# **DELTA VECTOR CONTROL DISTRICT**

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### REPORT OF THE MANAGER SEPTEMBER 2020

### I. Water and Weather

The temperature in September began to decrease, although at the end of the month, high temperatures began to climb again. The average high temperature for the month was 92.3°F, and the average low was 63.7°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 temperatures in September were 87.7°F and 60.3 °F respectively, with the 30-year average rainfall reported as 0.15 inches by the National Oceanic and Atmospheric Administration.

Water storage at Pine Flat Reservoir decreased minutely to 206,781 acre-feet by the end of the month. By September 30<sup>th</sup>, Pine Flat Reservoir's inflow had decreased to 401 cubic feet per second (CFS) and its release decreased significantly, by over 77% to 347 CFS. The Lake Kaweah Reservoir ended the month with over 24% less water as the previous month, with 10,592 acre-feet on the 30<sup>th</sup> of September. Lake Kaweah's inflow decreased slightly to 24 CFS and its release was decreased by 50% to 54 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 4 mosquitoes per trap per night, versus 8 mosquitoes per trap per night caught in 2019. Routed BG trap averages were also down, averaging around 8 mosquitoes per trap per night, versus 18 mosquitoes per trap per night in 2019. Strategic traps aren't directly comparable due to the lack of consistency in trap placement, but strategic BG traps had a higher average than last year and EVS traps had a lower average than last year.

Arbovirus screening for WNV, SLEV, and WEEV continued in September. A total of 61 mosquito samples tested positive for WNV in September, and 30 tested positive for SLEV, out of the 635 samples that were tested in September. So far, no mosquito samples have tested positive for WEEV.

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 September, a total of 2,616 inspections for the invasive *Aedes aegypti* have been conducted. Of these inspections, 2,249 were first time inspections, meaning the first time they were inspected this year, and 367 were re-inspections, i.e., that mosquito breeding was found at least once on the property. Over 1,015 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, 1,721 inspections were completed, of which 1,504 were first inspections, and 941 related to service requests. This is not a count of individual properties, as some properties have required multiple inspections both during this and last year.

Aerial larvicide treatment of the Santa Fe Aggregates continued in September. The catch basins of outlying towns are being treated every 28 days to ensure no mosquito breeding occurs. The House mosquito crew is continuing to check known mosquito breeding sources and responding to service requests. 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.

Due to poor air quality in the month of September, some personnel were sent home early, and all were encouraged to use protective masks when outside for extended lengths of time. Throughout the month, 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.

Weed control treatments and *Bacillus thuringiensis israelensis* (BTI) route continued through the 24<sup>th</sup> of September, at which time most of the Vector Control Technicians 1's completed their mosquito seasonal work. Weed control treatment need had slowed down due to seasonal slow growth. The Zone Technicians will be using the BTI truck and Oil truck once weekly, as needed, to treat sources, and will be assisting with catch basins until such a time the mosquito larvae are no longer actively breeding. All treatments remained on schedule. The laboratory is retaining seasonal staff for longer, due to a continued high number of service requests involving the *Aedes aegypti* mosquitoes.

The Mosquito and Vector Control Association of California (MVCAC) statewide biweekly virtual Zoom discussion on COVID-19 Pandemic and vector response related issues has become a monthly MVCAC check in call, which the Manager and Assistant Manager have been attending when possible.

The staff of the Delta Vector Control District congratulated and recognized Mr. Paul Harlien's 15-year work service milestone at the District on October 1, 2020.

The General Manager and Assistant Manager attended a two-hour virtual webinar presented by four lawyers from California Special District Association (CSDA) on navigating COVID-19 Pandemic employment issues, i.e. important steps to avoid new employment claims and best practices for managing COVID-19 issues.

The General Manager continued to work with Mr. Joe Tanner, the City Manager of Lindsay and Mr. Kuyler Crocker, Tulare County Supervisor District 1 to evaluate and secure support for the annexation of Lindsay and Strathmore to DVCD. In addition, the General Manager reached out to Mr. Ben Giuliani, the Executive Officer of Local Agency Formation Commission (LAFCO) to inform him of the annexation and seek guidance with the annexation process.

There were 262 service requests in September:

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	106	224	76	13	438
August	8	76	135	86	9	314
September	19	44	143	54	2	262
Total	90	331	719	302	37	1 479

2020 Service Request Summary

### III. Vector and Disease Surveillance

#### **Delta VCD Summaries**

<u>Humans</u>: There are five potential WNV positive human cases, reported from within Tulare County to date, two have been confirmed from the city of Lindsay and Porterville, and three are listed as probable. One of the confirmed cases from Tulare City was fatal. One of the probable cases is within Delta VCD boundaries. There have been no SLEV positive human cases or WEEV positive human cases reported within Delta VCD boundaries at this time.

<u>Birds</u>: In September 2020, five dead birds were reported to the District, only two of which were suitable for testing. Both tested positive for WNV. At this time, a total of 43 dead birds have been reported to the District, nine of which were viable for testing, and three of which have tested positive for WNV.

<u>Mosquitoes</u>: As of October 2<sup>nd</sup>, 2020, 2,615 mosquito samples from within the District have been tested for WNV, SLEV, and WEEV. 136 samples have tested positive for WNV and 37 samples have tested positive for SLEV. At this time last year, 3,691 samples were tested, with 771 testing positive for WNV and 86 testing positive for SLEV. No samples have tested positive for WEEV this year, or last year.

#### **State Surveillance:**

<u>Humans:</u> As of October 2<sup>nd</sup>, 2020, 93 human cases of WNV have been reported from 18 counties within the state of California. One human case of SLEV has been detected from

Madera County. At this time in 2019, 128 human cases of WNV were detected from 19 counties, and five human cases of SLEV were reported from three counties.

Birds: As of October 2<sup>nd</sup>, 2020, 273 WNV positive dead birds have been reported from 19 counties. At this time in 2019, 186 WNV positive dead birds were reported from 19 counties.

Mosquitoes: As of October 2<sup>nd</sup>, 2020, 2,388 WNV positive mosquito samples have been reported across the state of California, from 27 counties. Additionally, a total of 473 SLEV positive mosquito pools have been reported from nine counties. At this date in 2019, 3,206 WNV positive mosquito samples were reported from 24 counties, and 337 SLEV positive mosquito samples from 12 counties.

#### IV. Expenditures & Revenues – 2020/21

TOTAL BUDGET \$3,594,403.09

EXPENDITURES – July 1, 2020 – September 30, 2020

Salaries	\$850,195.03
Services & Supplies	\$252,238.78
Tax Admin Fee	0
Capital	\$6,394.99
Building Improvements	\$54,904.86

TOTAL EXPENDITURES \$1,163,733.66

REVENUE RECEIVED – July 1, 2020 – September 30, 2020

July	\$1,011.30
August	\$0.00
September	\$22,679.32
TOTAL REVENUE TO DATE	\$23,690.62

#### V. **Time Sheet Summary**

Month	Available Work	Sick Hrs Used	Total Hrs	Pct. Of Hrs
	Hrs		Available for	Avail for
			Work	Work
July	5,632	50.25	5,581.75	99.10
August	5,376	133.25	5,242.75	97.53
September	4,816	99.75	4,716.25	97.93

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.