



Orange County Mosquito and Vector Control District

Serving Orange County Since 1947

PUBLIC RELATIONS COMMITTEE MEETING WAS JULY 25
OPERATIONS COMMITTEE MEETING WAS AUGUST 2
BUDGET AND FINANCE COMMITTEE MEETING- 1:30 PM

**NOTICE AND AGENDA
 OF THE REGULAR MEETING OF THE BOARD OF TRUSTEES
 THURSDAY AUGUST 17, 2017
 849TH REGULAR MEETING 3:00 P.M.
 13001 GARDEN GROVE BLVD.
 GARDEN GROVE, CA 92843
 WEBSITE ADDRESS: www.ocvector.org**

REGULAR MEETING 3:00 P.M.

A. PLEDGE OF ALLEGIANCE, ROLL CALL, AND LATE COMMUNICATIONS

1. Call business meeting to order 3:00 p.m.
2. Pledge of Allegiance
3. Roll Call - (If absences occur, consider whether to deem those absences excused based on facts presented for the absence — such determination shall be the permission required by law.)

PRESIDENT:	Barbara Kogerman	Laguna Hills
VICE-PRESIDENT:	Lucille Kring	Anaheim
SECRETARY:	Cheryl Brothers	Fountain Valley

Aliso Viejo	Phillip B. Tsunoda	Lake Forest	Scott Voigts
Anaheim	Lucille Kring	Los Alamitos	Warren Kusumoto
Brea	Cecilia Hupp	Mission Viejo	Dave Leckness
Buena Park	Michael Davis	Newport Beach	Scott Peotter
Costa Mesa	Sandra Genis	Orange	Michael Alvarez
Cypress	Stacy Berry	Placentia	Craig Green
Dana Point	Richard Viczorek	Rancho Santa Margarita	April Josephson
Fountain Valley	Cheryl Brothers	San Clemente	Jim Dahl
Fullerton	Jennifer Fitzgerald	San Juan Capistrano	Pam Patterson
Garden Grove	Stephanie Klopfenstein	Santa Ana	Cecilia Aguinaga
Huntington Beach	Mike Posey	Seal Beach	Sandra Massa-Lavitt
Irvine	Lynn Schott	Stanton	Al Ethans
La Habra	James Gomez	Tustin	Letitia Clark
La Palma	Marshall Goodman	Villa Park	Bill Nelson
Laguna Beach	Toni Iseman	Westminster	Sergio Contreras
Laguna Hills	Barbara Kogerman	Yorba Linda	Peggy Huang
Laguna Niguel	John Mark Jennings	County of Orange	Lilly Simmering
Laguna Woods	Shari Horne		

4. Late/Other Communications

B. PUBLIC COMMENTS

(Individual Public Comments may be limited to a 3-minute or less time limit)

During Public Comments, the public may address the Board on any issue within the District's jurisdiction which is not on the agenda. The public may comment on any item on the Agenda at the time that item is before the Board for consideration. Any person wishing to speak must come up and speak from the lectern. There will be no dialog between the Board and the commenter. Any clarifying questions from the Board must go through the Board President.

C. PRESENTATIONS

1. A Representative from Assemblymember Daly's Office will recognize the District's 70 years of service to Orange County
2. A Representative from the Orange County Board of Supervisors will recognize the District's 70 years of service to Orange County
3. Communications Lab will give a presentation on the public relations campaign created for the Orange County Mosquito and Vector Control District

D. OCMVCD COMMITTEE REPORTS TO THE BOARD OF TRUSTEES

1. Public Relations Committee
2. Operations Committee
3. Budget and Finance Committee

E. CONSENT CALENDAR

All matters listed under the CONSENT CALENDAR are considered by the District to be routine and will be enacted by one motion. Any member of the Board may pull an item from the Consent Calendar for additional clarification or action.

1. Approval of DRAFT minutes for the regular meeting of July 20, 2017
2. Approve Warrant Register for July 2017 **This will be in the September Agenda Packet**
3. Monthly Financial Report for June 2017 (Exhibit A)
4. Approve Travel to Mosquito and Vector Control Association of California (MVCAC) Fall Quarterly Meeting November 1-2, 2017 in Sacramento, CA

F. BUSINESS AND ACTION ITEMS

G. INFORMATIONAL ITEMS ONLY (NO ACTION NECESSARY)

1. Staff Presentation: Senior staff will give an update of vector activity in Orange County
2. Report of District Activities

H. PRESIDENT'S REPORT AND TRUSTEE COMMENTS

I. DISTRICT MANAGER'S REPORT – Discussion and Possible Action

J. DISTRICT LEGAL COUNSEL REPORT – Discussion and Possible Action

CLOSING

K. CORRESPONDENCE – Discussion and Possible Action None

L. FUTURE AGENDA ITEMS

M. ADJOURNMENT

1. Adjourn to the next regular meeting of September 21, 2017 starting at 3:00 p.m. at the Orange County Mosquito and Vector Control District offices, 13001 Garden Grove Blvd., Garden Grove, CA 92843

“This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Orange County Mosquito and Vector Control District at (714-971-2421), during regular business hours, at least twenty-four hours prior to the time of the meeting.”

"Materials related to an item on the Agenda submitted after distribution of the agenda packet are available for public inspection in the District Office located at Orange County Mosquito and Vector Control District offices, 13001 Garden Grove Blvd., Garden Grove, CA 92843 during normal business hours."

C. PRESENTATIONS

- 1. A REPRESENTATIVE FROM ASSEMBLYMEMBER DALY'S OFFICE WILL RECOGNIZE THE DISTRICT'S 70 YEARS OF SERVICE TO ORANGE COUNTY**
- 2. A REPRESENTATIVE FROM THE ORANGE COUNTY BOARD OF SUPERVISORS WILL RECOGNIZE THE DISTRICT'S 70 YEARS OF SERVICE TO ORANGE COUNTY**
- 3. COMMUNICATIONS LAB WILL GIVE A PRESENTATION ON THE PUBLIC RELATIONS CAMPAIGN CREATED FOR THE ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT**

D. OCMVCD COMMITTEE REPORTS TO THE BOARD OF TRUSTEES

1. [PUBLIC RELATIONS COMMITTEE](#)
2. [OPERATIONS COMMITTEE](#)
3. [BUDGET AND FINANCE COMMITTEE](#)



**PUBLIC RELATIONS COMMITTEE
MEETING NOTICE
TUESDAY JULY 25, 2017
11:30 A.M.**

TO: Public Relations Committee

Lucille Kring	Anaheim
Stacy Berry	Cypress
Richard Viczorek	Dana Point
Stephanie Klopfenstein	Garden Grove
Mike Posey	Huntington Beach
Mike Alvarez	Orange
April Josephson	Rancho Santa Margarita
Cecilia Aguinaga	Santa Ana
Letitia Clark	Tustin

FROM: Tawnia Pett, Executive Assistant/Clerk of the Board

RE: Public Relations Committee Meeting:
11:30 a.m., Tuesday, July 25, 2017
Orange County Mosquito and Vector Control District
13001 Garden Grove Blvd., Garden Grove, CA

AGENDA

1. Select Committee Chair
2. Public Comments
3. Discuss Public Relations Program with Communications Lab
4. Adjourn

tep



**OPERATIONS COMMITTEE
NOTICE OF SPECIAL MEETING
AUGUST 2, 2017
10:00 A.M.**

TO: Operations Committee

Phillip Tsunoda	Aliso Viejo
Cecilia Hupp	Brea
Sandra Genis	Costa Mesa
James Gomez (Chair)	La Habra
Craig Green	Placentia
Pam Patterson	San Juan Capistrano
Sergio Contreras	Westminster

FROM: Tawnia Pett, Executive Assistant/Clerk of the Board

RE: Operations Committee Meeting:
10:00 a.m., Wednesday, August 2, 2017
Orange County Mosquito and Vector Control District
13001 Garden Grove Blvd., Garden Grove, CA

AGENDA

1. Call Meeting to Order and Roll Call
2. Public Comments
3. La Habra West Nile Virus Update and Scheduled Mosquito Control Operation
4. Adjourn

tep



**BUDGET AND FINANCE COMMITTEE
MEETING NOTICE
AUGUST 17, 2017
1:30 P.M.**

TO: Budget and Finance Committee
Mike Posey
James Gomez
Barbara Kogerman
John Mark Jennings
Scott Voigts
Scott Peotter
Jim Dahl
Bill Nelson (Chair)
Lilly Simmering
Huntington Beach
La Habra
Laguna Hills
Laguna Niguel
Lake Forest
Newport Beach
San Clemente
Villa Park
County of Orange

FROM: Tawnia Pett, Executive Assistant/Clerk of the Board

RE: Budget and Finance Committee Meeting:
1:30 p.m., Thursday, August 17, 2017
Orange County Mosquito and Vector Control District
13001 Garden Grove Blvd., Garden Grove, CA

AGENDA

1. Call Meeting to Order and Roll Call
2. Public Comments
3. Approve Minutes from July 20, 2017 Meeting
4. Review of District Reserves Analysis and Policy Draft
5. Adjourn

tep

MINUTES OF THE BUDGET AND FINANCE COMMITTEE MEETING

Orange County Mosquito and Vector Control District

TIME: 2:00 P.M., July 20, 2017

PLACE: 13001 Garden Grove Blvd., Garden Grove, CA 92843

Budget and Finance Committee Members Present:

Barbara Kogerman	Laguna Hills
John Mark Jennings	Laguna Niguel
Scott Peotter	Newport Beach
Jim Dahl	San Clemente
Bill Nelson (Chair)	Villa Park

Budget and Finance Committee Members Absent:

Mike Posey	Huntington Beach
James Gomez	La Habra
Scott Voigts	Lake Forest
Lilly Simmering	County of Orange

Staff Members Present

Rick Howard	District Manager
Wendy Goodson	Director of Administrative Services
Debi Kimball	Accounting Supervisor
Terry Pospisil	Accounting Specialist

Chairperson, Bill Nelson called the meeting to order at 2:06 P.M.

1. **Call Meeting to Order and Roll Call:**
2. **Public Comments:** No public comments.
3. **Approve Minutes from June 15, 2017 Meeting:** On motion by Trustee Kogerman, seconded by Trustee Dahl, and passed by majority vote the Minutes from the June 15, 2017 committee meeting were approved. Trustee Jennings abstained.
4. **Review Investment Policy No. 38 for Monies of the Orange County Mosquito and Vector Control District (Agenda item F.1):**
No action taken.
5. **Adjourn:** Meeting adjourned at 2:26 p.m.

E. CONSENT CALENDAR

All matters listed under the CONSENT CALENDAR are considered by the District to be routine and will be enacted by one motion. Any member of the Board may pull an item from the Consent Calendar for additional clarification of action.

