



**Coachella Valley Mosquito and Vector Control District**

**43420 Trader Place, Indio, CA 92201 | (760) 342-8287 | cvmosquito.org**

**Board of Trustees Meeting**

**Tuesday, May 12, 2026**

**6:00 p.m.**

**AGENDA**

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Materials related to an agenda item that are submitted to the Board of Trustees after distribution of the agenda packets are available for public inspection in the Clerk of the Board's office during normal business hours and on the District's website.

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This meeting will be conducted by video and/or teleconference as well as in person at the District office located at the address listed above. To view/listen/participate in the meeting live, please join by calling 1-888-475-4499 (toll-free), meeting ID: [847 1941 0493](https://us02web.zoom.us/j/84719410493) or click this link to join: <https://us02web.zoom.us/j/84719410493>.

Assistance for those with disabilities: If you have a disability and need an accommodation to participate in the meeting, please contact the Clerk of the Board at (760) 342-8287 at least 48 hours prior to the meeting to inform us of your needs and to determine if accommodation is feasible. The District will attempt to accommodate you in every reasonable manner.

**Our Mission, Vision, and Values**

**Mission Statement** We protect public health with our communities through proven scientific, educational, and sustainable vector control programs.

**Vision** We envision our communities free of mosquito and vector-borne disease.

**Values** Integrity and Trust | Collaboration | Dedication and Service | Respect

**1. Call to Order — Benjamin Guitron, IV, President**

**A. Roll Call**

**2. Pledge of Allegiance**

**3. Confirmation of Agenda**

**4. Public Comments**

Members of the public may provide comments in person or remotely at the time of the meeting as set forth in the agenda. Public comments may also be sent by E-mail to Interim Clerk of the Board by 2:00 p.m. on May 12, 2026, at [mscarboroughheckel@cvmosquito.org](mailto:mscarboroughheckel@cvmosquito.org). E-mails received prior to 2:00 p.m. on the day of the Board meeting will be made part of the record and distributed to the Board. This method is encouraged as it gives the Board of Trustees the opportunity to reflect upon your input. E-mails will not be read at the meeting.

**A. PUBLIC Comments — NON-AGENDA ITEMS:** This time is for members of the public to address the Board of Trustees on items of general interest (a non-agenda item) within the subject matter jurisdiction of the District. The District values your comments; however, pursuant to the Brown Act, the Board cannot take action on items not listed on the posted Agenda. **Comments are limited to a total of three (3) minutes per speaker for non-agenda items.**

**B. PUBLIC Comments — AGENDA ITEMS:** This time is for members of the public to address the Board of Trustees on agenda items (Open and Closed Sessions). **Comments are limited to three (3) minutes per speaker per agenda item.**

All comments are to be directed to the Board of Trustees and shall be devoid of any personal attacks. Members of the public are expected to maintain a professional, courteous decorum during public comments.

**5. Announcements, Presentations, and Written Communications**

**A. Arbovirus Review and Forecast — Jennifer A Henke, MS, BCE, Laboratory Manager**

**6. Items of General Consent**

The following items are routine in nature and may be approved by one blanket motion upon unanimous consent. The President or any member of the Board of Trustees may request an item be pulled from Items of General Consent for a separate discussion.

A. Minutes for April 14, 2026, Board Meeting

B. Approval of expenditures for April 10, 2026, to May 7, 2026

C. Informational Items:

- Financials — **David l'Anson, Administrative Finance Manager**
- Important Budget Meeting Dates
- National Pollutant Discharge Elimination System (NPDES) Annual Reports — **Jennifer A. Henke, M.S., BCE, Laboratory Manager**
- California Environmental Quality Act (CEQA) Mitigated Negative Declaration Annual Compliance Report — **Jennifer A. Henke, M.S., BCE, Laboratory Manager**
- Quarterly Department Reports: Human Resources; Operations; Information Technology; Fleet Services; Laboratory & Surveillance Control; and Public Outreach
- Mosquito and Vector Control Association of California Legislative Day and Spring Committee Meetings, March 10-11, 2026, Sacramento, CA — **Jeremy Wittie, MS, CSDM, General Manager, Robert C Gaona, MPA, Public Information Manager, Jennifer A Henke, MS, BCE, Laboratory Manager, and Kim Hung, PhD, BCE, Vector Ecologist**
- The American Mosquito Control Association Annual Meeting, March 23-27, 2026, Portland, OR
- Pacific Southwest Center of Excellence in Vector-Borne Diseases (PacVec) and Rockies and High Plains Vector-borne Diseases Center (RaHP VEC) Joint Annual Meeting, April 8-10, 2026, Salt Lake City, UT — **Jennifer A Henke, MS, BCE, Laboratory Manager and Kim Hung, PhD, BCE, Vector Ecologist**
- Pacific Branch of the Entomological Society of America Annual Meeting, April 12-15, 2026, Spokane, WA — **Jennifer A Henke, MS, BCE, Laboratory Manager**

D. Approval of Resolution 2026-03 Adopting Employee Pay Schedule, in conformance with California Code of Regulations, Title 2, Sections 570.5 and 571 — **Crystal Garcia Moreno, MSIOP, Human Resources Risk Manager**

*Staff recommends the Board approve Resolution No. 2026-03 Adopting the Employee Pay Schedule in conformance with California Code of Regulations, Title 2, Sections 570.5 and 571.*

E. Approval to continue subscribing to Microsoft M365 Services, in an amount not to exceed \$31,000.00 through Hypertec Solutions, from Cloud Services fund 7680.01.210.070 – **Budgeted; Funds Available** – Cloud Services — **Edward Prendez, Information Technology Manager**

*Staff recommends the Board approve the continuation of Microsoft M365 Services through Hypertec Solutions in an amount not to exceed \$31,000.00.*

- F. Approval of three-year contract with Willdan Financial Services for the Mosquito, Fire Ant, and Disease Control Assessment. — **David l’Anson, Administrative Finance Manager**

*Staff recommends the Board authorize the General Manager to execute a three-year agreement with Willdan Financial Services to provide annual assessment engineering services for the District’s Mosquito, Fire Ant, and Disease Control Assessment Districts, in an amount not to exceed \$17,557 per year, with no change in annual cost over the term of the agreement.*

- G. Approval of Resolution 2026-04 and adoption of the CVMVCD Invasive Mosquito Species Response Plan — **Jennifer A Henke, MS, BCE, Laboratory Manager**

*Staff recommends the Board approve the adoption of the CVMVCD Invasive Mosquito Species Response Plan, which establishes current procedures for early detection, surveillance, containment, and control of invasive mosquito species to protect public health and support compliance with state and regulatory guidelines.*

- H. Approval of Resolution 2026-05 and adoption of the 2026 CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan — **Jennifer A. Henke, MS, BCE, Laboratory Manager**

*Staff recommends the Board approve the adoption of the 2026 CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan, which provides current protocols for surveillance, risk assessment, public notification, and response actions to protect public health and ensure compliance with state guidelines.*

## **7. Action Items**

- A. None

## **8. Committee and Trustee Reports**

- A. Executive Committee — **Benjamin Guitron, IV, Board President**

Executive Committee oral report

- B. Finance Committee — **Frank Figueroa, EdD, Board Treasurer**

Finance Committee oral report

- C. 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 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 three minutes.*

**9. Reports**

A. General Manager

i. General Manager’s Report — **Jeremy Wittie, MS, CSDM**

B. General Counsel

**10. Closed Session**

**Closed Session (s):**

A. **None**

**11. 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. |
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**Certification of Posting**

I certify that on May 8, 2026, 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 May 8, 2026

*Megan Scarborough-Eckel*  
Megan Scarborough-Eckel, Clerk of the Board



# **ITEMS OF GENERAL CONSENT**

**COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT**

**Board of Trustees Meeting  
Minutes**

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**MEETING TIME:** 6:00 p.m., April 14, 2026

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

**TRUSTEES PRESENT**

|                                |                    |
|--------------------------------|--------------------|
| PRESIDENT Benjamin Guitron, IV | Indio              |
| VICE PRESIDENT John Peña       | La Quinta          |
| SECRETARY Dr. Doug Kunz        | Palm Springs       |
| TREASURER Dr. Frank Figueroa   | Coachella          |
| Steve Downs                    | Rancho Mirage      |
| Gary Gardner                   | Desert Hot Springs |
| Bito Larson                    | County at Large    |
| Felipe Ortiz                   | County at Large    |
| Nancy Ross                     | Cathedral City     |
| John Vallat                    | Indian Wells       |
| Doug Walker                    | Palm Desert        |

**TRUSTEES ABSENT**

|             |               |
|-------------|---------------|
| Steve Downs | Rancho Mirage |
|-------------|---------------|

**STAFF AND GENERAL COUNSEL PRESENT**

Jeremy Wittie, General Manager  
Lena D Wade, Legal Counsel, SBEMP  
Greg Alvarado, Operations Manager  
Robert C Gaona, Public Information Manager  
Jennifer A Henke, Laboratory Manager  
David l'Anson, Administrative Finance Manager  
Crystal Garcia Moreno, Human Resources Risk Manager  
Edward Prendez, Information Technology Manager  
Megan Scarborough-Eckel, Clerk of the Board

**MEMBERS OF THE PUBLIC PRESENT**

Yes

**1. Call to Order**

*Vice President Peña called the meeting to order at 4:12 pm.*

**A. Roll Call**

*At roll call, eight (8) of the eleven (11) Trustees were present.*

Trustee Ross joined the meeting at 4:16 pm.  
President Guitron and Secretary Kunz joined the meeting at 4:18 pm.

**2. Pledge of Allegiance**

Everyone in attendance recited the Pledge of Allegiance.

**3. Confirmation of Agenda**

Vice President Peña inquired if there was a need to make adjustments to the agenda. Since there were no objections from the Board or staff, the agenda was confirmed as stands.

**4. Public Comments**

**A. PUBLIC Comments — NON-AGENDA Items:**

None

**B. PUBLIC Comments — AGENDA Items:**

None

**5. Announcements, Presentations, and Written Communications**

A. None

**6. Items of General Consent**

The following items are routine in nature and may be approved by one blanket motion upon unanimous consent. The President or any member of the Board of Trustees may request an item be pulled from Items of General Consent for a separate discussion.

A. Minutes for February 10, 2026, Board Meeting

B. Approval of expenditures for March 6, 2026, to April 9, 2026

**C. Approval to renew the contract with CleanExcel for cleaning services for the District headquarters in an amount not to exceed \$4,343 per month from fund 7675.01.305.000 – Contract Services, Budgeted; funds available — David I'Anson, Administrative Finance Manager \*Pulled for standalone vote**

*On a motion from Trustee Figueroa, seconded by Trustee Ortiz, the Board of Trustees approved all Items of General Consent.*

*Ayes: President Guitron, Trustees Figueroa, Gardner, Kunz, Ortiz, Peña, Ross, Vallat, Walker*

*Noes: None*

*Abstained: Trustee Larson*

*Absent: Trustee Downs*

D. Informational Items:

- Financials — **David I'Anson, Administrative Finance Manager**
- Important Budget Meeting Dates
- Approval of Proclamation designating the week of April 19-25, 2026 as Mosquito Awareness Week — **Robert C Gaona, MPA, Public Information Manager**

*On a motion from Trustee Ortiz, seconded by Trustee Walker, the Board of Trustees approved all Items of General Consent.*

*Ayes: President Guitron, Trustees Figueroa, Gardner, Kunz, Larson, Ortiz, Peña, Ross, Vallat, Walker*

*Noes: None*

*Abstained: None*

*Absent: Trustee Downs*

## **7. Actions Items**

- A. Approval to purchase one (1) vehicle, in an amount not to exceed \$69,000.00, from Capital Replacement Budget Fund #8415.14.300.000 – utilizing the State of California Contract #1-22-23-20D — **Edward Prendez, Information Technology Manager**

*Staff recommends approval of this purchase to ensure continuity of essential field operations and to maintain a safe, reliable, and efficient fleet. Unit #111 has reached the end of its useful life at twenty-one years of service and is currently experiencing significant mechanical failure, making continued repairs impractical and cost-inefficient.*

*On a motion from Trustee Figueroa, seconded by Trustee Ortiz, the Board of Trustees approved Item (A) of Action Items.*

*Ayes: President Guitron, Trustees Figueroa, Gardner, Kunz, Larson, Ortiz, Peña, Ross, Vallat, Walker*

*Noes: None*

*Abstained: None*

*Absent: Trustee Downs*

## **8. Committee and Trustee Reports**

- A. Executive Committee — **Benjamin Guitron, Board President**  
Executive Committee Oral Report and minutes from April 3, 2026

*President Guitron gave a brief overview of the Executive Committee meeting.*

B. Finance Committee — **Frank Figueroa, EdD, Board Treasurer**

Finance Committee Oral Report and Finance Committee minutes from April 7, 2026

*Treasurer Figueroa gave a brief overview of the General Fund line graph.*

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

**9. Reports**

A. General Counsel

***Questions and/or comments from Trustees regarding the reports***

*Nothing to report.*

**10. Closed Session**

**Closed Session (s):**

A. **Conference with Labor Negotiators pursuant to Government Code Section 54957.6**

Agency Designated Representatives: Lena D. Wade, Crystal Moreno, and David I' Anson.

Employee Organizations: California School Employees Association and Teamsters Local 911.

*General Counsel reports that by unanimous consent, the Board will extend a one percent cost of living adjustment for all District employees.*

**11. Adjournment**

*There being no further business to discuss, President Guitron adjourned the meeting at 4:39 p.m.*

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Benjamin Guitron, IV  
President

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Dr. Doug Kunz  
Secretary

**Coachella Valley Mosquito and Vector Control District**

Checks Issued for the Period of:

Apr 10-May 9, 2026

| Check No   | Payable To  | Description                               | Check Amount | Total Amount        |
|--|---|---|--------------|---------------------|
|  | Payroll Disbursement                              | April 10, 2026                            | 290,161.65   |                     |
|  | Payroll Disbursement                              | April 24, 2026                            | 280,355.28   |                     |
|  |   |   |              | <b>570,516.93</b>   |
| <b>Pre-Approved Expenditures Utilities/Benefits:</b>                     |   |   |              |                     |
| 46382  | CalPERS Healthcare Acct                           | Cafeteria Plan                            | 133,000.07   |                     |
| 46383  | CalPERS - Retirement Acct                         | Retirement Contributions: 4/10/2026PP     | 47,125.00    |                     |
| 46384  | Principal Life Insurance Co.                      | Cafeteria Plan                            | 13,796.96    |                     |
| 46409  | iSolved, Inc.                                     | Cafeteria Plan                            | 70.00        |                     |
|  |   |   |              | <b>193,992.03</b>   |
| <b>Pre-Approved Expenditures less than \$10,000.00:</b>                  |   |   |              |                     |
| 46385  | 34th Street Inc. dba 34th Street Consulting, Inc. | Staff Training                            | 1,500.00     |                     |
| 46386  | Advance Imaging Systems                           | Contract Services                         | 717.65       |                     |
| 46388  | Airgas USA, LLC                                   | Lab Supplies & Expenses                   | 2,954.23     |                     |
| 46389  | Marvin Alvarez                                    | Employee Reimbursement                    | 150.00       |                     |
| 46391  | Carbon Health Medical Goup of California, PC      | Physican Fees                             | 567.00       |                     |
| 46392  | Critical Electric Systems Group LLC               | Repair & Maintenance                      | 952.79       |                     |
| 46393  | Clairemont Equipment                              | Repair & Maintenance                      | 482.66       |                     |
| 46394  | CleanExcel  | Janitorial Services                       | 8,384.00     |                     |
| 46395  | CSI Ceja Security International                   | Contract Services                         | 3,330.00     |                     |
| 46396  | Darwin Chambers                                   | Repair & Maintenance                      | 7,525.87     |                     |
| 46397  | Desert Air Conditioning Inc.                      | Repair & Maintenance                      | 4,408.33     |                     |
| 46398  | Desert Fire Extinguisher Co., Inc.                | Safety Expense                            | 2,290.51     |                     |
| 46400  | Excel Landscape South                             | Contract Services                         | 1,620.00     |                     |
| 46401  | Roberto Gaona                                     | Employee Reimbursement                    | 150.00       |                     |
| 46402  | Armando Gaspar                                    | Professional Development                  | 16.99        |                     |
| 46403  | G/M Business Interiors                            | Furniture & Equipment                     | 8,613.00     |                     |
| 46404  | Oscar Guerrero                                    | Professional Development                  | 162.40       |                     |
| 46405  | Jennifer Henke                                    | Professional Development                  | 966.92       |                     |
| 46406  | Holt Architects, Inc.                             | Professional Fees                         | 3,725.00     |                     |
| 46407  | Kim Hung-Lyu                                      | Professional Development                  | 368.80       |                     |
| 46408  | Hypertec USA Inc                                  | Cloud Computing Services                  | 90.02        |                     |
| 46410  | Jernigan's Sporting Goods, Inc.                   | Safety Expense                            | 364.29       |                     |
| 46411  | Kiley & Associates, LLC                           | Professional Fees                         | 2,600.00     |                     |
| 46413  | KYA Services                                      | Capital Outlay                            | 5,343.47     |                     |
| 46415  | Izzy Motors Inc. dba La Quinta Chevrolet          | Offsite Vehicle Maintenance & Repair      | 814.62       |                     |
| 46416  | Linde Gas & Equipment Inc.                        | Offsite Vehicle Maintenance & Repair      | 81.00        |                     |
| 46417  | Marlin Leasing Corporation                        | Contract Services                         | 885.93       |                     |
| 46418  | Matrix Consulting Group, LTD                      | Capital Outlay                            | 4,960.00     |                     |
| 46419  | O'Reilly Auto Parts                               | Vehicle Parts & Supplies                  | 1,134.36     |                     |
| 46420  | ApplicantPro Holdings, LLC dba Proscreening       | Recruitment/Advertising                   | 202.50       |                     |
| 46422  | Prudential Overall Supply                         | Uniform Expense                           | 5,120.54     |                     |
| 46423  | Puretec Industrial Water                          | Lab Supplies                              | 138.04       |                     |
| 46424  | Aaron Rivas                                       | Employee Reimbursement                    | 150.00       |                     |
| 46425  | Rosendo Ruiz                                      | Employee Reimbursement                    | 45.00        |                     |
| 46426  | Shasta Fire Protection, Inc.                      | Repair & Maintenance                      | 4,300.00     |                     |
| 46427  | Slovak Baron Empey Murphey & Pinkney LLP          | Attorney Fees                             | 4,000.00     |                     |
| 46429  | Tacos El Viejon                                   | Promotion & Education                     | 1,600.00     |                     |
| 46430  | Veolia ES Technical Solutions, LLC                | Lab Supplies & Expenses                   | 619.61       |                     |
| 46431  | Valley Lock & Safe                                | Equipment Parts & Supplies                | 19.25        |                     |
| 46432  | Vector Control Joint Powers Agency                | Employee Assistance Program               | 637.29       |                     |
| 46433  | Jonathan Zamaniego                                | Employee Reimbursement                    | 150.00       |                     |
| <b>Cash - California Bank &amp; Trust Checking</b>                       |   |   |              | <b>82,142.07</b>    |
| <b>Cash - California Bank &amp; Trust Checking</b>                       |   |   |              |                     |
| 46381  | UMPQUA Bank Commercial Card OPS                   | District Credit Card April 2026 Statement | 130,587.87   |                     |
| 46387  | TeamBuilders, Inc.                                | Aerial Pool Surveillance                  | 20,876.94    |                     |
| 46390  | AMS Paving  | Capital Outlay                            | 36,735.00    |                     |
| 46399  | Dudek & Associates                                | Professional Fees                         | 18,263.05    |                     |
| 46412  | KYA Services                                      | Capital Outlay                            | 35,134.69    |                     |
| 46414  | KYA Services                                      | Capital Outlay                            | 101,525.85   |                     |
| 46428  | SC Commercial LLC dba SC Fuels                    | Motor,Fuel,Oil                            | 23,437.55    |                     |
| <b>Cash - California Bank &amp; Trust Check Run Total to be Approved</b> |   |   |              | <b>366,560.95</b>   |
| <b>Total Expenditures: Apr 10-May 9, 2026</b>                            |   |   |              | <b>1,213,211.98</b> |

Benjamin Guitron, President

Frank Figueroa, Treasurer



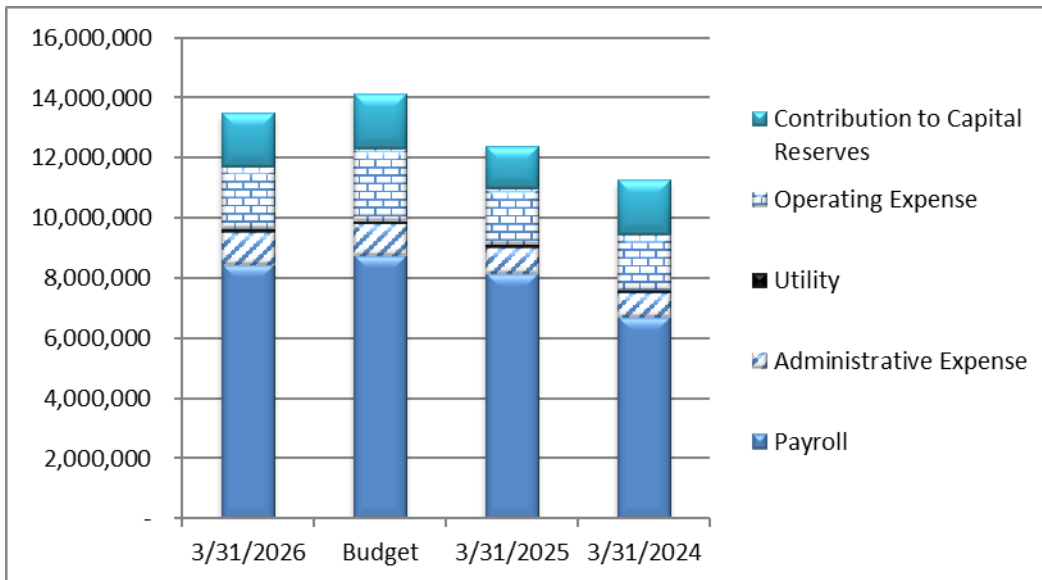
# FINANCE REPORTS

## FINANCE

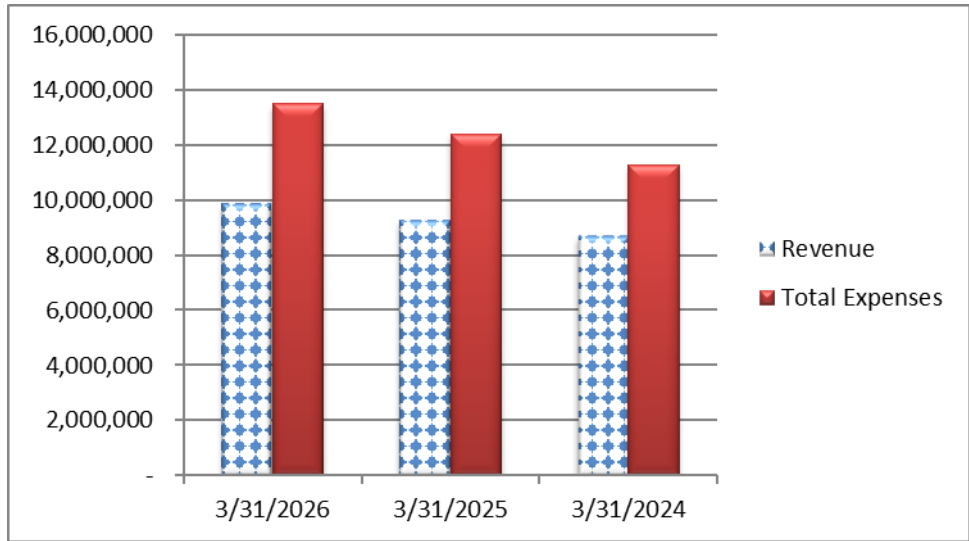
The financial reports show the balance sheet, receipts, and revenue and expenditure reports for the month ending March 31, 2026. The revenue and expenditure report shows that the operating budget expenditure for July 1, 2025 to March 31, 2026, is \$13,480,718 total revenue is \$9,819,903 resulting in excess revenue over (under) expenditure for the year to March 31, 2026, of (\$3,660,815).

### THREE YEAR FINANCIALS

|                         | Actual      | Budget      | Actual      | Actual      |
|-------------------------|-------------|-------------|-------------|-------------|
|                         | 3/31/2026   | Budget      | 3/31/2025   | 3/31/2024   |
| <b>Revenue</b>          | 9,819,903   | 9,657,107   | 9,249,117   | 8,688,891   |
| Expenses                |             |             |             |             |
| Payroll                 | 8,456,943   | 8,746,720   | 8,150,994   | 6,682,255   |
| Administrative Exper    | 1,064,798   | 1,051,981   | 857,029     | 806,145     |
| Utility                 | 116,334     | 107,478     | 119,241     | 96,129      |
| Operating Expense       | 2,029,084   | 2,396,287   | 1,842,295   | 1,857,727   |
| Contribution to Capital | 1,813,559   | 1,813,559   | 1,420,243   | 1,810,619   |
| <b>Total Expenses</b>   | 13,480,718  | 14,116,025  | 12,389,802  | 11,252,875  |
|                         |             |             |             |             |
| <b>Profit (Loss)</b>    | (3,660,815) | (4,458,918) | (3,140,685) | (2,563,984) |



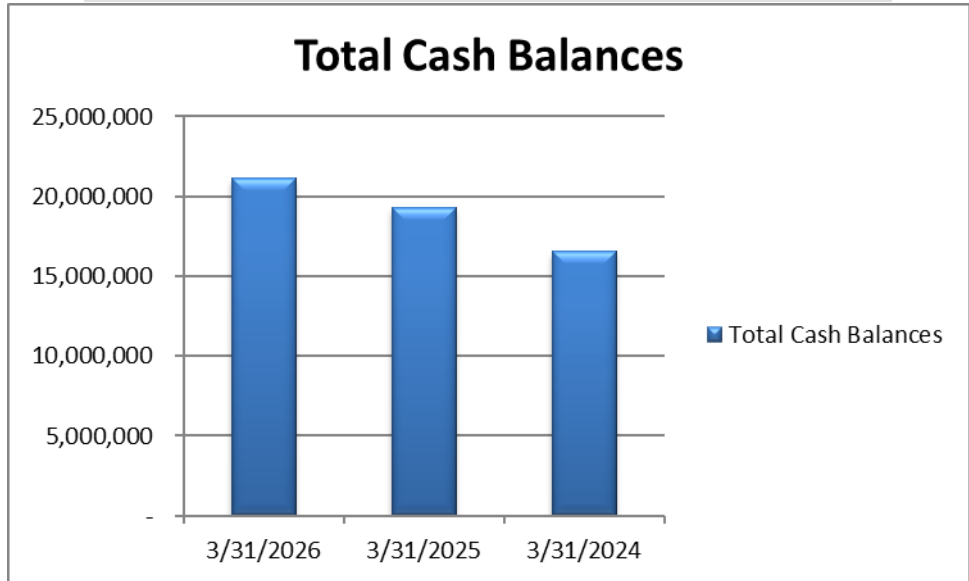
**Figure 1 - Three Year Expenditure**



**Figure 2 - Three-Year Revenue & Expenditure**

**THREE-YEAR CASH BALANCE**

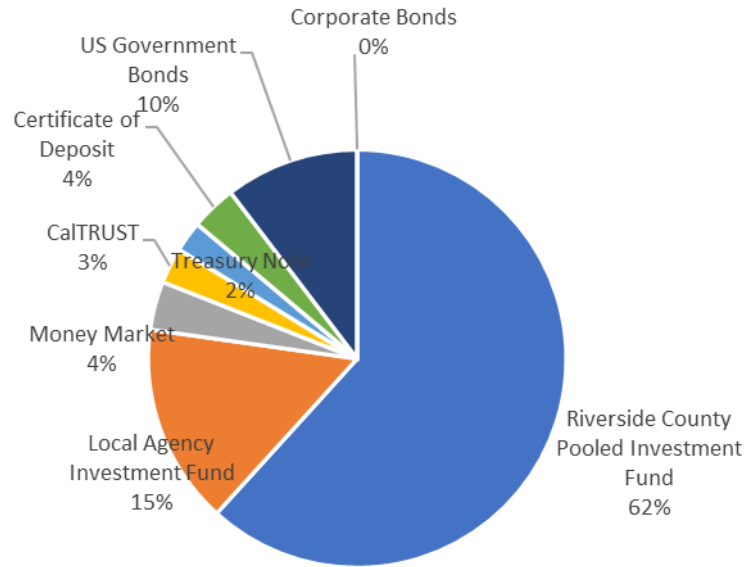
| Cash Balances              | 3/31/2026         | 3/31/2025         | 3/31/2024         |
|----------------------------|-------------------|-------------------|-------------------|
| Investment Balance         | 20,884,874        | 19,004,970        | 16,191,333        |
| Checking Accounting        | 23992.48          | 44544.67          | 63,341            |
| Payroll Account            | 187,701           | 231,735           | 272,613           |
| Petty Cash                 | 2,000             | 2,000             | 2,000             |
| <b>Total Cash Balances</b> | <b>21,098,568</b> | <b>19,283,249</b> | <b>16,529,287</b> |



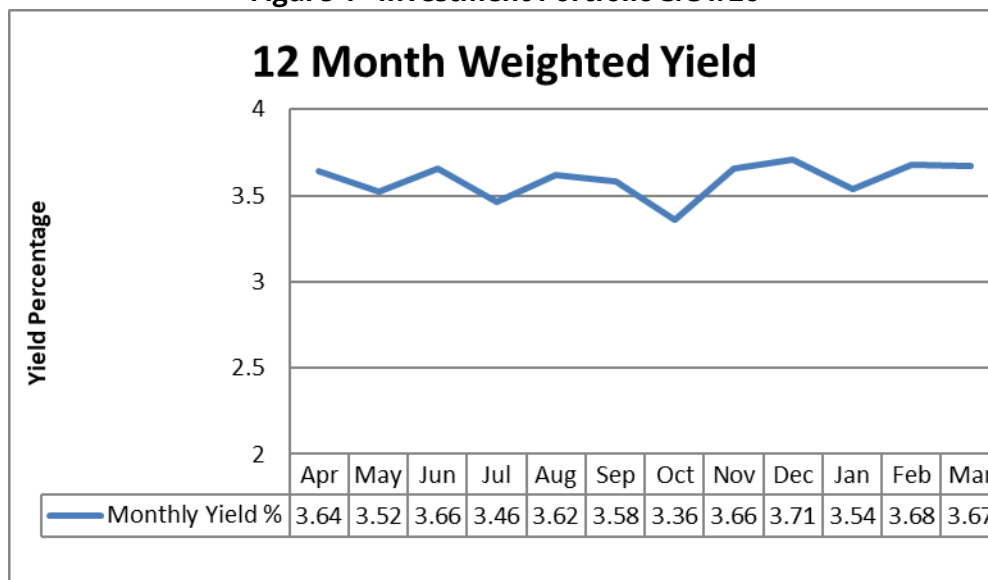
**Figure 3 - Cash Balances**

**DISTRICT INVESTMENT PORTFOLIO 3/31/2026**

The District’s investment fund balance for the period ending March 31, 2026, is \$20,884,874. The portfolio composition is shown in the pie chart. Local Agency Investment Fund (LAIF) accounts for 15% of the District’s investments; the Riverside County Pooled Investment Fund is 62% of the total. The LAIF yield for the end of March was 3.83% and the Riverside County Pooled Investment Fund was 3.80%. This gives an overall weighted yield for District investments of 3.67%.



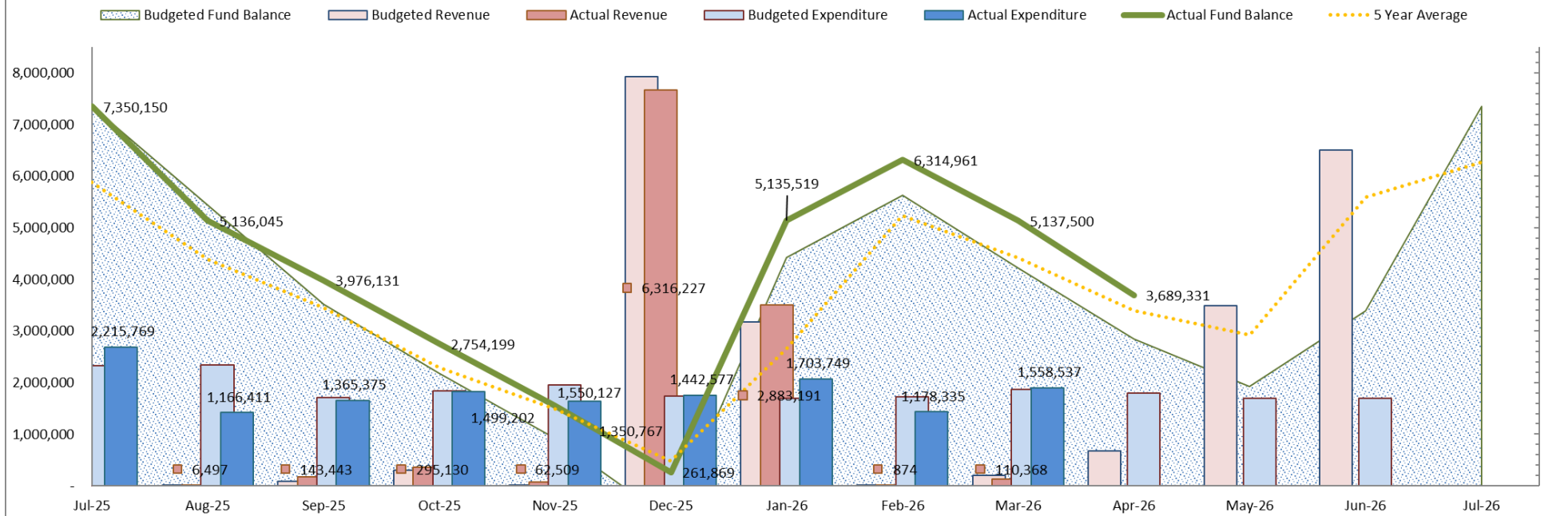
**Figure 4 - Investment Portfolio 3/31/26**



**Figure 5 - District Investments Weighted Yield**

## General Fund Operational Cash Flow

Fiscal Year 2025-2026



The **General Fund Operational Cash Flow** graph outlines the District's working capital for the fiscal year July 1, 2025, to June 30, 2026. The beginning Operational Cash Flow fund balance is \$7.3 million and the ending Operational Cash Flow fund balance is \$3.7 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. July expenditure is higher than average because of the prefunding lump sum of \$0.5 million for CalPERS unfunded liability. The budget also accounts for prepayments. The revenue follows a different pattern, Riverside County distributes the property tax revenue in January and May with advancements in December and April. The *shaded area* represents the **Budgeted Operational Cash Flow Fund Balance** which has a formula of (beginning) **Fund Operational Cash Flow Balance** plus **Revenue** minus **Expenditure**. The *green line* represents the **Actual Operational Cash Flow Fund Balance** and is graphed against the *shaded area* **Budgeted Operational Cash Flow Fund Balance**. The *three-year average* Fund Operational Cash Flow Balance is the orange dash line.

The graph shows \$7.3 million **Operational Cash Flow Fund Balance** plus total Revenue for July 1 to March 31, 2026, of \$9,819,903 minus total Expenses of \$13,480,718 is \$3,689,331. Revenue shows a positive variance of \$162,795, expenditure shows a positive variance of \$635,307, overall positive variance of \$798,102. For planning purposes, the District is under budget. As long as the green line stays out of the shaded area the District is within budget, as of March 31, 2026, the line is outside the shaded area.

