

DELTA VECTOR CONTROL DISTRICT

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REPORT OF THE MANAGER MAY 2020

I. Water and Weather

The temperature in May began to increase, with temperatures reaching over 100 °F near the end of the month. The average high temperature for the month was 87.05°F, and the average low was 56.07°F, with 0.55 inches of rainfall reported as preliminary data from the Delta Vector Control District weather station. The 30-year seasonal averages for May are 55.7°F and 81.6°F respectively, with the seasonal average rainfall reported as 0.35 inches.

Water storage at Pine Flat Reservoir increased by just under 20% to 819,375 acre-feet by the end of the month. By May 31st, Pine Flat Reservoir's inflow had decreased by approximately half, to 3,177 cubic feet per second (CFS) and its release increased by more than 50% to 2,080 CFS. The Lake Kaweah Reservoir ended the month with over twice as much water as the previous month, with 141,303 acre-feet on the 31st of May. Lake Kaweah's inflow decreased by slightly less than 40%, to 569 CFS and its release was increased dramatically to 258 CFS.

II. Narrative

The Delta Vector Control District laboratory staff continued its combined native mosquito and invasive mosquito surveillance programs, with testing beginning for West Nile virus (WNV), St. Louis Encephalitis virus (SLEV), and Western Equine Encephalitis virus (WEEV) at the start of May. Gravid trap averages were down from last year, at only 6 mosquitoes per trap per night, versus 13 mosquitoes per trap per night we trapped in 2019. Routed BG trap averages were also down, resulting in about 6 mosquitoes per trap per night, versus 15 mosquitoes per trap per night we trapped in 2019. Strategic traps aren't directly comparable due to the lack of consistency in trap placement, but both strategic BG traps and EVS traps had lower averages than last year.

The invasive *Aedes* have continued to be found across the District, with inspections from service requests and from high count trap areas already taking place.

Arbovirus screening officially began in May, with two mosquito collections testing positive for disease. The first detection of WNV was from a sample collected on May 15 from Dinuba. This

was the first detection of a mosquito-borne disease this year from both Tulare county and the state. Laboratory staff posted it on social media to notify citizens of the detection. On May 29, one additional sample from North East Visalia tested positive for WNV. So far, no samples have tested positive for SLEV or WEEV.

Aerial larvicide treatment of the Santa Fe Aggregates continued in May. Additionally, aerial photographs to aid in locating potential mosquito breeding sources were taken at the start of the month. Mir Bear-Johnson and Mark Dyngge began to examine the aerial images in order to assign locations to technicians to check and survey. The catch basins of outlying towns are being treated every 28 days to ensure no mosquito breeding is occurring. The House Mosquito Crew is continuing to check, and survey known mosquito breeding sources and handling the locations from the aerial photos.

Due to increased temperatures at the end of the month, and the need to continue to keep staff separated due to the continued presence of COVID-19, staff work start times changed from 6:30, 7:00 & 7:30 to 6:00, 6:30 & 7:30 am. Gatorade was also made available to all field staff and they were reminded of the hazard of heat illness and instructed how to prevent it.

There were a hundred and seven service requests during the month of May:

2020 Service Request Summary

2020	Fish	Inspection	Mosquito	Source	Other	Total
January	0	3	0	0	3	6
February	2	6	0	4	0	12
March	1	7	0	5	0	13
April	16	22	13	22	2	75
May	14	13	55	24	1	107
Total	33	51	68	55	6	213

III. Vector and Disease Surveillance

Delta VCD Summaries

Humans: There are no WNV positive human cases, SLEV positive human cases or WEEV positive human cases reported within Delta VCD boundaries at this time.

Birds: During the month of May, 4 dead birds were reported to the District, only one of which was suitable for testing. At this time no birds have tested positive for arboviral disease within the District.

Mosquitoes: As of May 29th, 2020, 291 mosquitoes from within the District were tested for WNV, SLEV and WEEV, and two samples have tested positive for WNV. One sample from Dinuba and one from Northeastern Visalia.

State Surveillance:

Humans: As of May 29th, 2020, no human cases of WNV or SLEV have been detected across the state of California. At this date in 2019, no human cases had been detected.

Birds: As of May 29th, 2020, six WNV positive dead birds have been reported from three counties. At this time in 2019, one WNV positive dead bird had been reported from San Diego.

Mosquitoes: As of May 29th, 2020, four positive mosquito samples have been reported across the state of California, from Los Angeles, Stanislaus and Tulare counties. At this date in 2019, 41 positive mosquito samples had been reported from three counties.

IV. Expenditures & Revenues – 2019/20

TOTAL BUDGET \$4,053,625.97

EXPENDITURES – July 1, 2019 – May 31, 2020

Salaries	\$2,251,343.17
Services & Supplies	\$675,809.50
Tax Admin Fee	\$61,996.00
Capital	\$45,337.36
Building Improvements	\$94,483.72
TOTAL EXPENDITURES	\$3,128,969.75

REVENUE RECEIVED – July 1, 2019 – May 31, 2020

July	\$356.00
August	\$82.30
September	\$17,909.97
October	\$2,858.74
November	\$1,593.76
December	\$1,834,682.15
January	\$385,487.27
February	\$9,687.75
March	\$32,196.19
April	\$1,079,126.73
May*	
TOTAL REVENUE TO DATE	\$3,363,980.86

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
November	2160	75.75	2084.25	96.50
December	1920	46.50	1873.50	97.58

January	2640	78.50	2561.50	97.03
February	2280	48.00	2232.00	97.89
March	3032	70.75	2961.25	97.67
April	5632	83.75	5548.25	98.52
May	4960	72.00	4888.00	98.54

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.

**May revenue not available from Tulare County as of 6/4/2020.*