1. **APPROVAL OF DRAFT MINUTES FOR THE REGULAR MEETING OF JULY 20, 2017**
2. **APPROVE WARRANT REGISTER FOR THE PERIOD JULY 1 TO JULY 31, 2017**
This will be in the September Agenda Packet
3. **APPROVE MONTHLY FINANCIAL REPORT FOR JUNE 2017 (EXHIBIT A)**
4. **APPROVE TRAVEL TO MOSQUITO AND VECTOR CONTROL ASSOCIATION OF CALIFORNIA (MVCAC) FALL QUARTERLY MEETING NOVEMBER 1-2, 2017 IN SACRAMENTO, CA**

MINUTES OF THE 848th MEETING

BOARD OF TRUSTEES Orange County Mosquito and Vector Control District

TIME: 3:00 P.M. July 20, 2017

PLACE: 13001 Garden Grove Blvd., Garden Grove, CA 92843

TRUSTEES PRESENT:

PRESIDENT:	Barbara Kogerman	Laguna Hills
VICE-PRESIDENT:	Lucille Kring	Anaheim
SECRETARY:	Cheryl Brothers	Fountain Valley

Aliso Viejo	Phillip Tsunoda	Laguna Woods	Shari Horne
Anaheim	Lucille Kring	Lake Forest	Scott Voigts
Brea	Cecilia Hupp	Los Alamitos	Warren Kusumoto
Buena Park	Michael Davis	Newport Beach	Scott Peotter
Cypress	Stacy Berry	Orange	Michael Alvarez
Dana Point	Richard Viczorek	Rancho Santa Margarita	April Josephson
Fountain Valley	Cheryl Brothers	San Clemente	Jim Dahl
Fullerton	Jennifer Fitzgerald	San Juan Capistrano	Pam Patterson
Garden Grove	Stephanie Klopfenstein	Seal Beach	Sandra Massa-Lavitt
La Palma	Marshall Goodman	Stanton	Al Ethans
Laguna Beach	Toni Iseman	Tustin	Letitia Clark
Laguna Hills	Barbara Kogerman	Villa Park	Bill Nelson
Laguna Niguel	John Mark Jennings	Westminster	Sergio Contreras

TRUSTEES ABSENT:

Costa Mesa	Sandra Genis	Mission Viejo	Dave Leckness
Huntington Beach	Mike Posey	Placentia	Craig Green
Irvine	Lynn Schott	Santa Ana	Cecilia Aguinaga
La Habra	James Gomez	Yorba Linda	Peggy Huang
		County of Orange	Lilly Simmering

*Trustees Posey, Green, Aguinaga, Huang, and Simmering had an Excused Absence

OTHERS PRESENT:

Rick Howard, District Manager
Robert Cummings, Director of Scientific Technical Services
Wendy Goodson, Director of Administrative Services
Larry Shaw, Director of Operations
Lora Young, Director of Communications
Tawnia Pett, Executive Assistant/Clerk of the Board
Dana Zamora, Operations Specialist
Alan Burns, District Counsel

- A. **Opening:**
1. **Call the Business Meeting to Order:** President Kogerman called the meeting to order at 3:06 P.M.
 2. **Pledge of Allegiance:** President Kogerman asked Trustee Berry to lead the Pledge of Allegiance.
 3. **Roll Call:** Roll call indicated 25 Trustees were present with Trustee Tsunoda arriving late to bring the total to 26 out of the current Board membership of 35.
 4. **Late/Other Communications:**
 - Late Communications:**
 1. Exhibit B Agenda Item G.2
 - Other Communications:**
 1. CSDA Handout for the CSDA Presentation
 5. **Closed Session:** Conference with Legal Counsel- Pursuant to Government Code Section 54956.9(d)(1), Orange County Mosquito and Vector Control District Employees Association v. Orange County Mosquito and Vector Control District (PERB Case No. LA-CE-117-M). President Kogerman called for closed session at 3:08 p.m.
 6. **Open Session:** Open Session resumed at 3:26 p.m. President Kogerman reported that there was no action taken at this time to report.
- B. **Public Comments:** Three members of the public spoke. One person thanked the District for the newsletters but questioned the gap for March, April, and May. The speaker spoke about being a more proactive entity in informing the community and raising awareness. One person spoke about being a West Nile virus survivor. One person spoke that the District's message is staying consistent but outreach to the community should be better. He stated there needs to be more signs posted when the District is spraying for mosquitoes. The speaker asked for mosquito trap reports, including the number of mosquitoes, to be listed on the website. District Manager Howard addressed the comments for clarification: There was a break in the mosquito season, and that is why there were not any eAlerts for the months of March, April, and May, there was nothing to report. Additional information like mosquito trap counts will be put on the website in the future.
- C. **Presentations:**
1. A presentation entitled "CSDA, what it is and what it can do for your District" was presented by Chris Palmer, CSDA
 2. A presentation entitled "OCMVCD's Roll in Emergencies and Disasters" was presented by Russ Patterson, R.E. Patterson and Associates
 3. President Kogerman Recognized Trustee Tsunoda for his 10 years of service to the District
- D. **OCMVCD Committee Reports to the Board of Trustees:**
1. Budget and Finance Committee: Committee Chair Nelson reported that the committee approved of the two changes to the Investment Policy No. 38 (Agenda Item F.1) and recommended approval by the Board of Trustees.
 2. Policy and Personnel Committee: Committee Chair Josephson reported that the committee recommended continuing agenda item F.2 (Ordinance Amending OCMVCD Operations Code Regarding Travel and Expense Policy) to a future meeting.
- E. **Consent Calendar: Items for Approval by General Consent**
On motion from Trustee Dahl, seconded by Trustee Voigts, and passed by unanimous vote, the Board of Trustees approved Consent Calendar Items E.2 and E.4-6. Agenda Item E.1 was passed by majority vote due to absences at the previous Board Meeting (Abstained: Trustees Fitzgerald, Jennings, Horne, and Ethans)

Ayes: Trustees Tsunoda, Kring, Hupp, Davis, Berry, Viczorek, Brothers, Fitzgerald, Klopfenstein, Goodman, Iseman, Kogerman, Jennings, Horne, Voigts, Kusumoto, Peotter, Alvarez, Josephson, Dahl, Patterson, Massa-Lavitt, Ethans, Clark, Nelson, and Contreras.

Noes: None.

Abstained: None.

Absent: Trustees Genis, Posey, Schott, Gomez, Leckness, Green, Aguinaga, Huang, and Simmering.

1. **Approval of Minutes:** Approved, without reading, the Minutes of the 847th Meeting of the Board of Trustees held June 15, 2017 enclosed as a separate item with the agenda.
 2. **Approved Warrant Register for the Period June 1 to June 30, 2017: (Exhibit A)** Received and filed payment of warrant register (**Exhibit A**) dated July 20, 2017 in the amount of \$689,118.53 as presented by in-house check runs dated June 1, 8, 15, 22, 27, and 29, 2017.
 3. **Approved Monthly Financial Report for June 2017: (Exhibit A)** This will be in the August Agenda Packet
 4. **Contract Change Order Number 1 to Contract Between Orange County Mosquito and Vector Control District and Hummingbird Helicopters, Inc.: (Exhibit A)** Approved Contract Change Order No. 1 between the Orange County Mosquito and Vector Control District and Hummingbird Helicopters, Inc. in the amount of \$6,200 and authorized the District Manager to execute all contract documents.
 5. **Authorized Purchase of Three (3) Replacement Fleet Vehicles from Elk Grove Auto/Winner Chevrolet in the Amount of \$75,206.19: (Exhibit A)** Approved the purchase of three (3) replacement 2018 4X2 Chevrolet Colorado pickup trucks from Elk Grove Auto/Winner Chevrolet for a total cost of \$75,206.19, Pursuant to the California Statewide Commodity Contract 1-16-23-20D.
 6. **Approved Travel for California Special Districts Association (CSDA) Annual Conference September 25-28, 2017 in Monterey, CA:** Authorized District Manager Howard, Director of Communications Young, and Director of Administrative Services Goodson to attend the California Special District Association (CSDA) Annual Conference on September 25-28, 2017 at the Monterey Marriott & Portola Hotels in Monterey, California; and authorized a total of approximately \$7,218 for travel expenses.
- F. Business and Action Items:**
1. **Amended Investment Policy No. 38 for Monies of the Orange County Mosquito and Vector Control District: (Exhibit A, B)** On motion from Trustee Voigts, seconded by Trustee Horne, and approved by unanimous vote, the Board of Trustees amended Investment Policy No. 38 for Liquid Assets for Fiscal Year 2017-18 and adopted Resolution No. 451 stating such.

Ayes: Trustees Tsunoda, Kring, Hupp, Davis, Berry, Viczorek, Brothers, Fitzgerald, Klopfenstein, Goodman, Iseman, Kogerman, Jennings, Horne, Voigts, Kusumoto, Peotter, Alvarez, Josephson, Dahl, Patterson, Massa-Lavitt, Ethans, Clark, Nelson, and Contreras.

Noes: None.

Abstained: None.

Absent: Trustees Genis, Posey, Schott, Gomez, Leckness, Green, Aguinaga, Huang, and Simmering.
 2. **Item Continued to a Future Meeting: An Ordinance of the Board of Trustees of the Orange County Mosquito and Vector Control District Amending its Operations Code with Regard to its Travel and Expense Policy: (Exhibit A, B)** This item was continued to a future meeting.

3. **Elected a Representative to the CSDA Board of Directors in Our CSDA Network for Seat C: (Exhibit A, B, C, D, E, F)** Trustee Nelson recommended the board select Arlene Schafer, the current incumbent, as the District's choice for Seat C. On motion from Trustee Nelson, seconded by Trustee Peotter, and approved by unanimous vote, the Board of Trustees selected Arlene Schafer as its choice for Seat C on the CSDA Board.

Ayes: Trustees Tsunoda, Kring, Hupp, Davis, Berry, Viczorek, Brothers, Fitzgerald, Klopfenstein, Goodman, Iseman, Kogerman, Jennings, Horne, Voigts, Kusumoto, Peotter, Alvarez, Josephson, Dahl, Patterson, Massa-Lavitt, Ethans, Clark, Nelson, and Contreras.

Noes: None.

Abstained: None.

Absent: Trustees Genis, Posey, Schott, Gomez, Leckness, Green, Aguinaga, Huang, and Simmering.

4. **Approved First Amended Employment Agreement Between the Orange County Mosquito and Vector Control District and its District Manager: (Exhibit A, B)** On motion from Trustee Josephson, seconded by Trustee Voigts, and approved by unanimous vote, the Board of Trustees approved the First Amended Employment Agreement between the Orange County Mosquito and Vector Control District and its District Manager, Richard Howard; and authorized Board President Kogerman to execute the amended contract.

Ayes: Trustees Tsunoda, Kring, Hupp, Davis, Berry, Viczorek, Brothers, Fitzgerald, Klopfenstein, Goodman, Iseman, Kogerman, Jennings, Horne, Voigts, Kusumoto, Peotter, Alvarez, Josephson, Dahl, Patterson, Massa-Lavitt, Ethans, Clark, Nelson, and Contreras.