Coachella Valley Mosquito and Vector Control District  
 FINANCES AT A GLANCE  
 ALL FUNDS COMBINED  
 For the Month Ended March 31, 2026

|  | Beginning of<br>the Month | Change<br>During<br>the Month | End of<br>the Month |
|--|---------------------------|-------------------------------|---------------------|
| INVESTMENTS  | 21,892,379                | (1,007,505)                   | 20,884,874          |
| CASH   | 228,679                   | (14,985)                      | 213,694             |
| INVESTMENTS & CASH   | 22,121,058                | (1,022,490)                   | 21,098,568          |
| RESTRICTED ASSETS  | 426,380                   | -                             | 426,380             |
| CURRENT ASSETS   | 2,301,593                 | (76,027)                      | 2,225,567           |
| FIXED ASSETS   | 8,744,009                 | -                             | 8,744,009           |
| OTHER ASSETS   | 6,078,429                 | -                             | 6,078,429           |
| TOTAL ASSETS   | 39,671,469                | (1,098,516)                   | 38,572,952          |
| TOTAL LIABILITIES  | 5,723,541                 | 163,789                       | 5,887,331           |
| TOTAL DISTRICT EQUITY  | 33,947,927                | (1,262,306)                   | 32,685,622          |
| TOTAL LIABILITIES & EQUITY   | 39,671,469                | (1,098,516)                   | 38,572,952          |
| RECEIPTS   |                           |                               |                     |
|  |                           | \$ 113,519                    |                     |
| CASH DISBURSEMENTS   |                           |                               |                     |
| Payroll  | \$ 614,930                |                               |                     |
| General Admin  | \$ 521,379                |                               |                     |
| Total Cash Disbursements   |                           | \$ (1,136,309)                |                     |
| NON-CASH ENTRIES:  |                           |                               |                     |
| Accrual Modifications -  |                           | \$ (75,726)                   |                     |
| Changes in A/P, A/R & Pre-paid insurance                                     |                           | _____                         |                     |
| Change during Month - Excess of Cash over<br>Receipts & Non-Cash Adjustments |                           | \$ (1,098,516)                |                     |

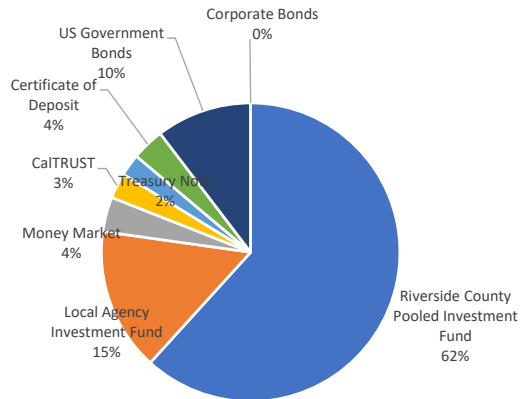
**CVMVCD**  
 Cash Journal - deposits  
 From 3/1/2026 Through 3/31/2026

| Effective ... | Transaction Description          | Deposits   | Payee/Recipient Name                                |
|---------------|----------------------------------|------------|---|
| 3/19/2026     | County Reimbursement             | 1,488.00   | Riverside County Department of Environmental Health |
| 3/31/2026     | March Receipts - Bank Interest   | 412.09     | California Bank & Trust                             |
| 3/31/2026     | March Receipts - County Interest | 84,287.30  | Riverside County                                    |
| 3/31/2026     | March Receipts - CY Supplemental | 23,349.29  | Riverside County                                    |
| 3/31/2026     | March Receipts - PY Supplemental | 3,932.69   | Riverside County                                    |
| 3/31/2026     | March Receipts - Vendor Refund   | 50.00      | Vendor  |
| Report Total  |                                  | 113,519.37 |   |

**COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT  
INVESTMENT FUND BALANCES AS OF MARCH 31, 2026**

| INSTITUTION              | IDENTIFICATION         | Issue Date | Maturity Date | YIELD | General Fund | Thermal Capital Fund | Capital Equipment Replacement Fund | Capital Facility Replacement Fund | Capital Project Insectory Fund | BALANCE              |
|--------------------------|------------------------|------------|---------------|-------|--------------|----------------------|------------------------------------|-----------------------------------|--------------------------------|----------------------|
| LAIF                     | Common Investments     |            |               | 3.83% | 1,927,087    | 50,099               | 92,216                             | 846,297                           | 317,974                        | \$ 3,233,674         |
| Riverside County         | Funds 51105 & 51115    |            |               | 3.80% | 7,684,389    | 199,772              | 367,718                            | 3,374,665                         | 1,267,944                      | \$ 12,894,489        |
| CalTRUST                 | Medium Term Fund       |            |               | 3.98% | 343,832      | 8,939                | 16,453                             | 150,997                           | 56,733                         | \$ 576,953           |
| CA Bank & Trust          | Market Rate            |            |               | 0.70% | 464,213      | 12,068               | 22,214                             | 203,863                           | 76,596                         | \$ 778,954           |
| Pershing                 | Market Rate            |            |               | 0.80% | 3,452        | 90                   | 165                                | 1,516                             | 570                            | \$ 5,792             |
| US Treasury Securities   | Treasury Bill          | 11/24/2025 | 6/23/2026     | 3.31% |              | 82,955               | 152,694                            | 1,401,319                         | 526,510                        | \$ 2,163,478         |
| US Treasury Securities   | Treasury Note          | 1/17/2023  | 4/28/2026     | 3.88% |              | 19,070               | 35,101                             | 322,134                           | 121,033                        | \$ 497,338           |
| ALL IN American Cred     | Certificate of Deposit | 1/18/2023  | 1/19/2027     | 4.55% |              | 9,628                | 17,722                             | 162,643                           | 61,109                         | \$ 251,102           |
| Austin Telco             | Certificate of Deposit | 1/27/2023  | 1/27/2028     | 4.75% |              | 8,867                | 16,321                             | 149,784                           | 56,278                         | \$ 231,249           |
| Alaska USA Fed Cr        | Certificate of Deposit | 3/8/2023   | 3/8/2028      | 4.60% |              | 9,657                | 17,775                             | 163,125                           | 61,290                         | \$ 251,846           |
| <b>Total Investments</b> |                        |            |               |       | 10,422,972   | 401,143              | 738,380                            | 6,776,342                         | 2,546,037                      | <b>\$ 20,884,874</b> |

**PORTFOLIO COMPOSITION AS OF MARCH 31, 2026  
WEIGHTED YIELD 3.67%**



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

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NOTED AND APPROVED

CVMVCD  
Statement of Revenue and Expenditures  
March 31, 2026

|                         | Annual Budget                  | YTD Budget        | YTD Actual       | YTD Budget Variance | Current Period Budget | Current Period Actual | Current Period Variance | Annual Budget Variance | Percent Annual Budget |              |
|-------------------------|--------------------------------|-------------------|------------------|---------------------|-----------------------|-----------------------|-------------------------|------------------------|-----------------------|--------------|
| <b>Revenues</b>         |                                |                   |                  |                     |                       |                       |                         |                        |                       |              |
| 4000                    | Property Tax - Current Secured | 5,659,455         | 3,036,545        | <b>3,079,983</b>    | 43,438                | 93,794                | <b>0</b>                | (93,794)               | (2,579,472)           | (46)%        |
| 4010                    | Property Tax - Curr. Supplmntl | 67,646            | 0                | <b>38,494</b>       | 38,494                | 0                     | <b>0</b>                | 0                      | (29,152)              | (43)%        |
| 4020                    | Property Tax - Curr. Unsecured | 270,201           | 262,230          | <b>305,279</b>      | 43,049                | 0                     | <b>23,349</b>           | 23,349                 | 35,078                | 13 %         |
| 4030                    | Homeowners Tax Relief          | 37,846            | 18,923           | <b>18,354</b>       | (569)                 | 0                     | <b>0</b>                | 0                      | (19,492)              | (52)%        |
| 4070                    | Property Tax - Prior Supp.     | 53,097            | 0                | <b>53,980</b>       | 53,980                | 0                     | <b>3,933</b>            | 3,933                  | 883                   | 2 %          |
| 4080                    | Property Tax - Prior Unsecured | 12,532            | 0                | <b>0</b>            | 0                     | 0                     | <b>0</b>                | 0                      | (12,532)              | (100)%       |
| 4090                    | Redevelopment Pass-Thru        | 9,566,505         | 4,783,253        | <b>4,481,958</b>    | (301,295)             | 0                     | <b>0</b>                | 0                      | (5,084,547)           | (53)%        |
| 4520                    | Interest Income - LAIF/CDs     | 275,000           | 206,250          | <b>450,683</b>      | 244,433               | 68,750                | <b>84,699</b>           | 15,949                 | 175,683               | 64 %         |
| 4530                    | Other Miscellaneous Receipts   | 63,000            | 47,250           | <b>39,667</b>       | (7,583)               | 5,250                 | <b>50</b>               | (5,200)                | (23,333)              | (37)%        |
| 4551                    | Benefit Assessment Income      | 2,437,709         | 1,302,657        | <b>1,351,505</b>    | 48,848                | 0                     | <b>0</b>                | 0                      | (1,086,204)           | (45)%        |
|                         | <b>Total Revenues</b>          | <b>18,442,991</b> | <b>9,657,107</b> | <b>9,819,903</b>    | <b>162,795</b>        | <b>167,794</b>        | <b>112,031</b>          | <b>(55,763)</b>        | <b>(8,623,089)</b>    | <b>(47)%</b> |
| <b>Expenditures</b>     |                                |                   |                  |                     |                       |                       |                         |                        |                       |              |
| <b>Payroll Expenses</b> |                                |                   |                  |                     |                       |                       |                         |                        |                       |              |
| 5101                    | Payroll - FT                   | 7,358,139         | 5,518,605        | <b>5,338,910</b>    | 179,694               | 613,178               | <b>574,397</b>          | 38,781                 | 2,019,229             | 27 %         |
| 5102                    | Payroll Seasonal               | 97,186            | 77,117           | <b>0</b>            | 77,117                | 6,690                 | <b>0</b>                | 6,690                  | 97,186                | 100 %        |
| 5103                    | Temporary Services             | 14,900            | 11,175           | <b>2,327</b>        | 8,848                 | 1,242                 | <b>0</b>                | 1,242                  | 12,573                | 84 %         |
| 5105                    | Payroll - Overtime Expense     | 38,080            | 28,560           | <b>43,600</b>       | (15,040)              | 3,173                 | <b>3,824</b>            | (651)                  | (5,520)               | (14)%        |
| 5150                    | CalPERS State Retirement       | 1,419,867         | 1,181,693        | <b>1,157,505</b>    | 24,188                | 79,391                | <b>151,021</b>          | (71,630)               | 262,362               | 18 %         |
| 5155                    | Social Security Expense        | 443,686           | 333,027          | <b>330,565</b>      | 2,462                 | 36,886                | <b>36,085</b>           | 802                    | 113,121               | 25 %         |
| 5165                    | Medicare Expense               | 103,332           | 77,560           | <b>78,981</b>       | (1,421)               | 8,591                 | <b>8,439</b>            | 151                    | 24,351                | 24 %         |
| 5170                    | Cafeteria Plan                 | 1,601,674         | 1,201,256        | <b>1,193,113</b>    | 8,143                 | 133,473               | <b>135,801</b>          | (2,328)                | 408,562               | 26 %         |
| 5172                    | Retiree Healthcare             | 240,000           | 180,000          | <b>168,658</b>      | 11,342                | 20,000                | <b>18,725</b>           | 1,275                  | 71,342                | 30 %         |
| 5180                    | Deferred Compensation          | 149,689           | 112,267          | <b>115,740</b>      | (3,473)               | 12,474                | <b>11,715</b>           | 760                    | 33,950                | 23 %         |
| 5195                    | Unemployment Insurance         | 33,802            | 25,460           | <b>27,544</b>       | (2,084)               | 2,781                 | <b>115</b>              | 2,666                  | 6,258                 | 19 %         |
|                         | <b>Total Payroll Expenses</b>  | <b>11,500,357</b> | <b>8,746,720</b> | <b>8,456,943</b>    | <b>289,777</b>        | <b>917,879</b>        | <b>940,122</b>          | <b>(22,243)</b>        | <b>3,043,414</b>      | <b>26 %</b>  |

CVMVCD  
Statement of Revenue and Expenditures  
March 31, 2026

|                                      |                                 | Annual           |                  | YTD Budget       | Current         | Current        | Current        | Annual          | Percent        |             |
|--------------------------------------|---------------------------------|------------------|------------------|------------------|-----------------|----------------|----------------|-----------------|----------------|-------------|
|                                      |                                 | Budget           | YTD Budget       | YTD Actual       | Variance        | Period Budget  | Period Actual  | Budget Variance | Annual Budget  |             |
|                                      |                                 |                  |                  |                  |                 |                |                |                 | Annual Budget  |             |
| <b>Administrative Expenses</b>       |                                 |                  |                  |                  |                 |                |                |                 |                |             |
| 5250                                 | Tuition Reimbursement           | 20,000           | 15,000           | <b>14,324</b>    | 676             | 1,667          | <b>1,571</b>   | 95              | 5,676          | 28 %        |
| 5300                                 | Employee Incentive              | 15,000           | 11,250           | <b>11,743</b>    | (493)           | 1,250          | <b>2,789</b>   | (1,539)         | 3,257          | 22 %        |
| 5302                                 | Wellness                        | 10,600           | 7,950            | <b>2,397</b>     | 5,554           | 883            | <b>40</b>      | 843             | 8,204          | 77 %        |
| 5305                                 | Employee Assistance Program     | 2,500            | 1,875            | <b>1,243</b>     | 632             | 208            | <b>0</b>       | 208             | 1,257          | 50 %        |
| 6000                                 | Property & Liability Insurance  | 334,375          | 247,031          | <b>333,123</b>   | (86,092)        | 29,115         | <b>37,538</b>  | (8,423)         | 1,252          | 0 %         |
| 6001                                 | Workers' Compensation Insurance | 239,126          | 166,844          | <b>142,151</b>   | 24,693          | 24,094         | <b>23,037</b>  | 1,057           | 96,975         | 41 %        |
| 6050                                 | Dues & Memberships              | 68,283           | 51,244           | <b>46,811</b>    | 4,434           | 10,157         | <b>1,056</b>   | 9,101           | 21,472         | 31 %        |
| 6060                                 | Reproduction & Printing         | 54,400           | 40,800           | <b>20,182</b>    | 20,618          | 4,533          | <b>84</b>      | 4,449           | 34,218         | 63 %        |
| 6065                                 | Recruitment/Advertising         | 4,000            | 3,000            | <b>2,680</b>     | 320             | 333            | <b>0</b>       | 333             | 1,320          | 33 %        |
| 6070                                 | Office Supplies                 | 24,255           | 18,491           | <b>12,705</b>    | 5,787           | 1,921          | <b>1,707</b>   | 214             | 11,550         | 48 %        |
| 6075                                 | Postage                         | 8,200            | 6,150            | <b>4,538</b>     | 1,612           | 683            | <b>233</b>     | 451             | 3,662          | 45 %        |
| 6080                                 | Computer & Network Systems      | 13,399           | 10,049           | <b>0</b>         | 10,049          | 1,117          | <b>0</b>       | 1,117           | 13,399         | 100 %       |
| 6085                                 | Bank Service Charges            | 500              | 375              | <b>656</b>       | (281)           | 42             | <b>55</b>      | (13)            | (156)          | (31)%       |
| 6090                                 | Local Agency Formation Comm.    | 3,000            | 3,000            | <b>3,720</b>     | (720)           | 0              | <b>0</b>       | 0               | (720)          | (24)%       |
| 6095                                 | Professional Fees               | 128,400          | 100,300          | <b>58,948</b>    | 41,352          | 9,367          | <b>7,358</b>   | 2,009           | 69,452         | 54 %        |
| 6100                                 | Attorney Fees                   | 83,000           | 62,250           | <b>39,560</b>    | 22,690          | 6,917          | <b>4,172</b>   | 2,745           | 43,440         | 52 %        |
| 6106                                 | HR Risk Management              | 8,000            | 6,000            | <b>5,470</b>     | 530             | 667            | <b>0</b>       | 667             | 2,530          | 32 %        |
| 6110                                 | Conference Expense              | 62,050           | 55,225           | <b>49,677</b>    | 5,548           | 5,875          | <b>9,052</b>   | (3,177)         | 12,373         | 20 %        |
| 6115                                 | In-Lieu                         | 13,200           | 9,900            | <b>1,100</b>     | 8,800           | 1,100          | <b>0</b>       | 1,100           | 12,100         | 92 %        |
| 6120                                 | Trustee Support                 | 7,600            | 5,700            | <b>4,910</b>     | 790             | 633            | <b>225</b>     | 408             | 2,690          | 35 %        |
| 6200                                 | Meetings Expense                | 14,760           | 11,070           | <b>4,342</b>     | 6,728           | 1,230          | <b>219</b>     | 1,011           | 10,418         | 71 %        |
| 6210                                 | Promotion & Education           | 56,300           | 42,225           | <b>39,066</b>    | 3,159           | 4,692          | <b>9,253</b>   | (4,561)         | 17,234         | 31 %        |
| 6220                                 | Public Outreach Advertising     | 151,000          | 113,250          | <b>115,660</b>   | (2,410)         | 12,583         | <b>18,230</b>  | (5,647)         | 35,340         | 23 %        |
| 6500                                 | Benefit Assessment Expenses     | 84,000           | 63,000           | <b>149,793</b>   | (86,793)        | 7,000          | <b>0</b>       | 7,000           | (65,793)       | (78)%       |
| <b>Total Administrative Expenses</b> |                                 | <b>1,405,948</b> | <b>1,051,981</b> | <b>1,064,798</b> | <b>(12,818)</b> | <b>126,066</b> | <b>116,618</b> | <b>9,449</b>    | <b>341,149</b> | <b>24 %</b> |
| <b>Utilities</b>                     |                                 |                  |                  |                  |                 |                |                |                 |                |             |
| 6400                                 | Utilities                       | 140,544          | 105,408          | <b>114,207</b>   | (8,799)         | 11,712         | <b>13,620</b>  | (1,908)         | 26,337         | 19 %        |
| 6410                                 | Telecommunications              | 2,760            | 2,070            | <b>2,127</b>     | (57)            | 230            | <b>237</b>     | (7)             | 633            | 23 %        |
| <b>Total Utilities</b>               |                                 | <b>143,304</b>   | <b>107,478</b>   | <b>116,334</b>   | <b>(8,856)</b>  | <b>11,942</b>  | <b>13,858</b>  | <b>(1,916)</b>  | <b>26,970</b>  | <b>19 %</b> |

CVMVCD  
Statement of Revenue and Expenditures  
March 31, 2026

|                                     | Annual Budget    | YTD Budget       | YTD Actual       | YTD Budget Variance | Current Period Budget | Current Period Actual | Current Period Variance | Annual Budget Variance | Percent Annual Budget |
|-------------------------------------|------------------|------------------|------------------|---------------------|-----------------------|-----------------------|-------------------------|------------------------|-----------------------|
| <b>Operating</b>                    |                  |                  |                  |                     |                       |                       |                         |                        |                       |
| 7000 Uniform Expense                | 63,294           | 48,190           | <b>39,675</b>    | 8,515               | 5,035                 | <b>6,160</b>          | (1,126)                 | 23,619                 | 37 %                  |
| 7050 Safety Expense                 | 51,826           | 38,870           | <b>39,158</b>    | (289)               | 4,319                 | <b>5,009</b>          | (690)                   | 12,668                 | 24 %                  |
| 7100 Physican Fees                  | 6,000            | 4,500            | <b>6,330</b>     | (1,830)             | 500                   | <b>5,120</b>          | (4,620)                 | (330)                  | (6)%                  |
| 7150 IT Communications              | 94,500           | 70,875           | <b>60,887</b>    | 9,988               | 7,875                 | <b>9,445</b>          | (1,570)                 | 33,613                 | 36 %                  |
| 7200 Household Supplies             | 3,000            | 2,250            | <b>2,668</b>     | (418)               | 250                   | <b>223</b>            | 27                      | 332                    | 11 %                  |
| 7300 Repair & Maintenance           | 47,000           | 35,250           | <b>39,044</b>    | (3,794)             | 3,917                 | <b>6,275</b>          | (2,358)                 | 7,956                  | 17 %                  |
| 7310 Maintenance & Calibration      | 7,900            | 7,900            | <b>13,237</b>    | (5,337)             | 0                     | <b>5,415</b>          | (5,415)                 | (5,337)                | (68)%                 |
| 7350 Permits, Licenses & Fees       | 9,792            | 7,344            | <b>8,279</b>     | (935)               | 816                   | <b>2,061</b>          | (1,245)                 | 1,513                  | 15 %                  |
| 7360 Software Licensing             | 43,355           | 19,070           | <b>23,544</b>    | (4,474)             | 10,100                | <b>2,141</b>          | 7,959                   | 19,811                 | 46 %                  |
| 7400 Vehicle Parts & Supplies       | 72,800           | 54,600           | <b>45,502</b>    | 9,098               | 6,067                 | <b>18,995</b>         | (12,928)                | 27,298                 | 37 %                  |
| 7420 Offsite Vehicle Maint & Repair | 20,378           | 15,283           | <b>8,930</b>     | 6,354               | 1,698                 | <b>1,609</b>          | 89                      | 11,448                 | 56 %                  |
| 7450 Equipment Parts & Supplies     | 34,920           | 26,390           | <b>13,180</b>    | 13,211              | 2,843                 | <b>1,482</b>          | 1,361                   | 21,740                 | 62 %                  |
| 7500 Small Tools Furniture & Equip  | 6,500            | 4,875            | <b>2,860</b>     | 2,015               | 542                   | <b>70</b>             | 472                     | 3,641                  | 56 %                  |
| 7550 Lab Supplies & Expense         | 66,625           | 48,150           | <b>33,324</b>    | 14,826              | 6,942                 | <b>4,289</b>          | 2,652                   | 33,301                 | 50 %                  |
| 7570 Aerial Pool Surveillance       | 25,000           | 18,750           | <b>0</b>         | 18,750              | 2,083                 | <b>0</b>              | 2,083                   | 25,000                 | 100 %                 |
| 7575 Surveillance                   | 122,810          | 111,682          | <b>89,910</b>    | 21,772              | 3,709                 | <b>2,192</b>          | 1,517                   | 32,900                 | 27 %                  |
| 7600 Staff Training                 | 165,369          | 130,704          | <b>120,336</b>   | 10,368              | 29,255                | <b>22,593</b>         | 6,661                   | 45,033                 | 27 %                  |
| 7650 Equipment Rental               | 13,500           | 10,125           | <b>3,703</b>     | 6,422               | 1,125                 | <b>0</b>              | 1,125                   | 9,797                  | 73 %                  |
| 7675 Contract Services              | 222,507          | 179,313          | <b>159,851</b>   | 19,462              | 47,631                | <b>49,536</b>         | (1,905)                 | 62,656                 | 28 %                  |
| 7680 Cloud Computing Services       | 159,859          | 74,430           | <b>95,719</b>    | (21,289)            | 10,781                | <b>14,150</b>         | (3,369)                 | 64,140                 | 40 %                  |
| 7700 Motor Fuel & Oils              | 159,800          | 119,850          | <b>80,104</b>    | 39,746              | 13,317                | <b>10,134</b>         | 3,182                   | 79,696                 | 50 %                  |
| 7750 Field Supplies                 | 21,000           | 15,750           | <b>11,434</b>    | 4,316               | 1,750                 | <b>2,436</b>          | (686)                   | 9,566                  | 46 %                  |
| 7800 Control Products               | 851,039          | 822,237          | <b>728,500</b>   | 93,737              | 76,131                | <b>26,773</b>         | 49,358                  | 122,539                | 14 %                  |
| 7850 Aerial Applications            | 80,000           | 60,000           | <b>63,943</b>    | (3,943)             | 6,667                 | <b>0</b>              | 6,667                   | 16,057                 | 20 %                  |
| 8415 Capital Outlay                 | 101,530          | 76,148           | <b>21,386</b>    | 54,762              | 8,461                 | <b>4,932</b>          | 3,529                   | 80,144                 | 79 %                  |
| 8510 Research Projects              | 250,000          | 187,500          | <b>199,971</b>   | (12,471)            | 20,833                | <b>85,391</b>         | (64,558)                | 50,029                 | 20 %                  |
| 9000 Contingency Expense            | 275,000          | 206,250          | <b>117,609</b>   | 88,641              | 22,917                | <b>0</b>              | 22,917                  | 157,391                | 57 %                  |
| <b>Total Operating</b>              | <b>2,975,304</b> | <b>2,396,287</b> | <b>2,029,084</b> | <b>367,203</b>      | <b>295,563</b>        | <b>286,432</b>        | <b>9,131</b>            | <b>946,220</b>         | <b>32 %</b>           |

CVMVCD  
Statement of Revenue and Expenditures  
March 31, 2026

|   | Annual Budget | YTD Budget  | YTD Actual         | YTD Budget Variance | Current Period Budget | Current Period Actual | Current Period Variance | Annual Budget Variance | Percent Annual Budget |
|---|---------------|-------------|--------------------|---------------------|-----------------------|-----------------------|-------------------------|------------------------|-----------------------|
| <b>Contribution to Capital Reserves</b>       |               |             |                    |                     |                       |                       |                         |                        |                       |
| 8900 Transfer to other funds                  | 2,418,078     | 1,813,559   | <b>1,813,559</b>   | 0                   | 201,507               | <b>201,507</b>        | 0                       | 604,520                | 25 %                  |
| <b>Total Contribution to Capital Reserves</b> | 2,418,078     | 1,813,559   | <b>1,813,559</b>   | 0                   | 201,507               | <b>201,507</b>        | 0                       | 604,520                | 25 %                  |
| <b>Total Expenditures</b>                     | 18,442,991    | 14,116,024  | <b>13,480,718</b>  | 635,307             | 1,552,956             | <b>1,558,536</b>      | (5,579)                 | 4,962,273              | 27 %                  |
| <b>Net revenue over/(under) expenditures</b>  | 0             | (4,458,917) | <b>(3,660,815)</b> | 798,102             | (1,385,162)           | <b>(1,446,504)</b>    | (61,342)                |                        |                       |

**CVMVCD**

Balance Sheet - Unposted Transactions Included In Report  
As of 3/31/2026

|                        |   | <b>Current Year</b> |
|------------------------|---|---------------------|
| Assets                 |   |                     |
| Cash and Investments   |   |                     |
| 1000                   | Cash - Investments                              | 20,884,874.16       |
| 1012                   | Cash - Clearing Account                         | 300.00              |
| 1016                   | Petty Cash                                      | 500.00              |
| 1017                   | Petty Cash Checking                             | 1,500.00            |
| 1035                   | CB&T General Checking                           | 23,692.48           |
| 1036                   | CB&T Payroll Checking                           | 187,701.27          |
|                        | Total Cash and Investments                      | 21,098,567.91       |
| Restricted Cash Assets |   |                     |
| 1040                   | Restricted Assets - Pension Stabilization CEPPT | 426,380.05          |
|                        | Total Restricted Cash Assets                    | 426,380.05          |
| Current Assets         |   |                     |
| 1050                   | Accounts Receivable                             | 15,006.63           |
| 1051                   | Lease Payments Receivable                       | 31,250.22           |
| 1080                   | Interest Receivable                             | 116,263.77          |
| 1085                   | Inventory                                       | 641,544.59          |
| 1166                   | Prepaid IT Service                              | 0.05                |
| 1167                   | Prepaid Research Proposals                      | 109,961.46          |
| 1168                   | Prepaid Expenses                                | 181,724.45          |
| 1169                   | Deposits  | 1,129,815.33        |
|                        | Total Current Assets                            | 2,225,566.50        |
| Fixed Assets           |   |                     |
| 1170                   | Construction in Progress                        | 349,239.02          |
| 1201                   | Leased Copier Asset #1 Ops Copier               | 45,754.67           |
| 1300                   | Equipment/Vehicles                              | 2,336,533.48        |
| 1310                   | Computer Equipment                              | 838,443.06          |
| 1311                   | GIS Computer Systems                            | 301,597.91          |
| 1320                   | Office Furniture & Equipment                    | 1,389,749.63        |
| 1330                   | Land  | 417,873.30          |
| 1335                   | Oleander Building                               | 5,665,861.83        |

**CVMVCD**

Balance Sheet - Unposted Transactions Included In Report  
As of 3/31/2026

|      |                                       | <b>Current Year</b> |
|------|---------------------------------------|---------------------|
| 1336 | Signage                               | 23,651.39           |
| 1340 | Structures & Improvements             | 3,751,399.28        |
| 1341 | Bio Control Building                  | 6,923,882.74        |
| 1342 | Bio Control Equip/Furn                | 43,986.77           |
| 1398 | Amortization Leased Equipment         | (9,150.93)          |
| 1399 | Accumulated Depreciation              | (13,334,812.78)     |
|      | Total Fixed Assets                    | 8,744,009.37        |
|      | Other Assets                          |                     |
| 1520 | Resources to Be Provided              | 3,624,327.41        |
| 1525 | Deferred Outflows of Resources        | 1,650,537.00        |
| 1530 | Deferred Outflows of Resources - OPEB | 803,564.00          |
| 1900 | Due to/from                           | 0.12                |
|      | Total Other Assets                    | 6,078,428.53        |
|      | Total Assets                          | 38,572,952.36       |
|      | Liabilities                           |                     |
|      | Short-term Liabilities                |                     |
|      | Accounts Payable                      |                     |
| 2015 | Credit Card Payable                   | 159,039.50          |
| 2020 | Accounts Payable                      | 437,796.06          |
| 2185 | Employee Dues                         | (374.54)            |
| 2401 | Leased Copier Asset # 1               | 37,078.13           |
|      | Total Accounts Payable                | 633,539.15          |
|      | Total Short-term Liabilities          | 633,539.15          |
|      | Long-term Liabilities                 |                     |
| 2100 | Pollution Remediation Obligation      | 2,100,000.00        |
| 2200 | Net Pension Liability                 | 1,304,728.00        |
| 2210 | Deferred Inflows of Resources         | 228,562.00          |
| 2230 | Deferred Inflows - OPEB               | 928,198.00          |
| 2235 | Deferred Inflow of Resources - Leases | 31,250.22           |
| 2300 | Net OPEB Liability                    | (351,251.00)        |

**CVMVCD**

Balance Sheet - Unposted Transactions Included In Report  
As of 3/31/2026

|                              |   | <u>Current Year</u>   |
|------------------------------|---|-----------------------|
| 2500                         | Compensated Absences Payable                    | 1,012,304.19          |
|                              | Total Long-term Liabilities                     | <u>5,253,791.41</u>   |
|                              | Total Liabilities                               | <u>5,887,330.56</u>   |
| Fund Balance                 |   |                       |
| Restricted Fund Balance      |   |                       |
| 3901                         | Restricted Fund Balance - Pension Stabilization | 426,380.05            |
|                              | Total Restricted Fund Balance                   | <u>426,380.05</u>     |
| Non Spendable Fund Balance   |   |                       |
| 3920                         | Investment in Fixed Assets                      | 10,673,170.66         |
| 3945                         | Reserve for Prepays & Deposit                   | 1,853,432.51          |
| 3960                         | Reserve for Inventory                           | 641,544.59            |
|                              | Total Non Spendable Fund Balance                | <u>13,168,147.76</u>  |
| Committed Fund Balance       |   |                       |
| 3965                         | Public Health Emergency                         | 6,063,874.00          |
|                              | Total Committed Fund Balance                    | <u>6,063,874.00</u>   |
| Assigned Fund Balance        |   |                       |
| 3910                         | Reserve for Operations                          | 7,350,150.00          |
| 3955                         | Thermal Remediation Fund                        | 365,108.00            |
| 3970                         | Reserve for Equipment                           | 726,018.00            |
| 3971                         | Reserve for Facility & Vehicle Replacement      | 2,659,312.00          |
|                              | Total Assigned Fund Balance                     | <u>11,100,588.00</u>  |
| Unassigned Fund Balance      |   |                       |
| 3900                         | Fund Equity                                     | 869,490.62            |
| 3999                         | P&L Summary                                     | 4,002,355.99          |
|                              | Total Unassigned Fund Balance                   | <u>4,871,846.61</u>   |
| Current YTD Net Income       |   | (2,945,214.62)        |
| Total Current YTD Net Income |   | <u>(2,945,214.62)</u> |
| Total Fund Balance           |   | <u>32,685,621.80</u>  |

**CVMVCD**

Balance Sheet - Unposted Transactions Included In Report  
As of 3/31/2026

|                                  | <b>Current Year</b>         |
|----------------------------------|-----------------------------|
| Total Liabilities and Net Assets | <u><u>38,572,952.36</u></u> |

**FY2026-27 BUDGET CALENDAR**

| <b>STAGE</b>             | <b>TASK TO BE COMPLETED</b>   | <b>ACTIVITIES</b>   | <b>STAKEHOLDERS</b>  | <b>DEADLINE</b>                   |
|--------------------------|-------------------------------|---|--|-----------------------------------|
| <b>STAFF</b>             | Budget Templates created      | Templates in Microix Budget Workflow Created. Sent to Department Budget managers  | Administrative Finance Manager   | January 16, 2026                  |
|                          | Personnel Salary & Benefits   | Updated information from Payroll & benefits added to Workflow. Budget spreadsheets & formulae created.                  | Administrative Finance Manager   | Ongoing                           |
|                          | Budget Workshop for Managers  | Help facilitate & train staff to build budget in Workflow   | Management Team  | January 28, 2026                  |
|                          | Budget docs to AFM & GM       | General Manager to review and approve budget documents  | GM, Management Team  | March 6, 2026                     |
|                          | Completion of first draft     | Team to review and adjust budget according to GM & AFM suggestion & direction   | GM, Management & Supervisory Team  | March 13, 2026                    |
|                          | Draft 1 Budget                | Preparation of first draft of FY2026/2027 Budget for Finance Committee Budget Meeting. PDF and hard copy to FC Trustees | Finance  | March 27, 2026                    |
| <b>FINANCE COMMITTEE</b> | Draft 1 for Finance Committee | Emailed to Finance Committee For Review email questions or meet. Reserve Study to be emailed with draft Budget          | Finance Committee Department heads, General Manager & Administrative Finance Manager | April 3, 2026                     |
|                          | Draft 1 for Finance Committee | Finance Committee to review draft budget & reserve study & discuss in meeting<br><b>**FINANCE COMMITTEE MEETING</b>     | Finance Committee General Manager & Administrative Finance Manager                   | Tuesday April 7, 2026 at 11:30 am |

|              |                                     |  |  |  |
|--------------|-------------------------------------|--|--|--|
| <b>BOARD</b> | High Level review of draft budget   | Board Retreat  | Board of Trustees Workshop   | April 14, 2026                           |
|              | Final Draft for Finance Committee   | Final draft of FY2026/2027 Budget for Finance Committee Budget Meeting, attended by General Manager, Finance Committee, and Administrative Finance Manager.<br><b>**FINANCE COMMITTEE MEETING (If Needed)</b>  | Finance Committee General Manager & Administrative Finance Manager | <b>May 12, 2026</b><br>4:00 pm – 4:30 pm |
| <b>BOARD</b> | Final Draft for Budget Workshop     | Budget Workshop for in depth discussion<br><b>BOARD MEETING</b>  | Board of Trustees Workshop   | <b>May 12, 2026</b><br>4:30 pm – 5:30 pm |
|              | Adoption of Final Draft             | Adoption of FY2026/2027 Budget<br><b>BOARD MEETING</b>   | Board of Trustees Board Meeting                                    | <b>June 9, 2026</b>                      |
|              | Set Benefit Assessment Rate         | Adopt Resolution – Intention to Levy Assessment, Preliminary approval of engineer’s report, and providing notice of hearing for the CVMVCD mosquito, fire ant, and disease surveillance and vector control assessment<br><b>BOARD MEETING</b>  | Board of Trustees Board Meeting                                    | <b>June 9, 2026</b>                      |
|              | Adopt Benefit Assessment Resolution | Adopt Resolution approving Engineer’s Report, Confirming Diagram and Assessment, and Ordering the Levy of Assessments for fiscal year 2026/2027 for the Coachella Valley Mosquito and Vector Control District Mosquito, Fire Ant and Disease Control Assessment Public Hearing<br><b>BOARD MEETING</b> | Public Hearing   | <b>July 14, 2026</b>                     |



# **ENVIRONMENTAL REPORTS**



**Coachella Valley Mosquito and  
Vector Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Informational Item

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

**Background:**

The District’s application of pesticides to and adjacent to Waters of the United States are subject to compliance with 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.

The District also maintains a Federal NPDES Pesticide General Permit and reports on applications made to land under tribal jurisdiction. The report on 2025 applications included multiple larvicide applications to 16 locations, 7 barrier application events, and 18 ULV applications (6 by helicopter and 12 by ground equipment).

**Exhibits:**

- 2025 NPDES annual report executive summary for California permit

2025 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 976 larvicide treatments to 131 waters of the U.S. in 2025. The District also made 18 ULV applications of adulticides near private duck club ponds and the Salton Sea (6 by helicopter and 12 by ground equipment) and 7 barrier applications of adulticides to vegetation adjacent to a water of the U.S. in 2025. 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 13 mosquito pools and St. Louis encephalitis virus in 96 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 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 976 applications of larvicide made to waters of the U.S. It also includes 18 ULV applications of adulticide adjacent to waters of the U.S. and 7 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

May 12, 2026

### Staff Report

**Agenda Item:** Informational Item

California Environmental Quality Act (CEQA) Annual Report – **Jennifer A. Henke, M.S., BCE, 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). On September 13, 2022, the Board adopted a Supplemental Mitigated Negative Declaration for the IVM Program (Resolution 2022-23).

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:**

- 2025 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  
2025 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. In 2022, the District engaged a consultant to review the District's IVM program, including consideration of changes that are part of the District's 2022-2025 Strategic Business Plan. The District ultimately completed a Supplement to 2011 Mitigated Negative Declaration, and the [Supplement](#) was adopted September 13, 2022. While the original MND remains the primary document, the District has updated its Mitigation and Monitoring Reporting Program in the Supplement MND. The review indicated that many of the items listed in the previous program were not mitigation and not a necessary part of this report.

This is the Annual Compliance Report detailing the monitoring which took place in 2025. What follows are the mitigation measures listed in the Mitigated Negative Declaration, and the actions indicating compliance from the Supplemental Mitigation Monitoring and Reporting Program. 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 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 Administrative 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.

2025 activity: The District used ATVs thirty-four times during breeding season (March – June) near the shoreline to examine the need for an aerial applications in response to higher than expected virus activity. 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. Twenty-six employees were trained on October 2, 2025, which is the annual training in preparation for increased used in duck hunting club and shoreline habitats.

**Mitigation Measure 2:** *The District shall use mosquitofish (*Gambusia affinis*) only in private man-made bodies of water for mosquito control – neglected pools, in ornamental ponds, and fountains (e.g., golf course ponds) with no connectivity to public waters. The District shall not plant mosquitofish in public waters within Riverside County without the written concurrences of the California Department of Fish and Wildlife (CDFW).*

Action indicating compliance:

- The District Biologist will provide a report of the use and location of mosquitofish stocking.

2025 activity: Mosquitofish were stocked in neglected swimming pools, ornamental ponds, agricultural ponds, and water troughs. Fish were used in man-made bodies of water for mosquito control. A map of treatments is available upon request.

**Mitigation Measure 3:** *The District shall consult with the California Department of Wildlife (CDFW) before Project activities commence to determine current and planned desert pupfish refugia and other important areas for desert pupfish. The District shall not plant mosquitofish in current or planned desert pupfish refugia or other important areas for desert pupfish, including but not limited to the following:*

- i. McCallum/Simone pond and Visitor Center Pond and any water course at the Thousand Palms Preserve, along Thousand Palms Canyon Drive.*
- ii. The Sharon pond, 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 Headquarter, Varner Harbor at the State Recreation Area where desert pupfish may be restocked, and nearby North Shore Marina (North Shore Beach and Yacht Club).*
- iv. Any pond or watercourse located at the Dos Palmas Preserve, the Oasis Springs, Ecological Reserve, and Salt Creek.*
- v. The University of California, Riverside Palm Desert pond.*
- vi. Any future pupfish refuges, including the Coachella Valley Water District desert pupfish mitigation ponds (25 acres at the Garfield Street site).*
- vii. The approximately 25 irrigation drains that have at least seasonal connection to the Salton Sea.*

Action indicating compliance:

- The Laboratory Manager will maintain a record of consultation with CDFW and other agencies regarding the use of mosquitofish pursuant to potential areas that desert pupfish may occupy or that have suitable habitat for desert pupfish.

