

# **DELTA VECTOR CONTROL DISTRICT**

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## **REPORT OF THE MANAGER DECEMBER 2019**

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

Temperatures continued to remain cool for the month of December, with the average high temperature decreasing quite a bit from November but the average low staying similar. There was increased rainfall from the previous month, however. The average high temperature for the month was 59.2°F, and the average low was 40.3°F, with 1.64 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 December are 54.5°F and 37.8°F respectively, with the average temperature being 46.1 °F, and the 30-year average rainfall reported as 1.74 inches by the National Oceanic and Atmospheric Administration.

Water storage at Pine Flat Reservoir increased over the course of December, by over 10%, to be 470,233 acre-feet. By the end of the month Pine Flat Reservoir's inflow had increased by more than 20%, to 1,278 cubic feet per second (CFS), while the release decreased minimally to 299 CFS. Lake Kaweah Reservoir water storage continued to increase during the month, going up by over 75%, to be 30,009 acre-feet at the end of the month. Lake Kaweah's inflow almost doubled to be 224 CFS, and its release decreased by over 80%, ending the month at 13 CFS.

### **II. Narrative**

Winter maintenance on vehicles and equipment continued throughout the month, with the addition of another Vector Control Tech III/Mechanic proving very useful. Changes were made to the front offices and the movement of personnel to make room for the new Administrative Analyst I was completed. Herbicides were purchased, and equipment is ready to start pre-emergent treatments to wastewater lagoons the first week of January 2020. All sites were inspected for access problems and contacts made to the sites that had not yet paid or enrolled in the 2020 Weed program. There were only four sites that had not responded back by the end of December 2019.

Repairs to District trap inventory continued, as did planning for the new building. Work was done on the Annual report, which will be available early in 2020. In the laboratory, after season maintenance continued, including inspection of all instruments and large equipment. The floor

was examined for cracks, and those were sealed, and the bookcases gone through. A thorough cleaning of the lab was completed, including windows being washed. A purchasing list was created to allow for lab work to be completed through the following fiscal year. Lab staff posters and presentations were accepted at both AMCA annual meeting and MVCAC annual meeting, and work was continued to ensure readiness for said meetings. Outreach events continued.

### **2019 Service Request Summary**

There was one service request in the month of December. Cumulatively for the year, there were a total 1530 service requests. This total is significantly higher than last year's total of 553 service requests. They are defined as follows:

<b>2019</b>	<b>Fish</b>	<b>Inspection</b>	<b>Mosquito</b>	<b>Source</b>	<b>Other</b>	<b>Total</b>
<b>January</b>	0	4	1	1	1	<b>7</b>
<b>February</b>	0	9	0	0	0	<b>9</b>
<b>March</b>	2	14	0	4	1	<b>21</b>
<b>April</b>	8	36	14	34	0	<b>92</b>
<b>May</b>	5	31	15	24	1	<b>76</b>
<b>June</b>	8	36	102	62	0	<b>208</b>
<b>July</b>	6	58	221	111	18	<b>414</b>
<b>August</b>	10	81	176	91	14	<b>372</b>
<b>September</b>	8	69	110	67	9	<b>263</b>
<b>October</b>	0	12	26	12	1	<b>51</b>
<b>November</b>	0	7	5	4	0	<b>16</b>
<b>December</b>	0	1	0	0	0	<b>1</b>
<b>Total</b>	<b>47</b>	<b>358</b>	<b>670</b>	<b>410</b>	<b>45</b>	<b>1530</b>

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

#### **Delta VCD Summaries**

##### Humans:

The Tulare County Health and Human Services Agency is still in the process of finalizing their results for 2019 and confirming infection. Initial results show a total of 25 human cases of WNV, 16 (64%) of which were neuroinvasive, and an additional one asymptomatic case. Of those 25 human cases, 13 were reported within Delta VCD boundaries. Seven (53.85%) of those thirteen were neuroinvasive WNV. Date of symptom onset ranged between late July to late August. In 2018, one WNV human case was reported within Delta VCD boundaries and thirteen WNV human cases were reported with Tulare County.

