Coachella Valley Mosquito and Vector Control District

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

Board of Trustees Meeting Via Zoom and In-Person

Tuesday, May 10, 2022

6:00 p.m.

AGENDA

The Board of Trustees will take action on all items on the agenda.

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.

Pursuant to Assembly Bill 361, this meeting will be conducted by video and/or teleconference as well as in-person public access to the meeting location. To view/listen/participate in the meeting live, please join by calling 1-888-475-4499 (toll-free), meeting ID: 823 9743 9821, or click this link to join: https://us02web.zoom.us/j/82397439821, or attend in person at the District office located at the address listed above. Written public comment may also be submitted to the Clerk of the Board by 1:30 p.m. on May 10, 2022, at mtallion@cvmosquito.org. Transmittal prior to the meeting is required. Any correspondence received during or after the meeting will be distributed to the Board as soon as practicable and retained for the official record.

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

1. **Call to Order** – Benjamin Guitron, President

2. **Pledge of Allegiance**

3. **Oath of Office**

4. **Roll Call**

5. **Confirmation of Agenda**

6. **Public Comments**

Those wishing to address the Board should send an email to the Clerk of the Board by 1:30 p.m. on May 10, 2022, at mtallion@cvmosquito.org, or appear at the meeting to provide public comments. Please note that, as stated above, the meeting will be conducted remotely.

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.

7. **Board Reports**

A. President's Report **– Benjamin Guitron, President**

Executive Committee oral report and Executive Committee minutes from April 26, 2022 **(Pg. 6)**

B. Finance Committee **– Doug Walker, Treasurer**

Finance Committee oral report and Finance Committee minutes from March 8, April 12, and May 3, 2022 **(Pg. 10)**

8. **Staff Informational Reports**

A. Live Reports

- General Manager's Report – **Jeremy Wittie, M.S., General Manager**
- Laboratory Introduction – **Jennifer A. Henke, M.S., Laboratory Manager**

Questions and/or comments from Trustees regarding the reports

9. 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 March 8, 2022, Board Meeting and April 12, 2022, Special Board Meeting **(Pg. 17)**

B. Approval of expenditures for March 4, 2022-May 2, 2022 **(Pg. 29)**

C. Informational Items:

- Financials **– David I'Anson, MPA, MBA/ACC., Administrative Finance Manager (Pg. 31)**
- Important Budget Meeting Dates, **Finance Committee (Pg. 46)**
- PacVec Center of Excellence, April 5-6, 2022– **Jennifer A. Henke, M.S., Laboratory Manager (Pg. 49)**
- ESA Pacific Branch, April 10-13, 2022 – **Jennifer A. Henke, M.S., Laboratory Manager (Pg. 50)**
- MVCAC Spring Quarter Meeting, April 26-27, 2022 **(Pg. 51)**
- Accept the resignation of Trustee Isaiah Hagerman– **Jeremy Wittie, M.S., General Manager (Pg. 52)**

10. Old Business

A. Discussion and Approval of Resolution 2022-08 authorizing remote teleconferencing meetings for the period May 12, 2022 – June 10, 2022 – **Jeremy Wittie, M.S., General Manager (Pg. 54)**

B. 2021 Valley-wide Market Research Project Results Summary Report– **Tammy Gordon, M.A., APR, Public Information Officer (Pg. 60)**

11. New Business

A. Discussion regarding the Budget Workshop held before the Board meeting **– Jeremy Wittie, M.S., General Manager, and Doug Walker, Treasurer**

B. Overview and Discussion of the 2021 Annual Report**– Jeremy Wittie, M.S., General Manager (Pg. 65)**

C. Approval of Resolution 2022-07 and Adoption of the 2022 CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan **– Jennifer A. Henke, MS, Laboratory Manager (Pg. 69)**

D. Approval of Resolution 2022-09 and Adoption of the CVMVCD Invasive Mosquito Management Program and Arbovirus Response Plan **– Jennifer A. Henke, MS, Laboratory Manager (Pg. 116)**

E. Nomination and Election of the vacant Secretary seat on the Board of Trustees **– Benjamin Guitron, Board President (Pg. 132)**

F. Appointment of ad hoc Research Committee **– Benjamin Guitron, Board President (Pg. 133)**

12. Closed Session (s)

Closed Session (s):

A. Conference with Legal Counsel – Existing Litigation pursuant to Government Code section 54956.9
Name of Case: DIR-CalOSHA: In Matter of Appeal of Coachella Valley Mosquito and Vector Control District (Ins. No. 1483049)

B. Conference with Legal Counsel – Existing Litigation pursuant to Government Code section 54956.9
Name of Case: DIR-Labor Commissioner: Anderson v. Coachella Valley Mosquito and Vector Control District (Case No. RCI-601454 (2018))

13. Comments by General Counsel

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

The Board may not legally take action on any item presented at this time other than to direct staff to investigate a complaint or place an item on a future agenda unless (1) by a majority vote, the Board determines that an emergency 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.

15. Adjournment

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

Certification of Posting

I certify that on May 6, 2022, 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 6, 2022.

_____

Melissa Tallion, Clerk of the Board

BOARD REPORTS

Coachella Valley Mosquito and Vector Control District

Executive Committee Meeting Via Zoom

DRAFT - Minutes

TIME AND DATE: 1:30 p.m. Tuesday, April 26, 2022

LOCATION: 43420 Trader Place, Indio, CA 92201-Via Zoom

TRUSTEES PRESENT:

Indio	Benjamin Guitron, President
Indian Wells	Clive Weightman, Vice President
Palm Desert	Doug Walker, Treasurer

ABSENT:
None

Members of the Public present:
Yes

OTHERS PRESENT:
Jeremy Wittie, M.S., General Manger
Crystal Moreno, Human Resources Manager
Melissa Tallion, Clerk of the Board

1. **Call to Order**
   President Guitron called the meeting to order at 1:34 p.m.

2. **Roll Call**
   Roll call indicated three (3) Committee members were present.

3. **Confirmation of Agenda**
   There was a consensus to approve the agenda as presented.

4. **Public Comments**
   None

5. **Review of May 10, 2022, draft Board meeting agenda**

The draft May Board meeting agenda was reviewed by the Committee. Changes to the agenda and discussions included adding the Arbovirus Risk report, from Jennifer Henke, Laboratory Manager to a live report, moving General Consent Item 9A to Old Business Item 10B, moving General Consent Item 9D – Annual Report to New Business Item 11B and changing the order of the New Business items.

6. Old Business

A. Continued discussion; returning to in-person meetings
   - Hybrid meeting for May 2022 Update

     Options for the hybrid meeting were discussed. The Committee asked for one more test before the Board meeting. Staff will schedule that zoom. Staff asked Melissa Tallion, Clerk of the Board to poll the Board to get an accurate headcount for the in-person meeting.

B. Continued discussion; Strategic Plan Workshop Update
   - May 2022 Workshop to review Draft Strategic Business Plan and Workplan

     Jeremy Wittie, General Manager gave an overview of where staff is at with the draft strategic plan and discussed the timeline. Jeremy would like to hold a workshop in May after the next Executive Committee meeting. Melissa will send out information to Board.

C. Continued discussion regarding the District observing the Federal holiday Juneteenth National Independence Day

   Crystal Moreno, Human Resources Manager gave a presentation including what is Juneteenth, why the District should acknowledge the holiday, and other public agencies observing the Holiday. The Committee was receptive, and the topic is being taken respectfully. The Committee asked Crystal to come back to the next Executive Committee meeting with which agencies in our 9 represented cities are observing the holiday, which agencies are not, and why.

D. LAFCO Update

   LAFCO sent a draft to the District for review. Staff has reviewed the document and has provided comments. Jeremy will send the draft to Legal Counsel and President Guitron for comment.

7. New Business

A. Nomination for Slate of Officers
   - Secretary Position

     Melissa sent an email to the survey the Board about their interest in serving as Secretary. President Guitron called the Board to seek out an interested volunteer. President Guitron will present his volunteer at the May Board meeting.

B. VCJPA Trustee Nomination

Jeremy gave an overview of this item and explained that the VCJPA is seeking a Trustee nomination to serve on the Board. The Committee asked Melissa to send an email to the Board to seek interest.

8. Trustee/staff comments

9. Confirmation of next meeting

The next meeting was scheduled for Thursday, May 26, 2022, at 1:30 p.m.

10. Adjournment

The meeting was adjourned by President Guitron at 2:42 p.m.

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

Finance Committee Meeting Via Zoom
DRAFT-Minutes

TIME 4:30 p.m. **DATE:** March 8, 2022

LOCATION: 43420 Trader Place Indio, CA 92201

COMMITTEE MEMBERS PRESENT:

Palm Desert	Doug Walker
Indian Wells	Clive Weightman
County at Large	Bito Larson

COMMITTEE MEMBERS ABSENT:

Rancho Mirage	Isaiah Hagerman

STAFF PRESENT:
Jeremy Wittie, M.S., General Manager
David I'Anson, MPA, MBA/ACC., Administrative Finance Manager
Melissa Tallion, Executive Assistant/Clerk of the Board

MEMBERS OF THE PUBLIC PRESENT:
None

1. Call to Order
Treasurer Walker called the meeting to order at 4:37 p.m.

2. Roll Call
Roll call indicated three (3) of the four (4) Committee members were present.

3. Confirmation of Agenda
The agenda was confirmed as presented.

4. Public Comments
One (1) written public comment was received from Mr. Brad Anderson. The written comment was distributed to the Finance Committee and Legal Counsel and are attached for the record.

5. Items of General Consent
Approval of Minutes from February 8, 2022, Finance Committee Meeting
On a motion from Trustee Weightman seconded by Trustee Larson, and passed by the following roll call votes, the Committee approved the minutes as presented.

Ayes: Treasurer Walker, Trustees Weightman, Larson

Noes: None

Abstained: None

Absent: Trustee Hagerman

6. Discussion, Review, and/or Update

A. Review of Check Report from Abila MIP for the period of February 8, 2022, to March 3, 2022
A discussion ensued concerning a few checks that needed further explanation.

B. CalCard Charges for Statement dated February 23, 2022
The CalCard statement was reviewed by Committee members and staff. Questions regarding specific charges were brought forward by Trustees and staff provided more information.

C. Review of February 2022 Financials and Treasurers Report
The documents were reviewed.

7. Old Business

A. None

8. New Business

A. Review of finance-related items on Board Agenda
The Finance Committee fully supports the Board and all Finance-related items. A discussion ensued regarding New Business item 10-A (Unmanned Aircraft System). Staff gave an overview of the purchase and what it will be used for.

8. Schedule Next Meeting

The next Finance Committee meeting is scheduled for Tuesday, April 12, 2022, at 1:00 p.m. See attached schedule for upcoming dates.

10. Trustee and/or Staff Comments/Future Agenda Items

None

11. Adjournment

The meeting was adjourned by Treasurer Walker at 5:27 p.m.

Melissa Tallion

From: [redacted]
Sent: Tuesday, March 8, 2022 4:27 PM
To: Melissa Tallion; Edward Prendez
Subject: Public Comment - CVMVCD Finance Committee meeting 3/8/22

March 8, 2022

Coachella Valley Mosquito and Vector Control District (CVMVCD)
43420 Trader Pl
Indio, CA. 92201
Attn: Clerk of the Board (Melissa Tallion)

Re: Written Public Comment
(Submitted in accordance with California's AB361)

Dear selected Finance Committee member's,

Please review my written statements listed below

1) Agenda Item: 6-B (extreme CalCard charges)

Opposed -

Please consider becoming as transparent as possible with regards to the continued reckless activities surrounding how Tax collected dollars are squandered by CVMVCD administration.

Please detail with every CVMVCD report (statement) of terms used to describe ledger activity. Fee's and tip's should be disclosed in a matter that doesn't decive Coachella Valley Residents.
Massive overspending have become normal and accepted by the CVMVCD administration and it's current Board of Trustees - but is likely unknown to the Coachella Valley Residents that continue to fund that organization.

Sincerely,

Brad Anderson | [redacted]

Cc.

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

Finance Committee Meeting Via Zoom and In-Person
DRAFT-Minutes

TIME: 1:30 p.m. **DATE:** April 12, 2022

LOCATION: 43420 Trader Place Indio, CA 92201

COMMITTEE MEMBERS PRESENT:

Palm Desert	Doug Walker
Indian Wells	Clive Weightman
County at Large	Bito Larson

OTHER TRUSTEES PRESENT:

Indio	Benjamin Guitron

STAFF PRESENT:
Jeremy Wittie, M.S., General Manager
David I'Anson, MPA, MBA/ACC., Administrative Finance Manager
Melissa Tallion, Executive Assistant/Clerk of the Board
Rosendo Ruiz, Accounting Technician I

MEMBERS OF THE PUBLIC PRESENT:
None.

1. **Call to Order—***Treasurer Walker called the meeting to order at 1:01 p.m.*

2. **Roll Call—***Roll call indicated three (3) Committee members out of three (3) were present.*

3. **Confirmation of Agenda—***The agenda was confirmed as presented.*

4. **Public Comments—***None.*

5. **Items of General Consent—***None.*

6. **Old Business**
   A. Budget Calendar
   The budget calendar was reviewed by the committee.

7. **New Business**
   A. Draft FY2022-2023 Budget

The budget summary document was reviewed along with revenue and expenditure assumptions. Jeremy Wittie, General Manager provided more information regarding the proposed additional position and reclassifications. Trustee Weightman suggested that the Revenue Assumption line on the draft budget be removed and/or updated. The Committee asked staff to prepare 5 or 6 scenarios for the $1million surplus. Staff will prepare those scenarios and present them at the May 3, 2022, Finance Committee meeting.

B. Capital Project—District Sterile Mosquito Program
Jeremy Wittie presented the timeline for the Sterile Mosquito Insectary. A discussion ensued.

8. **Schedule Next Meeting:** *The next Finance Committee meeting (special meeting to review the final budget draft) was scheduled via Zoom for Tuesday, May 3, 2022, at 1:00 p.m.*

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

10. **Adjournment:** *The meeting was adjourned by Treasurer Walker at 2:39. p.m.*

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

Finance Committee Meeting Via Zoom
DRAFT-Minutes

TIME 1:00 p.m. **DATE:** May 3, 2022

LOCATION: 43420 Trader Place Indio, CA 92201 via zoom

COMMITTEE MEMBERS PRESENT:

Palm Desert	Doug Walker
Indian Wells	Clive Weightman
County at Large	Bito Larson (joined at 1:30 p.m.)

COMMITTEE MEMBERS ABSENT:
None

OTHER TRUSTEES PRESENT:

Indio	Benjamin Guitron (joined at 1:46 p.m.)

STAFF PRESENT:
Jeremy Wittie, M.S., General Manager
David I'Anson, MPA, MBA/ACC., Administrative Finance Manager
Melissa Tallion, Executive Assistant/Clerk of the Board

MEMBERS OF THE PUBLIC PRESENT:
Yes

1. Call to Order: *Treasurer Walker called the meeting to order at 1:02 p.m.*

2. Roll Call: *Roll call indicated two (2) of the three (3) Committee members were present.*

3. Confirmation of Agenda: *The agenda was confirmed as presented.*

4. Public Comments: *None.*

5. Items of General Consent
Approval of Minutes from March 8, 2022, Finance Committee Meeting and April 12, 2022, Special Finance Committee Meeting
On a motion from Trustee Weightman seconded by Treasurer Walker, and passed by the following roll call votes, the Committee approved the minutes as presented.

Ayes: Treasurer Walker, Trustee Weightman

Noes: None.

Abstained: None.

Absent: Trustee Larson

6. Old Business:

A. Budget Calendar
The Committee reviewed the budget calendar

B. Draft FY2022-2023 Budget
The Committee reviewed the draft FY2022-23 budget and options for the $1Million surplus reported during the May 3, 2022, Finance Committee meeting. Option #6 was discussed and recommend by the Finance Committee to be presented to the Board during the May 10th Budget Workshop with a presentation from the Laboratory Manager and Operations Manager.

7. New Business: *None*

8. Schedule Next Meeting: *The next Finance Committee meeting was scheduled via Zoom and in-person for Tuesday, May 10, 2022, at 3:30 p.m.*

10. Trustee and/or Staff Comments/Future Agenda Items: *Jeremy Wittie, M.S., General Manager thanked the Finance Committee for their input.*

11. Adjournment: *The meeting was adjourned by Treasurer Walker at 1:57. p.m.*

ITEMS OF GENERAL CONSENT

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

Board of Trustees Meeting Via Zoom
Summary of Action Items
March 8, 2022

- The Board of Trustees approved Resolution 2022-04 authorizing remote teleconferencing meetings for the period of March 12, 2022 – April 10, 2022
- Approval of February 8, 2022, Board Meeting Minutes
- Approval of Proclamation designating the week of April 17-23, 2022, as Mosquito Awareness Week
- Approval to renew the annual agreement with Salton Sea Aerial Services, Inc. to conduct both aerial adulticiding and larviciding applications
- Approval to renew the contract with CleanExcel for cleaning services for the District headquarters in an amount not to exceed $3,811.00 per month from fund 7675.01.305.000 – Contract Services
- Discussion and/or approval to purchase an Unmanned Aircraft System (UAS), payload, and battery systems in an amount not to exceed $69,000.00, from Leading Edge. Capital Replacement Budget Fund #8415.13.300.000 – Budgeted; Funds Available- Capital Replacement

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

Board of Trustees Meeting Via Zoom
DRAFT - Minutes

MEETING TIME: 6:00 p.m. Tuesday, March 8, 2022

LOCATION: 43420 Trader Place, Indio, CA 92201- ***Via Zoom***

TRUSTEES PRESENT

PRESIDENT: Benjamin Guitron	Indio
VICE PRESIDENT: Doug Walker	Palm Desert
TREASURER: Clive Weightman	Indian Wells
Denise Delgado	Coachella
Dr. Doug Kunz	Palm Springs
Rita Lamb	Cathedral City
Bito Larson	County at Large
John Peña	La Quinta
Janell Percy	County at Large

TRUSTEES ABSENT

Gary Gardner	Desert Hot Springs
SECRETARY: Isaiah Hagerman	Rancho Mirage

STAFF AND GENERAL COUNSEL PRESENT

Jeremy Wittie, General Manager
Lena Wade, Legal Counsel, SBEMP
Crystal Moreno, Human Resources Manager
David I'Anson, Administrative Finance Manager
Jennifer Henke, Laboratory Manager
Roberta (Bobbye) Dieckmann, Operations Manager
Edward Prendez, Information Technology Manager
Tammy Gordon, Public Information Officer
Kim Hung, Vector Ecologist
Gaby Harvey, Vector Ecologist
Melissa Tallion, Executive Assistant/Clerk of the Board

Other staff members joined the zoom meeting as well.

MEMBERS OF THE PUBLIC PRESENT

Yes

1. **Call to Order** – *President Guitron called the meeting to order at 6:02 p.m.*

2. **Pledge of Allegiance** – *Trustee Clive Weightman led the Pledge of Allegiance*

3. **Roll Call** – *At roll call nine (9) Trustees out of eleven (11) were present.*

4. **Confirmation of Agenda** – *President Guitron inquired if there were any agenda items to be shifted. Upon no objections by the Board of Trustees, the agenda was confirmed.*

5. **Public Comments** – *One (1) written comment was received from Mr. Brad Anderson regarding Agenda items. The written comment was distributed to the Board of Trustees and Legal Counsel and is attached for the record. Mr. Anderson spoke on a non-agenda item.*

6. **Board Reports**

   President's Report:

   President Guitron stated that the Executive Committee held its meeting on February 22, 2022, reviewed the draft Board Agenda for March 2022, and the Committee revised it as needed. President Guitron mentioned the ongoing discussion about COVID and the return to in-person meetings which will be discussed later in the meeting.

   Treasurer's Report:

   Treasurer Walker stated that the Finance Committee held its meeting before the Board meeting to review the check report, CalCard charges, and financials for the period ending February 2022. As per normal, there were some questions regarding charges. All questions were answered to the Committee's satisfaction.