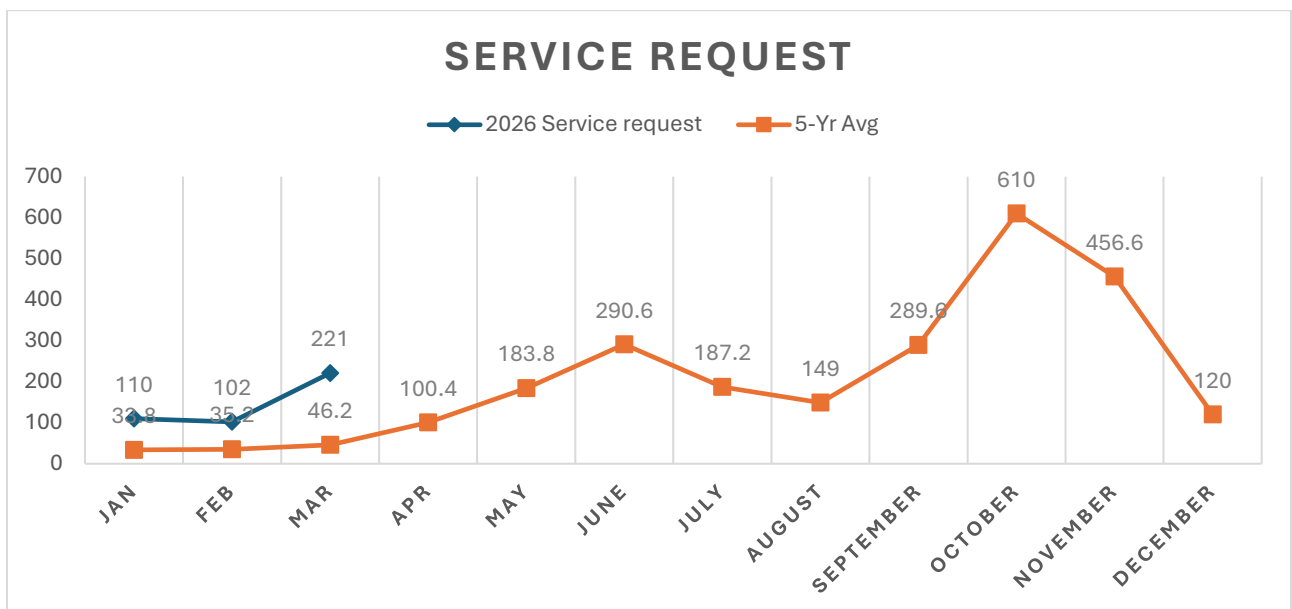
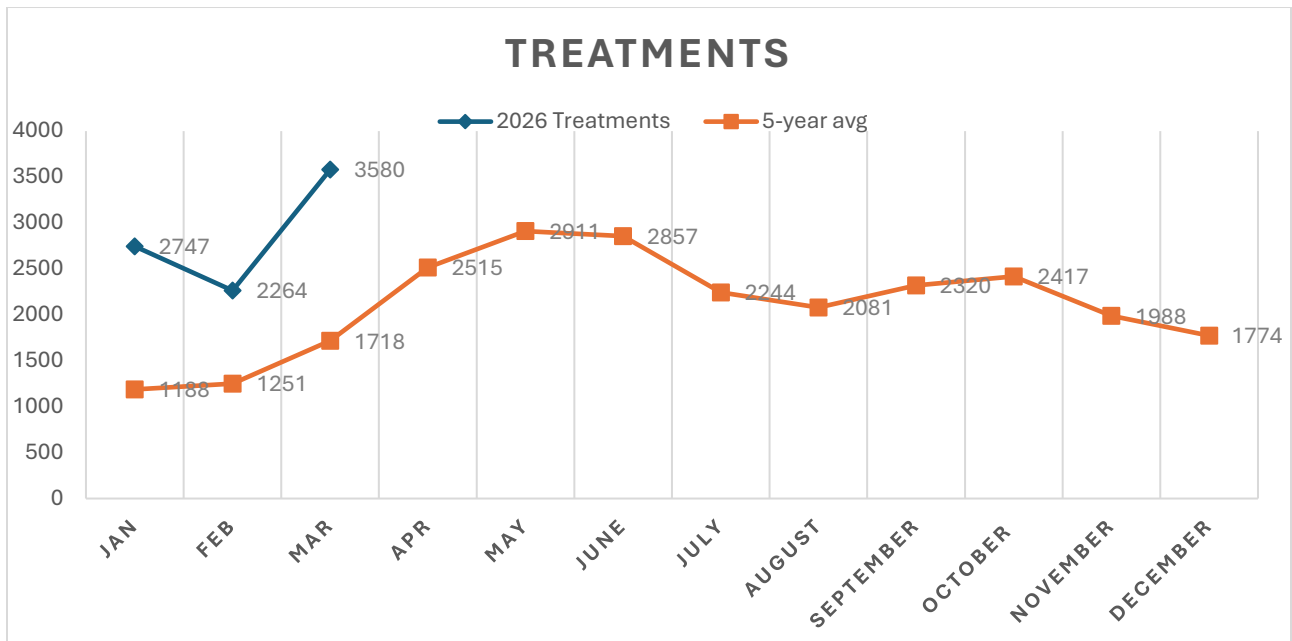
2025 activity: Mosquitofish were stocked in neglected swimming pools, ornamental ponds, agricultural ponds, and water troughs. Fish were used in man-made bodies of water for mosquito control. The Laboratory Manager did not have any consultations with CDFW or other agencies in 2025 regarding the use of mosquitofish in areas where desert pupfish do or may occupy.



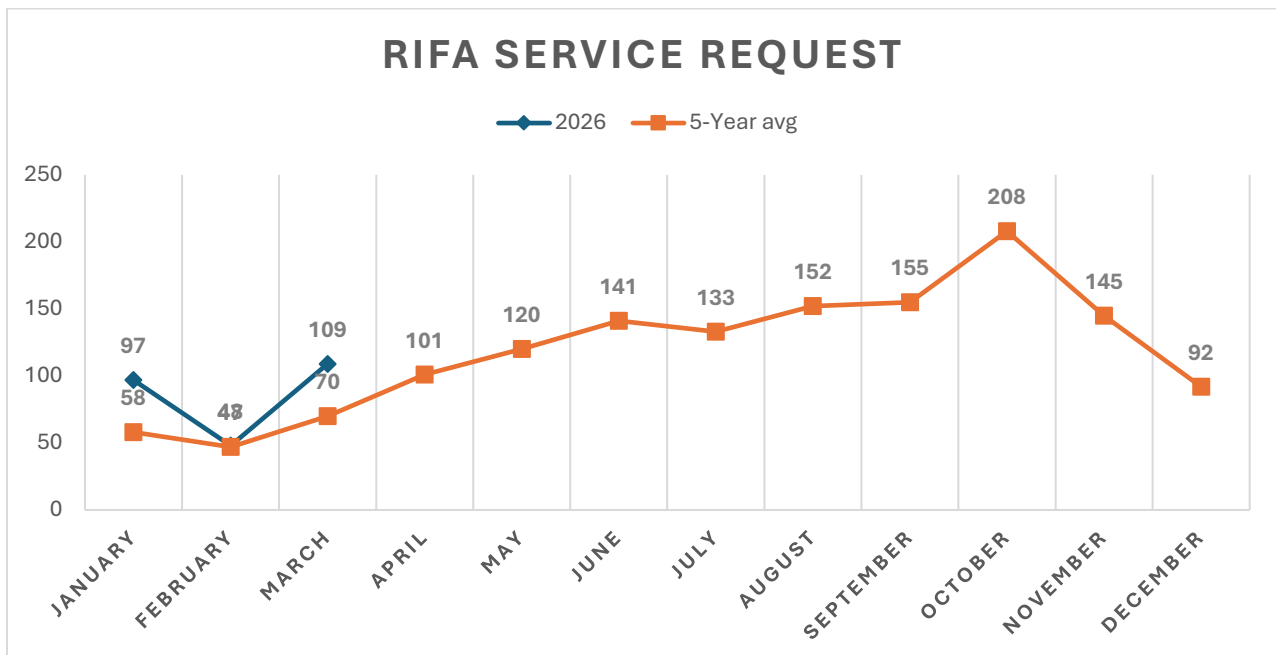
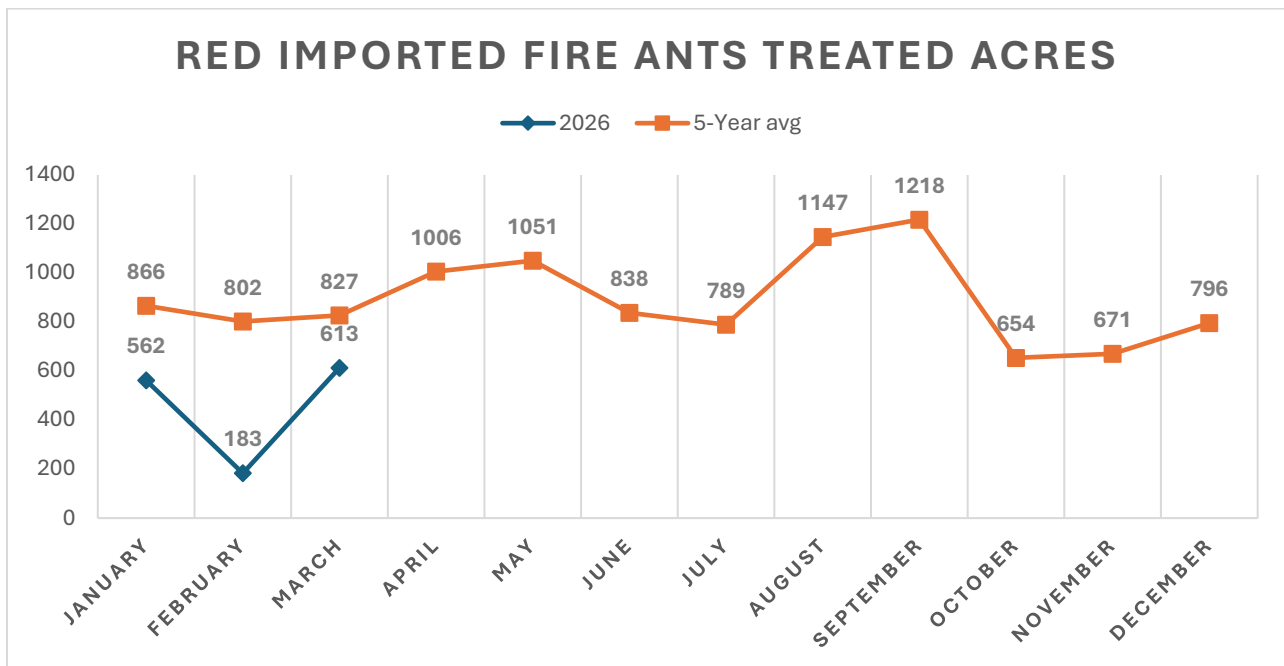
# DEPARTMENT REPORTS

## OPERATIONS

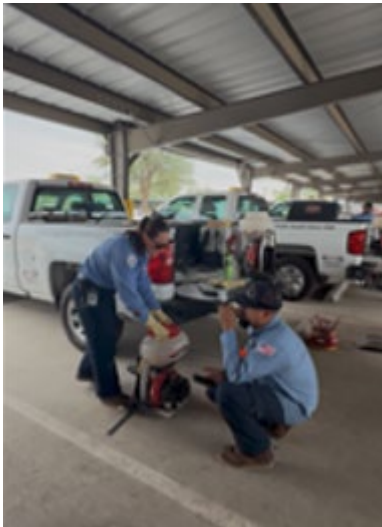
**Operations update:** In 2026, mosquito control treatments experienced a 69% increase compared to the 5-year average. This growth is largely due to having a fully staffed team and ongoing enhancements to our assignment and scheduling programs. It's also a response to the increase in breeding sources caused by rain events in January and February, which are evident in the service request graph. Furthermore, service requests rose by 116% for the year, likely attributable to these early rain events. This increase has led to a higher population of *Aedes aegypti*, particularly due to increased cryptic breeding sources in residential areas. The graph below provides a monthly comparison of treatments and service requests done by field staff for 2026 and the 5-year average.



**Red imported fire ants-** The operations team continued red imported fire ant (RIFA) treatments in 2026. In February, treated acreage decreased as efforts focused on service request and residential neighborhoods. However, total acreage treated for the year decreased by approximately 59% compared to the 5-year average, primarily due to fewer applications at golf courses. Service request calls saw a 36% increase, showing some change from the 5-year average. The graphs below provide a month-by-month comparison of acreage treated and service requests completed by the RIFA team in 2026 and the average.



**Annual application equipment calibrations-** Operations staff completed the annual calibration of pesticide application equipment in accordance with state regulatory requirements. This process is essential to ensure all application equipment is operating accurately, safely, and within label and compliance standards. Supervisory staff coordinated the planning, scheduling, and oversight of these activities, while field staff carried out the hands-on calibration and testing of equipment used in routine vector control operations. These efforts help maintain consistency in application rates, support regulatory compliance, and ensure the District remains prepared to deliver effective and responsible mosquito and vector control services throughout the service area.

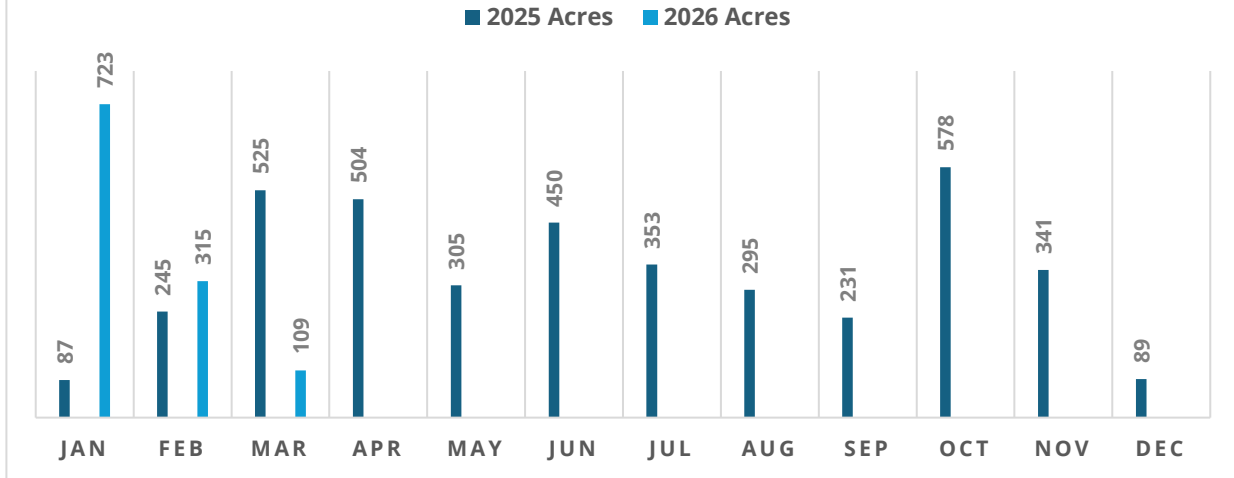


Field staff performing calibrations to backpacks and handheld liquid applications. This is conducted annually to ensure applications are done according to the label.

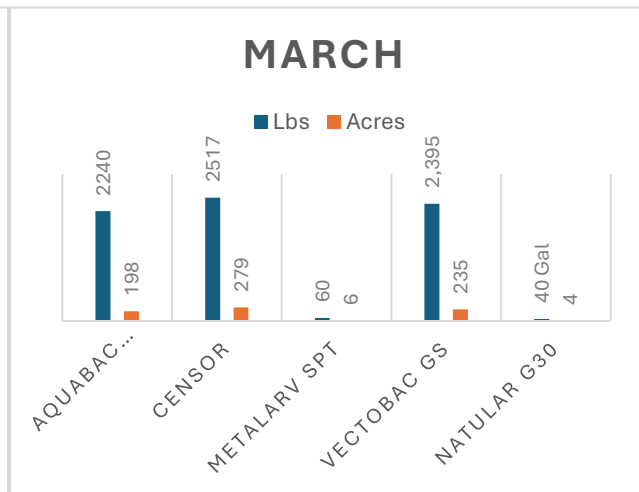
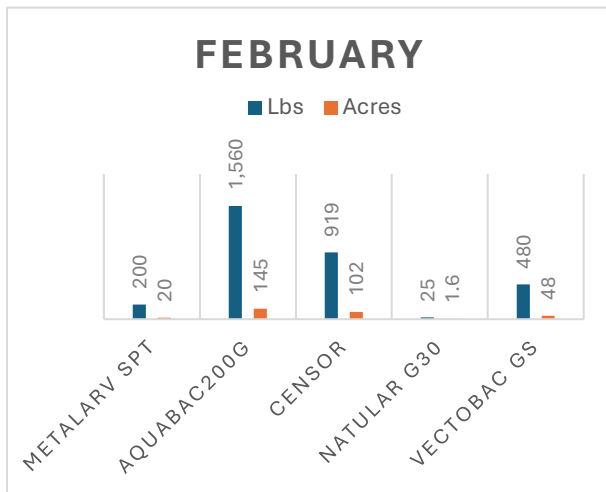
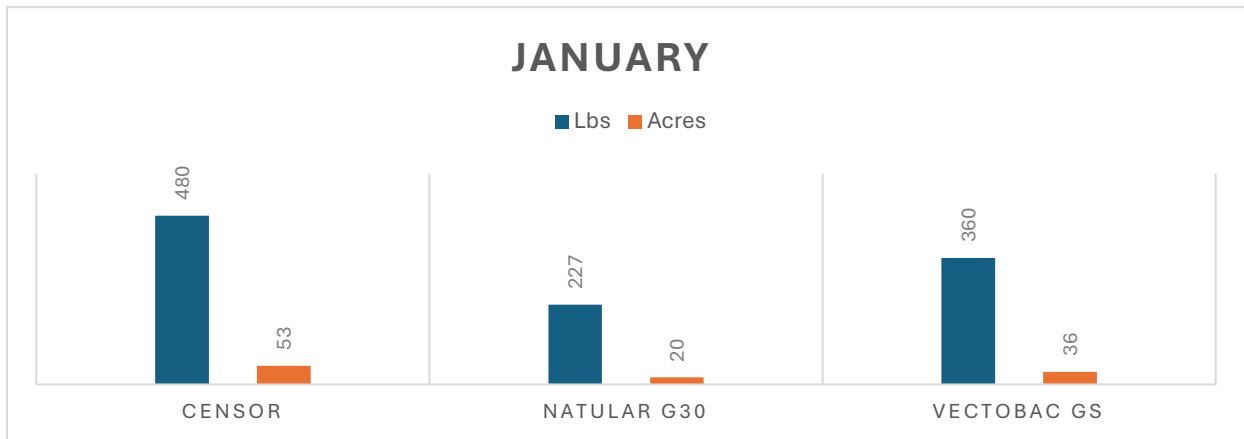
**UAS Larvicide Applications:** Drone applications were performed responding to mosquito larvae population surrounding Salton Sea shoreline and duck clubs in response to high mosquito adult abundance. In the months of January through March the UAS team focused primarily on conducting applications within designated areas in the Salton Sea shoreline. These applications assist in reducing the mosquito larvae abundance in hard to access areas. Treated areas are known sources treated routinely and other new sources.

**Monthly drone applications-** The graph below illustrates the number of acres treated so far for the year in comparison to last year. In 2026 the team treated about 1,147 acres an increase of 29% in comparison to the same time last year. The increase is attributed to having a dedicated team conducting applications on a routine basis, including new drone additions to the program with higher payload assisting with high mosquito abundance. The graph below illustrates the comparison of monthly acreage treated by the drone team in 2025 and 2026.

# 2025-26 ACRES TREATED



Below is the information on drone larvicide applications done in January through March. Information includes products used, amounts and area covered, during this timeline the team covered about 1,148 acres applying about 11,479 lbs. of product.



**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. The information generated by this department is used by District Operations and Public Outreach staff to ensure control measures are efficiently implemented in the field.

**DISEASE SURVEILLANCE (As of 4/9/2026)**

**2025 Summary. California** – Last year [West Nile virus activity](#) in people was lower than in 2024 and much lower than the five-year average. St Louis encephalitis virus was also not detected very much in California in 2025, with only three counties detecting positive mosquito samples. 2025 was the third year of local detections of dengue in people, and the first time that dengue was found in a mosquito sample.

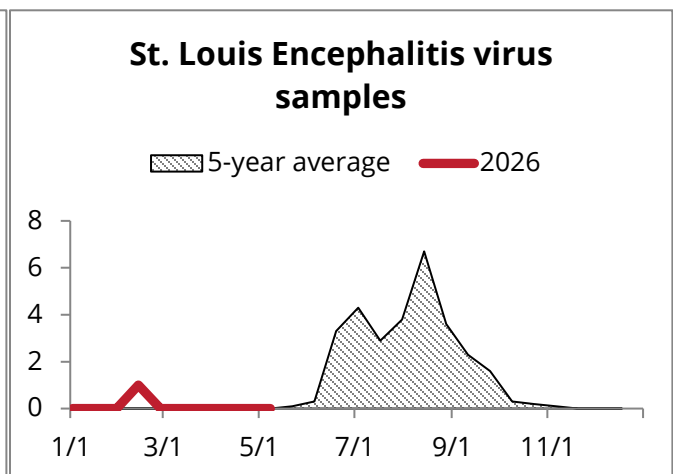
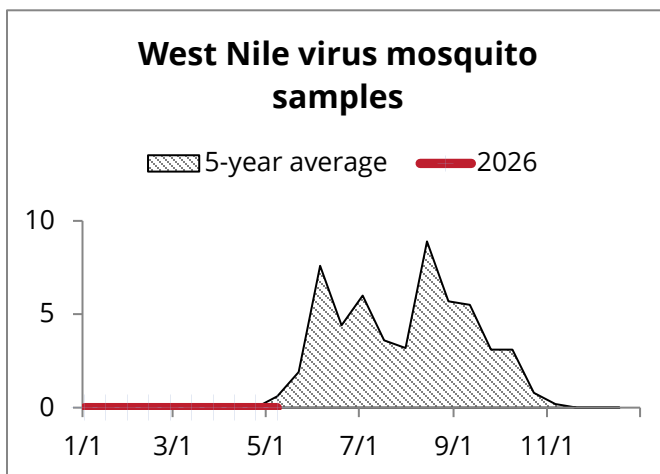
**DISEASE SURVEILLANCE (As of 5/1/2026)**

**California**

|                                    | WNV - Positive 2026 YTD | WNV - Positive 2025 YTD | WNV - 5-year Average | WEE 2026 YTD | SLEV 2026 YTD |
|------------------------------------|-------------------------|-------------------------|----------------------|--------------|---------------|
| Positive Counties                  | 3                       | 2                       | 2.4                  | 0            | 1             |
| Human Cases                        | 0                       | 0                       | 0                    | 0            | 0             |
| Positive Dead Birds / # Tested     | 3/102                   | 8/176                   | 4.8                  | 0            | 0             |
| Positive Mosquito Pools / # Tested | 0/6,022                 | 0/3,715                 | 1                    | 0            | 1             |

**ARBOVIRUS SURVEILLANCE TESTING - COACHELLA VALLEY**

|                                |                 | February | March | April | 2026 YTD | 2025 YTD | 5-year Average YTD |
|--------------------------------|-----------------|----------|-------|-------|----------|----------|--------------------|
| <b>Humans</b>                  |                 | 0        | 0     | 0     | 0        | 0        | 0                  |
| <b>Dead Birds</b>              |                 | 0        | 0     | 0     | 0        | 0        | 0                  |
| <b>Mosquito Pooled Samples</b> | <b>WNV</b>      | 0        | 0     | 0     | 0        | 0        | 0.2                |
|                                | <b>SLEV</b>     | 1        | 0     | 0     | 1        | 0        | 0                  |
|                                | <b># Tested</b> | 186      | 1,034 | 952   | 2,232    | 1,645    | 1,407              |



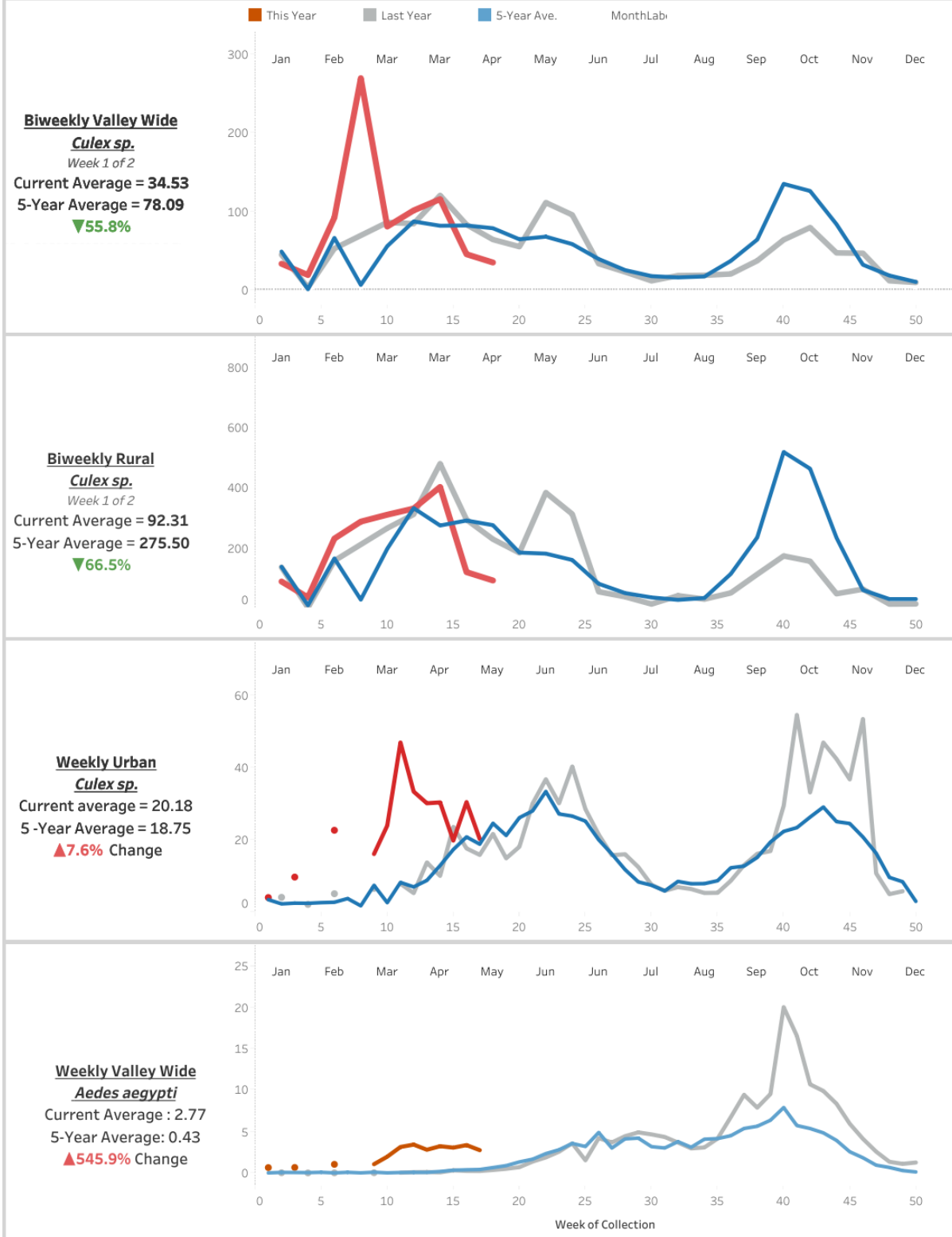
# MOSQUITO COLLECTIONS

## Week #17, 2026 - Virus Risk Assessment

**West Nile Virus**  
 This Year-to-Date: 0  
 Last Year-to-Date: 0  
 Last Year Final Total: 13

**Saint Louis Encephalitis Virus**  
 This Year-to-Date: 1  
 Last Year-to-Date: 0  
 Last Year Final Total: 96

### Average Mosquito Abundance per Trap per Night



## BIOLOGICAL CONTROL

**Mosquitofish.** As of May 1, 2026, approximately 2,500 mosquitofish were stocked in neglected swimming pools, private ponds, fountains, and animal watering troughs. The District raises its mosquitofish in outdoor ponds, and mosquitofish are taken by technicians to locations where they are needed.

**Sterile Male Mosquito Program.** SEPARATOR, a product by Synvect, provides users with male *Ae. aegypti* mosquitoes. We received a shipment of larvae that we then raised to adults and irradiated. These males were then placed in a cage with female mosquitoes. We saw that the male mosquitoes could be irradiated without much detriment and successfully mate with our female mosquitoes producing nonviable eggs.

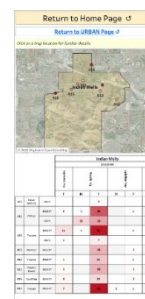
This season, we plan to release 60,000 MosquitoMate WB1 male mosquitoes in the community of Northshore each week from June through September. This project will be evaluated like other control efforts. Here, we plan to mark the mosquitoes to determine if we collect them in the traps, so we can estimate their movement. We will also monitor the adult *Ae. aegypti* population, as we expect a reduction in the collections over the summer.

## SURVEILLANCE PROJECTS

**Full trapping season.** The team routinely sets fewer traps over the winter months, allowing for time to repair traps and check that they function. March brought us the return to full trapping – 53 gravid trap, 58 CO2 trap, and 98 BG sentinel trap locations throughout the valley. Staff began modifying gravid traps to be compatible with lithium-ion battery packs. Compared to the currently used 6-volt batteries, the lithium-ion batteries are lighter in weight and expected to provide longer operational life during trapping activities.



**Development of new dashboard.** Part of the winter has been spent revising the Tableau dashboard used by employees to view mosquito collections. Following feedback from the Operations employees, a more intuitive platform was developed. The new dashboard has the employee select regions by city, where all traps are then shared with the most recent collection. Color coding that has been used previously remains, highlighting the highest collections of mosquitoes that can vector pathogens. The updated dashboard fits better on phone screens which more technicians are using before using tablets. We are looking forward to testing this with the team and learning how else to improve it.



## PRODUCT EFFICACY

**Calibrating equipment.** Each year, the Laboratory, Operations, and Fleet departments work together to calibrate the adulticide equipment. This process ensures that the machines apply pesticides with the correct amount and the droplet sizes meet the label requirements. We calibrated 17 pieces of equipment: 7 truck-mounted units and 10 handheld or backpack units.



**Resistance in larval mosquitoes.** We conducted an assay to observe whether there is larvicide resistance of our field-collected mosquitoes to spinosad, the active ingredient Natular and Censor products. Resistance can mean the active ingredient is no longer effective against field populations. Populations are collected from the field and compared to a colony population known to be susceptible to the active ingredient. Here, we added a range of low, medium, and high doses to susceptible colony larvae and our field larvae to compare the difference in their mortality rate. We saw no resistance in the field population compared to the susceptible population.

**Resistance in adult mosquitoes.** In May, we will be conducting bottle assays to examine resistance to active ingredients in control products for adult mosquitoes. The mosquitoes are exposed to a small amount of product that coats the inside of bottles. We will examine mosquito resistance in local *Culex tarsalis* mosquitoes against Aqua-Reslin at 22 ug/mL (permethrin with synergist), DeltaGard at 10 ug/mL (deltamethrin), Merus 3.0 (pyrethrin) at 10 ug/mL, and Fyfanon ULV at 150 ug/mL (malathion). Based on these results, a semi-field trial will be conducted to evaluate *Cx. tarsalis* wild mosquitoes against these products.



## ENVIRONMENTAL COMPLIANCE

**CEQA.** The District has a Mitigated Negative Declaration for its IVM program, indicating that while the work we do is likely to have an impact on the environment, the District is also able to reduce that impact through a variety of compliance measures. The program is reviewed annually for compliance, and the report was filed February 5.

**NPDES.** The District submitted its Annual Report for 2025 to the State Water Resources Control Board and Colorado River Regional Water Quality Control Board on February 27 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.

## ADDITIONAL DEPARTMENT ACTIVITIES

**IN-HOUSE TRAINING.** Winter is a time when District employees participate in refresher training and continuing education units to ensure that we are at our best and have the latest information on mosquito and vector control. The Department is responsible for a number of the trainings – the most involved of which is mosquito identification. The department hosts three stations where we

show our colleagues the features of larval mosquitoes, adult mosquitoes, and how to quickly estimate how many mosquitoes are in a cup.



We also led the team through HIPAA training as preparation for handling case investigations for arboviruses in people. Jennifer organizes the trainings, incorporating leaders across the District to ensure the team meets our legal requirements and gains valuable insights into how to improve in our individual roles.

*CONFERENCES.* As reported elsewhere, Department employees have been active participants at MVCAC and AMCA Conferences. At MVCAC, Diana Ramirez presented a poster on using lithium-ion battery packs in gravid traps (and placed second in the competition). Melissa Snelling presented a poster on the Tableau software we are using to report mosquito collections and other work to our colleagues. Kim Hung organized a symposium on arthropods and vertebrates of importance to vector control. There, Jacob Tarango presented an overview of spiders and scorpions in the Coachella Valley. Alex Echenberg presented on bats in California. Jennifer Henke summarized the work we have done for controlling *Aedes* mosquitoes, including how we decide which areas to treat.



At AMCA, Gabriela Harvey presented a review of adult mosquito control surveillance in the Coachella Valley, with how the program has changed. Jennifer Henke was invited to speak about wetlands and discussed the challenges and opportunities we have used to control mosquitoes around the Salton Sea and at duck clubs. Alex Echenberg presented a poster comparing rates of SumiLarv application, showing that a lower application rate may be appropriate for our uses (and placed second in the competition). Kim Hung presented a poster showing that generic batteries do not last as long as brand-name batteries in spinning impingers. Mike Esparza received the Boyd Ariaz Grass Roots Award for excellence in non-supervisory employees at mosquito control districts.

*ANNUAL MAINTENANCE.* Much of the equipment in the department is calibrated and cleaned on an annual basis. This includes our BSL safety cabinets, our pipettes, and our microscopes. The insect rearing rooms and the irradiator are also serviced to maintain their functionality for the year. Positive samples from the previous year are shared with researchers, and freezers are defrosted so they can be in top working order for the season. Much of this is coordinated by Kim Hung and Gabriela Perezchica-Harvey, with the biologists Melissa Snelling, Jacob Tarango, and Alex

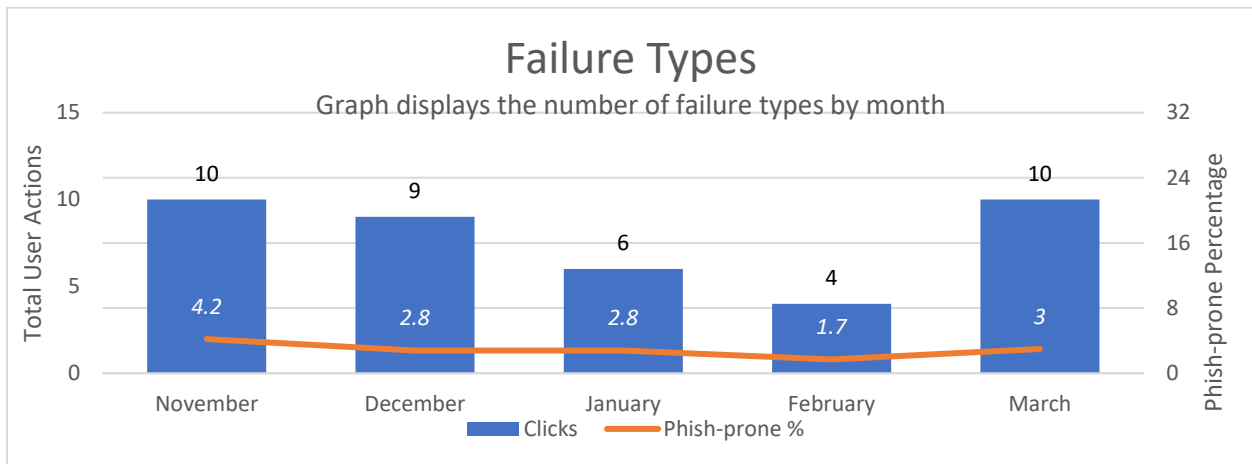
Echenberg cleaning and coordinating as directed. The remaining team members inventory equipment, clean traps, and make repairs before the season starts in March.

## INFORMATION TECHNOLOGY

**KnowBe4 Phishing Campaign:** The KnowBe4 Phishing Campaign is an ongoing security awareness initiative in which all District employees participate in bi-weekly phishing simulations. These simulations involve social engineering messages that mimic real-world phishing attacks, where malicious actors attempt to deceive recipients into revealing sensitive information or installing harmful software, such as ransomware.

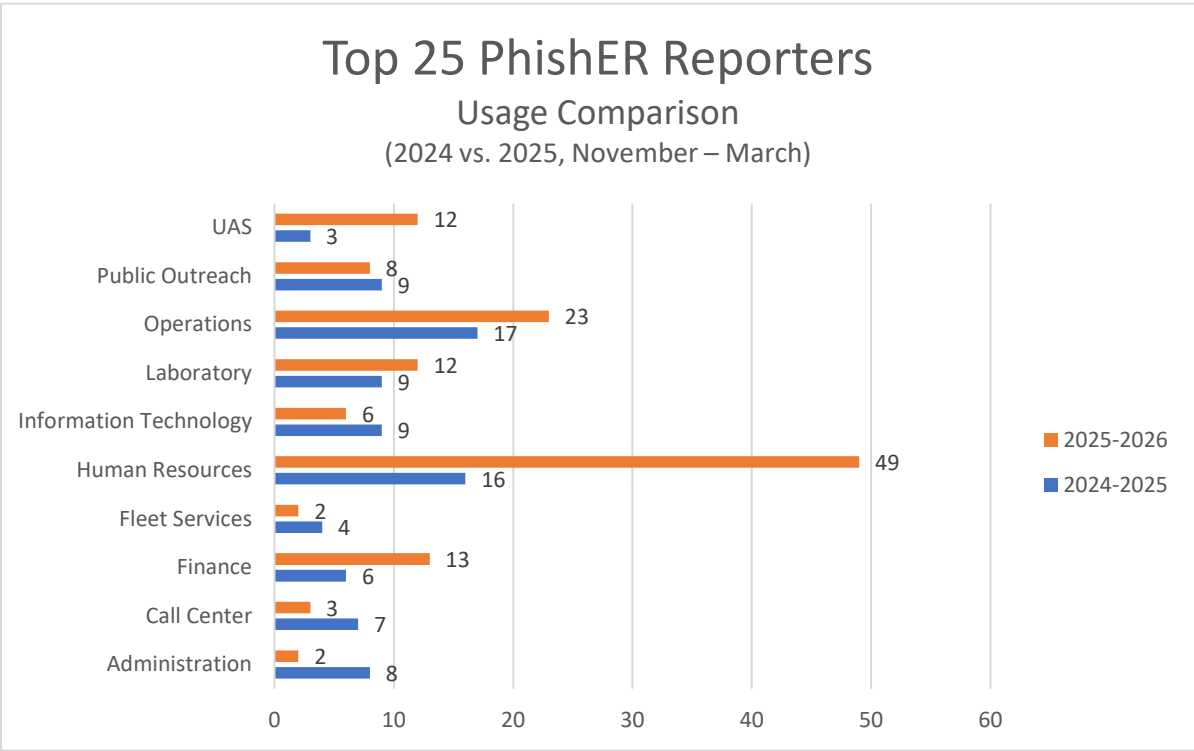
From **November 2025 to March 2026**, reports showed an **average failure rate of 4.1 clicks per campaign**. During this period, the **KnowBe4 platform sent a total of 1393 phishing emails** to District employees. The **calculated average phishing failure rate remained unchanged at 2.9 percent** for the same reporting period, indicating no measurable increase or decrease relative to prior results within that interval.

Employees who fail to recognize phishing attempts are automatically enrolled in targeted training sessions designed to improve their ability to detect and avoid phishing threats.



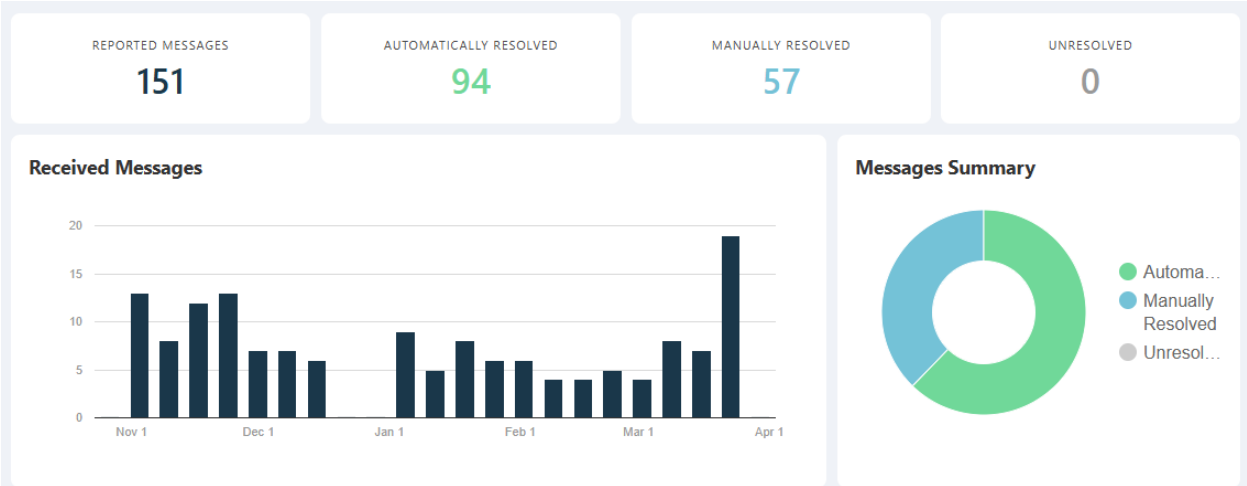
**Phishing ER:** Between **November 2025 to March 2026**, District employees reported a total of **151 potential phishing emails**. These reports were submitted using the **PhishER Button**, an Outlook add-in that enables users to quickly flag and submit unusual, unfamiliar, or suspicious emails for further analysis. This tool is accessible from both desktop computers and mobile devices, allowing employees to report potential threats efficiently.

