pathogens**

2/3 of pathogens are viral. Majority are RNA viruses. Vectors that transmit the viruses most commonly are mosquitos followed by ticks. Heartland virus was found in Missouri and transmitted by the Lone Star tick. Most common vector borne diseases in the United States are tick borne disease. Lyme's disease has doubled in the past 10 years. Other tick borne diseases include Rocky Mountain Spotted Fever, Anaplasmosis and Errhlichiosis. What will appear next? Usutu virus possibly.

How are we to prepare? Stay informed with Arbonet

Core Competencies of vector control:

- Sufficient operatives

- Better training

- Better communication

- New tools

- Better use of existing tools because this is what we have.

**Ovi Booth**

Alkali metal markers in mosquitos Rb and Cs stick in cells and increase negative charges in the cytoplasm. 35ug/ml did not effect behavior or biology. Rb was consistent whereas Cs was not.

**Xiaoming Wang**

The impact of bacterial microbiota in *Aedes albopictus*.. *Wolbachia* affects on the microbiota.

## **Megan Sebay, MPH**

Evaluating programs

CDC Evaluation Process

1. Engage stakeholders
2. Describe program – inputs, activities, outputs, outcomes and impacts.
3. Design the evaluation
  - a. What do you want to know
  - b. What will you measure
  - c. How will you measure it
  - d. Is it feasible
  - e. What are the ethical considerations.
4. Gather credible evidence
5. Justify conclusions, findings, conclusions and recommendations.
6. Share Data
  - a. Ensure use and shape lessons
  - b. Implement changes
  - c. Re-evaluate as needed

## **Daniel Wilson**

Norway rats are invading homeless encampments creating health risks. Alameda County has developed Tuff shed shelters after cleaning up a camp and allowing residence to stay in the improved shelters for six months. Social services are brought to bear to help resolve individual's problems to move them back into normal housing a life.

## **Katherine Ramirez**

Using Google forms sent out via Next Door app to raise public awareness of mosquito sources.

## **Jennifer A. Henke, MS**

Use targeted community outreach at large events. Use community clean up events to distribute literature and information for constituents. Inters can be found to help using [www.healthcareers.org](http://www.healthcareers.org).

## **Hester Petropoulos**

School outreach. Educate children. Use research-based strategies. Need class room management techniques to keep student involved. Support class room teachers.

## **Eric Engh**

Vector education in the schools. Resource [www.msosquito.com/education](http://www.msosquito.com/education). Use life cycle kits and have students keep an observation journal.

## **Marco Metzger, PhD**

*Aedes notoscriptus* winters in the larval stages. Native of Australia and New Guinea. 2014 found in LA County in EVS traps. 200 m territory – small areas and ponds and derelict pools Very few males detected. Like Bromeliads.

### **Trinidad Reyes**

*Aedes aegypti* was first found in Madera county in 2013. 309 average territory. Wind can increase territory. Used isotope marking to map territory. Challenge to get information to the public to help with control of this mosquito.

### **Sarah T. Abusaa**

Need more districts to participate in mapping quantitative data on *Aedes aegypti* prevalence and territory.

### **Marisa Donnelly**

*Aedes aegypti* and the transmission of Zika virus and Dengue fever. LA county has > 20% of travel related cases. Greater prevalence of the mosquito due to older homes and lower income areas. Need to help residents understand the feeding behavior of *Aedes*.

### **Oliver C. Winokur**

Extrinsic incubation of Zika Virus

- Temperature affects transmission

- Increased temperature – shorter incubation time and increased transmission of the virus

- 26 to 30 degrees C 4.9 days incubation time

- 18 degrees C 18 days. Incubation time

- Faster to transmit than other viruses

### **Tianyun Su, PhD**

Mosquitos can be infected with multiple viruses such as chikungunya, dengue and Zika viruses. PCR testing is effective in detecting the viruses.

### **Ary Faraji, PhD**

*Opifex fuscus* native to New Zealand. Exhibits pupal attendance Mates as soon as the females emerge. Poor flyers.

*Uranotaenia diagonalis* – Afrotropical. Inhabits wild ginger

### **Greg White, PhD**

Described the use of drones to deliver product in lakeside thick grass marshes.

Liquid applications do not penetrate the grasses. Drones were effective in delivering granular applications that were able to penetrate the grasses and control mosquitos.

### **Maribel A. Portilla**

Larval abundance in water hyacinth. Invasive aquatic weeds such as Brazilian waterweed and water hyacinth choke inland waterways. Does plant management affect mosquito larva? After application of a herbicide to water hyacinth the plants decay and 9 weeks later there was a larval spike. Plants may compete for nutrients.

**Mary Sorenson, PhD, BCE**

Automated counting traps count every 15 minutes. Helps in understanding biology of the mosquito. Helps to know when to take protective measures – peak times to spray. Relative humidity and temperature affect activity. Highest activity was just after sunset. Most active in moderate humidity 24 to 57%. Temperatures in middle range. Wind also may have an affect.

**Mario Boisvert, PhD**

Behavior of *Culex tarsalis* in rice fields. Peak activity was at sunset with some variation between sites. Spray during periods of highest activity. Used automated counters.

**Marcia Reed, BS**

Automated traps in urban/suburban areas. *Culex pipens* which is a West Nile virus vector was active later at night. Spraying in parks showed significant reduction in mosquito numbers.

**Mary Danforth, PhD**

Sin Nombre virus shed in urine and feces of deer mice. Problem in Yosemite's Tulum Meadows. Mountain cabins need good mouse control. Education of public and park staff important for control.

**Robert Cummings**

Flea born typhus in Orange County. Three organisms involved. Epidemic with flea borne *R. typhi* and *R. felis*. Shed in the feces of fleas and causes high fever and headache. Found in both Orange and Los Angeles counties. Opossums have the highest flea index. Cat fleas have the highest infection rate. Human cases correlate with populations of feral cat colonies. <https://www.ocvector.org/flea-borne-typhus>

**Sutapa Biswas, MS**

*Rickettsia* in fleas and Norway Rats in Alameda County. Spotted fever group transmitted by ticks and mites.

Typhus group transmitted by cat fleas which can infest dogs, cats, opossums, raccoons and skunks. Urban cycle – Norway rats carrying oriental rat fleas. Can also transmit plague. Suburban – cats. Opossums, raccoons and skunks. PCR test can detect *Rickettsia typhi*.

**Adena Why, PHD**

Ectoparasites in Norway Rats associated with homeless camps. Fleas, lice and mites. Most effective to bait traps with mackerel or peanut butter.

**Sergio Mendoza**

Ixodes Pacificus (deer tick) and Dermacenter occidentalis which carry Lymes disease and Tularemia were noted most commonly on the up slope of coastal trails in Alameda County.

**Joyce Kleinjan, MS**

Ixodes Pacificus the vector for Lyme disease is affected by moisture variability. Nymph stage mot likely infected. Thrives in cool moist maritime regions on East face of the coastal range. Found in leaf liter especially along creek sides. During drought nymph collection doubled. It is thought that the spike in numbers was a response to dryness over a period of drought.

**Joseph Burns**

Tick borne relapsing fever. Caused by Borrelia hermsii carried by sylvatic rodents (chipmunks). 3000 to 9000 feet elevation in coniferous forest. Vector is a soft tick. The disease causes a temperature of 100.5 + F. The organism which is a spirochete is visible in a blood smear of the infected patient. IgM or IgG can be detected by EIA or IFA tests. Summer disease.

**Andrew M. Sutherland, PhD, BCE**

Cockroaches – bait only programs for control Liquids are not efficacious. Cockroaches are cannibalistic.

**UAV panel**

Very effective for contour mapping with a high rate of data accuracy. Software is able to stitch images seamlessly.

COACHELLA VALLEY MOSQUITO and VECTOR CONTROL DISTRICT  
REPORT of TRUSTEE'S ATTENDANCE  
MVCAC Annual Conference  
February 3-6, 2019

**Trustee:** Doug Walker  
Location: Burlingame, CA

Significant points learned of benefit to the District and the community:

Sunday afternoon, the conference began with registration packets being available, followed in the evening with the President's Welcome Reception (Jeremy Wittie) and the Exhibitor Hall being open. Monday morning began with the MVCAC President's Welcome by Jeremy. This was followed by the Plenary Session, with a number of presentations until about 12:30. Lunch was provided along with opportunities to review the Poster presentations. Four CVMVCD staff members prepared and presented very professional technical posters. Kudos to each of those contributors including: Michael Esparza, Kim Hung, Jeff Rushing and Miguel Vargas. During the afternoon I attended an Ethics AB-1234 Compliance Training session designed for Trustees. With my fellow Trustees, we each received a Certificate of Completion for this training that is good for two years.

Tuesday began early with a Trustee breakfast meeting, including a presentation by Jennifer Henke. The rest of this day consisted of concurrent sessions with opportunities to learn more about topics like: mosquito biology, vector-borne diseases, pesticide resistance, stormwater treatment control devices, unmanned aircraft use, fleas, ticks, IT data security... This evening, the MVCAC Annual Awards banquet occurred and was emceed by President Wittie. Once again, we should recognize the participation of District staff in MVCAC positions as officers and committee chairs. Thanks to our staff, the Coachella Valley MVCD is recognized as one of the premier districts in California and the nation.

Wednesday morning consisted of a Board of Directors meeting and conference adjournment. This continues to serve as the best conference for Trustees to obtain a real sense of what is happening throughout our State in relation to mosquito and vector control. Next year's conference is scheduled for January 26-29 in San Diego.

Signature: *Doug Walker*

Date: February 28, 2019



**COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT  
REPORT OF TRUSTEE'S ATTENDANCE  
AT CONFERENCE/SEMINAR**

**Trustee: Clive Weightman**

**Name of Conference/Seminar: MVCAC Annual Conference**

**e:**

**Date: Feb 3-6 2019**

**Location: Burlingame, CA**

**Significant points learned of benefit to the District and the community:**

**How all 80 special districts appear to have many of the same issues and are doing similar research. I sense there is significant potential benefit by increased sharing of knowledge and action plans.**

**How ill prepared the CDC was for the Zika outbreak in Florida, with very limited knowledge of the Vector Districts across the US and how to leverage their skills. We need to ensure that the CDC is better linked to our district**

**The interaction of Trustees at the Trustee breakfast was very useful. More time should be allocated at these conferences for trustee interaction**

**A session on Tuesday at 2:30pm entitled "Gone Phishing-basic lessons in information security" was excellent. I have recommended that our district map our situation against the key recommendations in this paper. My feeling is that we can learn a lot.**

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**Date:** February 13<sup>th</sup> 2019 **Signature:** Clive Weightman

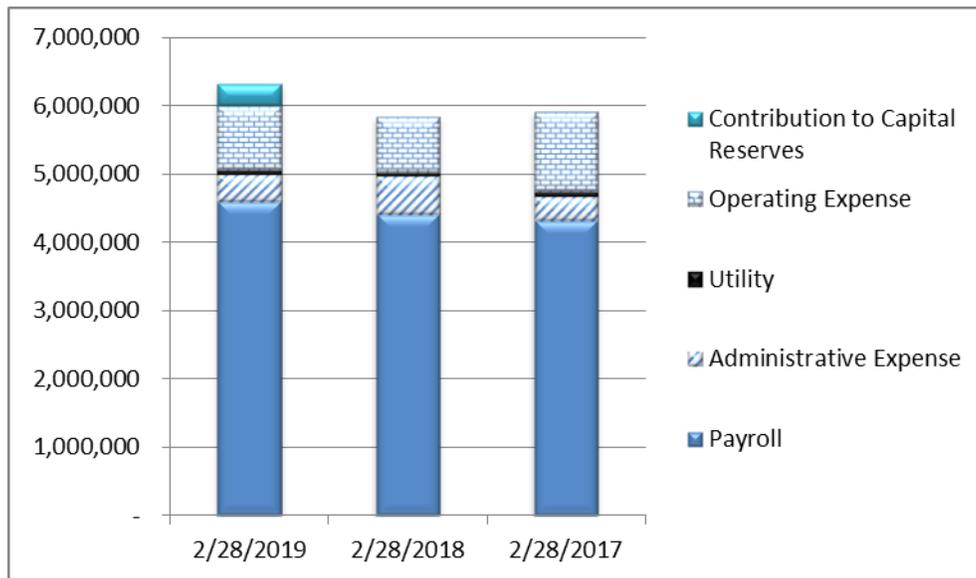
Reg. AB1234, Section III, Subsection 3.13 ~ Upon returning from seminars, workshops, conferences, etc., where expenses are reimbursed by the District, Trustees will either prepare a written report for distribution to the Board, or make a verbal report during the next regular meeting of the Board. Said report shall detail what was learned at the session(s) that will be of benefit to the District. Materials from the session(s) maybe delivered to the District office to be included in the District library for the future use of other Trustees and staff.

## FINANCE

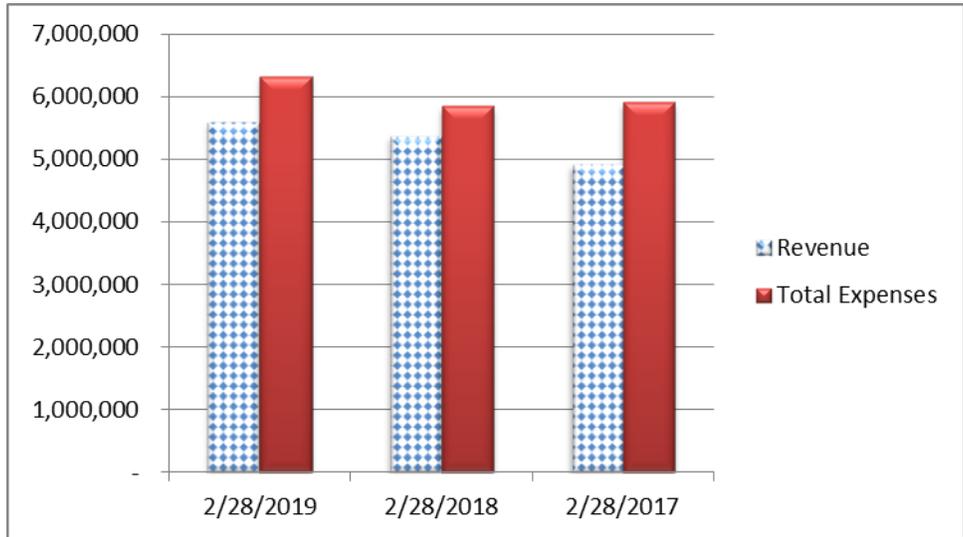
The financial reports show the balance sheet, receipts, and the revenue and expenditure reports for the month ending February 28, 2019. The revenue and expenditure report shows that the operating budget expenditure for July 1, 2018 to February 28, 2019 is \$6,322,853; total revenue is \$5,595,614 resulting in excess revenue over (under) expenditure for the year to February 28, 2019 of (\$727,239).