7. **Staff Informational Reports**

A. Live Reports

- General Manager's Report – **Jeremy Wittie, M.S., General Manager**

  Jeremy gave congratulations to Jennifer Henke, Laboratory Manager for her MVCAC Presidential Citation, and Trustee Clive Weightman for his Inspiration award for his service to the community. Jeremy gave a brief overview of the virtual CSDA roundtable meeting that he and Present Guitron attended with Assemblymember Garcia. Jeremy highlighted the strategic plan timeline and introduced the Trustee Field days which will become part of the Trustee orientation.

- Information Technology and Fleet Introduction – **Edward Prendez, Information Technology Manager**

  Edward introduced his staff; Two (2) staff from IT and two (2) from fleet.

- Arbovirus Threats and Activity Report **– Jennifer A. Henke, M.S., Laboratory Manager**

Jennifer gave an overview of vector-borne disease threats that are most likely to arrive in the Coachella Valley.

8. 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. Approval of Resolution 2022- 04 authorizing remote teleconferencing meetings for the period March 12, 2022 – April 10, 2022

B. Minutes for February 8, 2022, Board Meeting

C. Approval of expenditures for February 2, 2022-March 3, 2022

D. Approval of Proclamation designating the week of April 17-23, 2022, as Mosquito Awareness Week– **Tammy Gordon, M.A. APR, Public Information Officer**

E. Annual Statement of Economic Interests/Form 700 Annual Filing for the filing period of 2021/2022 – **Melissa Tallion, Executive Assistance/Clerk of the Board**

F. Approval to renew the annual agreement with Salton Sea Aerial Services, Inc. to conduct both aerial adulticiding and larviciding applications; Budgeted; Funds Available – **Roberta Dieckmann, Operations Manager**

H. Informational Items:

- Financials **– David I'Anson, MPA, MBA/ACC., Administrative Finance Manager**
- Quarterly Department Reports
- Board Business Log
- Strategic Planning Workshop Minutes
- Important Budget Meeting Dates, Finance Committee
- Prerecorded presentation regarding the Environmental Reports included in the Board packet– **Jennifer A. Henke, M.S., Laboratory Manager**
- National Pollutant Discharge Elimination System (NPDES) Annual Reports – **Jennifer A. Henke, M.S., Laboratory Manager**
- EPA Pesticide Environmental Stewardship Program (PESP) – **Jennifer A. Henke, M.S., Laboratory Manager**
- California Environmental Quality Act (CEQA) Mitigated Negative Declaration Annual Compliance Report – **Jennifer A. Henke, M.S., Laboratory Manager**

- Trustee Travel – **Melissa Tallion, Executive Assistance/Clerk of the Board**
- Mosquito and Vector Control Association of California (MVCAC) Annual Conference, February 7-10, 2022, Sacramento, CA
- American Mosquito Control Association (AMCA) Annual Conference, February 28-March 4, 2022

On a motion from Trustee Peña, seconded by Trustee Lamb, and passed by the following roll call votes, the Board of Trustees approved items A-E and G-H of General Consent.

Ayes: President Guitron, Trustees Delgado, Kunz, Lamb, Larson, Peña, Percy, Walker, Weightman

Noes: None.

Abstained: None.

Absent: Trustees Gardner, Hagerman

F. Approval to renew the contract with CleanExcel for cleaning services for the District headquarters in an amount not to exceed $3,811.00 per month from fund 7675.01.305.000 – Contract Services, Budgeted; funds available – **David l'Anson, MPA, MBA/ACC., Administrative Finance Manager**

On a motion from Trustee Peña, seconded by Trustee Kunz, and passed by the following roll call votes, the Board of Trustees approved item F of General Consent.

Ayes: President Guitron, Trustees Delgado, Kunz, Lamb, Peña, Percy, Walker, Weightman

Noes: None.

Abstained: Trustee Larson (recused himself from the vote)

Absent: Trustees Gardner, Hagerman

9. Old Business

A. Continued discussion regarding COVID-19 and returning to in-person meetings – **Executive Committee; Jeremy Wittie, M.S., General Manager**

A discussion ensued regarding the upcoming Board and Finance Committee meetings. If the Board wants to continue the provisions and meet remotely the Board will need to hold a special board meeting to review current findings and/or approve a

new resolution to extend provisions of AB-361 through April. The Board came to a consensus to hold a hybrid meeting (in-person and remote) on May 10, 2022.

10. New Business

A. Discussion and/or approval to purchase an Unmanned Aircraft System (UAS), payload, and battery systems in an amount not to exceed $69,000.00, from Leading Edge. Capital Replacement Budget Fund #8415.13.300.000 – Budgeted; Funds Available- Capital Replacement – **Edward Prendez, Information Technology Manager**

On a motion from Trustee Kunz, seconded by Trustee Peña and passed by the following roll call votes, the Board of Trustees approved the purchase of an Unmanned Aircraft System (UAS), payload, and battery systems in an amount not to exceed $69,000.00 from Leading Edge.

Ayes: President Guitron, Trustees Delgado, Kunz, Lamb, Larson, Peña, Percy, Walker, Weightman

Noes: None.

Abstained:

Absent: Trustees Gardner, Hagerman

11. Closed Session (s):

No Closed Session

12. Comments by General Counsel

Lena Wade, General Counsel assured the Board of Trustees that has not been any credible evidence or findings regarding fraud with a District service provider. Lena informed the Board of Trustees that regarding District Legal issues the Board will receive attorney-client privileged and/or confidential information regarding legal matters. Feel free to contact Lena by phone or email.

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

14. Adjournment-*President Guitron adjourned the meeting at 7:49 p.m.*

_____ _____

Benjamin Guitron
President

Clive Weightman
Vice President

Melissa Tallion

From: [redacted]
Sent: Tuesday, March 8, 2022 2:29 PM
To: Melissa Tallion; Edward Prendez
Subject: Public Comment(s) - CVMVCD Board of Trustees meeting - March 8, 2022

March 8, 2022

Coachella Valley Mosquito and Vector Control District (CVMVCD)
43420 Trader Pl
Indio, CA. 92201
Attn: Clerk of the Board (Melissa Tallion)

Re: Written Public Commentary in regards to Agenda Items: 8-A,8-B,8-F,8-G and 9-A,10.

Dear Current CVMVCD Board of Trustees,

Please consider allowing citizens the opportunity to listen to and possible addressing each agenda Item as it is presented to the board for it's considered. As you are well aware, of the current CVMVCD system of limiting free speech of any Resident that addresses this unique and unusual organization.

1) Agenda Item: 8-A (the consensus to continue with potential unlawful action of the missuse of California's AB361)

Opposed -

As this organization's operational board is aware of puposely using California's AB361 to potentially limit Public participation in it precived open Public meetings and to allow for it's non-elected officials to decive local residents by using California's AB361 as a conveniences to avoid the general Public at In-person meetings.
Ethical standards should be upgraded for the CVMVCD Board of Trustees (administrators) to serve each taxpayer over what appears to be serving the self-interests of member's.

2) Agenda Item: 8-B (Incorrect/incomplete written recorded meeting minutes- February 8, 2022 Board of Trustees meeting)

Opposed -

The CVMVCD administration have taken the unusual action of limiting Free speech of a member of the Community. That member has great insight into the negative aspects (potential corruption) of the CVMVCD organization. The drastic changes of how the CVMVCD organization prepares its documents (written meeting minutes) to exclude any aspects of verbal testimony is morally corrupted and illustrates how "customary norms" were puposely abandoned by CVMVCD officials.
The CVMVCD actions related to Public input have clearly waged an attack from within the CVMVCD to limit Public participation and potentially accommodate a "chilling effect" for all that monitor and or may be aware of how people are confronted by CVMVCD officials.

3) Agenda Item: 8-F (potential Influence over external company - Clean Excel)

Opposed -

It's well established that CVMVCD Board of Trustees member (Lawson) may have a direct conflict of interest that could Influence the selection of this external company (contract for services).

4) Agenda Item: 8-G (Salton Sea Aerial Services Inc.)

Opposed -

The conditions to allow for an unsuitable and potential financial motivator (incentive) of the CVMVCD administrator (Roberta Dieckmann) to activity participate in financial contracts of the long time (entrenched into CVMVCD organization) service contractor is dangerous.
It's highly recommended that any and all financial aspects that Involved tax collected dollars - be administered ONLY by CVMVCD officials that haven't been drectly associated with fraud and wrongful actions to deframe others.
Other companies should be obtained due to the continued reckless activities surrounding the CVMVCD administration's direct involvement in Contractor(s) operations.

5) Agenda Item: 9-A (discussion - return to normalisation of Public meetings)

Support -

Full Support with allowing the Public to monitor and or participate in the Peoples business with In-Person Open Public meetings. All Non-elected officials should be at meeting locations (other that following Cal. Brown Act safeguards) and be approachable by citizens during the Open Public meetings.
The complete abandonment of California's AB361 should be a priority of this special district. - CVMVCD operations have only been allowed to further cause distrust among the population while hiding from the people that fund its operations.

6) Agenda Item: 10 (unnecessary financial burden)

Opposed -

The CVMVCD current administration have proven that its priorities are to advance unsuitable/unqualified family and friends into the CVMVCD organization. Of course having nepotism and other family-friendly Individuals operate "Public safety" aspects of "Public Health services" have place the complete Coachella Valley at Increased risk of harm from dangers that wouldn't be a threat with a Special District that was operated in an professional ethical matter.
The trust in the CVMVCD to control Vectors and disease have been destroyed by the Increasing numbers of Vectors while NO noticeable difference in control have been detected - discontinue wasting tax collected dollars on what is clearly consider a "Toy" by CVMVCD officials and pose's a great risk to the Public in its fight and discharging of chemicals.

Sincerely,

Brad Anderson | [redacted]

Cc

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

Board of Trustees Meeting Via Zoom
Summary of Action Items
April 12, 2022

- The Board of Trustees approved Resolution 2022-05 authorizing remote teleconferencing meetings for the period of April 12, 2022, to May 11, 2022

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

Board of Trustees Meeting Via Zoom
DRAFT - Minutes

MEETING TIME: 12:30 p.m. Tuesday, April 12, 2022

LOCATION: 43420 Trader Place, Indio, CA 92201- ***Via Zoom and In-Person***

TRUSTEES PRESENT

PRESIDENT: Benjamin Guitron	Indio
VICE PRESIDENT: Doug Walker	Palm Desert
TREASURER: Clive Weightman	Indian Wells
Denise Delgado	Coachella
Gary Gardner	Desert Hot Springs
Dr. Doug Kunz	Palm Springs
Rita Lamb	Cathedral City
Bito Larson	County at Large
John Peña	La Quinta
Janell Percy	County at Large

TRUSTEES ABSENT

Vacant	Rancho Mirage

STAFF AND GENERAL COUNSEL PRESENT
Jeremy Wittie, General Manager
Lena Wade, Legal Counsel, SBEMP
Crystal Moreno, Human Resources Manager
David I'Anson, Administrative Finance Manager
Roberta (Bobbye) Dieckmann, Operations Manager
Melissa Tallion, Executive Assistant/Clerk of the Board

MEMBERS OF THE PUBLIC PRESENT
No

1. **Call to Order** – *President Guitron called the meeting to order at 12:35 p.m.*

2. **Pledge of Allegiance** – *Trustee Doug Walker led the Pledge of Allegiance*

3. **Roll Call** – *At roll call ten (10) Trustees out of eleven (11) were present.*

4. **Public Comments** – *None*

5. **Approval of Resolution 2022-05 authorizing remote teleconferencing meetings for the period April 12, 2022, to May 11, 2022**

   On a motion from Trustee Weightman seconded by Trustee Peña, and passed by the following roll call votes, the Board of Trustees approved Resolution 2022-05 authorizing remote teleconferencing meetings for the period April 12, 2022, to May 11, 2022.

   Ayes: President Guitron, Trustees Delgado, Gardner, Kunz, Lamb, Larson, Peña, Percy, Walker, Weightman

   Noes: None.

   Abstained: None

   Absent: None

6. **Adjournment**-*President Guitron adjourned the meeting at 12:40 p.m.*

_____ _____

Benjamin Guitron
President

Clive Weightman
Vice President

Coachella Valley Mosquito and Vector Control District
Checks Issued for the Period of:
March 4-April 6, 2022

Check No	Payable To	Description	Check Amount	Total Amount
	Payroll Disbursement	March 4, 2022	215,648.58	
	Payroll Disbursement	March 18, 2022	230,602.17	
	Payroll Dispursement	April 1, 2022	212,508.02	
				658,758.77
Pre-Approved Expenditures Utilities/Benefits:				
43897	CalPERS Retirement Acct	Retirement Contributions: 03/04/2022PP	32,223.15	
43942	Principal Life Insurance Co.	Dental/Life Insurance 02/22, 03/22, 04/22	32,674.53	
43918	CalPERS Healthcare Acct	Healthcare Retired/Active 04/2022	94,120.86	
				159,018.54
Pre-Approved Expenditures less than $10,000.00:				
43894	Advance Imaging Systems	Contract Services	364.41	
43895	Airgas USA, LLC	Dry Ice	716.86	
43896	Burrtec Waste Industries	Waste Disposal	172.85	
43898	CleanExcel	Janitorial Services	6,611.00	
43899	CSI Ceja Security International	Security Patrol Services	1,075.00	
43900	Darwin Chambers	Environmental Chamber Maintenance	6,270.88	
43901	Eisenhower Medical Center	Safety Expense	3,000.00	
43902	Jennifer Henke	Professional Development	188.47	
43903	Izzy Motors Inc. dba La Quinta Chevrolet	Vehicle Parts & Supplies	318.98	
43904	Liebert Cassidy Whitmore	Attorney Fees	168.00	
43905	Graciela Morales	Tuition Reimbursement	1,964.93	
43906	NAPA Auto & Truck Parts	Vehicle Parts & Supplies	720.70	
43907	SeqGen, Inc.	Equipment Parts and Supplies	3,380.00	
43908	Slovak Baron Empey Murphey & Pinkney LLP	Attorney Fees	4,000.00	
43909	Three Peaks Corp	Repair & Maintenance	3,194.64	
43910	Valley Lock & Safe	Repair & Maintenance	88.03	
43911	Vector-Borne Disease Account	State Certification Exam Fees	792.00	
43912	Zaretsky Engineering Solutions	Repair & Maintenance	6,051.33	
43914	Abila	Cloud Computing Services	873.87	
43915	Advance Imaging Systems	Contract Services	145.09	
43916	Airgas USA, LLC	Dry Ice	748.84	
43917	Association Reserves - Inland Empire, LLC	Annual Reserve Study	1,800.00	
43919	CarQuest Auto Parts	Vehicle Parts & Supplies	1,079.87	
43921	Cintas Corporation #3	Safety Expense	3,844.97	
43922	City of Indio Alarm Program	Permits, Licenses,Fees	93.00	
43923	C&R Wellness Works	Employee Assistance Services	306.00	
43924	Desert Electric Supply	Repair & Maintenance	623.79	
43926	Employee Relations Inc.	Recruitment/Advertising	240.29	
43928	Fedak & Brown, LLP	Professional Services	500.00	
43929	Garcia Plumbing Co.	Repair & Maintenance	2,435.00	
43930	Jennifer Henke	Professional Development	295.63	
43931	Hypertec USA Inc	Cloud Computing Services	48.46	
43932	Indio Emergency Medical Group	Physician Fees	135.00	
43933	Jernigan's Sporting Goods, Inc.	Safety Expense	312.09	
43934	Izzy Motors Inc. dba La Quinta Chevrolet	Vehicle Parts & Supplies	614.50	
43936	Linde Gas & Equipment Inc.	Cylinder Rentals	57.52	
43937	Marlin Business Bank	Contract Services	705.79	
43938	NAPA Auto & Truck Parts	Vehicle Parts & Supplies	898.78	
43940	nfpAccounting Technologies, Inc.	Staff Training	2,400.00	
43941	Pitney Bowes Purchase Power	Contract Services	500.00	
43943	Rauch Communication Consultants, Inc.	Professional Fees	1,837.50	
43944	Refrigeration Supplies Distributor	Repair & Maintenance	281.29	
43948	Melissa Tallion	Meeting Expense Reimbursement	120.00	
43949	Veolia ES Technical Solutions, LLC	Operating Supplies	432.43	
43950	Technical Safety Services, LLC.	Maintenance and Calibration	812.00	
43951	Waterlogic Americas LLC	Employee Support	106.57	
Cash - California Bank & Trust Checking				**61,326.36**
Cash - California Bank & Trust Checking				
` 43913	Salton Sea Air Service	Aerial Larvicide	34,067.49	
43925	Dudek & Associates	Capital Facilities	10,512.50	
43927	Environmental Systems Research Inst	Software Licensing	17,400.00	
43935	Leading Edge Aerial Technologies, Inc.	Unmanned Aircraft Applications	16,207.76	
43939	Nearmap US Inc.	Cloud Computing Services	12,000.00	
43945	Salton Sea Air Service	Aerial Larvicide	17,016.66	
43946	Slovak Baron Empey Murphey & Pinkney LLP	Attorney Fees	10,017.45	
43947	SC Commercial LLC dba SC Fuels	Motor,Fuel, Oil	14,528.46	
43952	U.S. Bank	Calcard Payment for March	83,452.17	
Cash - California Bank & Trust Check Run Total to be Approved				**215,202.49**
Total Expenditures: March 4-April 6, 2022				**1,094,306.16**

Benjamin Guitron IV, President

Douglas Walker, Treasurer

Coachella Valley Mosquito and Vector Control District
Checks Issued for the Period of:
April 7-May 2, 2022

Check No	Payable To	Description	Check Amount	Total Amount
	Payroll Disbursement	April 15, 2022	218,306.74	
	Payroll Disbursement	April 29, 2022	211,372.67	
				429,679.41
Pre-Approved Expenditures Utilities/Benefits:				
43954	CalPERS Healthcare Acct	Healthcare Retired/Active 05/2022	92,245.28	
43955	CalPERS Retirement Acct	Retirement Contributions: 03/18,4/1,4/15,4/29PP	128,266.31	
43956	ICMA Retirement Trust	Deferred Compensation Contributions 03/18,04/1,4/15,4/29PP	43,704.82	
43957	Principal Life Insurance Co.	Dental/Life Insurance 05/22	14,082.57	
				278,298.98
Pre-Approved Expenditures less than $10,000.00:				
43953	Petty Cash Custodian Crystal Moreno	Petty Cash Replenishment	392.92	
43958	Advance Imaging Systems	Contract Services	526.13	
43959	Airgas USA, LLC	Dry Ice	1,496.22	
43960	Alpha Media LLC	Advertising	3,996.00	
43962	Cintas Corporation #3	Safety Expense	2,823.66	
43963	CleanExcel	Janitorial Services	7,031.00	
43964	C&R Wellness Works	Employee Assistance Services	612.00	
43965	CSI Ceja Security International	Security Patrol Services	1,075.00	
43966	Del Valle Informador Inc.	Advertising	1,980.00	
43967	Desert Air Conditioning	Repair & Maintenance	4,671.24	
43968	Desert Alarm, Inc.	Burglar & Fire Alarm Monitoring Services	1,019.70	
43969	Desert Sun Publishing Co	Advertising	2,014.00	
43970	Dudek & Associates	Capital Facility Replacement	9,816.50	
43971	Eisenhower Occupational Health Serv	Physician Fees	55.00	
43972	Equipment Direct, Inc.	Safety Expense	2,736.86	
43973	Fedak & Brown, LLP	Professional Services	1,039.00	
43974	Gulf California Broadcast Company	Advertising	8,945.00	
43975	Jennifer Henke	Professional Development	182.00	
43976	High Tech Irrigation, Inc.	Repair & Maintenance	47.50	
43978	Indio Emergency Medical Group	Physician Fees	135.00	
43979	Jernigan's Sporting Goods, Inc.	Safety Expense	169.64	
43980	Kwik Kleen Of The Desert	Offsite Vehicle Maintenance & Repair	395.00	
43981	Linde Gas & Equipment Inc.	Cylinder Rentals	60.99	
43982	Marino Wellness LLC	Wellness	4,275.00	
43983	Marlin Business Bank	Contract Services	705.79	
43984	Graciela Morales	Tuition Reimbursement	1,908.00	
43985	NAPA Auto & Truck Parts	Specialty Vehicle Parts & Supplies	690.33	
43987	Refrigeration Supplies Distributor	Repair & Maintenance	44.36	
43988	RM Broadcasting LLC	Advertising	4,500.00	
43989	SC Commercial LLC dba SC Fuels	Motor,Fuel, Oil	6,581.91	
43990	Veolia ES Technical Solutions, LLC	Operating Supplies	320.07	
43991	Waterlogic Americas LLC	Employee Support	106.57	
43992	Waxie Sanitary Supply	Field Supplies	133.45	
43993	Zeigler Bros., Inc.	Operating Supplies	262.61	
Cash - California Bank & Trust Checking				**70,748.45**
Cash - California Bank & Trust Checking				
` 43977	Hypertec USA Inc	Cloud Computing Services	27,037.44	
43986	Rauch Communication Consultants, Inc.	Professional Fees	18,107.00	
43994	U.S. Bank	Calcard Statement April	88,338.21	
Cash - California Bank & Trust Check Run Total to be Approved				**133,482.65**
Total Expenditures: April 7-May 2, 2022				**912,209.49**

Benjamin Guitron IV, President

Douglas Walker, Treasurer

FINANCE REPORTS

The financial reports show the preliminary balance sheet, receipts, and revenue and expenditure reports for the month ending April 30, 2022. The revenue and expenditure report shows that the operating budget expenditure for July 1, 2021, to April 30, 2022, is $10,818,823; total revenue is $7,368,941 resulting in excess revenue over (under) expenditure for the year to April 30, 2022, of ($3,449,882).