From **November 2025 to March 2026**, employees used the **PhishER Button 47% more** compared to the same period (**November 2024 to March 2025**) among the **Top 25 Reporters**. Human Resources lead in usage, followed by Operations and Laboratory. The tool is still active across departments, but may need some reinforce awareness, training, or reminders about the importance of utilizing the reporting tool.

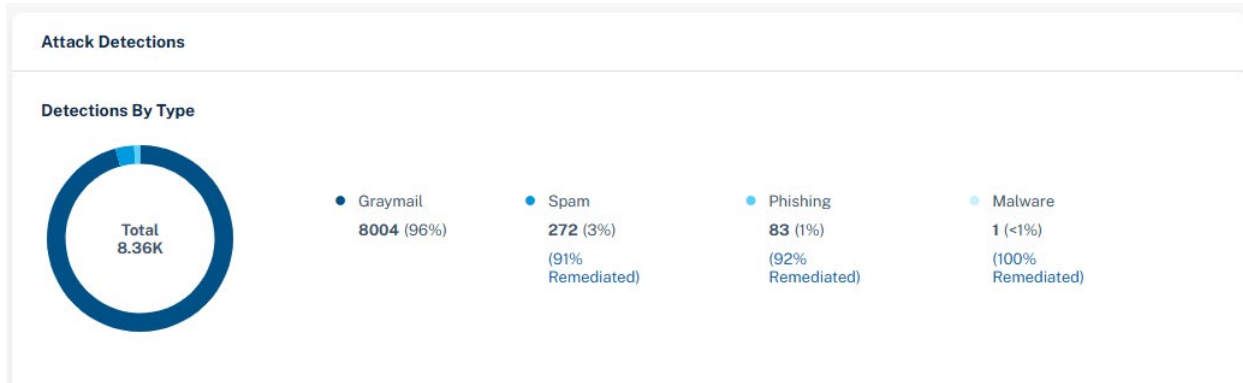


Once submitted, the emails were processed through **PhishER**, an automated email security platform designed to analyze and categorize reported messages. **PhishER automatically removed 62% of the reported emails** based on known phishing signatures, sender reputation, and other security indicators. This automated filtering significantly reduced the number of emails requiring manual intervention, streamlining the threat management process.

Despite the automated filtering, **57 reported messages were manual reviewed** by the **IT/GIS Department**. By integrating employee-reported phishing detection with automated filtering and expert analysis, the **PhishER system enhances the District’s cybersecurity posture**. This proactive approach not only helps identify and neutralize threats more efficiently but also encourages employee vigilance in recognizing potential phishing attempts.



**Checkpoint Harmony Email & Collaboration:** Checkpoint Harmony Email is an advanced email security solution designed to protect organizations from phishing, malware, ransomware, business email compromise (BEC), and other email-borne threats. It provides an additional security layer for the Microsoft 365 Email Platform. It integrates AI-driven threat prevention, anti-phishing technologies, and advanced sandboxing to detect and block sophisticated attacks before they reach users.

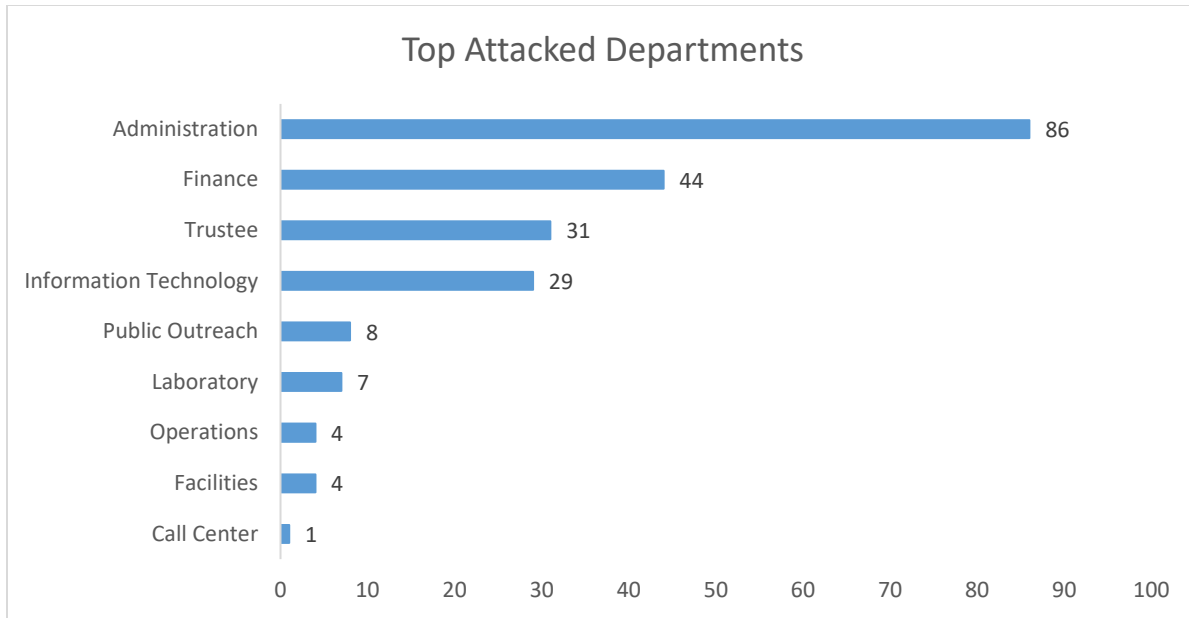


Over the last **90 days**, the **Checkpoint security system** inspected **25,485 incoming messages** to identify and mitigate potential cybersecurity threats. This review process plays a critical role in filtering out harmful emails before they reach employees, reducing the risk of security breaches.

During this period, Checkpoint detected and categorized:

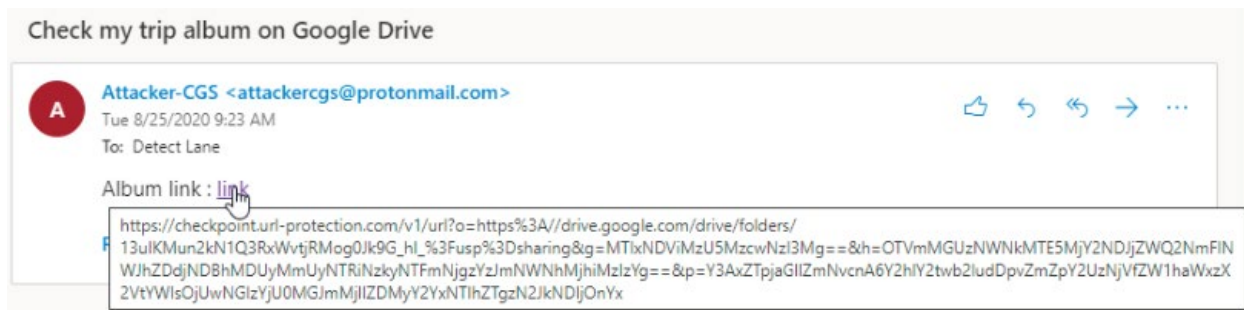
- **25,485 Graymail messages** - Graymail is a type of email that is not spam but isn't necessarily wanted by the recipient. Examples include newsletters, announcements, and promotional offers.
- **693 SPAM messages** – These were unsolicited or bulk emails, often promotional in nature, that could clutter inboxes or contain misleading content.
- **206 Phishing attempts** – These emails were designed to deceive recipients into providing sensitive information, such as login credentials or financial data. Phishing attacks remain a significant threat as they often appear to come from legitimate sources.
- **10 Malware-infected messages** – These emails contained malicious attachments or links intended to install harmful software, such as viruses, ransomware, or spyware, on District systems.

The **Top Attacked Departments** bar chart shows which **departments within the District** are being **targeted most frequently by cyberattacks**, based on Check Point’s threat data. This helps identify internal areas at greatest risk.



By continuously monitoring and filtering emails, **Checkpoint enhances the District’s cybersecurity defenses**. While automated detection is highly effective, **sophisticated phishing attempts may still bypass initial screening**. Therefore, a layered approach—including employee awareness and manual review—is essential to maintaining a **secure digital environment**.

**Checkpoint Click-Time Protection:** Click-Time Protection is a proactive security measure that replaces links in email bodies and attachments with secure, inspected URLs as seen below:



When a link is clicked, the destination website is dynamically inspected to ensure it is not a phishing site. Email Security secures emails by replacing URLs in emails and their attachments with protected links, based on the District's Security Policies.

### Benefits

- **Most Up-to-Date Intelligence:** Inspecting links when the user clicks on the URL allows Check Point to inspect the URL based on the latest inspection intelligence and software capabilities.
- **Protection against zero-day phishing websites:** Inspecting links when the user clicks on the URL allows Check Point to follow the user into the website. Click-Time Protection then emulates the website to expose hidden Phishing indicators.

- Pointing out the users that clicked the malicious URL: Click-Time Protection forensics allows administrators to detect the users that require further education and training to avoid clicking on malicious links.

## FLEET SERVICES

**Fleetio Vehicle Maintenance Roll-out:** Fleetio is a cloud-based fleet management platform that will **track, analyze, and improve the performance of our fleet vehicles**. It offers a centralized platform for managing maintenance, fuel usage, inspections, and other operational needs, providing a modern and efficient alternative to spreadsheets and outdated legacy systems.

**Vehicle Inspection:** Shop Mechanics are configuring **Fleetio Go**, a mobile app which will include a **digital vehicle inspection** feature that lets drivers complete and submit inspections **directly from a smartphone or tablet, eliminating the need for paper forms**. These inspections are fully customizable, allowing Fleet Services to tailor checklists to specific vehicle types, compliance requirements, or internal processes.

As a driver completes an inspection, the app can capture GPS location data, verify submission time, and **ensure inspections are performed where and when they are required**. If any items fail, Fleetio can **automatically trigger a maintenance workflow: creating issues, notifying the appropriate personnel, and initiating corrective actions**. Drivers can also attach photos, videos, and comments to document problems clearly, improving communication and speeding up resolution.

## SECURITY

**CSI Security:** On April 7th, CSI Security personnel **identified two (2) exterior doors on the Laboratory Building** that were found unsecured during routine inspection. Upon discovery, **CSI Security immediately secured both doors** to maintain the integrity of the building's perimeter and prevent unauthorized access. The incident was documented and formally reported through standard security reporting protocols. Following resolution, **the building's alarm system was reset, tested, and verified to be fully operational**. No additional security breaches, system malfunctions, or other anomalies were detected, and the situation was considered resolved without further incident.

## Public Outreach Department

The Public Information and Outreach Department advances the District's mission by delivering meaningful educational opportunities to the communities we serve. These efforts are thoughtfully planned and strategically implemented to ensure we are effectively reaching residents with timely, accurate, and actionable information.



Our school-based outreach program focuses primarily on students in grades K–5 and is aligned with California's Next Generation Science Standards (NGSS). Classroom presentations are designed to complement existing curriculum and are customized to meet the specific needs and requests of educators. In addition, school-wide presentations are conducted during events such as science fairs and career days, allowing us to engage larger student audiences. These presentations highlight the District's services, provide education on mosquitoes and vector control, and introduce students to potential career pathways in public health.

Outreach to adult audiences is conducted in partnership with local organizations, including the Desert Recreation District, senior centers, and other community-based groups. These presentations emphasize the importance of source reduction and provide practical, easy-to-implement strategies to reduce mosquito activity and prevent vector-borne diseases, with a focus on protecting vulnerable populations such as older adults.

The Department also leverages social media platforms to extend its reach beyond traditional communication channels. This approach allows us to connect with community members in a more direct and familiar way, increasing public engagement while strengthening awareness of the District's programs and services.

Participation in community events remains a key component of our outreach strategy. Through informational booths and in-person engagement, staff are able to connect with residents, families, and visitors in an approachable setting. These interactions provide valuable opportunities to share resources, answer questions, and reinforce key public messaging that supports the District's mission.

## Outreach Overview



During the reporting period of November 2025 through April 2026, with support from Diana Reyes, the District’s Events and Outreach assistant, the Public Information and Outreach Department conducted a total of 254 outreach events, reaching more than 12,000 residents across the Coachella Valley. These efforts reflect a balanced and strategic approach, combining classroom-based education with community engagement to maximize both reach and impact.

Classroom presentations accounted for approximately half of all activities, underscoring the District’s continued investment in early education and alignment with state science standards. At the same time, participation in community events, resource fairs, and wellness events provided opportunities to engage large and diverse audiences, significantly expanding overall visibility.



This period included participation in the City of Coachella Holiday Parade, Riverside County Presidents Day Parade, and The Riverside County Date fair. Increasing our overall outreach to residents across the County.

### Break down by Community:

| City                  | Total Events | Total Attendees | City                  | Total Events | Total Attendees |
|-----------------------|--------------|-----------------|-----------------------|--------------|-----------------|
| <b>Indio</b>          | 55           | 3,377           | <b>Mecca</b>          | 11           | 276             |
| <b>North Shore</b>    | 45           | 1,556           | <b>Thermal</b>        | 14           | 589             |
| <b>Coachella</b>      | 35           | 1,400           | <b>Cathedral City</b> | 7            | 680             |
| <b>Palm Springs</b>   | 19           | 1,367           | <b>Indian Wells</b>   | 7            | 276             |
| <b>Palm Desert</b>    | 20           | 827             | <b>Rancho Mirage</b>  | 3            | 103             |
| <b>La Quinta</b>      | 14           | 760             | <b>Indio Hills</b>    | 4            | 54              |
| <b>Thousand Palms</b> | 3            | 251             | <b>DHS</b>            | 2            | 20              |
| <b>Oasis</b>          | 9            | 209             |                       |              |                 |

## Youth Education



Hugo Arcos, the District's Education Specialist, continues to strengthen and expand the District's school-based educational programming. He has developed grade-specific lesson plans for kindergarten through 5th grade, available in both English and Spanish, ensuring accessibility and alignment with diverse classroom needs. These materials will be incorporated into the

District's Resource Center for the upcoming school year, providing teachers with tools they can use independently to reinforce key concepts introduced during in-person presentations.

Mr. Arcos has also played a key role in expanding the District's presence across the Coachella Valley and multiple school districts. Through consistent community outreach and strong relationships with educators, interest in the program continues to grow. Teachers are increasingly requesting presentations directly, allowing the District to extend its reach and engage a greater number of students throughout the region.

As part of the continued growth of the District's educational programs, and to further encourage and recognize participation, Mr. Arcos has developed a formal recognition program. The purpose of this initiative is to acknowledge outstanding partnership, engagement, and sustained commitment to vector control education, reflecting contributions made not only during the current year but also in prior years, including 2024 and 2025. These recognitions are scheduled to be presented in the coming months, prior to the conclusion of the school year.

## Adult Education

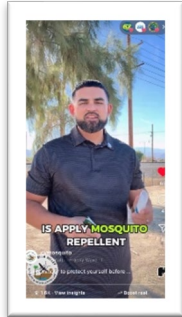
Fernando Gutierrez, the District's Community Engagement Specialist, continues to advance adult-focused education by strengthening partnerships with senior centers and community-based organizations throughout the Valley. A key component of this effort is the continued expansion of the Lotería de Vectores program, which has now been formally incorporated into the CCSC regularly scheduled programs.



Mr. Gutierrez has also reestablished partnerships with the Indio Senior Center and Coachella Senior Center, while expanding outreach to a new location in Desert Hot Springs. In addition, he has maintained a consistent presence at community events, including county fairs, parades, HOA meetings, and outreach efforts within mobile home communities such as Dune Palms in La Quinta.

He further supported the Oasis Tick Clinic Project through targeted, door-to-door engagement and community outreach.

## Social Media



The District’s social media program, led by Alejandro Camacho, the District’s Community Engagement Specialist focused on social media and content creation, continues to demonstrate steady growth and increased effectiveness as a key communication tool. During this reporting period, staff published more than 108 posts across District platforms, achieving consistent month-over-month growth in reach and engagement. These efforts generated over 453,000 total views, resulted in the addition of more than 420 new followers, and produced over 9,000 interactions, reflecting strong community interest and engagement with District messaging.

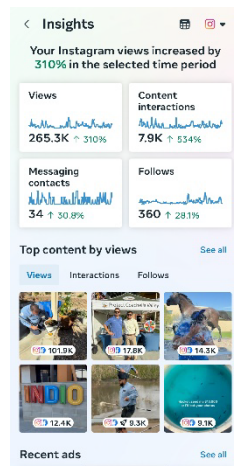
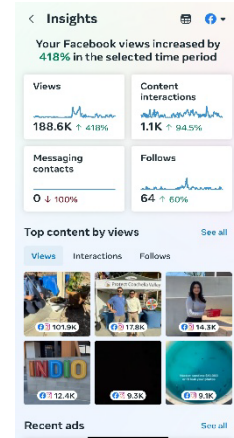
Content performance was further amplified through strategic sharing and collaboration with regional partners. Posts were reshared by a wide range of local agencies and organizations, including the Desert Recreation District, Desert Sands Unified School District, Coachella Valley Unified School District, and the Cities of Palm Springs, Palm Desert, Coachella, and Indio. Additional amplification was provided by local elected officials, including councilmembers, Assembly representatives, and Riverside County Supervisor V. Manuel Perez, as well as engaged community members.

This level of organic reach and partner collaboration has significantly expanded the visibility of the District’s messaging, reinforcing key education efforts and strengthening community awareness across the Coachella Valley.

## Look Ahead

April 19<sup>th</sup>, 2026, marks the beginning of Mosquito Awareness Week, a key annual initiative focused on increasing public awareness and promoting preventive actions. Throughout the week, staff will conduct targeted community canvassing across the Coachella Valley, engaging residents through visits to community centers, medical clinics, and local businesses to share resources.

This year’s campaign will focus on messaging focused on prevention strategies and the role residents can play in reducing the risk of mosquito-borne disease.





**Coachella Valley  
Mosquito and Vector  
Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Informational Item

Mosquito and Vector Control Association of California (MVCAC) Legislative Day and Spring Meetings, March 9-11, 2026

**Report:**

The spring quarterly meeting of the Mosquito and Vector Control Association of California began with our Legislative Advocacy Day. This year, MVCAC sought to inform legislators and their staff of the vital work mosquito and vector control districts perform to protect people from diseases such as dengue and West Nile encephalitis. Information on the role of mosquito and vector control following disaster events such as hurricanes and fires was shared to ensure agencies are supported and funded. *Jeremy Wittie* led much of the efforts here as the chair of the Legislative Committee.

The spring quarterly meeting provides an opportunity for committees that complete specific tasks within the association to meet and update the MVCAC membership on their activities. Committees address statewide issues that impact mosquito and vector control districts from surveillance and control to outreach and legislation. *Robert Gaona* leads the Public Relations Committee; *Jennifer Henke* chairs the Regulatory Affairs Committee; and *Kim Hung* is part of the Laboratory Technology Committee.



*General Manager Jeremy Wittie, Representative Jeff Gonzalez, Public Information Manager Robert Gaona, and Trustee Frank Figueroa.*

**ATTENDEES:**

Jeremy Wittie, General Manager

Robert Gaona, Public Information Manager

Jennifer A. Henke, Laboratory Manager   Kim Hung, Vector Ecologist



## Coachella Valley Mosquito and Vector Control District

May 12, 2026

### Staff Report

#### **Agenda Item:** Informational Item

American Mosquito Control Association (AMCA) Annual Conference, March 23-27, 2026, in Portland, Oregon

#### **Report:**

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 highlighted two speakers. The first was the AMCA Memorial Lecture where Dr. Chris Barker of UC Davis shared the contributions of Dr. Bruce Eldridge. Dr. Eldridge worked at UC Davis, and in his later years, was the source of inspiration for the VectorSurv system that is used to track mosquito collections and virus test results. The second was Dr. Erin Cadwalader of the Entomological Society of America, who highlighted the importance of advocating for mosquito control with the public and elected officials.

*Michael Esparza* received the Boyd-Arias Grass Roots Award for excellence in mosquito control from a non-supervisory employee. *Alex Echenberg* received second place in the poster competition.



*Left: Michael Esparza accepting his Boyd Ariaz Grass Roots Award.*

*Center: District employees and Board President Ben Guitron*

*Right: Alex Echenberg (fourth from the right) accepting her poster award.*

#### **Presentations**

*Alex Echenberg*, Goldilocks and the Three Rates of Sumilarv 0.5G – poster presentation  
*Gabriela Harvey*, Follow the buzz to plan your work – talk presentation

Jennifer Henke, Wet desert: Evaluating pesticide applications in the Coachella Valley, CA – invited talk presentation

Kim Hung, “You spin me right round” Best battery brands for spinning impingers – poster presentation

Antonio Molina, Scaling up Wide Area Larvicide Spraying (WALS): A strategic approach to *Aedes aegypti* control in the Coachella Valley – poster presentation

Rick Ortiz, Beating the heat: Keeping our drone program mission ready – invited talk presentation



Left: Alex Echenberg and Board President Ben Guitron  
Center: Rick Ortiz and Board Treasurer Dr. Frank Figueroa  
Right: Board President Ben Guitron and Michael Esparza

This year the AMCA Annual Conference hosted sessions on:

- Legislative and Regulatory issues and updates
- MADHacks and Innovations
- Mosquito surveillance
- Next-Gen Mosquito Control and developing products
- Outreach and education strategies
- Insecticide resistance
- Managing mosquitoes across the wetland spectrum
- Sterile mosquito programs
- Adult mosquito control
- Aerial mosquito control
- Adult mosquito control
- Connecting data, researchers, and stakeholders
- Biting midges
- Latin American presentations
- Social media and mosquito control
- Public relations
- Traps and attractants for mosquito surveillance

**ATTENDEES:**

President Ben Guitron  
Treasurer Frank Figueroa  
Jennifer A. Henke, Laboratory Manager  
Greg Alvarado, Operations Manager  
Robert Gaona, Public Information Manager  
Crystal Moreno, Human Resources Risk Manager

Kim Hung, Vector Ecologist  
Gabriela Harvey, Vector Ecologist  
Antonio Molina, Operations Program Coordinator  
Rick Ortiz, UAS Coordinator  
Robert Mora, Field Supervisor  
Alex Echenberg, Biologist  
Michael Esparza, Laboratory Assistant I



**Coachella Valley  
Mosquito and Vector  
Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Informational Item

PacVec and RaHP VEC Joint Annual Meeting April 8-10, 2026, in Salt Lake City, Utah

**Report:**

The Pacific Southwest Center of Excellence in Vector-Borne Diseases (PacVec) met jointly with the Rockies and High Plains Vector-borne Diseases Center (RaHP VEC) in Salt Lake City. These two centers have complimentary missions through their funding from the Centers for Disease Control; both are seeking to improve the work and the workforce of vector control professionals by bringing together local agencies, universities, and the CDC to address regional issues.



St. Louis encephalitis virus has spread further in 2025, reaching Colorado and Texas. Examination of the type of virus leads us to believe that the strain that was in Colorado is a re-introduction for Argentina instead of a spread from California and Arizona. One program is starting to use adult mosquito control products in their drones. Another demonstrated that rather than focusing on a single message for informing people about the reduced risk of the pesticides used for mosquito control, the fact that there were messages and outreach to the community was the driver for gaining acceptance by the public. People also want more pictures of what mosquitoes really look like in addition to the cartoons used.

Of additional interest, there were several updates from researchers on brown dog ticks. A program in Arizona has been tracking that people are frequently introducing ticks to the area as they visit out of state and out of country locations with their pets. Researchers also highlighted findings on alpha-gal syndrome. Attendees had the

opportunity to tour the Salt Lake City Mosquito Abatement District, which has a similar landscape to the Coachella Valley.

**ATTENDEES:**

Jennifer A. Henke, Laboratory Manager

Kim Hung, Vector Ecologist



**Coachella Valley Mosquito  
and Vector Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Informational Item

Pacific Branch of the Entomological Society of America Annual Conference, April 12-15, 2026

**Report:**

The Pacific Branch of the Entomological Society of America Annual Conference provides an opportunity for researchers of insects from the western states of the U.S. to meet to discuss their latest research on a variety of topics. The meeting opened with a plenary presentation on how armature on beetles has grown and how selection by female beetles has led to changes in the appearance of male beetles over generations.

A particularly compelling program was put together on the use of sterile insects to control agricultural pests. For one pest that is a moth, they have determined that it is better to irradiate the female moth and then release her offspring, as the irradiation impacts are inherited in that animal. They are also needing to use a higher dose of irradiation, likely due to the larger insect that they are working to control. For a fly that is a pest, they found issues with shipping the insects, similar to what was seen in the early days of mosquito work (2016-2018 counts). Understanding how this work is being done in other systems can continue to improve our work.

Other presentations of interest included research on plague bacteria in fleas and behavior of ticks, including brown dog ticks.

I co-organized a symposium and workshop aimed at improving skills and confidence when speaking with elected officials regarding policies that impact scientists. My colleague invited a staff member from the local Congressional representative's office to attend. Collin Tracy, from Representative Baumgartner's office met with constituents, and offered advice to the wider audience on how to frame meetings. We had several attendees who were new to advocacy who walked away feeling more confident in how to approach such meetings with their elected officials.

**ATTENDEES:**

Jennifer A. Henke, Laboratory Manager



**Coachella Valley Mosquito and  
Vector Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Consent Calendar

Approval of Resolution 2026-03 Adopting Employee Pay Schedule, in conformance with California Code of Regulations, Title 2, Sections 570.5 and 571 — **Crystal Garcia Moreno, MSIOP, Human Resources Risk Manager**

**Background:**

On August 10, 2011, CalPERS adopted the *California Code of Regulations (CCR) Title 2, Sections 570.5 and 571(b)*, which set specific requirements for making pay schedules publicly available. The stated purpose was to ensure consistency and enhance disclosure and transparency of public employee compensation.

To fully meet the requirements of these regulations, the pay schedule must list a position title for every employee position, show a pay rate for each position, and indicate the time base for the pay rate (hourly, monthly, annually, etc.). The pay schedule shown in *Exhibit A* reflects the following change:

- Vector Control Technician I, Nine-Month Position

**Strategic Business Plan Alignment**

**Goal 6:** FINANCE-Sustained and Transparent Finances that meet District revenue needs

**Staff Recommendation:**

Staff recommends that the Board of Trustees approve Resolution 2026-03.

**Exhibit:**

- Resolution 2026-03
- Pay Schedule (Exhibit A)

**RESOLUTION NO. 2026-03**

**A RESOLUTION OF THE BOARD OF TRUSTEES OF THE  
COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL  
DISTRICT APPROVING THE DISTRICT'S PAY SCHEDULE TO  
CONFORM WITH THE CALIFORNIA CODE OF REGULATIONS  
(CCR) TITLE 2, SECTION 570.5 AND AMENDMENTS TO CCR  
SECTION 571, SUBDIVISION (b)**

**WHEREAS**, the Coachella Valley Mosquito and Vector Control District ("District") is a political subdivision and a "local agency" of the State of California, created and operating under the authority and provisions of California Health and Safety Code Section 2000 et. seq., and is also a "local agency" within the meaning of Section 53600 of the California Government Code; and

**WHEREAS**, California Code of Regulations, Title 2, Section 570.5 requires governing bodies of local agencies contracting with CalPERS to approve and adopt a publicly available pay schedule in accordance with public meeting laws; and

**WHEREAS**, the Board of Trustees wishes to meet the requirements of these regulations by adopting a Pay Schedule which sets forth the pay ranges for all District employee classifications, including seasonal employees, in one single document;

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

**Section 1. Recitals.**

The true and correct recitals above are incorporated by this reference herein as the basis and foundation for the District's adoption of this Resolution.

**Section 2. Approval of Pay Schedule**

That the Board of Trustees hereby approves the pay schedule shown on Exhibit "A," which is incorporated herein by this reference, for classifications as designated on said schedule, a copy of which is attached hereto and incorporated herein by this reference.

**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 by the Board of Trustees of the Coachella Valley Mosquito and Vector Control District this 12th day of May 2026.**

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Benjamin Guitron, IV, President  
Board of Trustees

**ATTEST:**

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Megan Scarborough-Eckel, Clerk of the Board

**APPROVED AS TO FORM:**

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Lena D. Wade, General Counsel

**REVIEWED:**

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Jeremy Wittie, M.S., General Manager

**Exhibit "A"**

**Coachella Valley Mosquito and Vector Control District  
Pay Schedule**

**Coachella Valley Mosquito and Vector Control District**

FY2025-26 - Effective 7/1/2025 to 6/30/2025

|  | HOURLY-STEPS     |               |               |               |               |               | MONTHLY-STEPS   |                 |                 |                 |                 |                 | ANNUAL-STEPS     |                  |                  |                  |                  |                   | CSEA SMP             |                 |
|--|------------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|-------------------|----------------------|-----------------|
|  | 1                | 2             | 3             | 4             | 5             | 6             | 1               | 2               | 3               | 4               | 5               | 6               | 1                | 2                | 3                | 4                | 5                | 6                 | 1.5%                 | 2.5%            |
| <b>VCT I, 9-Month VCT I, Lab Technician - MOU Range 14</b>   | <b>28.67</b>     | <b>30.10</b>  | <b>31.61</b>  | <b>33.19</b>  | <b>34.85</b>  | <b>36.59</b>  | <b>4,969.38</b> | <b>5,217.85</b> | <b>5,478.73</b> | <b>5,752.68</b> | <b>6,040.31</b> | <b>6,342.32</b> | <b>59,632.60</b> | <b>62,614.20</b> | <b>65,744.82</b> | <b>69,032.19</b> | <b>72,483.68</b> | <b>76,107.82</b>  | <b>1,141.62</b>      | <b>1,902.70</b> |
| <i>Certificate 1%</i>  | 28.96            | 30.40         | 31.92         | 33.52         | 35.20         | 36.96         | 5,019.08        | 5,270.03        | 5,533.52        | 5,810.21        | 6,100.71        | 6,405.74        | 60,228.93        | 63,240.34        | 66,402.27        | 69,722.52        | 73,208.51        | 76,868.90         | 1,153.03             | 1,921.72        |
| <i>Associates 2%</i>   | 29.24            | 30.71         | 32.24         | 33.85         | 35.54         | 37.32         | 5,068.77        | 5,322.21        | 5,588.31        | 5,867.74        | 6,161.11        | 6,469.17        | 60,825.25        | 63,866.49        | 67,059.71        | 70,412.84        | 73,933.35        | 77,629.98         | 1,164.45             | 1,940.75        |
| <i>Bachelors 3%</i>  | 29.53            | 31.01         | 32.56         | 34.18         | 35.89         | 37.69         | 5,118.46        | 5,374.39        | 5,643.10        | 5,925.26        | 6,221.52        | 6,532.59        | 61,421.58        | 64,492.63        | 67,717.16        | 71,103.16        | 74,658.19        | 78,391.06         | 1,175.87             | 1,959.78        |
| <i>Masters 4%</i>  | 29.82            | 31.31         | 32.87         | 34.52         | 36.24         | 38.05         | 5,168.16        | 5,426.56        | 5,697.88        | 5,982.79        | 6,281.92        | 6,596.01        | 62,017.90        | 65,118.77        | 68,374.61        | 71,793.48        | 75,383.02        | 79,152.14         | 1,187.28             | 1,978.80        |
| <i>Doctorate 5%</i>  | 30.10            | 31.61         | 33.19         | 34.85         | 36.59         | 38.42         | 5,217.85        | 5,478.74        | 5,752.67        | 6,040.32        | 6,342.32        | 6,659.43        | 62,614.23        | 65,744.91        | 69,032.06        | 72,483.80        | 76,107.86        | 79,913.22         | 1,198.70             | 1,997.83        |
| <b>VCT II, Laboratory Asst. I - MOU Range 18</b>   | <b>34.85</b>     | <b>36.59</b>  | <b>38.42</b>  | <b>40.34</b>  | <b>42.36</b>  | <b>44.48</b>  | <b>6,040.31</b> | <b>6,342.32</b> | <b>6,659.45</b> | <b>6,992.42</b> | <b>7,342.06</b> | <b>7,709.16</b> | <b>72,483.68</b> | <b>76,107.82</b> | <b>79,913.35</b> | <b>83,909.07</b> | <b>88,104.66</b> | <b>92,509.90</b>  | <b>1,387.65</b>      | <b>2,312.75</b> |
| <i>Certificate 1%</i>  | 35.20            | 36.96         | 38.80         | 40.74         | 42.78         | 44.92         | 6,100.71        | 6,405.74        | 6,726.04        | 7,062.35        | 7,415.48        | 7,786.25        | 73,208.51        | 76,868.90        | 80,712.48        | 84,748.16        | 88,985.71        | 93,435.00         | 1,401.53             | 2,335.88        |
| <i>Associates 2%</i>   | 35.54            | 37.32         | 39.19         | 41.15         | 43.21         | 45.37         | 6,161.11        | 6,469.17        | 6,792.63        | 7,132.27        | 7,488.90        | 7,863.34        | 73,933.35        | 77,629.98        | 81,511.61        | 85,587.26        | 89,866.76        | 94,360.10         | 1,415.40             | 2,359.00        |
| <i>Bachelors 3%</i>  | 35.89            | 37.69         | 39.57         | 41.55         | 43.63         | 45.81         | 6,221.52        | 6,532.59        | 6,859.23        | 7,202.20        | 7,562.32        | 7,940.43        | 74,658.19        | 78,391.06        | 82,310.75        | 86,426.35        | 90,747.80        | 95,285.20         | 1,429.28             | 2,382.13        |
| <i>Masters 4%</i>  | 36.24            | 38.05         | 39.96         | 41.95         | 44.05         | 46.25         | 6,281.92        | 6,596.01        | 6,925.82        | 7,272.12        | 7,635.74        | 8,017.52        | 75,383.02        | 79,152.14        | 83,109.88        | 87,265.44        | 91,628.85        | 96,210.30         | 1,443.15             | 2,405.26        |
| <i>Doctorate 5%</i>  | 36.59            | 38.42         | 40.34         | 42.36         | 44.48         | 46.70         | 6,342.32        | 6,659.43        | 6,992.42        | 7,342.04        | 7,709.16        | 8,094.62        | 76,107.86        | 79,913.22        | 83,909.01        | 88,104.53        | 92,509.90        | 97,135.40         | 1,457.03             | 2,428.38        |
| <b>Mechanic I, Fac Maint Tech I - MOU Range 19</b>   | <b>36.59</b>     | <b>38.42</b>  | <b>40.34</b>  | <b>42.36</b>  | <b>44.48</b>  | <b>46.70</b>  | <b>6,342.32</b> | <b>6,659.45</b> | <b>6,992.42</b> | <b>7,342.06</b> | <b>7,709.16</b> | <b>8,094.62</b> | <b>76,107.82</b> | <b>79,913.35</b> | <b>83,909.07</b> | <b>88,104.66</b> | <b>92,509.90</b> | <b>97,135.40</b>  | <b>1,457.03</b>      | <b>2,428.38</b> |
| <i>Certificate 1%</i>  | 36.96            | 38.80         | 40.74         | 42.78         | 44.92         | 47.17         | 6,405.74        | 6,726.04        | 7,062.35        | 7,415.48        | 7,786.25        | 8,175.56        | 76,868.90        | 80,712.48        | 84,748.16        | 88,985.71        | 93,435.00        | 98,106.75         | 1,471.60             | 2,452.67        |
| <i>Associates 2%</i>   | 37.32            | 39.19         | 41.15         | 43.21         | 45.37         | 47.63         | 6,469.17        | 6,792.63        | 7,132.27        | 7,488.90        | 7,863.34        | 8,256.51        | 77,629.98        | 81,511.61        | 85,587.26        | 89,866.76        | 94,360.10        | 99,078.11         | 1,486.17             | 2,476.95        |
| <i>Bachelors 3%</i>  | 37.69            | 39.57         | 41.55         | 43.63         | 45.81         | 48.10         | 6,532.59        | 6,859.23        | 7,202.20        | 7,562.32        | 7,940.43        | 8,337.46        | 78,391.06        | 82,310.75        | 86,426.35        | 90,747.80        | 95,285.20        | 100,049.46        | 1,500.74             | 2,501.24        |
| <i>Masters 4%</i>  | 38.05            | 39.96         | 41.95         | 44.05         | 46.25         | 48.57         | 6,596.01        | 6,925.82        | 7,272.12        | 7,635.74        | 8,017.52        | 8,418.40        | 79,152.14        | 83,109.88        | 87,265.44        | 91,628.85        | 96,210.30        | 101,020.81        | 1,515.31             | 2,525.52        |
| <i>Doctorate 5%</i>  | 38.42            | 40.34         | 42.36         | 44.48         | 46.70         | 49.03         | 6,659.43        | 6,992.42        | 7,342.04        | 7,709.16        | 8,094.62        | 8,499.35        | 79,913.22        | 83,909.01        | 88,104.53        | 92,509.90        | 97,135.40        | 101,992.17        | 1,529.88             | 2,549.80        |
| <b>Lead VCT, Lab Asst. II, Mechanic II, Fac Maint Tech II, Unmanned Aircraft Systems (UAS) Operator - MOU Range 20</b> | <b>38.42</b>     | <b>40.34</b>  | <b>42.36</b>  | <b>44.48</b>  | <b>46.70</b>  | <b>49.03</b>  | <b>6,659.45</b> | <b>6,992.42</b> | <b>7,342.06</b> | <b>7,709.16</b> | <b>8,094.62</b> | <b>8,499.35</b> | <b>79,913.35</b> | <b>83,909.07</b> | <b>88,104.66</b> | <b>92,509.90</b> | <b>97,135.40</b> | <b>101,992.16</b> | <b>1,529.88</b>      | <b>2,549.80</b> |
| <i>Certificate 1%</i>  | 38.80            | 40.74         | 42.78         | 44.92         | 47.17         | 49.53         | 6,726.04        | 7,062.35        | 7,415.48        | 7,786.25        | 8,175.56        | 8,584.34        | 80,712.48        | 84,748.16        | 88,985.71        | 93,435.00        | 98,106.75        | 103,012.08        | 1,545.18             | 2,575.30        |
| <i>Associates 2%</i>   | 39.19            | 41.15         | 43.21         | 45.37         | 47.63         | 50.02         | 6,792.63        | 7,132.27        | 7,488.90        | 7,863.34        | 8,256.51        | 8,669.33        | 81,511.61        | 85,587.26        | 89,866.76        | 94,360.10        | 99,078.11        | 104,032.00        | 1,560.48             | 2,600.80        |
| <i>Bachelors 3%</i>  | 39.57            | 41.55         | 43.63         | 45.81         | 48.10         | 50.51         | 6,859.23        | 7,202.20        | 7,562.32        | 7,940.43        | 8,337.46        | 8,754.33        | 82,310.75        | 86,426.35        | 90,747.80        | 95,285.20        | 100,049.46       | 105,051.93        | 1,575.78             | 2,626.30        |
| <i>Masters 4%</i>  | 39.96            | 41.95         | 44.05         | 46.25         | 48.57         | 51.00         | 6,925.82        | 7,272.12        | 7,635.74        | 8,017.52        | 8,418.40        | 8,839.32        | 83,109.88        | 87,265.44        | 91,628.85        | 96,210.30        | 101,020.81       | 106,071.85        | 1,591.08             | 2,651.80        |
| <i>Doctorate 5%</i>  | 40.34            | 42.36         | 44.48         | 46.70         | 49.03         | 51.49         | 6,992.42        | 7,342.04        | 7,709.16        | 8,094.62        | 8,499.35        | 8,924.31        | 83,909.01        | 88,104.53        | 92,509.90        | 97,135.40        | 101,992.17       | 107,091.77        | 1,606.38             | 2,677.29        |
|  | <b>TEAMSTERS</b> |               |               |               |               |               |                 |                 |                 |                 |                 |                 |                  |                  |                  |                  |                  |                   | <b>TEAMSTERS SMP</b> |                 |
|  | <b>Step 1</b>    | <b>Step 2</b> | <b>Step 3</b> | <b>Step 4</b> | <b>Step 5</b> | <b>Step 6</b> | <b>Step 1</b>   | <b>Step 2</b>   | <b>Step 3</b>   | <b>Step 4</b>   | <b>Step 5</b>   | <b>Step 6</b>   | <b>Step 1</b>    | <b>Step 2</b>    | <b>Step 3</b>    | <b>Step 4</b>    | <b>Step 5</b>    | <b>Step 6</b>     | <b>1.5%</b>          | <b>2.5%</b>     |
| <b>Administrative Assistant, Events and Outreach Assistant</b>   | <b>32.34</b>     | <b>33.96</b>  | <b>35.66</b>  | <b>37.44</b>  | <b>39.31</b>  | <b>41.28</b>  | <b>5,605.66</b> | <b>5,885.95</b> | <b>6,180.24</b> | <b>6,489.26</b> | <b>6,813.71</b> | <b>7,154.41</b> | <b>67,267.98</b> | <b>70,631.36</b> | <b>74,162.92</b> | <b>77,871.09</b> | <b>81,764.58</b> | <b>85,852.89</b>  | <b>1,287.79</b>      | <b>2,146.32</b> |
| <i>Certificate 1%</i>  | 32.66            | 34.30         | 36.01         | 37.81         | 39.70         | 41.69         | 5,661.72        | 5,944.81        | 6,242.05        | 6,554.15        | 6,881.85        | 7,225.95        | 67,940.66        | 71,337.67        | 74,904.55        | 78,649.80        | 82,582.22        | 86,711.42         | 1,300.67             | 2,167.79        |
| <i>Associates 2%</i>   | 32.99            | 34.64         | 36.37         | 38.19         | 40.10         | 42.10         | 5,717.78        | 6,003.67        | 6,303.85        | 6,619.04        | 6,949.99        | 7,297.50        | 68,613.34        | 72,043.98        | 75,646.18        | 79,428.51        | 83,399.87        | 87,569.95         | 1,313.55             | 2,189.25        |
| <i>Bachelors 3%</i>  | 33.31            | 34.98         | 36.72         | 38.56         | 40.49         | 42.51         | 5,773.83        | 6,062.52        | 6,365.65        | 6,683.94        | 7,018.13        | 7,369.04        | 69,286.02        | 72,750.30        | 76,387.80        | 80,207.22        | 84,217.51        | 88,428.48         | 1,326.43             | 2,210.71        |
| <i>Masters 4%</i>  | 33.63            | 35.32         | 37.08         | 38.94         | 40.88         | 42.93         | 5,829.89        | 6,121.38        | 6,427.45        | 6,748.83        | 7,086.26        | 7,440.58        | 69,958.70        | 73,456.61        | 77,129.43        | 80,985.93        | 85,035.16        | 89,287.01         | 1,339.31             | 2,232.18        |
| <i>Doctorate 5%</i>  | 33.96            | 35.66         | 37.44         | 39.31         | 41.28         | 43.34         | 5,885.95        | 6,180.24        | 6,489.26        | 6,813.72        | 7,154.40        | 7,512.13        | 70,631.38        | 74,162.92        | 77,871.06        | 81,764.64        | 85,852.81        | 90,145.54         | 1,352.18             | 2,253.64        |
| <b>Accounting Technician I</b>   | <b>33.96</b>     | <b>35.66</b>  | <b>37.44</b>  | <b>39.31</b>  | <b>41.28</b>  | <b>43.34</b>  | <b>5,885.95</b> | <b>6,180.24</b> | <b>6,489.26</b> | <b>6,813.72</b> | <b>7,154.40</b> | <b>7,512.12</b> | <b>70,631.36</b> | <b>74,162.92</b> | <b>77,871.07</b> | <b>81,764.62</b> | <b>85,852.85</b> | <b>90,145.50</b>  | <b>1,352.18</b>      | <b>2,253.64</b> |
| <i>Certificate 1%</i>  | 34.30            | 36.01         | 37.81         | 39.70         | 41.69         | 43.77         | 5,944.81        | 6,242.05        | 6,554.15        | 6,881.86        | 7,225.95        | 7,587.25        | 71,337.67        | 74,904.55        | 78,649.78        | 82,582.27        | 86,711.38        | 91,046.95         | 1,365.70             | 2,276.17        |
| <i>Associates 2%</i>   | 34.64            | 36.37         | 38.19         | 40.10         | 42.10         | 44.21         | 6,003.67        | 6,303.85        | 6,619.04        | 6,949.99        | 7,297.49        | 7,662.37        | 72,043.98        | 75,646.18        | 79,428.49        | 83,399.92        | 87,569.91        | 91,948.41         | 1,379.23             | 2,298.71        |
| <i>Bachelors 3%</i>  | 34.98            | 36.72         | 38.56         | 40.49         | 42.51         | 44.64         | 6,062.52        | 6,365.65        | 6,683.93        | 7,018.13        | 7,369.04        | 7,737.49        | 72,750.30        | 76,387.81        | 80,207.20        | 84,217.56        | 88,428.44        | 92,849.86         | 1,392.75             | 2,321.25        |
| <i>Masters 4%</i>  | 35.32            | 37.08         | 38.94         | 40.88         | 42.93         | 45.07         | 6,121.38        | 6,427.45        | 6,748.83        | 7,086.27        | 7,440.58        | 7,812.61        | 73,456.61        | 77,129.44        | 80,985.91        | 85,035.21        | 89,286.97        | 93,751.32         | 1,406.27             | 2,343.78        |
| <i>Doctorate 5%</i>  | 35.66            | 37.44         | 39.31         | 41.28         | 43.34         | 45.51         | 6,180.24        | 6,489.26        | 6,813.72        | 7,154.40        | 7,512.12        | 7,887.73        | 74,162.92        | 77,871.07        | 81,764.62        | 85,852.85        | 90,145.50        | 94,652.77         | 1,419.79             | 2,366.32        |
| <b>Procurement Specialist</b>  | <b>35.66</b>     | <b>37.44</b>  | <b>39.31</b>  | <b>41.28</b>  | <b>43.34</b>  | <b>45.51</b>  | <b>6,180.24</b> | <b>6,489.26</b> | <b>6,813.71</b> | <b>7,154.41</b> | <b>7,512.13</b> | <b>7,887.73</b> | <b>74,162.92</b> | <b>77,871.09</b> | <b>81,764.58</b> | <b>85,852.89</b> | <b>90,145.56</b> | <b>94,652.77</b>  | <b>1,419.79</b>      | <b>2,366.32</b> |
| <i>Certificate 1%</i>  | 36.01            | 37.81         | 39.70         | 41.69         | 43.77         | 45.96         | 6,242.05        | 6,554.15        | 6,881.85        | 7,225.95        | 7,587.25        | 7,966.61        | 74,904.55        | 78,649.80        | 82,582.22        | 86,711.42        | 91,047.01        | 95,599.30         | 1,433.99             | 2,389.98        |
| <i>Associates 2%</i>   | 36.37            | 38.19         | 40.10         | 42.10         | 44.21         | 46.42         | 6,303.85        | 6,619.04        | 6,949.99        | 7,297.50        | 7,662.37        | 8,045.49        | 75,646.18        | 79,428.51        | 83,399.87        | 87,569.95        | 91,948.47        | 96,545.82         | 1,448.19             | 2,413.65        |
| <i>Bachelors 3%</i>  | 36.72            | 38.56         | 40.49         | 42.51         | 44.64         | 46.87         | 6,365.65        | 6,683.94        | 7,018.13        | 7,369.04        | 7,737.49        | 8,124.36        | 76,387.80        | 80,207.22        | 84,217.51        | 88,428.48        | 92,849.93        | 97,492.35         | 1,462.39             | 2,437.31        |
| <i>Masters 4%</i>  | 37.08            | 38.94         | 40.88         | 42.93         | 45.07         | 47.33         | 6,427.45        | 6,748.83        | 7,086.26        | 7,440.58        | 7,812.62        | 8,2             |                  |                  |                  |                  |                  |                   |                      |                 |

