

# DELTA MOSQUITO & VECTOR CONTROL DISTRICT

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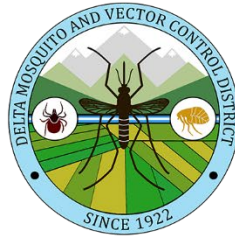
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## REPORT OF THE MANAGER JUNE 2024

### I. Water and Weather

The Delta Mosquito and Vector Control District (DMVCD) Weather Station reported an average high temperature of 96.9°F with an average low of 67.0°F and 0.0 inches of rainfall as of June 30, 2024. The National Oceanic and Atmospheric Administration 1991-2020 seasonal averages for high and low temperatures in June were 88.8°F and 61.5°F respectively, with average rainfall of 0.13 inches.

Water storage at Pine Flat Reservoir decreased to 885,330 acre-feet as of June 30, 2024. Pine Flat Reservoir's water inflow rate is 2,371 cubic feet per second (CFS) while its release is 6,602 CFS. The Lake Kaweah Reservoir storage decreased to 123,156 acre-feet. Lake Kaweah's water inflow rate is 2,518 CFS and its release increased to 2,549 CFS as of June 30, 2024.

### II. Narrative

Field operations received 96 mosquito service requests and 7 fish requests in June 2024. The service request inspections consisted of a Vector Control Technician inspecting the reported property for any standing water that mosquito larvae could breed in. During this time, the technician used an integrated vector management (IVM) strategy to reduce any mosquito-breeding found. In addition, technicians used this opportunity to educate residents on mosquito-breeding prevention and how to protect themselves from mosquito bites and mosquito-borne diseases.

### **Operations**

All the field techs are hard at work, we have moved the start time to 6:00 AM so they can get the heavy spraying done before the heat gets too hot to spray. The Urban Techs are coming in at 7:00 am to avoid the heat as much as possible and not be too early to contact residents. We are still working on swimming pools and storm drains.

The Ford Maverick has been put in service and so far, everyone likes it. Currently, we have all the fleet up and running. We do have some small repairs like AC, lights, and spray pumps. Bryan Ferguson did a drone treatment at the Ivanhoe sewer farm.

## **Outreach**

This month, The DMVCD took part in 6 outreach events: two Wednesday morning farmers markets in Visalia and one Saturday morning farmers market in Visalia. We attended three events of the six-event series for the Dinuba Farmers Market. New tailgate graphics have been ordered; they are expected to be completed and installed as soon as the new vehicles arrive. Staff shirts were ordered for full-time employees; they're expected to arrive within the first two weeks of July. The employee of the quarter plaque for the second quarter of 2024 has been updated and a certificate created.

The first inspections for the annual aerial pool list are complete; we had fewer issues than prior years. Any issues encountered this season will be considered for next year's annual pool inspection project.

## **Laboratory**

Routine mosquito trapping continued through June 2024. Traps were set throughout the District in Goshen, Traver, London, Delft Colony, Dinuba, Orosi, Seville, Kings River area, Elderwood, Woodlake, Lemon Cove, Ivanhoe, Exeter, Farmersville, and Visalia.

A total of 39,697 mosquitoes were collected across 1,674 trap nights. The District-wide average of 23.7 mosquitoes per trap night for June was 27.0% lower than the previous 5-year average of 32.5 and 65.1% lower than the 2023 average of 68.0 mosquitoes per trap night for the same time. The top 3 mosquito species caught in June were *Culex quinquefasciatus* at 67.4%, followed by *Ae. aegypti* at 23.2%, and *Cx. stigmatosoma* at 4.4%. Compared to June of 2023, the top 3 mosquito species caught were *Cx. quinquefasciatus* at 59.8%, followed by *Cx. tarsalis* at 34.0% and *Ae. aegypti* at 3.7%. Arbovirus testing for West Nile virus (WNV), St. Louis Encephalitis virus (SLEV), and Western equine encephalitis virus (WEEV) continued through June. As of June 30, 2024, DMVCD tested all 743 mosquito samples collected in June. One sample was positive for St. Louis Encephalitis virus and was collected in north Visalia. Three dead bird brain samples were collected in June and have all tested negative for WNV, SLEV, and WEEV. No kissing bugs have been reported to the district so far in June.

Technicians brought in 18 mosquito larvae samples to the laboratory for species identification in June 2024. There were 42 larval samples collected in June 2023.

There were 35 technician and homeowner mosquitofish requests in June 2024 to distribute 1,004 fish. In June 2023, there were 40 technician and homeowner mosquitofish requests to distribute 1,712 fish. Approximately 1,265 mosquitofish fry were produced by June 30, 2024.