THREE YEAR FINANCIALS

	Actual	Budget	Actual	Actual
	4/30/2022	Budget	4/30/2021	4/30/2020
Revenue	**7,368,941**	**6,818,985**	**6,915,540**	**6,367,571**
Expenses				
Payroll	**8,187,866**	**8,169,411**	**6,372,302**	**6,514,123**
Administrative Expe	**695,733**	**822,269**	**479,687**	**538,319**
Utility	**93,755**	**89,853**	**85,228**	**118,503**
Operating Expense	**1,440,386**	**1,851,938**	**1,207,866**	**1,606,418**
Contribution to Capita	**401,083**	**401,083**	**394,568**	**419,623**
Total Expenses	**10,818,823**	**11,334,554**	**8,539,651**	**9,196,986**
Profit (Loss)	**(3,449,882)**	**(4,515,569)**	**(1,624,111)**	**(2,829,415)**

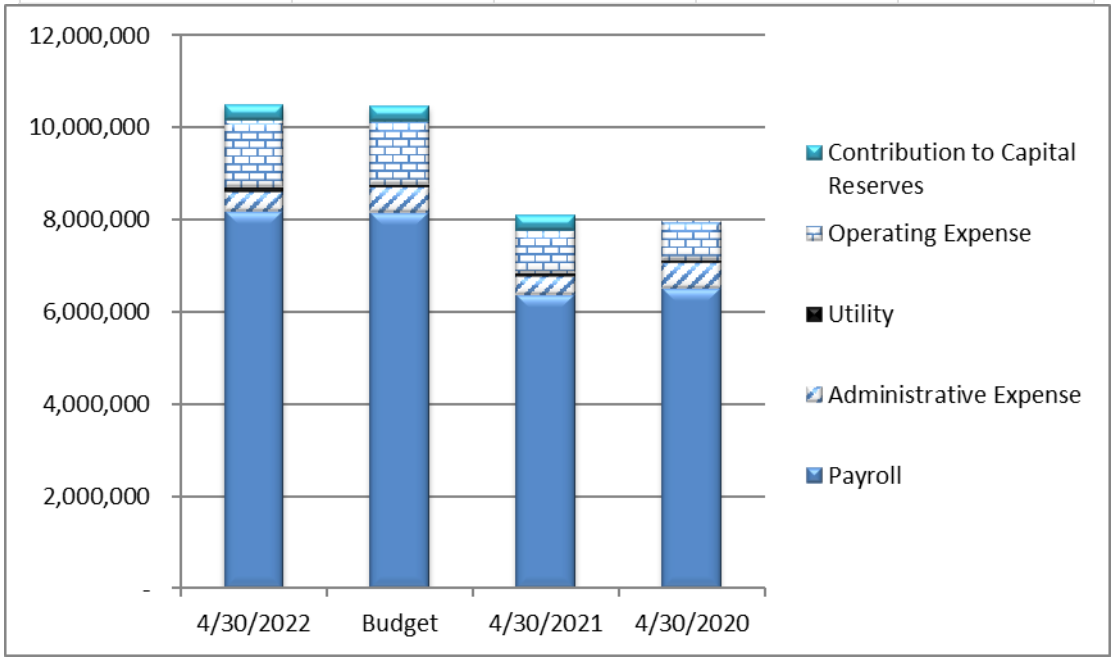


Figure 1 - Three Year Expenditure

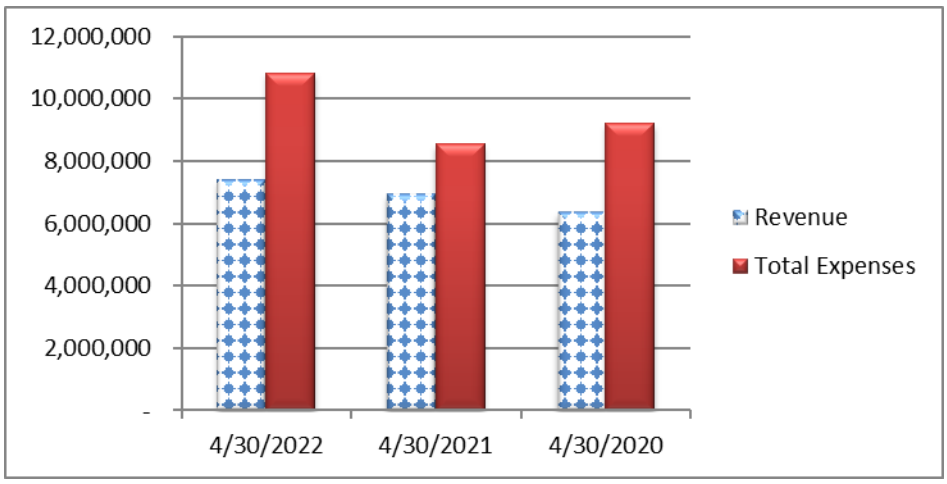


Figure 2 - Three Year Revenue & Expenditure

THREE YEAR CASH BALANCE

Cash Balances	4/30/2022	4/30/2021	4/30/2020
Investment Balance	12,126,014	11,830,182	10,000,518
Checking Accounting	5,543	7,421	83,691
Payroll Account	159,613	129,627	609,082
Petty Cash	2,000	2,000	2,000
Total Cash Balances	**12,293,170**	**11,969,229**	**10,695,291**

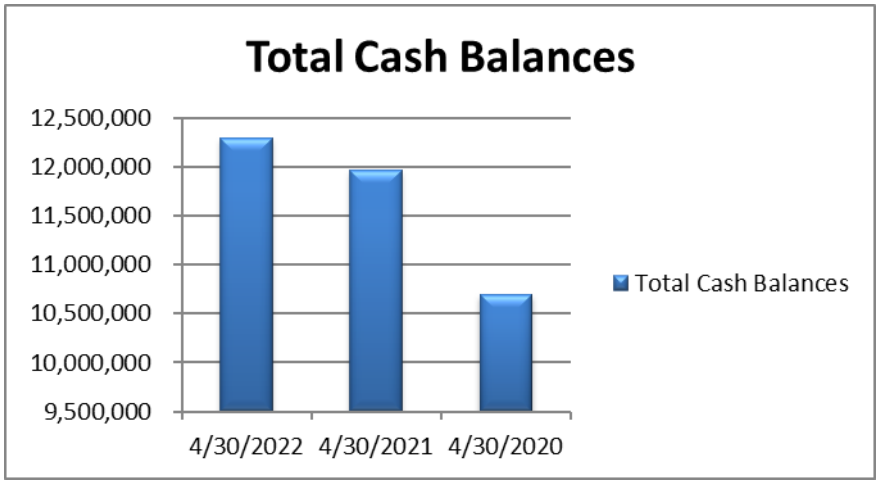


Figure 3 - Cash Balances

DISTRICT INVESTMENT PORTFOLIO 4/30/2022

The District's investment fund balance for the period ending April 30, 2022 is $12,126,014. The portfolio composition is shown in the pie chart. Local Agency Investment Fund (LAIF) accounts for 23% of the District's investments; the Riverside County Pooled Investment Fund is 41% of the total. The LAIF yield for the end of April was 0.51% and the Riverside County Pooled Investment Fund was 0.56% this gives an overall weighted yield for District investments of 0.51%.

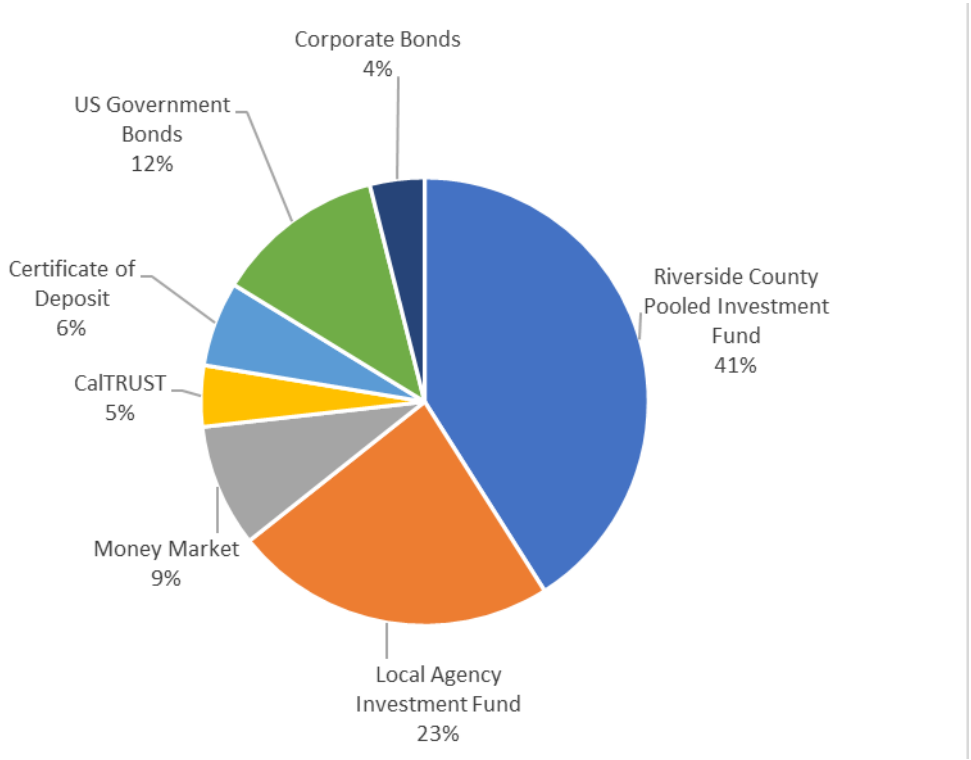


Figure 4 - Investment Portfolio 4/30/22

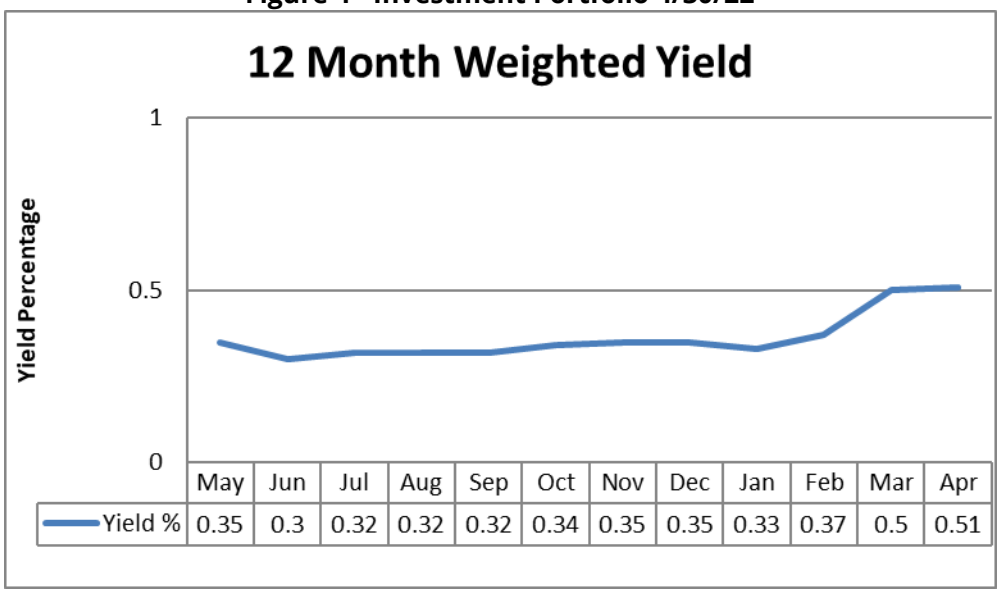


Figure 5 - District Investments Weighted Yield

Coachella Valley Mosquito and Vector Control District
FINANCES AT A GLANCE
ALL FUNDS COMBINED
For the Month Ended April 30, 2022

	Beginning of the Month	Change During the Month	End of the Month
INVESTMENTS	12,478,385	(352,371)	12,126,014
CASH	349,995	(182,839)	167,156
INVESTMENTS & CASH	12,828,380	(535,210)	12,293,170
CURRENT ASSETS	1,747,471	(50,297)	1,697,174
FIXED ASSETS	9,632,595	-	9,632,595
OTHER ASSETS	4,995,513	-	4,995,513
TOTAL ASSETS	29,203,960	(585,507)	28,618,452
TOTAL LIABILITIES	5,774,344	(36,675)	5,737,668
TOTAL DISTRICT EQUITY	23,429,616	(548,832)	22,880,784
TOTAL LIABILITIES & EQUITY	29,203,960	(585,507)	28,618,452

RECEIPTS		$ 437,808
CASH DISBURSEMENTS		
Payroll	$ 642,447	
General Admin	$ 330,572	
Total Cash Disbursements		$ (973,018)
NON-CASH ENTRIES: Accrual Modifications - Changes in A/P, A/R & Pre-paid insurance		$ (50,297)
Change during Month - Excess of Cash over Receipts & Non-Cash Adjustments		$ (585,507)

CVMVCD

Cash Journal - deposits

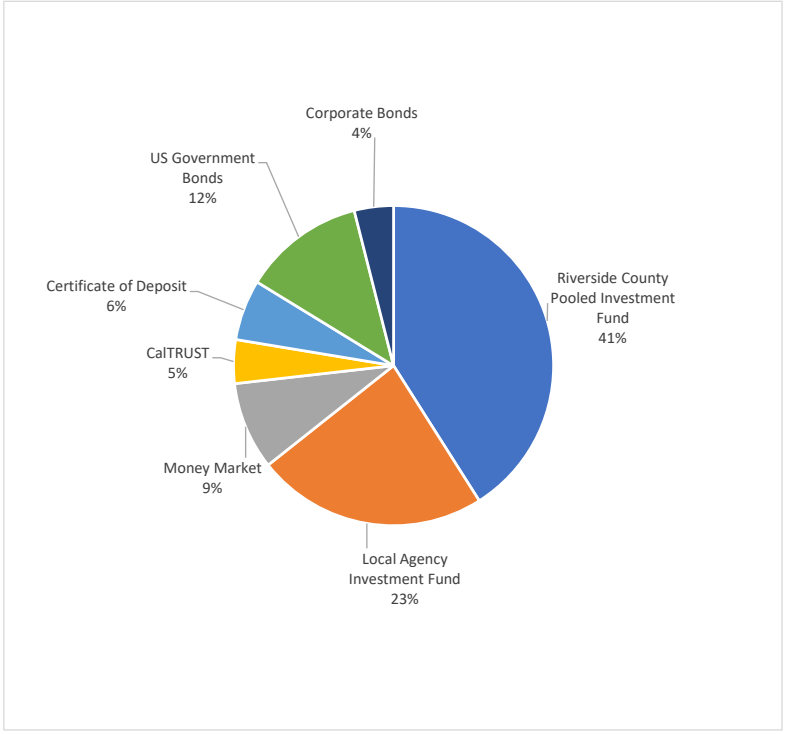
From 4/1/2022 Through 4/30/2022

Effective ...	Transaction Description	Deposits	Payee/Recipient Name
4/7/2022	April receipts CY Sec	419,037.33	Riverside County
4/15/2022	April receipts - LAIF Interest	2,227.81	Local Agency Investment Fund
4/28/2022	Rental receipt	15,000.00	Coachella Valley Unified School District
4/30/2022	April receipts	17.44	California Bank & Trust
4/30/2022	April receipts	2.40	Marissa Kelling
4/30/2022	April receipts - Public Records Request	9.00	Brad Anderson
4/30/2022	April receipts - Rebate	100.00	Syngenta
4/30/2022	April receipts - refund	148.76	London Fog
4/30/2022	April receipts - reimbursment	329.81	Petty Cash
4/30/2022	April receipts - Reimbursment	935.52	VSP
Report Total		437,808.07	

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT
INVESTMENT FUND BALANCES AS OF APRIL 30, 2022

INSTITUTION	IDENTIFICATION	Issue Date	Maturity Date	YIELD	General Fund	Thermal Capital Fund	Capital Equipment Replacement Fund	Capital Facility Replacement Fund		BALANCE
LAIF	Common Investments			0.51%	2,532,521	29,938	22,243	244,604	$	2,829,306
Riverside County	Funds 51105 & 51115			0.56%	4,450,248	52,609	39,086	429,827	$	4,971,770
CalTRUST	Medium Term Fund			0.21%	478,853	5,661	4,206	46,250	$	534,970
CA Bank & Trust	Market Rate			0.02%	947,002	11,195	8,317	91,466	$	1,057,981
Pershing	Market Rate			0.00%	15,524	184	136	1,499	$	17,343
BMW Bank	Certificate of Deposit	11/20/2020	11/20/2025	0.50%			59,440	188,226	$	247,665
State BK of India	Certificate of Deposit	11/23/2020	11/24/2025	0.55%			59,557	188,597	$	248,153
Goldman Sachs	Certificate of Deposit	9/21/2021	9/22/2026	1.05%		37,736	50,474	159,833	$	248,043
Federal Home Ln	US Government Bonds	11/24/2020	11/24/2025	0.63%			179,402	568,108	$	747,510
Federal Natl Mtg Assn	US Government Bonds	11/25/2020	11/25/2025	0.63%			178,461	565,127	$	743,588
Bank Amer Corp	Corporate Bonds	11/25/2020	11/25/2025	0.65%			115,124	364,561	$	479,685
	Total Investments				8,424,149	137,322	716,446	2,848,097	**$**	**12,126,014**

PORTFOLIO COMPOSITION AS OF APRIL 30, 2022
WEIGHTED YIELD 0.51%



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 anticpated revenue are available to meet the District's budgeted expenditure requirements for the next six months.