**Coachella Valley Mosquito and Vector Control District**

FY2025-26 - Effective 7/1/2025 to 6/30/2025

|   | HOURLY-STEPS           |               |               |               |               |               | MONTHLY-STEPS |               |               |               |               |               | ANNUAL-STEPS  |               |               |               |               |               | CSEA SMP           |             |           |
|---|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------|-------------|-----------|
|   | 1                      | 2             | 3             | 4             | 5             | 6             | 1             | 2             | 3             | 4             | 5             | 6             | 1             | 2             | 3             | 4             | 5             | 6             | 1.5%               | 2.5%        |           |
| <b>Community Engagement Specialist</b>  | 38.16                  | 40.07         | 42.07         | 44.17         | 46.38         | 48.70         | 6,614.09      | 6,944.79      | 7,292.03      | 7,656.63      | 8,039.46      | 8,441.44      | 79,369.10     | 83,337.50     | 87,504.40     | 91,879.59     | 96,473.55     | 101,297.27    | 1,519.46           | 2,532.43    |           |
| <i>Bachelors 3%</i>   | 39.30                  | 41.27         | 43.33         | 45.50         | 47.77         | 50.16         | 6,812.51      | 7,153.14      | 7,510.79      | 7,886.33      | 8,280.65      | 8,694.68      | 81,750.17     | 85,837.62     | 90,129.53     | 94,635.98     | 99,367.75     | 104,336.19    | 1,565.04           | 2,608.40    |           |
| <i>Masters 4%</i>   | 39.68                  | 41.67         | 43.75         | 45.94         | 48.24         | 50.65         | 6,878.66      | 7,222.58      | 7,583.71      | 7,962.90      | 8,361.04      | 8,779.10      | 82,543.86     | 86,671.00     | 91,004.58     | 95,554.78     | 100,332.49    | 105,349.16    | 1,580.24           | 2,633.73    |           |
| <i>Doctorate 5%</i>   | 40.07                  | 42.07         | 44.17         | 46.38         | 48.70         | 51.14         | 6,944.80      | 7,292.03      | 7,656.63      | 8,039.46      | 8,441.44      | 8,863.51      | 83,337.55     | 87,504.37     | 91,879.62     | 96,473.57     | 101,297.22    | 106,362.13    | 1,595.43           | 2,659.05    |           |
| <b>Education Specialist</b>   | 42.07                  | 44.17         | 46.38         | 48.70         | 51.14         | 53.69         | 7,292.03      | 7,656.63      | 8,039.46      | 8,441.44      | 8,863.51      | 9,306.69      | 87,504.40     | 91,879.59     | 96,473.55     | 101,297.27    | 106,362.13    | 111,680.24    | 1,675.20           | 2,792.01    |           |
| <i>Bachelors 3%</i>   | 43.33                  | 45.50         | 47.77         | 50.16         | 52.67         | 55.30         | 7,510.79      | 7,886.33      | 8,280.65      | 8,694.68      | 9,129.42      | 9,585.89      | 90,129.53     | 94,635.98     | 99,367.75     | 104,336.19    | 109,553.00    | 115,030.65    | 1,725.46           | 2,875.77    |           |
| <i>Masters 4%</i>   | 43.75                  | 45.94         | 48.24         | 50.65         | 53.18         | 55.84         | 7,583.71      | 7,962.90      | 8,361.04      | 8,779.10      | 9,218.05      | 9,678.95      | 91,004.58     | 95,554.78     | 100,332.49    | 105,349.16    | 110,616.62    | 116,147.45    | 1,742.21           | 2,903.69    |           |
| <i>Doctorate 5%</i>   | 44.17                  | 46.38         | 48.70         | 51.14         | 53.69         | 56.38         | 7,656.63      | 8,039.46      | 8,441.44      | 8,863.51      | 9,306.69      | 9,772.02      | 91,879.62     | 96,473.57     | 101,297.22    | 106,362.13    | 111,680.24    | 117,264.25    | 1,758.96           | 2,931.61    |           |
| <b>Public Outreach Coord, Network Support Specialist</b>  | 43.04                  | 45.19         | 47.45         | 49.82         | 52.31         | 54.93         | 7,459.48      | 7,832.45      | 8,224.08      | 8,635.28      | 9,067.05      | 9,520.40      | 89,513.75     | 93,989.42     | 98,689.01     | 103,623.41    | 108,804.57    | 114,244.74    | 1,713.67           | 2,856.12    |           |
| <i>Bachelors 3%</i>   | 44.33                  | 46.54         | 48.87         | 51.31         | 53.88         | 56.57         | 7,683.26      | 8,067.43      | 8,470.81      | 8,894.34      | 9,339.06      | 9,806.01      | 92,199.17     | 96,809.10     | 101,649.68    | 106,732.11    | 112,068.71    | 117,672.08    | 1,765.08           | 2,941.80    |           |
| <i>Masters 4%</i>   | 44.76                  | 46.99         | 49.34         | 51.81         | 54.40         | 57.12         | 7,757.86      | 8,145.75      | 8,553.05      | 8,980.70      | 9,429.73      | 9,901.21      | 93,094.30     | 97,749.00     | 102,636.57    | 107,768.35    | 113,156.76    | 118,814.53    | 1,782.22           | 2,970.36    |           |
| <i>Doctorate 5%</i>   | 45.19                  | 47.45         | 49.82         | 52.31         | 54.93         | 57.67         | 7,832.45      | 8,224.07      | 8,635.29      | 9,067.05      | 9,520.40      | 9,996.41      | 93,989.44     | 98,688.89     | 103,623.46    | 108,804.58    | 114,244.80    | 119,956.98    | 1,799.35           | 2,998.92    |           |
| <b>Biologist</b>  | 45.24                  | 47.51         | 49.88         | 52.37         | 54.99         | 57.74         | 7,842.12      | 8,234.22      | 8,645.93      | 9,078.23      | 9,532.14      | 10,008.75     | 94,105.39     | 98,810.70     | 103,751.21    | 108,938.77    | 114,385.73    | 120,105.02    | 1,801.58           | 3,002.63    |           |
| <i>Certificate 1%</i>   | 45.70                  | 47.98         | 50.38         | 52.90         | 55.54         | 58.32         | 7,920.54      | 8,316.57      | 8,732.39      | 9,169.01      | 9,627.47      | 10,108.84     | 95,046.45     | 99,798.80     | 104,788.72    | 110,028.15    | 115,529.59    | 121,306.07    | 1,819.59           | 3,032.65    |           |
| <i>Bachelors 3%</i>   | 46.60                  | 48.93         | 51.38         | 53.95         | 56.64         | 59.48         | 8,077.38      | 8,481.25      | 8,905.31      | 9,350.58      | 9,818.11      | 10,309.01     | 96,928.56     | 101,775.02    | 106,863.75    | 112,206.93    | 117,817.30    | 123,708.18    | 1,855.62           | 3,092.70    |           |
| <i>Masters 4%</i>   | 47.05                  | 49.41         | 51.88         | 54.47         | 57.19         | 60.05         | 8,155.80      | 8,563.59      | 8,991.77      | 9,441.36      | 9,913.43      | 10,409.10     | 97,869.61     | 102,763.13    | 107,901.26    | 113,296.32    | 118,961.16    | 124,909.23    | 1,873.64           | 3,122.73    |           |
| <i>Doctorate 5%</i>   | 47.51                  | 49.88         | 52.37         | 54.99         | 57.74         | 60.63         | 8,234.22      | 8,645.94      | 9,078.23      | 9,532.14      | 10,008.75     | 10,509.19     | 98,810.66     | 103,751.23    | 108,938.77    | 114,385.70    | 120,105.02    | 126,110.28    | 1,891.65           | 3,152.76    |           |
| <b>Field Supervisor, Public Info Officer, Unmanned Aircraft Systems (UAS) Coordinator</b>                                 | 52.46                  | 55.09         | 57.84         | 60.73         | 63.77         | 66.96         | 9,093.57      | 9,548.26      | 10,025.67     | 10,526.95     | 11,053.30     | 11,605.96     | 109,122.86    | 114,579.07    | 120,308.01    | 126,323.43    | 132,639.58    | 139,271.58    | 2,089.07           | 3,481.79    |           |
| <i>Bachelors 3%</i>   | 54.04                  | 56.74         | 59.58         | 62.55         | 65.68         | 68.97         | 9,366.38      | 9,834.70      | 10,326.44     | 10,842.76     | 11,384.90     | 11,954.14     | 112,396.54    | 118,016.44    | 123,917.25    | 130,113.13    | 136,618.77    | 143,449.73    | 2,151.75           | 3,586.24    |           |
| <i>Masters 4%</i>   | 54.56                  | 57.29         | 60.15         | 63.16         | 66.32         | 69.64         | 9,457.31      | 9,930.19      | 10,426.69     | 10,948.03     | 11,495.43     | 12,070.20     | 113,487.77    | 119,162.23    | 125,120.33    | 131,376.36    | 137,945.17    | 144,842.44    | 2,172.64           | 3,621.06    |           |
| <i>Doctorate 5%</i>   | 55.09                  | 57.84         | 60.73         | 63.77         | 66.96         | 70.31         | 9,548.25      | 10,025.67     | 10,526.95     | 11,053.30     | 11,605.96     | 12,186.26     | 114,579.00    | 120,308.02    | 126,323.41    | 132,639.60    | 139,271.56    | 146,235.16    | 2,193.53           | 3,655.88    |           |
| <b>Vector Ecologist, IT/GIS Analyst, Lead Supervisor, Operations Program Coordinator</b>                                  | 55.09                  | 57.84         | 60.73         | 63.77         | 66.96         | 70.30         | 9,548.19      | 10,025.60     | 10,526.87     | 11,053.22     | 11,605.89     | 12,186.17     | 114,578.25    | 120,307.20    | 126,322.48    | 132,638.63    | 139,270.63    | 146,234.09    | 2,193.51           | 3,655.85    |           |
| <i>Bachelors 3%</i>   | 56.74                  | 59.58         | 62.55         | 65.68         | 68.97         | 72.41         | 9,834.63      | 10,326.37     | 10,842.68     | 11,384.82     | 11,954.06     | 12,551.76     | 118,015.60    | 123,916.41    | 130,112.15    | 136,617.79    | 143,448.74    | 150,621.11    | 2,259.32           | 3,765.53    |           |
| <i>Masters 4%</i>   | 57.29                  | 60.15         | 63.16         | 66.32         | 69.64         | 73.12         | 9,930.12      | 10,426.62     | 10,947.95     | 11,495.35     | 12,070.12     | 12,673.62     | 119,161.38    | 125,119.49    | 131,375.37    | 137,944.18    | 144,841.45    | 152,083.45    | 2,281.25           | 3,802.09    |           |
| <i>Doctorate 5%</i>   | 57.84                  | 60.73         | 63.77         | 66.96         | 70.30         | 73.82         | 10,025.60     | 10,526.88     | 11,053.22     | 11,605.88     | 12,186.18     | 12,795.48     | 120,307.16    | 126,322.56    | 132,638.60    | 139,270.56    | 146,234.16    | 153,545.79    | 2,303.19           | 3,838.64    |           |
|   | <b>NON-REPRESENTED</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | <b>Non-Rep SMP</b> |             |           |
|   | <b>Step 1</b>          | <b>Step 2</b> | <b>Step 3</b> | <b>Step 4</b> | <b>Step 5</b> | <b>Step 6</b> | <b>Step 1</b> | <b>Step 2</b> | <b>Step 3</b> | <b>Step 4</b> | <b>Step 5</b> | <b>Step 6</b> | <b>Step 1</b> | <b>Step 2</b> | <b>Step 3</b> | <b>Step 4</b> | <b>Step 5</b> | <b>Step 6</b> | <b>1.5%</b>        | <b>3.5%</b> | <b>5%</b> |
| <b>HR Assistant</b>   | 28.67                  | 30.10         | 31.61         | 33.19         | 34.85         | 36.59         | 4,969.37      | 5,217.85      | 5,478.73      | 5,752.67      | 6,040.31      | 6,342.32      | 59,632.43     | 62,614.15     | 65,744.82     | 69,032.08     | 72,483.74     | 76,107.81     | 1,141.62           | 2,663.77    |           |
| <i>Certificate 1%</i>   | 28.96                  | 30.40         | 31.92         | 33.52         | 35.20         | 36.96         | 5,019.06      | 5,270.02      | 5,533.52      | 5,810.20      | 6,100.71      | 6,405.74      | 60,228.75     | 63,240.29     | 66,402.27     | 69,722.40     | 73,208.57     | 76,868.89     | 1,153.03           | 2,690.41    |           |
| <i>Associates 2%</i>  | 29.24                  | 30.71         | 32.24         | 33.85         | 35.54         | 37.32         | 5,068.76      | 5,322.20      | 5,588.31      | 5,867.73      | 6,161.12      | 6,469.16      | 60,825.08     | 63,866.44     | 67,059.71     | 70,412.72     | 73,933.41     | 77,629.97     | 1,164.45           | 2,717.05    |           |
| <i>Bachelors 3%</i>   | 29.53                  | 31.01         | 32.56         | 34.18         | 35.89         | 37.69         | 5,118.45      | 5,374.38      | 5,643.10      | 5,925.25      | 6,221.52      | 6,532.59      | 61,421.40     | 64,492.58     | 67,717.16     | 71,103.05     | 74,658.25     | 78,391.05     | 1,175.87           | 2,743.69    |           |
| <i>Masters 4%</i>   | 29.82                  | 31.31         | 32.87         | 34.52         | 36.24         | 38.05         | 5,168.14      | 5,426.56      | 5,697.88      | 5,982.78      | 6,281.92      | 6,596.01      | 62,017.72     | 65,118.72     | 68,374.61     | 71,793.37     | 75,383.09     | 79,152.12     | 1,187.28           | 2,770.32    |           |
| <i>Doctorate 5%</i>   | 30.10                  | 31.61         | 33.19         | 34.85         | 36.59         | 38.42         | 5,217.84      | 5,478.74      | 5,752.67      | 6,040.31      | 6,342.33      | 6,659.43      | 62,614.05     | 65,744.86     | 69,032.06     | 72,483.69     | 76,107.92     | 79,913.20     | 1,198.70           | 2,796.96    |           |
| <b>Exec. Assistant/Clerk of the Board, HR Specialist, Payroll Administrator</b>   | 44.14                  | 43.65         | 48.67         | 51.10         | 53.66         | 56.34         | 7,651.53      | 7,566.10      | 8,435.81      | 8,857.60      | 9,300.48      | 9,765.51      | 91,818.36     | 90,793.16     | 101,229.76    | 106,291.18    | 111,605.73    | 117,186.15    | 1,757.79           | 4,101.52    |           |
| <i>Certificate 1%</i>   | 44.58                  | 44.09         | 49.15         | 51.61         | 54.19         | 56.90         | 7,728.05      | 7,641.76      | 8,520.17      | 8,946.17      | 9,393.48      | 9,863.17      | 92,736.54     | 91,701.10     | 102,242.06    | 107,354.09    | 112,721.79    | 118,358.01    | 1,775.37           | 4,142.53    |           |
| <i>Associates 2%</i>  | 45.03                  | 44.52         | 49.64         | 52.12         | 54.73         | 57.47         | 7,804.56      | 7,717.42      | 8,604.53      | 9,034.75      | 9,486.49      | 9,960.82      | 93,654.73     | 92,609.03     | 103,254.35    | 108,417.00    | 113,837.85    | 119,529.87    | 1,792.95           | 4,183.55    |           |
| <i>Bachelors 3%</i>   | 45.47                  | 44.96         | 50.13         | 52.63         | 55.27         | 58.03         | 7,881.08      | 7,793.08      | 8,688.89      | 9,123.33      | 9,579.49      | 10,058.48     | 94,572.91     | 93,516.96     | 104,266.65    | 109,479.91    | 114,953.90    | 120,701.73    | 1,810.53           | 4,224.56    |           |
| <i>Masters 4%</i>   | 45.91                  | 45.40         | 50.61         | 53.15         | 55.80         | 58.59         | 7,957.59      | 7,868.74      | 8,773.25      | 9,211.90      | 9,672.50      | 10,156.13     | 95,491.10     | 94,424.89     | 105,278.95    | 110,542.83    | 116,069.96    | 121,873.59    | 1,828.10           | 4,265.58    |           |
| <i>Doctorate 5%</i>   | 46.35                  | 45.83         | 51.10         | 53.66         | 56.34         | 59.16         | 8,034.11      | 7,944.40      | 8,857.60      | 9,300.48      | 9,765.50      | 10,253.79     | 96,409.28     | 95,332.82     | 106,291.25    | 111,605.74    | 117,186.02    | 123,045.46    | 1,845.68           | 4,306.59    |           |
| <b>Admin/Finance Manager, HR Risk Mgr, IT Manager, Public Information Manager, Laboratory Manager, Operations Manager</b> | 61.30                  | 64.37         | 67.59         | 70.96         | 74.51         | 78.24         | 10,625.71     | 11,156.98     | 11,714.84     | 12,300.57     | 12,915.60     | 13,561.39     | 127,508.48    | 133,883.77    | 140,578.07    | 147,606.83    | 154,987.23    | 162,736.70    | 2,441.05           | 5,695.78    | 8,136.84  |
| <i>Masters 4%</i>   | 63.75                  | 66.94         | 70.29         | 73.80         | 77.49         | 81.37         | 11,050.73     | 11,603.26     | 12,183.43     | 12,792.59     | 13,432.23     | 14,103.85     | 132,608.82    | 139,239.12    | 146,201.19    | 153,511.10    | 161,186.72    | 169,246.17    | 2,538.69           | 5,923.62    | 8,462.31  |
| <i>Doctorate 5%</i>   | 64.37                  | 67.59         | 70.96         | 74.51         | 78.24         | 82.15         | 11,156.99     | 11,714.83     | 12,300.58     | 12,915.60     | 13,561.38     | 14,239.46     | 133,883.90    | 140,577.96    | 147,606.97    | 154,987.17    | 162,736.59    | 170,873.54    | 2,563.10           | 5,980.57    | 8,543.68  |
| <b>General Manager</b>  | 95.81                  |               |               |               |               |               | 16,607.17     |               |               |               |               |               | 199,286.09    |               |               |               |               |               |                    |             | 9,964.30  |

# Coachella Valley Mosquito and Vector Control District

## Pay Schedule FY2025-26 Annual Rates - Effective 7/1/2025 to 6/30/2025

|  | <u>Step 1</u> | <u>Step 2</u> | <u>Step 3</u> | <u>Step 4</u> | <u>Step 5</u> | <u>Step 6</u> |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Vector Control Technician I, 9-Month Vector Control Technician I, Laboratory Technician  | 59,632.60     | 62,614.20     | 65,744.82     | 69,032.19     | 72,483.68     | 76,107.82     |
| Vector Control Technician II, Laboratory Assistant I   | 72,483.68     | 76,107.82     | 79,913.35     | 83,909.07     | 88,104.66     | 92,509.90     |
| Mechanic I, Facilities Maintenance Technician I  | 76,107.82     | 79,913.35     | 83,909.07     | 88,104.66     | 92,509.90     | 97,135.40     |
| Lead Vector Control Technician, Laboratory Assistant II, Mechanic II, Facilities Maintenance Technician II, Unmanned Aircraft Systems (UAS) Operator             | 79,913.35     | 83,909.07     | 88,104.66     | 92,509.90     | 97,135.40     | 101,992.16    |
| Administrative Assistant, Events and Outreach Assistant  | 67,267.98     | 70,631.36     | 74,162.92     | 77,871.09     | 81,764.58     | 85,852.89     |
| Accounting Technician I  | 70,631.36     | 74,162.92     | 77,871.07     | 81,764.62     | 85,852.85     | 90,145.50     |
| Procurement Specialist   | 74,162.92     | 77,871.09     | 81,764.58     | 85,852.89     | 90,145.56     | 94,652.77     |
| Accounting Technician II   | 77,057.37     | 80,910.20     | 84,955.69     | 89,203.49     | 93,663.66     | 98,346.80     |
| Community Engagement Specialist  | 79,369.10     | 83,337.50     | 87,504.40     | 91,879.59     | 96,473.55     | 101,297.27    |
| Education Specialist   | 84,955.73     | 89,203.49     | 93,663.64     | 98,346.86     | 103,264.21    | 108,427.42    |
| Public Outreach Coordinator, Network Support Specialist  | 89,513.75     | 93,989.42     | 98,689.01     | 103,623.41    | 108,804.57    | 114,244.74    |
| Biologist  | 94,105.39     | 98,810.70     | 103,751.21    | 108,938.77    | 114,385.73    | 120,105.02    |
| Field Supervisor, Public Information Officer, Unmanned Aircraft Systems (UAS) Coordinator  | 109,122.86    | 114,579.07    | 120,308.01    | 126,323.43    | 132,639.58    | 139,271.58    |
| Vector Ecologist, IT/GIS Analyst, Lead Supervisor, Operations Program Coordinator  | 114,578.25    | 120,307.20    | 126,322.48    | 132,638.63    | 139,270.63    | 146,234.09    |
| Human Resources Assistant  | 59,632.43     | 62,614.15     | 65,744.82     | 69,032.08     | 72,483.74     | 76,107.81     |
| Executive Assistant/Clerk of Board, Human Resources Specialist, Payroll Administrator  | 91,818.36     | 90,793.16     | 101,229.76    | 106,291.18    | 111,605.73    | 117,186.15    |
| Administrative Finance Manager, Human Resources Risk Manager, Information Technology Manager, Public Information Manager, Operations Manager, Laboratory Manager | 127,508.48    | 133,883.77    | 140,578.07    | 147,606.83    | 154,987.23    | 162,736.70    |
| General Manager  | 199,286.09    |               |               |               |               |               |

### Educational Incentive Pay

|                   |    |                  |    |
|-------------------|----|------------------|----|
| Certificate       | 1% | Master's Degree  | 4% |
| Associates Degree | 2% | Doctorate Degree | 5% |
| Bachelor's Degree | 3% |                  |    |

### Temporary: Out-of-Class

5%

### Additional Duties

5%

# Coachella Valley Mosquito and Vector Control District

## Pay Schedule FY2025-26 Monthly Rates - Effective 7/1/2025 to 6/30/2025

|  | <u>Step 1</u> | <u>Step 2</u> | <u>Step 3</u> | <u>Step 4</u> | <u>Step 5</u> | <u>Step 6</u> |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Vector Control Technician I, 9-Month Vector Control Technician I, Laboratory Technician  | 4,969.38      | 5,217.85      | 5,478.73      | 5,752.68      | 6,040.31      | 6,342.32      |
| Vector Control Technician II, Laboratory Assistant I   | 6,040.31      | 6,342.32      | 6,659.45      | 6,992.42      | 7,342.06      | 7,709.16      |
| Mechanic I, Facilities Maintenance Technician I  | 6,342.32      | 6,659.45      | 6,992.42      | 7,342.06      | 7,709.16      | 8,094.62      |
| Lead Vector Control Technician, Laboratory Assistant II, Mechanic II, Facilities Maintenance Technician II, Unmanned Aircraft Systems (UAS) Operator             | 6,659.45      | 6,992.42      | 7,342.06      | 7,709.16      | 8,094.62      | 8,499.35      |
| Administrative Assistant, Events and Outreach Assistant  | 5,605.66      | 5,885.95      | 6,180.24      | 6,489.26      | 6,813.71      | 7,154.41      |
| Accounting Technician I  | 5,885.95      | 6,180.24      | 6,489.26      | 6,813.72      | 7,154.40      | 7,512.12      |
| Procurement Specialist   | 6,180.24      | 6,489.26      | 6,813.71      | 7,154.41      | 7,512.13      | 7,887.73      |
| Accounting Technician II   | 6,421.45      | 6,742.52      | 7,079.64      | 7,433.62      | 7,805.30      | 8,195.57      |
| Community Engagement Specialist  | 6,614.09      | 6,944.79      | 7,292.03      | 7,656.63      | 8,039.46      | 8,441.44      |
| Education Specialist   | 7,079.64      | 7,433.62      | 7,805.30      | 8,195.57      | 8,605.35      | 9,035.62      |
| Public Outreach Coordinator, Network Support Specialist  | 7,459.48      | 7,832.45      | 8,224.08      | 8,635.28      | 9,067.05      | 9,520.40      |
| Biologist  | 7,842.12      | 8,234.22      | 8,645.93      | 9,078.23      | 9,532.14      | 10,008.75     |
| Field Supervisor, Public Information Officer, Unmanned Aircraft Systems (UAS) Coordinator  | 9,093.57      | 9,548.26      | 10,025.67     | 10,526.95     | 11,053.30     | 11,605.96     |
| Vector Ecologist, IT/GIS Analyst, Lead Supervisor, Operations Program Coordinator  | 9,548.19      | 10,025.60     | 10,526.87     | 11,053.22     | 11,605.89     | 12,186.17     |
| Human Resources Assistant  | 4,969.37      | 5,217.85      | 5,478.73      | 5,752.67      | 6,040.31      | 6,342.32      |
| Executive Assistant/Clerk of Board, Human Resources Specialist, Payroll Administrator  | 7,651.53      | 7,566.10      | 8,435.81      | 8,857.60      | 9,300.48      | 9,765.51      |
| Administrative Finance Manager, Human Resources Risk Manager, Information Technology Manager, Public Information Manager, Operations Manager, Laboratory Manager | 10,625.71     | 11,156.98     | 11,714.84     | 12,300.57     | 12,915.60     | 13,561.39     |
| General Manager  | 16,607.17     |               |               |               |               |               |

### Educational Incentive Pay

|                   |    |                  |    |
|-------------------|----|------------------|----|
| Certificate       | 1% | Master's Degree  | 4% |
| Associates Degree | 2% | Doctorate Degree | 5% |
| Bachelor's Degree | 3% |                  |    |

### Temporary: Out-of-Class

75 5%

### Additional Duties

5%

Effective: 7/1/2025  
Updated: 3/24/2026

# Coachella Valley Mosquito and Vector Control District

## Pay Schedule FY2025-26 Hourly Rate - Effective 7/1/2025 to 6/30/2025

|  | <u>Step 1</u> | <u>Step 2</u> | <u>Step 3</u> | <u>Step 4</u> | <u>Step 5</u> | <u>Step 6</u> |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Vector Control Technician I, 9-Month Vector Control Technician I, Laboratory Technician  | 28.67         | 30.10         | 31.61         | 33.19         | 34.85         | 36.59         |
| Vector Control Technician II, Laboratory Assistant I   | 34.85         | 36.59         | 38.42         | 40.34         | 42.36         | 44.48         |
| Mechanic I, Facilities Maintenance Technician I  | 36.59         | 38.42         | 40.34         | 42.36         | 44.48         | 46.70         |
| Lead Vector Control Technician, Laboratory Assistant II, Mechanic II, Facilities Maintenance Technician II, Unmanned Aircraft Systems (UAS) Operator             | 38.42         | 40.34         | 42.36         | 44.48         | 46.70         | 49.03         |
| Administrative Assistant, Events and Outreach Assistant  | 32.34         | 33.96         | 35.66         | 37.44         | 39.31         | 41.28         |
| Accounting Technician I  | 33.96         | 35.66         | 37.44         | 39.31         | 41.28         | 43.34         |
| Procurement Specialist   | 35.66         | 37.44         | 39.31         | 41.28         | 43.34         | 45.51         |
| Accounting Technician II   | 37.05         | 38.90         | 40.84         | 42.89         | 45.03         | 47.28         |
| Community Engagement Specialist  | 38.16         | 40.07         | 42.07         | 44.17         | 46.38         | 48.70         |
| Education Specialist   | 40.84         | 42.89         | 45.03         | 47.28         | 49.65         | 52.13         |
| Public Outreach Coordinator, Network Support Specialist  | 43.04         | 45.19         | 47.45         | 49.82         | 52.31         | 54.93         |
| Biologist  | 45.24         | 47.51         | 49.88         | 52.37         | 54.99         | 57.74         |
| Field Supervisor, Public Information Officer, Unmanned Aircraft Systems (UAS) Coordinator  | 52.46         | 55.09         | 57.84         | 60.73         | 63.77         | 66.96         |
| Vector Ecologist, IT/GIS Analyst, Lead Supervisor, Operations Program Coordinator  | 55.09         | 57.84         | 60.73         | 63.77         | 66.96         | 70.30         |
| Human Resources Assistant  | 28.67         | 30.10         | 31.61         | 33.19         | 34.85         | 36.59         |
| Executive Assistant/Clerk of Board, Human Resources Specialist, Payroll Administrator  | 44.14         | 43.65         | 48.67         | 51.10         | 53.66         | 56.34         |
| Administrative Finance Manager, Human Resources Risk Manager, Information Technology Manager, Public Information Manager, Operations Manager, Laboratory Manager | 61.30         | 64.37         | 67.59         | 70.96         | 74.51         | 78.24         |
| General Manager  | 95.81         |               |               |               |               |               |

### Educational Incentive Pay

|                   |    |                  |    |
|-------------------|----|------------------|----|
| Certificate       | 1% | Master's Degree  | 4% |
| Associates Degree | 2% | Doctorate Degree | 5% |
| Bachelor's Degree | 3% |                  |    |

### Temporary: Out-of-Class

|    |                          |    |
|----|--------------------------|----|
| 5% | <u>Additional Duties</u> | 5% |
|----|--------------------------|----|



**Coachella Valley Mosquito and  
Vector Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Consent Calendar

Approval to continue subscribing to Microsoft M365 Services, in an amount not to exceed \$31,000.00 through Hypertec Solutions, from Cloud Services fund 7680.01.210.070 - **Budgeted; Funds Available** - Cloud Services **Edward Prendez, Information Technology Manager**

**Background:**

The District has transitioned to Microsoft's M365, a cloud-based subscription model that allows for ongoing access to the latest software versions. This move provides flexibility in licensing and expands staff access to modern Microsoft applications, such as Microsoft Teams, which enables virtual collaboration, online meetings, and real-time co-authoring of documents. Microsoft M365 ensures staff can work securely across various devices and locations.

As part of this migration, the District's email system is hosted by Microsoft. This provides enhanced reliability, data protection, and legal discovery (eDiscovery) features. Offsite hosting also safeguards District email against hardware failure, natural disasters, or other disruptive events, while eliminating the need to maintain or replace local email servers.

Microsoft's M365 is deployed as the standard productivity suite on all District desktop and laptop computers. This ensures consistency and ease of transition with each new software update. Future funding for this subscription will be incorporated into the District's annual budget proposals.

**Staff Recommendation:**

Staff recommend approval to continue obtaining Microsoft M365 Licensing Services, in an amount not to exceed \$31,000.00 through Hypertec Solutions, from Cloud Services fund 7680.01.210.070.