Routine laboratory maintenance continued during June 2024. Monthly safety checks for fire extinguishers and emergency lights were performed as well as weekly safety showers and eyewash inspections.

The laboratory staff tested 59 mosquito samples from Tulare Mosquito Abatement District (MAD) in June 2024.

There were 96 service requests in June 2024.

### 2024 Service Request Summary

<b>2024</b>	<b>Mosquitofish</b>	<b>Inspection</b>	<b>Mosquito</b>	<b>Source</b>	<b>Other</b>	<b>Total</b>
<b>January</b>	0	2	2	1	0	<b>5</b>
<b>February</b>	3	5	1	12	0	<b>21</b>
<b>March</b>	5	17	6	5	0	<b>33</b>
<b>April</b>	4	25	1	6	0	<b>36</b>
<b>May</b>	15	110	0acr	0	0	<b>125</b>
<b>June</b>	7	15	51	5	1	<b>79</b>
<b>Total</b>	<b>34</b>	174	<b>61</b>	<b>29</b>	<b>1</b>	<b>299</b>

### III. Vector and Disease Surveillance

Delta MVCD Summaries:

**Humans:** No new human cases reported to DMVCD in June 2024. In 2023, there were 3 confirmed human cases of WNV and SLEV co-infection, 1 probable WNV and SLEV co-infection, 1 confirmed WNV case, and 6 probable WNV cases. There was 1 potential WNV death in 2024 but the patient contracted WNV in 2023. It is unclear whether the patient had other co-morbidities.

**Birds:** 3 dead birds were reported to DMVCD in June 2024 and all 3 tested negative.

**Mosquitoes:** 743 samples were collected and tested in June 2024. There is 1 SLEV positive. In 2023, 7,082 mosquito samples were tested with 473 positive WNV samples, 172 SLEV positive samples, and 47 positives for both WNV and SLEV.

#### **State Surveillance:**

**Humans:** As of June 30, 2024, 0 human cases of WNV from 0 counties and 0 cases of SLEV from 0 counties have been reported.

**Birds:** As of June 30, 2024, 61 dead birds from 10 counties tested positive.

**Mosquitoes:** As of June 30, 2024, 203 mosquito samples from 14 counties have tested positive for WNV. Also, 9 samples from 3 counties have tested positive for SLEV.

**V1. Expenditures & Revenues – 2023/24**

Total Budget \$5,068,115.26

EXPENDITURES – July 1, 2023, to June 30, 2024

Salaries	\$2,912,306.18
Services & Supplies	\$1,236,040.76
Tax Admin Fee	\$75,283.00
Capital	\$93,907.20
Long-Term Debt	\$117,828.06
<b>TOTAL EXPENDITURES</b>	<b>\$4,435,365.20</b>

REVENUE RECEIVED - July 1, 2023– June 30, 2024

July	\$75.00
August	\$39,702.16
September	\$31,916.62
October	\$7,591.00
November	\$523.77
December	\$2,635,329.40
January	\$285,794.26
February	\$13,558.44
March	\$55,614.48
April	\$1,509,823.04
May	\$458,362.10
June	Unavailable
<b>TOTAL REVENUE TO DATE</b>	<b>\$5,038,290.27</b>

**IV. Timesheet Summary**

Month	Available Hours	Sick Hrs Used	Total Hrs Avail. For Work	Pct. Of Hrs Avail for Work
July	6,048	129	5,919	97.86
August	6,440	320.4	6,119.60	95.02
September	5,376	150.5	5,225.50	97.2

<b>October</b>	4,400	265.75	4,134.25	93.9
<b>November</b>	2,992	178	2,814	94.0
<b>December</b>	2,688	104	2,584	96.13
<b>January</b>	3,128	118	3,010	96.22
<b>February</b>	2,432	95.25	2,336.75	96.08
<b>March</b>	2,856	163	2,693	94.3
<b>April</b>	5,632	84.5	5,547.5	98.5
<b>May</b>	5,984	126	5,858	97.89
<b>June</b>	5,600	319.5	5,280.50	94.3

The District has a vacation policy that requires 24-hour notice to ensure the operational integrity of the workforce. Sick leave for doctor, dentist and/ or family medical necessity also requires advance notice-in so much as it is possible. Illness is unplanned and therefore unscheduled. Attendance records for the current year are shown in the table.

**\*\* June expenditures and revenue are not available as of 7/5/2024**