

DELTA MOSQUITO & VECTOR CONTROL DISTRICT

Dr. Mustapha Debboun
General Manager

Post Office Box 310 * Visalia, California 93279-0310

Mir Bear-Johnson
Assistant Manager

1737 West Houston Avenue * Visalia, California 93291

Phone (559) 732-8606 * (877) 732-8606 * Fax (559)-732-7441

www.deltavcd.com

Hector Cardenas
Operations Program Manager

Crystal Grippin
Scientific Program Manager

Mary Ellen Gomez
Administrative Analyst



Erick Arriaga
*Community Education and
Outreach Coordinator*

REPORT OF THE MANAGER JULY 2022

I. Water and Weather

The temperature remained high throughout the month of July. The Delta Mosquito and Vector Control District (DMVCD) Weather Station reported an average high temperature of 99.2° with an average low of 68.9°F and 0.00 inches of rainfall as of 6/28/2022. The National Oceanic and Atmospheric Administration 1981-2010 seasonal averages for high and low temperatures in June were 93.8°F and 66.7°F respectively, with average rainfall of 0.00 inches.

Water storage at Pine Flat Reservoir decreased to 216,349 acre-feet by the end of July. By July 31, 2022, Pine Flat Reservoir's inflow had decreased to 408 cubic feet per second (CFS) and its release had decreased to 3,773 CFS. The Lake Kaweah Reservoir had less water than the previous month with 34,324 acre-feet on July 31, 2022. Lake Kaweah's inflow decreased, showing 37 CFS and its release was decreased to 389 CFS.

II. Narrative

In July, there were two personnel changes to the Rural and Urban operations. Lisa Salgado joined the Urban Team on July 18, 2022. She has been assigned to work in zone 14 which is SW Visalia. Due to a vacancy in Rural operations, Carlos Rodriguez has been reassigned from the Urban Team to the Rural Team to monitor Rural Zone 2 which covers the West part of the District.

Urban staff are currently wrapping up the remainder of the neglected fly-over pool list with 436 out of the 493 potential neglected pools having been inspected.

Wide area larviciding (WAL's) continued in July. Staff completed a total of 21 applications for WAL's and treated a total 1,050 acres of residential properties targeting the Yellow Fever mosquito, *Aedes aegypti*.

On July 26, four staff members (Paul Harlien, Bryan Ferguson, Mark Nakata, and Hector Cardenas) took and passed the California Department of Pesticide Regulation aircraft pilot certificate exam to conduct aerial applications in the District.

Field operations received 146 service requests for July. Service requests consist of a vector control technician inspecting the reported property for any standing water that can breed mosquito larvae. During this time, the technician uses an integrated vector

management strategy to reduce any mosquito-breeding found. In addition, technicians use this opportunity to educate residents on mosquito-breeding prevention, and how to protect themselves from mosquito bites. Field staff completed a total of 4,064 mosquito inspections throughout the District including rural and urban locations. Staff also conducted 889 larval applications. Storm drain operations continued in July. Operations treated 10,072 storm drains in relation to streets, parks, commercial complexes, and parking lots. Storm drains are treated using a 30-day residual product, Altosid WSP, and re-inspection occurs monthly.

The Woodlake aerial application took place on July 5, 2022. The aerial service did have some minor engine trouble in the morning of the application but did manage to complete the application after a short delay. The plane dispensed 120 pounds of Altosid XRG Ultra, covering 12 acres.

Due to the 1999 Chevrolet S10 pickup short bed 2WD vehicle's extreme old age, high mileage and need of extensive repair, it was sent to auction on July 20, 2022 on Govdeals.com which is a liquidity service marketplace. It was at auction from July 20, 2022 to July 29, 2022 till 2:00pm. The vehicle was sold to a local public member from Visalia, CA for \$2,750. The Govdeals received payment from the buyer on August 1, 2022. Once the vehicle is picked up by the buyer, funding will be transferred from Govdeals to the District by check within 21-28 days from pick-up date. In addition, on July 28, 2022, the District received four new Chevrolet Colorado trucks from Enterprise Fleet Management.