**Strategic Business Plan Alignment:**

4. Facilities, Equipment and Technology – Reliable, cost-effective, equipment and technology that meet evolving needs.

| <b>Fiscal Impact:</b>                      |                            |   |                              |
|--|----------------------------|---|------------------------------|
| FY2024-25<br>Budget<br>GL #7680.01.210.070 | Current<br>Available Funds | Proposed<br>Expense<br>Fiscal Year<br>2024/25 | Remaining Available<br>Funds |
| <b>\$146,859.00</b>                        | <b>\$32,374.18</b>         | <b>\$30,344.92</b>                            | <b>\$2,029.26</b>            |



**Coachella Valley Mosquito  
and Vector Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Consent Calendar

Approval of Seventh Addendum to Agreement with Willdan Services to extend the contract term and update the compensation schedule for assessment levy administration services — **David l'Anson, Administrative Finance Manager**

**Background:**

On April 10, 2017, the Coachella Valley Mosquito and Vector Control District (District) entered into an agreement with Willdan Financial Services (Willdan) to provide assessment levy administration services. Willdan has provided ongoing support to the District in administering its assessment districts and related financial processes.

The Agreement has been amended periodically to address term extensions and compensation updates. The proposed Seventh Addendum continues these services without interruption.

**Discussion:**

The Seventh Addendum includes the following key provisions:

**1. Term Extension**

Section 3 (Term) is amended to extend the Agreement for an additional three (3) years, beginning Fiscal Year 2026–2027 through Fiscal Year 2028–2029.

**2. Updated Compensation Schedule**

Section 4 (Compensation) is revised to reflect an updated fee schedule effective Fiscal Year 2026–2027:

- Annual administration fees are based on estimated time and level of effort.
- Fees may be adjusted if the District's structure is significantly modified.
- Annual increases are limited to the Consumer Price Index (CPI).
- Billing will occur quarterly based on percentage of work completed.

**Additional Cost Provisions:**

- In-person meeting attendance: \$1,250 per meeting
- Reimbursable expenses: Not to exceed \$1,250 annually

- Additional services require prior written District approval and are billed at current hourly rates
- Outside services may include a 15% administrative markup
- Third-party document requests may be billed per Willdan’s rate schedule

### **3. Hourly Rates for Additional Services**

Additional authorized services outside the scope of work will be billed at Willdan Financial Services’ current hourly rates. The current rate schedule is as follows:

- Group Director: \$250/hour
- Principal Engineer: \$249/hour
- Assistant Director: \$240/hour
- Principal Consultant: \$210/hour
- Senior Project Manager: \$185/hour
- Project Manager / Program Director: \$165/hour
- Senior Project Analyst: \$135/hour
- Senior Analyst: \$125/hour
- Analyst II: \$110/hour
- Analyst: \$100/hour
- Assistant Analyst: \$75/hour

#### **Fiscal Impact:**

Costs associated with this agreement are included in the District’s annual operating budget. The updated compensation structure provides cost predictability, with increases limited to CPI and clearly defined parameters for reimbursable expenses and additional services.

#### **Strategic Plan Alignment:**

This agreement supports the District’s commitment to sound financial management and operational efficiency by ensuring continued professional administration of assessment levy services.

#### **Attachments:**

- Willdan Financial Services Benefit Assessment Renewal

# Addendum 7

The agreement between Coachella Valley Mosquito & Vector Control District (“CVMVCD”) and Willdan Financial Services, dated April 10, 2017, (hereinafter, the “Agreement”) is amended as follows:

- A. **Section 3** – entitled “**TERM**”, is amended to extend the term of the Agreement for an additional three (3) years, beginning Fiscal Year 2026-2027 and continuing through Fiscal Year 2028-2029.
- B. **Section 4** – entitled “**COMPENSATION**”, is amended to include the revised fee schedule, with new fees effective beginning Fiscal Year 2026–2027

## SCHEDULE OF COMPENSATION

### Assessment Levy Administration

The annual administration fees below reflect application of the scope of services. They are based on the time estimated that will be spent on average each year. If the district structure is significantly modified, the amount may be adjusted. These fees and rates are subject to increase, which will not exceed the most recent annual change in the Consumer Price Index (CPI) within the applicable area. Unless another billing format is mutually agreed upon between the District and Willdan, fees are payable as the work progresses, on a **quarterly** percentage completion basis.

| Services  | Approximate Number of Parcels | Annual Fee |
|---|-------------------------------|------------|
| Mosquito, Fire, Ant, and Disease Control Assessment | 206,109                       | \$17,557   |

*Note: Attendance at in-person meetings will be an additional \$1,250 per meeting*

### Reimbursable Expenses

Willdan will be reimbursed for out-of-pocket expenses at a **not-to-exceed amount of \$1,250 per year**. Examples of reimbursable expenses include, but are not limited to:

- Postage;
- Travel expenses;
- Mileage (current federal prevailing rate)
- Maps, electronic data provided from the County and/or other applicable resources; and
- Copying (currently 6¢ per copy)

Any additional expense for reports or from outside services will be billed to the District, plus a fifteen-percent mark-up. Charges for meeting and consulting with the District, counsel, or other parties regarding services not listed in the scope of work will be at our then-current hourly rates (see “Hourly Rates” section), provided that Willdan notifies the District of its intent and need for such additional services and the District gives its written consent.

In the event that a third-party requests any documents, Willdan may charge such third party for providing said documents, in accordance with Willdan’s applicable rate schedule.

# Addendum 7

## Project Disclaimer

Willdan is a registered municipal advisory firm with the U.S. Securities and Exchange Commission (“SEC”), as such the Coachella Valley Mosquito & Vector Control District represents, acknowledges, and agrees that Willdan is not acting as a “municipal advisor” (as defined by the SEC), to the District, in any capacity as it relates to the project proposed in this Benefit Assessment Levy proposal.

- (i) The District uses, or may use, the services of one or more municipal advisors registered with the SEC to advise it in connection with municipal financial products and the issuance of municipal securities;
- (ii) The District is not looking to Willdan to provide, and the District shall not otherwise request or require Willdan to provide any advice or recommendations with respect to municipal financial products or the issuance of municipal securities (including any advice or recommendations with respect to the structure, timing, terms, and other similar matters concerning such financial products or issues);
- (iii) The provisions of this proposal and the services to be provided hereunder as outlined in the scope of services are not intended (and shall not be construed) to constitute or include any municipal advisory services within the meaning of Section 15B of the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the rules and regulations adopted thereunder;
- (iv) For the avoidance of doubt and without limiting the foregoing, in connection with any revenue projections, cash-flow analyses, feasibility studies and/or other analyses Willdan may provide the District with respect to financial, economic or other matters relating to a prospective, new or existing issuance of municipal securities of the District , (A) any such projections, studies and analyses shall be based upon assumptions, opinions or views (including, without limitation, any assumptions related to revenue growth) established by the District ,in conjunction with such of its municipal, financial, legal and other advisers as it deems appropriate; and (B) under no circumstances shall Willdan be asked to provide, nor shall it provide, any advice or recommendations or subjective assumptions, opinions or views with respect to the actual or proposed structure, terms, timing, pricing or other similar matters with respect to any municipal financial products or municipal securities issuances, including any revisions or amendments thereto; and
- (v) Notwithstanding all of the foregoing, the District recognizes that interpretive guidance regarding municipal advisory activities is currently quite limited and is likely to evolve and develop during the term of the potential engagement and, to that end, the District will work with Willdan throughout the term of the potential Agreement to ensure that the Agreement and the services to be provided by Willdan hereunder, is interpreted by the parties, and if necessary amended, in a manner intended to ensure that the District is not asking Willdan to provide, and Willdan is not in fact providing or required to provide, any municipal advisory services.

# Addendum 7

## Hourly Rates

Additional authorized services will be billed at WFS' then-current hourly consulting rates. Our current hourly rates are presented below.

| Willdan Financial Services<br>Hourly Rate Schedule |             |
|--|-------------|
| Position   | Hourly Rate |
| Group Director                                     | \$250       |
| Principal Engineer                                 | \$249       |
| Assistant Director                                 | \$240       |
| Principal Consultant                               | \$210       |
| Senior Project Manager                             | \$185       |
| Project Manager / Program Director                 | \$165       |
| Senior Project Analyst                             | \$135       |
| Senior Analyst                                     | \$125       |
| Analyst II   | \$110       |
| Analyst  | \$100       |
| Assistant Analyst                                  | \$75        |

All other terms, fees and conditions contained in the Agreement shall remain in full force and effect.

Executed on February 20, 2026.

COACHELLA VALLEY MOSQUITO & VECTOR CONTROL DISTRICT, CA

WILLDAN FINANCIAL SERVICES

By: \_\_\_\_\_  
Jeremy Wittie  
General Manager

By: Josephine Moses  
Josephine Moses  
Vice President / Assistant Director



**Coachella Valley Mosquito and  
Vector Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Consent Calendar

Approval of Resolution 2026-04 and adoption of the CVMVCD Invasive Mosquito Species Response Plan — **Jennifer A. Henke, MS, BCE, Laboratory Manager**

**Background:**

The District’s mission is to protect the health of the public in the Coachella Valley from excessive nuisance, caused by mosquitoes, and to mitigate the risk from mosquito-borne viral disease through its ongoing mosquito surveillance and control program. Intensive control measures may be applied to reduce the potential for virus transmission to humans by suppressing infected mosquito populations for no less than a 45-day period while infectious viremia persists in people, thus breaking the cycle by preventing new vector infections.

The *CVMVCD Invasive Mosquito Management Program and Arbovirus Response Plan* describes an enhanced surveillance and response program for the Coachella Valley dependent on the level of risk of mosquito-borne virus transmission to humans. The plan was created in 2015 and updated in 2026. This updated plan follows changes in surveillance, new guidance on monitoring, and new findings regarding invasive mosquitoes and arboviruses. *The Guidance for Surveillance of and Response to Invasive Aedes Mosquitoes and Dengue, Chikungunya, and Zika in California* generated by the California Department of Public Health is referenced in this document; however, the District’s response plan includes information on surveillance, control, and public outreach activities relative to the conditions and communities in the Coachella Valley.

**Staff Recommendation:**

Approval of Resolution 2026-04 adopting the CVMVCD Invasive Mosquito Species Response Plan.

**Exhibits:**

- Resolution 2026-04
- CVMVCD Invasive Mosquito Species Response Plan
- [Response Plan Summary Video](#)

**Resolution No. 2026-04**

**A RESOLUTION OF THE BOARD OF TRUSTEES OF THE  
COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL  
DISTRICT ADOPTING THE CVMVCD INVASIVE MOSQUITO  
SPECIES RESPONSE PLAN**

**WHEREAS**, the Coachella Valley Mosquito and Vector Control District (the “District”) is a political subdivision of the State of California, created and operating under the authority and provisions of California Health and Safety Code Section 2000 et seq.; and

**WHEREAS**, the State of California annually adopts the California Guidance for Surveillance of and Response to Invasive *Aedes* Mosquitoes and Locally Acquired Exotic Mosquito-borne Infections Transmitted by These Mosquitoes in California (“State Invasive Mosquito Guidance”) which provides local agencies with a decision support system outlining the roles and responsibilities involved with mosquito-borne virus surveillance and response; and

**WHEREAS**, the District has prepared its own Invasive Mosquito Management Program and Arbovirus Response Plan, attached hereto as Exhibit “A” and incorporated herein by this reference (“District Invasive Mosquito Plan”), which incorporates the State Invasive Mosquito Guidance with certain adjustments made to benchmark ratings relative to the conditions in the Coachella Valley.

**NOW, THEREFORE, THE BOARD OF TRUSTEES OF THE COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:**

**Section 1. Recitals.**

The recitals set forth above are true and correct.

**Section 2. Adoption of District Invasive Mosquito Plan.**

The Board of Trustees hereby adopts the District Invasive Mosquito Plan.

**Section 3. Delegation of Authority.**

The District’s General Manager is hereby delegated all authority necessary to implement the District Invasive Mosquito Plan in a manner that is consistent with the State Invasive Mosquito Guidance and the conditions in the Coachella Valley.

**Section 4. Public Inspection and Copying.**

A copy of the District Invasive Mosquito Plan shall be maintained at the District offices and shall be made available for public inspection and copying during regular business hours.

**Section 5. Severability.**

The Board of Trustees declares that 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 6. Repeal of Conflicting Provisions.**

All the provisions of any resolution or policy heretofore adopted by the District that are in conflict with the provisions of this Resolution are hereby repealed.

**Section 7. Effective Date.**

This Resolution shall take effect upon its adoption.

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

**Section 8. 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 by the Board of Trustees of the Coachella Valley Mosquito and Vector Control District this 12<sup>th</sup> day of May 2026.**

\_\_\_\_\_  
Benjamin Guitron, IV, President  
Board of Trustees

**ATTEST:**

\_\_\_\_\_  
Megan Scarborough-Eckel, Clerk of the Board

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Lena D. Wade, General Counsel

**REVIEWED:**

\_\_\_\_\_  
Jeremy Wittie, MS, CSDM, General Manager

**EXHIBIT "A"**

**SEE ATTACHED  
COACHELLA VALLEY MOSQUITO AND  
VECTOR CONTROL DISTRICT  
INVASIVE MOSQUITO SPECIES RESPONSE PLAN**

# COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

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## INVASIVE MOSQUITO MANAGEMENT PROGRAM AND ARBOVIRUS RESPONSE PLAN 2026



CVMVCD 43-420 Trader Place Indio, CA 92201  
E-mail: [cvmosquito@cvmvcd.org](mailto:cvmosquito@cvmvcd.org)  
[www.cvmosquito.org](http://www.cvmosquito.org)

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## I. OBJECTIVE

The purpose of this document is to provide guidance to Coachella Valley Mosquito and Vector Control District staff on how to prepare for, conduct surveillance of, and respond to the detection of invasive mosquitoes in the Coachella Valley. Mosquito species of immediate concern are the container-breeding *Aedes aegypti* and *Aedes albopictus*, both of which have been detected in multiple areas of California, including Riverside County. This document was developed based on the California Department of Public Health (CDPH) **“Guidance for Surveillance of and Response to Invasive *Aedes* Mosquitoes and Dengue, Chikungunya, and Zika in California”** published in June 2014, revised several times, and most recently updated in March 2025. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/InvasiveAedesSurveillanceandResponseinCA.pdf>

## II. INTRODUCTION

The detections of *Aedes albopictus* (Los Angeles area 2011), *Aedes aegypti* (Central Valley and Bay Area 2013), and *Aedes notoscriptus* (Los Angeles area 2014) demonstrated that California is vulnerable to colonization by these highly invasive mosquito species. In October of 2015, *Aedes aegypti* was discovered in Riverside and San Bernardino Counties. These discoveries alerted District staff that the detection of one of these invasive species may occur at any time within the Coachella Valley.

*Aedes aegypti* mosquitoes were detected in the Coachella Valley in May 2016. Since that time, the District staff have determined that BG traps are the most effective for collecting adequate numbers, examined pesticide efficacy, reviewed physical control strategies, and honed communication methods to best meet the needs of a variety of community groups. This work has led to the selection of appropriate surveillance, control, and outreach strategies outlined in this management and response plan.

In an effort to protect residents and visitors from invasive mosquito species and the viruses they transmit, the District plans to exercise its full abatement powers and exemptions for vector control as specified in the **“The Cooperative Agreement between the California Department of Public Health and Local Vector Control Agencies.”**

[https://www.cdpr.ca.gov/docs/enforce/mous/dhs\\_cac.pdf](https://www.cdpr.ca.gov/docs/enforce/mous/dhs_cac.pdf)

The District prioritizes active virus transmission and public health risks. Depending on the needs in other vector programs, work to manage invasive mosquitoes not actively transmitting arboviruses may be considered as a lower priority than the management of mosquitoes or other vectors, invasive or native, actively transmitting arboviruses. Please

review the [District's Mosquito-Borne Surveillance and Emergency Response Plan](#) for additional information on the surveillance and response for West Nile virus, St. Louis encephalitis virus, and western equine encephalomyelitis virus and the mosquitoes that vector these viruses.

### III. ANNUAL TRAINING

In March of each year, the Vector Ecologist will coordinate mosquito species training with all Surveillance and Quality Control department staff. The training will include information on all known invasive mosquito species currently established or likely to establish in California. Upon completion of training, staff should be able to:

1. Identify all life stages of invasive mosquito species.
2. Know the biology and ecology of the invasive mosquito species.
3. Be current on the latest surveillance and control methods being used for invasive mosquitoes in California.

An annual training for Operations and Public Outreach Departments will be coordinated by the leaders of those departments with the Surveillance and Quality Control department. The training should include:

1. Biology and ecology of invasive mosquito species in California.
2. Current surveillance and control methods used against relevant invasive mosquito species and the current distribution of invasive *Aedes* species in California.
3. Service Request procedures when responding to a potential report of an invasive mosquito species.

### IV. NOVEL INVASIVE MOSQUITO RESPONSE PLAN

The District has a long history of effectively controlling vectors and minimizing vector-borne disease. However, new and emerging vectors and vector-borne diseases pose greater challenges, and there is little likelihood of eradicating them with current techniques. To maintain its ability to proactively respond to vectors and vector-borne diseases, the District prioritizes and tracks global emerging vector-borne disease threats most likely to arrive in the Coachella Valley.

The Laboratory Manager reviews the potential for vector-borne disease transmission in the Coachella Valley; this review is shared with the District Board of Trustees and District leadership by February annually. By March, the Vector Ecologist will review and update the invasive mosquito surveillance plan as needed. Information is gathered through scientific literature; statewide and neighboring agency communications; and reports made at local, regional, and national meetings.

The Vector Ecologist will confirm the first detection of an invasive mosquito species in a new city or un-incorporated community. Then the Vector Ecologist will call for a special meeting immediately with the General Manager, Department Managers, and Field Supervisors. At this meeting, an initial assessment will be made and a post-detection response plan initiated. The Laboratory Manager will notify CDPH Vector-Borne Disease Section Biologists at the Ontario Field office.

## **V. INVASIVE *Aedes aegypti* MANAGEMENT PROGRAM**

In the absence of evidence of the presence of arboviruses primarily transmitted by *Aedes aegypti* (such as chikungunya, dengue, yellow fever, and Zika), the following discusses the normal response to the presence of *Aedes aegypti*.

### **1. Surveillance Response**

BG traps are set one night per week at pre-defined trap locations throughout the season to monitor the detection area. When evaluations of control efforts are being considered, at least 4 BG traps within a 600-acre treatment area will be set weekly at temporary locations. A report of trap count results is sent to the District staff by the end of the next business day.

### **2. Operations Response**

#### **Service Requests**

Each Vector Control Technician (VCT) will be responsible for responding to service requests as assigned. If the presence of mosquitoes is confirmed at the residence of the requestor, the Technician will inspect the property. During the property inspection, the VCT will focus on educating the resident in ways to prevent mosquito breeding on their property as well as performing both physical and chemical control (larval and adult) as necessary based on the results of the inspection.

If the service request load becomes too great due to service request volume or response to other arbovirus threats that impede the ability to respond to Invasive *Aedes* service, the Operations Manager will discuss the need with the Department Managers.

#### ***Aedes* Area of Interest**

The District may choose to conduct enhanced and sustained mosquito surveillance and control efforts in a neighborhood. This work may supplement the surveillance and control efforts of areas that are experiencing above average Service Requests; high collections of *Aedes aegypti* in traps, or a high concentration of positive larval lab samples. This work may include the initiation of [abatement powers](#) for repeat offender properties.

### Seasonal Area-Wide Applications

Annual planning for seasonal area-wide applications is performed during the winter planning period in conjunction with the District's operations budget development.

When determining an area for area-wide applications for the coming season, the District's IVM team analyzes monthly historical *Aedes aegypti* population data by city or unincorporated county area to forecast peak mosquito activity for the coming season. Then using GIS software, District staff define areas within cities or unincorporated areas with high *Aedes aegypti* activity and risk of disease transmission by examining service requests, larval samples, *Aedes* trap count data, and other associated risk indicators. Based on this analysis, specific sites within the District are prioritized for area-wide applications to drive down the forecasted peak in the coming season.

Once sites are determined and the budget for the coming fiscal year is approved by the Board of Trustees, the IVM team begins planning for the area-wide application to determine the most appropriate means of public outreach to the affected local government entities and residents of the area-wide application area as well as to finalize the means of application and method of efficacy assessment.

### 3. Outreach Response

Outreach will lead general awareness outreach initiatives regarding invasive *Aedes* mosquitoes, as follows:

- a. Provide invasive *Aedes* outreach materials to cities for distribution in city offices, newsletters, websites, and social media.
- b. Distribute invasive *Aedes* awareness materials at public events such as community, city, and school presentations, fairs, other community engagements, and one-on-one meetings with city, county, state, and federal officials.
- c. Include invasive *Aedes* as a topic in standard presentations and other outreach efforts.
- d. Include promoting the use of repellent to people travelling to areas any time they are spending time outside. This includes discussions that travel within the region may mean encounters with mosquitoes capable of transmitting viruses.
- e. Include information on dengue and other diseases when the District is aware of cases in the region in discussions and presentations.
- f. Deliver *Aedes* detection programs designed for students in targeted elementary, middle, and high schools to teach students about invasive *Aedes*.

- g. Provide Vector Control Technicians with informational materials to distribute during Service Requests with residents.
- h. Post informational materials on District website page (<https://www.cvmosquito.org/>) promoting awareness of invasive *Aedes* risk and prevention.
- i. Promote awareness of invasive *Aedes* through a multimedia and multi-channel advertisement campaign
- j. Promote awareness of invasive *Aedes* through social media channels.
- k. Provide media with interviews and informational materials on the threat of invasive *Aedes*.

**VI. RESPONSE TO AN ARBOVIRUS VECTORED BY *Aedes aegypti***

**1. Initial Communication Plan**

- a. Arbovirus reported in a person or *Aedes aegypti*
- b. Riverside County Department of Public Health or California Department of Public Health notifies Laboratory Manager of a suspected, probable, or confirmed case of invasive *Aedes*-vectored disease case in a person; or the Laboratory Manager or Vector Ecologist is notified of a virus-positive sample of *Aedes aegypti*.
- c. The Laboratory Manager calls an Action Plan meeting of the General Manager, Operations Manager, Operations Program Coordinator, IT Manager, Public Information Manager, and Vector Ecologist. The objective of the meeting will be to discuss the District's response to the specific detection. Due to the distribution of *Aedes aegypti* within the Coachella Valley, the District considers that any case of an invasive *Aedes*-vectored disease case may lead to local transmission. All cases are treated as if *Aedes* mosquitoes may be in the vicinity.
- d. When arbovirus has been detected in *Aedes aegypti*, upon conclusion of the meeting described above, the General Manager (or their designee) will notify, State and County Public Health officials and neighboring vector control agencies the District's planned response.
- e. The District will work collaboratively with the Riverside County Public Health Department and CDPH to issue a joint media release to raise awareness of an increased threat potential and provide an update on status of locally-acquired cases.

## 2. Surveillance Response

- a. For human cases, the Vector Ecologist or a Biologist along with a Lead Technician or Field Supervisor will inspect the residence as well as any additionally named addresses to determine the presence of *Aedes* mosquitoes.
- b. For both human cases and the presence of virus-positive mosquitoes, Laboratory Department staff will conduct enhanced adult surveillance with BG traps distributed within a 350-650 foot radius around the address. Traps in an area will be monitored for 45 days following the final detection of a disease agent in a person or a mosquito sample.
- c. Any adult female *Aedes aegypti* mosquitoes collected will be tested for chikungunya, dengue, and Zika viruses. Female mosquitoes are pooled together by trap and with an approved lab. Results will be shared with the Action Plan group as well as with Riverside County Department of Public Health.
- d. Inspections conducted by Laboratory staff where *Aedes* mosquitoes are found will be reported to Operations to coordinate treatment and follow-up inspection.

## 3. Operations Response:

- a. Door-to-door inspection notifications will commence within 48 hours of the District's Action Plan Meeting.
- b. Operations Department will post signage in the area indicating that there is mosquito activity in the area. Signs will be posted in areas where deemed necessary in order for residents to see the information.
- c. After notification of residential and business properties within the buffered area, Operations staff initiates larval mosquito surveillance throughout an area around the suspect-case residence or initial positive trap and monitored for 45 days. The area will have a radius between 350 and 650 feet, depending on local surveillance data. Control strategies will be implemented when appropriate conditions for mosquito development or resting are detected.
- d. Samples of mosquitoes should be collected and submitted to Laboratory staff for identification.
- e. If Operations staff are not able to access a property under mandatory door-to-door inspections because the resident is absent or refuses, Operations staff will

- i. Post the [Area Warrant](#) which will allow access after 24 hours from the date and time of posting.
- ii. Notify the appropriate law enforcement about the need for coordination.
- iii. Return 24 hours from posting of the [Area Warrant](#) on the property and attempt to contact the resident. If the resident is unwilling or unable to cooperate, the Operations staff may execute the Warrant to Inspect and Abate and follow the protocols described in said Warrant.

#### **4. Public Outreach Response**

- a. The Public Information Manager and staff proceed with stakeholder notifications.
- b. The Public Information Department will use the most appropriate channels below to reach the affected neighborhood regarding the door-to-door campaign:
  - i. Door Hangers
  - ii. Geo-targeted digital messaging
  - iii. Townhall, community, city, and school meetings
  - iv. Fairs and other community engagements
  - v. One-on-one meetings with city, county, state, and federal officials
  - vi. Media interviews
  - vii. Neighborhood listservs
  - viii. Homeowner Associations (HOA) outreach email, postcards, or printed postings

#### **5. Using Area-wide Applications as a Response**

- a. No later than the third day following notification of a positive case, human or mosquito, the Laboratory Manager calls a meeting to include General Manager, IT Manager, Operations Manager, Operations Program Coordinator, Public Information Manager, and Vector Ecologist. At the meeting, the results of trap collections and inspections will be discussed.
- b. Aerial applications of larvicide will be made if traps in the affected neighborhood capture an average of more than 10 female Aedes mosquitoes per trap per night or if 40% of the properties inspected are found to have more than 10 larval Aedes mosquitoes. Applications will cover a 1-mile square surrounding the index case.
- c. Truck-mounted or aerial larvicide applications may be made if more than 5 female Aedes mosquitoes per trap per night are captured or if 20% of the

properties inspected are found to have more than 10 larval Aedes mosquitoes.

- d. Neighborhoods outside of a 1-mile radius of the human case will be evaluated. If more than 10 female Aedes mosquitoes per night are captured on a 2-week cycle, those neighborhoods may be scheduled for larvicide applications to reduce the risk of virus transmission.
- e. Once the determination that area-wide application is necessary:
  - i. The Laboratory Manager will direct staff to evaluate the efficacy of the application through trapping.
  - ii. The Operations Manager will direct staff to continue inspections and treat the properties where immediate control of mosquitoes is needed.
  - iii. The Operations Manager will notify the Riverside County Agricultural Commissioner, law enforcement, and, if needed, the Federal Aviation Administration of area-wide applications.
  - iv. The Public Outreach Department will update the District stakeholders.



**Coachella Valley Mosquito and  
Vector Control District**

**May 12, 2026**

**Staff Report**

**Agenda Item:** Consent Calendar

Approval of Resolution 2026-05 and adoption of the 2026 CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan — **Jennifer A. Henke, MS, BCE, Laboratory Manager**

**Background:**

The District’s mission is to protect the health of the public in the Coachella Valley from excessive nuisance, caused by mosquitoes, and to mitigate the risk from mosquito-borne viral disease through its ongoing mosquito surveillance and control program. Intensive control measures may be applied to reduce the potential for virus transmission to humans by suppressing infected mosquito populations for up to a 10-day period while infectious viremia persists in vertebrate hosts, thus breaking the cycle by preventing new vector infections.

The *CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan* describes an enhanced surveillance and response program for the Coachella Valley dependent on the level of risk of mosquito-borne virus transmission to humans, particularly for West Nile virus, St. Louis encephalitis virus, and western equine encephalomyelitis virus. The plan was created in 2003 and is updated every year to follow changes in surveillance and new findings regarding arboviruses. The Mosquito-borne Virus Surveillance & Response Plan generated by the California Department of Public Health, the Mosquito & Vector Control Association of California, and the University of California, is the core of this document; however, some necessary adjustments were made in benchmark ratings relative to the conditions in the Coachella Valley.

**Staff Recommendation:**

Approval of Resolution 2026-05 adopting the CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan.

**Exhibits:**

- Resolution 2026-05
- CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan
- [Response Plan Summary Video](#)

**Resolution No. 2026-05**

**A RESOLUTION OF THE BOARD OF TRUSTEES OF THE  
COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL  
DISTRICT ADOPTING THE CVMVCD MOSQUITO-BORNE VIRUS  
SURVEILLANCE AND EMERGENCY RESPONSE PLAN**

**WHEREAS**, the Coachella Valley Mosquito and Vector Control District (the “District”) is a political subdivision of the State of California, created and operating under the authority and provisions of California Health and Safety Code Section 2000 et seq.; and

**WHEREAS**, the State of California annually adopts the California Mosquito-Borne Virus Surveillance and Response Plan (“State Risk Assessment Plan”) which provides local agencies with a decision support system outlining the roles and responsibilities involved with mosquito-borne virus surveillance and response; and

**WHEREAS**, the District has prepared its own Mosquito-Borne Virus Surveillance and Emergency Response Plan, attached hereto as Exhibit “A” and incorporated herein by this reference (“District Risk Assessment Plan”), which incorporates the State Risk Assessment Plan with certain adjustments made to benchmark ratings relative to the conditions in the Coachella Valley.

**NOW, THEREFORE, THE BOARD OF TRUSTEES OF THE COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:**

**Section 1. Recitals.**

The recitals set forth above are true and correct.

**Section 2. Adoption of Amended District Risk Assessment Plan.**

The Board of Trustees hereby adopts the amended District Risk Assessment Plan.

**Section 3. Delegation of Authority.**

The District’s General Manager is hereby delegated all authority necessary to implement the District Risk Assessment Plan in a manner that is consistent with the State Risk Assessment Plan and the conditions in the Coachella Valley.

**Section 4. Public Inspection and Copying.**

A copy of the District Risk Assessment Plan shall be maintained at the District offices and shall be made available for public inspection and copying during regular business hours.

**Section 5. Severability.**

The Board of Trustees declares that 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 6. Repeal of Conflicting Provisions.**

All the provisions of any resolution or policy heretofore adopted by the District that are in conflict with the provisions of this Resolution are hereby repealed.

**Section 7. Effective Date.**

This Resolution shall take effect upon its adoption.

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

**Section 8. 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 by the Board of Trustees of the Coachella Valley Mosquito and Vector Control District this 12<sup>th</sup> day of May 2026.**

\_\_\_\_\_  
Benjamin Guitron, IV, President  
Board of Trustees

**ATTEST:**

\_\_\_\_\_  
Megan Scarborough-Eckel, Clerk of the Board

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Lena D. Wade, General Counsel

**REVIEWED:**

\_\_\_\_\_  
Jeremy Wittie, MS, CSDM, General Manager

**EXHIBIT "A"**

**SEE ATTACHED  
COACHELLA VALLEY MOSQUITO AND  
VECTOR CONTROL DISTRICT  
MOSQUITO-BORNE VIRUS SURVEILLANCE AND  
EMERGENCY RESPONSE PLAN**

# COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

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## MOSQUITO-BORNE VIRUS SURVEILLANCE AND EMERGENCY RESPONSE PLAN



CVMVCD 43-420 Trader Place Indio, CA 92201  
E-mail: [cvmosquito@cvmvcd.org](mailto:cvmosquito@cvmvcd.org)  
[www.cvmosquito.org](http://www.cvmosquito.org)

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## **I. INTRODUCTION**

Since 1969, California has had a mosquito-borne disease surveillance program in place to monitor mosquito abundance and encephalitis virus activity. The District began routine mosquito surveillance in the early 1980s. The present program was established in 1990 through a cooperative effort by the Arbovirus Research Group at the School of Public Health, UC Berkeley (now the Davis Arbovirus Research and Training, UC Davis), and the Coachella Valley Mosquito and Vector Control District (the District).

The District's mission is to protect public health with our communities through proven scientific, educational, and sustainable vector control programs. This mission is accomplished through an ongoing mosquito surveillance and control program. Intensive control measures may be applied to reduce the potential for virus transmission to people by suppressing infected mosquito populations while infectious viremia persists in vertebrate hosts, thus breaking the cycle by preventing new vector infections.

This document describes an enhanced surveillance and response program for the Coachella Valley dependent on the level of risk of mosquito-borne virus transmission to humans. [The Mosquito-borne Virus Surveillance & Response Plan](#) generated by California Department of Health Services, Mosquito & Vector Control Association of California, and University of California, is the core of this document; however, some necessary adjustments were made in benchmark ratings relative to the conditions in the Coachella Valley.

Guidelines for adult mosquito surveillance, processing mosquitoes for arbovirus detection, and testing dead birds and equines, as well as information regarding compounds approved for mosquito control in California are part of the California State Mosquito-Borne Virus Surveillance & Response plan.

## **II. BACKGROUND INFORMATION**

Mosquito-borne viruses belong to a group of arthropod-borne viruses referred to as arboviruses (for **arthropod-borne**). From 15 mosquito-borne viruses known to occur in California, to date, only St. Louis encephalitis virus (SLEV), western equine encephalomyelitis virus (WEEV), and West Nile virus (WNV) have caused significant outbreaks of human disease. These viruses are maintained in nature in wild bird-mosquito cycles, and therefore they do not depend upon infections of humans or domestic animals for their persistence.

Surveillance includes the monitoring of immature and adult mosquito abundance and detecting virus activity by testing (a) adult female mosquitoes, (b) sentinel chickens and wild birds, (c) horses, and (d) humans for infection. Surveillance must include not only the monitoring of mosquito-borne viruses known to exist in California, but also the detection of newly introduced viruses.

### III. MOSQUITO SURVEILLANCE OBJECTIVES

Mosquito control is the only practical method of protecting people and animals from WNV, SLEV, and WEEV infections. Larvae and pupae (immature stages) of *Culex tarsalis* and *Culex quinquefasciatus* can be found throughout the Coachella Valley in a wide variety of aquatic sources, ranging from urban retention basins to irrigated agricultural lands, Salton Sea marshes and duck club habitats.

#### A. MOSQUITO SURVEILLANCE

Surveillance includes monitoring of immature and adult mosquito abundance in the Coachella Valley throughout the year. To monitor mosquito larvae, “dippers” or long-handled ladles are used to collect samples from known and new water sources. At that time, the number of larvae and pupae per “dip” is estimated. These data are used to determine larval control measures. The records of the number and developmental stages of larvae, source size treated, product name, and amount used, with the control effectiveness data can provide an early warning tool for forecasting the size of the adult population.

Mosquito adult surveillance in the Coachella Valley is conducted by setting 53 gravid traps and 95 BG-Sentinel II traps on a weekly basis and setting an additional 58 CO<sub>2</sub> traps on a bi-weekly basis. Adult mosquito abundance is a key factor when evaluating the risk of disease transmission. **Guidelines for mosquito surveillance are summarized in Appendix A of the [California Mosquito-Borne Virus Surveillance and Response Plan – April 2026](#).**

#### B. MOSQUITO INFECTIONS

Early detection of virus activity may be accomplished by testing *Culex tarsalis* and *Culex quinquefasciatus*, the primary vectors of SLEV, WEEV, and WNV in the Coachella Valley for virus infection. Sampling of other mosquito species may be necessary to detect the introduction of viruses that do not have a primary avian-*Culex* transmission. Mosquitoes are trapped by using carbon-dioxide-baited traps and using gravid traps baited with water with enriched organic content and the females are then pooled in groups up to 50 for testing at the District. **Procedures for processing mosquitoes for virus infection are summarized in Appendix C of the [California Mosquito-Borne Virus Surveillance and Response Plan – April 2026](#).**

#### C. DEAD BIRDS

Dead birds are reported to CDPH, then either brain or eye tissue is sampled and tested at the District Laboratory for WNV. The dead bird testing algorithm is provided **in Appendix E of the [California Mosquito-Borne Virus Surveillance and Response Plan – April 2026](#).**

#### D. EQUINE INFECTIONS

Equine disease due to WEEV and WNV is not a sensitive indicator of epizootic (infections only in animals) WEEV and WNV activity in California. The reason for this is the widespread vaccination of equines. If confirmed cases do occur, it is a strong indication that WEEV or WNV is active in the region. California Department of Agriculture (CDFA) and CDPH annually

contact veterinarians to ensure equine vaccinations. Besides WEEV and WNV, other mosquito-borne viruses may also cause encephalitis in horses, and consequently, testing of equine specimens by CDPH has been expanded to include other viruses. **See Appendix F of the [California Mosquito-Borne Virus Surveillance and Response Plan – April 2026](#).**

#### **E. HUMAN INFECTIONS**

In general, human cases are not a sensitive surveillance indicator of virus activity because most human infections (>99%) have no, or only mild, symptoms. When severe encephalitis cases do occur, rarely are arboviruses suspected, and sera generally are not sent to CDPH for testing. Communication with key hospitals and local health officials has been enhanced in the last year. However, rapid detection and reporting of confirmed human cases is crucial to local mosquito control agencies in planning and expanding emergency control activities to prevent additional infections. **(See Appendices G and H of the [California Mosquito-Borne Virus Surveillance and Response Plan – April 2026](#).**

#### **F. DATA ANALYSIS AND INTERPRETATION**

1. All weather reports received from state and local agencies that can affect mosquito breeding will be reviewed and analyzed by the District staff. Weekly and biweekly mosquito occurrence reports received from the District laboratory and the CDPH – VBDS statewide will be used for forecasting purposes. For websites related to weather conditions refer to **Appendix K of the [California Mosquito-Borne Virus Surveillance and Response Plan – April 2026](#).**

2. Reports from the District laboratory, CDPH – VBDS, and UCD on virus isolations in mosquito pools, confirmed human cases and horse cases of encephalitis will be used for operational program planning.

#### **G. PUBLIC INFORMATION AND EDUCATION**

Residents, farmers, and duck club owners can play an important role in reducing the number of adult mosquitoes by eliminating standing water that may support the development of immature mosquitoes. Farmers and ranchers can ensure that irrigation practices do not allow standing water for extended periods, and duck club owners can work with mosquito control agencies to determine appropriate flooding schedules. Education regarding personal protective measures will help reduce exposure to mosquitoes (insect repellents, protective clothing time of the exposure to mosquitoes). Equally important is the education of the medical community to recognize the symptoms of WEEV, SLEV, and WNV and request proper laboratory testing for their confirmation. Public health officials need to be alerted if a mosquito-borne viral disease is detected, especially if the public health risk is high.

The level of public information and education depends on the conditions and required response.

**Level 1:** During a normal mosquito-breeding season, routine public education will be conducted.

**Level 2:** Emergency planning and enhanced public education will be conducted. This includes posting messages on the symptoms of encephalitis, public information about pesticide applications, and recommendations about avoiding mosquito bites.

**Level 3:** Full-scale media campaign is required at this level. Coordinate with CDPH in a regional emergency response in conjunction with California Office of Emergency Services in informing County Board of Supervisors, Local Health Departments, city, and county officials.