Noes: None.

Abstained: None.

Absent: Trustees Genis, Posey, Schott, Gomez, Leckness, Green, Aguinaga, Huang, and Simmering.

G. **Informational Items Only (NO ACTION NECESSARY):**

1. **Staff Presentation:** Director of Scientific Technical Services Cummings gave an update on the recent vector activity in Orange County.
2. **Selected Board of Trustee Candidate for MVCAC Council from Orange County Mosquito and Vector Control District: (Exhibit A, B)** Received and filed.
3. **Report of District Activities:** Received and filed.

H. **President's Report and Trustee Comments:**

1. President Kogerman reported that Mrs. Mosquito was at the Laguna Hill's 4th of July event.
2. Trustee Brothers reported that she was happy the District was at Fountain Valley's Summerfest and she wants to speak to someone in Communications about the inflatable mosquito.

- I. **District Manager's Report:** District Manager Howard introduced Lora Young, the new Director of Communications.

J. **District Legal Counsel Report:** District Counsel Burns reported:

1. The new West Nile virus warrant has a six month extension instead of going back every two months.


- K. **Correspondence:** None.

- L. **Future Agenda Items:** None.

M. **Adjournment:**

1. President Kogerman adjourned the meeting at 4:17 p.m. to the next regularly scheduled meeting on Thursday, August 17, 2017

I certify that the above minutes substantially reflect the actions taken by the Board of Trustees at its meeting held July 20, 2017


Richard Howard, District Manager

Approved as written and/or corrected by the Board of Trustees at its _____
_____ meeting held _____

ATTEST: _____
Cheryl Brothers, Secretary



ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT

August 17, 2017

AGENDA REPORT

AGENDA ITEM # E.3

Prepared By: Debi Kimball, Accounting Supervisor
Submitted By: Rick Howard, District Manager

Agenda Title:

Monthly Financial Report for June 2017

Recommended Action:

Receive and file.

Executive Summary:

Accept for inclusion as [Exhibit A](#), the Orange County Mosquito and Vector Control District Monthly Financial Report for June 2017.

Fiscal Impact:

Amount Requested \$ N/A

Sufficient Budgeted Funds Available:

Category: Pers. Optg. Cap. -or- CIP# Fund#

Previous Relevant Board Actions for This Item:

Exhibits:

[Exhibit A: Monthly Financial Report for June 2017](#)

Orange County Mosquito and Vector Control District
Monthly Financial Report
Month Ending June 30, 2017

Fund No.	Fund	Cash Balance 5/31/2017	Revenue	Expenditures	Transfers	Accrual Adjustment	Cash Balance 6/30/2017	Cash Balance 6/30/2016
10	Operating	10,771,910	228,329	987,960	-	264,659	10,276,938	8,402,650
20	Vehicle Replacement	528,338	-	-	-	-	528,338	655,887
30	Liability Reserve	460,234	-	-	-	-	460,234	457,021
40	Equipment Replacement	370,758	-	-	-	-	370,758	358,719
50	Emergency Vector Control	1,151,011	-	-	-	-	1,151,011	1,142,977
60	Facility Improvement	1,453,977	25,776	4,475	-	1,716	1,476,994	1,228,159
70	Habitat Remediation	185,668	-	-	-	-	185,668	186,658
75	Environmental Fund	4,171	-	-	-	-	4,171	2,064
90	Retiree Medical Insurance	57,127	123,310	-	-	(8,291)	172,146	171,375
95	Retirement Contingency	1,060,185	-	-	-	-	1,060,185	739,069
99	Payroll Clearing	308,413	-	-	-	(321,824)	(13,411)	8,328
		\$ 16,351,792	\$ 377,415	\$ 992,435	\$ -	\$ (63,740)	\$ 15,673,031	\$ 13,352,907

Cash Reconciliation

California LAIF	13,816,037	0.98%
O.C. Treasurer	1,634,094	1.06%
F&M Checking	73,717	n/a
Payroll Checking	8,865	n/a
F&M HBP	130,318	0.05%
Petty Cash - Checking	10,000	n/a
Cash and Investments	\$ 15,673,031	

Note: The PARS OPEB Trust has a balance of \$3,030,664 as of 5/31/2017 (the most recent information available). These monies are held in an irrevocable trust and are to be used exclusively for retiree medical payments.



Wendy Goodson
Director of Administrative Services



Debi Kimball
Accounting Supervisor

Monthly Cash Flow

Month	Revenue	Expenditures	Transfers	Accrual Adjustment	Monthly Cash Flow	F/Y '15-'16 Comparison
July	\$ 36,304	\$ 1,511,897	\$ -	\$ (5,726)	\$ (1,481,319)	\$ (1,561,391)
August	\$ 48,955	\$ 1,092,890	\$ -	\$ 17,730	\$ (1,026,205)	\$ (887,164)
September	\$ 157,716	\$ 1,168,491	\$ -	\$ 206,921	\$ (803,854)	\$ (844,400)
October	\$ 70,575	\$ 746,597	\$ -	\$ (10,231)	\$ (686,253)	\$ (728,065)
November	\$ 1,563,549	\$ 750,114	\$ -	\$ (208,879)	\$ 604,556	\$ 244,842
December	\$ 5,461,273	\$ 854,135	\$ -	\$ (26,206)	\$ 4,580,932	\$ 4,070,508
January	\$ 627,771	\$ 760,134	\$ -	\$ (23,734)	\$ (156,097)	\$ (217,070)
February	\$ 51,502	\$ 726,678	\$ -	\$ (2,754)	\$ (677,930)	\$ (734,755)
March	\$ 876,671	\$ 1,099,233	\$ -	\$ 158,447	\$ (64,115)	\$ (108,703)
April	\$ 4,238,312	\$ 815,436	\$ -	\$ 154,655	\$ 3,577,531	\$ 3,125,085
May	\$ 337,283	\$ 1,009,129	\$ -	\$ (206,880)	\$ (878,726)	\$ (395,227)
June	\$ 377,415	\$ 992,435	\$ -	\$ (63,740)	\$ (678,760)	\$ (836,789)
Total YTD	\$ 13,847,326	\$ 11,527,168	\$ -	\$ (10,397)	\$ 2,309,760	\$ 1,126,871

Revenues: 100% of Fiscal Year (Preliminary data - year-end closing entries are not yet included)

Year to Date			
10-Operating Fund	Annual Budget	Actual	Percentage
Property Taxes	5,350,000	5,572,324	104.2%
1996 Benefit Assessment	1,550,000	1,517,023	97.9%
2004 Benefit Assessment	5,602,000	5,552,625	99.1%
Interest and Concessions	18,250	38,031	208.4%
Miscellaneous	10,000	15,786	157.9%
Pass thru Money	225,000	413,044	183.6%
Rent for Cell Sites	26,300	30,484	115.9%
VCJPA Pooled Services	50,000	144,689	289.4%
CDPH - CA State Grant	-	44,720	%
Charges for Services	64,000	35,044	54.8%
	\$ 12,895,550	\$ 13,363,771	103.6%

*The major distributions of property tax and benefit assessments occur in four installments: December, January, April, and May.

2016 Net Retrospective Adjustment Applied and Received / Not Budgeted Annual service levels vary and are invoiced after the fact.

No.	Other Funds	Budget	Actual	Percentage
20	Vehicle Replacement	2,200	2,777	126.2%
30	Liability Reserve	1,300	2,356	181.2%
40	Equipment Replacement	1,200	1,893	157.7%
50	Emergency Vector Control	3,200	5,892	184.1%
60	Facility Improvement	293,500	314,069	107.0%
90	Retiree Medical Insurance	158,000	151,316	95.8%
95	Retirement Contingency	2,500	5,254	210.2%
	Total Revenue	\$ 13,357,450	\$ 13,847,326	103.7%

Expenditures: 100% of Fiscal Year (Preliminary data - year-end closing entries are not yet included)

No.	Program	Budget	Actual	Percentage
110	Trustees	50,750	50,913	100.3%
120	District Manager	338,660	342,566	101.2%
130	Legal Services	195,000	86,978	44.6%
140	Non-Departmental	433,850	365,455	84.2%
	Executive	\$ 1,018,260	\$ 845,912	83.1%
210	Administrative Services	781,990	609,264	77.9%
220	Insurance	496,350	667,182	134.4%
	Administrative Services	\$ 1,278,340	\$ 1,276,446	99.9%
310	Technical Services	1,547,540	1,444,393	93.3%
	Scientific Technical Services	\$ 1,547,540	\$ 1,444,393	93.3%
410	Field Operations	6,424,080	5,782,188	90.0%
430	Vehicle Maintenance	689,705	617,780	89.6%
440	Building Maintenance	179,325	165,737	92.4%
	Operations	\$ 7,293,110	\$ 6,565,705	90.0%
510	Public Information	862,110	558,330	64.8%
520	Information Technology	757,220	487,349	64.4%
530	Public Service	149,330	121,780	81.6%
	Public Information	\$ 1,768,660	\$ 1,167,459	66.0%
	Total Operating Fund Expenditure:	\$ 12,905,910	\$ 11,299,915	87.6%
20	Vehicle Replacement	-	-	0.0%
30	Liability Reserve	-	-	0.0%
40	Equipment Replacement	-	-	0.0%
50	Emergency Vector Control	-	-	0.0%
60	Facility Improvement	442,100	68,416	15.5%
70	Habitat Remediation	1,000	868	86.8%
75	Environmental	-	7,892	0.0%
90	Retiree Medical Insurance	158,000	150,077	95.0%
95	Retirement Contingency	-	-	0.0%
	Total Other Funds	\$ 601,100	\$ 227,253	37.8%
	Total Expenditures	\$ 13,507,010	\$ 11,527,168	85.3%

* Annual Workers Comp, Liability & Property Insurance

Saving on salaries, advertising, and capital outlay for various displays Saving on software, license fees, & IT equipment

Capital projects (repaving & server room) did not occur as budgeted

Local Agency Investment Fund
P.O. Box 942809
Sacramento, CA 94209-0001
(916) 653-3001

www.treasurer.ca.gov/pmia-laif/laif.asp
July 06, 2017

ORANGE COUNTY VECTOR CONTROL DISTRICT

DIRECTOR OF ADMINISTRATIVE SERVICES
13001 GARDEN GROVE BLVD
GARDEN GROVE, CA 92843

PMIA Average Monthly Yields

Account Number:

Tran Type Definitions

June 2017 Statement

Account Summary

Total Deposit:	0.00	Beginning Balance:	13,816,036.87
Total Withdrawal:	0.00	Ending Balance:	13,816,036.87



COUNTY OF ORANGE
OFFICE OF THE TREASURER-TAX COLLECTOR

Shari L. Freidenrich, CPA, CCMT, CPFA, ACPFIM
 P. O. BOX 4515
 SANTA ANA, CA 92702-4515

ocgov.com/ocinvestments
 June 30, 2017

ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT

Attn: Richard Howard, District Manager
 13001 Garden Grove Blvd.
 Garden Grove, CA 92843