### THREE YEAR FINANCIALS

	<b>2/28/2019</b>	<b>2/28/2018</b>	<b>2/28/2017</b>
<b>Total Revenue</b>	<b>5,595,614</b>	<b>5,375,187</b>	<b>4,919,067</b>
Expenses			
Payroll	4,597,866	4,407,180	4,323,996
Administrative Expense	404,612	560,475	349,643
Utility	69,088	60,857	76,771
Operating Expense	929,544	814,015	1,160,333
Contribution to Capital Reserves	321,743		
<b>Total Expenses</b>	<b>6,322,853</b>	<b>5,842,528</b>	<b>5,910,743</b>
<b>Profit (Loss)</b>	<b>(727,239)</b>	<b>(467,341)</b>	<b>(991,676)</b>



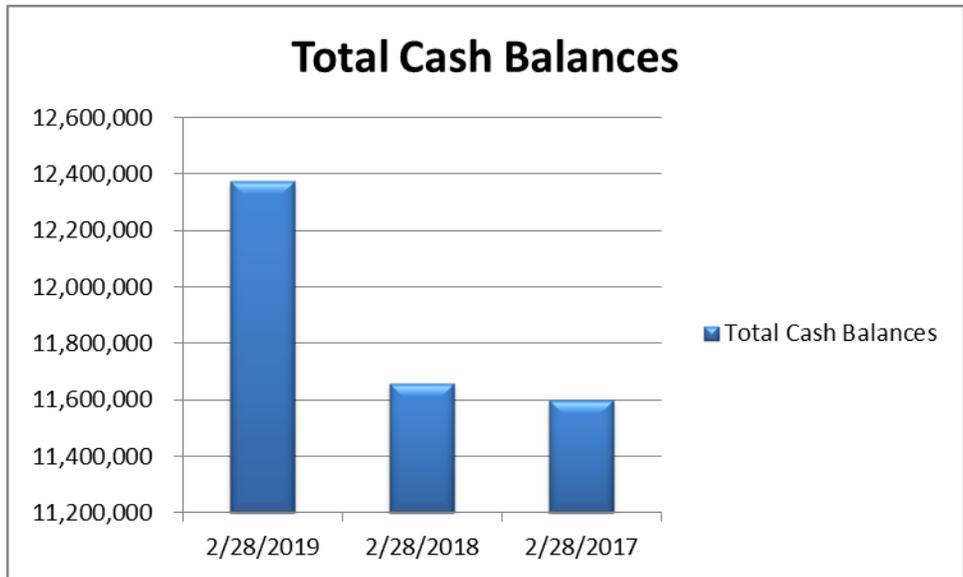
**Figure 1 Three Year Expenditure**



**Figure 2 Three Year Revenue & Expenditure**

**THREE YEAR CASH BALANCE**

<b>CASH BALANCES</b>	<b>2/28/2019</b>	<b>2/28/2018</b>	<b>2/28/2017</b>
Investment Balance	12,289,258	11,547,590	11,519,793
Checking Accounting	28,635	11,965	6,217
Payroll Account	55,724	96,115	71,599
Petty Cash	2,000	2,000	2,000
<b>TOTAL CASH BALANCES</b>	<b>12,375,617</b>	<b>11,657,670</b>	<b>11,599,609</b>



**Figure 3 Cash Balances**

**DISTRICT INVESTMENT PORTFOLIO 2/28/2019**

The District's investment fund balance for the period ending February 28, 2019 is \$12,289,258. The portfolio composition is shown in the pie chart. Local Agency Investment

Fund (LAIF) accounts for 52% of the District’s investments; the Riverside County Pooled Investment Fund is 35% of the total. The LAIF yield for the end of December was 2.39% and the Riverside County Pooled Investment Fund was 2.31%; this gives an overall weighted yield for District investments of 2.12%.

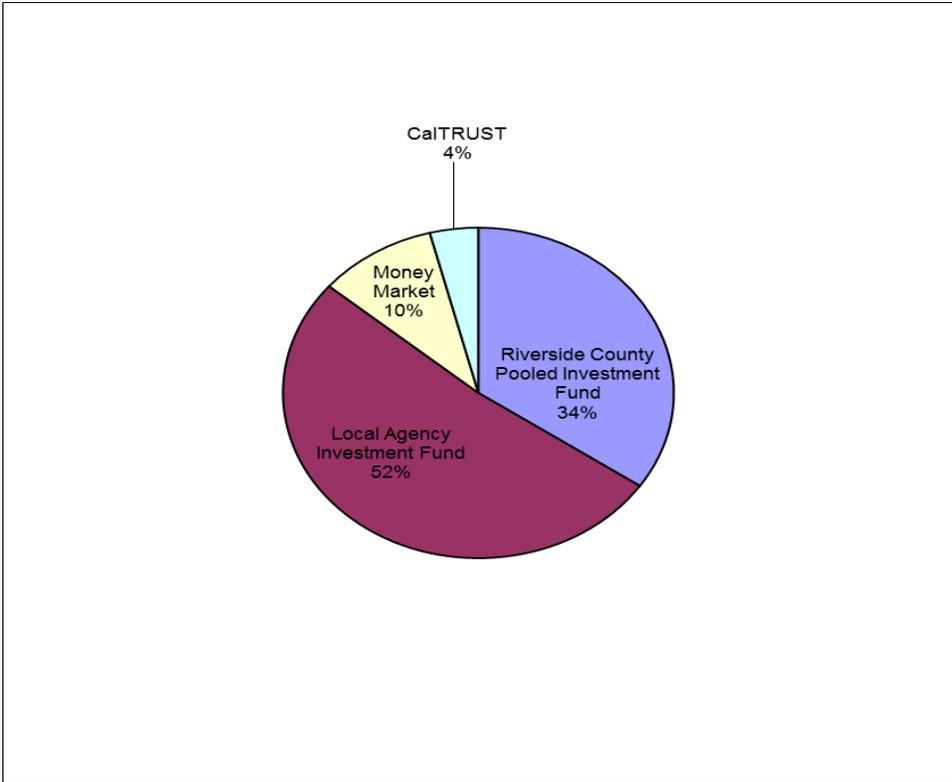


Figure 4 Investment Portfolio 2-28-19

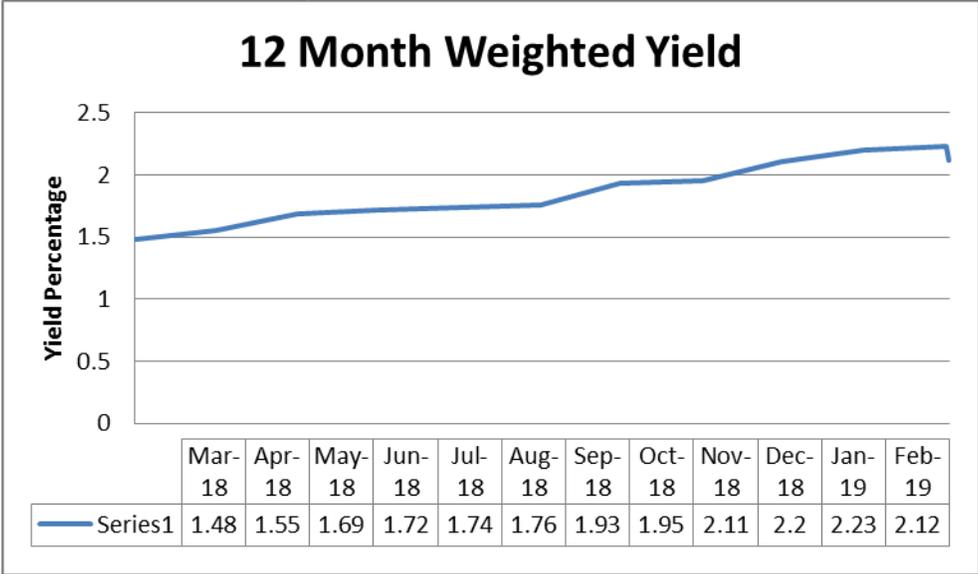
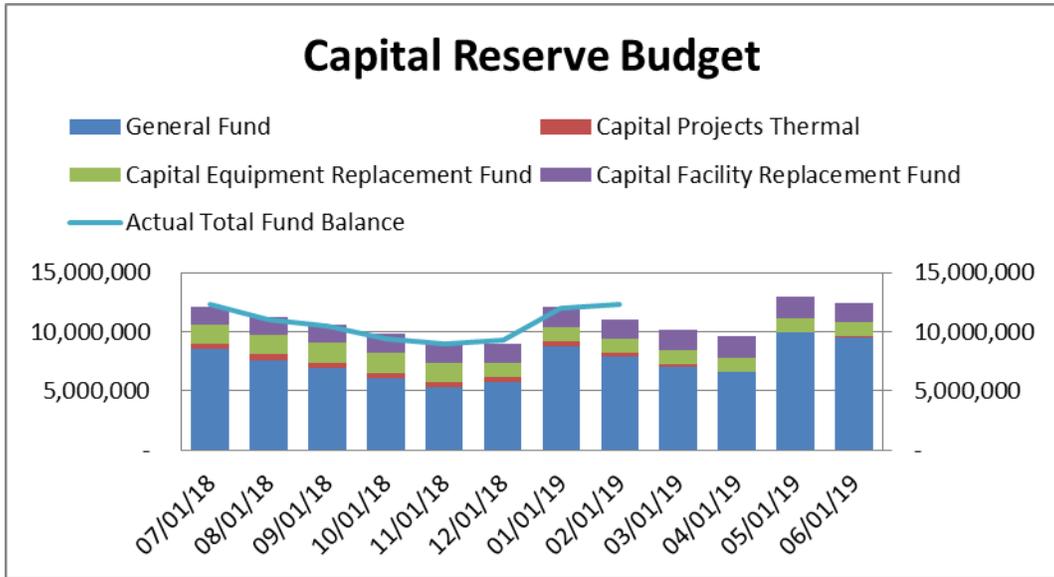
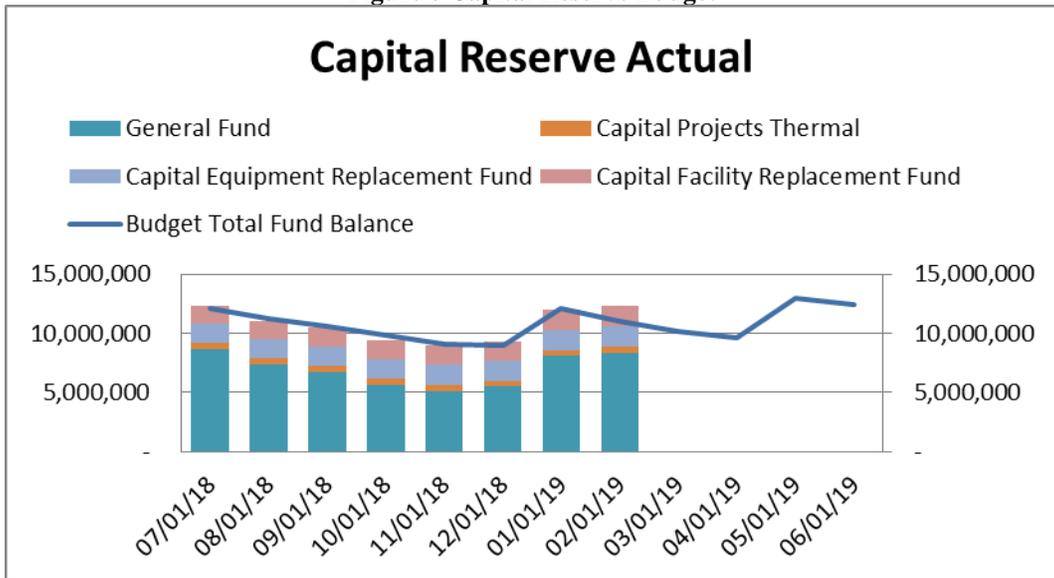


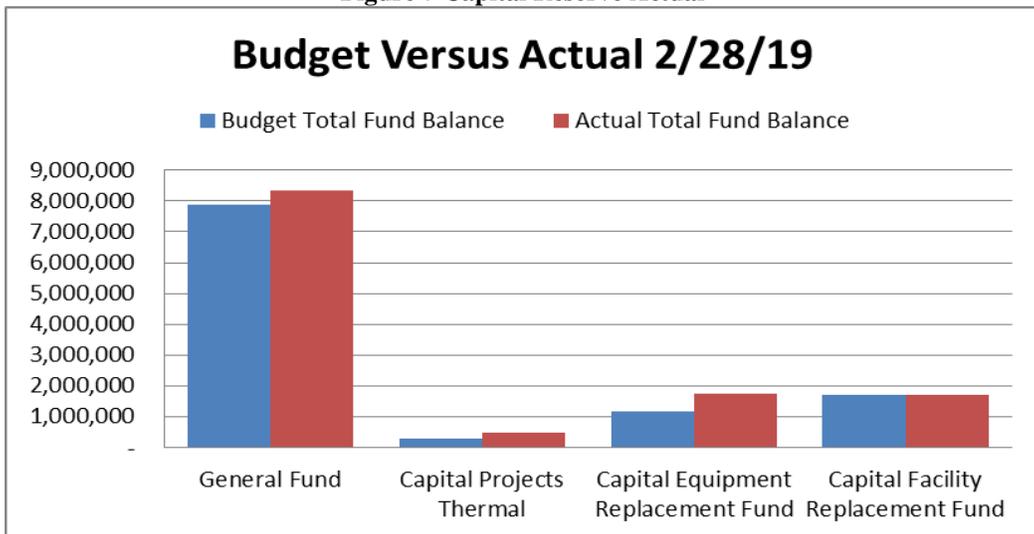
Figure 5 District Investments Weighted Yield



**Figure 6 Capital Reserve Budget**

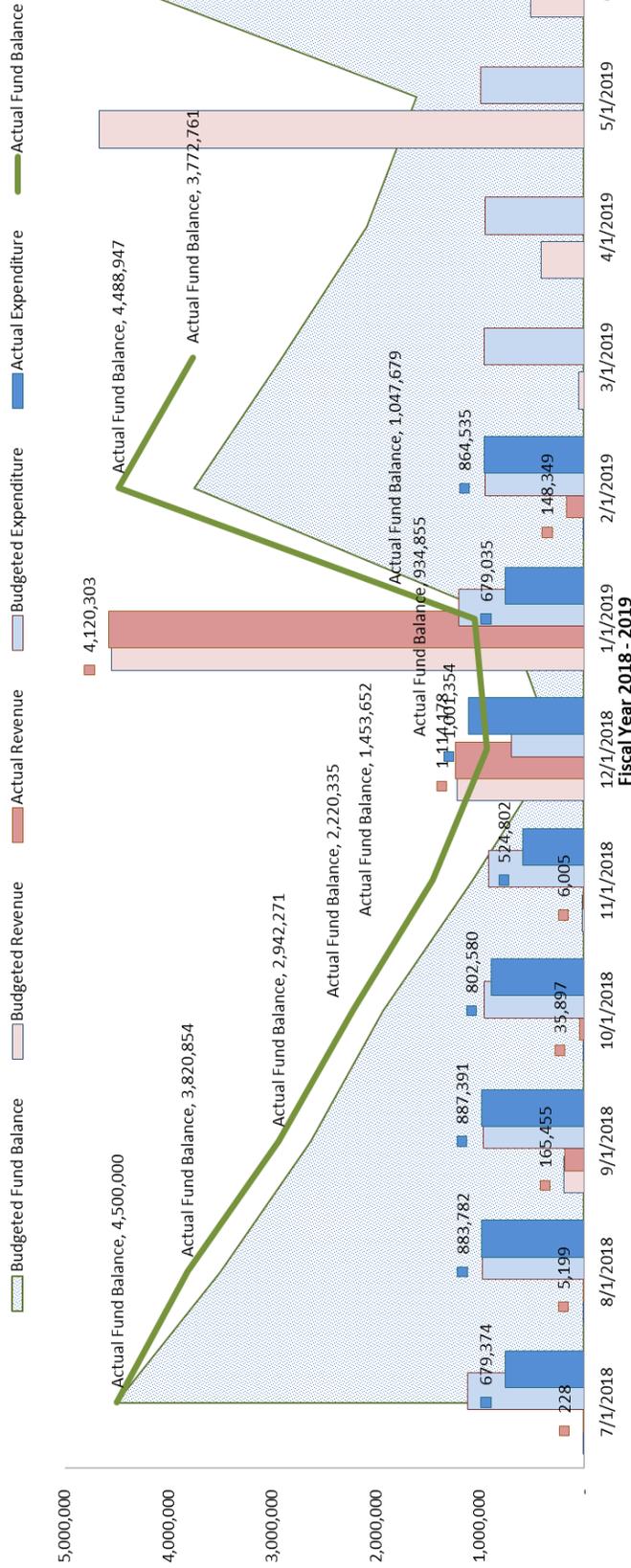


**Figure 7 Capital Reserve Actual**



**Figure 8 Capital Reserve 2/28/2019**

## General Fund Operational Cash Flow



The **General Fund Operational Cash Flow** graph outlines the District's working capital for the fiscal year July 1 2018 to June 30 2019. The beginning fund and ending fund balance is \$4.5 million. Expenditure is approximately divided by 12 equal months, with some differences accounting for the seasonality of the program for example control products and seasonal employment which are greater in the mosquito breeding season. The budget also accounts for prepayments. The revenue follows a different pattern, Riverside County distribute the property tax revenue in January and May with advancements in December and April.

