# DELTA VECTOR CONTROL DISTRICT

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# REPORT OF THE MANAGER June 2018

## I. Water and Weather

Temperatures continued to slowly increase in June, with the average minimum temperature being 10 degrees greater than the month of May. The average high temperature for the month was 82°F and the average low was 65°F, with 0.00 inches of rainfall reported by Weather Underground, Visalia station. The 30-year seasonal averages for high and low temperature in June are 89.1°F and 61.6 °F respectively, with the 30-year average rainfall reported as 0.14 inches by the National Oceanic and Atmospheric Administration.

Water storage at Pine Flat Reservoir was recorded at 697,364 acre-feet by the end of the month. Its inflow decreased by about 60% to 1,770 cubic feet per second (CFS), while its outflow increased to 6,425 CFS. Lake Kaweah Reservoir water was recorded at 100,773 acre-feet at the end of the month. The inflow decreased by over 300% to 192 CFS, while the outflow increased by approximately 87% to be 1,916 CFS.

# II. Narrative

The Delta Vector Control District laboratory staff continued its WNV surveillance program. In addition to trapping in the populated areas, Encephalitis Virus Surveillance (EVS) traps were set to monitor mosquito activity around historical mosquito breeding sources, such as the rock plant, along the Kings River, and in the Kiwi and Orange orchards near Dinuba, among other locations. Counts from the Rock Plant, Kings River, and Kiwis have begun to rise and were reported to field technicians. Gravid trap averages were up from last year, at 33 mosquitoes per trap versus 20 mosquitoes per trap in 2017.

The new *Aedes* surveillance program continued in June, with lab techs and interns setting 60 BGS traps on a weekly basis in the District's incorporated cities. Additional BGS were also set outside of the routed sites, called "Strategic BGS", to further monitor suspected high-risk areas (neighborhoods with yard drains, lush neighborhoods, and historic *Aedes aegypti* infestation areas). *Ae. aegypti* were collected from 30 trap sets in June, with the average number of *Ae. aegypti* in each trap being 2. Twenty-Seven yard inspections were completed, following high trap counts or service requests, in Orosi, Dinuba, and Beverly Glen, with breeding found in 9 yards. Follow up inspections, trapping, and responses to door hangers are ongoing.

Arbovirus screening continued in June, with 1 mosquito collection testing positive for West Nile Virus (WNV) and 15 mosquito collections testing positive for St. Louis Encephalitis Virus (SLEV). No mosquito collections tested positive for Western Equine Encephalitis Virus (WEEV).

The Kings, St. Johns and Kaweah rivers continue to flow at high levels, which has increased the treatment needs along those waterways. June 4<sup>th</sup> all field personnel's work hours changed to 6:30am to 3:00pm in preparation for the summer heat. Weed control treatments has remained within a 14-day return interval. Catch basin treatments continue to be on schedule despite losing two seasonal Technicians. A new Seasonal Technician was hired June 29<sup>th</sup> to fill one of the vacated positions. Continued high trap counts in Farmersville prompted an Adulticide treatment to decrease the population. The House mosquito crew has found and treated some small sources in the area as well.

There were twenty-six service requests during June categorized as follows:

	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
Total	14	43	19	33	2	111

## **2018 Service Request Summary**

#### **III. Vector and Disease Surveillance**

#### **Delta VCD Summaries**

<u>Humans:</u> No human cases of vector-borne disease have been reported to Delta VCD in 2018 to date.

<u>Birds:</u> Sixteen dead birds were reported within Tulare County, 5 within the city of Visalia, 8 within the city of Tulare, and one each from Strathmore, Lemon Cove and Porterville. Three birds met the requirements for arbovirus testing and did not test positive for WNV, SLEV or WEEV.

<u>Mosquito</u>: Mosquito abundance data was collected weekly from 172 fixed gravid trap locations and 60 fixed BG trap locations. A total of 911 mosquito pools were tested with 1 pool testing positive for WNV and 15 pools testing positive for SLEV. No pools have tested positive for WEEV.

#### **State Surveillance:**

<u>Humans:</u> As of June 29<sup>th</sup>, 2018, 9 human cases of WNV have been reported from 6 counties. At this date in 2017, three human cases had been detected from 3 counties.

<u>Birds</u> As of June 29<sup>th</sup>, 2018, 35 birds had tested positive for WNV from 12 different counties. At this date in 2017, 39 WNV positive birds had been reported from 12 different counties.

<u>Mosquitoes:</u> As of June 29<sup>th</sup>, 2018, 47 pools have tested positive for WNV from 8 counties and 29 mosquito pools have tested positive for SLEV from 3 counties (Fresno, Kern and Tulare). At this date in 2017, 412 mosquito collections had tested positive for WNV from 14 counties and 4 mosquito collections had tested positive for SLEV from 2 counties.

## IV. Expenditures & Revenues – 2017/18

TOTAL BUDGET

\$4,205,079.78

EXPENDITURES – July 1, 2017 – June 30, 2018

Salaries	\$2,085,980.11
Services & Supplies	\$484,738.63
Tax Admin Fee	\$58,558.00
Capital	\$26,629.32
Long-Term Debt	\$1,448,190.13
TOTAL EXPENDITURES	\$4,104,096.19

REVENUE RECEIVED – July 1, 2017 – June 30, 2018

July	\$533.21
August	\$158.70
September	\$12,310.49
October	\$205.60
November	\$810.30
December	\$1,634,092.49
January	\$334,738.65
February	\$1,405.97
March	\$24,300.04
April	\$963,281.62
May	\$380,947.39
June*	
TOTAL REVENUE TO DATE	\$3,352,784.46

### 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	4600	30.75	4569.25	99.34

September	4000	207.25	3792.75	94.82
October	2824	137.15	2686.85	95.15
November	1976	119.30	1856.70	93.97
December	1560	77.75	1482.25	95.02
January	2184	101.75	2082.25	95.35
February	2128	42.50	2085.50	98.01
March	3360	59.50	3300.50	98.23
April	5040	103.75	4936.25	97.95
May	5456	168.25	5287.75	96.92
June	4872	118.75	4753.25	97.57

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.

<sup>\*</sup>June revenue not available from Tulare County as of 7/6/18.