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

Respectfully submitted

NOTED AND APPROVED

CVMVCD
Statement of Revenue and Expenditures
April 30, 2022

		Annual Budget	YTD Budget	YTD Actual	YTD Budget Variance	Current Period Budget	Current Period Actual	Current Period Variance	Annual Budget Variance	Percent Annual Budget
Revenues										
4000	Property Tax - Current	4,121,655	2,606,297	**2,765,637**	159,340	394,849	**419,037**	24,188	(1,356,018)	(33)%
4010	Property Tax - Curr. Su	30,561	0	**0**	0	0	**0**	0	(30,561)	(100)%
4020	Property Tax - Curr. Un	170,821	165,780	**196,264**	30,483	0	**0**	0	25,443	15 %
4030	Homeowners Tax Relie	36,430	30,908	**18,839**	(12,069)	12,693	**0**	(12,693)	(17,591)	(48)%
4070	Property Tax - Prior Su	23,736	0	**60,757**	60,757	0	**0**	0	37,021	156 %
4080	Property Tax - Prior Un	9,069	0	**0**	0	0	**0**	0	(9,069)	(100)%
4090	Redevelopment Pass-Tl	5,406,064	2,703,032	**3,002,448**	299,416	0	**0**	0	(2,403,616)	(44)%
4520	Interest Income - LAIF/	42,000	31,500	**24,459**	(7,041)	0	**2,245**	2,245	(17,541)	(42)%
4530	Other Miscellaneous Re	63,000	52,500	**34,672**	(17,828)	5,250	**1,525**	(3,725)	(28,328)	(45)%
4551	Benefit Assessment Inc	2,299,810	1,228,967	**1,265,864**	36,897	0	**0**	0	(1,033,946)	(45)%
	Total Revenues	12,203,146	6,818,985	**7,368,941**	549,956	412,792	**422,808**	10,016	(4,834,205)	(40)%
Expenditures										
Payroll Expenses										
5101	Payroll - FT	5,373,288	4,455,181	**4,351,867**	103,314	459,060	**416,363**	42,697	1,021,420	19 %
5102	Payroll Seasonal	203,400	169,500	**200,403**	(30,903)	16,950	**4,260**	12,690	2,997	1 %
5103	Temporary Services	6,900	6,900	**0**	6,900	0	**0**	0	6,900	100 %
5105	Payroll - Overtime Expe	45,120	37,600	**4,506**	33,094	3,760	**493**	3,267	40,614	90 %
5150	CalPERS State Retireme	1,873,120	1,786,448	**1,770,136**	16,312	43,337	**105,112**	(61,776)	102,984	5 %
5155	Social Security Expense	331,680	275,047	**285,834**	(10,787)	28,317	**27,228**	1,089	45,846	14 %
5165	Medicare Expense	77,570	64,326	**68,018**	(3,692)	6,623	**6,368**	255	9,552	12 %
5170	Cafeteria Plan	1,141,827	945,843	**1,050,147**	(104,303)	97,993	**115,188**	(17,195)	91,680	8 %
5172	Retiree Healthcare	372,588	310,490	**327,049**	(16,559)	31,049	**32,262**	(1,213)	45,539	12 %
5180	Deferred Compensatior	108,010	89,800	**97,822**	(8,022)	9,105	**30,410**	(21,305)	10,188	9 %
5195	Unemployment Insuran	34,236	28,276	**32,083**	(3,807)	2,980	**407**	2,573	2,153	6 %
	Total Payroll Expenses	9,567,740	8,169,411	**8,187,866**	(18,455)	699,174	**738,092**	(38,918)	1,379,874	14 %

CVMVCD
Statement of Revenue and Expenditures
April 30, 2022

		Annual Budget	YTD Budget	YTD Actual	YTD Budget Variance	Current Period Budget	Current Period Actual	Current Period Variance	Annual Budget Variance	Percent Annual Budget
Administrative Expenses										
5250	Tuition Reimbursement	20,000	16,667	**8,825**	7,842	1,667	**1,908**	(241)	11,175	56 %
5300	Employee Incentive	15,500	12,917	**6,263**	6,654	1,292	**129**	1,162	9,237	60 %
5301	Employee Support	0	0	**959**	(959)	0	**107**	(107)	(959)	0 %
5302	Wellness	5,600	4,667	**572**	4,094	467	**0**	467	5,028	90 %
5305	Employee Assistance Pr	3,200	2,667	**2,538**	129	267	**0**	267	662	21 %
6000	Property & Liability Insu	156,406	127,005	**152,906**	(25,901)	14,701	**17,526**	(2,825)	3,500	2 %
6001	Workers' Compensatior	181,607	138,839	**69,487**	69,352	21,384	**21,345**	39	112,120	62 %
6050	Dues & Memberships	42,816	36,508	**30,868**	5,641	2,902	**0**	2,902	11,948	28 %
6060	Reproduction & Printing	7,950	7,458	**3,325**	4,133	246	**24**	222	4,625	58 %
6065	Recruitment/Advertising	7,500	6,250	**3,979**	2,271	625	**240**	385	3,521	47 %
6070	Office Supplies	17,111	14,259	**8,801**	5,458	1,426	**1,212**	214	8,310	49 %
6075	Postage	5,750	4,792	**518**	4,274	479	**0**	479	5,232	92 %
6080	Computer & Network S	8,199	6,833	**7,582**	(749)	683	**332**	352	617	8 %
6085	Bank Service Charges	200	167	**(21)**	187	17	**4**	13	221	110 %
6090	Local Agency Formatior	2,400	2,400	**2,243**	157	0	**0**	0	157	7 %
6095	Professional Fees	192,000	178,500	**127,546**	50,954	31,750	**20,484**	11,266	64,454	34 %
6100	Attorney Fees	68,000	56,667	**50,407**	6,260	5,667	**0**	5,667	17,593	26 %
6105	Legal Services / Filing F	1,000	833	**0**	833	83	**0**	83	1,000	100 %
6106	HR Risk Management	6,000	5,000	**1,500**	3,500	500	**0**	500	4,500	75 %
6110	Conference Expense	44,400	41,433	**17,578**	23,855	1,483	**3**	1,480	26,822	60 %
6115	In-Lieu	13,200	11,000	**10,300**	700	1,100	**1,000**	100	2,900	22 %
6120	Trustee Support	7,600	6,333	**694**	5,639	633	**0**	633	6,906	91 %
6200	Meetings Expense	4,890	4,075	**2,483**	1,592	408	**32**	376	2,407	49 %
6210	Promotion & Education	5,000	5,000	**2,784**	2,216	0	**22**	(22)	2,216	44 %
6220	Public Outreach Adverti	46,000	46,000	**40,130**	5,870	0	**21,435**	(21,435)	5,870	13 %
6500	Benefit Assessment Exp	86,000	86,000	**143,466**	(57,466)	0	**0**	0	(57,466)	(67)%
Total Administrative Expenses		948,329	822,269	**695,733**	126,536	87,778	**85,803**	1,975	252,596	27 %
Utilities										
640	Utilities	106,000	88,333	**92,227**	(3,893)	8,833	**0**	8,833	13,773	13 %
641	Telecommunications	1,824	1,520	**1,528**	(8)	152	**0**	152	296	16 %
Total Utilities		107,824	89,853	**93,755**	(3,902)	8,985	**0**	8,985	14,069	13 %

CVMVCD
Statement of Revenue and Expenditures
April 30, 2022

		Annual Budget	YTD Budget	YTD Actual	YTD Budget Variance	Current Period Budget	Current Period Actual	Current Period Variance	Annual Budget Variance	Percent Annual Budget
Operating										
7000	Uniform Expense	44,727	37,350	**38,806**	(1,456)	3,689	**3,040**	649	5,921	13 %
7050	Safety Expense	32,375	27,038	**20,052**	6,985	2,669	**760**	1,909	12,323	38 %
7100	Physican Fees	5,000	4,167	**2,640**	1,527	417	**325**	92	2,360	47 %
7150	IT Communications	56,860	47,383	**38,348**	9,036	4,738	**0**	4,738	18,512	33 %
7200	Household Supplies	3,000	2,500	**2,621**	(121)	250	**0**	250	379	13 %
7300	Repair & Maintenance	42,000	35,000	**46,111**	(11,111)	3,500	**4,175**	(675)	(4,111)	(10)%
7310	Maintenance & Calibrat	6,170	6,170	**4,831**	1,339	0	**0**	0	1,339	22 %
7350	Permits, Licenses & Fee	8,273	7,422	**7,531**	(109)	426	**0**	426	742	9 %
7360	Software Licensing	22,305	22,305	**18,795**	3,510	19,900	**1,395**	18,505	3,510	16 %
7400	Vehicle Parts & Supplie	44,720	37,267	**38,839**	(1,573)	3,727	**6,105**	(2,378)	5,881	13 %
7420	Offsite Vehicle Maint &	17,343	14,452	**7,783**	6,669	1,445	**395**	1,050	9,559	55 %
7450	Equipment Parts & Sup	28,620	24,645	**12,383**	12,262	1,750	**61**	1,689	16,237	57 %
7500	Small Tools Furniture &	4,400	3,667	**3,151**	516	367	**2,244**	(1,877)	1,249	28 %
7550	Lab Supplies & Expense	36,700	30,283	**15,781**	14,502	3,208	**2,399**	810	20,919	58 %
7570	Aerial Pool Surveillance	26,000	0	**0**	0	0	**0**	0	26,000	100 %
7575	Surveillance	60,360	56,842	**65,764**	(8,922)	1,759	**8,740**	(6,981)	(5,404)	(9)%
7600	Staff Training	85,824	73,753	**46,316**	27,437	6,385	**1,369**	5,016	39,508	46 %
7650	Equipment Rental	1,000	833	**297**	536	83	**0**	83	703	70 %
7675	Contract Services	109,720	91,853	**108,579**	(16,725)	7,938	**10,078**	(2,140)	1,142	1 %
7680	Cloud Computing Servic	101,370	81,455	**87,877**	(6,422)	26,925	**41,961**	(15,036)	13,493	13 %
7700	Motor Fuel & Oils	80,000	66,667	**92,437**	(25,770)	6,667	**13,003**	(6,336)	(12,437)	(16)%
7750	Field Supplies	14,600	12,167	**5,842**	6,324	1,217	**979**	237	8,758	60 %
7800	Control Products	711,280	667,505	**427,018**	240,487	47,378	**0**	47,378	284,262	40 %
7850	Aerial Applications	209,213	174,344	**163,221**	11,123	17,434	**17,017**	418	45,992	22 %
7860	Unmanned Aircraft App	40,000	33,333	**26,318**	7,016	3,333	**16,208**	(12,874)	13,682	34 %
8415	Capital Outlay	46,343	40,919	**26,163**	14,756	2,712	**0**	2,712	20,180	44 %
8510	Research Projects	182,093	161,159	**132,880**	28,279	10,473	**11,427**	(954)	49,213	27 %
9000	Contingency Expense	109,750	91,458	**0**	91,458	9,146	**0**	9,146	109,750	100 %
Total Operating		2,130,046	1,851,938	**1,440,386**	411,552	187,536	**141,679**	45,856	689,660	32 %
Contribution to Capital Reserves										
890	Transfer to other funds	481,300	401,083	**401,083**	0	40,108	**40,108**	0	80,217	17 %
Total Contribution to Capital Reserves		481,300	401,083	**401,083**	0	40,108	**40,108**	0	80,217	17 %
Total Expenditures		13,235,239	11,334,555	**10,818,824**	515,731	1,023,581	**1,005,682**	17,899	2,416,415	18 %
Net revenue over / (under) expenditures		(1,032,093)	(4,515,570)	**(3,449,883)**	1,065,688	(610,789)	**(582,874)**			

UNAUDITED

CVMVCD

Balance Sheet

As of 4/30/2022

		Current Year
	Assets	
	Cash and Investments	
1000	Cash - Investments	12,126,014.18
1012	Cash - Clearing Account	150.00
1016	Petty Cash	500.00
1017	Petty Cash Checking	1,500.00
1035	CB&T General Checking	5,392.51
1036	CB&T Payroll Checking	159,613.07
	Total Cash and Investments	12,293,169.76
	Current Assets	
1050	Accounts Receivable	2,076.00
1080	Interest Receivable	4,539.84
1085	Inventory	633,981.76
1167	Prepaid Research Proposals	91,413.66
1168	Prepaid Insurance	80,300.75
1169	Deposits	884,862.00
	Total Current Assets	1,697,174.01
	Fixed Assets	
1170	Construction in Progress	4,925.00
1300	Equipment/Vehicles	2,055,955.14
1310	Computer Equipment	488,713.68
1311	GIS Computer Systems	301,597.91
1320	Office Furniture & Equipment	1,300,099.10
1330	Land	417,873.30
1335	Oleander Building	5,665,861.83
1336	Signage	23,651.39
1340	Structures & Improvements	3,026,125.52
1341	Bio Control Building	6,849,603.74
1342	Bio Control Equip/Furn	43,986.77
1399	Accumulated Depreciation	(10,545,798.38)
	Total Fixed Assets	9,632,595.00

CVMVCD

Balance Sheet

As of 4/30/2022

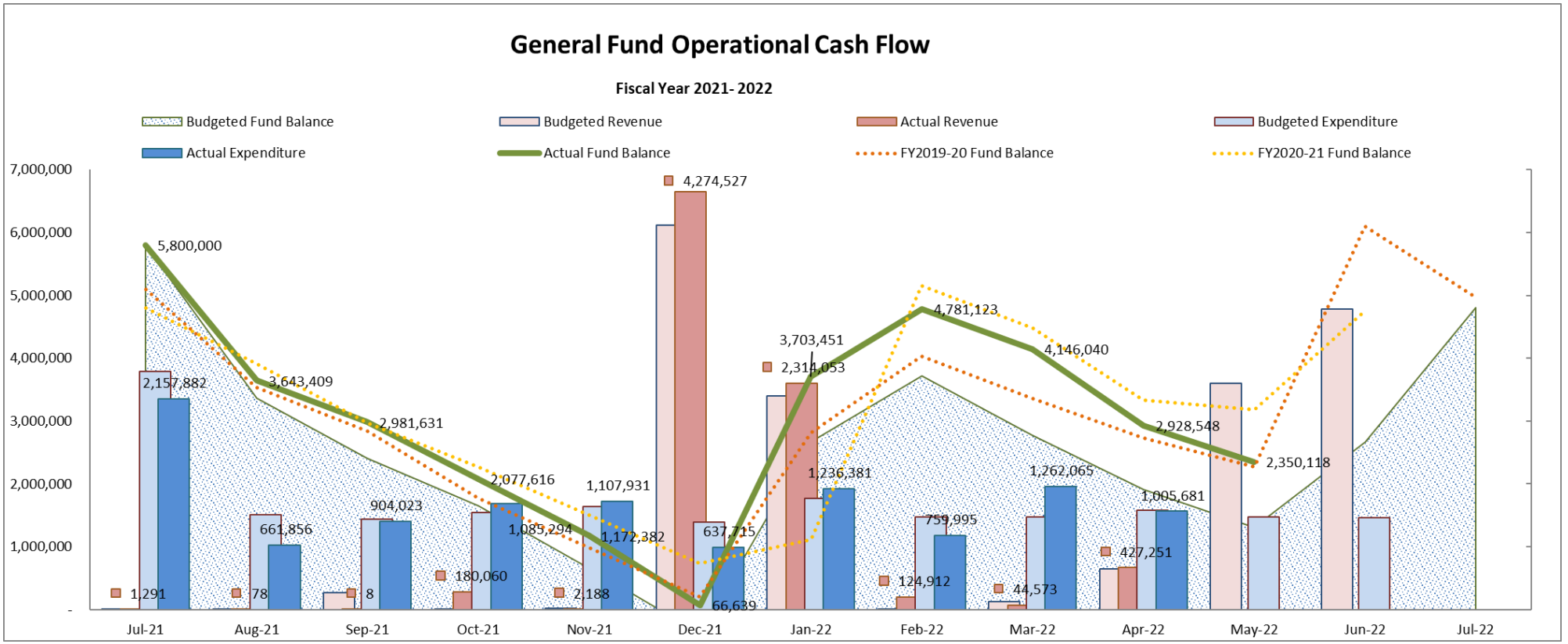
		Current Year
	Other Assets	
1520	Resources to Be Provided	3,514,102.32
1525	Deferred Outflows of Resources	1,068,928.00
1530	Deferred Outflows of Resources - OPEB	412,483.00
1900	Due to/from	0.12
	Total Other Assets	4,995,513.44
	Total Assets	28,618,452.21
	Liabilities	
	Short-term Liabilities	
	Accounts Payable	
2015	Credit Card Payable	21,221.18
2020	Accounts Payable	642,570.16
2030	Accrued Payroll	0.03
2040	Payroll Taxes Payable	84.54
2175	Claims/Judgements Payable	(426.30)
2185	Employee Dues	426.30
	Total Accounts Payable	663,875.91
	Deferred Revenue	
2025	Deferred Revenue	11,250.00
	Total Deferred Revenue	11,250.00
	Total Short-term Liabilities	675,125.91
	Long-term Liabilities	
2100	Pollution Remediation Obligation	2,100,000.00
2200	Net Pension Liability	1,612,919.00
2210	Deferred Inflows of Resources	85,158.00
2230	Deferred Inflows - OPEB	16,118.00
2300	Net OPEB Liaibility	453,746.00
2500	Compensated Absences Payable	794,601.32
	Total Long-term Liabilities	5,062,542.32
	Total Liabilities	5,737,668.23

CVMVCD

Balance Sheet

As of 4/30/2022

		Current Year
	Fund Balance	
	Non Spendable Fund Balance	
3920	Investment in Fixed Assets	10,698,793.35
3945	Reserve for Prepaids & Deposit	1,041,259.68
3960	Reserve for Inventory	459,270.86
	Total Non Spendable Fund Balance	12,199,323.89
	Committed Fund Balance	
3965	Public Health Emergency	4,851,276.00
	Total Committed Fund Balance	4,851,276.00
	Assigned Fund Balance	
3910	Reserve for Operations	5,800,000.00
3925	Reserve for Future Healthcare Liabilities	453,746.00
3955	Thermal Remediation Fund	63,688.00
3970	Reserve for Equipment	726,018.00
3971	Reserve for Facility & Vehicle Replacement	2,659,312.00
	Total Assigned Fund Balance	9,702,764.00
	Unassigned Fund Balance	
3900	Fund Equity	(568,650.76)
	Total Unassigned Fund Balance	(568,650.76)
	Current YTD Net Income	
		(3,303,929.15)
	Total Current YTD Net Income	(3,303,929.15)
	Total Fund Balance	22,880,783.98
	Total Liabilities and Net Assets	28,618,452.21



The **General Fund Operational Cash Flow** graph outlines the District's working capital for the fiscal year July 1, 2021, to June 30, 2022. The beginning fund balance is $5.8 million and the ending fund balance is $4.8 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 $1.3 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 Fund Balance** which has a formula of (beginning) **Fund Balance** plus **Revenue** minus **Expenditure**. The *green line* represents the **Actual Fund Balance** and is graphed against the *shaded area* **Budgeted Fund Balance**. FY2019-2020 Fund Balance is the orange dash line. FY2020-2021 Fund Balance is the yellow dash line.

The graph shows for June 1 the $5.8 million **Fund Balance** plus total Revenue for July 1 to April 30, 2022, of $7,368,941 minus total Expenses of $10,818,824 is $2,350,117. Revenue shows a $549,956 favorable year to date budget variance, which includes an almost $300,000 favorable variance in Pass Thru revenue, $159,340 in current secured property taxes and a $36,897 in Benefit Assessment revenue. Payroll variance (18,455) includes prepaid healthcare for May. Administrative expenses have a favoprable variance of $126,536 this is due to the high retrospective adjustment for workers compensation. Operating expenses have a favorable variance of $411,552, expenses for Contingency budget are variable depending on mosquito abundance and virus prevalence, control products due to be delivered in the next month total about $68,000, favorable variance for control proudtcs is because less aerial larvice applications occurred this fiscal year and there was a change in RIFA protocol that brought about cost savings. Overall, the District is showing a favorable variance of $1 million mainly due to increase in revenue and timing of expenses. 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 April 30, 2022, the line is outside the shaded area.