The shaded area represents the **Budgeted Fund Balance** which has a formula of (beginning) **Fund Balance** plus **Revenue** minus **Expenditure**. The green line represents the **Actual Fund Balance** and is graphed against the shaded area **Budgeted Fund Balance**.

The graph shows for March 1 the \$4.5 million **Fund Balance** plus total Revenue for July 1 to February 28, 2019 of \$5.6 million minus total Expenditure of \$6.3million is \$3,772,761. For planning purposes the District is well within budget, showing revenue is slightly higher and expenditure is lower than budgeted. As long as the green line stays out of the shaded area the District is fiscally sound.

Coachella Valley Mosquito and Vector Control District  
**FINANCES AT A GLANCE**  
**ALL FUNDS COMBINED**  
For the Month Ended February 28, 2019

	Beginning of the Month	Change During the Month	End of the Month
INVESTMENTS	11,918,255	371,003	12,289,258
CASH	52,349	34,010	86,359
INVESTMENTS & CASH	<b>\$ 11,970,605</b>	<b>405,012</b>	<b>12,375,617</b>
CURRENT ASSETS	2,832,089	(1,017,380)	1,814,709
FIXED ASSETS	10,725,824	-	10,725,824
OTHER ASSETS	5,111,294	-	5,111,294
TOTAL ASSETS	<b>\$ 30,639,812</b>	<b>(612,368)</b>	<b>30,027,444</b>
TOTAL LIABILITIES	5,698,440	63,600	5,762,040
TOTAL DISTRICT EQUITY	24,941,372	(675,968)	24,265,404
TOTAL LIABILITIES & EQUITY	<b>\$ 30,639,812</b>	<b>(612,368)</b>	<b>30,027,444</b>
RECEIPTS		\$ 992,205	
CASH DISBURSEMENTS			
Payroll	\$ 371,353		
General Admin	\$ 281,395		
Total Cash Disbursements		\$ (652,748)	
NON-CASH ENTRIES:		\$ (951,824)	
Accrual Modifications - Changes in A/P, A/R & Pre-paid insurance		(951,824)	
Change during Month - Excess of Cash over Receipts & Non-Cash Adjustments		<b>\$ (612,368)</b>	

CVMVCD

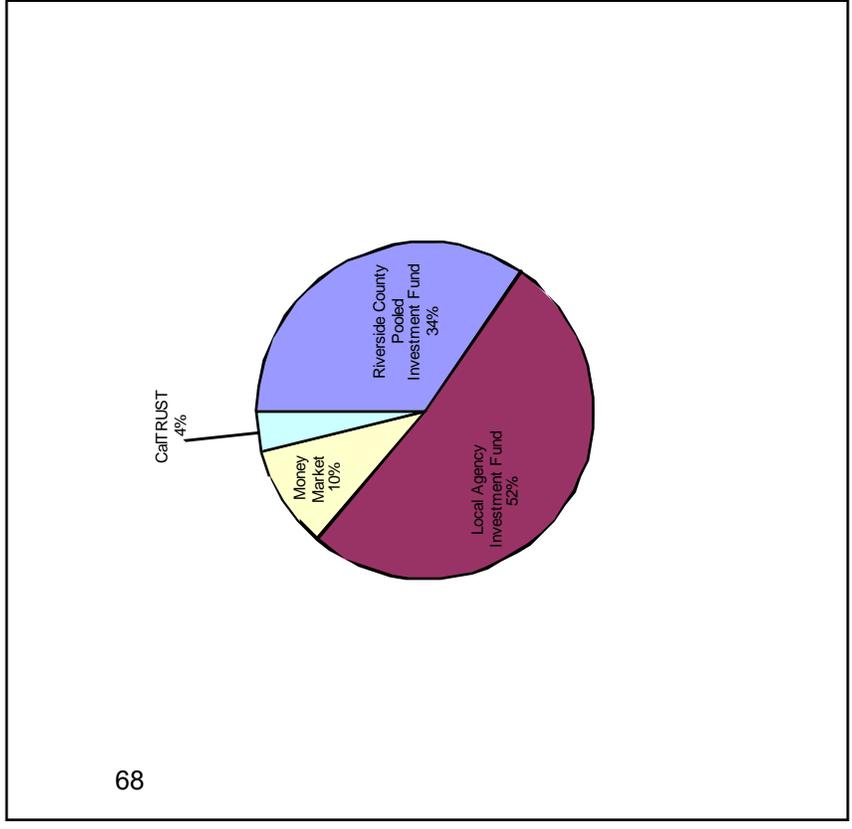
Cash Journal - deposits  
From 2/1/2019 Through 2/28/2019

Effective ...	Payee/Recipient Name	Transaction Description	Deposits
2/7/2019	Riverside County	Benefit Assessment	986,707.74
2/7/2019	State of California	February Receipts - Medicare Subsidy Payment	83.75
2/8/2019	Riverside County	February Receipts - SBE - Benefit Assessment	371.28
2/25/2019	US Bank	February Receipts - CalCard Rebate	4,780.43
2/25/2019	US Treasury	February Receipts - IRS Refund	64.39
2/28/2019	First Foundation Bank	February Receipts - Bank Interest	197.10
Report Total			992,204.69

**COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT  
INVESTMENT FUND BALANCES AS OF FEBRUARY 28, 2019**

INSTITUTION	IDENTIFICATION	Issue Date	Maturity Date	YIELD	General Fund	Thermal Capital Fund	Capital Equipment Replacement Fund	Capital Facility Replacement Fund	BALANCE
<b>Investment Fund Balance</b>									
LAIIF	Common Investments			2.39%	8,357,967	487,737	1,743,620	1,699,933	\$ 12,289,258
Riverside County	Funds 51105 & 51115			2.31%	4,316,159	251,873	900,427	877,867	\$ 6,346,327
CaTRUST	Medium Term Fund			1.49%	2,885,223	168,370	601,909	586,828	\$ 4,242,329
First Foundation	Market Rate			0.25%	334,343	19,511	69,750	68,002	\$ 491,606
					822,243	47,983	171,534	167,237	\$ 1,208,996
	<b>Total Investments</b>				8,357,967	487,737	1,743,620	1,699,933	<b>\$ 12,289,258</b>

**PORTFOLIO COMPOSITION AS OF FEBRUARY 28, 2019  
WEIGHTED YIELD 2.12%**



In compliance with the California Code Section 53646; the Finance Administrator of the Coachella Valley Mosquito and Vector Control District hereby certifies that sufficient liquidity and anticipated revenue are available to meet the District's budgeted expenditure requirements for the next six months.

Investments in the report meet the requirements of the Coachella Valley Mosquito and Vector Control District's adopted investment policy

Respectfully submitted

NOTED AND APPROVED

CVMVCD  
Statement of Revenue and Expenditures  
From 2/1/2019 Through 2/28/2019

	Budget -		YTD Budget		YTD Budget		Current Period		Current Period		Total Budget		Percent Total Budget Remaining - Original
	Original		YTD Budget	YTD Actual	Variance	Budget	Variance	Variance	Actual	Remaining	Remaining	Original	
<b>Revenues</b>													
4000 Property Tax - Current Secured	3,733,045	1,931,777	<b>1,987,074</b>		55,297	0	<b>65,556</b>	65,556		(1,745,971)		(47)%	
4010 Property Tax - Curr. Supplmntl	72,202	19,392	<b>0</b>		(19,392)	0	<b>0</b>	0		(72,202)		(100)%	
4020 Property Tax - Curr. Unsecured	161,854	145,599	<b>156,827</b>		11,228	0	<b>0</b>	0		(5,027)		(3)%	
4030 Homeowners Tax Relief	42,732	21,031	<b>20,009</b>		(1,022)	0	<b>0</b>	0		(22,723)		(53)%	
4070 Property Tax - Prior Supp.	28,660	21,428	<b>0</b>		(21,428)	0	<b>0</b>	0		(28,660)		(100)%	
4080 Property Tax - Prior Unsecured	9,902	0	<b>0</b>		0	0	<b>0</b>	0		(9,902)		(100)%	
4090 Redevelopment Pass-Thru	4,275,025	2,099,329	<b>2,232,847</b>		133,518	0	<b>0</b>	0		(2,042,178)		(48)%	
4520 Interest Income - LAIF/CDs	100,000	50,200	<b>106,067</b>		55,867	100	<b>197</b>	97		6,067		6%	
4530 Other Miscellaneous Receipts	63,000	42,000	<b>28,417</b>		(13,583)	5,250	<b>4,929</b>	(321)		(34,583)		(55)%	
4551 Benefit Assessment Income	1,996,366	1,078,038	<b>1,064,374</b>		(13,664)	0	<b>77,667</b>	77,667		(931,992)		(47)%	
<b>Total Revenues</b>	<b>10,482,786</b>	<b>5,408,794</b>	<b>5,595,614</b>		<b>186,820</b>	<b>5,350</b>	<b>148,348</b>	<b>142,998</b>		<b>(4,887,172)</b>		<b>(47)%</b>	
<b>Expenditures</b>													
Payroll Expenses													
5101 Payroll - FT	4,686,031	3,124,024	<b>2,905,954</b>		218,070	390,503	<b>352,641</b>	37,862		1,780,077		38%	
5102 Payroll Seasonal	208,460	115,810	<b>131,124</b>		(15,314)	23,162	<b>8,039</b>	15,123		77,336		37%	
5103 Temporary Services	6,900	6,900	<b>6,900</b>		0	0	<b>0</b>	0		0		0%	
5105 Payroll - Overtime Expense	41,700	27,800	<b>6,673</b>		21,127	3,475	<b>369</b>	3,106		35,027		85%	
5150 CalPERS State Retirement	566,460	421,832	<b>380,165</b>		41,667	36,158	<b>82,298</b>	(46,140)		186,295		33%	
5155 Social Security Expense	302,827	201,888	<b>187,609</b>		14,279	25,236	<b>23,471</b>	1,765		115,218		38%	
5165 Medicare Expense	70,821	47,216	<b>45,200</b>		2,016	5,902	<b>5,384</b>	518		25,621		36%	
5170 Cafeteria Plan	1,031,051	687,368	<b>774,798</b>		(87,430)	85,921	<b>161,071</b>	(75,150)		256,253		25%	
5172 Retiree Healthcare	342,420	228,280	<b>72,574</b>		155,706	28,535	<b>10,180</b>	18,356		269,846		79%	
5180 Deferred Compensation	101,030	67,352	<b>56,339</b>		11,013	8,419	<b>17,251</b>	(8,832)		44,691		44%	
5195 Unemployment Insurance	36,405	24,272	<b>30,532</b>		(6,260)	3,034	<b>5,523</b>	(2,489)		5,873		16%	
<b>Total Payroll Expenses</b>	<b>7,394,105</b>	<b>4,952,742</b>	<b>4,597,866</b>		<b>354,876</b>	<b>610,345</b>	<b>666,227</b>	<b>(55,882)</b>		<b>2,796,239</b>		<b>38%</b>	
Administrative Expenses													

CVMVCD  
Statement of Revenue and Expenditures  
From 2/1/2019 Through 2/28/2019

	Budget -		YTD Budget		YTD Actual		YTD Budget		Current Period		Current Period		Total Budget		Percent Total	
	Original	Remaining -	YTD Budget	YTD Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance	Remaining -	Original	Remaining -	Original	
5250 Tuition Reimbursement	15,000		10,000	6,993	3,007	1,250	0	1,250	0	1,250	8,007	53 %				
5300 Employee Incentive	6,000		4,000	3,485	515	500	0	500	0	500	2,515	42 %				
5301 Employee Support	4,000		2,664	1,885	779	333	213	120	213	120	2,115	53 %				
5302 Wellness	600		0	0	0	0	0	0	0	0	600	100 %				
5305 Employee Assistance Program	3,200		2,136	2,108	28	267	256	11	1,092	11	1,092	34 %				
6000 Property & Liability Insurance	79,895		33,264	70,388	(37,124)	11,658	11,203	455	9,507	455	9,507	12 %				
6001 Workers' Compensation Insurance	85,730		13,824	51,060	(37,236)	17,978	17,948	30	34,670	30	34,670	40 %				
6050 Dues & Memberships	25,480		23,848	24,736	(887)	407	0	407	745	407	745	3 %				
6060 Reproduction & Printing	21,750		14,504	4,887	9,617	1,813	1,123	690	16,863	690	16,863	78 %				
6065 Recruitment/Advertising	6,500		4,336	5,519	(1,183)	542	438	104	981	104	981	15 %				
6070 Office Supplies	14,980		9,984	12,032	(2,048)	1,248	185	1,063	2,948	1,063	2,948	20 %				
6075 Postage	8,500		5,664	1,635	4,029	708	0	708	6,865	708	6,865	81 %				
6080 Computer & Network Systems	5,000		3,336	3,142	194	417	0	417	1,858	417	1,858	37 %				
6085 Bank Service Charges	200		136	13	123	17	0	17	187	17	187	93 %				
6090 Local Agency Formation Comm.	1,200		1,200	1,129	71	0	0	0	71	0	71	6 %				
6095 Professional Fees	53,000		35,336	24,587	10,749	4,417	2,304	2,113	28,413	2,113	28,413	54 %				
6100 Attorney Fees	90,000		60,000	68,529	(8,529)	7,500	0	7,500	21,471	7,500	21,471	24 %				
6105 Legal Services / Filing Fees	1,000		0	0	0	0	0	0	1,000	0	1,000	100 %				
6106 HR Risk Management	4,500		4,500	4,500	0	0	0	0	0	0	0	0 %				
6110 Conference Expense	48,800		40,000	12,024	27,976	0	118	(118)	36,776	(118)	36,776	75 %				
6115 In-Lieu	13,200		8,800	8,100	700	1,100	1,200	(100)	5,100	(100)	5,100	39 %				
6120 Trustee Support	4,000		2,664	2,926	(262)	333	175	158	1,074	158	1,074	27 %				
6200 Meetings Expense	2,000		1,336	1,386	(50)	167	41	126	614	126	614	31 %				
6210 Promotion & Education	26,000		7,000	2,402	4,598	5,000	464	4,536	23,598	4,536	23,598	91 %				
6220 Public Outreach Advertising	46,000		12,000	0	12,000	8,000	0	8,000	46,000	8,000	46,000	100 %				
6500 Benefit Assessment Expenses	96,000		96,000	91,146	4,855	0	77,295	(77,295)	4,855	(77,295)	4,855	5 %				
<b>Total Administrative Expenses</b>	662,535		396,532	404,612	(8,080)	63,655	112,964	(49,309)	257,923	(49,309)	257,923	39 %				
Utilities																
6400 Utilities	105,000		70,000	57,999	12,001	8,750	4,959	3,791	47,001	3,791	47,001	45 %				
6410 Telecommunications	11,000		7,336	11,089	(3,753)	917	0	917	(89)	917	(89)	(1)%				
<b>Total Utilities</b>	116,000		77,336	69,088	8,248	9,667	4,959	4,708	46,912	4,708	46,912	40 %				