#### **IV. MOSQUITO CONTROL OBJECTIVES**

Mosquito control in California is conducted by over 80 local agencies, including mosquito and vector control districts, environmental health departments, and county health departments.

The Coachella Valley Mosquito and Vector Control District is a Special District and public agency that operates under the California Health and Safety Code, section 2270 (2000). The District currently serves 2400 square miles and is governed by an 11-member board of Trustees, nine representing the incorporated cities and two from Riverside County at large.

The District's mission is to reduce the risk from disease carried by mosquitoes and other vectors for residents in the Coachella Valley. **See Appendix I and J of the [California Mosquito-Borne Virus Surveillance and Response Plan - April 2026](#)** for compounds approved for mosquito control in California and application methods.

##### **A. LARVAL CONTROL**

This strategy prevents producing another generation of mosquitoes capable of transmitting disease. Control of larvae is target-specific and covers a defined area. Larval mosquito control includes environmental manipulation, biological control, and chemical control.

**Environmental manipulation** decreases habitat availability for immature mosquitoes. It may include water management, such as conservative crop irrigation in the Coachella Valley in date and citrus orchards, removal of standing water in the urban areas, re-circulation of water at fish farms, and water disposal through evaporation, such as at duck clubs.

**Biological control** uses natural predators, parasites, or pathogens to suppress immature stages of mosquitoes. In the Coachella Valley, mosquitofish, *Gambusia affinis*, are the most widely used biocontrol agent. These fish are released annually in a variety of habitats, mostly in abandoned pools.

**Chemical control** presently includes products that are highly specific and have minimal impact on non-target organisms. These products include microbial control agents, such as *Bacillus thuringiensis israelensis* (Bti), *Lysinibacillus sphaericus* and spinosad. Microbial products control mosquito larvae within 24 - 48 hours, and Bti is used in short-term habitats, such as irrigated dates and citrus orchards. Microbial products with a longer residual, such as *Lysinibacillus sphaericus*, are mostly used in permanent habitats of *Culex tarsalis* where penetration of the product is not an issue, or is applied by air to force the granules through the dense vegetation. Products based on the microbial-derived spinosad toxins are an effective tool to control immature mosquitoes; at the doses used to control mosquitoes, there is little danger of non-target impacts. Spinosad-containing products come in a variety of formulations; some work quickly within 48 hours, and others have a residual effect of up to 180 days. Insect growth regulators, such as Methoprene and pyriproxyfen, are widely in use in permanent breeding sources of *Culex tarsalis*, for instance, salt marshes along the Salton Sea and duck club ponds. Lightweight oils and monomolecular surface films are also used, but have the drawback of suffocating non-target surface breathing aquatic organisms as well. These surface products are primarily used against sources with large numbers of pupae.

## **B. ADULT CONTROL**

Adult mosquito control may be required as an additional measure to control populations of infected mosquitoes and reduce the risk of transmission to people. Adult mosquito control products may be applied by ground-based equipment and airplanes or helicopters. Many factors need to be considered when selecting a pesticide and the target area for adult mosquito control treatments. These factors may include (1) efficacy against the target species or life cycle stages, (2) pesticide resistance (3) pesticide label requirements, (4) availability of pesticide and application equipment, (5) environmental conditions (6) cost, and (7) toxicity to non-target species, including humans. The products most likely used for adult mosquito control in the Coachella Valley include organophosphates, pyrethrin and pyrethroids. The two organophosphates that the District can use to control adult mosquitoes are malathion and naled. The pyrethrins and pyrethroids include active ingredients such as resmethrin, sumithrin, etofenprox, lambda-cyhalothrin, permethrin, prallethrin, deltamethrin, and esfenvalerate. These products may be applied with a synergist such as piperonyl butoxide (PBO). The District conducts routine evaluations of the effectiveness of the active ingredients against multiple mosquito populations to use the most effective suite of products.

## **V. RESPONSE LEVELS**

The California Mosquito-borne Virus Surveillance and Response Plan is based on conditions that exist at three response levels identified as normal season, emergency planning, and epidemic conditions. Six risk factors that are analyzed to determine the appropriate response level include:

- Environmental conditions (wetland surface water area, rainfall, and temperature)
- Adult mosquito vector abundance
- Virus isolation rates from mosquitoes
- Infection rates in wild or domestic animals
- Human cases of mosquito-borne viruses
- Proximity of detected virus activity to urban or suburban regions

Sentinel chicken seroconversions should be used in areas where they are available. Each of these factors is rated on a scale of 1 to 5, with 5 representing conditions indicative of a high risk of human infection with a mosquito-borne virus. An average rating is determined for the six factors and is correlated with the response level as follows:

**Level 1: Normal Season (1.0 to 2.5)**

**Level 2: Emergency Planning (2.6 to 4.0)**

**Level 3: Epidemic Conditions (4.1 to 5.0)**

Tables 1 – 3 provide worksheets to assist in determining the appropriate rating for each of the risk factors. The term “average” refers to averages over non-epidemic years in a specific region, such as that within the boundaries of a local mosquito and vector control district. Averages typically are determined for the preceding five-year period. The roles and responsibilities of key agencies involved in carrying out the surveillance and response plan are outlined in “Key Agency Responsibilities.”

## VI. MOSQUITO-BORNE VIRUS RISK ASSESSMENT TABLES

**Table 1. West Nile virus**

| WNV Surveillance Factor  | Assessment Value | Benchmark   | Value   |          |
|--|------------------|---|---------|----------|
|  |                  |   | Cx tars | Cx quinq |
| <b>1. Environmental conditions</b><br>Favorable environmental conditions in the Coachella Valley for virus multiplication or transmission<br>Consider ambient temperature and rainfall for prior 2-week period                                       | 1                | Temperature $\leq 56^{\circ}\text{F}$                       |         |          |
|  | 2                | Temperature 57 - 65°F                                       |         |          |
|  | 3                | Temperature 66 - 72°F                                       |         |          |
|  | 4                | Temperature 73 – 79°F                                       |         |          |
|  | 5                | Temperature $> 79^{\circ}\text{F}$                          |         |          |
|  |                  |   | Cx tars | Cx quinq |
| <b>2. Adult <i>Culex tarsalis</i> and <i>Culex quinquefasciatus</i> abundance</b><br>Determined by trapping adults, enumerating them by species, and comparing numbers to those previously documented for an area for the prior 2-week period.       | 1                | Vector abundance well below average (<50%)                  |         |          |
|  | 2                | Vector abundance below average (50–90%)                     |         |          |
|  | 3                | Vector abundance average (90–150%)                          |         |          |
|  | 4                | Vector abundance above average (150–300%)                   |         |          |
|  | 5                | Vector abundance well above average (>300%)                 |         |          |
| <b>3. Virus isolation rate in <i>Culex tarsalis</i> and <i>Culex quinquefasciatus</i> mosquitoes</b><br>Tested in pools of 50. Test results expressed as minimum infection rate (MIR) per 1,000 female mosquitoes tested for the prior 2-week period | 1                | MIR / 1000 = 0  |         |          |
|  | 2                | MIR / 1000 = 0–1.0  |         |          |
|  | 3                | MIR / 1000 = 1.1–2.0  |         |          |
|  | 4                | MIR / 1000 = 2.1–5.0  |         |          |
|  | 5                | MIR / 1000 $> 5.0$  |         |          |
| <b>4. Dead bird infection</b><br>Number of birds that have tested positive (recent infections only) for WNV during the prior 90 days.  | 1                | No WN positive dead bird within 150 miles of District       |         |          |
|  | 2                | WN positive dead bird within 150 miles of District          |         |          |
|  | 3                | One WN positive dead bird in California                     |         |          |
|  | 4                | One WN positive dead bird in Coachella Valley.              |         |          |
|  | 5                | Multiple WN positive dead bird reported in Coachella Valley |         |          |
| <b>5. Human cases</b><br>Do not include this factor in calculations if no cases are detected in region   | 3                | One or more human infections within 150 miles of District.  |         |          |
|  | 4                | One human infection in Coachella Valley                     |         |          |
|  | 5                | Multiple human infections in Coachella Valley.              |         |          |
|  |                  |   | Cx tars | Cx quinq |
| <b>Response Level / Average Rating:</b><br>Normal Season (1.0 to 2.5)<br>Emergency Planning (2.6 to 4.0)<br>Epidemic (4.1 to 5.0)  | <b>TOTAL</b>     |   |         |          |

**Table 2. Western Equine Encephalomyelitis virus**

| <b>Table 2. WEEV Surveillance Factor</b>  | <b>Assessment Value</b> | <b>Benchmark</b>                                     | <b>Value</b> |
|---|-------------------------|--|--------------|
| <b>1. Environmental conditions</b><br>Favorable environmental conditions in the Coachella Valley for virus multiplication or transmission<br>Considers ambient temperature and rainfall for prior 2-week period | 1                       | Cumulative rainfall and runoff well below average    |              |
|   | 2                       | Cumulative rainfall and runoff below average         |              |
|   | 3                       | Cumulative rainfall and runoff average               |              |
|   | 4                       | Cumulative rainfall and runoff above average         |              |
|   | 5                       | Cumulative rainfall and runoff well above average    |              |
| <b>2. Adult <i>Culex tarsalis</i> abundance</b><br>Area of North and West Shore in last 5 years = female mosquitoes /trap night/ month  | 1                       | Vector abundance well below average (<50%)           |              |
|   | 2                       | Vector abundance below average (50–90%)              |              |
|   | 3                       | Vector abundance average (90–150%)                   |              |
|   | 4                       | Vector abundance above average (150–300%)            |              |
|   | 5                       | Vector abundance well above average (>300%)          |              |
| <b>3. Virus isolation rate in <i>Culex tarsalis</i> mosquitoes</b><br>Tested in pools of 50. Test results expressed as minimum infection rate (MIR) per 1,000 female mosquitoes tested                          | 1                       | MIR / 1000 = 0                                       |              |
|   | 2                       | MIR / 1000 = 0–1.0                                   |              |
|   | 3                       | MIR / 1000 = 1.1–2.0                                 |              |
|   | 4                       | MIR / 1000 = 2.1–5.0                                 |              |
|   | 5                       | MIR / 1000 > 5.0                                     |              |
| <b>4. Proximity to urban or suburban regions</b> (score only if virus activity detected)<br>Risk of outbreak is highest in urban areas because of high likelihood of contact between humans and vectors.        | 1                       | Virus detected in rural area                         |              |
|   | 3                       | Virus detected in small town or suburban area        |              |
|   | 5                       | Virus detected in urban area                         |              |
| <b>5. Human cases</b><br>Do not include this factor in calculations if no cases found in region or in agency.   | 3                       | One or more human cases within 150 miles of District |              |
|   | 4                       | One human case in Coachella Valley.                  |              |
|   | 5                       | More than one human case in Coachella Valley.        |              |
| <b>Response Level / Average Rating:</b><br>Normal Season (1.0 to 2.5)<br>Emergency Planning (2.6 to 4.0)<br>Epidemic (4.1 to 5.0)   |                         | <b>TOTAL</b>   |              |
|   |                         | <b>AVERAGE</b>                                       |              |

**Table 3. St. Louis Encephalitis virus**

| <b>Table 3. SLEV Surveillance Factor</b>   | <b>Assessment Value</b> | <b>Benchmark</b>  | <b>Value</b>   |                 |
|--|-------------------------|---|----------------|-----------------|
| <b>1. Environmental conditions</b><br>Favorable environmental conditions in the Coachella Valley for virus multiplication or transmission.<br>Considers ambient temperature for prior 2-week period.   | 1                       | Temperature $\leq 56^{\circ}\text{F}$                     |                |                 |
|  | 2                       | Temperature 57 - 65°F                                     |                |                 |
|  | 3                       | Temperature 66 - 72°F                                     |                |                 |
|  | 4                       | Temperature 73 – 79°F                                     |                |                 |
|  | 5                       | Temperature $> 79^{\circ}\text{F}$                        |                |                 |
|  |                         |   | <i>Cx tars</i> | <i>Cx quinq</i> |
| <b>2. Adult <i>Culex tarsalis</i> and <i>Culex quinquefasciatus</i> abundance</b><br><br>Area of North and West Shore in last 5 years = female mosquitoes /trap night for prior 2-week period.   | 1                       | Vector abundance well below average (<50%)                |                |                 |
|  | 2                       | Vector abundance below average (50–90%)                   |                |                 |
|  | 3                       | Vector abundance average (90–150%)                        |                |                 |
|  | 4                       | Vector abundance above average (150–300%)                 |                |                 |
|  | 5                       | Vector abundance well above average (>300%)               |                |                 |
| <b>3. Virus isolation rate in <i>Culex tarsalis</i> and <i>Culex quinquefasciatus</i> mosquitoes</b><br>Tested in pools of 50. Test results expressed as minimum infection rate (MIR) per 1,000 female mosquitoes tested for the prior 2-week period | 1                       | MIR / 1000 = 0  |                |                 |
|  | 2                       | MIR / 1000 = 0–1.0  |                |                 |
|  | 3                       | MIR / 1000 = 1.1–2.0                                      |                |                 |
|  | 4                       | MIR / 1000 = 2.1–5.0                                      |                |                 |
|  | 5                       | MIR / 1000 $> 5.0$  |                |                 |
| <b>4. Human cases</b><br>Do not include this factor in calculations if no cases are detected in region   | 3                       | One or more human infections within 150 miles of District |                |                 |
|  | 4                       | One human infection in Coachella Valley.                  |                |                 |
|  | 5                       | Multiple human infections in Coachella Valley.            |                |                 |
|  |                         |   | <i>Cx tars</i> | <i>Cx quinq</i> |
| <b>Response Level / Average Rating:</b><br>Normal Season (1.0 to 2.5)<br>Emergency Planning (2.6 to 4.0)<br>Epidemic (4.1 to 5.0)  | <b>TOTAL</b>            |   |                |                 |
|  | <b>AVERAGE</b>          |   |                |                 |

## VII. CHARACTERIZATION OF CONDITIONS AND RESPONSES

### Normal Season

Risk Rating: 1.0 – 2.5

|   |
|---|
| <b>Conditions:</b>  |
| <ul style="list-style-type: none"><li>• Average or below average rainfall; average seasonal temperatures</li><li>• Mosquito abundance at or below five-year average (key indicator = adults of vector species)</li><li>• No virus isolations from mosquitoes</li><li>• No recently infected arbovirus positive dead birds</li><li>• No human cases</li></ul>  |
| <b>Response Activities by Role:</b>   |
| <p>General Manager</p> <ul style="list-style-type: none"><li>• With Laboratory Manager, Operations Manager, and Public Information Manager, establish and maintain routine communication with local office of emergency services personnel; obtain Standardized Emergency Management System (SEMS) training</li><li>• Ensure adequate emergency funding with Administrative Finance Manager</li></ul>   |
| <p>Laboratory Manager</p> <ul style="list-style-type: none"><li>• With General Manager, Operations Manager, and Public Information Officer establish and maintain routine communication with local office of emergency services personnel; obtain Standardized Emergency Management System (SEMS) training</li><li>• With Public Information Manager, send routine notifications to physicians and veterinarians</li></ul>  |
| <p>Operations Manager</p> <ul style="list-style-type: none"><li>• With General Manager, Laboratory Manager, and Public Information Manager establish and maintain routine communication with local office of emergency services personnel; obtain Standardized Emergency Management System (SEMS) training</li><li>• Coordinate routine mosquito larval control</li><li>• Comply with National Pollutant Discharge Elimination System permit if applying pesticides to waters of the United States</li><li>• Inventory pesticides and equipment</li></ul> |
| <p>Public Information Manager</p> <ul style="list-style-type: none"><li>• Conduct routine public education (eliminate standing water around homes, use personal protection measures)</li><li>• Release routine press notices</li><li>• Send routine notifications to physicians and veterinarians</li></ul>   |
| <p>Vector Ecologist</p> <ul style="list-style-type: none"><li>• Conduct routine mosquito and virus surveillance activities</li><li>• Evaluate pesticide resistance in vector species</li></ul>  |

**Emergency Planning**  
**Risk Rating 2.6-4.0**

|  |
|--|
| <p><b>Conditions:</b></p> <ul style="list-style-type: none"> <li>• Temperature and rainfall above average</li> <li>• Adult mosquito abundance &gt;5-year average (150-300% above normal)</li> <li>• One or more virus isolations from mosquitoes (MIR / 1000 is &lt;5)</li> <li>• Evidence of recent infection in 1-5 wild birds within the District</li> <li>• One human case within 150 miles of District</li> <li>• If WEEV, viral activity in small towns or suburban area</li> </ul>                                      |
| <p><b>Response Activities by Role:</b></p> <p>Laboratory Manager</p> <ul style="list-style-type: none"> <li>• Coordinate epidemic response in consultation with General Manager</li> <li>• Review candidate pesticides for availability and susceptibility of vector mosquito species</li> <li>• Identify any special environmental compliance concerns in affected area and communicate with Lead District staff</li> <li>• Provide assistance to County Public Health on investigations of cases of human disease</li> </ul> |
| <p>Operations Manager</p> <ul style="list-style-type: none"> <li>• Review epidemic response plan</li> <li>• Increase surveillance and control of mosquito larvae</li> <li>• Coordinate localized chemical control of adult mosquitoes</li> <li>• Contact commercial applicators in anticipation of large scale adulticide applications</li> </ul>  |
| <p>Public Information Manager</p> <ul style="list-style-type: none"> <li>• Review epidemic response plan</li> <li>• Enhance public education (include messages on signs and symptoms of encephalitis; seek medical care if needed; inform public about pesticide applications if appropriate)</li> <li>• Enhance information for public health providers</li> <li>• Ensure notification of key agencies of presence of viral activity, including the office of emergency services</li> </ul>                                   |
| <p>Vector Ecologist</p> <ul style="list-style-type: none"> <li>• Review epidemic response plan</li> <li>• Increase adult mosquito surveillance</li> <li>• Increase number of mosquito pools tested for virus</li> <li>• Review candidate pesticides for availability and susceptibility of vector mosquito species</li> </ul>  |

**Epidemic Conditions**  
**Risk Rating 4.1-5.0**

|  |
|--|
| <p><b>Conditions:</b></p> <ul style="list-style-type: none"> <li>• Rainfall, temperature, wetland surface area well above average</li> <li>• Adult vector population extremely high (&gt;300% above normal)</li> <li>• Virus isolates from multiple pools of mosquitoes (MIR /1000 &gt; 5.0)</li> <li>• Increased seroprevalance rates in wild bird populations or die-off of susceptible species (more than 5)</li> <li>• One or more human cases in District</li> <li>• In the case of WEEV, virus detection in urban or suburban areas</li> </ul>   |
| <p><b>Response Activities by Role:</b></p> <p>General Manager and Administrative Finance Manager:</p> <ul style="list-style-type: none"> <li>• Ensure adequate emergency funding</li> <li>• Determine whether a declaration of a local emergency should be considered by the County Board of Supervisors (or Local Health Officer)</li> <li>• Determine whether a declaration of a “State of Emergency” should be considered by the Governor at the request of designated county or city officials</li> </ul>  |
| <p>Administrative Finance Manager:</p> <ul style="list-style-type: none"> <li>• Ensure state funds and resources are available to assist epidemic control efforts.</li> </ul>  |
| <p>Laboratory Manager:</p> <ul style="list-style-type: none"> <li>• Coordinate epidemic response.</li> <li>• Coordinate with County Public Health to conduct investigations of cases of human disease</li> <li>• Coordinate the response with the local Office of Emergency Services or if activated, the Emergency Operation Center (EOC)</li> <li>• Request public health exemptions from FIFRA (40 CFR 166) and emergency tolerance exemptions (40 CFR 176)</li> <li>• With Operations Manager and Vector Ecologist, accelerate adult mosquito surveillance and control</li> <li>• Ensure remaining environmental compliance requirements are met.</li> </ul> |
| <p>Operations Manager:</p> <ul style="list-style-type: none"> <li>• With Laboratory Manager and Vector Ecologist, initiate mosquito surveillance and control in geographic regions without an organized vector control program</li> <li>• Continue enhanced larval surveillance and control of immature mosquitoes</li> <li>• Accelerate adult mosquito control as appropriate</li> </ul>  |
| <p>Public Information Manager:</p> <ul style="list-style-type: none"> <li>• Conduct full-scale media campaign</li> <li>• Alert physicians and veterinarians to expect cases</li> </ul>   |

- Continue mosquito education and control programs until mosquito abundance is substantially reduced and no additional human cases are detected

Vector Ecologist:

- With Laboratory Manager and Operations Manager, initiate mosquito surveillance and control in geographic regions without an organized vector control program
- Broaden geographic coverage of adult mosquito surveillance and arbovirus testing.

## **VIII. PROGRAM SUPPORT**

### **A. Key Agency Responsibilities**

#### **1. Local Mosquito and Vector Control Agencies**

- Acquire and interpret regional weather data
- Monitor abundance of immature and adult mosquitoes
- Collect and submit mosquito pools for virus isolation
- Pick up suitable dead birds and test for WNV
- Update the VectorSurv Gateway weekly to record all mosquito samples and birds that are tested
- Conduct routine control of immature mosquitoes
- Conduct control of adult mosquitoes when needed
- Comply with NPDES permit if applying pesticides to or near water of the United States
- Educate public on mosquito avoidance and reduction of mosquito sources
- Coordinate with local Office of Emergency Services personnel
- Communicate regularly with neighboring agencies

#### **2. Mosquito and Vector Control Association of California**

- Coordinate purchase of sentinel chickens
- Receive, track, and disburse payment for surveillance expenses
- Coordinate surveillance and response activities among member agencies
- Serves as spokesperson for member agencies
- Establish liaisons with press and government officials

#### **3. California Department of Public Health**

- Provide and maintain Vector Control Technician Certification program
- Maintain a WNV information hotline, 1-877-WNV-BIRD, and a website (<http://westnile.ca.gov>).
- Test sentinel chicken sera for viral antibodies
- Coordinate surveillance for human infections and conduct epidemiological investigations of cases of human disease
- Coordinate and oversee testing and acquisition of human specimens for virus and antiviral antibodies.
- Distribute a weekly bulletin summarizing surveillance test results
- Report weekly surveillance results to the CDC ArboNET surveillance system.
- Immediately notify local vector control agency and public health officials when evidence of viral activity is found
- Coordinate and participate in regional emergency response in conjunction with California Emergency Management Agency
- Provide oversight of local jurisdictions without defined vector-borne disease control program
- Maintain inventory of antigens, antisera, and RNA assays to detect exotic viruses
- Provide confirmation of tests done by local agencies

#### **4. University of California at Davis, Davis Arbovirus Research and Training (DART)**

- Conduct research on arbovirus surveillance, transmission of mosquito-borne pathogens, and mosquito ecology and control
- Provide support for testing mosquito and dead bird samples for endemic and exotic arboviruses
- Provide a panel of tests for a wide range of viruses for identification of viruses from human, equine, bird, or arthropod vectors
- Maintain an interactive website (<https://ca.vectorsurv.org/>) for dissemination of mosquito-borne virus information and data
- Maintain inventory of antigens and antisera to detect exotic viruses
- Provide confirmation of tests done by local or state agencies

#### **5. California Department of Food and Agriculture**

- Notify veterinarians and veterinary diagnostic laboratories about WEEV and WNV testing facilities available at California Animal Health and Food Safety Laboratory
- Provide outreach to general public and livestock and poultry producers on the monitoring and reporting of equine and ratite encephalitides
- Facilitate equine sample submission from the field
- Conduct investigations of confirmed WNV and WEEV equine cases and notify CDPH of positive equines.

#### **6. Local Health Departments and Public Health Laboratories**

- Test human specimens for arboviruses
- Refer human specimens to CDPH for further testing
- Notify local medical community, including hospitals and laboratories, if evidence of viral activity present
- Participate in emergency response
- Conduct epidemiological investigations of cases of human disease
- Report human arbovirus cases to CDPH
- Conduct public outreach and education

#### **7. California Emergency Management Agency**

- Coordinate the local, regional, or statewide emergency response under epidemic conditions in conjunction with CDPH via the Standardized Emergency Management System (SEMS)
- Serve as liaison with the Federal Emergency Management Agency (FEMA) in the event that a federal disaster has been declared

#### **8. State Water Resources Control Board**

- Review NPDES permit applications and respond in a timely manner
- Review vector control pesticides registered by Department of Pesticide Regulation for inclusion on the Vector Control NPDES permit

## **9. Centers for Disease Control and Prevention**

- Provide consultation to state and local agencies in California if epidemic conditions exist
- Provide national surveillance data to state health departments
- Provide diagnostic consultation

## B. Equipment

Monitoring of emergency levels of larvicide and adulticide control products will be done on a monthly basis and displayed in the monthly district inventory program located on the district Operations Application program. If larvicide or adulticide levels fall below or are in danger of falling below the emergency treatment level capability, steps will be taken to replenish inventory levels to meet the emergency requirements.

### APPLICATION EQUIPMENT

| <i>Equipment</i>                              | <i>Number in use</i> |
|---|----------------------|
| 1. Hand Cans (1 gal)                          | 63                   |
| 2. Maruyama Backpack Sprayers (Granular)      | 42                   |
| 3. Stihl Backpack Sprayers (Liquid)           | 15                   |
| 4. Stihl Granular                             | 5                    |
| 5. Tomahawk battery pack                      | 1                    |
| 6. Hand Backpack Sprayers                     | 52                   |
| 7. Argo – all-terrain vehicle                 | 1                    |
| 8. Powered Liquid Skid Mounted Sprayer        | 3                    |
| 9. ATV - quadbike                             | 3                    |
| 10. ATV - ranger                              | 4                    |
| 11. London Fog ULV Model 18-20                | 2                    |
| 12. Guardian Model 190ES ULV Sprayer          | 1                    |
| 13. Guardian Model 190G4 ULV Sprayer          | 4                    |
| 14. Colt Hand Portable Fog Generator          | 8                    |
| 15. A1 Super Duty Mister                      | 4                    |
| 16. Twister (Liquid)                          | 2                    |
| 17. Birchmeirer 4-Gal Liquid Backpack Sprayer | 13                   |

|   |   |
|---|---|
| 18. SP2 5-Gal Gas-powered Liquid Backpack Sprayer | 2 |
| 19. Micronair Liquid Barrier Sprayer              | 1 |
| 20. PS 50-Gal Gas-powered liquid sprayer          | 2 |
| 21. 25-Gal Power Sprayer                          | 1 |
| 22. Polaris 15-Gal electric pump sprayer          | 1 |
| 23. Herd Spreader for Ranger                      | 2 |
| 24. MultiQuip Water Trailer                       | 1 |

**Aerial applicators available for contact**

Salton Sea Air Service, Inc.  
 101-111 Desert Air Drive  
 North Shore, CA 92254

Clarke Environmental Mosquito  
 Management, Inc.  
 110 East Irving Park Road, 4<sup>th</sup> Floor  
 Roselle, IL 60172-9963  
 Telephone: (800) 323-5727

OceanAir Helicopters  
 16603 Vesper Road  
 Valley Center, CA 92082

Vector Disease Control International  
 (VDCI)  
 1320 Brookwood Drive, Suite H  
 Little Rock, AR 72202  
 Telephone: (800) 413-4445

## C. Control Products

### LARVAL CONTROL

Products – The District will maintain an emergency level of larval control product inventory to control mosquito breeding at the following listed levels for 14 consecutive days. This level would be sufficient for District personnel to evaluate the scope and magnitude of the emergency, formulate a specific response plan, and procure additional control products if needed.

The following products are stored at the District and emergency response amounts will be available in combination to treat the listed acreage during the specified season. A combination of products within the same classification can fulfill the emergency requirements. The Maximum Product Required listed in the table is the amount required to fulfill the required treatment capability, provided that no other product within that category is available. The combined acreage capability for each classification of product is displayed in the monthly inventory spreadsheet located at our in-house Ops Application under Pesticide Inventory.

#### LARVAL CONTROL PRODUCT INVENTORY EMERGENCY RESERVE

| Product                               | Classification    | Treatment Rate | Maximum Product Required                         | Required Treatment Capability and Seasonal Availability  |
|---------------------------------------|-------------------|----------------|--|--|
| PUPACIDES                             |                   |                |  |  |
| CocoBear Mosquito Larvicide           | Pupacide (liquid) | 3 gal./acre    | 240 gals.  | 40 acres for 14 days – year-round<br>Retreat after 7 days<br>80 acres treated  |
| INSECT GROWTH REGULATORS - methoprene |                   |                |  |  |
| MetaLarv S-PT                         | IGR (granule)     | 10 lbs./acre   | 2500 lbs. – April-Oct.<br>1500 lbs. – Nov.-March | 250 acres April through October;<br>150 acres November through March.<br><br>Altosid Liquid – re-treat after 7 days<br>500 acres April – October treated.<br>200 acres November – March treated. |
| Altosid Liquid                        | IGR (liquid)      | 4 oz./acre     | 15.6 gal. – April-Oct.<br>9.4 gal. – Nov.-March  | MetaLarv S-PT – re-treat after 42 days<br>250 acres April – October treated<br>150 acres November – March treated  |

| BACTERIAL PRODUCTS – Bti, <i>Lysinibacillus sphaericus</i> |                      |              |  |   |
|--|----------------------|--------------|--|---|
| Aquabac 200G   | Biological (granule) | 10 lbs./acre | 5000 lbs. – April - October                  | 250 acres for 14 days – April through October<br>Retreat after 7 days<br>500 acres treated  |
| VectoBac 12AS  | Biological (liquid)  | 16 oz./acre  | 62.5 gals. – April - October                 |   |
| VectoBac G   | Biological (granule) | 10 lbs./acre | 5000 lbs. – April - October                  |   |
| VectoBac GS  | Biological (granule) | 10 lbs./acre | 5000 lbs. – April - October                  |   |
| VectoBac WDG   | Biological (granule) | 7 oz./acre   | 219 lbs. – April - October                   |   |
| VectoMax FG  | Biological (granule) | 10 lbs./acre | 5000 lbs. – April - October                  |   |
| SPINOSAD PRODUCTS  |                      |              |  |   |
| Censor   | Spinosad (granule)   | 9 lbs./acre  | 3000 lbs. April-Oct.<br>1200 lbs. Nov.-March | 250 acres for 14 days – April through October. 100 acres for 14 days – November through March.<br><br>Censor, Natular SC, and Natular G - Retreat after 7 days. 500 acres April – October treated. 200 acres November – March treated.<br><br>Natular G30 – Retreat after 30 days. 250 acres April – October treated. 100 acres November – March treated. |
| Natular G  | Spinosad (granule)   | 9 lbs./acre  | 1500 lbs. April-Oct.<br>600 lbs. Nov.-March  |   |
| Natular SC   | Spinosad (liquid)    | 6.4 oz./acre | 25 gals. April-Oct.<br>10 gals. Nov.-March   |   |
| Natular G30  | Spinosad (granule)   | 10 lbs./acre | 2500 lbs. April-Oct.<br>1000 lbs. Nov.-March |   |

**ADULT CONTROL**

Products – District emergency adult mosquito control product inventory for rural areas of the Coachella Valley is estimated to be 250 acres (35,000 linear feet), for 10 days of ground treatment, plus 640 acres for 10 days for aerial ULV treatments. Urban control is estimated to be 250 acres, (35,000 linear feet), for 10 days ground ULV. In addition, barrier treatment products capable of treating 4 acres, (29,000 linear feet by 6 foot), will also be available for emergency response. This level would be sufficient for district personnel to evaluate the scope and magnitude of the emergency, formulate a specific response plan, and procure additional control products if needed. A combination of products within the same classification can fulfill the emergency requirements. The Maximum Product Required listed in the table is the amount required to fulfill the required treatment capability, provided that no other product within that category is available.

District personnel may substitute products based on product availability, mosquito population resistance studies, and environmental impacts.

**ADULT CONTROL PRODUCT INVENTORY EMERGENCY RESERVE**

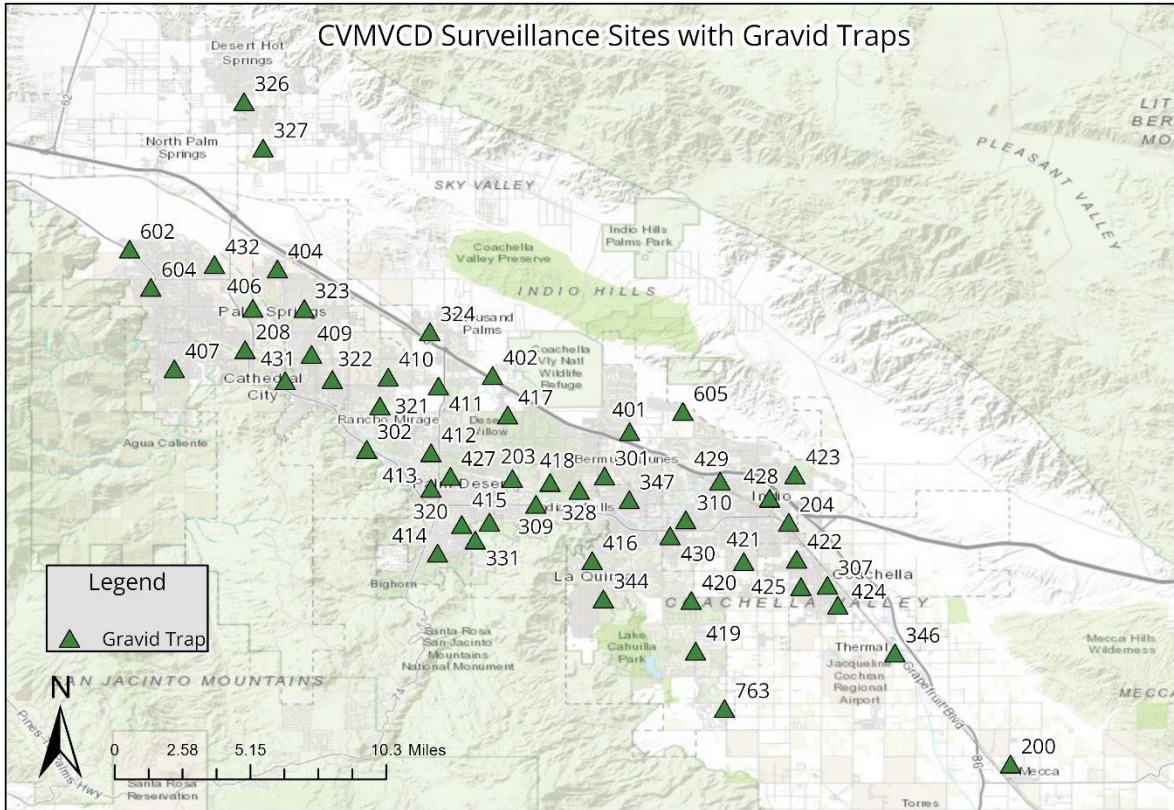
| Adulticide Product | Classification | Treatment Rate                        | Maximum Product Required | Treatment Capability                  |
|--------------------|----------------|---------------------------------------|--------------------------|---------------------------------------|
| Aqua-Reslin        | Adulticide     | 0.536oz. Aqua-Reslin/Acre             | 37.2 gals.               | 6400 acres – rural fogging            |
| Duet               | Adulticide     | 1.28 oz. Duet/Acre                    | 89 gals.                 |                                       |
| EverGreen 5-25     | Adulticide     | 0.876 oz. EverGreen 5-25/Acre         | 60.9 gals.               | 2500 acres – urban fogging            |
| Fyfanon ULV        | Adulticide     | 0.75 oz Fyfanon/Acre                  | 52.14 gals.              |                                       |
| DeltaGard          | Adulticide     | 1.007 oz. DeltaGard/Acre              | 19.6 gals.               | 2500 acres – urban fogging (no rural) |
| Aqua-Reslin        | Barrier Spray  | 7.7 fl. oz./Acre barrier treatment    | 0.25 gals.               | 4 acres Barrier treatments            |
| Demand CS          | Barrier Spray  | 21.78 fl. oz./ Acre barrier treatment | 0.68 gals                |                                       |
| Demon Max          | Barrier Spray  | 43.56 fl. oz./ Acre barrier treatment | 1.36 gals                |                                       |
| Mavrik Perimeter   | Barrier Spray  | 21.78 fl. oz./ Acre barrier treatment | 0.68 gals                |                                       |

## **EMERGENCY CONTROL PRODUCT MONITORING**

Monitoring of emergency levels of larvicide and adulticide control products will be done monthly and displayed in the monthly district inventory sheets located our in-house Ops Application under Pesticide Inventory. If larvicide or adulticide levels fall below or are in danger of falling below the emergency treatment level capability, steps will be taken to replenish inventory levels to meet the emergency requirements.