Monthly Apportionment Gross Yield: 1.062%
 Administration Fee: -0.005%
 Monthly Apportionment Net Yield: 1.057%

Fund Number :

JUNE 2017 STATEMENT

CASH IN TREASURY

Transactions

Transaction Date	Transaction Description	Tran Type	Authorized Signer	Amount
06/01/17	May 2017 Admin Fee	AF		\$ (62.40)
06/20/17	May 2017 Interest	IN		\$ 1,379.26

Summary

Total Deposit:	\$	1,379.26	Beginning Balance:	\$	1,632,777.11
Total Withdrawal:	\$	(62.40)	Ending Balance:	\$	1,634,093.97

ACCRUED INVESTMENT INCOME

Transactions

Transaction Date	Transaction Description	Tran Type	Authorized Signer	Amount
06/20/17	May 2017 Interest	IN		\$ (1,379.26)
07/03/17	June 2017 Interest	IN		\$ 1,425.76

Summary

Total Accrual:	\$	1,425.76	Beginning Balance:	\$	1,379.26
Total Payment:	\$	(1,379.26)	Ending Balance:	\$	1,425.76



ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT

August 17, 2017

AGENDA REPORT

AGENDA ITEM # E.4

Prepared By: Tawnia Pett, Executive Assistant/Clerk of the Board
Submitted By: Rick Howard, District Manager

Agenda Title:

Authorize Travel to Mosquito and Vector Control Association of California (MVCAC) Fall Quarterly Meeting

Recommended Action:

Authorize District Manager Howard, Director of Communications Young, and Director of Scientific Technical Services Cummings to attend the Mosquito and Vector Control Association of California (MVCAC) Fall Quarterly Meeting on November 1-2, 2017 in Sacramento, California; and authorize a total of approximately \$2,460 for travel expenses.

Executive Summary:

District Manager Howard is requesting approval for District Manager Howard, Director of Communications Young, and Director of Scientific Technical Services Cummings to attend the Mosquito and Vector Control Association of California (MVCAC) Fall Quarterly Meeting in Sacramento, California, on November 1-2, 2017.

The estimated cost for travel expenses is approximately \$820 per attendee (Flight: \$250/each; Hotel Accommodations: \$189/night; Meals: \$64/day).

This item has been budgeted for the 2017-18 fiscal year travel account.

Fiscal Impact:

Amount Requested \$ 2,460

Sufficient Budgeted Funds Available: Yes

Category: Pers. Optg. Cap. -or- CIP# Fund#

Previous Relevant Board Actions for This Item:

Exhibits:

F. BUSINESS AND ACTION ITEMS

G. INFORMATIONAL ITEMS

1. **STAFF PRESENTATION: SENIOR STAFF WILL GIVE AN UPDATE OF VECTOR ACTIVITY IN ORANGE COUNTY**
2. **[REPORT OF DISTRICT ACTIVITIES](#)**

*Vectors of the Month, Invasive *Aedes aegypti* and *Aedes albopictus**

Detections of invasive mosquitoes, the yellow fever mosquito, *Aedes aegypti*, and the Asian tiger mosquito, *Aedes albopictus*, in Orange County this year have increased since June. Collections have been highest in yards with backyard ornamental plants and small containers with water. One or both of these invasive mosquitoes have been established in the U.S. for years and have now been found in 12 California counties.

Both species are primarily associated with urban areas and are dependent on humans not only for their breeding sources, but often as a source for their blood meals. Adult mosquitoes are relatively small and are black with white stripes. Females (males do not bite) are active during the day and will readily bite indoors and outdoors in shaded areas around the home. Once established, they can become a severe nuisance to both people and pets, and are potential vectors of several mosquito-borne diseases, such as yellow fever, dengue, chikungunya, and dog heartworm.

Larvae of *Aedes aegypti* and *Aedes albopictus* usually do not develop in typical open water sources characteristic of most of our local mosquitoes; instead, they breed in water held in both natural and artificial containers. The range of sources include leaf axils, tree holes, discarded tires, flower pots, buckets, cemetery urns, discarded cups/cans, and occasionally larger sites, such as storm drains and even septic tanks. Their eggs can survive desiccation for long periods of time,

facilitating their spread to new locations with the movement of contaminated containers, or their ability to re-emerge after control efforts.

The yellow fever mosquito, *Aedes aegypti*, originated in tropical Africa and spread around the tropical and sub-tropical world with the movement of people and commerce. It likely reached the Americas by the 1600s and has been responsible for outbreaks of yellow fever, as its common name implies, in Africa and in many parts of the New World. The Asian tiger mosquito, *Aedes albopictus*, on the other hand, originated in Southeast Asia and did not reach the Americas until the 1980s. In both instances, the spread of these species has been facilitated by the worldwide movement of goods and people; both are now found in Europe as well.

Historically, the failure of either mosquito to become established locally in prior years may be related to our dry climate and lower humidity levels that reduce survival of adult mosquitoes. However, this scenario has been breached because human development has progressively changed arid regions of the American southwest into a well-irrigated, pseudo-rain forest system with suitable conditions throughout many areas of California. No longer confined to regions of the United States with high summer humidity, these mosquitoes are appearing in many arid regions of the U.S.

Because of their ability to live in close proximity to humans, the most effective method to control these invasive *Aedes* mosquitoes is to prevent containers around the home from collecting water. To stop their spread in Orange County, the District is requesting residents to do their part by following these steps:

- CALL and REPORT any sightings of small, black-and-white mosquitoes, or if you are being bitten by mosquitoes during the day! Residents can contact the Orange County Mosquito and Vector Control District at 714-971-2421, or online at www.ocvector.org.
- DUMP and DRAIN all stagnant water around your home. Eliminate plant saucers and other unnecessary containers; thoroughly scrub outdoor pet water dishes weekly to remove eggs.
- DO NOT transport or share plant stems rooted in water, or keep outdoor buckets full of water.
- USE INSECT REPELLENT containing EPA-registered active ingredients such as DEET, Picaridin, or oil of lemon eucalyptus to avoid bites.



Figure 1. *Aedes aegypti*. Note the black and white color pattern on body and legs.



Figure 2. *Aedes albopictus*. Note black and white color pattern on body and legs.

To Shrink Mosquito Population, Scientists are Releasing 20 Million Mosquitoes

James Doubek, NPR, July 21, 2017



Aedes aegypti mosquitoes in various stages of development displayed in Brazil in 2016.

Mario Tama/Getty Images

This summer, scientists in California are releasing 20 million mosquitoes in an effort to shrink the population of mosquitoes that can carry diseases. It sounds counterintuitive. But the plan is to release millions of sterile male mosquitoes, which will then mate with wild female mosquitoes. The eggs the females lay won't hatch, researchers say.

The project is called Debug Fresno and it's being undertaken by Verily, a subsidiary of Alphabet, Google's holding company. It's the company's first field study involving sterile mosquitoes in the U.S. Scientists say the goal is to cut the population of *Aedes aegypti* mosquitoes — the species responsible for spreading Zika, dengue and chikungunya. *Aedes aegypti* have been present in California's Central Valley since 2013 and have been a problem in Fresno County. "It's a terrible nuisance, a terrible biting nuisance. It's changed the way people can enjoy their back yard and it's a threat for disease transmission," Steve Mulligan of Fresno County's Consolidated Mosquito Abatement District told *The Washington Post*.

Each week for 20 weeks, the company plans to release 1 million of the sterile, non-biting male mosquitoes in two neighborhoods in Fresno County. The male mosquitoes are bred and infected with *Wolbachia*, a bacterium that is "naturally found in at least 40 percent of all insect species," according to *The Scientist magazine*, though it's normally not found in *A. aegypti*. "Over time, we hope to see a steep decline in the presence of *Aedes aegypti* in these communities," Verily says in a statement.

In a phenomenon called cytoplasmic incompatibility, "matings between *Wolbachia*-infected males and uninfected females results in embryo lethality or low hatch rates," William Sullivan and Scott L. O'Neill write in the journal *Nature*. *Wolbachia* also helps mosquitoes to avoid carrying diseases like Zika in the first place. *Aedes aegypti* "carrying *Wolbachia* bacteria were highly resistant to Zika virus infection, and were unable to transmit the virus via their saliva," *The Scientist* writes, citing a 2016 study in Brazil. The magazine says the bacterium "is not known" to infect humans.

Verily is partnering in the project with the Kentucky-based company MosquitoMate and the Consolidated Mosquito Abatement District of Fresno County. They plan to study the *Aedes aegypti* population density and number of eggs hatching in the experimental areas and compare to control neighborhoods to measure the experiment's effectiveness.

It's not the first time the bacteria-carrying mosquitoes have been released into the wild in the U.S. MosquitoMate and the Florida Keys Mosquito Control District released 75,000 *Wolbachia*-carrying mosquitoes each week for several weeks this spring in the Florida Keys. Last year in Fresno, MosquitoMate and county officials released about 800,000 of the mosquitoes. This experiment is a 25-fold increase on that. Verily says it developed "automated mass rearing and sex-sorting processes," which enable it to breed and release so many of the mosquitoes in such a short time.

A. aegypti is an invasive species to Fresno County, and officials told the *Post* they don't predict an impact on the local ecosystem from reducing or eliminating it. The method Verily is using to cut the mosquito population differs from the experiment the British company Oxitec proposed last year in the Florida Keys. In contrast to the mosquitoes being infected by bacteria, Oxitec has released males that are genetically modified with "a gene that causes the mosquito's offspring to die in the first two to three days of life," according to *The Dallas Morning News*. Many Florida Keys residents bitterly opposed the proposed experiment last year; some Texas residents are reacting similarly to a proposed trial there, the *Morning News* reports.

From the spring to the fall of 2016, 38 additional counties in the U.S. reported evidence of the *Aedes aegypti* mosquito, according to the Centers for Disease Control and Prevention. Since the beginning of 2015, more than 5,300 symptomatic cases of Zika were reported to the CDC in the U.S., though the vast majority stemmed from people traveling to affected areas. As of Wednesday (7/19/2017), the agency said there were no reported cases of people getting Zika in the U.S. this year "through presumed local mosquito-borne transmission."