CVMVCD  
Statement of Revenue and Expenditures  
From 2/1/2019 Through 2/28/2019

	Budget -		YTD Budget		YTD Actual		YTD Budget		Current Period		Current Period		Total Budget		Percent Total	
	Original	YTD Budget	YTD Budget	YTD Actual	Variance	Budget	Variance	Budget	Variance	Actual	Variance	Remaining	Remaining	Original	Original	
Operating																
7000 Uniform Expense	26,650	17,768	20,382	20,382	(2,614)	2,221	1,592	629	629	6,268	24 %	6,268	24 %			
7050 Safety Expense	23,350	15,568	10,826	10,826	4,742	1,946	364	1,582	1,582	12,524	54 %	12,524	54 %			
7100 Physican Fees	4,000	2,664	2,755	2,755	(91)	333	0	333	333	1,245	31 %	1,245	31 %			
7150 IT Communications	40,000	26,664	20,137	20,137	6,527	3,333	0	3,333	3,333	19,863	50 %	19,863	50 %			
7200 Household Supplies	4,000	2,664	1,932	1,932	732	333	169	164	164	2,068	52 %	2,068	52 %			
7300 Repair & Maintenance	42,000	28,000	16,128	16,128	11,872	3,500	615	2,885	2,885	25,872	62 %	25,872	62 %			
7310 Maintenance & Calibration	6,000	4,000	4,000	4,000	0	500	0	500	500	2,000	33 %	2,000	33 %			
7350 Permits, Licenses & Fees	10,850	7,232	3,795	3,795	3,437	904	0	904	904	7,055	65 %	7,055	65 %			
7400 Vehicle Parts & Supplies	32,000	21,336	18,673	18,673	2,663	2,667	886	1,781	1,781	13,327	42 %	13,327	42 %			
7420 Offsite Vehicle Maint & Repair	12,500	8,336	10,296	10,296	(1,960)	1,042	927	115	115	2,204	18 %	2,204	18 %			
7450 Equipment Parts & Supplies	16,500	11,000	5,884	5,884	5,116	1,375	0	1,375	1,375	10,616	64 %	10,616	64 %			
7500 Small Tools Furniture & Equip	1,700	1,136	855	855	281	142	0	142	142	845	50 %	845	50 %			
7550 Lab Supplies & Expense	30,500	20,336	17,218	17,218	3,118	2,542	165	2,377	2,377	13,282	44 %	13,282	44 %			
7570 Aerial Pool Surveillance	25,000	0	0	0	0	0	0	0	0	25,000	100 %	25,000	100 %			
7575 Surveillance	45,500	30,336	25,851	25,851	4,485	3,792	0	3,792	3,792	19,649	43 %	19,649	43 %			
7600 Staff Training	72,000	49,729	44,002	44,002	5,727	5,363	0	5,363	5,363	27,998	39 %	27,998	39 %			
7650 Equipment Rental	1,000	664	540	540	124	83	0	83	83	460	46 %	460	46 %			
7675 Contract Services	131,232	87,488	76,568	76,568	10,920	10,936	7,008	3,928	3,928	54,664	42 %	54,664	42 %			
7700 Motor Fuel & Oils	73,200	48,800	46,737	46,737	2,063	6,100	0	6,100	6,100	26,463	36 %	26,463	36 %			
7750 Field Supplies	9,400	6,264	4,859	4,859	1,405	783	2	781	781	4,541	48 %	4,541	48 %			
7800 Control Products	785,000	523,328	457,697	457,697	65,631	65,416	24,762	40,654	40,654	327,303	42 %	327,303	42 %			
7850 Aerial Applications	114,500	76,332	50,550	50,550	25,782	0	3,675	(3,675)	(3,675)	63,950	56 %	63,950	56 %			
8415 Capital Outlay	20,650	13,768	3,943	3,943	9,825	1,721	0	1,721	1,721	16,707	81 %	16,707	81 %			
8510 Research Projects	150,000	150,000	85,917	85,917	64,083	0	0	0	0	64,083	43 %	64,083	43 %			
9000 Contingency Expense	150,000	100,000	0	0	100,000	12,500	0	12,500	12,500	150,000	100 %	150,000	100 %			
<b>Total Operating</b>	1,827,532	1,253,413	929,544	929,544	323,869	127,532	40,166	87,366	87,366	897,988	49 %	897,988	49 %			
Contribution to Capital Reserves																
8900 Transfer to other funds	482,614	321,744	321,743	321,743	1	40,218	40,218	0	0	160,871	33 %	160,871	33 %			
<b>Total Contribution to Capital Reserves</b>	482,614	321,744	321,743	321,743	1	40,218	40,218	0	0	160,871	33 %	160,871	33 %			
<b>Total Expenditures</b>	10,482,786	7,001,767	6,322,853	6,322,853	678,915	851,417	864,535	(13,118)	(13,118)	4,159,933	40 %	4,159,933	40 %			
<b>Net revenue over/(under) expenditures</b>	0	(1,592,973)	(727,239)	(727,239)	865,734	(846,067)	(716,186)	129,881	129,881	(727,239)	0 %	(727,239)	0 %			

**CVMVCD**  
Balance Sheet  
As of 2/28/2019  
(In Whole Numbers)

		Current Year
<b>Assets</b>		
Cash and Investments		
1000	Cash - Investments	12,289,258
1016	Petty Cash	500
1017	Petty Cash Checking	1,500
1025	First Foundation - General	28,635
1026	First Foundation - Payroll	55,724
	Total Cash and Investments	12,375,617
Current Assets		
1050	Accounts Receivable	24,615
1085	Inventory	632,699
1168	Prepaid Insurance	118,126
1169	Deposits	1,039,269
	Total Current Assets	1,814,709
Fixed Assets		
1300	Equipment/Vehicles	1,870,816
1310	Computer Equipment	417,111
1311	GIS Computer Systems	301,598
1320	Office Furniture & Equipment	1,218,125
1330	Land	417,873
1335	Oleander Building	5,665,862
1336	Signage	23,651
1340	Structures & Improvements	3,026,126
1341	Bio Control Building	6,963,768
1342	Bio Control Equip/Furn	32,034
1399	Accumulated Depreciation	(9,211,140)
	Total Fixed Assets	10,725,824
Other Assets		
1520	Resources to Be Provided	3,514,102
1525	Deferred Outflows of Resources	1,284,772
1530	Deferred Outflows of Resources - OPEB	312,420
1900	Due to/from	0
	Total Other Assets	5,111,294
	Total Assets	30,027,444
<b>Liabilities</b>		
Short-term Liabilities		
Accounts Payable		
2015	Credit Card Payable	122,508
2020	Accounts Payable	111,394
2030	Accrued Payroll	(4,276)
2035	Fundware AP Clearing	1
2040	Payroll Taxes Payable	(1,293)

**CVMVCD**  
Balance Sheet  
As of 2/28/2019  
(In Whole Numbers)

		Current Year
2175	Claims/Judgements Payable	(442)
2185	Employee Dues	(103)
	Total Accounts Payable	227,790
	Total Short-term Liabilities	227,790
	Long-term Liabilities	
2100	Pollution Remediation Obligation	2,100,000
2200	Net Pension Liability	1,763,285
2210	Deferred Inflows of Resources	131,145
2300	Net OPEB Liability	877,253
2500	Compensated Absences Payable	662,567
	Total Long-term Liabilities	5,534,250
	Total Liabilities	5,762,040
	Fund Balance	
	Non Spendable Fund Balance	
3920	Investment in Fixed Assets	10,698,793
3945	Reserve for Prepaids & Deposit	1,373,799
3960	Reserve for Inventory	532,129
	Total Non Spendable Fund Balance	12,604,721
	Committed Fund Balance	
3965	Public Health Emergency	4,103,640
	Total Committed Fund Balance	4,103,640
	Assigned Fund Balance	
3910	Reserve for Operations	4,500,000
3925	Reserve for Future Healthcare Liabilities	877,253
3955	Thermal Remediation Fund	463,724
3970	Reserve for IT Replacement	277,991
3971	Reserve for Vehicle Replacement	344,376
	Total Assigned Fund Balance	6,463,344
	Unassigned Fund Balance	
3900	Fund Equity	1,513,538
3999	P&L Summary	(499)
	Total Unassigned Fund Balance	1,513,039
	Current YTD Net Income	
		(419,341)
	Total Current YTD Net Income	(419,341)
	Total Fund Balance	24,265,404
	Total Liabilities and Net Assets	30,027,444

## Human Resources

### Recruitment

- Recruitment has begun for the position of Administrative Clerk.
- Recruitment is continuing for the position of Seasonal Vector Control Operator.
- The District has extended an offer of employment for the position of Public Information Officer.

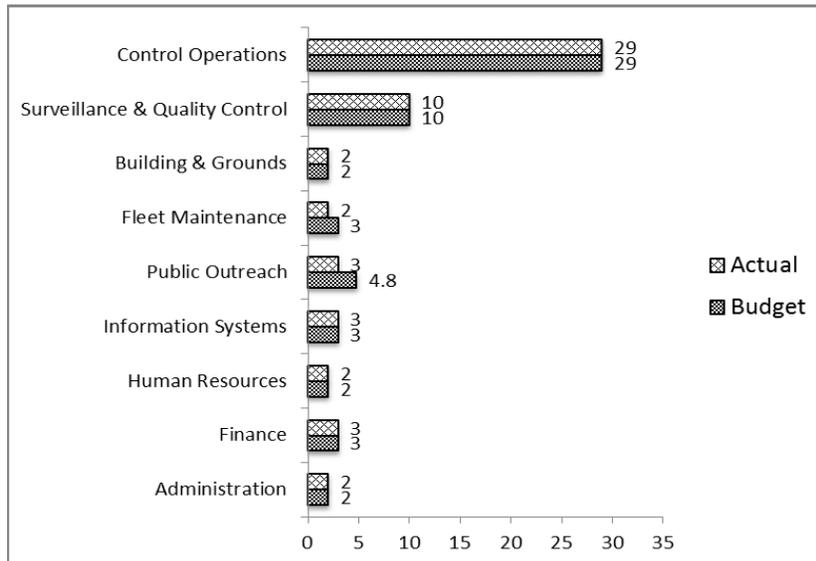
### New Employee

- *Paula Flores* began work in the position of Seasonal Vector Control Operator on March 4<sup>th</sup>.

### Training

- All District employees completed ALICE (Alert, Lockdown, Inform, Counter, Evacuate) Training online by November 16, 2018. ALICE provides preparation and a plan on how to more proactively handle the threat of an aggressive intruder or active shooter event. The District provided this training to employees through a Blended Learning Approach. The approach combines online e-Learning with onsite group instructor led training. The instructor led training, presented by Field Supervisor *Roberta Dieckmann* and Information Technology Manager *Edward Prendez*, ALICE Certified Instructors, took place November 29, 2018.
- *David l'Anson*, Administrative Finance Manager, *Kim Hung-Lyu*, Vector Ecologist, and *Crystal Moreno*, Human Resources Specialist, attended AB 1825 Sexual Harassment Training on January 15, 2019, presented by Employment Risk Management Authority (ERMA).
- Managers *Jeremy Wittie*, *Jennifer Henke*, *David l'Anson*, *Anita Jones*, *Jill Oviatt*, and *Edward Prendez* completed the required two hour Ethics Training mandated by AB 1234 online by February 15<sup>th</sup>. The training webinar was presented by California Special Districts Association (CSDA).

**Regular Employee Headcount by Program**



## Public Outreach Department

The Public Outreach Department took part in two fairs, gave four community presentations and tours, five student education events, published the District's annual report, and moved forward the District's rebranding project with the Board-approved logo.

- **November**

- Four Cathedral City High School juniors in the HEAL program spent the day with different District departments, observing and participating in using science to carry out vector surveillance, control, and education.
- Public Outreach Administrative Clerk *Diana Reyes* and Vector Control Technician I *Jonathan Zamaniago* staffed the District booth at the Mecca Fall Festival educating more than 100 people about mosquito threats and prevention.
- General Manager *Jeremy Wittie* and Jill Oviatt hosted a District tour for a legislative staff member from State Assemblymember Chad Mayes' office to help educate them on how their team could help us with our mission to protect Californians from vector-borne diseases.
- Field Supervisor *Oldembour Avalos* and *Jill Oviatt* provided an interactive training to 35 Coachella Valley Unified School District maintenance and custodial staff on mosquito prevention best practices using a backyard sources display.
- *Jeremy Wittie* provided an update on virus activity and District surveillance, control, and education strategies at the Thermal-Oasis Community Council meeting and at the Palm Springs Rotary Club meeting, reaching about 50 people.



- **December**

- Vector Ecologist *Kim Hung* mentored 70 students at the Cathedral City High School HEAL program Professional Interview Day.

- **January**

- *Jeremy Wittie* with the help of *Diana Reyes* judged the Coachella Valley and Desert Sands Unified School District Science Fairs, awarding two students the Best Entomologist for 2019 for their respective school districts. Nearly 2,000 people attended the awards presentation.
- A job shadow student from Coachella Valley High School started a 9-week program at the District, spending Tuesday mornings with different departments to learn how we use science to carry out the District mission.



- **February**

- 22 District staff covered booth shifts at the Riverside County Fair and National Date Festival over 10 days and 10 hours each day. The booth featured a live mosquito display, traps, an interactive video and touchscreen, a photo booth, two mosquito prevention routine games, and a mosquito scavenger hunt. During that time, staff interacted with about 2,000 residents.
- The District published its 2018 Annual Report and distributed printed copies to District Trustees, Coachella Valley government officials and stakeholders, and MVCAC stakeholders. The report is also posted on the District website.



## SURVEILLANCE AND QUALITY CONTROL MANAGEMENT PROGRAM

The vector-borne statewide surveillance program was established in 1969. The District began encephalitis surveillance in the early 1980s and the surveillance program has been in place since 1990. The District program includes the monitoring of vector and vector borne diseases and the implementation, evaluation and analysis of integrated vector management strategies in the Coachella Valley. Information generated by this department is used by District Operations staff to ensure control measures are efficiently implemented in the field.

### DISEASE SURVEILLANCE (As of 3/4/2019)

**California** – Last year West Nile virus activity in people was lower than in 2017 as well as lower than the five-year average. No activity has been reported in 2019. St Louis encephalitis virus was detected in fewer counties in 2018 than in 2017 (10 compared to 14), but there were approximately twice the number positive mosquito samples. There were 5 human cases in California, one more than in 2017.

**Coachella Valley** – Testing mosquitoes for arboviruses is being conducted at the District. Thus far in 2019 there have not been any mosquito samples that have tested positive for WNV or any other virus. Viruses in mosquitoes are usually first detected beginning in June, although earlier viruses detections have been made in the District during previous years.