# IX. APPENDICES

## Appendix A.1 - Map of Surveillance Locations with Gravid Traps in the Coachella Valley

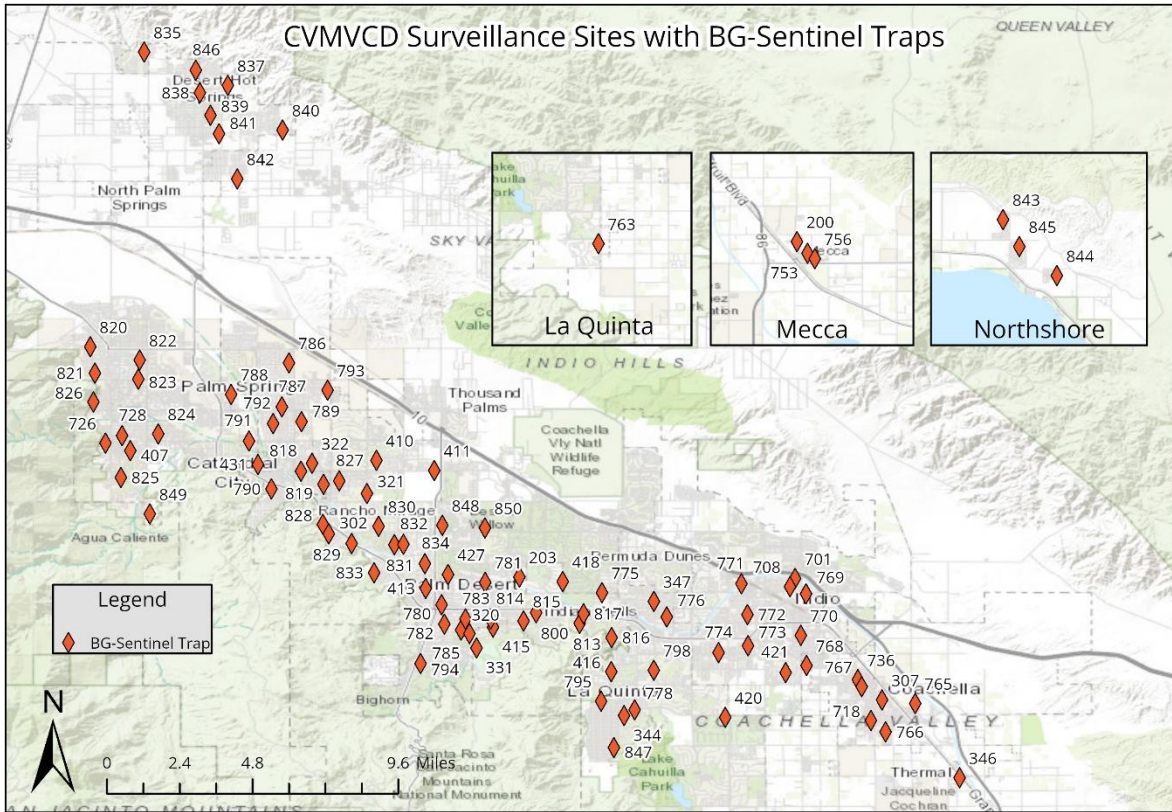


## Appendix A.2 – List of Sites with Gravid Trap Locations in the Coachella Valley

| <b>No.</b> | <b>Site ID</b> | <b>City</b>        | <b>Location Description</b>            |
|------------|----------------|--------------------|--|
| 1          | 200            | Mecca              | Avenue 64 and Lincoln St               |
| 2          | 203            | Palm Desert        | Cook St and Sheryl Ave                 |
| 3          | 204            | Indio              | Van Buren St and Enterprise Way        |
| 4          | 208            | Palm Springs       | Mesquite Ave and S Gene Autry Trl      |
| 5          | 301            | Bermuda Dunes      | Avenue 42 and Washington St            |
| 6          | 302            | Rancho Mirage      | Hwy 111 and Thunderbird Rd             |
| 7          | 307            | Coachella          | 6th St and Palm Ave                    |
| 8          | 309            | Indian Wells       | Hwy 111 and El Dorado Dr               |
| 9          | 310            | New Indio          | Avenue 46 and Madison St               |
| 10         | 320            | Palm Desert        | Portola Ave and Grapevine St           |
| 11         | 321            | Rancho Mirage      | Frank Sinatra Dr and Thompson Rd       |
| 12         | 322            | Cathedral City     | Gerald Ford Dr and Plumley Rd          |
| 13         | 323            | Cathedral City     | Avenue 30 and Avenida Ximino           |
| 14         | 324            | Thousand Palms     | Ramon Rd and Robert Rd                 |
| 15         | 326            | Desert Hot Springs | Palm Dr and Park Ln                    |
| 16         | 327            | Desert Hot Springs | Avenue 18 and Bubbling Wells Rd        |
| 17         | 328            | Palm Desert        | Fred Waring Dr and Warner Trail        |
| 18         | 331            | Palm Desert        | Portola Ave and Haystack Rd            |
| 19         | 344            | La Quinta          | Avenue 52 and Avenida Bermudas         |
| 20         | 346            | Thermal            | Airport Blvd and Grapefruit Blvd       |
| 21         | 347            | La Quinta          | Miles Ave and Adams St                 |
| 22         | 401            | Palm Desert        | Avenue 40 and Adams St                 |
| 23         | 402            | Thousand Palms     | Varner Rd and Jack Ivey Dr             |
| 24         | 404            | Cathedral City     | Landau Blvd and Ontina Rd              |
| 25         | 406            | Palm Springs       | Gene Autry Trail and Clubhouse View Dr |
| 26         | 407            | Palm Springs       | S Camino Real and E La Verne Way       |
| 27         | 409            | Cathedral City     | Date Palm Dr and Ortega Rd             |
| 28         | 410            | Rancho Mirage      | Gerald Ford Dr and Inverness Dr        |
| 29         | 411            | Rancho Mirage      | Gerald Ford Dr and Monterey Ave        |
| 30         | 412            | Rancho Mirage      | Monterey Ave and Verbenia Rd           |
| 31         | 413            | Palm Desert        | Monterey Ave and Parkview Dr           |
| 32         | 414            | Palm Desert        | Mesa View Dr and Alamo Dr              |
| 33         | 415            | Indian Wells       | Vintage Dr and Fairway Dr              |
| 34         | 416            | La Quinta          | Eisenhower Dr and Coachella Dr         |
| 35         | 417            | Palm Desert        | Frank Sinatra Dr and Cook St           |
| 36         | 418            | Indian Wells       | Fred Waring Dr and Via Toscana         |
| 37         | 419            | La Quinta          | Airport Blvd and Madison St            |
| 38         | 420            | La Quinta          | Avenue 52 and Madison St               |
| 39         | 421            | Indio              | Avenue 50 and Jackson St               |

|           |            |              |  |
|-----------|------------|--------------|--|
| <b>40</b> | <b>422</b> | Coachella    | Avenue 49 and Van Buren St               |
| <b>41</b> | <b>423</b> | Indio        | Avenue 43 and Golf Center Pkwy           |
| <b>42</b> | <b>424</b> | Coachella    | Avenue 53 and Genoa St                   |
| <b>43</b> | <b>425</b> | Coachella    | Avenue 51 and Frederick St               |
| <b>44</b> | <b>427</b> | Palm Desert  | Monterey Ave and Magnesia Falls Dr       |
| <b>45</b> | <b>428</b> | Indio        | Dillon Ave and Palo Verde St             |
| <b>46</b> | <b>429</b> | Indio        | Monroe St and Oleander Ave               |
| <b>47</b> | <b>430</b> | Indio        | Hwy 111 and Jefferson St                 |
| <b>48</b> | <b>431</b> | Palm Springs | Cathedral Canyon Dr and E Palm Canyon Dr |
| <b>49</b> | <b>432</b> | Palm Springs | N Whitewater Club Dr and N Farrell Dr    |
| <b>50</b> | <b>602</b> | Palm Springs | N Palm Canyon Dr and W Gateway Dr        |
| <b>51</b> | <b>604</b> | Palm Springs | N Palm Canyon Dr and W Vista Chino       |
| <b>52</b> | <b>605</b> | Indio        | Avenue 38 and Madison St                 |
| <b>53</b> | <b>763</b> | La Quinta    | Avenue 60 and Monroe St                  |

# Appendix B.1 – Map of Surveillance Locations with BG-Sentinel Traps in the Coachella Valley



**Appendix B.2 – List of Sites with BG-Sentinel Trap Locations in the Coachella Valley**

| <b>No.</b> | <b>Site ID</b> | <b>City</b>    | <b>Location Description</b>              |
|------------|----------------|----------------|--|
| 1          | 200            | Mecca          | Avenue 64 and Lincoln St                 |
| 2          | 203            | Palm Desert    | Cook St and Sheryl Ave                   |
| 3          | 302            | Rancho Mirage  | Hwy 111 and Thunderbird Rd               |
| 4          | 307            | Coachella      | 6th St and Palm Ave                      |
| 5          | 320            | Palm Desert    | Portola Ave and Grapevine St             |
| 6          | 321            | Rancho Mirage  | Frank Sinatra Dr and Thompson Rd         |
| 7          | 322            | Cathedral City | Gerald Ford Dr and Plumley Rd            |
| 8          | 331            | Palm Desert    | Portola Ave and Haystack Rd              |
| 9          | 344            | La Quinta      | Avenue 52 and Avenida Bermudas           |
| 10         | 346            | Thermal        | Airport Blvd and Grapefruit Blvd         |
| 11         | 347            | La Quinta      | Miles Ave and Adams St                   |
| 12         | 407            | Palm Springs   | S Camino Real and E La Verne Way         |
| 13         | 410            | Rancho Mirage  | Gerald Ford Dr and Inverness Dr          |
| 14         | 411            | Rancho Mirage  | Gerald Ford Dr and Monterey Ave          |
| 15         | 413            | Palm Desert    | Monterey Ave and Parkview Dr             |
| 16         | 415            | Indian Wells   | Vintage Dr and Fairway Dr                |
| 17         | 416            | La Quinta      | Eisenhower Dr and Coachella Dr           |
| 18         | 418            | Indian Wells   | Fred Waring Dr and Eldorado Dr           |
| 19         | 420            | La Quinta      | Avenue 52 and Madison St                 |
| 20         | 421            | Indio          | Avenue 50 and Jackson St                 |
| 21         | 427            | Palm Desert    | Monterey Ave and Magnesia Falls Dr       |
| 22         | 431            | Palm Springs   | Cathedral Canyon Dr and E Palm Canyon Dr |
| 23         | 701            | Indio          | Jackson St and Kenner Ave                |
| 24         | 708            | Indio          | Avenue 44 and Jackson St                 |
| 25         | 718            | Coachella      | Avenue 52 and Harrison St                |
| 26         | 726            | Palm Springs   | S Palm Canyon Dr and W El Camino Way     |
| 27         | 728            | Palm Springs   | E Palm Canyon Dr and S Camino Real       |
| 28         | 736            | Coachella      | Avenue 50 and Frederick St               |
| 29         | 753            | Mecca          | 7th St and Date Palm Ave                 |
| 30         | 756            | Mecca          | 4th St and Dale Kiler Rd                 |
| 31         | 763            | La Quinta      | Avenue 60 and Monroe St                  |
| 32         | 765            | Coachella      | Tyler St and Calle Bouganvillea          |
| 33         | 766            | Coachella      | Avenue 53 and Shady Lane                 |
| 34         | 767            | Coachella      | Avenue 50 and Frederick St               |
| 35         | 768            | Coachella      | Avenue 49 and Jackson St                 |
| 36         | 769            | Indio          | Avenue 44 and Jackson St                 |

|           |            |                |   |
|-----------|------------|----------------|---|
| <b>37</b> | <b>770</b> | Indio          | Jackson St and Dr. Carreon Blvd           |
| <b>38</b> | <b>771</b> | Indio          | Indio Blvd and Clinton St                 |
| <b>39</b> | <b>772</b> | Indio          | Clinton St and Miles Ave                  |
| <b>40</b> | <b>773</b> | Indio          | Avenue 48 and Monroe St                   |
| <b>41</b> | <b>774</b> | Indio          | Avenue 48 and Shields Rd                  |
| <b>42</b> | <b>775</b> | Palm Desert    | Fred Waring Dr and Warner Trail           |
| <b>43</b> | <b>776</b> | La Quinta      | Dune Palms Rd and Blackhawk Way           |
| <b>44</b> | <b>778</b> | La Quinta      | Avenue 52 and Washington St               |
| <b>45</b> | <b>780</b> | Palm Desert    | Highway 111 and Monterey Ave              |
| <b>46</b> | <b>781</b> | Palm Desert    | Magnesia Falls Dr and Deep Canyon Rd      |
| <b>47</b> | <b>782</b> | Palm Desert    | San Luis Rey Ave and Ironwood St          |
| <b>48</b> | <b>783</b> | Palm Desert    | Portola Ave and Shadow Mountain Dr        |
| <b>49</b> | <b>785</b> | Palm Desert    | Portola Ave and Grapevine St              |
| <b>50</b> | <b>786</b> | Cathedral City | Date Palm Dr and Tachevah Dr              |
| <b>51</b> | <b>787</b> | Cathedral City | Ramon Rd and Date Palm Dr                 |
| <b>52</b> | <b>788</b> | Cathedral City | San Luis Rey Dr and Mission Dr            |
| <b>53</b> | <b>789</b> | Cathedral City | Date Palm Dr and Ramon Rd                 |
| <b>54</b> | <b>790</b> | Cathedral City | E Palm Canyon and Cathedral Canyon Dr     |
| <b>55</b> | <b>791</b> | Palm Springs   | Avenue 34 and Lawrence Crossley Rd        |
| <b>56</b> | <b>792</b> | Cathedral City | Avenue 33 and Cathedral Canyon Dr         |
| <b>57</b> | <b>793</b> | Cathedral City | Da Vall Dr and McCallum Way               |
| <b>58</b> | <b>794</b> | Palm Desert    | Highway 74 and Mesa View Dr               |
| <b>59</b> | <b>795</b> | La Quinta      | Eisenhower Dr and Avenida Montezuma       |
| <b>60</b> | <b>798</b> | La Quinta      | Avenue 50 and Washington St               |
| <b>61</b> | <b>800</b> | Indian Wells   | Highway 111 and El Dorado Dr              |
| <b>62</b> | <b>813</b> | Indian Wells   | Iroquois Dr and Club Dr                   |
| <b>63</b> | <b>814</b> | Palm Desert    | Deep Canyon Rd and Candlewood St          |
| <b>64</b> | <b>815</b> | Indian Wells   | Fairway Dr and Rancho Palmeras Dr         |
| <b>65</b> | <b>816</b> | Indian Wells   | Quail Run Dr and Seminole Rd              |
| <b>66</b> | <b>817</b> | Indian Wells   | Highway 111 and Manitou Dr                |
| <b>67</b> | <b>818</b> | Cathedral City | Gerald Ford Dr and Plumley Rd             |
| <b>68</b> | <b>819</b> | Cathedral City | Da Vall Dr and Sunny Lane                 |
| <b>69</b> | <b>820</b> | Palm Springs   | W Chino Canyon Rd and N Via Norte         |
| <b>70</b> | <b>821</b> | Palm Springs   | W Alejo Rd and N Via Monte Vista          |
| <b>71</b> | <b>822</b> | Palm Springs   | N Sunrise Way and E Paseo El Mirador      |
| <b>72</b> | <b>823</b> | Palm Springs   | E Alejo Rd and N Hermosa Dr               |
| <b>73</b> | <b>824</b> | Palm Springs   | E Sonora Rd and S Cerritos Dr             |
| <b>74</b> | <b>825</b> | Palm Springs   | S Calle Palo Fierro and E Avenida Granada |

|           |            |                    |                                      |
|-----------|------------|--------------------|--------------------------------------|
| <b>75</b> | <b>826</b> | Palm Springs       | S Tahquitz Dr and W Baristo Rd       |
| <b>76</b> | <b>827</b> | Rancho Mirage      | Sunny Lane and Da Vall Dr            |
| <b>77</b> | <b>828</b> | Rancho Mirage      | Highway 111 and Mirage Cove Dr       |
| <b>78</b> | <b>829</b> | Rancho Mirage      | Highway 111 and Country Club Dr      |
| <b>79</b> | <b>830</b> | Rancho Mirage      | Morningside Dr and Country Club Dr   |
| <b>80</b> | <b>831</b> | Rancho Mirage      | Bob Hope Dr and Country Club Dr      |
| <b>81</b> | <b>832</b> | Rancho Mirage      | Bob Hope Dr and Palm Crest Dr        |
| <b>82</b> | <b>833</b> | Rancho Mirage      | Highway 111 and Dunes View Rd        |
| <b>83</b> | <b>834</b> | Rancho Mirage      | Clancy Ln and Monterey Ave           |
| <b>84</b> | <b>835</b> | Desert Hot Springs | Augusta Ave and Little Morongo Rd    |
| <b>85</b> | <b>837</b> | Desert Hot Springs | San Ardo Rd and Verbena Dr           |
| <b>86</b> | <b>838</b> | Desert Hot Springs | 6th St and Palm Dr                   |
| <b>87</b> | <b>839</b> | Desert Hot Springs | Estrella Ave and Mesquite Ave        |
| <b>88</b> | <b>840</b> | Desert Hot Springs | Hacienda Ave and Hacienda Heights Dr |
| <b>89</b> | <b>841</b> | Desert Hot Springs | Verbena Dr and Two Bunch Palms Trail |
| <b>90</b> | <b>842</b> | Desert Hot Springs | Dillon Rd and Bubbling Wells Rd      |
| <b>91</b> | <b>843</b> | Northshore         | Admiralty Way and Costa Mesa Dr      |
| <b>92</b> | <b>844</b> | Northshore         | Avenue 72 and Beacon St              |
| <b>93</b> | <b>845</b> | Northshore         | Avenue 70 and Miramar Dr             |
| <b>94</b> | <b>846</b> | Desert Hot Springs | Mission Lakes Blvd and Santa Cruz Rd |
| <b>95</b> | <b>847</b> | La Quinta          | Avenida Bermudas and Calle Chillon   |
| <b>96</b> | <b>848</b> | Palm Desert        | Monterey Ave and Country Club Dr     |
| <b>97</b> | <b>849</b> | Palm Springs       | Andreas Hills Dr and Hillview Cove   |
| <b>98</b> | <b>850</b> | Palm Desert        | Portola Ave and Country Club Dr      |



**Appendix C.2 – List of Surveillance Locations with only CO<sub>2</sub> Traps in the Coachella Valley**

| <b>No.</b> | <b>Site ID</b> | <b>City</b> | <b>Site Description</b>             |
|------------|----------------|-------------|-------------------------------------|
| 1          | 2              | Oasis       | Avenue 84 and Johnson               |
| 2          | 5              | Oasis       | Avenue 82 and Johnson               |
| 3          | 6              | Oasis       | Avenue 82 and Lincoln               |
| 4          | 8              | Oasis       | Avenue 80 and Buchanan              |
| 5          | 9              | Thermal     | Pierce and King St                  |
| 6          | 10             | Oasis       | Avenue 79 and Buchanan              |
| 7          | 13             | Thermal     | Avenue 76 and Buchanan              |
| 8          | 15             | Thermal     | Avenue 76 and Filmore               |
| 9          | 17             | Thermal     | Avenue 73 and Lincoln               |
| 10         | 21             | Thermal     | Avenue 74 and Polk                  |
| 11         | 23             | Thermal     | Avenue 70 and Polk                  |
| 12         | 25             | Thermal     | Avenue 72 and Filmore               |
| 13         | 27             | Thermal     | Avenue 68 and Filmore               |
| 14         | 30             | Thermal     | Avenue 70 and Pierce                |
| 15         | 33             | Thermal     | Avenue 72 and Buchanan              |
| 16         | 34             | Mecca       | Avenue 72 and Lincoln               |
| 17         | 35             | Mecca       | Avenue 70 and Lincoln               |
| 18         | 37             | Mecca       | Avenue 68 and Buchanan              |
| 19         | 40             | Mecca       | Avenue 68 and Hayes                 |
| 20         | 43             | Mecca       | Avenue 70 and Garfield              |
| 21         | 45             | Mecca       | Avenue 71 and Grant                 |
| 22         | 46             | Mecca       | Avenue 72 and Hayes                 |
| 23         | 48             | Mecca       | Avenue 70 and Johnson               |
| 24         | 50             | Mecca       | Avenue 70 and Arthur                |
| 25         | 51             | Northshore  | Avenue 70 and Cleveland             |
| 26         | 54             | Northshore  | Avenue 73 and Vanderveer            |
| 27         | 55             | Mecca       | Avenue 72 and Garfield              |
| 28         | 56             | Northshore  | Avenue 72 and Arthur                |
| 29         | 57             | Northshore  | Avenue 72 and Cleveland             |
| 30         | 58             | Northshore  | Avenue 72 East of Cleveland         |
| 31         | 60             | Northshore  | Grapefruit Blvd and State Park Rd   |
| 32         | 68             | Mecca       | Avenue 66 and Lincoln               |
| 33         | 114            | Northshore  | Grapefruit Blvd and Desert Beach Dr |
| 34         | 115            | Northshore  | Mecca Ave and Tripoli Dr            |
| 35         | 116            | Northshore  | Southeast of Tripoli Dr             |
| 36         | 121            | Mecca       | Avenue 71 and Colfax                |
| 37         | 122            | Mecca       | East of Avenue 71 and Colfax        |
| 38         | 123            | Mecca       | Avenue 72 between Hayes and Colfax  |
| 39         | 130            | Oasis       | Avenue 81 and Johnson St            |

|           |            |                    |   |
|-----------|------------|--------------------|---|
| <b>40</b> | <b>131</b> | Oasis              | Avenue 81 and Buchanan                                |
| <b>41</b> | <b>132</b> | Oasis              | Avenue 81 and Johnson                                 |
| <b>42</b> | <b>140</b> | Mecca              | Avenue 66 and Johnson                                 |
| <b>43</b> | <b>200</b> | Mecca              | Avenue 64 and Lincoln                                 |
| <b>44</b> | <b>327</b> | Desert Hot Springs | Avenue 18 and Bubbling Wells Rd                       |
| <b>45</b> | <b>530</b> | Mecca              | Avenue 64 and Grant                                   |
| <b>46</b> | <b>531</b> | Mecca              | Avenue 64 and Hayes                                   |
| <b>47</b> | <b>532</b> | Mecca              | Avenue 66 and Grant                                   |
| <b>48</b> | <b>533</b> | Mecca              | Avenue 66 and Hayes                                   |
| <b>49</b> | <b>536</b> | Thermal            | Avenue 62 and Monroe St                               |
| <b>50</b> | <b>538</b> | Thermal            | Avenue 58 and Van Buren St                            |
| <b>51</b> | <b>539</b> | Thermal            | Avenue 54 and Jackson St                              |
| <b>52</b> | <b>540</b> | Mecca              | Avenue 73 and Lincoln St                              |
| <b>53</b> | <b>541</b> | Thermal            | Avenue 66 and Harrison St                             |
| <b>54</b> | <b>542</b> | Thermal            | Avenue 64 and Fillmore St                             |
| <b>55</b> | <b>543</b> | Thermal            | Avenue 60 and Laguna Seca Lane                        |
| <b>56</b> | <b>608</b> | Mecca              | Avenue 60 and Lincoln                                 |
| <b>57</b> | <b>610</b> | Mecca              | Avenue 72 and Lincoln St (Torres Martinez<br>Wetland) |
| <b>58</b> | <b>611</b> | Mecca              | Avenue 70 and End of Johnson                          |

**Appendix D – Table 4. Annual and monthly total and average rainfall (in.) for the Coachella Valley**

| <b>MONTH</b>      | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>2025</b> | <b>5-year Average</b> |
|-------------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| JANUARY           | 0.3         | 0           | 0.27        | 0.87        | 0.09        | 0.306                 |
| FEBRUARY          | 0           | 0.02        | 0.07        | 1.33        | 0.87        | 0.458                 |
| MARCH             | 0.01        | 0.01        | 0.25        | 0.28        | 0.21        | 0.152                 |
| APRIL             | 0           | 0           | 0           | 0           | 0           | 0                     |
| MAY               | 0           | 0           | 0.14        | 0           | 0.02        | 0.032                 |
| JUNE              | 0           | 0           | 0           | 0           | 0           | 0                     |
| JULY              | 0.44        | 0           | 0           | 0           | 0           | 0.088                 |
| AUGUST            | 0.17        | 0           | 3.23        | 0           | 0.19        | 0.718                 |
| SEPTEMBER         | 0           | 0.05        | 0           | 0.08        | 0.06        | 0.038                 |
| OCTOBER           | 0.01        | 0.01        | 0           | 0           | 0.01        | 0.006                 |
| NOVEMBER          | 0           | 0.04        | 0.15        | 0           | 1.51        | 0.34                  |
| DECEMBER          | 0.13        | 0.03        | 0.35        | 0           | 0.48        | 0.198                 |
| <b>YEAR TOTAL</b> | <b>1.06</b> | <b>0.16</b> | <b>4.46</b> | <b>2.56</b> | <b>3.44</b> | <b>2.336</b>          |

\*This data used for surveillance factor # 1 in the Mosquito-Borne Virus Risk Assessment Table calculations for WNV, WEEV, and SLEV on pages 10 – 12 of the Coachella Valley Mosquito-Borne Virus Surveillance and Emergency Response Plan. Data is from weather station KTRM in Thermal, CA (KPSP data is used if no information is available from KTRM).

**Appendix E - Table 5. Average Minimum and Maximum temperatures (°F) in the Coachella Valley**

| Month     | 2021 |     |     | 2022 |     |     | 2023 |     |     | 2024 |     |     | 2025 |     |     | 5-Year Average |       |       |
|-----------|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|----------------|-------|-------|
|           | Max  | Avg | Min | Max  | Avg | Min | Max  | Avg | Min | Max  | Avg | Min | Max  | Avg | Min | Max            | Avg   | Min   |
| Jan 1-15  | 75   | 55  | 38  | 71   | 52  | 33  | 67   | 54  | 41  | 66   | 55  | 43  | 73   | 51  | 24  | 70.40          | 53.27 | 35.95 |
| Jan 16-31 | 69   | 55  | 41  | 74   | 57  | 40  | 67   | 52  | 36  | 72   | 62  | 52  | 69   | 57  | 46  | 70.25          | 56.59 | 42.83 |
| Feb 1-14  | 77   | 62  | 46  | 79   | 61  | 42  | 72   | 56  | 39  | 64   | 56  | 48  | 76   | 65  | 54  | 73.63          | 59.90 | 45.74 |
| Feb 15-28 | 76   | 58  | 38  | 73   | 57  | 38  | 66   | 53  | 37  | 75   | 65  | 54  | 84   | 71  | 58  | 74.83          | 60.80 | 45.14 |
| Mar 1-15  | 75   | 60  | 44  | 76   | 61  | 45  | 72   | 61  | 50  | 73   | 63  | 53  | 71   | 60  | 47  | 73.33          | 61.15 | 47.68 |
| Mar 16-31 | 82   | 67  | 50  | 87   | 71  | 54  | 73   | 61  | 45  | 77   | 66  | 53  | 86   | 70  | 48  | 80.85          | 66.85 | 50.18 |
| Apr 1-15  | 94   | 79  | 63  | 88   | 73  | 57  | 83   | 68  | 51  | 83   | 70  | 56  | 66   | 47  | 24  | 82.88          | 67.65 | 49.97 |
| Apr 16-30 | 90   | 76  | 59  | 91   | 76  | 60  | 95   | 79  | 60  | 92   | 78  | 64  | 80   | 65  | 44  | 89.48          | 74.78 | 57.29 |
| May 1-15  | 97   | 82  | 62  | 94   | 79  | 55  | 88   | 75  | 62  | 93   | 80  | 66  | 92   | 79  | 59  | 93.03          | 78.79 | 61.11 |
| May 16-31 | 95   | 82  | 66  | 97   | 81  | 63  | 96   | 81  | 67  | 96   | 83  | 68  | 98   | 84  | 68  | 96.53          | 82.23 | 66.24 |
| Jun 1-15  | 104  | 88  | 70  | 105  | 89  | 70  | 94   | 77  | 55  | 105  | 91  | 75  | 102  | 88  | 66  | 101.91         | 86.62 | 67.27 |
| Jun 16-30 | 111  | 95  | 59  | 106  | 92  | 75  | 102  | 88  | 73  | 109  | 96  | 81  | 107  | 91  | 64  | 107.05         | 92.22 | 70.37 |
| Jul 1-15  | 109  | 93  | 65  | 108  | 94  | 78  | 110  | 95  | 77  | 113  | 100 | 86  | 109  | 95  | 77  | 109.88         | 95.41 | 76.65 |
| Jul 16-31 | 107  | 95  | 82  | 107  | 95  | 83  | 112  | 99  | 85  | 114  | 101 | 87  | 105  | 91  | 59  | 108.81         | 96.16 | 79.00 |
| Aug 1-15  | 109  | 96  | 81  | 101  | 89  | 77  | 101  | 87  | 74  | 110  | 99  | 88  | 109  | 94  | 71  | 106.01         | 93.11 | 77.97 |
| Aug 16-31 | 106  | 92  | 77  | 106  | 95  | 81  | 102  | 92  | 81  | 108  | 95  | 80  | 105  | 92  | 76  | 105.43         | 92.94 | 79.17 |
| Sep 1-15  | 106  | 92  | 75  | 100  | 89  | 79  | 100  | 89  | 78  | 108  | 97  | 84  | 101  | 88  | 74  | 103.01         | 90.98 | 77.92 |
| Sep 16-30 | 98   | 83  | 68  | 100  | 87  | 73  | 93   | 80  | 67  | 101  | 87  | 72  | 96   | 83  | 72  | 97.51          | 84.13 | 70.41 |
| Oct 1-15  | 89   | 73  | 58  | 96   | 83  | 69  | 97   | 78  | 58  | 106  | 92  | 77  | 90   | 76  | 61  | 95.80          | 80.15 | 64.60 |
| Oct 16-31 | 86   | 69  | 52  | 86   | 71  | 56  | 86   | 71  | 57  | 89   | 76  | 65  | 92   | 72  | 55  | 87.61          | 71.89 | 56.85 |
| Nov 1-15  | 88   | 69  | 52  | 73   | 59  | 45  | 80   | 65  | 51  | 78   | 66  | 54  | 85   | 74  | 63  | 80.83          | 66.58 | 52.76 |
| Nov 16-30 | 81   | 61  | 44  | 74   | 56  | 39  | 72   | 57  | 44  | 75   | 63  | 51  | 73   | 63  | 53  | 74.88          | 59.94 | 46.41 |
| Dec 1-15  | 73   | 55  | 40  | 66   | 51  | 35  | 74   | 55  | 39  | 78   | 63  | 51  | 80   | 65  | 50  | 74.04          | 57.71 | 42.73 |
| Dec 16-31 | 66   | 53  | 39  | 68   | 51  | 37  | 68   | 55  | 44  | 78   | 64  | 53  | 70   | 60  | 45  | 69.95          | 56.56 | 43.65 |

\* This data used for surveillance factor # 1 in the Mosquito-Borne Virus Risk Assessment Table calculations for WNV, WEEV, and SLEV on pages 10- 12 of the Coachella Valley Mosquito-Borne Virus Surveillance and Emergency Response Plan. Data is from weather station KTRM in Thermal, CA with KPSP in Palm Springs as a backup.

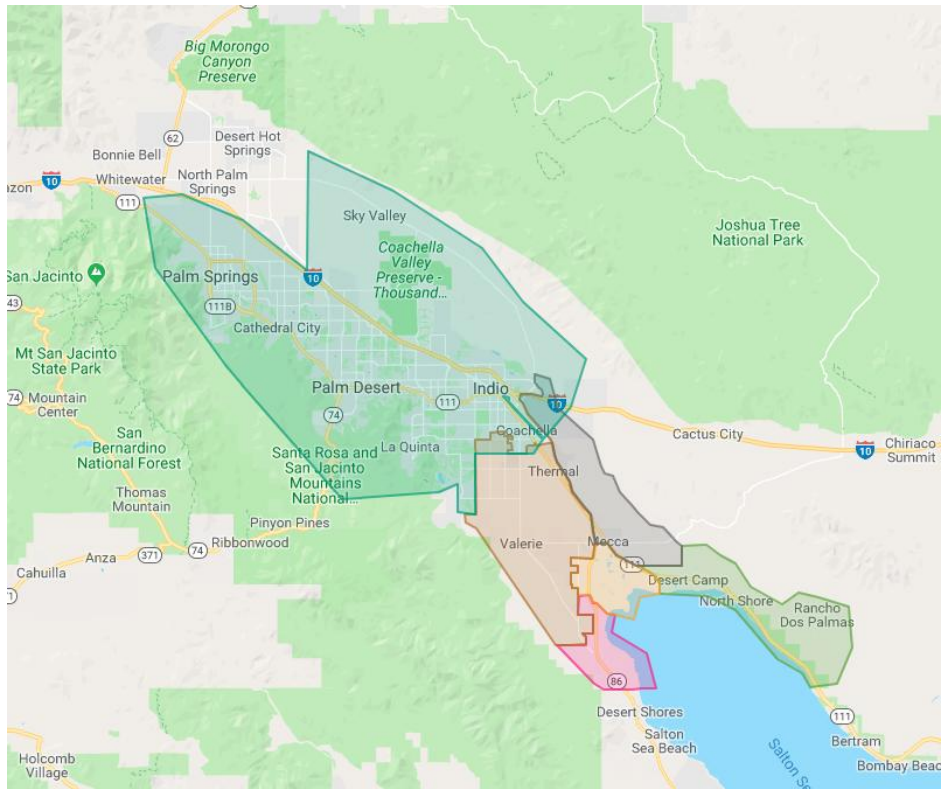
## Appendix F – Risk Assessment Maps

The seasonal transmission risk of the arboviruses WNV, WEEV, and SLEV in the Coachella Valley, among other factors, is related to temperature, rainfall, mosquito infection rates, vector abundance, and population size of vertebrate hosts. Some of these factors are used on a bi-weekly basis to determine the level of risk for WNV, SLEV, and WEEV transmission in various areas or zones of the Valley. Some of the zones used to calculate arbovirus transmission risk are shown in the figures below. For the surveillance zones around the Salton Sea (Figure 3), tables 6, 7, and 8 present the average number of *Cx. tarsalis* and *Cx. quinquefasciatus* female mosquitoes per trap per month.

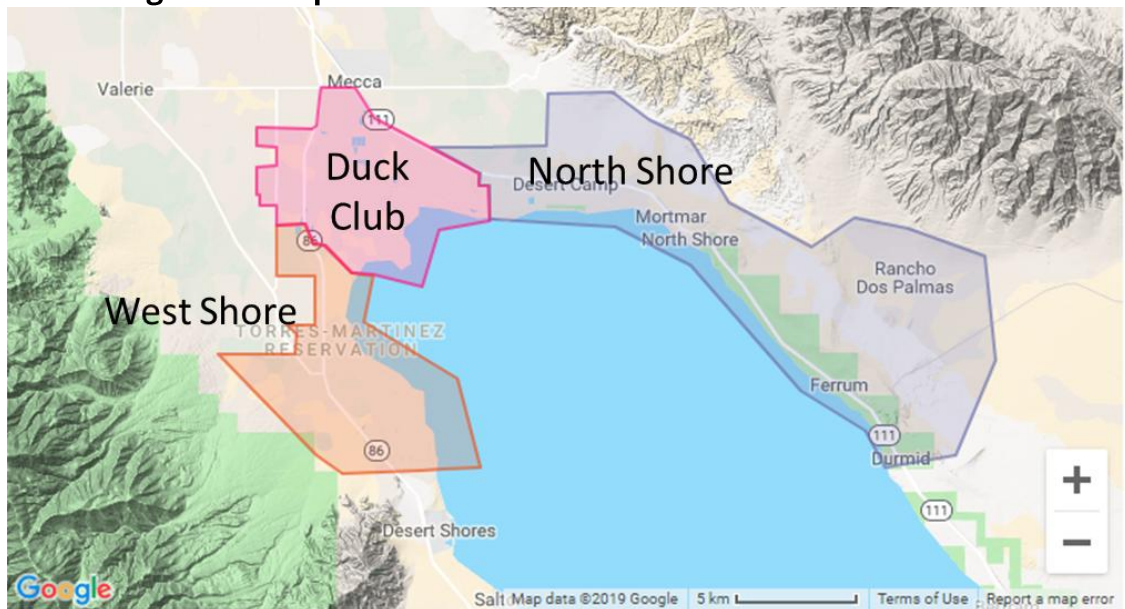
**Figure 1 – Map of the Coachella Valley risk assessment zone.**



**Figure 2 – Map of urban and agricultural risk assessment zones.**



**Figure 3 – Map of Salton Sea Shoreline Risk Assessment Zones**



**Table 6. North Shore Average Number of *Culex* Mosquitoes**

| <b>MONTH</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>2025</b> | <b>5-year<br/>Average</b> |
|--------------|-------------|-------------|-------------|-------------|-------------|---------------------------|
| <b>JAN</b>   | 207         | 18.67       | 122.5       | 100.88      | 108.14      | <b>111.44</b>             |
| <b>FEB</b>   | 67          | 214.33      | 75.13       | 327.75      | 282.7       | <b>193.38</b>             |
| <b>MAR</b>   | 456.13      | 269.63      | 104.83      | 263.96      | 404.9       | <b>299.89</b>             |
| <b>APR</b>   | 444.04      | 259.25      | 203.33      | 495.38      | 333.8       | <b>347.16</b>             |
| <b>MAY</b>   | 146.83      | 130.21      | 211.17      | 148.79      | 251.07      | <b>177.61</b>             |
| <b>JUN</b>   | 92.36       | 128.64      | 77.3        | 140.71      | 143.26      | <b>116.45</b>             |
| <b>JUL</b>   | 5.42        | 54.06       | 56.39       | 7.17        | 4.06        | <b>25.42</b>              |
| <b>AUG</b>   | 18.04       | 68.95       | 15.84       | 14.42       | 7.87        | <b>25.02</b>              |
| <b>SEP</b>   | 203.42      | 68..8       | 338.73      | 173.88      | 53.25       | <b>192.32</b>             |
| <b>OCT</b>   | 243.15      | 339.24      | 539.25      | 416.75      | 38.2        | <b>315.32</b>             |
| <b>NOV</b>   | 47.48       | 86.03       | 39.13       | 44.38       | 28.47       | <b>49.10</b>              |
| <b>DEC</b>   |             | 8.75        | 4.75        | 156.25      | 7.8         | <b>44.39</b>              |

**Table 7. Duck Club Zone Average Number of *Culex* Mosquitoes**

| <b>MONTH</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>2025</b> | <b>5-year<br/>Average</b> |
|--------------|-------------|-------------|-------------|-------------|-------------|---------------------------|
| <b>JAN</b>   | 109.6       | 113.69      | 840.55      | 292.86      | 252.88      | <b>321.92</b>             |
| <b>FEB</b>   | 50.45       | 288.73      | 188.25      | 653.36      | 230.44      | <b>282.25</b>             |
| <b>MAR</b>   | 820.9       | 1282.3      | 469.58      | 411.45      | 927.5       | <b>782.35</b>             |
| <b>APR</b>   | 853.2       | 813.23      | 749.57      | 925.21      | 470.24      | <b>762.29</b>             |
| <b>MAY</b>   | 345.9       | 342.17      | 794.86      | 446.35      | 678.76      | <b>521.61</b>             |
| <b>JUN</b>   | 275.59      | 178.12      | 170.9       | 236.5       | 355.23      | <b>243.27</b>             |
| <b>JUL</b>   | 64.44       | 40.7        | 51.81       | 43.86       | 20.19       | <b>44.20</b>              |
| <b>AUG</b>   | 87.86       | 131.47      | 42.2        | 300.31      | 45.18       | <b>121.40</b>             |
| <b>SEP</b>   | 1229.9      | 692.56      | 1602.06     | 1136.31     | 266.93      | <b>985.55</b>             |
| <b>OCT</b>   | 1045.6      | 2554.03     | 3105.08     | 2295.61     | 559.91      | <b>1912.05</b>            |
| <b>NOV</b>   | 141.76      | 272.54      | 149.83      | 138.7       | 69.17       | <b>154.40</b>             |
| <b>DEC</b>   |             | 5.8         | 65.5        | 700.25      | 18.29       | <b>197.46</b>             |

**Table 8. West Shore Average Number of *Culex* Mosquitoes**

| <b>MONTH</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>2025</b> | <b><i>5-year<br/>Average</i></b> |
|--------------|-------------|-------------|-------------|-------------|-------------|----------------------------------|
| <b>JAN</b>   | 29          | 6.5         | 503         | 152.83      | 73.5        | <b>152.97</b>                    |
| <b>FEB</b>   | 80          | 298         | 246.5       | 621         | 662.25      | <b>381.55</b>                    |
| <b>MAR</b>   | 200.38      | 489.64      | 729.64      | 441.71      | 771.25      | <b>526.52</b>                    |
| <b>APR</b>   | 112.33      | 343.21      | 1650.43     | 335         | 545.33      | <b>597.26</b>                    |
| <b>MAY</b>   | 119.14      | 370.5       | 733.21      | 719.64      | 564.25      | <b>501.35</b>                    |
| <b>JUN</b>   | 118         | 222         | 786.58      | 448.86      | 513.44      | <b>417.78</b>                    |
| <b>JUL</b>   | 16.71       | 53.89       | 218.19      | 20.93       | 127.5       | <b>87.44</b>                     |
| <b>AUG</b>   | 18.81       | 26.38       | 23.78       | 9.21        | 211.64      | <b>57.96</b>                     |
| <b>SEP</b>   | 90.68       | 154.79      | 437.54      | 119.43      | 239.96      | <b>208.48</b>                    |
| <b>OCT</b>   | 36.64       | 424.36      | 574         | 397.62      | 217.32      | <b>329.99</b>                    |
| <b>NOV</b>   | 22.69       | 57.57       | 34.85       | 14.79       | 22.3        | <b>30.44</b>                     |
| <b>DEC</b>   |             | 3.5         | 6           | 237         |             | <b>82.17</b>                     |