

DELTA VECTOR CONTROL DISTRICT

Michael W. Alburn
Manager

Post Office Box 310 * Visalia, California 93279-0310

Mir Bear-Johnson
Scientific Program Manager

1737 West Houston Avenue * Visalia, California 93291

Paul D. Jobe
Superintendent

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

Jesse Erandio
Biologist

www.deltavcd.com

Sheri D. Davis
Administrative Assistant

Crystal Grippin
Biologist

Mark Dyngge
Systems Administrator

Mark Nakata
Biologist

REPORT OF THE MANAGER OCTOBER 2019

I. Water and Weather

Temperatures continued to cool in October, with a cold snap at the beginning of the month. The average high temperature for the month was 80.4°F, and the average low was 44.2°F, with 0.00 inches of rainfall reported as preliminary data by the National Weather Service, Hanford Station. The 30-year seasonal averages for high and low temperature in October are 78.2°F and 52.5°F respectively, with the 30-year average rainfall reported as 0.61 inches by the National Oceanic and Atmospheric Administration.

Water storage at Pine Flat Reservoir decreased slightly, over the course of October, going down almost 23%, to be to be 427,814 acre-feet. By the end of the month Pine Flat Reservoir's inflow had increased, by only slightly more than 5%, to 922 cubic feet per second (CFS), while the release increased by almost 60% to 2,690 CFS. Lake Kaweah Reservoir water storage continued to decrease during the month, to be 14,243 acre-feet at the end of the month. Lake Kaweah's inflow increased slightly as well to 81 CFS, and its release decreased by over 43%, ending the month at 73 CFS.

II. Narrative

The Delta Vector Control District laboratory staff wrapped up its West Nile Virus (WNV) surveillance program and routed *Aedes* surveillance program on October 4th. Six of the lab seasonals were let go at this time. A total of 273 traps were placed in October, with 177 of those being routed traps, and the remaining 93 being strategic sets. Testing wrapped up as well, after having three sequential days without any positive pools. The last positive for St. Louis Encephalitis Virus (SLEV) was from an October 8th trap set, tested on October 9th, from an Encephalitis Virus Surveillance (EVS) trap. The last positive for WNV was from an October 3rd trap set, tested on October 4th. No further human cases from within the district have been reported.

Three seasonal employees stayed on slightly longer in order to continue inspections and strategic trap sets in response to service requests. Due to the cold snap, service request numbers decreased exponentially, and one of the seasonals left on October 11th.

The remaining two seasonal employees helped lab staff finish inspections and do some organizing of data before being released on the 24th of October. A total of 179 inspections were completed in the month of October, bringing the yearly total up to 1,902 total inspections completed.

The laboratory staff attended the quarterly Mosquito and Vector Control Association of California meeting, located in Visalia, from October 29th through October 30th. The laboratory staff has begun work on presentations and posters for annual conferences in 2020, as well as continuing to make repairs and fixes and beginning to work on the annual report.

Dairy lagoon treatments continued through the month of October. The last catch basin treatments were completed for the season. Field Techs completed fall crop mapping and made final treatments to irrigated crops. They also continued to inspect house mosquito sources and answer service requests. The remaining two Seasonal Tech II's were discharged the end of October. Full time Technicians have begun District clean-up and safety inspection remediation in preparation for winter maintenance work. The WALs skid was tested on three separate occasions and data gathered is being reviewed. The Mechanic/Tech III was hired in October and all staff underwent herbicide, and tool safety training in preparation for pre-emergent treatments and winter maintenance work.

There were fifty-one service requests during the month of October:

2019 Service Request Summary

	Fish	Inspection	Mosquito	Source	Other	Total
January	0	4	1	1	1	7
February	0	9	0	0	0	9
March	2	14	0	4	1	21
April	8	36	14	34	0	92
May	5	31	15	24	1	76
June	9	34	102	63	0	208
July	6	31	255	105	17	414
August	11	72	178	98	13	372
September	8	62	110	74	9	263
October	0	10	26	14	1	51
Total	49	199	858	339	17	1513

III. Vector and Disease Surveillance

Delta VCD Summaries

Humans:

As of November 1st, 2019, 2 confirmed human cases of neuroinvasive WNV, 5 probable cases of neuroinvasive WNV, and 6 probable cases of non-neuroinvasive WNV have been reported from within the district borders to Delta VCD. At this time last year there were no cases reported from within district borders.

Birds:

During the month of October, 5 dead birds were reported within Tulare County, 4 within the city of Visalia, and one from the city of Porterville. One of the birds from within the district met the requirements for arbovirus testing, which tested negative for disease. There have been a total of 28 testable dead birds from within the district in 2019, and 16 of them have tested WNV positive.

Mosquito:

Mosquito abundance data was collected weekly from 172 fixed gravid trap locations, 60 fixed BG trap locations, approximately 20 strategic BG trap locations, and approximately 20 strategic EVS trap locations. A total of 3,767 mosquito samples, each consisting of between 10 and 50 female mosquitoes, have been tested in 2019, with 772 samples testing positive for WNV, 89 samples testing positive for SLEV, and no samples testing positive for WEEV. Samples have tested positive from across the entire district. The last positive was detected on the 9th of October and testing has been completed for the year due to abundance and temperature conditions.

State Surveillance:

Humans:

As of November 1st, 2019, 178 human cases of WNV have been detected across the state of California, in 20 counties, including five fatalities. 17 asymptomatic infections have also been reported from 11 counties. At this date in 2018, 170 human cases of WNV had been detected in 30 counties. Additionally, 5 human cases of SLEV have been reported from three counties, Fresno, Kern and Imperial. At this time last year, one SLEV human case had been reported from one country.

Birds:

As of November 1st, 2019, 210 birds have tested positive for WNV from 21 counties. At this date in 2018, 496 WNV positive birds had been reported from 20 counties.

Mosquitoes:

As of November 1st, 2019, 3,269 mosquito samples have tested positive for WNV from 25 counties. Additionally, 355 mosquito samples from seven counties have tested positive for SLEV from 12 counties. At this date in 2018, 1,959 mosquito samples had tested positive for WNV from 29 counties, and 387 mosquito samples had tested positive for SLEV from eight counties.

IV. Expenditures & Revenues – 2019/20

TOTAL BUDGET \$4,053,625.97
 EXPENDITURES – July 1, 2019 – October 31, 2019

Salaries	\$980,034.45
Services & Supplies	\$397,061.19
Tax Admin Fee	\$0
Capital	\$26,816.42
Building Improvements	\$15,682.50
TOTAL EXPENDITURES	\$1,419,594.56

REVENUE RECEIVED – July 1, 2019 – October 31, 2019

July	\$356.00
August	\$82.30
September	\$17,909.97
October	\$2,858.74
TOTAL REVENUE TO DATE	\$21,207.01

V. Time Sheet Summary

Month	Available Work Hrs	Sick Hrs Used	Total Hrs Available for Work	Pct. Of Hrs Avail for Work
July	4928	94.25	4833.75	98.08
August	5104	106.00	4998.00	97.93
September	4400	71.25	4328.75	98.38
October	2680	72.50	2607.50	97.30

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.