### ENDEMIC MOSQUITO SURVEILLANCE

#### CO<sub>2</sub> TRAPS

During the normal mosquito season (March through mid-November) the District Laboratory staff maintains 109 CO<sub>2</sub> (carbon dioxide) traps through the District to monitor the mosquito populations. Extra emphasis is placed on mosquito species that are known to be vectors of virus that cause human disease. These vector species in the Coachella Valley are *Culex tarsalis* and *Cx. quinquefasciatus*. In the rural areas *Cx tarsalis* is the most abundant vector species. CO<sub>2</sub> traps release carbon dioxide to attract mosquitoes looking to obtain a blood meal and are very effective at collecting *Culex* mosquitoes. The average number of vectors captured per trap per night is monitored and used to guide operational activities of the District. The number of mosquitoes collected in half-month periods is compared to the previous 5-year average to determine anomalies in mosquito abundance. The surveillance program mosquito abundance is broadly reported in two areas – Urban and Rural. These Urban and Rural areas are also broken down into smaller zones to look at more specific regions of the Districts when planning mosquito control activities.

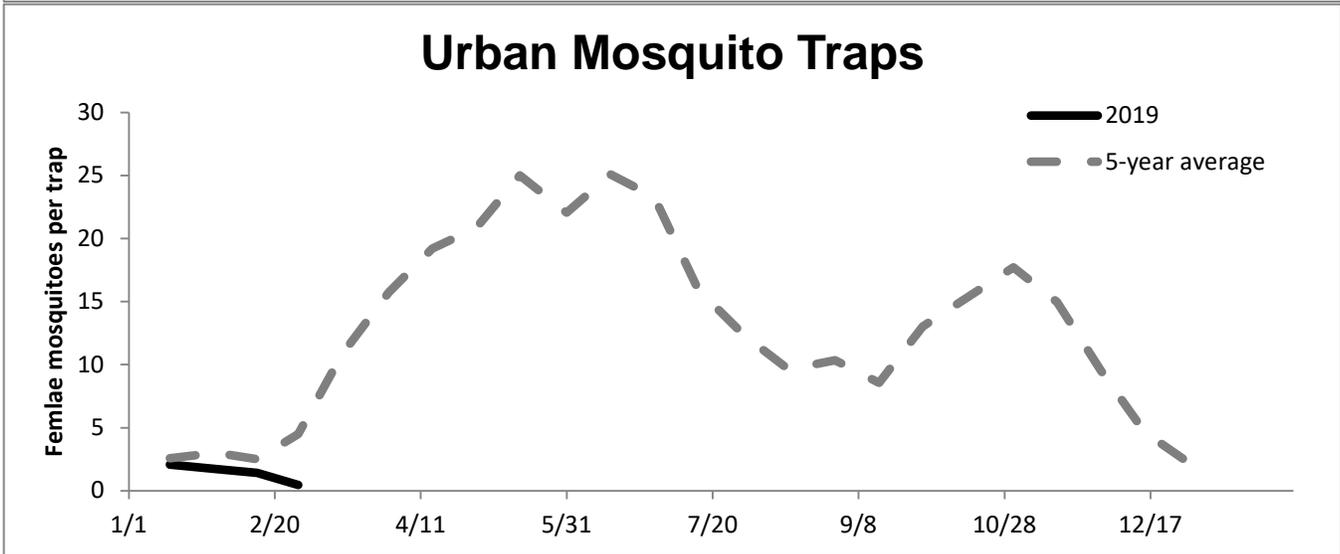
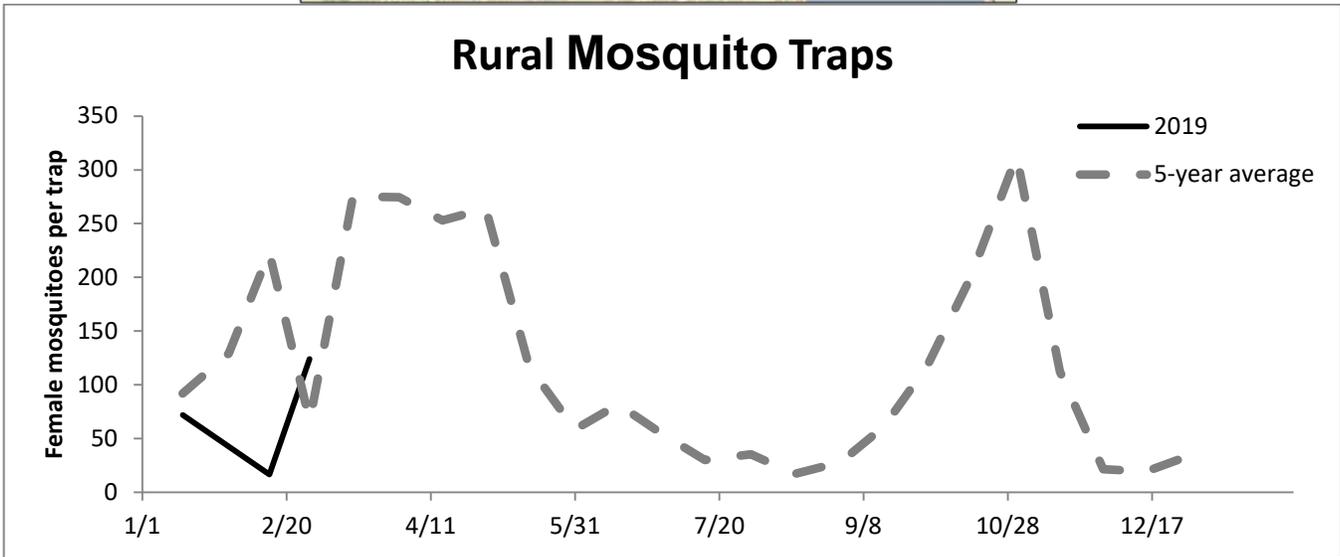
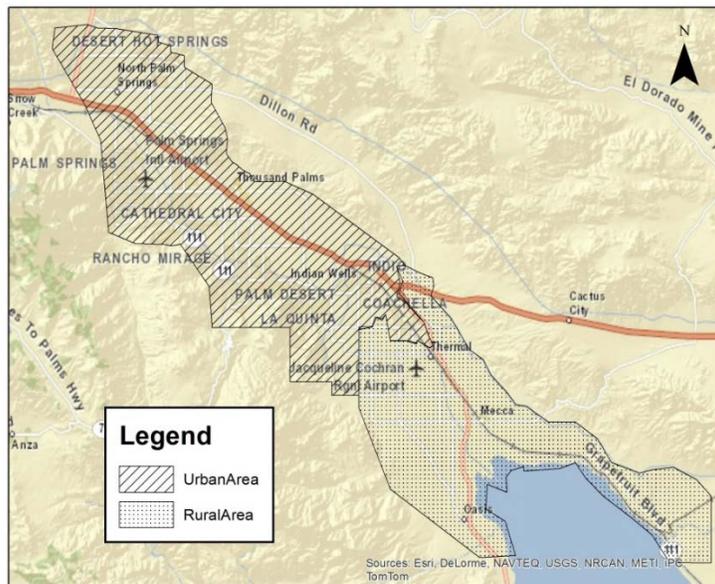


#### Gravid Traps

Gravid traps use water infused with organic matter such as alfalfa to attract mosquitoes looking to lay eggs. These traps are especially effective at collecting *Cx quinquefasciatus* mosquitoes, which are the primary disease vector in the urban areas of the District. However, other mosquito species, including *Cx tarsalis* are not attracted to these traps. Because of their use in targeting *Cx quinquefasciatus* mosquitoes these traps are placed in urban areas of Coachella Valley. The District currently uses gravid traps at 53 locations during the normal mosquito season.



# MOSQUITO SURVEILLANCE ZONES



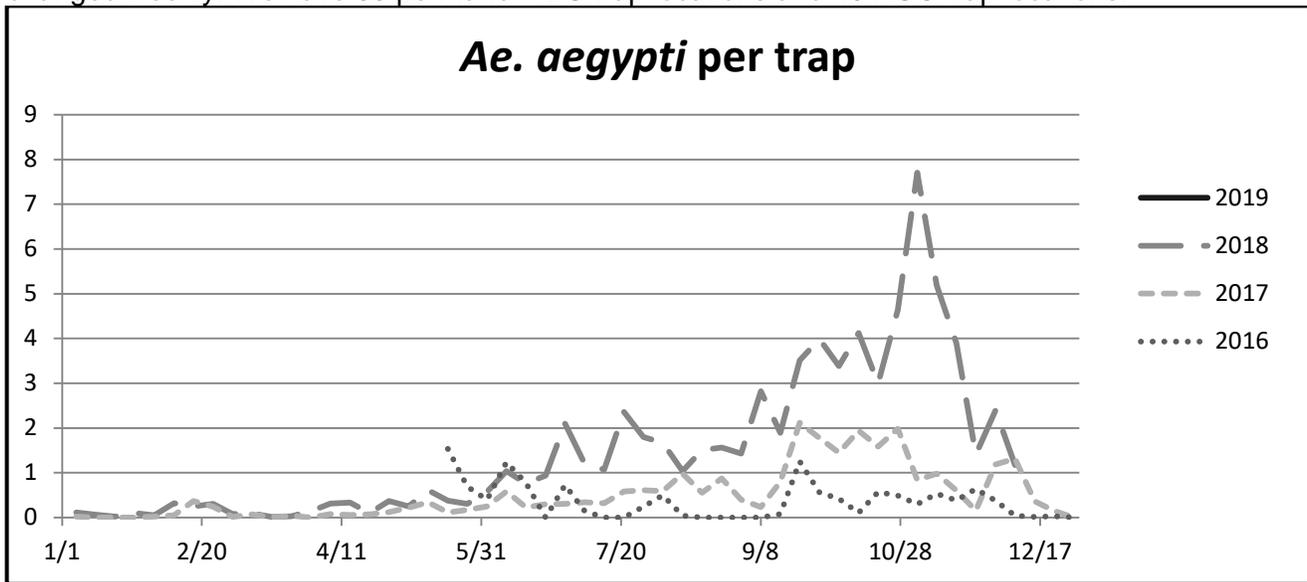
## EXOTIC MOSQUITO SURVEILLANCE

*Aedes aegypti* has been detected in 9 communities: Coachella (2 separate regions), Cathedral City, Indio, Palm Springs, La Quinta, Palm Desert, Mecca, Indian Wells, and Rancho Mirage. BG-Sentinel traps are deployed weekly at each region to detect and monitor for adult mosquitoes.

Autocidal Gravid Traps (AGO) are being used to provide an additional detection method for *Ae. aegypti*. AGO traps target the egg-laying adults and have been shown to be sensitive in areas where populations are low. AGO traps use an attractive bait made of week-old hay infusion to draw in gravid female mosquitoes. The mosquitoes are collected using a sticky trap and the trap and bait are changed weekly. We have 53 permanent BG trap locations and 40 AGO trap locations.



Left: BG Sentinel trap. Right: Autocidal Gravid Trap



## ENVIRONMENTAL COMPLIANCE

**NPDES.** The District submitted its Annual Report for 2018 to the State Water Resources Control Board and Colorado River Regional Water Quality Control Board on March 1 for compliance with the Clean Water Act's National Pollutant Discharge Elimination System Permit. The District also submitted its Annual Report to the Environmental Protection Agency for activities conducted on tribal property on February 15.

**CALIFORNIA ENVIRONMENTAL QUALITY ACT.** The District filed its Annual Report for 2018 in-house on February 1 as required by its Mitigated Negative Declaration for its Integrated Vector Management (IVM) Program. Overall, the District complied with the Mitigation Monitoring and Reporting Program, designed to ensure that the IVM Program does not have a significant impact on the environment.

**PESTICIDE ENVIRONMENTAL STEWARDSHIP PROGRAM.** The District filed its PESP report on its work completed being a steward of the environment while responsibly using pesticides on March 4.

## DEPARTMENT WORK

December through February is a lower mosquito activity period and a time when virus transmission is not expected. Staff brought in all traps from the field for a thorough repair and cleaning before re-deployment. Mosquito trapping began March 4.

At the Mosquito and Vector Control Association of California Annual Conference in January, members of the department gave five presentations. Laboratory Assistant II Arturo Gutierrez presented a poster on results of the sequential rotator trap. Laboratory Technician Michael Esparza presented a poster on the use of ovicups and the detections made in 2017 and 2018. Vector Ecologist Kim Hung presented a poster on the evaluation of EverGreen ULV 5-25 (active ingredients: pyrethrins and piperonyl butoxide), an adulticide that the District began using in 2018. Laboratory Manager Jennifer Henke presented on the truck larvicide applications for *Aedes aegypti* and on the community clean-up conducted in Mecca.

At the American Mosquito Control Association Conference in February, Biologist Chris Cavanaugh presented a poster on the use of BG-sentinel traps to expand our known area of *Aedes aegypti* activity. Kim Hung presented a poster on the evaluation of EverGreen ULV 5-25. Jennifer Henke presented posters on the truck larvicide applications and on the community clean-up. She also spoke about the MVCAC's partnership with California Department of Fish and Wildlife to evaluate water management methods to reduce mosquito populations. Jennifer met with the Science and Technology Committee and organized the poster judging competition.

## Operations Department Update

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### General Control Overview

This update covers the months of November 2018 through February 2019 contrasted with the same period in 2017 through 2018. The department's workflow was in three focus areas that included 14 urban and four rural and agricultural zones that were covered by 18 technicians. Two additional workflows are the Red Imported Fire Ants (RIFA) and the Invasive *Aedes* programs that were each assigned two full-time technicians, assisted by five seasonal staff on each program. Since the seasonal staff were hired in the months of September and October the Department plans to keep them until each of them exhausts their 890 hours for the season in the months of January through March 2019. The department intends to have the transition between two sets of seasonal staff in 2019 to happen after October instead of the month July as it has been routine in the past years. The months of July through October are very important in terms of mosquito and virus activity, and as was confirmed in 2018, *Aedes aegypti* activity. Further, this reporting season we report on the duck club activities whose season opened October 20<sup>th</sup>, 2018 and closed February 2<sup>nd</sup>, 2019. The strategy for this duck club season was focused on treatments as the flooding occurred away from the pre-treatment strategy of 2017 which helped with managing the amount of larvicide used, targeting breeding ponds.

### Mosquito Inspections and Control

The operations activities completed in the November 2018 through February 2019 were compared to similar months in 2017 and 2018 are as follows:

Month	Mosquito Inspections		Number of Applications	
	2018/19	2017/18	2018/19	2017/18
<b>November</b>	1,717	1,539	1,712	1,434
<b>December</b>	2,462	2,168	1,133	1,348
<b>January</b>	3,563	2,472	1,329	1,071
<b>February</b>	3,548	1,868	1,149	1,025
<b>Total</b>	11,290	8,047	5,323	4,878
<b>% Change</b>	40		9	

The month- to-month mosquito inspections in November 2018 through February 2019 has been running at 40 percent more compared to the same period in 2017/2018 with an additional 9 percent of actual chemical control applications in this period than the same period a year ago. The increased mosquito inspections and treatment in this reporting period compared to a year ago was anticipated by keeping field technicians in their work zones unlike the previous period where they were pulled from their zones to take over work left behind by seasonal staff that were laid off around December 2017. In addition, the approach in controlling mosquitoes in duck club habitats this reporting period was different than a year ago. The Operations department deliberately held back on pre-treatment of the duck clubs and engaged the duck club owners/caretakers more to know when the flooding occurred so that our treatments closely coincide with actual flooding. This approach helped our field staff to be proactive closely conducting surveillance and making our treatments more focused on flooded ponds and actual breeding impacting mosquito producing ponds this duck club season than a year ago.