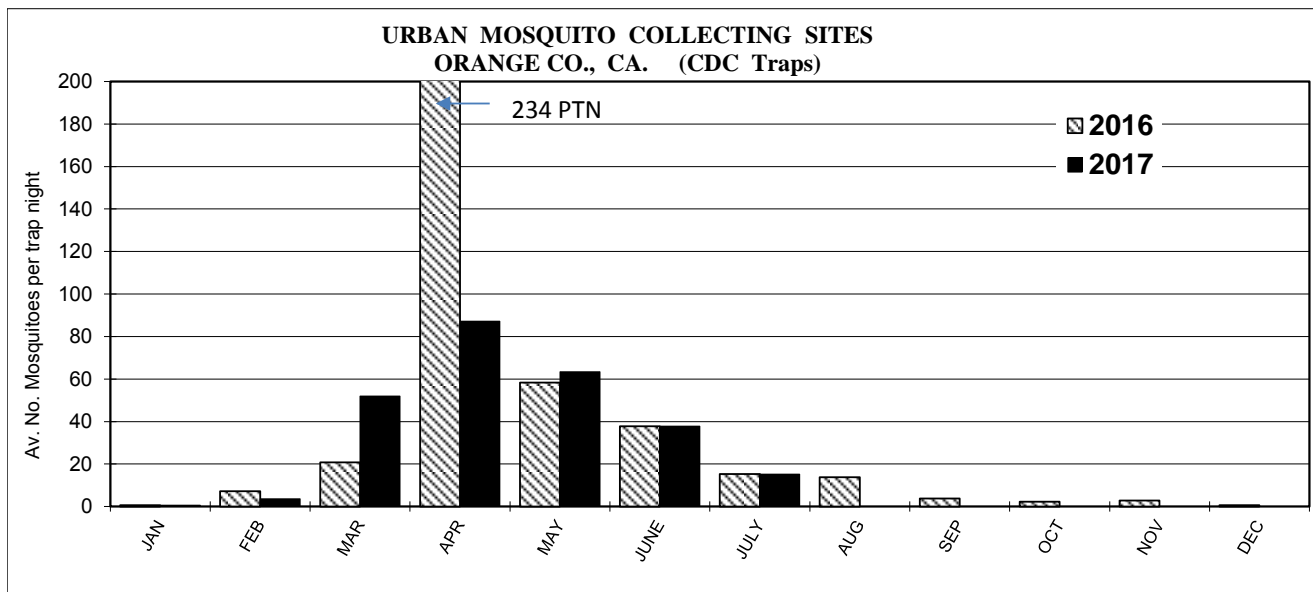
VECTOR ECOLOGY PROGRAM REPORT
July 1 to July 29, 2017

By
Robert F. Cummings, Director of Scientific Technical Services
Sokanary Sun, Laboratory Specialist
Kiet Nguyen, Assistant Vector Ecologist
Amber Semrow, Biologist
Laura Krueger, Vector Ecologist
Tim Morgan, Vector Ecologist

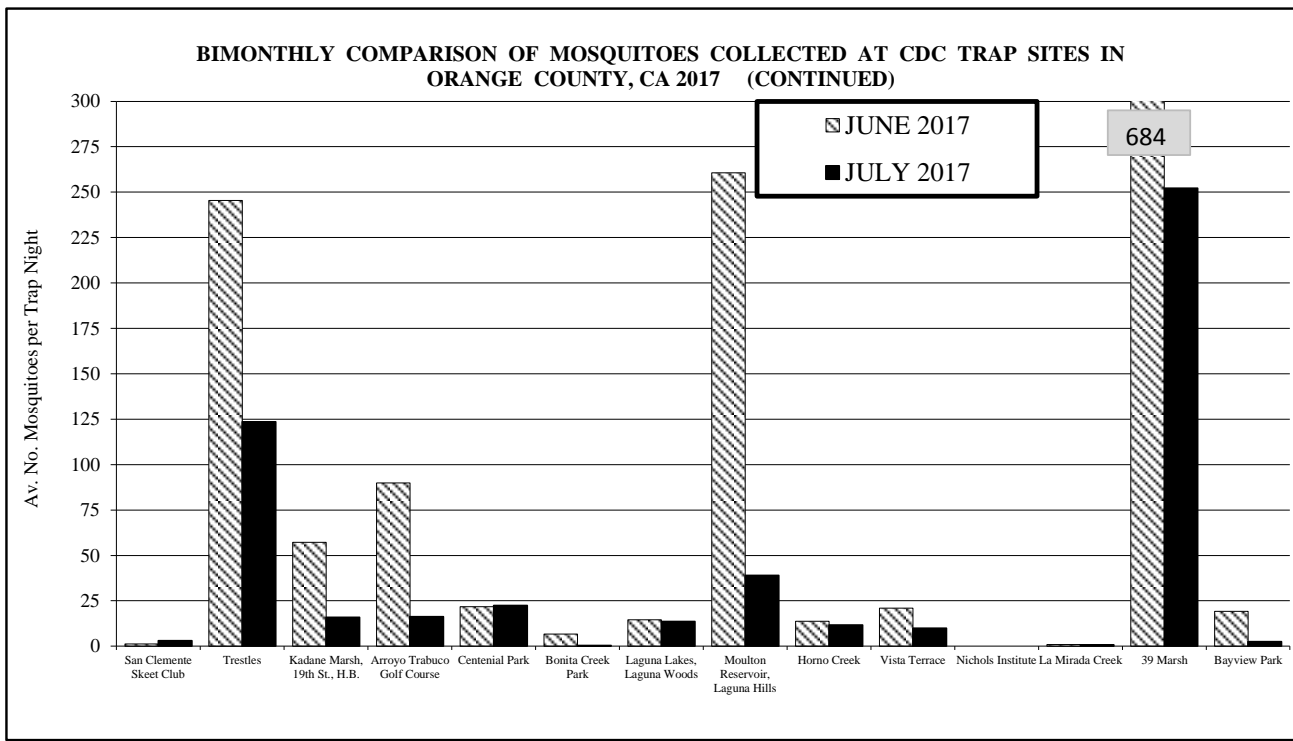
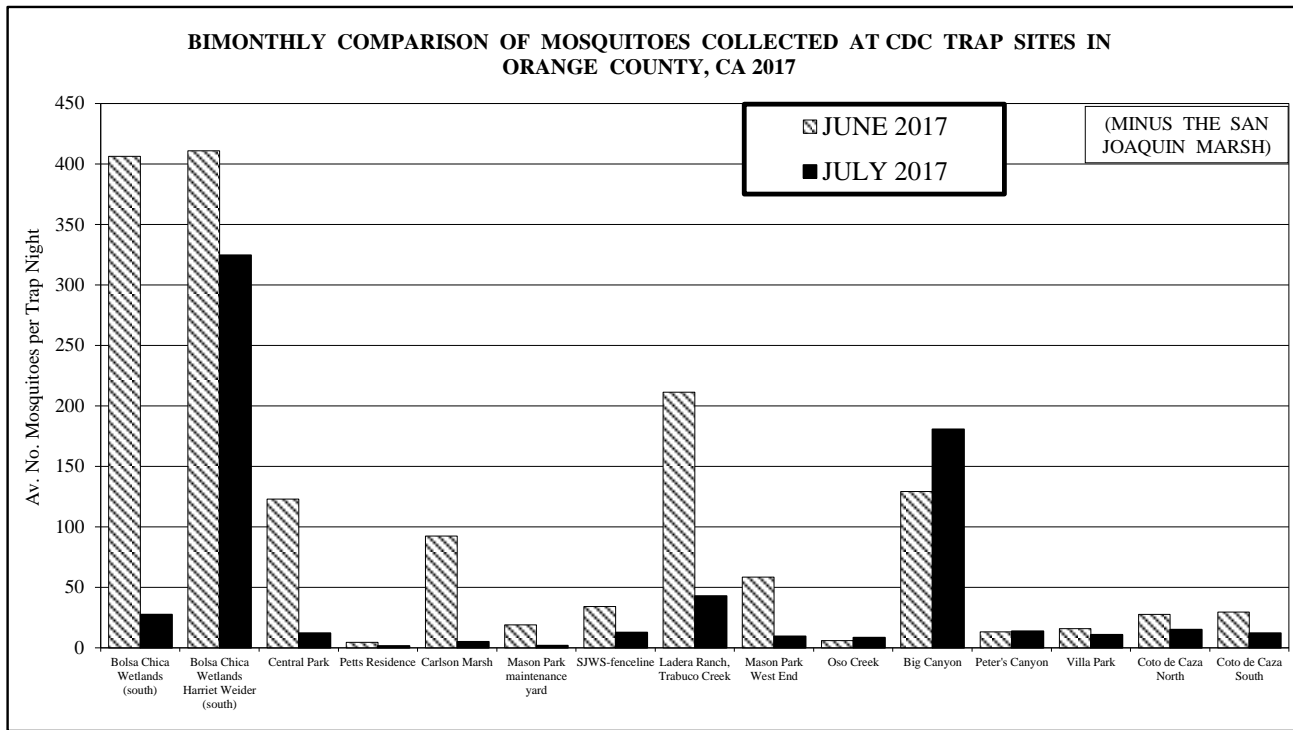
MOSQUITO TRAPPING
Mosquitoes/CDC/C0₂ Traps

During the month of July, CDC trap counts decreased overall, except at the Big Canyon site (Newport Beach), compared to the previous month. The decrease at many sites was the result of mosquito reduction efforts. Forty-six (46) routine CDC traps were operated for a total of 179 trap-nights during July. The proportion and amount of mosquitoes captured by species is as follows: the southern house mosquito, *Culex quinquefasciatus*, 10.7% (28 males, 792 females); the encephalitis mosquito, *Culex tarsalis*, 2.1% (1 male, 159 females); *Culex erythrothorax*, the Tule mosquito, 75.6% (20 males, 5,781 females), and the Cool Weather mosquito, *Culiseta incidens*, was 2.7% (0 males, 203 females). The total number of mosquitoes collected from CDC traps, across all species, was 7,675 (58 males and 7,617 females). The average number of mosquitoes collected in CDC traps per trap night (ptn) for urban sites was 15.2. Traps placed in urban wetlands averaged 67.9 ptn (some significant sites are: **Big Canyon** (Newport Beach), **Bolsa Chica Wetlands** (Huntington Beach), **39 Marsh** (Huntington Beach), and **Trestles** (San Clemente)).

Bold lettering signifies primary producers.



