

# DELTA MOSQUITO & VECTOR CONTROL DISTRICT

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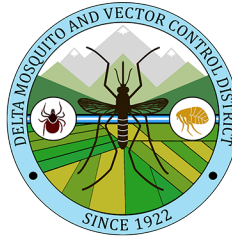
Bryan Ruiz  
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Bryan Ferguson  
*Foreman*

Erick Arriaga  
*Community Education &  
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Andrea Troupin  
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## REPORT OF THE MANAGER JANUARY 2024

### I. Water and Weather

The Delta Mosquito and Vector Control District (DMVCD) Weather Station reported an average high temperature of 59.4°F with an average low of 43.3°F and 1.55 inches of rainfall as of January 31, 2024. The National Oceanic and Atmospheric Administration 1991-2020 seasonal averages for high and low temperatures in January were 55.3°F and 38.4°F respectively, with average rainfall of 1.96 inches.

Water storage at Pine Flat Reservoir increased to 642,910 acres-feet as of January 31, 2024. Pine Flat Reservoir's water inflow rate is 840 cubic feet per second (CFS) while its release decreased to 247.7 CFS. The Lake Kaweah Reservoir storage increased to 33,789 acres-feet. Lake Kaweah's inflow also decreased to 32 CFS and its release decreased to 33 CFS as of January 31, 2024.

### II. Narrative

Field operations received five mosquito service requests in January 2024. The service request inspection 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 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**

The Auto and Equipment Shop Staff have been working on winter maintenance on District vehicles which consist of oil changes, brake inspections, lights, tire rotation, checking all hoses and belts, and anything else that needs maintenance.

We have been working on landscaping by the front fence and front gate by pouring concrete, placing rock in the yard, and placing ornate bark in the flower beds as seen in Figure1.



Figure 1. Before

After

From the Operations Program, Bryan Ruiz and Paul Harlien attended the Mosquito and Vector Control Association of California (MVCAC) Annual Conference and presented a poster on In2care Mosquito Traps against the Dangerous and Invasive Yellow Fever Mosquito, which won Third Place.

We auctioned three of the old Chevy S10 trucks in the Govdeals Auction and they were all sold for \$8,278.00 to the same person. The three trucks have been paid for but have not been picked up yet.

Paul Harlien has been working on the 2024/2025 budget for vehicles, pesticide equipment, planning the pesticide inventory, and working on Cyber Security updates with District grounds updates.

In January, the DMVCD participated in the 2<sup>nd</sup> and 3<sup>rd</sup> Science, Technology, Engineering, and Math (STEM) event series at Conyer Elementary School and Annie R Mitchell Elementary School in Visalia on Tuesday January 23, and January 30, 2024, respectively. A new service request form was created and tested for the 2024 season. The DMVCD In2Care Mosquito Trap Poster was printed and displayed at the MVCAC Conference.

Mark Nakata and Juan Pablo Ortega attended the Mosquito and Vector Control Association of California conference in Monterey, CA. Mark was the moderator for the 3D Printing symposium and gave a talk titled, "3D Printing at Delta MVCD." Andrea Troupin trained two staff from Shasta MVCD on disease testing. Andrea also attended the University of California Irvine National Biosafety Level 3 Training Program in Irvine, CA. Additionally, laboratory staff participated in continuing education webinars to maintain their Vector Control Technician Certification through the California Department of Public Health.

Trapping was only performed in the last week of January 2024 due to the cold weather and rain. Traps were set throughout the District in Goshen, Traver, Delft Colony, Dinuba,

Orosi, Seville, Woodlake, Ivanhoe, Exeter, Farmersville and Visalia. Trapping will be halted during the next week or so due to rain and potential flooding.

No mosquito larvae samples were brought to the laboratory for species identification in January 2024. Similarly, no larval samples were collected in January 2023.

There was no arbovirus testing for West Nile virus (WNV), St. Louis Encephalitis virus (SLEV), and Western equine encephalitis virus (WEEV) in January. In February 2024, the mosquitoes caught in December and January will be tested for all three viruses.

In January, laboratory staff went tick flagging at the rock plant and Kaweah Oaks Nature Preserve. Ticks were found at the rock plant, which is private land. No ticks were found at Kaweah Oaks Nature Preserve. The previous rock plant ticks were sent to the California Department of Public Health for rickettsial testing and the results will take several months. The most recently caught ticks will be stored at DMVCD. No kissing bugs were reported to the District in January.

There were no mosquitofish requests as of January 31, 2024. In January 2023, there were no mosquitofish requests to distribute. Approximately 2,033 mosquitofish fry were produced by January 31, 2024. In January 2023, 1,190 mosquitofish fry were produced.

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

The laboratory staff tested zero mosquito samples from Tulare Mosquito Abatement District (MAD) and zero samples collected from Tulare by Vector Disease Control International in January. The laboratory Scientific Program Manager will contact Tulare MAD and Kings MAD to find out if they are interested in testing their samples at our laboratory during the 2024 mosquito season.

There were 5 service requests in January.

#### 2024 Service Request Summary

2024	Mosquitofish	Inspection	Mosquito	Source	Other	Total
January	0	2	2	1	0	5
<b>Total</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>5</b>

**III. Vector and Disease Surveillance**

Delta MVCD Summaries

**Humans:** No new human cases reported to DMVCD in January 2024. In 2023, there were three confirmed human cases of WNV and SLEV co-infection, one probable WNV and SLEV co-infection, one confirmed WNV case, and six probable WNV cases.

**Birds:** No dead birds were tested in January; however, we did receive a dead bird from a resident which will be tested in February 2024.

**Mosquitoes:** No samples were tested in January. There are some mosquito pools waiting to be tested in February 2024. Last year, 7,028 mosquito samples were tested with 473 positive samples for WNV, 172 positives for SLEV, and 47 positives for both WNV and SLEV.

**State Surveillance:**

**Humans:** As of January 31, 2024, 0 human cases of WNV from 0 counties and 0 cases of SLEV from 0 counties have been reported.

**Birds:** On January 31, 2024, 0 dead birds from 0 counties tested positive.

**Mosquitoes:** As of January 31, 2024, 0 mosquito samples from 0 counties have tested positive for WNV. Also, 0 samples from 0 counties have tested positive for SLEV.

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

Total Budget \$5,068,115,26

EXPENDITURES – July 1, 2023, to January 31, 2024

Salaries	\$1,789,966.72
Services & Supplies	\$957,804.86
Tax Admin Fee	\$0.00
Capital	\$53,859.83
Long-Term Debt	\$58,914.03
<b>TOTAL EXPENDITURES</b>	<b>\$2,860,545.44</b>

REVENUE RECEIVED - July 1, 2023– January 31, 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	Unavailable
<b>TOTAL REVENUE TO DATE</b>	<b>\$2,715,137.95</b>

IV. Timesheet Summary

<b>Month</b>	<b>Available Work Hrs</b>	<b>Sick Hrs Used</b>	<b>Total Hrs Avail. for work</b>	<b>Pct. of Hrs Avail for work</b>
<b>July</b>	6,048	129	5,919	97.86
<b>August</b>	6,440	320.40	6,119.60	95.02
<b>September</b>	5,376	150.50	5,225.50	97.20
<b>October</b>	4,400	265.75	4,134.25	93.90
<b>November</b>	2,992	178	2,814	94.00
<b>December</b>	2,688	104	2,584	96.13
<b>January</b>	3,128	118	3,010	96.22

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.

**\*\* January expenditures and revenue are not available as of 2/9/2024**