### **The Red Imported Fire Ant Program**

The RIFA program inspections and chemical control applications in the months of November 2018 through February 2019 are compared to those conducted over the same period a year ago are shown below. The inspections and treatments for RIFA during this reporting period were significantly lower by more than twenty percent compared to the same period a year ago. This reduction in inspections and treatment was mostly due to the impact for scheduling of large properties than availability of the workforce. The source of this decline was the impact on the Call Center mostly due to the increased service request calls on biting caused by *Aedes aegypti* on local residents. The service request calls so overwhelmed the Call Center that large property RIFA scheduling rightfully became secondary focus than part of the primary obligation. This situation that started sometime in October has been extended due to the more wet winter season this year than last. Furthermore, the program will continue to focus on inspections and thorough baiting of RIFA to establish presence of infestation before treatment is conducted. Also, employee attention to following treatment guidelines closely to avoid treatments scheduled at the same time of ground irrigations.

	RIFA Inspections		RIFA Treatments	
	2018/19	2017/18	2018/19	2017/18
<b>November</b>	260	306	256	307
<b>December</b>	135	213	124	183
<b>January</b>	111	133	92	131
<b>February</b>	120	134	89	117
<b>Total</b>	626	786	561	738
<b>% Change</b>	-20		-24	

### Service Request

In the months of November 2018 through February 2019 Operations Department completed 497 Service Requests (SR) from residents compared to 608 Service Requests during the same period a year ago. The service request that affected RIFA scheduling occurred in the months of September and October. These two months generated 909 service requests compared to 760 calls the same period a year earlier. The service requests for this reporting period was mostly in response to RIFA and *Aedes*, however most of those a year ago were RIFA service request. The zone technicians handled most of the service requests, however the *Aedes* calls were handled by the invasive *Aedes* program and the RIFA calls from large properties were handled by the RIFA team.

### Control of *Aedes aegypti*

In March 2018, the Operations Department started conducting its inspections and control of *Aedes aegypti* by the Invasive *Aedes* Program of two full-time technicians assisted by five seasonal staff. The seasonal staff transitioned out starting early July and did not get a full squad until start of October. The impact can be seen in the number of inspections conducted in September compared to October 2018, from 580 in September to 1,596 inspections in October 2018. These inspections can be compared with those over the same months in 2017. The staff has been canvassing neighborhoods for properties infested with *Aedes aegypti* mosquitoes confirming presence of eggs, larvae, pupae and/or adults. The inspections and treatments over these two months were conducted mostly in the cities of Coachella, Indio, Cathedral City, Palm Springs, Palm Desert and Mecca. Treatments of properties against invasive *Aedes* is being conducted on properties identified by field staff and confirmed by the

Laboratory as positive for *Aedes aegypti*, and treatments of such properties include barrier sprays and residential fogging with larvicides and adulticides. Month-to-month records of inspections and treatments are as follows in the table below. The number of treatments for September and October 2018 were about half over the same period in 2017. The reduction in treatments over this period could be wholly attributed to treating properties that are positive or could potentially be positive for *Aedes aegypti*, and properties that had no potential of breeding or growing this mosquito were not treated.

	Invasive <i>Aedes</i> Inspections		Invasive <i>Aedes</i> Treatments	
	2018/19	2017/18	2018/19	2017/18
<b>November</b>	841	726	744	655
<b>December</b>	1,085	893	237	698
<b>January</b>	1,057	727	80	552
<b>February</b>	941	1,029	96	483
<b>Total</b>	3,924	3,375	1,157	2,397
<b>% Change</b>	16.3		-51.5	

In the months of November 2018 through February 2019 there were 16 percent more property inspections compared to the same period a year ago, however there were more than 50 percent fewer treatments than a year ago. The changes to the 2018 Comprehensive Invasive Aedes Response Plan required that properties be treated only if they had actual breeding or potential for breeding sources and/or resting locations. In addition, reduction in the number of treated properties coincided with several area-wide treatments using truck-mounted sprayers and aerial applications conducted against *Aedes aegypti* in the cities of Palm Springs and Mecca in the months of September and October 2018. These treatments

were quite effective on reducing sources and resulting in minimal or no findings of *Ae. aegypti* in the treated area for the rest of the season. Such area-wide treatment strategies shall form part of our 2019 invasive *Aedes* control strategy.

### **Proposed Activities for Operations Department**

1. Unmanned Autonomous Systems (Drone) program is underway with two operational UAS vehicles. The Operations, Lab, IT and Fleet departments staff are certified, the UAS vehicles are insured, and are operationally focused on aerial mapping of the shoreline areas.
2. Abatement Procedures and Policy being developed to be formally brought for Board consideration mid this year and implementation planned for the last quarter of 2019.

# Mosquito Habitats Treated

# Operations

11/1/2018 to 2/28/2019 Report



## 104 Agriculture APPLICATIONS

Applications	FORMULATION: DRY	Acreage
2	Bs	0.50
4	Bs/Bti	6.65
3	Bti	2.05
7	Methoprene	2.71
22	Spinosad	13.94
Applications	FORMULATION: LIQUID	Acreage
7	Bti	4.55
20	Methoprene	4.17
39	Spinosad	14.84



## 151 Duck Club APPLICATIONS

Applications	FORMULATION: DRY	Acreage
3	Bs/Bti	3.25
5	Bti	48.50
18	Methoprene	76.72
32	Spinosad	152.75
Applications	FORMULATION: LIQUID	Acreage
3	Bti	1.10
19	Methoprene	66.30
71	Spinosad	110.88



## 1,157 Invasive Aedes APPLICATIONS

Applications	FORMULATION: DRY	Acreage
352	Bti	2.59
2	Methoprene	0.00
1	Spinosad	0.00
Applications	FORMULATION: LIQUID	Acreage
352	Barrier	2.87
450	Fogging	170.88



## 4,587 Residential APPLICATIONS

Applications	FORMULATION: DRY	Acreage
3	Bs	2.50
27	Bs/Bti	0.07
60	Bti	3.17
1,327	Methoprene	6.18
1,586	Spinosad	12.72
Applications	FORMULATION: LIQUID	Acreage
324	(AE) surfactant	1.30
134	Bti	15.26
409	Methoprene	7.33
717	Spinosad	20.02



## 26 Salton Sea Marshes APPLICATIONS

Applications	FORMULATION: DRY	Acreage
7	Methoprene	160.02
4	Spinosad	155.00
Applications	FORMULATION: LIQUID	Acreage
8	Methoprene	19.46
7	Spinosad	7.18

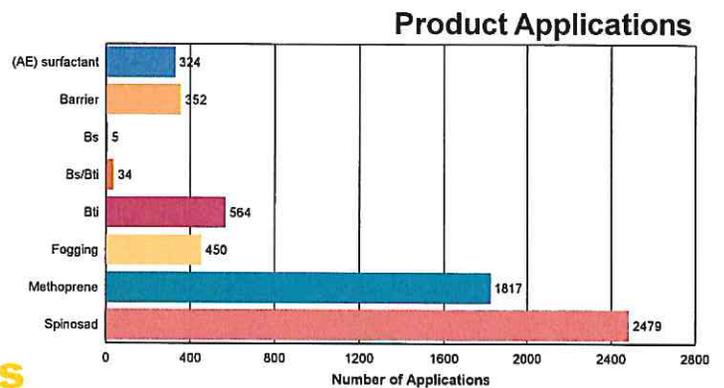
**(AE) surfactant** - reduces surface tension of water making it difficult for mosquito larvae and pupae to attach and causes them to drown

**BS (*Bacillus sphaericus*)** - soil-dwelling bacterium, used as a biological pesticide that during sporulation produce crystals that have insecticidal action when ingested by mosquito larvae

**BTI (*Bacillus thuringiensis israelensis*)** - soil-dwelling bacterium, commonly used as a biological pesticide that during sporulation produce crystal proteins that have insecticidal action when ingested by mosquito larvae

**Methoprene** - used as a biological pesticide that mimics natural juvenile hormone of insects and acts as a growth regulator. Juvenile hormone must be absent from mosquito pupa to molt to an adult. Mosquito pupae treated with Methoprene will be unable to successfully mature from pupae to the adult mosquito

**Spinosad** - a naturally-occurring soil-dwelling bacterium, *Saccharopholyspora spinosa*



## Product Breakdown

		Total		
		Count	Acreage	Cost
FORMULATION: DRY	<b>Total</b>	3,465	649.32	\$106,260.24
	Bs	5	3.00	\$160.77
	Bs/Bti	34	9.97	\$893.94
	Bti	420	56.31	\$1,056.47
	Methoprene	1,361	245.63	\$68,551.36
	Spinosad	1,645	334.41	\$35,597.70
	<b>Total</b>	2,560	446.14	\$27,098.21
FORMULATION: LIQUID	(AE) surfactant	324	1.30	\$51.61
	Barrier	352	2.87	\$23,664.90
	Bti	144	20.91	\$190.42
	Fogging	450	170.88	\$167.09
	Methoprene	456	97.26	\$795.32
	Spinosad	834	152.92	\$2,228.87
	<b>Total</b>	2,560	446.14	\$27,098.21

# Mosquito Habitats Treated

# Operations

11/1/2017 to 2/28/2018 Report



## 161 Agriculture APPLICATIONS

Applications	FORMULATION: DRY	Acreage
6	Bs/Bti	3.08
11	Bti	7.56
21	Methoprene	13.05
58	Spinosad	36.22
Applications	FORMULATION: LIQUID	Acreage
2	Bti	0.07
28	Methoprene	4.47
35	Spinosad	21.62



## 163 Duck Club APPLICATIONS

Applications	FORMULATION: DRY	Acreage
6	Bs/Bti	37.88
14	Bti	35.90
26	Methoprene	178.20
71	Spinosad	215.09
Applications	FORMULATION: LIQUID	Acreage
14	Bti	17.39
6	Methoprene	30.21
26	Spinosad	39.73



## 2,397 Invasive Aedes APPLICATIONS

Applications	FORMULATION: DRY	Acreage
742	Bti	6.02
Applications	FORMULATION: LIQUID	Acreage
742	Barrier	6.03
911	Fogging	326.31
2	Spinosad	0.01



## 3,982 Residential APPLICATIONS

Applications	FORMULATION: DRY	Acreage
26	Bs	0.05
19	Bs/Bti	0.19
93	Bti	0.36
1,354	Methoprene	4.16
1,660	Spinosad	7.78
Applications	FORMULATION: LIQUID	Acreage
191	(AE) surfactant	0.86
1	Barrier	0.10
73	Bti	0.49
1	Fogging	0.32
203	Methoprene	6.12
361	Spinosad	11.01

**(AE) surfactant** - reduces surface tension of water making it difficult for mosquito larvae and pupae to attach and causes them to drown

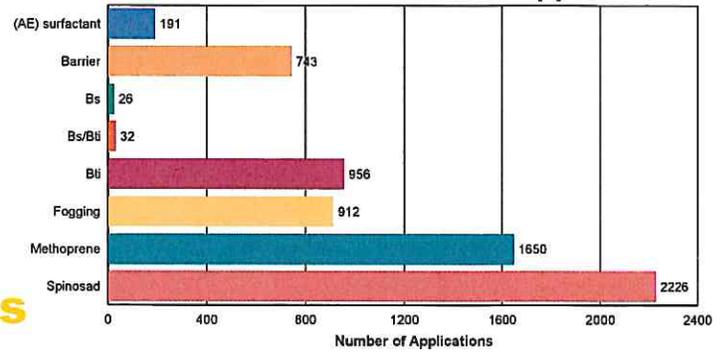
**BS (*Bacillus sphaericus*)** - soil-dwelling bacterium, used as a biological pesticide that during sporulation produce crystals that have insecticidal action when ingested by mosquito larvae

**BTI (*Bacillus thuringiensis israelensis*)** - soil-dwelling bacterium, commonly used as a biological pesticide that during sporulation produce crystal proteins that have insecticidal action when ingested by mosquito larvae

**Methoprene** - used as a biological pesticide that mimics natural juvenile hormone of insects and acts as a growth regulator. Juvenile hormone must be absent from mosquito pupa to molt to an adult. Mosquito pupae treated with Methoprene will be unable to successfully mature from pupae to the adult mosquito

**Spinosad** - a naturally-occurring soil-dwelling bacterium, *Saccharopolyspora spinosa*

Product Applications



Product Breakdown

		Total		
		Count	Acreage	Cost
FORMULATION: DRY	Total	4,131	746.88	\$131,599.30
	Bs	26	0.05	\$79.25
	Bs/Bti	32	41.46	\$3,510.68
	Bti	863	50.06	\$1,358.40
	Methoprene	1,412	387.98	\$103,962.65
	Spinosad	1,798	267.32	\$22,688.32
	Total	2,605	466.27	\$51,796.23
FORMULATION: LIQUID	(AE) surfactant	191	0.86	\$34.15
	Barrier	743	6.13	\$49,765.30
	Bti	93	19.12	\$92.23
	Fogging	912	326.63	\$319.88
	Methoprene	238	40.81	\$334.79
	Spinosad	428	72.72	\$1,249.87
	Total	2,605	466.27	\$51,796.23

# Operations

11/1/2018 to 2/28/2019 Report



## 226 Country Club

### APPLICATIONS

1,682.80 ACRES TREATED  
224 BROADCAST TREATMENTS  
2 SPOT TREATMENTS



## 26 Golf Course

### APPLICATIONS

2,143.24 ACRES TREATED  
26 BROADCAST TREATMENTS



## 293 Homeowner

### APPLICATIONS

66.52 ACRES TREATED  
293 BROADCAST TREATMENTS



## 7 Park

### APPLICATIONS

14.54 ACRES TREATED  
7 BROADCAST TREATMENTS



## 9 School

### APPLICATIONS

45.38 ACRES TREATED  
9 BROADCAST TREATMENTS

### Red Imported Fire Ant



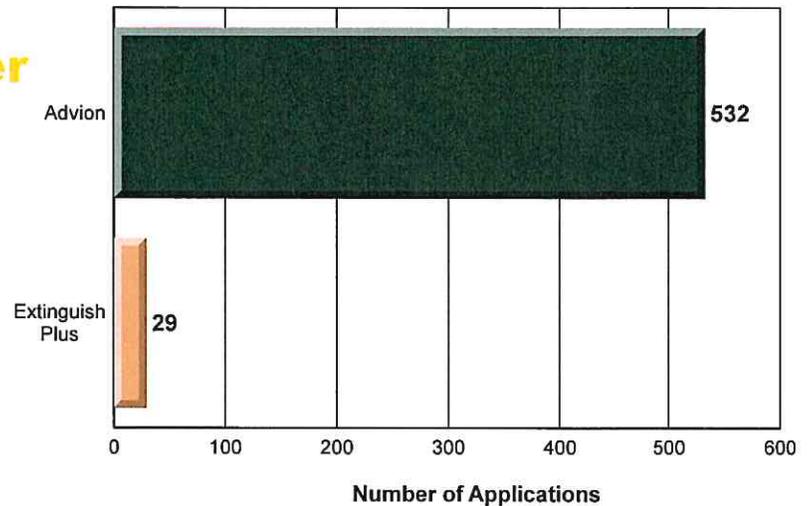
### Scientific classification

Kingdom: Animalia  
Phylum: Arthropoda  
Class: Insecta  
Order: Hymenoptera  
Family: Formicidae  
Genus: *Solenopsis*  
Species: *invicta*

### Binomial name

*Solenopsis invicta*  
(Buren, 1972)

### Product Applications



### Product Breakdown

		Advion	Extinguish Plus
Total	Acreage	1775.28	2177.20
	Amount (lbs.)	2,663.43	3,265.87
	Cost	\$ 25,196.04	\$ 21,032.20

ADVION® fire ant bait may be used to control imported fire ants, bigheaded ants\* and pavement ants\* in noncrop/nongrazed areas such as residential lawns, golf courses, recreational areas, industrial sites and other similar areas where imported fire ants, bigheaded ants and pavement ants are found. Rainfall or irrigation within 2 to 3 hours after application may reduce the effectiveness of ADVION® fire ant bait and a repeat application within 7 days may be necessary to achieve the desired level of control.