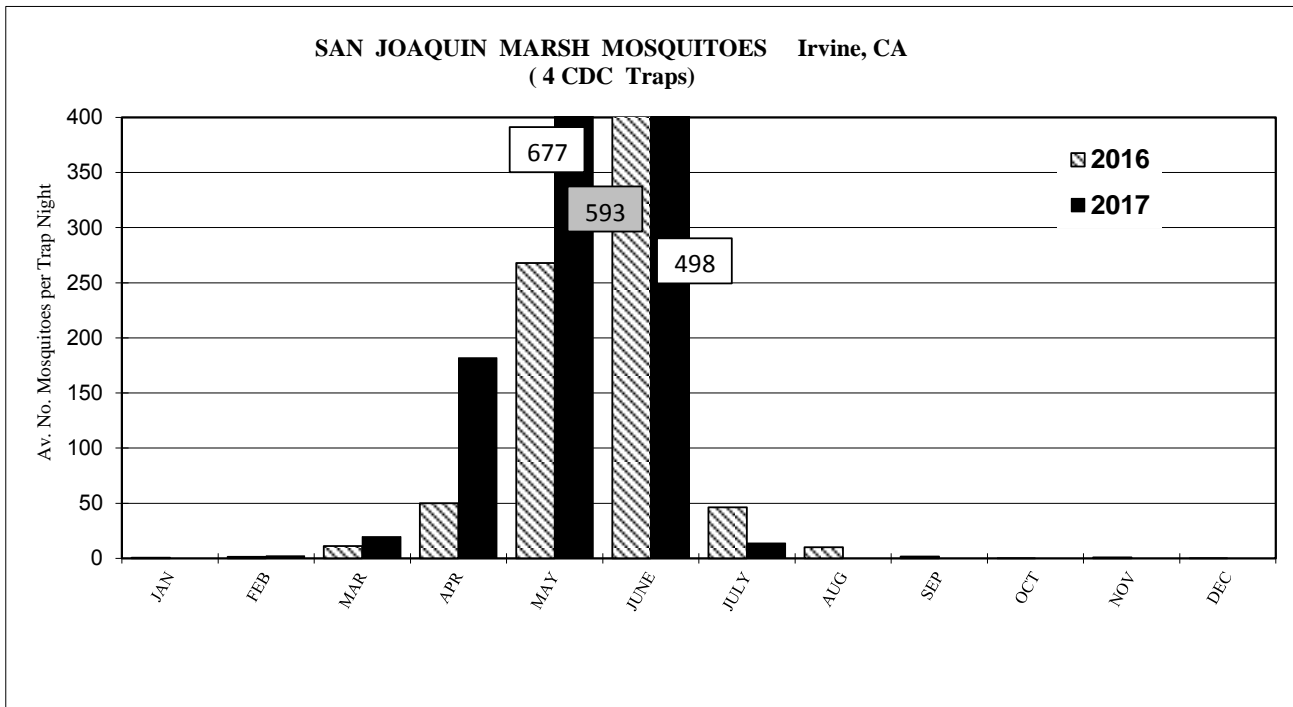
Mosquito Trapping (continued)



MOSQUITO SAMPLES TESTED FOR WEST NILE VIRUS

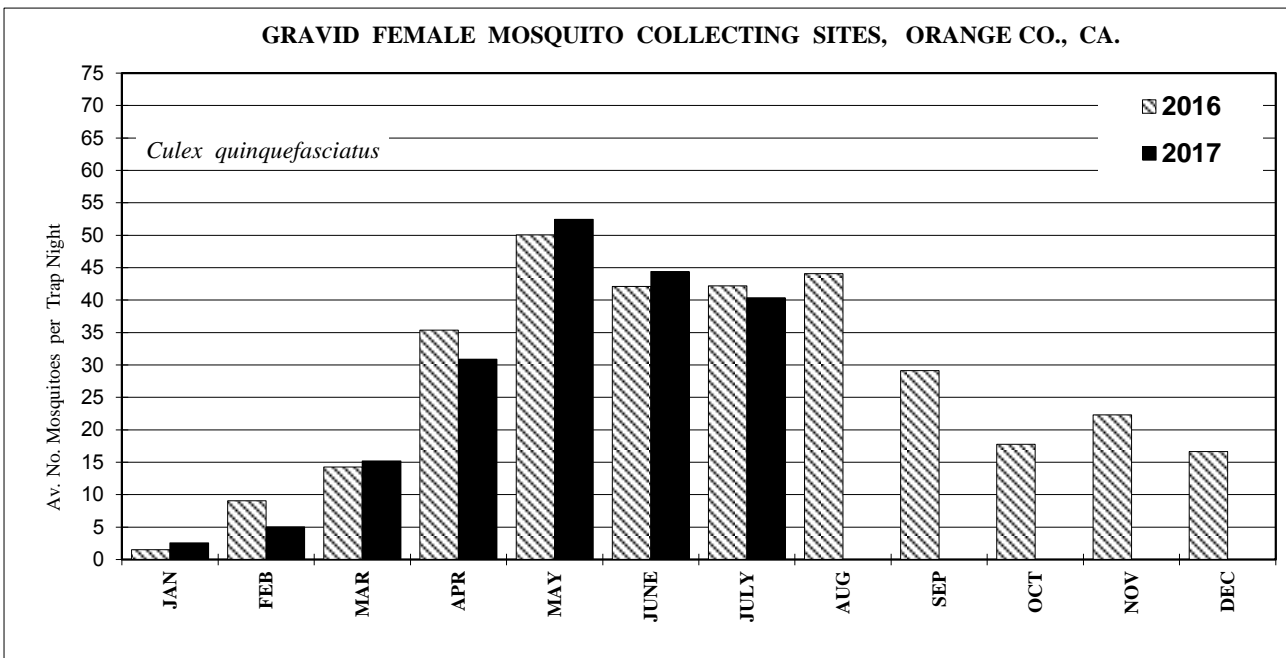
In total, 665 mosquito batches (pools) were collected by the District from June 30-July 29, 2017. The pools were collected from 35 cities. Of those tested (662), 42 samples were positive for West Nile virus (WNV). No samples were positive for Saint Louis encephalitis (SLE) or Western equine encephalomyelitis (WEE) viruses. The mosquito infection rate (MLE method) for July is 2.33 (CDC & CDPH considers an epidemic threshold to be an infection rate greater than 5.0).

Mosquito Trapping (continued)

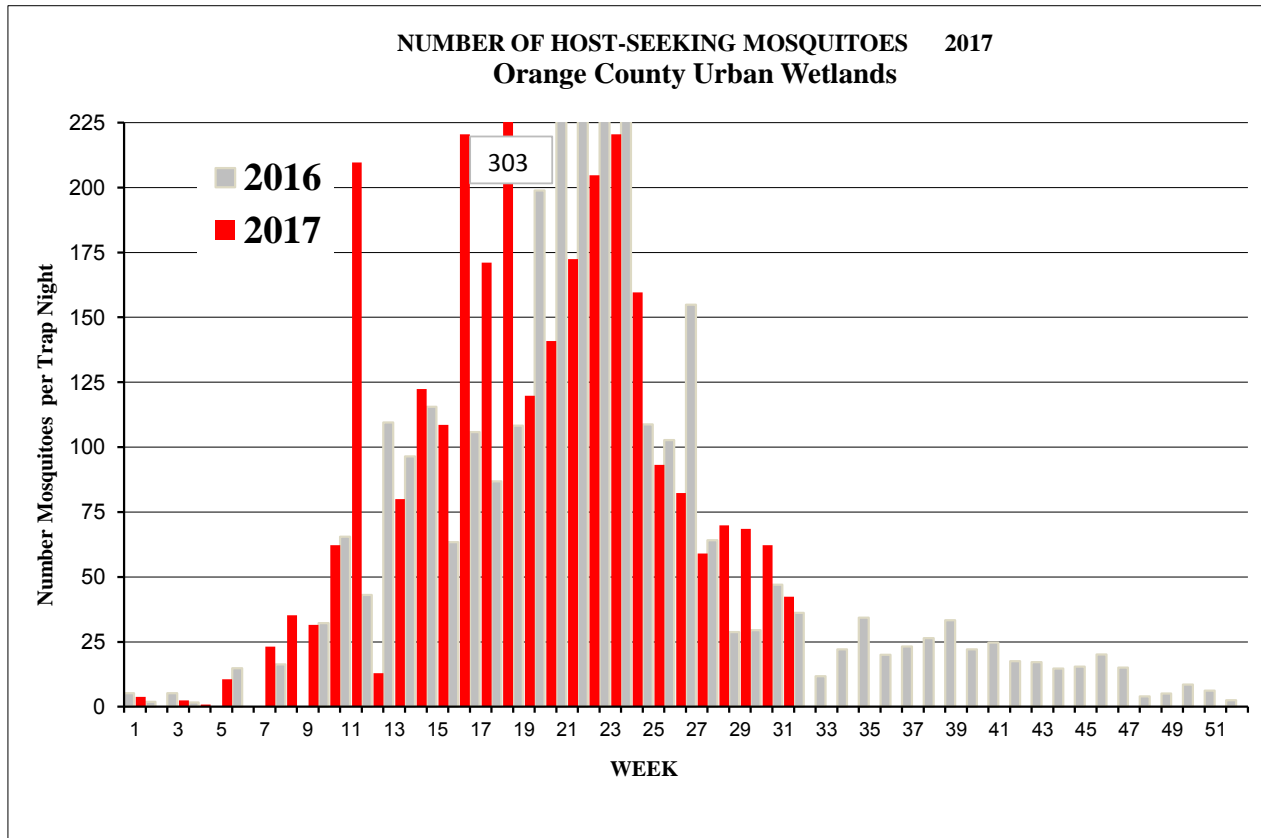
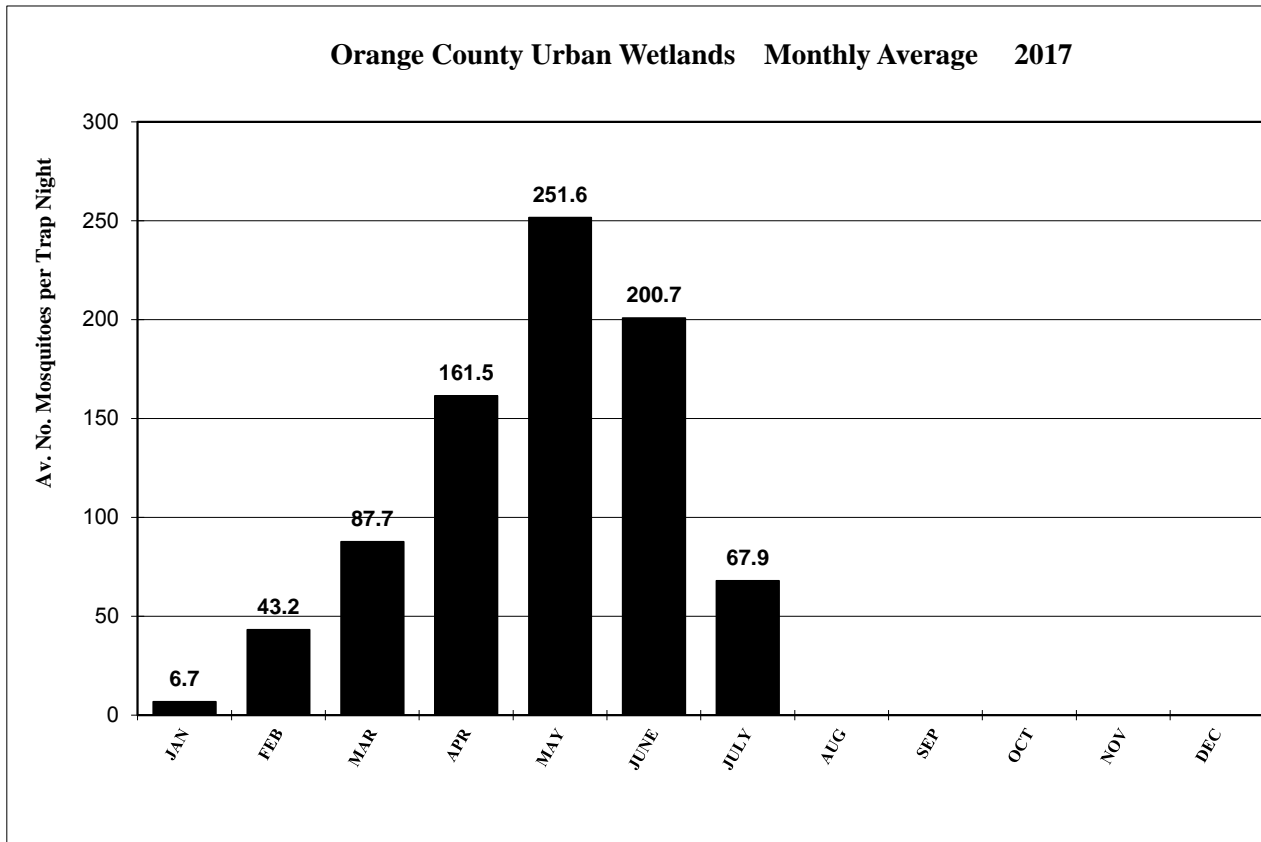