Routine mosquito surveillance continued throughout July. A total of 42,075 mosquitoes were collected across 1,342 trap nights. The District-wide average of 31.4 mosquitoes per trap night for July was 18.3% higher than the previous 5-year average of 26.5 and 17.0% higher than the 2021 average of 26.8 mosquitoes per trap night. The top 3 mosquito species caught in July were *Culex quinquefasciatus* at 72.1%, followed by *Aedes aegypti* at 20.7% and *Cx. tarsalis* at 4.0%. Compared to July of 2021, the top three mosquito species were *Cx quinquefasciatus* at 72.7%, followed by *Ae. aegypti* at 13.3% and *Cx. tarsalis* at 5.4%

Mosquito-borne disease testing for West Nile virus (WNV), St. Louis Encephalitis virus (SLEV), and Western Equine Encephalitis virus (WEEV) continued in July. The DMVCD tested 844 mosquito samples and 1 bird carcass collected in July, with 221 mosquito samples and one dead bird positive for WNV. In July 2021, 585 mosquito samples were collected with 23 samples positive for WNV. So far in 2022, a total of 225 mosquito samples, out of 2,103 samples tested, have tested positive for WNV. At this time last year, only 46 mosquito samples out of 1,048 mosquito samples collected, had tested positive for WNV.

There were 12 technician and homeowner mosquitofish requests in July to distribute a total of 389 mosquitofish. In July 2021, there were 32 technician and homeowner mosquitofish requests and distributed a total of 688 mosquitofish. A total of 500 mosquitofish fry were produced in July 2022. In July 2021, 1,223 fry were produced. Routine fish hatchery maintenance took place weekly during July 2022.

A total of 44 mosquito larvae samples were brought to the laboratory for processing. Susceptible *Cx. quinquefasciatus*, *Cx. tarsalis*, and *Ae. aegypti* colonies were maintained for insecticide resistance testing.

In July 2022, DMVCD attended 6 outreach events in Visalia and Dinuba, averaging about 10-15 residents who were educated on mosquito prevention. As we continue to have more presence in the District, residents are engaging and learning more about DMVCD and its services. During the events, we have been approached by some residents who either live in Three Rivers, Lindsay or Porterville and are disappointed to learn that their communities do not have a mosquito District serving them.

We have implemented a new design to our public notification via email that is modern and easy to read.

The current version of the 100-year invitation has been formatted to be printed in the next issue of the Good Life Newspaper. See below.

PLEASE JOIN US FOR

Delta Mosquito and Vector Control District's

100th Anniversary Celebration

Saturday October 8, 2022
 10am - 2pm
 1737 W Houston Ave
 Visalia CA, 93291

With special guests,
 food, music, and
 giveaways
 For more details, visit
DeltaMVCD.org

Join us on Saturday, October 8, 2022 for an Open House in celebration of the District's 100th Anniversary. All are welcome to attend this momental milestone to explore the District's headquarters, laboratory, fish hatchery, equipment, and enjoy food, music, and giveaways.



@DeltaMVCD - 559-737-8606 - DeltaMVCD.org



There were 149 service requests in July:

2022 Service Request Summary

2022	Fish	Inspection	Mosquito	Source	Other	Total
January	0	0	0	5	0	5
February	2	0	7	7	0	16
March	4	0	7	14	0	25
April	12	0	10	17	0	39
May	15	6	9	23	0	53
June	15	43	28	36	0	122
July	9	29	86	24	1	149
Total	57	78	147	126	1	409

III. Vector and Disease Surveillance

Delta MVCD Summaries

Humans: There were no human cases of an arbovirus reported by the local public health department for July 2022.

Birds: One dead bird tested positive for WNV in July. So far, in 2022, 1 dead bird has tested positive out of 7 dead birds tested.

Mosquitoes: In July 2022, 195 mosquito samples were positive for WNV out of 844 samples tested. So far in 2022, a total of 2,103 mosquito samples have been tested with 225 samples positive for WNV.

State Surveillance:

Humans: Seven human cases from 4 counties have tested positive for WNV in 2022.

Birds: 49 dead birds have tested positive for WNV. So far, 745 dead birds have been tested in 2022.

Mosquitoes: 702 mosquito samples have tested positive for WNV. So far, 17,315 mosquito samples have been tested in 2022.

IV. Expenditures & Revenues – 2022/23

TOTAL BUDGET \$4,833,308.73

EXPENDITURES – July 1, 2022 – July 31, 2022

Salaries	\$525,612.73
Services & Supplies	\$187,890.49
Tax Admin Fee	\$0.00
Capital	\$0.00
Long Term Debt	\$0.00

TOTAL EXPENDITURES	\$713,503.22
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REVENUE RECEIVED – July 1, 2022 – July 31, 2022

July	\$1,120.28
TOTAL REVENUE TO DATE	\$1,120.28

V. Time Sheet Summary

Month	Available Work Hrs	Sick Hrs Used	Total Hrs Available for Work	Pct. Of Hrs Avail for Work
July	5,880	20.5	5859.5	99.65

The District has a vacation policy that requires 24-hour notice in order 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.