EXTINGUISH® PLUS is highly attractive to imported and native fire ants and other ants. Worker ants carry the bait into the mound as food for the colony. The ants will then begin feeding the bait to the rest of the colony. They eat it and feed it to the queen. EXTINGUISH® PLUS is a unique product containing a slow acting insecticide and an Insect Growth Regulator (IGR). This two-way action ensures complete control of fire ants. The IGR prevents rebound of the colony, while the insecticide insures rapid demise of the colony. EXTINGUISH® PLUS will start to kill ants after they feed on the bait. The colony will begin to decline in about a week, after the bait has been brought back to the mound. The mound is destroyed when the queen dies.

# Operations

11/1/2017 to 2/28/2018 Report

## Red Imported Fire Ant



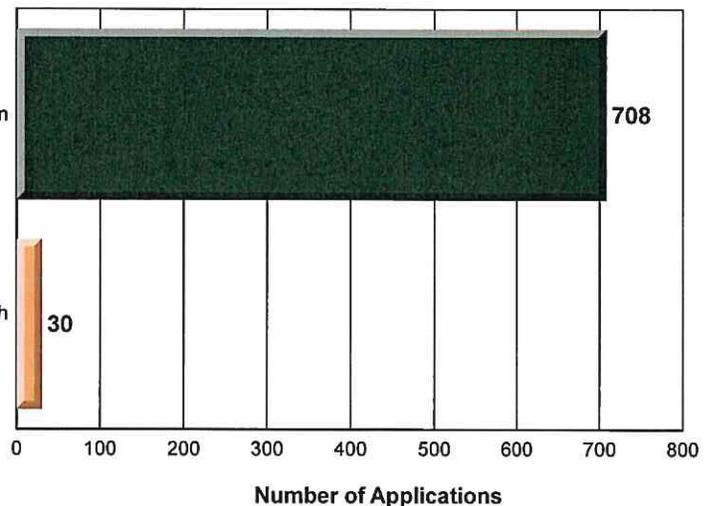
### Scientific classification

Kingdom: Animalia  
 Phylum: Arthropoda  
 Class: Insecta  
 Order: Hymenoptera  
 Family: Formicidae  
 Genus: *Solenopsis*  
 Species: *invicta*

### Binomial name

*Solenopsis invicta*  
 (Buren, 1972)

## Product Applications



## 159 Country Club

### APPLICATIONS

1,441.21 ACRES TREATED  
 155 BROADCAST TREATMENTS  
 4 SPOT TREATMENTS



## 31 Golf Course

### APPLICATIONS

2,479.40 ACRES TREATED  
 31 BROADCAST TREATMENTS



## 430 Homeowner

### APPLICATIONS

90.11 ACRES TREATED  
 427 BROADCAST TREATMENTS  
 3 SPOT TREATMENTS



## 33 Park

### APPLICATIONS

277.68 ACRES TREATED  
 33 BROADCAST TREATMENTS



## 85 School

### APPLICATIONS

609.58 ACRES TREATED  
 85 BROADCAST TREATMENTS

## Product Breakdown

		Advion	Extinguish Plus
<b>Total</b>	<b>Acres</b>	2419.90	2478.08
	<b>Amount (lbs.)</b>	3,630.30	3,717.12
	<b>Cost</b>	\$ 34,342.62	\$ 23,938.22

ADVION® fire ant bait may be used to control imported fire ants, bigheaded ants\* and pavement ants\* in noncrop/nongrazed areas such as residential lawns, golf courses, recreational areas, industrial sites and other similar areas where imported fire ants, bigheaded ants and pavement ants are found. Rainfall or irrigation within 2 to 3 hours after application may reduce the effectiveness of ADVION® fire ant bait and a repeat application within 7 days may be necessary to achieve the desired level of control.

EXTINGUISH® PLUS is highly attractive to imported and native fire ants and other ants. Worker ants carry the bait into the mound as food for the colony. The ants will then begin feeding the bait to the rest of the colony. They eat it and feed it to the queen. EXTINGUISH® PLUS is a unique product containing a slow acting insecticide and an Insect Growth Regulator (IGR). This two-way action ensures complete control of fire ants. The IGR prevents rebound of the colony, while the insecticide insures rapid demise of the colony. EXTINGUISH® PLUS will start to kill ants after they feed on the bait. The colony will begin to decline in about a week, after the bait has been brought back to the mound. The mound is destroyed when the queen dies.

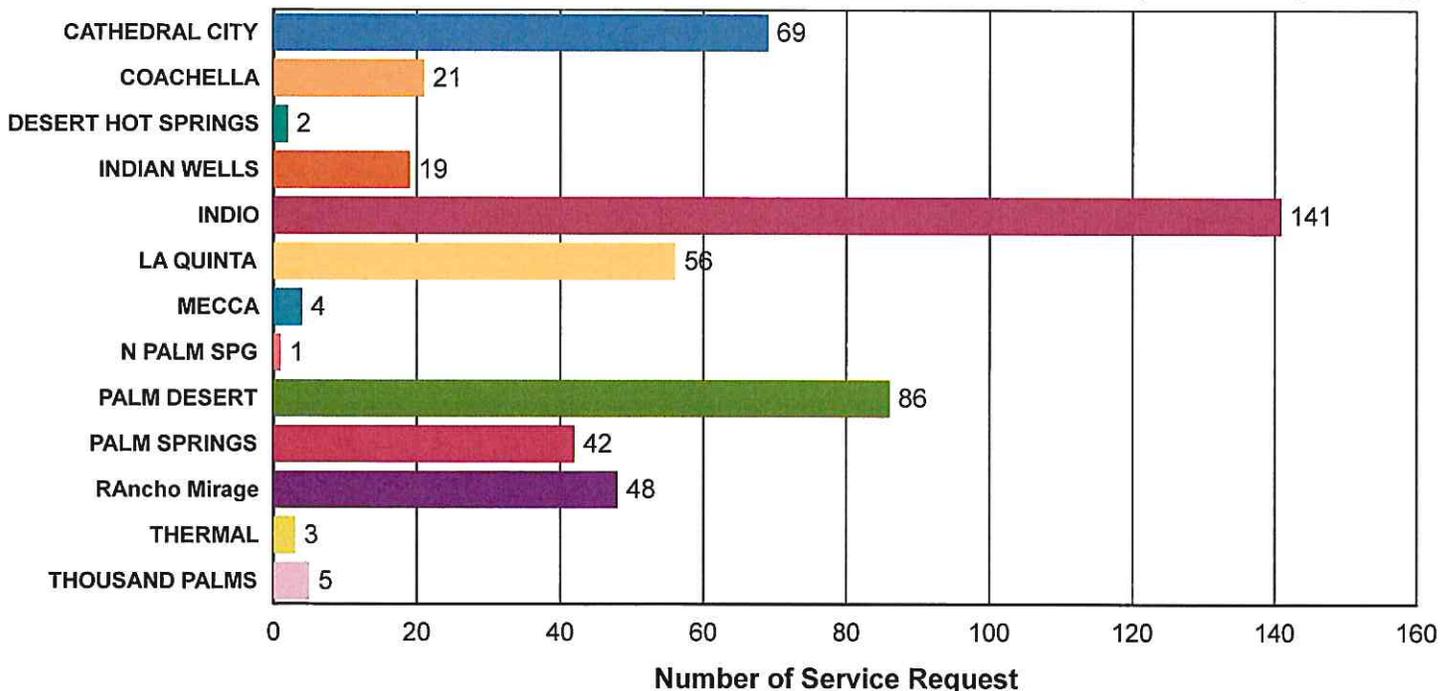
# Service Request Operations

11/1/2018 to 2/28/2019 Report

## Service Request Types

	TOTAL	STANDING WATER	NEGLECTED POOL	FLY/EYE GNATS	MOSQUITO	RODENTS	BEEES	RIFA
TOTAL	497	25	45	2	94	6	9	316
CATHEDRAL CITY	69	5	10	0	12	1	1	40
COACHELLA	21	1	0	0	15	0	0	5
DESERT HOT SPRINGS	2	0	2	0	0	0	0	0
INDIAN WELLS	19	0	1	0	1	1	1	15
INDIO	141	5	9	1	31	1	5	89
LA QUINTA	56	2	2	0	11	0	1	40
MECCA	4	3	0	0	1	0	0	0
N PALM SPG	1	0	0	0	0	0	0	1
PALM DESERT	86	5	7	0	17	2	1	54
PALM SPRINGS	42	3	11	1	2	1	0	24
RAAncho Mirage	48	0	3	0	4	0	0	41
THERMAL	3	1	0	0	0	0	0	2
THOUSAND PALMS	5	0	0	0	0	0	0	5

## Service Request by City



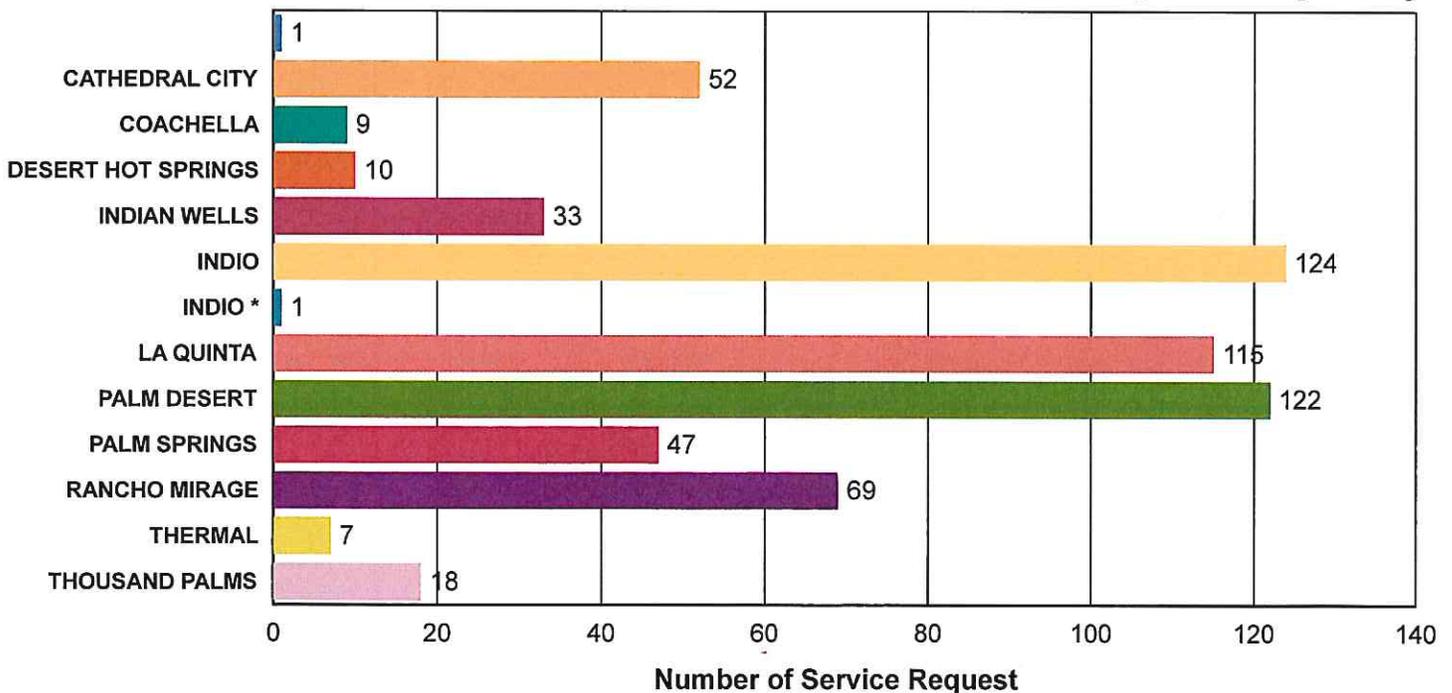
# Service Request Operations

11/1/2017 to 2/28/2018 Report

## Service Request Types

	TOTAL	STANDING WATER	NEGLECTED POOL	FLY/EYE GNATS	MOSQUITO	RODENTS	BEEES	RIFA	OTHER
TOTAL	608	12	39	13	40	14	8	480	2
	1	0	0	1	0	0	0	0	0
CATHEDRAL CITY	52	2	3	0	3	0	0	44	0
COACHELLA	9	0	0	1	2	1	0	5	0
DESERT HOT SPRINGS	10	0	2	1	1	0	4	2	0
INDIAN WELLS	33	1	3	1	1	3	0	24	0
INDIO	124	3	4	0	12	1	1	102	1
INDIO *	1	0	0	0	0	0	0	0	1
LA QUINTA	115	1	10	4	6	2	2	90	0
PALM DESERT	122	1	5	2	4	5	1	104	0
PALM SPRINGS	47	2	8	0	4	0	0	33	0
RANCHO MIRAGE	69	1	4	0	2	1	0	61	0
THERMAL	7	0	0	2	4	0	0	1	0
THOUSAND PALMS	18	1	0	1	1	1	0	14	0

## Service Request by City



## INFORMATION TECHNOLOGY

Heavy rain knocked out the power in the Trader Place Area on the weekend of January 12, 2019. The District was without power for two hours. Two employees were on property during the outage. The backup generator for the Laboratory started up as designed. The backup APC Battery Devices supplied power to the District Servers until power was restored.

We received the first Cisco Catalyst 9300 stackable network switch, which was recently recognized as CRN's 2018 Overall Network Product of the Year. Built for security, IoT, and the cloud, these network switches form the foundation for Cisco's Software-Defined Access and are to be the backbone of the District Network Infrastructure.



IT department staff reached out to Microsoft's Technical Support unit to assist in troubleshooting Windows Update Services (WSUS), previously known as Software Update Services (SUS), is a computer program developed by Microsoft Corporation that enables administrators to manage the distribution of updates and hotfixes released for Microsoft products to computers in a corporate environment. During the Technical Support call, Group Policies were recreated to properly distribute Windows Update Policies. Computers and Servers are now again receiving updates from the Windows Update Services Server.

## FLEET SERVICES

The 2018 Annual Fleet Smog Check was submitted. Vehicles subject to smog for calendar year 2018:



- 1976-2012 Gasoline vehicles that have a VIN (Vehicle Identification Number) that ends with an even number.
- 1998-2017 Diesel vehicles that have a VIN that ends with an even number and a GVWR (Gross Vehicle Weight Rating) under 14,001 lbs.

Fourteen vehicles were subject to the Smog Check and all passed.

South Coast Air Quality management District (SCAQMD) Rule 461 requires owners or operators of gasoline dispensing facilities to submit their facility monthly gasoline throughput data for the previous calendar year to the Executive Officer by March 1 of the following year. The District did not receive the Notice to Report due to change of address. The District was able to submit the throughput for 2017 before any penalties were incurred and submitted 2018's on time.



