

# **DELTA MOSQUITO & VECTOR CONTROL DISTRICT**

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## **REPORT OF THE MANAGER JULY 2021**

### **I. Water and Weather**

There were several heat waves throughout the month of July. The Delta Mosquito and Vector Control District (DMVCD) Weather Station reported an average high temperature of 102.0°F with an average low of 72.0°F and 0 inches of rainfall. The National Oceanic and Atmospheric Administration 1981-2010 seasonal averages for high and low temperatures in July were 94.1°F and 66.7°F respectively, with average rainfall of 0.01 inches.

Water storage at Pine Flat Reservoir decreased to 214,255 acre-feet by the end of the month. By July 31, 2021, Pine Flat Reservoir's inflow had decreased to 467 cubic feet per second (CFS) and its release decreased dramatically to 1,328 CFS. The Lake Kaweah Reservoir ended the month with less water than the previous month, with 31,323 acre-feet on July 31, 2021. Lake Kaweah's inflow fluctuated dramatically at the end of the month, with the last reading being from July 29, 2021 showing 67 CFS and its release was decreased to 146 CFS.

### **II. Narrative**

On July 2, 2021, the District purchased a right-hand side vehicle for the storm drain program. This equipment will allow a one-man operation to apply and inspect storm drains. In addition, this equipment will increase the efficiency of applications, and improve employee road safety while conducting inspections.

Continuous treatment of storm drain systems continued during the month of July throughout the Districts' jurisdiction. Approximately 10,502 storm drains were treated with a Methoprene product. Sites include street drains, parking lots, parks, apartment complexes, and schools. The District also began treating school storm drain with a long-term residual treatment and treated 36 active storm drains.

Larviciding aerial treatment for the Kaweah River Rock Plant Continued for the month of July, with the fourth treatment taking place on July 20, 2021. During the application, 8 acres were treated with an insect growth hormone regulator.

Due to high mosquito counts in the rural portion of the District, large BTI treatments have begun to reduce the mosquito populations near dense corn crops in the north region of Visalia.

On July 20, 2021, the Rural operation performed an ARGO (all-terrain vehicle) treatment covering 176-acre kiwi grove north of Dinuba treating multiple irrigation pockets.

Due to high viral activity, operations crew conducted an adult mosquito treatment on July 29, 2021. The treatment was conducted on the NW section of Visalia covering approximately 275 acres of land.

On July 26, 2021, Amanda Martin joined the urban operations team to assist with high trap counts specifically associated with *Aedes aegypti* sources.

High abundance of pasture mosquitoes north of Exeter on July 30, 2021 were decreased following an adult mosquito treatment.

The fish hatchery produced 1,223 fry in July. A total of 633 fish were distributed through 22 technician requests and 10 homeowner requests. So far, 2,813 fish have been placed in approximately 120 sources in 2021.

Routine mosquito surveillance continued throughout July. A total of 30,537 mosquitoes were collected across 1,140 trap nights. The District-wide average of 26.8 mosquitoes per trap night for the month of July is 1.3% lower than the previous 5-year average of 27.1, but 56.2% higher than the 2020 average of 17.2 mosquitoes per trap night. The top 3 mosquito species caught in July were *Culex quinquefasciatus* at 72.6%, followed by *Aedes aegypti* at 13.3% and *Culex 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 throughout July. The DMVCD tested 585 mosquito samples in July with 23 positives for WNV. Additionally, 2 dead bird carcasses were tested with 1 positive for WNV. The WNV positive mosquito samples were collected from Visalia, Farmersville, Dinuba, Peral, and west of Sequoia Fields. The WNV positive dead bird was collected from Visalia.

The Mosquito and Vector Control Association of California (MVCAC) conducted their quarterly conference over zoom on July 15, 2021, which was preceded by the Southern San Joaquin Regional Meeting, also over zoom, the previous Friday.

Interviews for the Community Education Outreach Coordinator took place near the end of the month, with an offer being made and accepted by Erick Arriaga to start in the position on August 16, 2021.

On July 28, 2021, the results from the balloting for the Prop 218 Assessment for funding additional *Aedes aegypti* activities passed with 57.03% weighted approval. The first funding from this assessment is not anticipated until December 2021 or January 2022.

Throughout July, employees who were not fully vaccinated continued to complete the online screening of COVID-19 survey and take paid time off to seek test results when required. The District will continue to be proactive in keeping employees and the public safe. Staff are encouraged to be fully vaccinated and allowed to take work time to do so.

There were 159 service requests in July:

## 2021 Service Request Summary

<b>2021</b>	<b>Fish</b>	<b>Inspection</b>	<b>Mosquito</b>	<b>Source</b>	<b>Other</b>	<b>Inquiries</b>	<b>Total</b>
<b>January</b>	0	0	1	2	0	0	<b>3</b>
<b>February</b>	0	0	0	2	0	0	<b>2</b>
<b>March</b>	0	0	7	17	1	2	<b>27</b>
<b>April</b>	21	0	14	31	1	1	<b>68</b>
<b>May</b>	32	20	27	35	0	1	<b>115</b>
<b>June</b>	23	44	72	42	1	0	<b>182</b>
<b>July</b>	16	0	95	47	1	0	<b>159</b>
<b>Total</b>	<b>92</b>	<b>64</b>	<b>216</b>	<b>176</b>	<b>4</b>	<b>4</b>	<b>556</b>

**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 the month of July.

Birds: There were 2 dead birds reported to the District in July, with 1 testing positive for WNV. In 2021, a total of 5 dead birds were positive for WNV out of 11 dead birds tested.

Mosquitoes: There were 23 new WNV positive mosquito samples out of 585 tested in July. In 2021, a total of 46 mosquito samples were positive for WNV out of 1,048 tested.

**State Surveillance:**

Humans: A total of 4 human cases have been reported in 4 counties across the state.

Birds: As of July 30, 2021, 94 dead birds have tested positive for WNV. So far, 94 dead birds from 9 counties have tested positive for WNV out of 737 tested in 2021.

Mosquitoes: As of July 30, 2021, 563 mosquito samples were positive for WNV. A total of 18,071 mosquito samples were tested for WNV, SLEV, and WEEV with 563 samples from 20 counties positive for WNV in 2021

**IV. Expenditures & Revenues – 2021/22**

TOTAL BUDGET \$3,974,072.78

EXPENDITURES – July 1, 2021 – July 31, 2021

Salaries	\$452,616.97
Services & Supplies	\$125,169.19
Tax Admin Fee	\$0.00
Capital	\$17,469.73
Building Improvements	\$0.00
<b>TOTAL EXPENDITURES</b>	<b>\$595,255.89</b>

REVENUE RECEIVED – July 1, 2021 – July 31, 2021

July*	
<b>TOTAL REVENUE TO DATE</b>	<b>\$0.00</b>

V. **Time Sheet Summary**

Month	Available Work Hrs	Sick Hrs Used	Total Hrs Available for Work	Pct. Of Hrs Avail for Work
July	5,376	119.25	5,256.75	97.79

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.

*\*July Revenue not available from Tulare County as of 8/2/21.*