Mosquitoes/Gravid Traps

During July, 2017, the number of gravid female *Culex quinquefasciatus* averaged 40.3 ptn. These mosquitoes were collected weekly from 57 routine trap sites for a sum of 135 trap-nights, and a total of 268 males and 5,447 females. Counts ranged from 3.5 to 223.3 mosquitoes ptn from all sites that were sampled. Highest counts ptn (in descending order) were from: Naval Weapons Station (Seal Beach), La Mirada Creek (La Habra), Craig Park (Fullerton), and Anaheim Cemetery (Anaheim). Some of these sites have been previously positive for WNV since introduction of the virus to Orange County in 2004. The total number of mosquitoes collected for the month was 4,990 (277 males and 4,713 females) for all species.



Mosquito Trapping (continued)

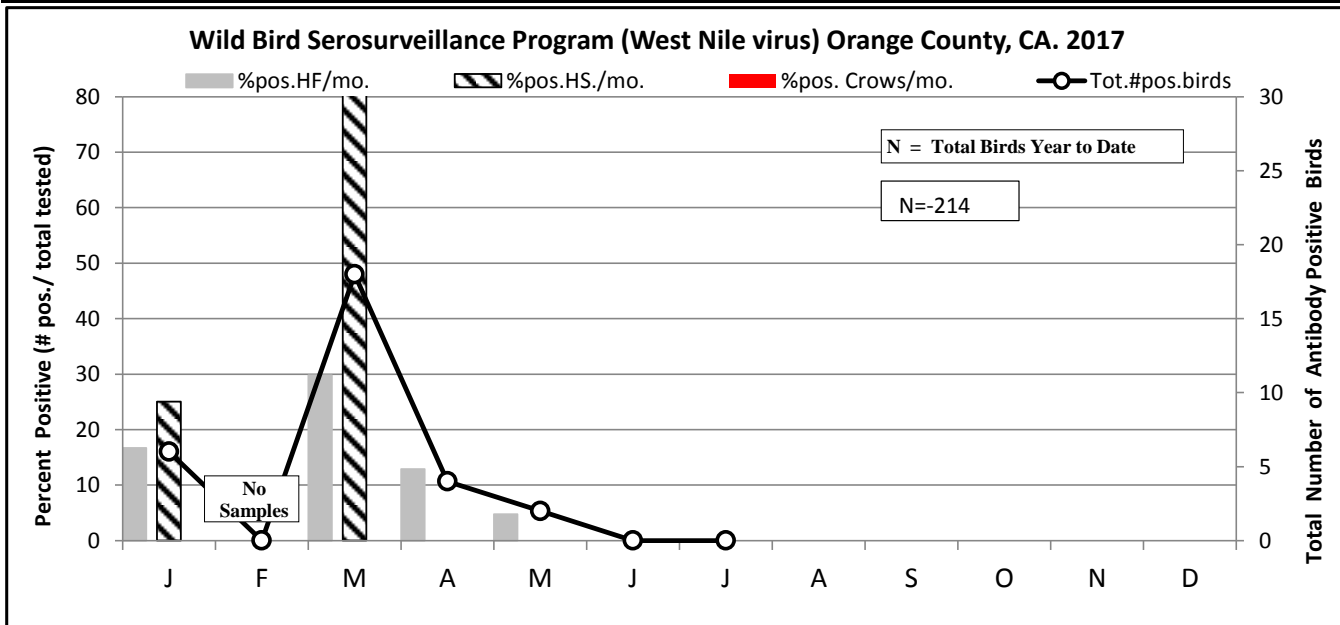


Wild Bird Surveillance (SLE/WEE/WNV) Program

The District received 66 reports of dead birds in July. Fourth-five (55) dead birds were collected, and of those, 51 were sampled and tested for WNV. Of those tested, four birds were found positive for WNV. Year to date, the laboratory has detected 8 WNV-positive dead birds. Last year at this time, the District detected 12 WNV-positive dead birds. The dead bird program continues to test all dead birds submitted by the public and animal care facilities throughout the county for WNV.

During July, 26 live wild birds (all house finches) were collected and sampled.. WNV antibodies test results are pending.

Month	1st time plus previously positive birds			Graph and table have been updated for WNV positives								
	Tot. birds tested	Tot.#pos.birds	%pos.for WNV	Tot.HF coll./mo.	Tot.HS coll./mo.	Tot. Crows coll/mo	#pos.HF/mo.	#pos.HS/mo.	#pos.Crows/mo	%pos.HF/mo.	%pos.HS/mo.	%pos.Crows/mo.
J	32	6	18.8	24	8	0	4	2	0	16.7	25.0	0
F	0	0	0.0	0	0	0	0	0	0	0.0	0.0	0
M	58	18	31.0	57	1	0	17	1	0	29.8	100.0	0
A	31	4	12.9	31	0	0	1	0	0	12.9	0.0	0
M	42	2	4.8	42	0	0	2	0	0	4.8	0.0	0
J	51	0	0.0	51	0	0	0	0	0	0.0	0.0	0
J	26	0	0.0	12	14	0	0	0	0	0.0	0.0	0
A												
S												
O												
N												
D												
YTD	240	30	12.5	217	23	0	24	3	0	11.1	13.0	0.0



Wild Bird Surveillance (WNV) Program (cont'd)

CUMMULATIVE TOTAL NUMBER OF DEAD BIRDS TESTED AT OCMVCD AS OF JULY 31, 2017									
Location	Jul	Jul POS	YTD	YTD POS	Location	Jul	Jul POS	YTD	YTD POS
Aliso Viejo	1		1		Los Alamitos			1	
Anaheim	5	1	26	1	Midway City				
Anaheim Hills	1		3	1	Mission Viejo	4		13	
Brea	1		8		Modjeska Canyon				
Buena Park	1				Newport Beach	1		5	
Cerritos					Orange	1		16	
Corona del Mar					Placentia	2		10	
Costa Mesa	2		12		Portola Hills				
Coto de Caza			3		Rancho Sta. Margarita	2		4	
Cypress	1		5		Rossmoor				
Dana Point					San Clemente	1		5	
Foothill Ranch			1		San Juan Capistrano	2		5	
Fountain Valley			4		Santa Ana	3		13	
Fullerton	2	2	7	2	San Juan Hot Springs				
Garden Grove	2		7		Seal Beach	1		3	
Huntington Beach	4		16		Silverado Canyon	1		5	
Irvine	5		36	2	Stanton				
La Habra	1	1	6	1	Trabuco Canyon			1	
La Palma					Tustin	3		6	
Ladera Ranch			3		Unincorp., O.C.				
Laguna Beach			2		Unincorp., Ortega Hwy.				
Laguna Hills			3		Villa Park			1	
Laguna Niguel			1		Westminster			1	
Laguna Woods	1		2		Yorba Linda	3		6	
Lake Forest	3		11	1	Other				
					TOTAL	54	4	252	8
Bird Species	Jul	Jul POS	YTD	YTD POS	Bird Species	Jul	Jul POS	YTD	YTD POS
American crow	18	2	78	5	Mourning Dove	2	1	16	1
American kestrel			2		Northern mockingbird	1		2	
Barn Owl			6		Red-Shouldered hawk	2		5	
Common raven	1		5		Red-tailed hawk	1		11	
Cooper's hawk	6		22		Rock pigeon	2		6	
Great horned owl			2		Swainson's thrush			3	
House finch	12		28		Western bluebird	3	1	8	2
House sparrow	2		9		Other*	4		45	
Lesser goldfinch			4		TOTAL	54	4	252	8

*Includes all other bird species that were not frequently collected (≤ 5 for the year)

West Nile Virus Program (cont'd)

There have been no human WNV cases reported in Orange County during July. Year-to-date, there has been one human case reported from Laguna Beach. Elsewhere in California, six human WNV cases have been reported year-to-date. Of the three new cases this month, one resident was from San Bernardino County, and two were from Los Angeles County.

CALIFORNIA ARBOVIRUS SURVEILLANCE TESTING SUMMARIES 2017								
Month of July					Year to Date			
	No. Tested	SLE Pos.	WEE Pos.	WNV Pos.	No. Tested	SLE Pos.	WEE Pos.	WNV Pos.
HUMANS	1	0	0	1	6	0	0	6
EQUINES	0	0	0	0	0	0	0	0
DEAD BIRDS	271	0	0	76	1,086	0	0	115
MOSQUITO POOLS (RT-PCR and RAMP tests)	7,045	13	0	713	23,496	17	0	1,125
CHICKENS								
California	1,759	0	0	33	5,917	0	0	34

TICK-BORNE DISEASE SURVEILLANCE

The District collects ticks for tick-borne disease surveillance, such as Lyme disease, Rocky Mountain spotted fever, and Pacific Coast tick fever. No ticks were collected in July. So far, none of these ticks have tested positive for disease agents.

FLEA-BORNE TYPHUS SURVEILLANCE

There were two recently reported flea-borne typhus cases in Orange County. One was a resident from Placentia (onset date of 6/27/17) and the other was a resident from Yorba Linda (onset date 7/2/17). These flea-borne typhus investigations are pending. Four flea-borne typhus cases have been reported year-to-date in 2017 for Orange County.

DISEASE SURVEILLANCE & EMERGENCY PLANNING**Emergency Risk Rating**

The WNV Risk Rating for Orange County in July is at the "Elevated Risk" range (4.0), which is just below the "High Risk" range. This is due to higher average daily temperatures, a higher mosquito infection rate (MLE), detections of WNV-positive mosquito samples, WNV-positive dead birds, and human WNV infections in neighboring counties.

WEATHER INFORMATION, July, 2017

Highest Max Temp (°F): 85

Lowest Min Temp (°F): 61

Average Temp (°F):

-High: 83.0

-Low: 63.4

-Overall: 73.2

Total Precipitation (inches): 0.01

Five Year Average (2012-2016) for the Month of July

Average Temp (°F):

-High: 82

-Low: 61

-Overall: 72

MOSQUITO FISH- *Gambusia affinis*

The District planted approximately 12,000 *Gambusia affinis* in multiple mosquito breeding source types including ponds and pools during the month of July, 2017.

