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DELTA VECTOR CONTROL DISTRICT

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REPORT OF THE MANAGER December 2018

I. <u>Water and Weather</u>

Temperatures stayed cold in December, with the average temperature being 48°F. The average high temperature for the month was 54°F and the average low was 42°F, with a total of 0.16 inches of rainfall reported by Weather Underground, Visalia Municipal 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 with the 30-year average rainfall reported as 1.74 inches by the National Oceanic and Atmospheric Administration.

Water storage at Pine Flat Reservoir was recorded at 317,737 acre-feet by the end of the month, an increase of nearly 50,000 from the previous month. Its inflow decreased to 897 cubic feet per second (CFS), while its outflow increased slightly to 116 CFS. Lake Kaweah Reservoir water was recorded at 21,719 acre-feet at the end of the month, a 50% increase from the previous month. The inflow decreased to 115 CFS, while the outflow increased to be 7 CFS.

II. Narrative

Safety inspection concerns on District grounds were completed and new safety protocols were established for recently discovered issues. Winter maintenance on vehicles and equipment continued throughout the month. Equipment was set up in the shop and proved useful. Chemicals were purchased, and equipment is ready to start pre-emergent treatments to Wastewater lagoons following favorable weather the first week of January 2019.

Repairs to District trap inventory continued, as did planning for the new building. Work was done on the new Aedes plan and the Annual report, both will be available early in 2019. In the laboratory, after season maintenance continued, including inspection of all instruments and large equipment. A purchasing list was created to allow for lab work to be completed through the following fiscal year.

2018 Service Request Summary

There were four service requests in the month of December. Cumulatively for the year, there were a total 553 service requests. This total is higher than last year's total of 304 service requests. They are defined as follows:

	Fish	Inspection	Mosquito	Source	Other	Total
January	0	4	1	0	0	5
February	0	3	0	0	0	3
March	0	5	0	2	0	7
April	7	11	7	11	2	38
May	1	9	6	16	0	32
June	5	9	6	6	0	26
July	3	21	9	14	1	48
August	2	22	49	11	1	85
September	3	24	92	15	1	135
October	2	19	101	18	1	141
November	1	4	15	9	0	29
December	0	3	0	1	0	4
Total	24	134	286	103	6	553

III. Vector and Disease Surveillance

Delta VCD Summaries

<u>Humans</u>: During 2018, a total of eight human cases of WNV have been officially reported within Tulare County boundaries, one of which was within Delta VCD boundaries. The Tulare County Health and Human Services Agency reported the cases and they were confirmed by the California Department of Health. Of the eight human cases reported in 2018 within the county, seven (87.5%) experienced neuroinvasive disease. Date of symptom onset ranged between the middle of July to the middle of October, with seventy-five percent of onsets beginning in August. In 2017, seven WNV human cases were reported within Delta VCD boundaries and thirteen WNV human cases were reported within Tulare County.

No Aedes-borne disease cases were reported to the District in 2018. In 2017 two travel cases of Zika were reported within Tulare county, one within Visalia and one within Tulare.

There were no tick-borne diseases reported in 2018, and none reported during the 2017 season.

<u>Birds:</u> One dead bird was reported to the District in December and was not tested due to the season. No birds tested positive for any disease in 2018.

<u>Mosquito:</u> No additional mosquito testing occurred in the month of December. A total of 3,836 mosquito pools were tested in 2018, with 65 testing WNV positive and 138 samples testing positive for SLEV. In 2017, 2,844 mosquito pools were tested, with 575 positive WNV pools and 30 SLEV positive pools.

State Surveillance:

<u>Humans</u>: In 2018, 203 human cases of WNV have been reported to CDPH from 31 counties, and eight fatalities have occurred. 70%, or 142 individuals, had neuroinvasive illness. In addition to the 203 case-patients, WNV was detected in 22 asymptomatic individuals. The case patients range in age from one to ninety-one with the median age being sixty years of age. Sixty-four percent, or 129, are male. Symptom onset ranged from May 6^{th} – November 8^{th} . Five human cases of SLEV have been reported from Fresno, Kern, Los Angeles, and Stanislaus in 2018, with currently no fatalities. 80%, or four of the individuals, had neuroinvasive disease. The age range is thirty-one to seventy-seven years, with the median age being sixty-three years. Forty percent, or two of the case patients, are male.

536 human cases of WNV from 27 counties and four human cases of SLEV from 4 counties were reported in 2017.

<u>Birds:</u> In 2018, a total of 499 WNV positive dead birds have been reported from 21 counties out of a total of 8,090 reported carcasses, 2,189 which were tested.

In 2017, 510 dead birds tested positive for WNV from 39 counties, with 7,629 carcasses reported, a total of 2,005 which were tested.

<u>Mosquitoes:</u> In 2018, 1,963 pools have tested positive for WNV from 29 counties and 387 mosquito pools have tested positive for SLEV from 8 counties. In 2017, 3,370 mosquito collections had tested positive for WNV from 26 counties and 179 mosquito collections had tested positive for SLEV from 14 counties.

IV. Expenditures & Revenues – 2018/19

TOTAL BUDGET EXPENDITURES – July 1, 2018 – Dec	\$3,092,198.15 cember 31, 2018
Salaries	\$1,161,144.82
Services & Supplies	\$356,752.88
Tax Admin Fee	\$29,587.00
Capital	\$55,566.07
Building Improvements	\$11,490.00
TOTAL EXPENDITURES	\$1,614,540.77

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

July	\$47.38
August	\$262.76
September	\$14,274.20
October	\$1,338.16
November	\$1,280.52
December	\$1,322,084.51
TOTAL REVENUE TO DATE	\$1,339,287.53

V. Time Sheet Summary

Month	Available Work	Sick Hrs Used	Total Hrs	Pct. Of Hrs Avail
	Hrs		Available for	for Work
			Work	
July	4320	66.50	4253.50	98.46
August	5152	118.50	5033.50	97.70
September	3792	88.25	3703.75	97.68
October	3160	50.25	3109.75	98.41
November	2128	94.95	2033.05	95.54
December	1736	86.75	1649.25	95.01

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.