**FLEETMATE Maintenance Data**  
**Date Range: November 2018 –February 2019**

VEHICLE TYPE	AGE CATEGORY	AVGERAGE REPAIR COST	COUNT OF WORK ORDERS	WORK ORDER TOTAL
FLEET	1-5	\$ 94.43	45	\$ 4,249.25
	6-10	\$ 80.22	7	\$ 561.51
	11-15	\$ 123.97	26	\$ 3,223.20
	16-20	\$ 49.50	2	\$ 98.99
OFFROAD	1-5	\$ 43.61	14	\$ 610.61
	6-10	\$ 299.78	5	\$ 1,498.88
	11-15	\$ 65.51	6	\$ 393.05
	>21	\$ 7.05	1	\$ 7.05
<b>Grand Total</b>			<b>106</b>	<b>\$ 10,642.53</b>

Count of Work Orders Completed		
Years	Month	Total
2018	Nov	19
	Dec	29
2019	Jan	33
	Feb	25
<b>Grand Total</b>		<b>106</b>



**Coachella Valley Mosquito and Vector  
Control District**

**March 12, 2019**

**Staff Report**

**Agenda Item:** Items of General Consent

Approval for General Manager Jeremy Wittie, to sign a one year contract extension with Willdan Financial Services, to provide engineering support services for the District's benefit assessment – **David l'Anson, Administrative Finance Manager**

**Background:**

The District, according to the provisions of California Constitution Article XIID (proposition 218), is required to contract with an Engineer certified by the State of California to administer the Benefit Assessment.

A Request for Proposals (RFP) for Assessment Engineering and Professional Benefit Assessment and Special Taxes Administration Services was issued on February 27, 2018, and the Board approved to contract with Willdan Financial Services in April 2018. The firm has been providing engineering support services for the District's benefit assessment for the past ten years. The service provided by Willdan has been very good and the District is satisfied with their work. Their proposal for FY 19-20 services is in the amount of \$13,963.00. Funds will be allocated for engineering services in the FY 19-20 Budget

**Staff Recommendation:**

Approval of one year contract extension with Willdan Financial Services.

**Fiscal Impact:**

FY2018-19 Budget	Current Available Funds	Proposed Expense Fiscal Year 2019/20	Remaining Available Funds
<b>6095.01.200.000</b>			
<b>\$96,000</b>	<b>N/A</b>	<b>*\$13,963</b>	

\*Expense is for fiscal year 2019-2020



**Coachella Valley Mosquito and Vector  
Control District**

**Staff Report**

**March 12, 2019**

**Agenda Item:** Items of General Consent

Approval to contract with Ceja Security International (CSI) for security services for the District headquarters for one year in an amount not to exceed \$975.00 per month, from Fund #7675.01.305.000, Contract Services – Budgeted; Funds Available **David I’Anson, Administrative Finance Manager**

**Background:**

The District has contracted with CSI, formerly Serna & Associates, for four years. CSI provides roving patrols during the weeknights and at all hours during the weekends. CSI performs door check on a nightly basis and any unusual event is reported and documented. The patrols cover the employee parking lots, fleet parking areas and the entire back lot of the District. In the event of an alarm, CSI is the first to be notified by Desert Alarm’s Central Station before Indio Police is dispatched. CSI also provides security services during the Board of Trustee’s Meetings. Annual expense is \$11,700 and is budgeted accordingly.

**Staff Recommendation:**

Staff recommends contracting with CSI for security services for the District headquarters for one year in an amount not to exceed \$975 per month.

**Fiscal Impact:**

FY2018-19 Approved Budget <b>7675.01.305.000</b>	Current Available Funds	Proposed Expense	Remaining Available Funds
<b>\$45,732</b>	<b>\$8,194</b>	<b>*\$3,900</b>	<b>\$4,294</b>

\*For fiscal year 2018-19 the expense is \$3,900 (March to June)



**Coachella Valley Mosquito and Vector  
Control District**

**March 12, 2019**

**Staff Report**

**Agenda Item:** Items of General Consent

Approval to renew annual maintenance contract with ESRI in an amount not to exceed \$19,000.00, from Fund #7675.01.210.000, Computer and Network Systems Maintenance Contracts – **Edward Prendez, Information Systems Manager**

**Background:**

The maintenance contract includes:

Product	Maintenance	Start Date	End Date	Term	Price
ArcGIS Desktop Advanced Concurrent Use	Primary Maintenance	4/22/2019	04/21/2020	12 Months	\$3,000
ArcGIS Desktop Standard Concurrent Use	Primary/Secondary Maintenance	4/22/2019	04/21/2020	12 Months	\$2,700
ArcGIS Desktop Basic Concurrent	Primary/Secondary Maintenance	4/22/2019	04/21/2020	12 Months	\$1,700
ArcGIS Server Advanced Enterprise	Up to Four Cores Maintenance	4/22/2019	04/21/2020	12 Months	\$10,000
Total (including tax)					\$18,184.00

The contract period runs from April to April, the financial calendar is July to June. This item will be a **prepaid expenditure** and is budgeted. For FY 2018-2019 the expense will be \$4,750.00 from budget line # 7675.01.210.000 – Computer and Network Systems Maintenance Contracts.

**Staff Recommendation:**

Approve purchase of annual maintenance contract from ESRI at a cost not to exceed \$19,000.00.

**Fiscal Impact:**

FY2018-19 Amended Budget <b>7675.01.210.000</b>	Current Available Funds	Proposed Expense From Current FY	Remaining Available Funds
<b>\$53,000</b>	<b>\$36,509</b>	<b>\$4,750</b>	<b>\$31,759</b>

	<p><b>Coachella Valley Mosquito and Vector Control District</b></p> <p><b>Staff Report</b></p>	<p><b>March 12, 2019</b></p>
<p><b>Agenda Item:</b> Items of General Consent</p> <p>Approval of Resolution 2019-03 designating the week of April 21-27, 2019, as Mosquito Awareness Week – <b>Jill Oviatt, M.C.D.M., Public Information Manager</b></p>		
<p><b>Background:</b></p> <p>The District has been responding to the threat posed by West Nile virus (WNV) since 2003 when it was detected in Imperial County, and later years spread through California. In addition, St. Louis encephalitis virus returned to the Valley in 2015 and has been steadily detected in Valley mosquitoes since then. In May 2016, the Valley was confronted by a new threat with the detection of the invasive mosquito species, <i>Aedes aegypti</i>, which has the potential to transmit serious viruses such as chikungunya, dengue, and Zika. Passing of this resolution helps to inform and educate the public as to the current health threat of existing and emerging diseases transmitted by mosquitoes, what they can do to prevent mosquito habitats, and assures the public of the District’s dedication to our mission and role in creating environmentally sound vector control.</p>		
<p><b>Staff Recommendation:</b></p> <p>Staff recommends the acceptance and adoption of Resolution 2019-03.</p>		
<p><b>Fiscal Impact:</b></p> <p>N/A</p>		

**RESOLUTION NO. 2019-03**

**A RESOLUTION OF THE BOARD OF TRUSTEES OF THE  
COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL  
DISTRICT DECLARING APRIL 21-27, 2019,  
MOSQUITO AWARENESS WEEK**

**WHEREAS**, the Coachella Valley Mosquito and Vector Control District (“District”) was established in 1928 as an independent special district by the Riverside County Board of Supervisors; and

**WHEREAS**, the District’s mission is to reduce the risk of disease transmission by mosquitoes and other vectors to protect Coachella Valley residents and visitors; and

**WHEREAS**, the District recognizes that West Nile and St. Louis encephalitis viruses can lead to serious mosquito-borne diseases that can result in debilitating cases of meningitis and encephalitis and death to people, horses, avian species, and other wildlife; and

**WHEREAS**, an invasive mosquito species, *Aedes aegypti*, which is capable of transmitting deadly viruses to people has been detected in eight Coachella Valley cities; and

**WHEREAS**, a safe and environmentally sound procedure needs to be used in the control of mosquitoes; and

**WHEREAS**, the State Department of Public Health and the Centers for Disease Control and Prevention predict that mosquito-borne viruses will, as they have previously, pose a grave public health threat in California in 2019; and

**WHEREAS**, adequately funded mosquito and vector control, disease surveillance, and public awareness programs are the best way to prevent outbreaks of West Nile virus and other diseases borne by mosquitoes and other vectors; and

**WHEREAS**, educational programs have been developed for schools, civic groups, businesses, and government agencies in order to help the public understand how to protect themselves from mosquito-borne threats by staying indoors when mosquitoes are most active, wearing pants and long-sleeved shirts, using repellents containing EPA-registered active ingredients, eliminating standing water where mosquitoes lay eggs, and alerting the community about the presence of significant mosquito infestations and virus activity; and

**WHEREAS**, “Mosquito Awareness Week” will increase the public’s awareness which can result in reduced production of mosquitoes and other vectors on private, commercial, and public lands by responsible parties, the reduction of mosquitoes bites when the risk of disease transmission is high, the detection of human cases of mosquito and vector-borne diseases that may otherwise be misdiagnosed due to a lack of knowledge and appropriate laboratory testing, and the formation of mosquito or vector control agencies where needed; and

**WHEREAS**, the California State Legislature and the Mosquito and Vector Control Association of California have designated the week of April 21 through April 27, 2019, as “Mosquito Awareness Week” in the State of California.

**NOW, THEREFORE**, be it resolved by the Board of Trustees of the Coachella Valley Mosquito and Vector Control District that:

**Section 1. Recitals.**

The Recitals set forth above are true and correct.

**Section 2. Declaration of Mosquito Awareness Week.**

The Week of April 21-27, 2019, be declared as Mosquito Awareness Week.

**Section 3. Severability.**

Should any provision, section, paragraph, sentence or word of this Resolution be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this Resolution as hereby adopted shall remain in full force and effect.

**Section 4. Repeal of Conflicting Provisions.**

All the provisions heretofore adopted by the District or the Board of Trustees that are in conflict with the provisions of this Resolution are hereby repealed.

**Section 5. Effective Date.**

This Resolution shall take effect upon its adoption.

**Section 6. Certification.**

The Clerk of the Board shall certify as to the adoption of this Resolution and shall cause the same to be processed in the manner required by law.

**[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]**

**PASSED, ADOPTED AND APPROVED, this 12th day of March, 2019.**

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**Doug Hassett, President  
Board of Trustees**

**ATTEST:**

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**Graciela Morales, Clerk of the Board**

**APPROVED AS TO FORM:**

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**Lena D. Wade, General Counsel**

**REVIEWED:**

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**Jeremy Wittie, MS, General Manager**



**Coachella Valley Mosquito and Vector  
Control District**

**March 12, 2019**

**Staff Report**

**Agenda Item:** Items of General Consent

Approval to contract with Aerial Services for aerial reconnaissance services of the Coachella Valley’s urban areas for neglected water features, in the amount not to exceed \$18,500.00, from Fund #7570.01.210.000, Aerial Surveillance – **Edward Prendez, Information Technology Manager**

**Background:**

Neglected water features can become breeding sources for mosquitoes that can potentially transmit West Nile Virus, a serious, life-altering, and even fatal disease. The District is taking a proactive approach to this problem by contracting with aerial service providers, who utilize digital photography and global positioning system (GPS) coordinates, to identify and mark neglected water features in the Coachella Valley.

Aerial Services has provided the District with simple to use datasets in a variety of formats which allow District Staff to quickly identify unknown breeding sources. The dataset created by Aerial Services are delivered on time and are accessible over the Internet via their File Transfer Protocol (FTP) Server. The FTP Server provides the IT/GIS Department with easy-to-use method of transferring the large number of files to begin reviewing and distributing to the Operations Department.

**Staff Recommendation:**

Staff recommends entering into a professional service agreement for aerial reconnaissance services of the Coachella Valley’s urban areas for neglected water features, in the amount not to exceed \$18,500.00.

**Fiscal Impact:**

FY2018-19	Current Available Funds	Proposed Expense	Remaining Available Funds
<b>7570.01.210.000</b>			
<b>\$25,000</b>	<b>\$25,000</b>	<b>\$18,500</b>	<b>\$7,000</b>

**SECTION  
12**



**OLD BUSINESS**



**Coachella Valley Mosquito and Vector  
Control District**

**March 12, 2019**

**Staff Report**

**Agenda Item:** Old Business

Discussion regarding the District's vacant land located adjacent to the District's main campus. **Jeremy Wittie, MS General Manager**

**Background:**

At the November 13, 2018 meeting, CVAG staff presented an update on CV Link, a multi-modal pathway across the Coachella Valley that is designed to provide safe access and connectivity for pedestrians, bicyclists, and low-speed electrical vehicles. As it was noted in the staff report, CVAG had inquired about the possibility of creating an access point on part of the Coachella Valley Mosquito Vector Control District's vacant property that is adjacent to the headquarters.

At that meeting, CVAG presented three options for the access point and requested an easement from the District to construct the access point for CV Link. District board members generally preferred an option that located the easement located furthest away from the District main campus so as not to hinder any potential expansion of the District's headquarters. The District also authorized the General Manager to negotiate some form of an agreement with CVAG.

Based on discussions with CVAG, consultation with District's Legal counsel, and the discovery of several issues surrounding the District's owned vacant land the following course of action is being proposed:

1. Recommend the formation of an ad hoc property committee
2. The ad hoc committee can review and discuss:
  - a. CVAG's current proposal and appraisal for the easement being requested.
  - b. Explore options regarding the vacant land and current road and access issues
  - c. Draft a long term plan for the vacant land that best addresses future operational and financial needs of the District.
3. The ad hoc committee to work over the course of the next several months and report back to the full board in June 2019 with recommendations regarding the CVAG proposal and update on the status of a long term plan for the District's vacant property.

**Staff Recommendation:**

That the Board of Trustees take whatever action deemed necessary.

**SECTION**  
**13**



**NEW BUSINESS**



**Coachella Valley Mosquito and Vector  
Control District**

**March 12, 2019**

**Staff Report**

**Agenda Item:** New Business

Approval to develop a new District website in an amount not to exceed \$15,000 from Capital Replacement Budget Fund 8415.13.210.000. – **Jill Oviatt, M.C.D.M., Public Information**

**Manager**

**Background:** One of the Public Outreach Department goals for the current fiscal year is to develop a District website that is more user friendly, updated to align with website best practices, and enhance District transparency with stakeholders, including the general public. While the current website includes useful content, the design is outdated, difficult to read, and cumbersome to update. The new website will improve the user experience with the ultimate goals of:

- Increasing awareness among the public of mosquito-borne threats and vector-borne diseases.
- Causing behavior change among residents to carry out practices routinely that reduce mosquito habitats and prevent mosquito bites.
- Educating the community about District services and operations.

The website contract will include a straightforward Content Management System for District staff, so that department staff with little web management experience or knowledge will be able to post news releases, control application notices, virus activity maps, board agendas, RFPs, job postings, photos, audio/video, etc.

Requests for a website redesign contract have been sent to six companies who have experience designing local government websites, and in some cases mosquito and vector control district websites.

**Staff Recommendation:** Approval to develop a new District website in an amount not to exceed \$15,000 from Capital Replacement Budget Fund 8415.13.210.000 – **Jill Oviatt, Public Information Manager**

**Fiscal Impact:**

FY2018-19 Adopted Budget <b>8415.13.210.000</b>	Current Available Funds	Proposed Expense	Remaining Available Funds
\$40,750	\$15,101	<b>\$15,000</b>	\$101