	Budget	Actual	Variance	June 30 2022	June 30 2022	
	4/30/2022	4/30/2022		Total Budget	Latest Estimate	
Revenue	6,818,985	**7,368,941**	(549,956)	12,203,146	12,977,141	favorable variance - pass thru revenue & property taxes higher than anticipated
Expenses						
Payroll	8,169,411	**8,187,866**	(18,455)	9,567,740	9,567,740	
Administrative Expense	822,269	**695,733**	126,536	948,329	858,329	favorable variance - workers comp expenses lower than budgeted
Utility	89,853	**93,755**	(3,902)	107,824	114,824	
Operating Expense	1,851,938	**1,440,386**	411,552	2,130,046	1,790,296	favorable variance - contingency expense not used, pesticide budget not fully expensed
Contribution to Capital Reserves	401,083	**401,083**	-	481,300	481,300	
Total Expenses	11,334,554	**10,818,823**	515,731	13,235,239	12,812,489	
Profit (Loss)	(4,515,569)	**(3,449,882)**	(1,065,687)	(1,032,093)	164,652	

FY2022-23 BUDGET CALENDAR				
STAGE	**TASK TO BE COMPLETED**	**ACTIVITIES**	**STAKEHOLDERS**	**DEADLINE**
STAFF	Budget Templates created	Templates in Microix Budget Workflow Created. Sent to Department Budget managers (complete)	Administrative Finance Manager	January 17, 2022
	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 & Supervisory Team	February 7, 2022
	Budget docs to AFM & GM	General Manager to review and approve budget documents	GM, Management & Supervisory Team	March 7, 2022
	Completion of first draft	Team to review and adjust budget according to GM & AFM suggestion & direction	GM, Management & Supervisory Team	March 25, 2021
	Draft 1 Budget	Preparation of first draft of FY2022/2023 Budget for Finance Committee Budget Meeting. PDF and hard copy to FC Trustees	Finance	April 1, 2022
FINANCE COMMITTEE	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 8, 2022
	Draft 1 for Finance Committee	Finance Committee to review draft budget & reserve study & discuss in meeting ****FINANCE COMMITTEE MEETING**	Finance Committee General Manager & Administrative Finance Manager	Tuesday April 12, 2022 1:00 p.m.-2:30 p.m.

STAFF	Updated salary	Salary & Benefits Proposals & scenarios	Administrative Finance Manager	April 29
FINANCE COMMITTEE	Final Draft for Finance Committee	Final draft of FY2022/2023 Budget for Finance Committee Budget Meeting, attended by General Manager, Finance Committee and Administrative Finance Manager. ****FINANCE COMMITTEE MEETING**	Finance Committee General Manager & Administrative Finance Manager	**May 3, 2022** 1:00pm – 3:00pm
BOARD	Final Draft for Budget Workshop	Budget Workshop for in depth discussion **BOARD MEETING**	Board of Trustees Workshop	**May 10, 2022** 4:30pm – 5:30pm
	Adoption of Final Draft	Adoption of FY2022/2023 Budget **BOARD MEETING**	Board of Trustees Board Meeting	**June14, 2022**
	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 **BOARD MEETING**	Board of Trustees Board Meeting	**June 14, 2022**
	Adopt Benefit Assessment Resolution	Adopt Resolution approving Engineer's Report, Confirming Diagram and Assessment, and Ordering the Levy of Assessments for fiscal year 2022-23 for the Coachella Valley Mosquito and Vector Control District Mosquito, Fire Ant and Disease Control Assessment	Public Hearing	**July 12, 2022**

		Public Hearing **BOARD MEETING**		

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: Informational Item

Staff report from: Pacific Southwest Center of Excellence in Vector-Borne Diseases Annual Progress and Planning Meeting, April 5-6, 2022, in Sacramento, CA – **Jennifer A. Henke, M.S., Laboratory Manager**

Report:

In 2017, the Centers for Disease Control and Prevention (CDC) established five universities as regional centers of excellence to prevent and rapidly respond to emerging vector-borne diseases across the United States. The Pacific Southwest Center of Excellence in Vector-Borne Diseases (COE) is a joint venture of several universities in the western United States, where researchers address public health challenges using cutting-edge research in surveillance, vector control, genetics, epidemiology, and effective insecticide development. The COE holds an annual meeting, where researchers meet with CDC officials and vector control professionals to discuss completed projects and to plan for the coming year. The COE has applied for a new 5-year approval. West Nile virus was a major discussion point for the attendees. Many areas, including Coachella Valley, noted that it was an active year of transmission, while Arizona had more than 16 times their previous record of cases of West Nile virus (1,693 confirmed and probable cases).

The District has had an active role in providing material and working with several of the researchers on projects that benefit the residents of the Coachella Valley, as well as southwestern U.S. Members of Lark Coffey's, Ph.D., group, presented on work that the District will be conducting this summer detecting mosquito-borne viruses as well as changed in St. Louis encephalitis virus over the past 7 years. Karine Le Roch, Ph.D. examined the immune response of mosquitoes, using samples from our District and West Valley MVCD. Sarjeet Gill, Ph.D., used mosquitoes from the Coachella Valley and Northwest to examine mechanisms for insecticide resistance. Ben Nyman discussed his evaluation of area-wide larvicide applications when applied to bromeliad plants. Zachary Barrand, working with Crystal Hepp, Ph.D., presented on the movement of *Cx. quinquefasciatus* between Maricopa County and Coachella Valley, an important mechanism in maintaining West Nile virus transmission.

ATTENDEES:

Jennifer A. Henke, Laboratory Manager

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: Informational Item

Staff report from Pacific Branch of the Entomological Society of America Annual Conference, April 10-13, 2022 – **Jennifer A. Henke, M.S. Laboratory Manager**

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. This year was the first that the meeting was held as a hybrid, and a variety of symposia were held on biological control, insecticide resistance, molecular entomology, and data modeling for ecological systems.

I presented on the work that the District has done using wide-area larvicide applications to control *Aedes aegypti* mosquitoes. Presentations on pesticide resistance and efficacy were particularly interesting, as some of the work that we do monitoring for resistance is similar to how extension agents are assisting growers. In my role as Vice President-Elect to ESA, I participated in town hall sessions to learn what brings members to these smaller, regionally focused meetings. Their valuable feedback will be used to shape both the Pacific Branch and the larger ESA organization.

Attendees:

Jennifer A. Henke, Laboratory Manager

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: Informational Item

Staff report from: MVCAC Spring Meeting, April 26-27, 2022, in Sacramento, CA

Spring Meeting Report:

The spring quarterly meeting of the Mosquito and Vector Control Association of California provides an opportunity for committees that complete specific tasks within the association to meet and update the MVCAC Board of Directors and membership on their activities. Committees address statewide issues that impact mosquito and vector control districts from surveillance and control to outreach and legislation.

Staff from the District serve on:

- CalSurv Steering Committee – Kim Hung
- Integrated Vector Management Committee – Bobbye Dieckmann
- Laboratory Technologies Committee – Kim Hung
- Legislative Committee – Tammy Gordon
- Regulatory Affairs Committee – Jennifer Henke
- SIT (Sterile Insct Technique) Committee – Jennifer Henke
- Training and Certification Committee – Jennifer Henke
- UAV (Unmanned Aerial Vehicle) Committee – Tammy Gordon and Bito Larson
- Vector and Vector-borne Disease Committee – Kim Hung and Doug Kunz
- MVCAC Treasurer – David l'Anson

ATTENDEES:
Jeremy Wittie, District Manager
Jennifer Henke, Laboratory Manager
Roberta Dieckmann, Operations Manager (remote)
Tammy Gordon, Public Information Officer
Kim Hung, Vector Ecologist (remote)
Gabriela Perezchica-Harvey, Vector Ecologist

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: Informational Item

Accept the resignation of Trustee Isaiah Hagerman - **Jeremy Wittie M.S., General Manager**

Background:

Trustee Hagerman resigned from his position on the CVMVCD Board of Trustees effective March 25, 2022.

On April 21, 2022, the Rancho Mirage City Council voted unanimously to accept the resignation of City Manager Isaiah Hagerman from the Coachella Valley Mosquito and Vector Control Board of Trustees. The City Council voted unanimously to appoint Councilmember Steve Downs to fill the remainder of the term which expires on January 6, 2025.

Staff Recommendation:

Staff recommends accepting the resignation of Trustee Hagerman, thank him for his service to the District during the June 14, 2022, Board of Trustees meeting, and welcome Councilmember Steve Downs to the Board of Trustees.

OLD BUSINESS

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: Old Business

Discussion and Approval of Resolution 2022-08 authorizing remote teleconferencing meetings for the period May 12, 2022 – June 10, 2022 – **Jeremy Wittie, M.S., General Manager**

Background:

The Board of Trustees met on April 12, 2022, and adopted Resolution 2022-05 proclaiming a local emergency, ratifying the proclamation of a state of emergency by Executive Order N-09-21, and authorizing remote teleconferencing meetings of the Legislative bodies of the Coachella Valley Mosquito and Vector Control District for the period of April 12, 2022, to May 11, 2022, pursuant to the provisions of the Ralph M. Brown act.

If a local agency passes a resolution by majority vote that meeting in person during the state of emergency would present imminent risks to the health or safety of attendees, the resolution will permit meeting under the provisions of AB 361 for a maximum period of 30 days. After 30 days, the local agency would need to renew its resolution, consistent with the requirements of AB 361, if the agency desires to continue meeting under the modified Brown Act requirements or allow the resolution to lapse.

This Resolution will cover all meetings of the Legislative Bodies.

- Board of Trustees Meetings
- Executive Committee Meetings
- Finance Committee Meetings

AB 361 provides that it will sunset on January 1, 2024.

Staff Recommendation:

Approve Resolution 2022-05 authorizing remote teleconferencing meetings for the period April 12, 2022, to May 11, 2022.

Continue to pass AB 361 resolutions to authorize remote teleconference meetings for all Board of Trustee meetings (Monthly, Executive, Finance, Ad hoc) until Governor Newsom resends his state of emergency addressing the COVID-19 pandemic.

Doing so will continue to allow Trustees, staff, and the public to attend and participate in meetings both in person or virtually which will enhance access to public meetings and maintain a safer meeting environment as we continue to conduct District business and navigate COVID-19 in the coming months.

Exhibits:

- Resolution 2022-08

RESOLUTION NO. 2022-08

A RESOLUTION OF THE BOARD OF TRUSTEES OF THE COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT PROCLAIMING A LOCAL EMERGENCY, RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY EXECUTIVE ORDER N-09-21, AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF THE COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT FOR THE PERIOD MAY 12, 2022 – JUNE 10, 2022, PURSUANT TO PROVISIONS OF THE RALPH M. BROWN ACT

WHEREAS, the Coachella Valley Mosquito And Vector Control District (the "District") is committed to preserving and nurturing public access and participation in meetings of the Board of Trustees; and

WHEREAS, all meetings of the District's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code §§ 54950 – 54963) (the "Brown Act"), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing or the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist in the District, specifically, on March 4, 2020, the Governor of the State of California proclaimed a State of Emergency to exist in California as a result of the threat of COVID-19; despite sustained efforts, the virus continues to spread and is impacting nearly all sectors of California; and

WHEREAS, on February 28, 2022, the California Department of Public Health website was updated and strongly recommends that all persons, regardless of vaccine status, continue indoor masking; and

WHEREAS, given the continued heightened risks of the predominant variant of COVID-19 in the community, holding meetings with all members of the legislative body, staff, and the public in attendance in person in a shared indoor meeting space would pose an unnecessary and immediate risk to the attendees; and

WHEREAS, the Board of Trustees does hereby find that the ongoing risk posed by the highly transmissible COVID-19 virus will continue to cause conditions of peril to the safety of persons within the District which are likely to be beyond the control of services, personnel, equipment, and facilities of the District, and the Board of Trustees desires to proclaim a local emergency and ratify the proclamation of a state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the local emergency, the Board of Trustees does hereby find that the legislative bodies of the District shall conduct the District's meetings without compliance with Government Code section 54953(b)(3), as authorized by Government Code section 54953(e), and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in Government Code section 54953(e)(2); and

WHEREAS, the Board of Trustees previously adopted Resolution No. 2022-05 on April 12, 2022, finding that the requisite conditions exist for the legislative bodies of the District to conduct remote teleconference meetings without compliance with Government Code section 54953(b)(3); and

WHEREAS, all meeting agendas stating meeting dates, times, and the manner in which the public may attend and offer public comment by call-in option or internet-based service option shall be posted, at a minimum, on the District's website, and at the District's main office.

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 and are incorporated into this Resolution by this reference.

Section 2. Proclamation of Local Emergency.

The Board of Trustees hereby proclaims that a local emergency now exists throughout the District, and the ongoing risk posed by the highly transmissible COVID-19 virus has caused and will continue to cause, conditions of peril to the safety of persons within the District; furthermore, the guidance of Riverside County Public Health recommends physical distancing and face coverings.

Section 3. Ratification of Governor's Proclamation of a State of Emergency.

The Board of Trustees hereby ratifies the Governor of the State of California's Proclamation of a State of Emergency, effective as of its issuance date of March 4, 2020.

Section 4. Remote Teleconference Meetings.

The President of the Board of Trustees, the District's General Manager, and legislative bodies of the District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date.

This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) June 10, 2022, or such time the Board of Trustees adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of the District may continue to teleconference without compliance with Government Code section 54953(b)(3).

Section 6. Certification.

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

PASSED, ADOPTED, AND APPROVED, this 10th day of May 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____

Benjamin Guitron, President
Board of Trustees

ATTEST:

_____

Melissa Tallion, Clerk of the Board

APPROVED AS TO FORM:

_____

Lena D. Wade, General Counsel

REVIEWED:

_____

Jeremy Wittie, M.S., General Manager

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: Old Business

2021 Valley-wide Market Research Project Results Summary Report – **Tammy Gordon, M.A., APR, Public Information Officer**

Background:

The CVMVCD 2018 Strategic Implementation Plan calls out a Valley-wide Market Research and Survey Project (No. 4.3.1) on current vector-related surveillance and control issues every three years and uses data to develop messaging to address identified issues. The project goals include determining resident awareness of District services, identifying behavior change motivation, and assessment of resident level of accepting program changes.

CVMVCD issued a Request for Proposal (RFP) and Research America Inc. was the chosen agency to implement a variety of awareness and behavioral change campaigns and initiatives. These projects included the development of marketing research surveys, focus groups, public relations activities, and media services.

Staff Recommendation:

Informational report only.

Market Research Report Summary

The CVMVCD contracted with Research America Inc. to conduct a series of information gathering events to help establish knowledge, attitudes, and practices (KAPs) for the residents of the Coachella Valley. These events included qualitative and quantitative methods. The goals of the project were to determine the KAPs of the residents in our jurisdiction and try to gain insights on the language residents use to discuss mosquito control. The outcomes of the project should help develop language and campaigns that may be the most persuasive in future mosquito prevention efforts.

We accomplished this in two ways. First, two focus groups were conducted. The intent is to use qualitative means to discover how people are talking about mosquito control; the language they use, and what language is most effective. As part of the focus group project, participants were also required to fill out an activities log – a behavior audit – daily for the 10 days leading up to the scheduled focus group.

The second piece of the project was an area-wide survey. A total of 351 surveys were completed by people residing in the valley at least part of the year. 321 surveys were completed in English, 30 in Spanish. Although a sample size of 351 may seem small, research has shown that after the sample hits 200, there is a very small decrease in error until you reach 1,000 people which is both costly and time consuming.

Awareness

Some significant findings and opportunities emerged from the analysis of the project when it comes to awareness.

- 46% of respondents had never heard about the local mosquito control district, CVMVCD. The lowest awareness coming from the non-white demographic.
- Nearly all residents (95%) felt that diseases spread by mosquitoes are a concern.
- About 20% of respondents could not describe what a mosquito habitat looked like or if their homes were an attractive mosquito environment.

Terminology

When it comes to terminology and mosquito control, the project found the most people did not understand terms of public health significance such as; vector, vector-borne disease, invasive mosquito, or sterile insect technique; especially if female, over 65+, or Hispanic.

However, although unfamiliar with terms, “diseases spread by mosquitoes” had the highest level of concern across the general population.

Several statements about support for mosquito control measures were tested. Agreement was highest for the statement “it’s more important to be proactive rather than reactive when it comes to mosquito control”

Residents found “Mosquitoes pose a serious public health threat. Mosquito-borne diseases kill more people world-wide than any other single disease” was found to be the most compelling. In the qualitative phase of research there was some skepticism around this statement. Coupled with data, statistics or links to reports to address the element of skepticism, this statement could be a powerful communications tool.

Effective Control Efforts

There are some notable differences in the perceived effectiveness of control measures across the District.

- Releasing sterile mosquitoes has the highest effectiveness rating within the Western side of the district
- Treating bodies of water to control for mosquito larvae has the highest effectiveness rating within the Central part of the district
- The Eastern side of the district felt all control measures are very or somewhat effective except breeding and releasing mosquitofish, which had the lowest effectiveness rating of any control effort, at 50%.

SIT

- Awareness of SIT is low at 35% valley-wide and lowest in the east valley at 20%.
- But, overall support for District use of SIT is high (78%).
- Only 3% oppose this program.
    - Reasons for opposing S.I.T. include the belief that it will interfere with nature; unsure of the method’s effectiveness; concerns about safety for humans; and a general lack of trust. All of which can be mitigated with an effective outreach campaign.
- Highest rated statement: It’s an environmentally friendly method to reduce disease-transmitting insects.

Calls to Action

The project identified patterns and highlight demographic segments that would benefit from more targeted campaigns.

For example, calls for action, such as removing water sources are less likely to be done by females, younger residents, seasonal residents, and renters.

The call-to-action wearing repellent is least likely to be worn by females, younger residents, and renters.

Trust and Support

The level of trust was measured as well. Doctors and scientists were rated slightly higher as a trustworthy sources than CVMVCD, but, CVMVCD was rated more trustworthy than the Centers for Disease Control (CDC), local and national news, HOAs, and social media.

When it comes to overall support for District mosquito control efforts, support is lowest among residents 18-34. Additional analysis suggests that this demographic is more concerned with environmental interferences and may be more abhorrent to pesticide usage.

What methods to communicate

How residents want to receive messages is another important tool discovered in the project. The most desirable means of communication according to respondents are:

1. Email
2. Advertisements
3. Mailers

When it comes to a preferred social media platform respondents overwhelmingly prefer Facebook.

What the demographics tell us

Gender

Females are less likely than the general population to empty water containers weekly. They are less likely to use mosquito deterrent products around the house or yard or wear chemical insect repellant. Females are more likely than the general population to wear insect repellant made with essential oils - which is not an effective repellent. Future campaigns should debunk the use of essential oils and emphasize tested active ingredients.

Age/Life Stage

Residents ages 18 – 34 emerged as another population to target. They are less likely than the general population to empty water vessels or wear chemical insect repellant. They are more likely to wear insect repellant made with essential oils, use environmental insect repellents, and use mosquito deterrent products around the house and yard. Further, because of their environmental activism and awareness, this group responds particularly well to SIT methods.

Parents are not significantly less likely than the general population to take action, but they are significantly more likely to use mosquito deterrent products around the house and yard and to wear chemical insect repellant.

Miscellaneous

East Valley residents are more likely to empty water vessels, use environmental insect repellants, and wear protective clothing.

Seasonal residents are less likely than the general population and all other demographic groups to empty water vessels. They are more likely than the general population to wear chemical insect repellant and use mosquito deterrent products around the house and yard.

Renters are less likely than the general population to empty water vessels and wear chemical insect repellants.

Where we go from here

This project will help guide the communication tools we as a District use to connect with our residents over the next three years or so. Campaigns that target and tailor messages to specific groups are currently being planned. Examples include:

- We are currently working with an MPH student at Cornell University to design a campaign targeted to renters in our community.
- Summer 2022 research project. We've created three different messaging campaigns that address the invasive *Aedes aegypti.* These campaigns will be sent to three areas of the Coachella Valley to test if using different words and phrases will have any effect on whether or not a resident will take any sort of mosquito control action. Specifically, will the resident remove water containers from their property weekly.
- A future campaign will target ages 18-34 with SIT messaging to influence the demographic to become champions of the program.

