

DELTA VECTOR CONTROL DISTRICT

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REPORT OF THE MANAGER August 2018

I. Water and Weather

Temperatures continued to remain high during the day in August. The average high temperature for the month was 98.7°F and the average low was 62.6°F, with 0.00 inches of rainfall reported by National Weather Service, Hanford station. The 30-year seasonal averages for high and low temperature in August are 92.8°F and 65.0°F respectively, with the 30-year average rainfall reported as 0.01 inches by the National Oceanic and Atmospheric Administration.

Water storage at Pine Flat Reservoir was recorded at 276,496 acre-feet by the end of the month. Its inflow decreased by around 50% to 637 cubic feet per second (CFS), while its outflow decreased to 2,396 CFS. Lake Kaweah Reservoir water was recorded at 14,976 acre-feet at the end of the month. The inflow decreased to 9 CFS, while the outflow decreased by approximately 500%, to be 99 CFS.

II. Narrative

The Delta Vector Control District laboratory staff continued its WNV surveillance program. In addition to routed gravid traps in populated areas, Encephalitis Virus Surveillance (EVS) traps were set to monitor mosquito activity around historical mosquito breeding sources, such as along Dairy Avenue, along the Kings River, and in the Kiwi and Citrus orchards near Dinuba, among other locations. Gravid trap averages were down from last month, at 10.6 mosquitoes per trap versus 21 per trap in July.

The new *Aedes* surveillance program continued in August, with lab techs and interns setting 60 BGS traps on a weekly basis in the District's incorporated cities. An influx of *Aedes* related service requests were answered with inspections and strategic BGS being placed, as quickly as possible. *Ae. aegypti* collected from 122 traps sets in August, almost doubled from the 71 trap sets in July which caught *Ae. aegypti*, with the highest trap count being 48 *Ae. aegypti* from a set in Dinuba. Yard inspections are being conducted at service request addresses and following high trap counts, but due to the sheer volume of trap counts and service requests, the lab is limited in its ability to expand to adjacent houses when trap counts are elevated or breeding is found. Current inspections are ongoing within Visalia, Dinuba and Exeter.

Arbovirus screening continued in August, finding 71 pools positive for disease. The lab found 33 mosquito collections tested positive for West Nile Virus (WNV), 36 mosquito collections testing positive for St. Louis Encephalitis Virus (SLEV), and two mosquito collections testing positive for both WNV and SLEV in the month of August. So far this year, positive WNV has been detected from Visalia, Farmersville, Exeter, Goshen, Dinuba, along the Kings River, and in the citrus and kiwi orchards outside of Dinuba. SLEV has been found in Visalia, Farmersville, the citrus and kiwi orchards near Dinuba, and in the rural area north and south of Visalia.

Weed control treatments were suspended the second week of August due to limited weed growth this time of year. Weed unit personnel were assigned to catch-basin duty when not on Larval control. District Foreman was assigned control efforts to two hundred acres of problem Kiwis in zone one. Adulticide treatment was made to the Kiwis and adjacent Citrus groves following high trap counts of WNV positive mosquitoes from the area. Technicians work load was alleviated some, due to Alta Irrigation Districts cease of water deliveries on August 28th and with the Kings River release reduced to minimal flow.

There were eighty-five service requests during August categorized as follows:

2018 Service Request Summary

	Fish	Inspection	Mosquito	Source	Other	Total
January		4	1			5
February		3				3
March		5		2		7
April	8	12	6	10	2	38
May	1	9	6	16		32
June	5	10	6	5		26
July	3	21	9	14	1	48
August	2	15	52	15	1	85
Total	19	79	110	62	4	244

III. Vector and Disease Surveillance

Delta VCD Summaries

Humans: One confirmed human case of WNV from Porterville has been reported to Delta VCD as of August 31st, 2018, with three probable cases of WNV also being reported. None of these cases are within district borders.

Birds: Three dead birds were reported within Tulare County, two within the city of Visalia, one in Tulare. Only one of the birds met the requirements for arbovirus testing and tested negative for all viruses.

Mosquito: Mosquito abundance data was collected weekly from 172 fixed gravid trap locations and 60 fixed BG trap locations. Mosquito pools were collected from traps in both fixed sites and strategic sites throughout the month. A total of 607 mosquito pools were tested with 33 pools testing positive for WNV, 38 pools testing positive for SLEV, and 2 pools testing positive for both WNV and SLEV.

State Surveillance:

Humans: As of August 31st, 2018, 42 human cases of WNV have been reported from 18 counties. At this date in 2017, 87 human cases had been detected from 13 counties.

Birds: As of August 31st, 2018, 397 birds had tested positive for WNV from 18 different counties. At this date in 2017, 264 WNV positive birds had been reported from 30 different counties.

Mosquitoes: As of August 31st, 2018, 1,456 pools have tested positive for WNV from 27 counties and 264 mosquito pools have tested positive for SLEV from 8 counties (Fresno, Kern, Kings, Riverside, and Tulare). At this date in 2017, 2,545 mosquito collections had tested positive for WNV from 24 counties and 70 mosquito collections had tested positive for SLEV from 11 counties.

IV. Expenditures & Revenues – 2018/19

TOTAL BUDGET \$3,092,198.15

EXPENDITURES – July 1, 2018 – August 31, 2018

Salaries	\$534,040.95
Services & Supplies	\$216,430.84
Tax Admin Fee	
Capital	\$16,648.74
Building Improvements	
TOTAL EXPENDITURES	\$767,120.53

REVENUE RECEIVED – July 1, 2018 – August 31, 2018

July	47.38
August	262.76
TOTAL REVENUE TO DATE	\$310.14

V. Time Sheet Summary

Month	Available Work Hrs	Sick Hrs Used	Total Hrs Available for Work	Pct. Of Hrs Avail for Work
July	4320	66.50	4253.50	98.46
August	5152	118.50	5033.50	97.70

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.