No Aedes-borne disease cases were reported to the District in 2019 or in 2018.

There were no tick-borne diseases reported in 2019, and none reported during the 2018 season.

##### Birds:

The dead bird hotline closed in mid-October and will open again in April of 2020. In 2019, 28 dead birds were suitable for being tested and 16 of them tested positive for WNV. No birds tested positive for any disease in 2018.

Mosquito: No additional mosquito testing occurred in the month of December. In 2019, 3,792 mosquito samples were tested, with 773 testing WNV positive and 34 testing positive for SLEV. In 2018, 3,836 mosquito samples were tested, with 65 testing WNV positive and 138 samples testing positive for SLEV.

**State Surveillance:**

Humans:

In 2019, 205 human cases of WNV have been reported to CDPH from 23 counties, and six fatalities have occurred. 66%, or 136 individuals, had neuroinvasive illness. In addition to the 205 case-patients, WNV was detected in 17 asymptomatic individuals. The case patients range in age from ten to ninety-three with the median age being fifty-nine years of age. Sixty percent, or 123, are male. Symptom onset ranged from May 12<sup>th</sup> – November 6<sup>th</sup>. Six human cases of SLEV have been reported from Fresno, Kern, Imperial, and Stanislaus in 2019, with currently no fatalities. All of the individuals had neuroinvasive disease. The median age being sixty-four years. Symptom onset ranged from July 14<sup>th</sup> to September 13<sup>th</sup>. There were 203 human cases of WNV from 31 counties and five human cases of SLEV from 4 counties reported in 2018.

Birds:

In 2019, a total of 225 WNV positive dead birds have been reported from 21 counties out of a total of 5,564 reported carcasses, 1,799 which were tested. In 2018, 499 dead birds tested positive for WNV from 21 counties, with 8,090 carcasses reported, a total of 2,189 which were tested.

Mosquitoes:

In 2019, 3,288 mosquito samples have tested positive for WNV from 25 counties and 356 mosquito pools have tested positive for SLEV from 12 counties. In 2018, 1,963 mosquito samples had tested positive for WNV from 29 counties and 387 mosquito samples had tested positive for SLEV from 8 counties.

**IV. Expenditures & Revenues – 2019/20**

TOTAL BUDGET \$4,053,625.97

EXPENDITURES – July 1, 2019 – December 31, 2019

Salaries	\$1,286,161.78
Services & Supplies	\$484,648.16
Tax Admin Fee	\$30,998.00
Capital	\$29,448.42
Building Improvements	\$31,440.43
<b>TOTAL EXPENDITURES</b>	<b>\$1,862,696.79</b>

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

July	\$356.00
August	\$82.30
September	\$17,909.97
October	\$2,858.74

November	\$1,593.76
December	\$1,834,682.15
<b>TOTAL REVENUE TO DATE</b>	<b>\$1,857,482.92</b>

V. **Time Sheet Summary**

<b>Month</b>	<b>Available Work Hrs</b>	<b>Sick Hrs Used</b>	<b>Total Hrs Available for Work</b>	<b>Pct. Of Hrs Avail for Work</b>
<b>July</b>	<b>4928</b>	<b>94.25</b>	<b>4833.75</b>	<b>98.08</b>
<b>August</b>	<b>5104</b>	<b>106.00</b>	<b>4998.00</b>	<b>97.93</b>
<b>September</b>	<b>4400</b>	<b>71.25</b>	<b>4328.75</b>	<b>98.38</b>
<b>October</b>	<b>2680</b>	<b>72.50</b>	<b>2607.50</b>	<b>97.30</b>
<b>November</b>	<b>2160</b>	<b>75.75</b>	<b>2084.25</b>	<b>96.50</b>
<b>December</b>	<b>1920</b>	<b>46.50</b>	<b>1873.50</b>	<b>97.58</b>

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.