NEW BUSINESS

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: New Business

Overview and Discussion of the 2021 Annual Report- **Jeremy Wittie, M.S., General Manager**

Background:

Since 2016 District staff has produced an Annual report summarizing the actions and achievements throughout the calendar year. The creation of these reports takes a great amount of time from Department staff, Department Managers, Public Information Officer, and the General Manager. In discussions with fellow General Managers from Southern Region Vector Control Agencies, it was noted that while annual reports support transparency they are rarely reviewed by Districts and the public residing in the District.

Early this year the General Manager worked with the Public Information Officer on some ideas to hopefully reduce staff time in creating the annual report but also maintain transparency with the public we serve. Several additional aims for this year's report included:

1. Increasing accessibility and being more appealing to a broader demographic of District residents and stakeholders
2. Ability to quantify readership of the report to better determine the level of time and resources to be expended by District staff in creating the report.
3. Increase traffic on the District's website.

To achieve these goals, we took a layered approach to create the report.

1. Created a one-page District 2021 Highlight PDF (https://www.cvmosquito.org/public-documents/pages/annual-reports) which contains areas devoted to brief highlights that will hopefully spark interest in the reader. This was created using Canva web-based software used by the District's Public Outreach Depart for much of our Social media content.
2. The recipient will be prompted to click on hyperlinks within the pdf which will take the reader to the District website page devoted to that area of interest or Department with more detailed information.

3. Over the course of the year, the District PIO will monitor website analytics to determine the level of unique visits to each of the hyperlinked sites so the GM and PIO can reassess and determine the best course of action for the 2022 Annual Report format and content.

Attached

DRAFT 2021 CVMVCD Highlights

2021 Annual Highlights

Coachella Valley Mosquito and Vector Control District

11 Members of the Board of Trustees

61 Full-Time Staff

2,400 Square Service Miles

467,000 Mosquitoes Collected

129 positive mosquito virus samples confirmed

Vector Control Services

Effective and Environmentally Sound vector control programs

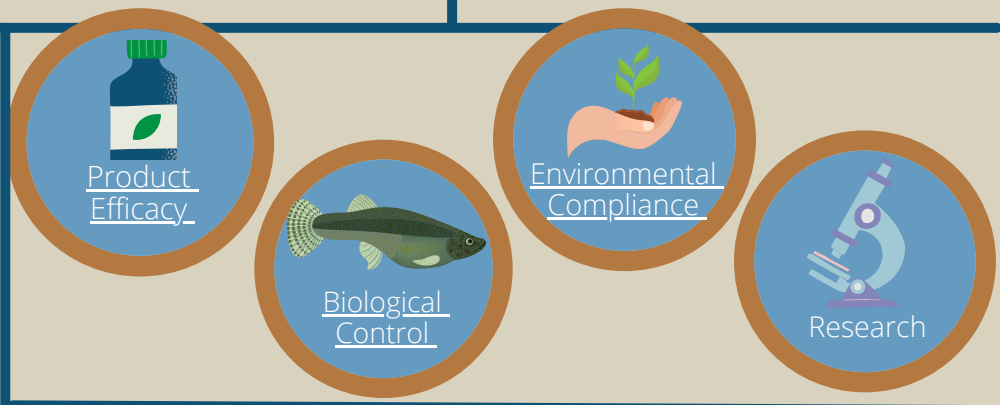
43% of all residential requests were for invasive *Aedes*

Human Resources

Total Years of Service ● ● ● ● ● ● ● ● ● ▶ **727**

Staff with 20+ Years of Service ● ● ● ● ● ● ● ● ● ● ● ● ● ▶ **8**

Average Years of Service ● ● ● ● ● ● ● ● ● ● ▶ **12**



FLEET

Drones or Unmanned Aerial Systems were used to conduct both mosquito surveillance and control near the Salton Sea.

Finance

13 consecutive years of award winning financial reporting!

Information Technology

824 SMS Sent to Residents

NEW automated text message app reminder for service requests launched

- **1,200 students taught**
- **61k website visits**
- **500k in social media reach**

Public Outreach

A Message from the General Manager

cvmosquito.org

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: New Business

Approval of Resolution 2022-07 Amending the CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan – **Jennifer A. Henke, MS, 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, 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 2022-07 revising the CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan.

Exhibits:

- Resolution 2022-07
- CVMVCD Mosquito-borne Virus Surveillance and Emergency Response Plan

Video Presentation: https://youtu.be/O7vCpbka2Oc

Resolution No. 2022-07

A RESOLUTION OF THE BOARD OF TRUSTEES OF THE COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT AMENDING 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.

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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 this 10th day of May 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Benjamin Guitron, President
Board of Trustees

ATTEST:

_____
Melissa Tallion, Clerk of the Board

APPROVED AS TO FORM:

_____
Lena D. Wade, General Counsel

REVIEWED:

_____
Jeremy Wittie, MS, 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

MOSQUITO-BORNE VIRUS SURVEILLANCE AND EMERGENCY RESPONSE PLAN

CVMVCD 43-420 Trader Place Indio, CA 92201
E-mail: cvmosquito@cvmvcd.org
www.cvmosquito.org

Table of Contents

I. INTRODUCTION

Since 1969, California has had a mosquito-borne disease surveillance program in place to monitor mosquito abundance and encephalitis virus activity. The state-wide surveillance program was established in 1969. The District started with surveillance in the early 1980s. The present program was established in 1990 through a cooperative effort of 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 enhance the quality of life for our community by providing effective and environmentally sound vector control and vector-borne disease prevention 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 humans 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 us as arboviruses (for **ar**thropod-**bo**rne). 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 on a weekly basis and setting an additional 56 CO_2 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 California Mosquito-Borne Virus Surveillance and Response Plan – May 2021.**

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 B California Mosquito-Borne Virus Surveillance and Response Plan – May 2021.**

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 – May 2021.**

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 – May 2021.**

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 – May 2021.)**

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 CVMVCD 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 – May 2021.**

2. Reports from CVMVCD 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 – May 2021** for compounds approved for mosquito control in California.

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 at 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, 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 stem an epidemic. 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 popuations 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

Table 1. WNV Surveillance Factor	Assessment Value	Benchmark	Value	
1. Environmental conditions Favorable environmental conditions in the Coachella Valley for virus multiplication or transmission Considers ambient temperature and rainfall for prior 2-week period	1	Temperature ≤ 56°F		
	2	Temperature 57 - 65°F		
	3	Temperature 66 - 72°F		
	4	Temperature 73 – 79°F		
	5	Temperature > 79°F		
			Cx tars	*Cx quinq*
2. Adult *Culex tarsalis and Culex quinquefasciatus* abundance 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%)		
3. Virus isolation rate in *Culex tarsalis and Culex quinquefasciatus* mosquitoes 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		
4. Dead bird infection 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		
5. Human cases 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*
<u>Response Level / Average Rating:</u> Normal Season (1.0 to 2.5) Emergency Planning (2.6 to 4.0) Epidemic (4.1 to 5.0)		TOTAL		

Table 2. Western Equine Encephalomyelitis virus

Table 2. WEEV Surveillance Factor	Assessment Value	Benchmark	Value
1. Environmental conditions Favorable environmental conditions in the Coachella Valley for virus multiplication or transmission 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	
2. Adult *Culex tarsalis* abundance 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%)	
3. Virus isolation rate in *Culex tarsalis* mosquitoes 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	
4. Proximity to urban or suburban regions (score only if virus activity detected) 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	
5. Human cases 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.	
Response Level / Average Rating: Normal Season (1.0 to 2.5) Emergency Planning (2.6 to 4.0) Epidemic (4.1 to 5.0)		**TOTAL**	
		AVERAGE	

Table 3. St. Louis Encephalitis virus

Table 3. SLEV Surveillance Factor	Assessment Value	Benchmark	Value	
1. Environmental conditions Favorable environmental conditions in the Coachella Valley for virus multiplication or transmission. Considers ambient temperature for prior 2-week period.	1	Temperature ≤ 56°F		
	2	Temperature 57 - 65°F		
	3	Temperature 66 - 72°F		
	4	Temperature 73 – 79°F		
	5	Temperature > 79°F		
			Cx tars	*Cx quinq*
2. Adult *Culex tarsalis and Culex quinquefasciatus* abundance 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%)		
3. Virus isolation rate in *Culex tarsalis and Culex quinquefasciatus* mosquitoes 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		
4. Human cases 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*
Response Level / Average Rating: Normal Season (1.0 to 2.5) Emergency Planning (2.6 to 4.0) Epidemic (4.1 to 5.0)		TOTAL		
		AVERAGE		

VII. CHARACTERIZATION OF CONDITIONS AND RESPONSES
Normal Season
Risk Rating: 1.0 – 2.5

Conditions:
• Average or below average rainfall; average seasonal temperatures • Mosquito abundance at or below five-year average (key indicator = adults of vector species) • No virus isolations from mosquitoes • No equine cases • No recently infected arbovirus positive dead birds • No human cases
Response Activities by Role:
General Manager • With Laboratory 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 • Ensure adequate emergency funding with Administrative Finance Manager
Laboratory Manager • 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 • With Public Information Officer, send routine notifications to physicians and veterinarians
Operations Manager • With General Manager, Laboratory Manager, and Public Information Officer establish and maintain routine communication with local office of emergency services personnel; obtain Standardized Emergency Management System (SEMS) training • Coordinate routine mosquito larval control • Comply with National Pollutant Discharge Elimination System permit if applying pesticides to waters of the United States • Inventory pesticides and equipment

Public Information Officer • Conduct routine public education (eliminate standing water around homes, use personal protection measures) • Release routine press notices • Send routine notifications to physicians and veterinarians
Vector Ecologist • Conduct routine mosquito and virus surveillance activities • Evaluate pesticide resistance in vector species

Emergency Planning
Risk Rating 2.6-4.0

Conditions:
• Temperature and rainfall above average • Adult mosquito abundance >5-year average (150-300% above normal) • One or more virus isolations from mosquitoes (MIR / 1000 is <5) • Evidence of recent infection in 1-5 wild birds within the District • One human case within 150 miles of District • If WEEV, viral activity in small towns or suburban area
Response Activities by Role:
Laboratory Manager • Coordinate epidemic response in consultation with General Manager • Review candidate pesticides for availability and susceptibility of vector mosquito species • Identify any special environmental compliance concerns in affected area and communicate with Lead District staff
Operations Manager • Review epidemic response plan • Increase surveillance and control of mosquito larvae • Coordinate localized chemical control of adult mosquitoes • Contact commercial applicators in anticipation of large scale adulticide applications
Public Information Officer • Review epidemic response plan • Enhance public education (include messages on signs and symptoms of encephalitis; seek medical care if needed; inform public about pesticide applications if appropriate) • Enhance information to public health providers • Ensure notification of key agencies of presence of viral activity, including the office of emergency services
Vector Ecologist • Review epidemic response plan • Increase adult mosquito surveillance • Increase number of mosquito pools tested for virus • Review candidate pesticides for availability and susceptibility of vector mosquito species

Epidemic Conditions
Risk Rating 4.1-5.0

Conditions:
• Rainfall, temperature, wetland surface area well above average • Adult vector population extremely high (>300% above normal) • Virus isolates from multiple pools of mosquitoes (MIR /1000 > 5.0) • Increased seroprevalance rates in wild bird populations or die-off of susceptible species (more than 5) • One or more human cases in District • In the case of WEEV, virus detection in urban or suburban areas
Response Activities by Role:
General Manager and Administrative Finance Manager: • Ensure adequate emergency funding • Determine whether a declaration of a local emergency should be considered by the County Board of Supervisors (or Local Health Officer) • Determine whether a declaration of a "State of Emergency" should be considered by the Governor at the request of designated county or city officials
Administrative Finance Manager: • Ensure state funds and resources are available to assist epidemic control efforts.
Laboratory Manager: • Coordinate epidemic response. • Coordinate the response with the local Office of Emergency Services or if activated, the Emergency Operation Center (EOC) • Request public health exemptions from FIFRA (40 CFR 166) and emergency tolerance exemptions (40 CFR 176) • With Operations Manager and Vector Ecologist, accelerate adult mosquito surveillance and control • Ensure remaining environmental compliance requirements are met.
Operations Manager: • With Laboratory Manager and Vector Ecologist, initiate mosquito surveillance and control in geographic regions without an organized vector control program • Continue enhanced larval surveillance and control of immature mosquitoes • Accelerate adult mosquito control
Public Information Officer: • Conduct full-scale media campaign • Alert physicians and veterinarians to expect cases

• 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

- Gather, collate, 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 to 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

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 sheets located on the district M drive at M:\Mosquito\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.

APPLICATION EQUIPMENT

Equipment	*Number in use*
1. Hand Cans (1 gal)	44
2. Maruyama Backpack Sprayers (Granular)	26
3. Maruyama Backpack Sprayer (Liquid)	6
4. Stihl Backpack Sprayers (Liquid)	6
5. Hand Backpack Sprayers	36
6. Argo – all-terrain vehicle	2
7. Powered Liquid Skid Mounted Sprayer	3
8. ATV - quadbike	3
9. ATV - ranger	2
10. London Fog ULV Model 18-20	2
11. Guardian Model 190ES ULV Sprayer	3
12. Longray Portable Electric Fog Generator	5
13. Colt Hand Portable Fog Generator	5
14. A1 Super Duty Mister	2
15. Twister (Liquid)	2
16. Birchmeirer 4 Gal Liquid Backpack Sprayer	7
17. SP1 5 Gal Gas-powered Liquid Backpack Sprayer	1

18. SP2 5 Gal Gas-powered Liquid Backpack Sprayer	1
19. Micronair Liquid Barrier Sprayer	1
20. 16 Gal Power Sprayer	1
21. Polaris 15 Gal electric pump sprayer	1
22. Herd Spreader for Ranger	2

Aerial applicators available for contact

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

OceanAir Helicopters
16603 Vesper Road
Valley Center, CA 92082

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

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 M:/Mosquito/Inventory.

LARVAL CONTROL PRODUCT INVENTORY EMERGENCY RESERVE

Product	Classification	Treatment Rate	Maximum Product Required	Required Treatment Capability and Seasonal Availability
PUPACIDES				
Agnique MMF	Pupacide (liquid)	1 gal./acre	80 gals.	40 acres for 14 days – year-round Retreat after 7 days 80 acres treated
Masterline Kontrol Mosquito Larvicide	Pupacide (liquid)	2 gal./acre	160 gals.	
INSECT GROWTH REGULATORS - methoprene				
MetaLarv S-PT	IGR (granule)	10 lbs./acre	2500 lbs. – April-Oct. 1500 lbs. – Nov.-March	250 acres April through October; 150 acres November through March. Altosid Liquid – re-treat after 7 days 500 acres April – October treated. 200 acres November – March treated. Altosid Pellets – re-treat after 42 days
Altosid Liquid	IGR (liquid)	4 oz./acre	15.6 gal. – April-Oct. 9.4 gal. – Nov.-March	
Altosid Pellets	IGR (granule)	7.5 lbs./acre	2500 lbs. – April-Oct.	

			1500 lbs. – Nov-March	MetaLarv S-PT – re-treat after 42 days 250 acres April – October treated 150 acres November – March treated
BACTERIAL PRODUCTS – Bti, *Lysinibacillus sphaericus*				
Aquabac 200G	Biological (granule)	10 lbs./acre	5000 lbs. – April - October	250 acres for 14 days – April through October Retreat after 7 days 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 WDG	Biological (granule)	7 oz./acre	219 lbs. – April - October	
VectoLex WDG	Biological (granule)	1 lb./acre	250 lbs. – April - October	
VectoMax FG	Biological (granule)	10 lbs./acre	5000 lbs. – April - October	
SPINOSAD PRODUCTS				
Natular G	Spinosad (granule)	9 lbs./acre	4500 lbs. April-Oct. 1800 lbs. Nov.-March	250 acres for 14 days – April through October. 100 acres for 14 days – November through March. Natular 2EC and Natular G - Retreat after 7 days. 500 acres April – October treated. 200 acres November – March treated. Natular G30 – Retreat after 30 days. 250 acres April – October treated. 100 acres November – March treated.
Natular 2EC	Spinosad (liquid)	6.4 oz./acre	25 gals. April-Oct. 10 gals. Nov.-March	
Natular G30	Spinosad (granule)	10 lbs./acre	2500 lbs. April-Oct. 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. The combined acreage capability for each classification of product is displayed in the monthly inventory spreadsheet located at M:/Mosquito/Inventory.

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

ADULT CONTROL PRODUCT INVENTORY EMERGENCY RESERVE

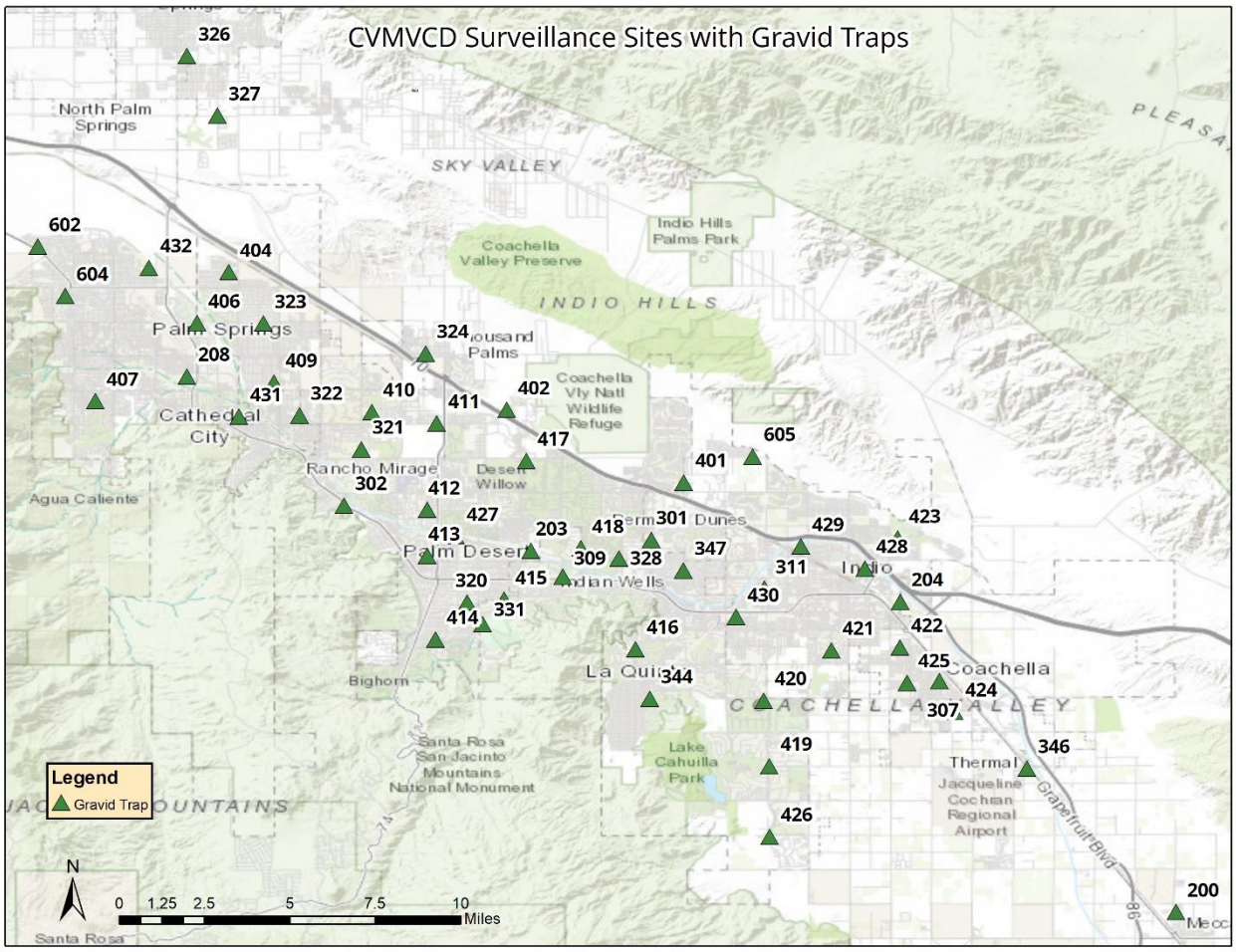
Adulticide Product	Classification	Treatment Rate	Maximum Product Required	Treatment Capability
Aqua-Reslin	Adulticide	0.356 oz. Aqua-Reslin/ Acre	23.7 gals.	6400 acres – rural fogging 2500 acres – urban fogging
Scourge 18 + 54	Adulticide	0.593 oz. Scourge 18+54/ Acre	37.4 gals.	
Duet	Adulticide	1.28 oz. Duet/Acre	85 gals.	
EverGreen 5-25	Adulticide	0.876 oz. EverGreen 5-25/Acre	60.9 gals.	
DeltaGard	Adulticide	1.007 oz. DeltaGard/Acre	39.3 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	10 fl. oz./ Acre barrier treatment	0.32 gals.	

