

DELTA VECTOR CONTROL DISTRICT

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REPORT OF THE MANAGER AUGUST 2020

I. Water and Weather

The temperature in August continued to increase, with high temperatures for the whole month, and a week of extremely high temperatures. The average high temperature for the month was 99.3°F, and the average low was 69.4°F, with 0.0 inches of rainfall reported as preliminary data from the Delta Vector Control District Weather Station. The 30-year seasonal averages for high and low temperature in August are 92.8°F and 65.0 °F respectively, with the 30-year average rainfall reported as 0.01 inches by the National Oceanic and Atmospheric Administration.

Water storage at Pine Flat Reservoir decreased by over 35% to 214,281 acre-feet by the end of the month. By August 31st Pine Flat Reservoir's inflow had decreased to 474 cubic feet per second (CFS) and its release decreased significantly, by almost 70% to 1,535 CFS. The Lake Kaweah Reservoir ended the month with over 38% less water as the previous month, with 13,963 acre-feet on the 31st of August. Lake Kaweah's inflow decreased significantly to 28 CFS and its release was decreased to 108 CFS.

II. Narrative

The Delta Vector Control District laboratory staff continued its combined native mosquito and invasive mosquito surveillance programs to the best of their ability, with testing continuing for West Nile virus (WNV), St. Louis Encephalitis Virus (SLEV), and Western Equine Encephalitis Virus (WEEV). Gravid trap averages were significantly down from last year, at only 6 mosquitoes per trap per night, versus 17 mosquitoes per trap per night we caught in 2019. Routed BG trap averages were also down, averaging around 9 mosquitoes per trap per night, versus 26 mosquitoes per trap per night 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.

Arbovirus screening continued in August, with 58 mosquito collections testing positive for WNV and seven mosquito collections testing positive for SLEV. These were the first SLEV detections found within the District this year. There has been a total of 74 positive WNV detections and seven SLEV detections from within the District boundaries this year and no

positive WEEV detections. This is a dramatic decrease from last year at this time, when there were 719 positive WNV samples and 58 positive SLEV samples.

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. As of the end of August, a total of 1,975 inspections for the invasive *Aedes aegypti* have been conducted. Of these inspections, 1,699 were first time inspections, meaning the first time they were inspected this year, and 276 were re-inspections, i.e. that breeding had been found at least once on the property. Over 780 of the inspections have been directly related to service requests, with the remainder attributed to high trap counts found in the area either from strategic traps or routed surveillance traps. Last year at this time, 1,274 inspections were completed, of which 1,126 were first inspections and 697 related to service requests. This is not a count of individual properties, as some properties have required multiple inspections both this and last year.

Wide Area Larviciding spray (WALs) applications took place in the Visalia Public Cemetery once a week for the month of August, with treatments occurring between 9 and 10 pm on Wednesday nights. Surveys conducted on breeding containers in the cemetery showed a decrease of mosquito breeding, with the first survey having approximately 40% of water holding containers containing live immature mosquito stages, and the last survey showing that only 5.4% of water holding containers contained live immature mosquito stages. Surveillance and trapping in the cemetery will continue for the month of September.

Aerial larvicide treatment of the Santa Fe Aggregates continued in August. The catch basins of outlying towns are being treated every 28 days to ensure no breeding occurs. The House mosquito crew is continuing to check known sources and handling the locations from the aerial photos. To assist the House mosquito program, each of the field technicians has been assigned one day a week to assist in the urban areas within their zone. Service requests are not significantly elevated from last year.

Throughout the Month of August, employees continued to complete the online screening COVID-19 survey and to take paid time off to seek test results when required. All employees at this time have tested negative. The District will continue to be proactive in keeping employees and the public as safe, with no planned rollback of any of the safety precautions that have been put in place.

After 29 years at the Delta Vector Control District, Mr. Paul Jobe, foreman, retired at the end of the month, citing family as the reason for the retirement as well as immediacy of the action. Paul has been invited to attend the end of the season celebration, where he will be presented with a retirement plaque honoring his 29 year work service to DVCD.

Dr. Mustapha Debboun, the General Manager attended two free 2-hour virtual webinars on Financial Management for Special Districts in California on August 18 and 19 sponsored by California Special District Association (CSDA). He also gave a 1-hour presentation entitled Climate Change & Health: Impacts, Solutions, & Advocacy to Sierra Club Mineral King Group Conservation of Visalia on August 31 on behalf of Climate for Health as a Climate for Health Ambassador.

The General Manager and Assistant Manager continued to attend the Mosquito and Vector Control Association of California statewide biweekly virtual Zoom discussion on COVID-19 Pandemic and vector response related issues.

There were three-hundred and fourteen service requests in August:

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	13	21	47	24	2	107
June	12	46	157	31	6	252
July	19	89	237	80	13	438
August	8	47	180	76	3	314
Total	71	241	634	242	29	1,217

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: In July 2020, four dead birds were reported to the District, only two of which were suitable for testing. Neither tested positive for virus. At this time, a total of seven birds have been viable for testing, only one of which has tested positive for WNV.

Mosquitoes: As of August 28th, 2020, 1,962 mosquito samples from within the District have been tested for WNV, SLEV and WEEV. 74 samples have tested positive for WNV and seven samples have tested positive for SLEV. At this time last year, 3,123 samples were tested, with 719 testing positive for WNV and 58 testing positive for SLEV.

State Surveillance:

Humans: As of August 28th, 2020, 35 human cases of WNV were reported from ten counties within the state of California. No human cases of SLEV have been detected across the state of California. At this time in 2019, 57 human cases were detected from 12 counties.

Birds: As of August 28th, 2020, 142 WNV positive dead birds have been reported from 17 counties. At this time in 2019, 57 WNV positive dead bird were reported from 13 counties.

Mosquitoes: As of August 28th, 2020, 1,420 WNV positive mosquito samples have been reported across the state of California, from 26 counties. Additionally, a total of 268 SLEV positive mosquito pools have been reported from eight counties. At this date in 2019, 2,516 WNV positive mosquito samples were reported from 24 counties, and 178 SLEV positive mosquito samples from 17 counties.

IV. Expenditures & Revenues – 2020/21

TOTAL BUDGET \$3,516,071.89

EXPENDITURES – July 1, 2020 – August 31, 2020

Salaries	\$637,081.16
Services & Supplies	\$217,179.49
Tax Admin Fee	0
Capital	\$6,394.99
Building Improvements	0
TOTAL EXPENDITURES	\$860,655.64

REVENUE RECEIVED – July 1, 2020 – August 31, 2020

July	\$1,011.30
August*	
TOTAL REVENUE TO DATE	\$1,011.30

V. Time Sheet Summary

Month	Available Work Hrs	Sick Hrs Used	Total Hrs Available for Work	Pct. Of Hrs Avail for Work
July	5632	50.25	5581.75	99.10
August	5376	133.25	5242.75	97.53

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.

**Revenue not available from Tulare County as of 9/4/2020.*