The cumulative total of *Gambusia affinis* planted in various sources from January 1 to July 31, 2017, is approximately 61,000.

PROJECT EVALUATIONS

There were no vector control evaluations requests submitted projects in July 2017.

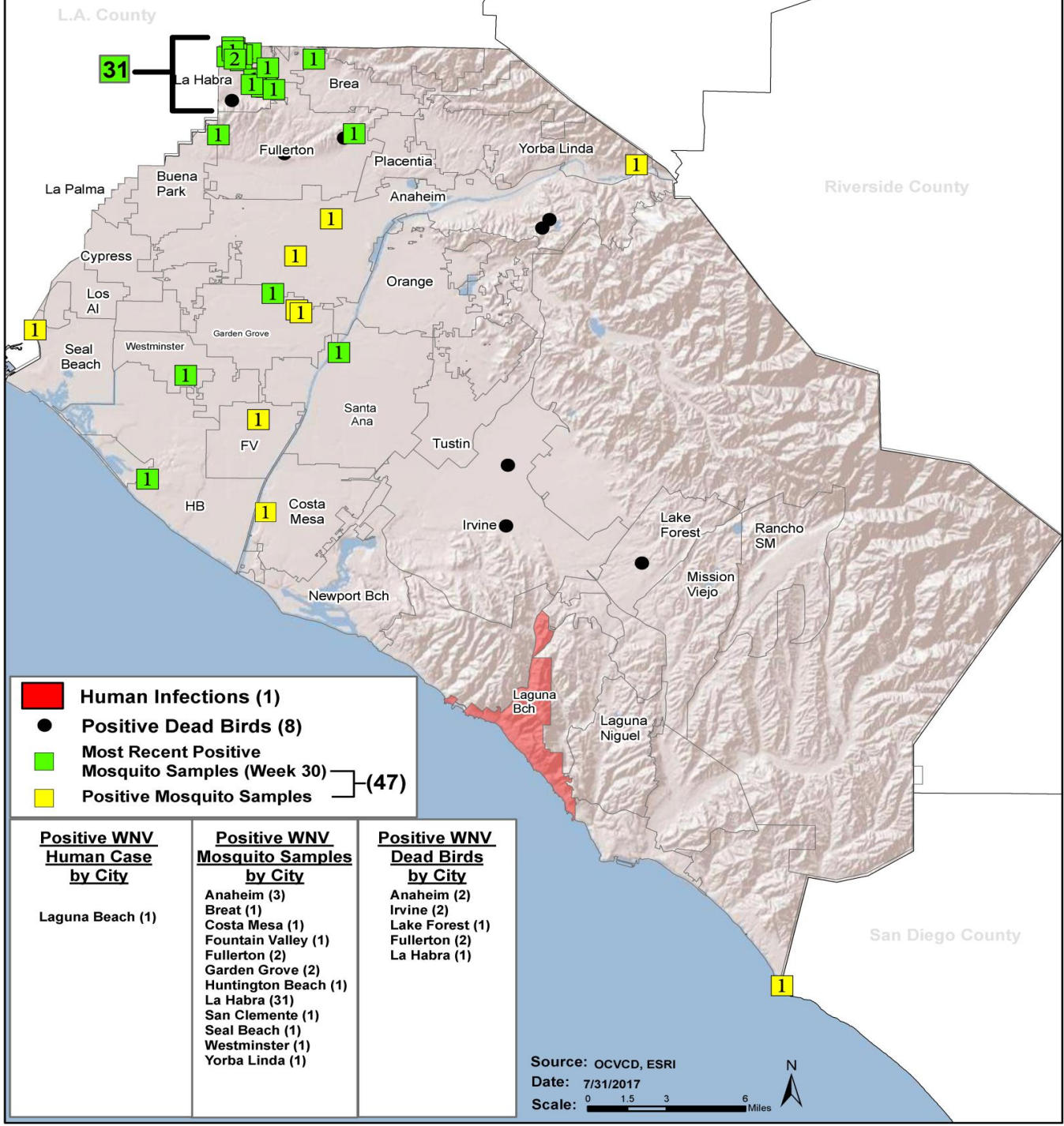
CUMMULATIVE TOTAL NO. OF DETECTED ADULT INAVSIVE <i>Aedes</i> BY OCMVCD AS OF JULY 30, 2017					
Location	July	YTD	Location	July	YTD
Aliso Viejo			Los Alamitos		
Anaheim	2	2	Midway City		
Anaheim Hills			Mission Viejo		
Brea			Modjeska Canyon		
Buena Park		2	Newport Beach		
Cerritos			Orange		
Corona del Mar			Placentia		
Costa Mesa			Portola Hills		
Coto de Caza			Rancho Sta. Margarita		
Cypress			Rossmoor		
Dana Point			San Clemente		
Foothill Ranch			San Juan Capistrano		
Fountain Valley			Santa Ana	1	2
Fullerton			San Juan Hot Springs		
Garden Grove			Seal Beach		
Huntington Beach			Silverado Canyon		
Irvine	5	5	Stanton		
La Habra	11	12	Trabuco Canyon		
La Palma			Tustin		
Ladera Ranch			Unincorp., O.C.		
Laguna Beach			Unincorp., Ortega Hwy.		
Laguna Hills			Villa Park		
Laguna Niguel			Westminster		
Laguna Woods			Yorba Linda		
Lake Forest			Other		
			TOTAL	19	23

***Aedes aegypti* and *Aedes albopictus* and Zika Virus Surveillance.**

The District is conducting intensive adult and larval surveillance for *Aedes aegypti* and *Aedes albopictus* mosquitoes in response to new discoveries of these invasive mosquitoes. Surveillance is also continuing in previously-known infestation areas throughout the County. Year-to-date, the District has received four travel-acquired Zika virus cases from OC Health Care. The District has not received any reported Zika cases since June. During 2016, OCMVCD investigated 31 travel-acquired Zika infections in Orange County.

Prior to 2017, only *Aedes aegypti* had been detected in the city of La Habra. In July, 2017, an *Ae. albopictus* female was found in the city, along with *Ae. aegypti* (2 *Ae. aegypti* and 1 *Ae. albopictus*, total).

West Nile Virus Activity Orange County, July 31, 2017



Orange County Mosquito and Vector Control District West Nile Virus Risk Assessment, July 2017

Table 1. WNV Surveillance Factor	Assessment Value	Benchmark	Value	
1. Environmental Condition Favorable environmental conditions in Orange County for virus multiplication/transmission. Considers temperature for prior 1 or 2 week period.	1	Average daily temperature $\leq 56^{\circ}\text{F}$		
	2	Average daily temperature 57 - 65 $^{\circ}\text{F}$		
	3	Average daily temperature 66 - 72 $^{\circ}\text{F}$		
	4	Average daily temperature 73 - 79 $^{\circ}\text{F}$	4	
	5	Average daily temperature $> 79^{\circ}\text{F}$		

Cx tarsalis

2. Abundance of adult <i>Culex quinquefasciatus</i> or <i>Culex tarsalis</i> Area wide average of adult mosquitoes the last 5 years = mosquitoes/trap night by month.	1	Vector abundance very low ($\leq 50\%$)		
	2	Vector abundance below average (51 - 90%)		
	3	Vector abundance average (91 - 150%)	3	
	4	Vector abundance above average (151 - 300%)		
	5	Vector abundance well above average ($> 300\%$)		
3. Infection rate (MLE) in variable pool sizes of <i>Culex quinquefasciatus</i> and <i>Culex tarsalis</i> mosquitoes. Considers pooled data for prior 1 or 2 week period.	1	MLE = 0		
	2	MLE $\geq 0.001 - 1.0$		
	3	MLE = 1.1 - 2.0		
	4	MLE = 2.1 - 5.0	4	
	5	MLE > 5.0		
4. Dead Bird Infection Number of birds that have tested positive (recent infections only) for WNV during the prior 30 days.	1	No WNV positive dead birds in Southern California		
	2	One or more WNV positive dead birds in neighboring county		
	3	One WNV positive dead bird in Orange County		
	4	Multiple WNV positive dead birds in broad region of Orange County		
	5	Multiple clusters of WNV positive dead birds in specific regions of Orange County	5	
5. Seroprevalence of WNV in free-ranging birds WNV antibody-positive/total sampled biweekly.	2	$> 30\%$ seroprevalence		
	3	21 - 30% seroprevalence		
	4	11 - 20% seroprevalence		
	5	$< 10\%$ seroprevalence		
6. Human Infections Do not include this factor in calculations if no cases are detected in region	3	One or more human infections in neighboring county		
	4	One or more human infections in Orange County	4	
	5	Multiple human infections in specific region of Orange County		

Cx tarsalis

Response Level / Average Rating: Normal Season (1.0 to 2.5) Elevated Risk (2.6 to 4.0) High Risk (4.1 to 5.0)	TOTAL	20	
	AVERAGE	4.0	

H. PRESIDENT'S REPORT AND TRUSTEE COMMENTS

I. DISTRICT MANAGER'S REPORT – DISCUSSION AND POSSIBLE ACTION

J. DISTRICT LEGAL COUNSEL REPORT – DISCUSSION AND POSSIBLE ACTION

CLOSING

K. CORRESPONDENCE – DISCUSSION AND POSSIBLE ACTION NONE

L. FUTURE AGENDA ITEMS

M. ADJOURNMENT

- 1. ADJOURN TO THE NEXT REGULAR MEETING OF SEPTEMBER 21, 2017 STARTING AT 3:00 P.M. AT THE ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT OFFICES, 13001 GARDEN GROVE BLVD., GARDEN GROVE, CA 92843**

ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT

MEETING CALENDAR

MEETING	LOCATION	DATE
CSDA Annual Conference	Monterey, CA	September 25-28, 2017
MVCAC Fall Quarterly Meeting	Sacramento, CA	Oct 31-Nov 2, 2017
MVCAC Planning Meeting	Emeryville, CA	Nov 30-Dec 1, 2017
CalPELRA Annual Conference	Monterey, CA	December 4-8, 2017
MVCAC Annual Conference	Sacramento, CA	January 28-31, 2018
AMCA Annual Conference	Kansas City, MO	Feb 26-Mar 2, 2018
Vertebrate Pest Conference	Rohnert Park, CA	Feb 26-Mar 1, 2018
MVCAC Spring Quarterly Meeting	South Lake Tahoe, CA	April 26-27, 2018
MVCAC Legislative Day	Sacramento, CA	TBD 2018
AMCA Legislative Days	Washington D. C.	May 2018
CSDA Legislative Days	Sacramento, CA	May 2018
RIFA Conference	Cary, NC	TBD 2018
VCJPA Annual Workshop	Walnut Creek, CA	TBD 2018