EMERGENCY CONTROL PRODUCT MONITORING

Monitoring of emergency levels of larvicide and adulticide control products will be done on a monthly basis and displayed in the monthly district inventory sheets located on the district M drive at M:\Mosquito\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

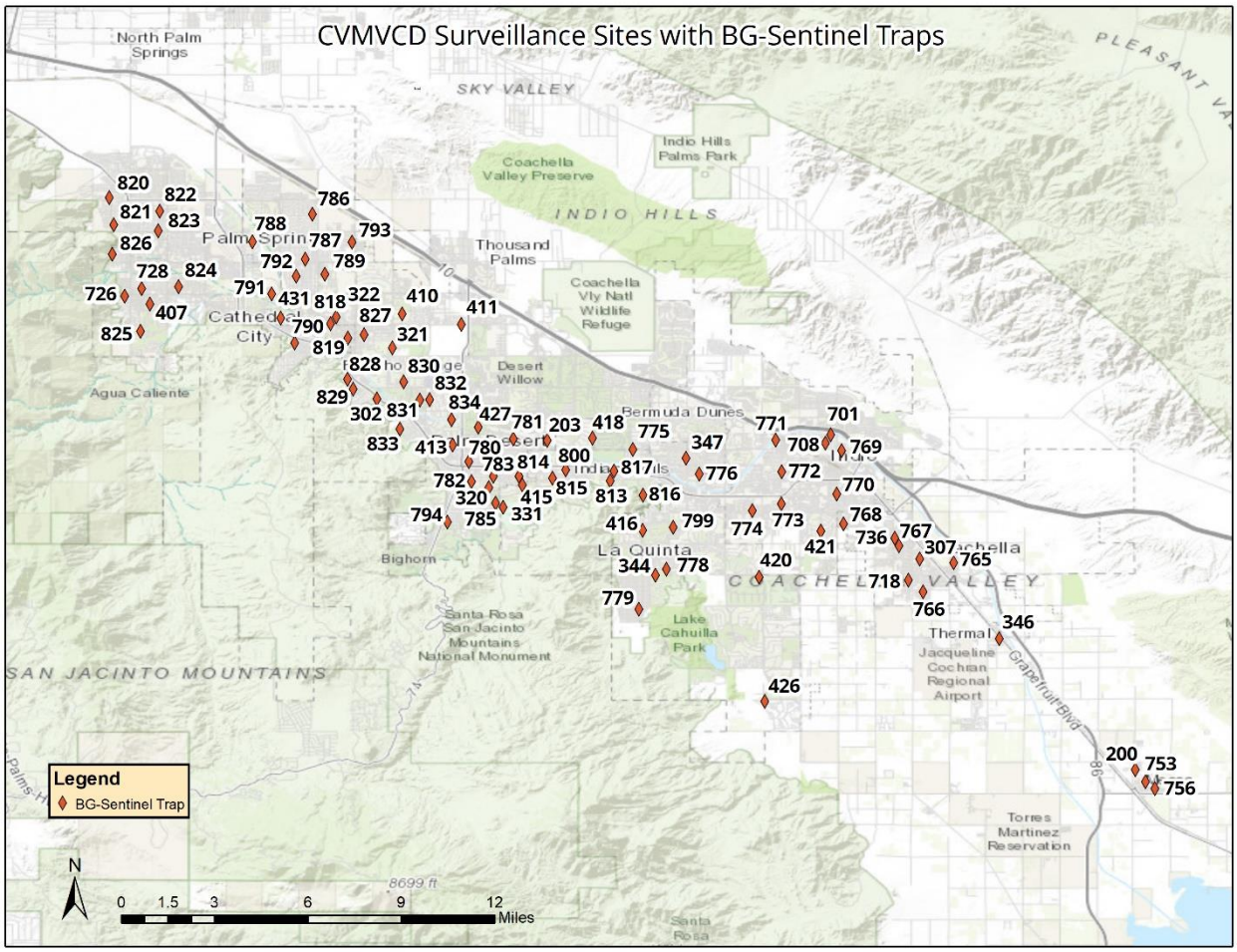


Appendix A.2 – List of Sites with Gravid Trap Locations in the Coachella Valley

No.	Site ID	City	Location Description
1	200	Mecca	Lincoln and Avenue 65
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	End of Hidden River Rd
6	302	Rancho Mirage	Thunderbird Rd and Hwy 111
7	307	Coachella	6th St and Palm Ave
8	309	Indian Wells	El Dorado Dr and Hwy 111
9	311	Indio	Madison St and Avenue 46
10	320	Palm Desert	Portola Ave and Fairway Dr
11	321	Rancho Mirage	Frank Sinatra Dr and Da Vall Dr
12	322	Cathedral City	Plumley Rd and Gerald Ford Dr
13	323	Cathedral City	Ximino Rd and 30th Avenue
14	324	Thousand Palms	Robert Rd and Ramon Rd
15	326	Desert Hot Springs	Verbena Dr and Park Ln
16	327	Desert Hot Springs	Bubbling Wells Rd and 18th Avenue
17	328	Palm Desert	Texas Ave by Fred Waring
18	331	Palm Desert	Portola Ave and Haystack Rd
19	344	La Quinta	Avenida Bermudas and 52nd Ave
20	346	Thermal	Grapefruit Blvd and Airport Blvd
21	347	La Quinta	Miles Ave and Adams St
22	401	Palm Desert	Apricot Ln and Nectarine Dr
23	402	Thousand Palms	Jack Ivey Dr and Stage Line Dr
24	404	Cathedral City	Landau Blvd and Ontina Rd
25	406	Palm Springs	Gene Autry Trl 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	Orleans Rd and Victor Hugo Rd
30	412	Rancho Mirage	Verbenia Rd and Monterey Ave
31	413	Palm Desert	Monterey Ave and Parkview Dr
32	414	Palm Desert	Mesa View and Racquet Ln
33	415	Indian Wells	Vintage Dr W and Wren Dr
34	416	La Quinta	Avenida El Nido & Avenida Fernando
35	417	Palm Desert	Vista Royal Dr and Desert Falls Dr
36	418	Indian Wells	Via Orvieto and Via Uzzano
37	419	La Quinta	Madison St and Airport Blvd
38	420	La Quinta	Madison St and 52nd Avenue
39	421	Indio	Jackson St and Avenue 50

40	**422**	**Coachella**	Avenue 49 and Van Buren St
41	**423**	**Indio**	Golf Center Pkwy and Avenue 43
42	**424**	**Coachella**	Genoa St and Avenue 53
43	**425**	**Coachella**	Frederick St and Avenue 51
44	**426**	**La Quinta**	Madison and Avenue 60
45	**427**	**Palm Desert**	Monterey Ave and Magnesia Falls Dr
46	**428**	**Indio**	Dillon Ave and Palo Verde St
47	**429**	**Indio**	Oleander Ave and Monroe St
48	**430**	**Indio**	Hwy 111 and Jefferson St
49	**431**	**Palm Springs**	Cathedral Canyon Dr and Paseo Azulejo
50	**432**	**Palm Springs**	Whitewater Club and N Farrell Dr
51	**602**	**Palm Springs**	N Palm Canyon Dr and W Gateway Dr
52	**604**	**Palm Springs**	N Palm Canyon and E Vista Chino
53	**605**	**Indio**	Madison St and Avenue 38

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



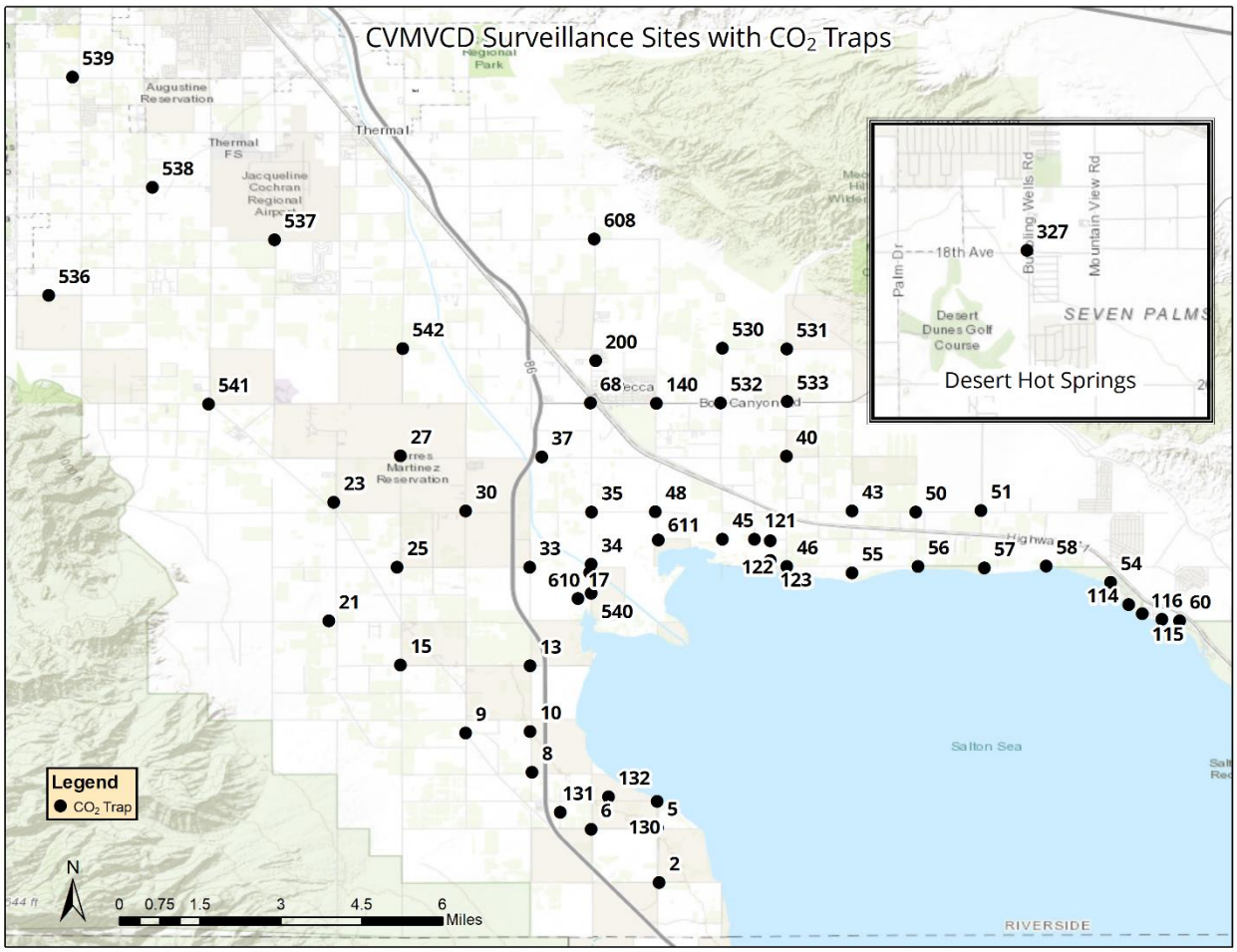
Appendix B.2 – List of Sites with BG-Sentinel Trap Locations in the Coachella Valley

No.	Site ID	City	Location Description
1	200	Mecca	Lincoln & Avenue 64
2	203	Palm Desert	Cook St and Sheryl Ave
3	302	Rancho Mirage	Thunderbird Rd and Hwy 111
4	307	Coachella	6th St and Palm Ave
5	320	Palm Desert	Portola Ave and Fairway Dr
6	321	Rancho Mirage	Frank Sinatra Dr and Da Vall Dr
7	322	Cathedral City	Plumley Rd and Gerald Ford Dr
8	331	Palm Desert	Portola Ave and Haystack Rd
9	344	La Quinta	Avenida Bermudas and 52nd Ave
10	346	Thermal	Grapefruit Blvd and Airport 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	Orleans Rd and Victor Hugo Rd
15	413	Palm Desert	Monterey Ave and Parkview Dr
16	415	Indian Wells	Vintage Dr W and Wren Dr
17	416	La Quinta	Avenida El Nido & Avenida Fernando
18	418	Indian Wells	Via Orvieto and Via Uzzano
19	420	La Quinta	Madison St and 52nd Ave
20	421	Indio	Jackson St and Ave 50
21	426	La Quinta	Madison and Avenue 60
22	427	Palm Desert	Monterey Ave and Magnesia Falls Dr
23	431	Palm Springs	Cathedral Canyon Dr and Paseo Azulejo
24	701	Indio	North Jackson Park
25	708	Indio	Kenner Ave and Oasis St
26	718	Coachella	Harrison St and Avenue 52
27	726	Palm Springs	S Palm Canyon Dr and W El Camino Way
28	728	Palm Springs	E Palm Canyon Dr and S Camino Real
29	736	Coachella	Avenue 50 and Frederick St
30	753	Mecca	7th Street and Date Palm St
31	756	Mecca	4th Street and Brown St
32	765	Coachella	Tyler St and Calle Bouganvilia
33	766	Coachella	Avenue 53 and Shady Lane
34	767	Coachella	Avenue 50 and Frederick St
35	768	Coachella	Jackson St and Avenue 48
36	769	Indio	Jackson St and Avenue 44
37	770	Indio	Jackson St and Dr. Carreon Blvd
38	771	Indio	Indio Blvd and Clinton St
39	772	Indio	Clinton St and Date Palm Ave

40	**773**	**Indio**	Highway 111 and Dr. Carreon Blvd
41	**774**	**Indio**	Avenue 48 and Shields Rd
42	**775**	**Palm Desert**	Fred Waring Dr and Warner Trail
43	**776**	**La Quinta**	Desert Stream and Dune Palms Rd
44	**778**	**La Quinta**	52nd Avenue and Washington St
45	**779**	**La Quinta**	Eisenhower Dr and Calle Madrid
46	**780**	**Palm Desert**	Monterey Ave and San Gorgonio Way
47	**781**	**Palm Desert**	Buttonwood and Deep Canyon Rd
48	**782**	**Palm Desert**	Ironwood Street and Shadow Mountain Dr
49	**783**	**Palm Desert**	Portola Ave and Shadow Mountain Dr
50	**785**	**Palm Desert**	Portola Ave and Vintage Dr W
51	**786**	**Cathedral City**	Date Palm Dr and Tachevah Dr
52	**787**	**Cathedral City**	Ramon Rd and Date Palm Dr
53	**788**	**Cathedral City**	San Diego Dr and San Jose Dr
54	**789**	**Cathedral City**	Date Palm Dr and 33rd Ave
55	**790**	**Cathedral City**	E Palm Canyon and Cathedral Canyon Dr
56	**791**	**Palm Springs**	34th Avenue and Golf Club Dr
57	**792**	**Cathedral City**	33rd Avenue and Cathedral Canyon Dr
58	**793**	**Cathedral City**	Bluegrass Way and Camrose Dr
59	**794**	**Palm Desert**	Highway 74 and Mesa View Dr
60	**799**	**La Quinta**	Washington St and Avenue 48
61	**800**	**Indian Wells**	Highway 111 and El Dorado Dr
62	**813**	**Indian Wells**	Iroquois Dr and Club Terrace Dr
63	**814**	**Palm Desert**	Deep Canyon Rd and Candlewood St
64	**815**	**Indian Wells**	Fairway Dr and Rancho Palmeras Dr
65	**816**	**Indian Wells**	Quail Run and Cottonwood Cove
66	**817**	**Indian Wells**	Miles Ave and Highway 111
67	**818**	**Cathedral City**	Gerald Ford Dr and Plumley Rd
68	**819**	**Cathedral City**	Da Vall Dr and Sunny Lane
69	**820**	**Palm Springs**	W Chino Canyon Rd and W Panorama Rd
70	**821**	**Palm Springs**	Patencio Rd and Hermosa Pl
71	**822**	**Palm Springs**	N Sunrise Way and E Paseo El Mirador
72	**823**	**Palm Springs**	E Alejo Rd and N Sunrise Way
73	**824**	**Palm Springs**	E Sonora Rd and S Farrell Dr
74	**825**	**Palm Springs**	Calle Palo Fierro and Avenida Granada
75	**826**	**Palm Springs**	S Tahquitz Dr and W Baristo Rd
76	**827**	**Rancho Mirage**	Sunny Lane and Da Vall Dr
77	**828**	**Rancho Mirage**	Highway 111 and Mirage Cove Dr
78	**829**	**Rancho Mirage**	Highway 111 and Camino Del Sol
79	**830**	**Rancho Mirage**	Desert Sun and Country Club Dr
80	**831**	**Rancho Mirage**	Bob Hope Dr and Country Club Dr
81	**832**	**Rancho Mirage**	Bob Hope Dr and Palm Crest Dr
82	**833**	**Rancho Mirage**	Halgar Rd and Dunes View Rd

83	**834**	**Rancho Mirage**	Clancy Ln and Monterey Ave

Appendix C.1 – Map of Surveillance Locations with only CO_2 Traps in the Coachella Valley



Appendix C.2 – List of Surveillance Locations with only CO_2 Traps in the Coachella Valley

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

39	**130**	Oasis	Johnson and Avenue 81
40	**131**	Oasis	Avenue 81 and Buchanan
41	**132**	Oasis	Johnson and Avenue 81
42	**200**	Mecca	Lincoln and Avenue 65
43	**140**	Mecca	Johnson and Avenue 66
44	**327**	Desert Hot Springs	Bubbling Wells Rd and 18th Avenue
45	**530**	Mecca	Grant and Avenue 64
46	**531**	Mecca	Hayes and Avenue 64
47	**532**	Mecca	Grant and Avenue 66
48	**533**	Mecca	Hayes and Avenue 66
49	**536**	Thermal	Orchid and Avenue 62
50	**537**	Thermal	Tyler and Avenue 60
51	**538**	Thermal	Van Buren and Avenue 58
52	**539**	Thermal	Jackson and Avenue 54
53	**540**	Mecca	Lincoln and Avenue 73
54	**541**	Mecca	Harrison and Avenue 66
55	**542**	Mecca	Fillmore and Avenue 64
56	**608**	Mecca	Lincoln and Avenue 60
57	**610**	Mecca	Torres Martinez Wetland
58	**611**	Mecca	End of Johnson and Avenue 70

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

MONTH	2017	2018	2019	2020	2021	5-year Average
JANUARY	0.95	0.41	0.57	0	0.3	0.446
FEBRUARY	0.31	0	1.29	0	0	0.32
MARCH	0	0	0.17	2.17	0.01	0.47
APRIL	0	0	0	0.72	0	0.144
MAY	0	0	0.01	2.89	0	0.58
JUNE	0	0	0	0	0	0
JULY	0	0	0.44	0	0.44	0.176
AUGUST	0.07	0.12	0	0	0.17	0.072
SEPTEMBER	0	0.02	0.51	0	0	0.106
OCTOBER	0	0.82	0	0	0.01	0.166
NOVEMBER	0	0	0.58	0	0	0.116
DECEMBER	0	0.09	1.42	0.21	0.13	0.37
YEAR TOTAL	**1.33**	**1.46**	**4.99**	**5.99**	**1.06**	**2.966**

*This data used for surveillance factor # 1 in the Mosquito-Borne Virus Risk Assessment Table calculations for WNV, WEEV, and SLEV on pages 9 – 11 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

	2017			2018			2019			2020			2021			5-Year Average		
Month	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min
Jan 1-15	66	55	43	78	61	45	66	52	40	70	52	37	75	55	38	70.95	54.98	40.56
Jan 16-31	68	54	41	78	61	42	74	60	47	75	58	43	69	55	41	72.86	57.68	42.89
Feb 1-14	78	65	51	84	65	46	66	54	42	70	55	38	77	62	46	75.03	60.10	44.64
Feb 15-28	71	60	48	71	55	39	68	56	43	81	62	44	76	58	38	73.33	58.22	42.41
Mar 1-15	86	67	48	81	65	49	76	66	54	75	61	45	75	60	44	78.56	63.87	48.07
Mar 16-31	89	73	57	86	70	54	85	71	56	74	63	53	82	67	50	83.14	68.71	53.95
Apr 1-15	89	72	56	95	78	60	89	75	61	78	67	56	94	79	63	89.00	74.30	59.15
Apr 16-30	94	77	61	94	78	61	95	82	66	95	80	64	90	76	59	93.59	78.56	62.25
May 1-15	92	77	62	97	81	65	93	80	68	99	86	71	97	82	62	95.65	81.11	65.69
May 16-31	99	83	66	98	83	69	88	76	64	99	85	68	95	82	66	95.89	81.71	66.63
Jun 1-15	101	84	67	107	90	72	105	89	72	101	87	70	104	88	70	103.61	87.68	70.29
Jun 16-30	113	94	74	107	89	72	104	90	73	104	90	75	111	95	59	107.81	91.66	70.60
Jul 1-15	111	94	78	111	96	81	110	95	79	109	95	71	109	93	65	110.09	94.51	74.81
Jul 16-31	107	93	79	112	99	84	109	97	81	111	96	80	107	95	82	109.11	96.05	81.14
Aug 1-15	107	94	79	111	98	83	111	98	83	111	96	79	109	96	81	109.73	96.36	81.00
Aug 16-31	110	93	76	109	94	78	110	97	81	110	98	85	106	92	77	109.01	94.86	79.49
Sep 1-15	103	90	77	108	89	68	106	92	77	107	94	79	106	92	75	105.96	91.40	75.11
Sep 16-30	95	80	65	106	88	70	95	81	67	107	93	77	98	83	68	100.20	85.09	69.47
Oct 1-15	94	75	56	90	79	66	90	73	55	102	82	60	89	73	58	93.03	76.42	58.96
Oct 16-31	95	77	59	92	75	57	88	70	51	91	71	46	86	69	52	90.36	72.41	53.05
Nov 1-15	82	67	52	85	67	47	87	64	45	82	64	48	88	69	52	84.79	66.20	48.72
Nov 16-30	83	66	49	79	62	44	73	58	45	79	60	43	81	61	44	78.95	61.39	44.97
Dec 1-15	78	61	43	71	57	43	69	57	46	73	60	48	73	55	40	72.79	58.04	43.91
Dec 16-31	71	54	37	72	57	41	64	50	38	70	58	47	66	53	39	68.53	54.32	40.48

* This data used for surveillance factor # 1 in the Mosquito-Borne Virus Risk Assessment Table calculations for WNV, WEEV, and SLEV on pages 9 – 11 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.

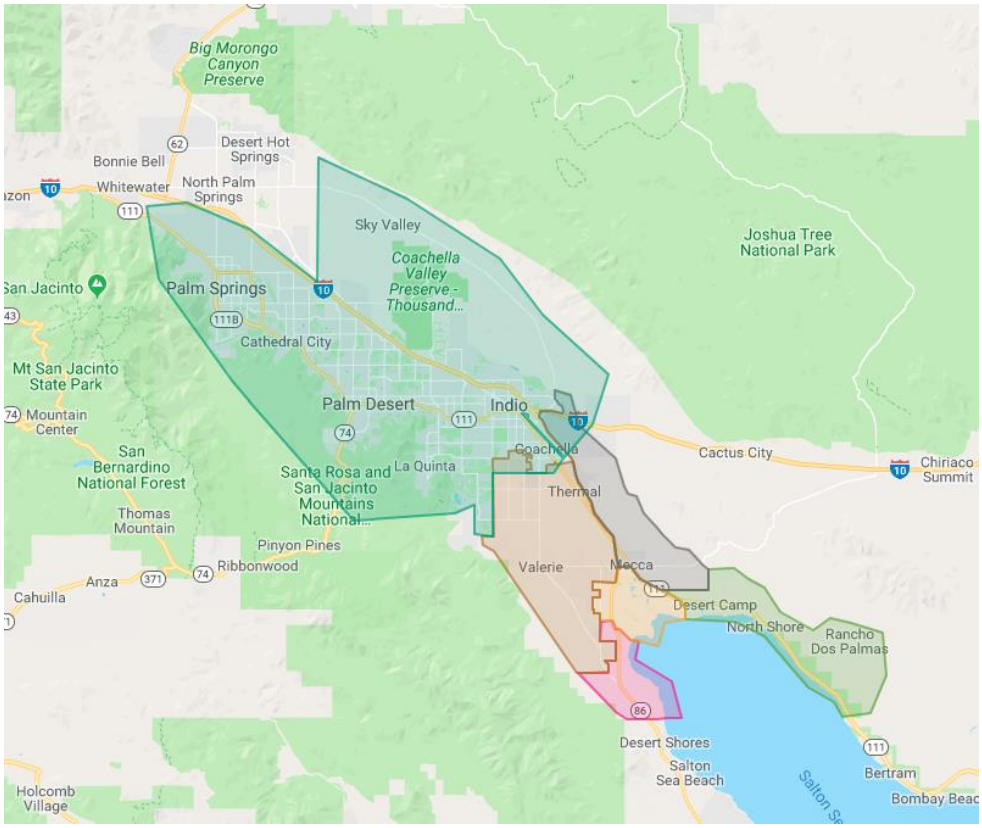


Figure 3 – Map of Salton Sea Shoreline Risk Assessment Zones

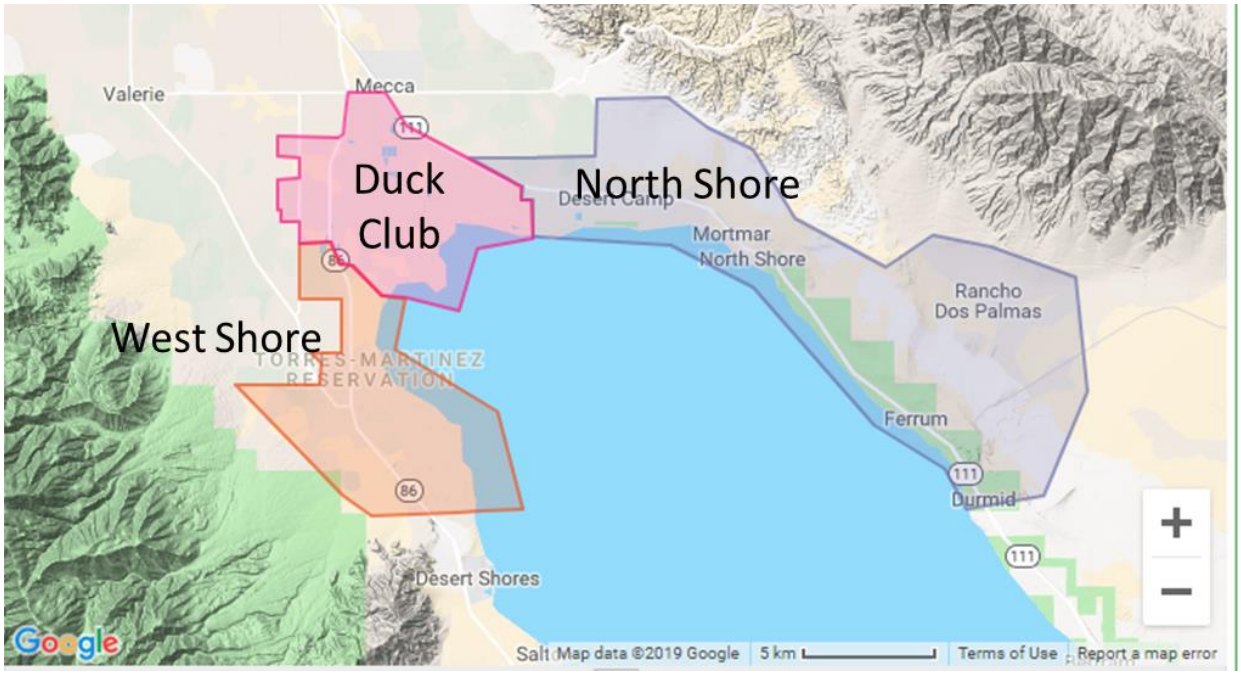


Table 6. North Shore Average Number of Vector Mosquitoes

MONTH	2017	2018	2019	2020	2021	*5-year Average*
JAN	224.33	204.5	14.33	81.33	207	*146.298*
FEB	158.33	444	11.67	45.67	67	*145.334*
MAR	137.92	260.25	175	284.78	456.13	*262.816*
APR	326.67	515.25	536.67	715.79	444.04	*507.684*
MAY	93.22	164.17	356.36	929.85	146.83	*338.086*
JUN	17.96	64.21	138.15	118.83	92.36	*86.302*
JUL	12.29	7.91	22.96	24.5	5.42	*14.616*
AUG	6.04	16.88	1.59	33.87	18.04	*15.284*
SEP	46.21	41.48	28.13	76.59	203.42	*79.166*
OCT	179.56	39.58	65.56	126.54	243.15	*130.878*
NOV	29.27	12.42	32.08	46.13	47.48	*33.476*
DEC	196	5	2.33	161	-	*91.0825*

Table 7. Duck Club Zone Average Number of Vector Mosquitoes

MONTH	2017	2018	2019	2020	2021	*5-year Average*
JAN	293.6	173.57	104.67	126.9	109.6	*161.668*
FEB	278.4	305.1	15.11	27.2	50.45	*135.252*
MAR	1370.3	365.68	630.3	1414.65	820.9	*920.366*
APR	952.5	1527.1	2426.07	2497.76	853.2	*1651.33*
MAY	388.24	406.03	1165.54	1674.89	345.9	*796.12*
JUN	111.35	121.94	1125.14	170.4	275.59	*360.884*
JUL	24.47	38.9	50.05	14.67	64.44	*38.506*
AUG	26.65	32.46	146.36	34.15	87.86	*65.496*
SEP	322.97	350.27	522.44	402.5	1229.87	*565.61*
OCT	1179.5	318.59	765.68	924.03	1045.61	*846.682*
NOV	158.68	129.4	124.74	153	141.76	*141.516*
DEC	84.6	82.36	30.8	46.4	-	*61.04*

Table 8. West Shore Average Number of Vector Mosquitoes

MONTH	2017	2018	2019	2020	2021	*5-year Average*
JAN	78.5	116.25	23.5	120	29	*80.65*
FEB	126.5	101	26.5	4.5	80	*108.8*
MAR	291.71	99.43	87.14	135.43	200.38	*186.742*
APR	62.64	77.21	173.64	309.21	112.33	*163.44*
MAY	27.43	68.05	158.29	165.57	119.14	*113.94*
JUN	32.07	82	318.79	55.59	118	*140.38*
JUL	19.5	21.79	89	6.21	16.71	*31.758*
AUG	5.57	18.71	69.48	30.56	18.81	*26.77*
SEP	17.33	54.14	45.93	59.05	90.68	*39.048*
OCT	33.86	31.57	174.57	100.86	36.64	*79.558*
NOV	41.11	3.14	50.79	8.43	22.69	*26.036*
DEC	21	14.5	15	7	-	*12.2*

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: New Business

Approval of Resolution 2022-09 adopting the CVMVCD Invasive Mosquito Management Program and Arbovirus Response Plan – **Jennifer A. Henke, MS, 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 2020. This updated plan follows changes in surveillance and new findings regarding invasive mosquitoes and arboviruses. *The Guidance for Surveillance of and Response to Invasive Aedes Mosquitoes and Locally Acquired Exotic Mosquito-borne Infections Transmitted by These Mosquitoes in California* generated by the California Department of Public Health, Mosquito & Vector Control Association of California, and the University of California, is the core of this document; however, some necessary adjustments were made based on results of surveillance, control, and public outreach activities relative to the conditions and communities in the Coachella Valley.

Staff Recommendation:
Approval of Resolution 2022-09 adopting the CVMVCD Invasive Mosquito Management Program and Arbovirus Response Plan

Exhibits:

- Resolution 2022-09
- CVMVCD Invasive Mosquito Management Program and Arbovirus Response Plan

Resolution No. 2022-09

A RESOLUTION OF THE BOARD OF TRUSTEES OF THE COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT ADOPTING THE CVMVCD INVASIVE MOSQUITO MANAGEMENT PROGRAM AND ARBOVIRUS 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 this 10th day of May 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Benjamin Guitron, President
Board of Trustees

ATTEST:

_____
Melissa Tallion, Clerk of the Board

APPROVED AS TO FORM:

_____
Lena D. Wade, General Counsel

REVIEWED:

_____
Jeremy Wittie, M.S., General Manager

EXHIBIT "A"

SEE ATTACHED
COACHELLA VALLEY MOSQUITO AND
VECTOR CONTROL DISTRICT
INVASIVE MOSQUITO MANAGEMENT PROGRAM
AND
ARBOVIRUS RESPONSE PLAN

COACHELLA VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT

INVASIVE MOSQUITO MANAGEMENT PROGRAM AND ARBOVIRUS RESPONSE PLAN 2022

CVMVCD 43-420 Trader Place Indio, CA 92201
E-mail: cvmosquito@cvmvcd.org
www.cvmosquito.org

Table of Contents

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 and revised March and August 2016, February 2017, April 2020, and June 2021.
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

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, 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. Have knowledge of 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.

The Vector Ecologist will also work in collaboration with the Operations Manager and Public Information Officer to design and present training to all Operations Department and Clerical staff. 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. Service Request procedures should include:
    a. Questions to ask when Call Center receives mosquito complaint calls.
    b. Methods of surveillance to be performed.
    c. Recommended control methods.
    d. Key messaging to be delivered to the resident requesting service.

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 reports in February annually the likely threats for the year. 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 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 level 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 8 BG traps per treatment plot will be set weekly at temporary locations.

Female mosquitoes are pooled together by city by week and sent to the Davis Arbovirus Research and Testing (DART) facility monthly from June to December for virus testing of chikungunya, dengue, and Zika viruses. A report of trap count results are sent to the District staff by the end of the next business day.

2. Operations Response

Service Requests

Each zone Vector Control Technician (VCT) will be responsible for responding to service requests involving *Aedes aegypti* in their zone. If the presence of *Aedes aegypti* is confirmed at the residence of the requestor, the Technician will inspect each property that borders the residence with *Aedes aegypti* (known as the rule of nine).

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 (no more

than 3 business days after resident request), the VCT will request assistance from their supervisor.

"Hot Shots" Team

This Operations team consists of two full-time VCTs supported by Seasonal VCTs as outlined by the Operations Manager. This team of VCTs has three primary areas of focus in the control program of *Aedes aegypti,*

- VCT "first responders" to a neighborhood if a human or positive mosquito sample for invasive *Aedes* vectored disease is reported to the District (see section VI below).
- Supplement the surveillance and control efforts of Zone VCTs in areas that are experiencing above-average Service Requests, adult *Aedes aegypti* trap counts, or high concentration of positive larval lab samples.
- Initiate 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 the highest *Aedes aegypti* activity by examining and visualizing service requests, larval samples, and invasive *Aedes* trap count data. Based on this data analysis, specific sites within the District are prioritized and targeted for area-wide application 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. Deliver Aedes detection programs designed for students in targeted elementary, middle, and high schools to teach students about invasive *Aedes*.
e. Provide Vector Control Technicians with informational materials to distribute during Service Requests with residents.
f. Post informational materials on District website page (www.cvmosquito.org) promoting awareness of invasive *Aedes* risk and prevention.
g. Promote awareness of invasive *Aedes* through social media channels.
h. 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 by DART of a virus-positive sample of *Aedes aegypti*.
c. The Laboratory Manager calls an Action Plan meeting of the General Manager, Operations Manager, Field Supervisor in charge of *Aedes* field response, IT Manager, Vector Ecologist, and Public Information Officer. 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. Upon conclusion of the meeting, State and County Public Health officials and neighboring vector control agencies will be notified by the General Manager or designee of 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 while acknowledging that no locally-acquired case has yet been confirmed.

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 450-foot radius around the address.
c. Any adult female *Aedes aegypti* mosquitoes will be sent to DART for arboviral testing.
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 a mosquito virus is 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 a 450-foot radius around the suspect-case residence or initial positive trap and monitored for 45 days. 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 invasive *Aedes* are discovered, Operations staff will conduct mandatory door-to-door inspections of each property extending 450-foot radius area from the positive property following post-detection Invasive Aedes control protocol.
f. If Operations staff is not able to access a property under mandatory door-to-door inspections becasue 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. 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 Officer contacts the city manager and county supervisor's office and law enforcement in affected city, cities, or unincorporated areas to inform them that an invasive Aedes-transmitted virus has been detected and a door-to-door inspection operation will begin. The Public Information Officer proceeds with stakeholder notification .
b. The Public Information Officer 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 or printed postings
      1. Gated Community – Notification of HOA/Property Management/Golf Course Management.
      2. Older Neighborhoods with walled courtyards (e.g., Palm Springs area) – Notification of HOA if known and potentially postcard mail campaign and posting.
      3. Non-gated neighborhoods – Notification and communication with HOA if it exists or is known.

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, Field Supervisor(s) overseeing response, Public Information Officer, and the 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 larvicide applications will 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. Truck-mounted larvicide applications will be made in neighborhoods outside of a 1-mile radius of the human case if more than 10 female Aedes mosquitoes per night are captured on a 2-week cycle.
e. Once the determination that area-wide application is necessary:
f. The Laboratory Manager will direct staff to evaluate the efficacy of the application through trapping.
g. The Operations Manager will direct staff to continue inspections and treat the properties where immediate control of mosquitoes is needed.
h. The Operations Manager will notify the Riverside County Agricultural Commissioner and, if needed, the Federal Aviation Administration of area-wide applications.
i. The Public Outreach Department will update the District stakeholders.

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: New Business

Nomination and Election of the vacant Secretary seat on the Board of Trustees- **Benjamin Guitron, Board President**

Background:

On April 4, 2022, Staff sent a survey out to eligible Trustees (those who have served on the Board for one year or more) seeking interested members to elect to the Secretary position.

President Guitron also made phone calls to the eligible Trustees and Dr. Doug Kunz was interested in filling the vacant Secretary position for the remainder of 2022.

Recommendation:

The Board elects Trustee Dr. Doug Kunz to serve as Secretary for the remainder of 2022.

	Coachella Valley Mosquito and Vector Control District **Staff Report**	**May 10, 2022**

Agenda Item: New Business

Appointment of ad hoc Research Committee – **Benjamin Guitron, Board President**

Background:

The Board appoints an ad hoc Research Committee charged with reviewing and assessing the research proposals that are received by the District for projects each year. The Committee makes its recommendation for financial support based on the District's Research Policy, and together with Staff, recommends funding proposals that meet the District's research needs and interests. The Committee also recommends how much funding to allocate to each proposal, which can be the full amount requested, a reduced amount, or no funding. The results are presented to the Board at the November Board meeting, and the Board then decides which proposals will be funded.

The time commitment is typically one meeting in late May or early June to set the priorities; and then one or two meetings in October to review the proposals and make the recommendation to the Board.

Staff Recommendation:

To appoint an ad hoc Research Committee comprised of no more than three members.

2021 Committee Members:
Dr. Doug Kunz
Janell Percy
Doug Walker