

# **DELTA MOSQUITO & VECTOR CONTROL DISTRICT**

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## **REPORT OF THE MANAGER MARCH 2022**

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

The temperature was high throughout the month of March. The Delta Mosquito and Vector Control District (DMVCD) Weather Station reported an average high temperature of 72.6°F with an average low of 47.2°F and 1.52 inches of rainfall. The National Oceanic and Atmospheric Administration 1981-2010 seasonal averages for high and low temperatures in March were 67.3°F and 46.1°F respectively, with average rainfall of 1.99 inches.

Water storage at Pine Flat Reservoir increased to 376,949 acre-feet by the end of March. By March 31, 2022, Pine Flat Reservoir's inflow had increased to 1,677 cubic feet per second (CFS) and its release increased slightly to 162 CFS. The Lake Kaweah Reservoir had more water than the previous month with 57,916 acre-feet on March 31, 2022. Lake Kaweah's inflow increased significantly, showing 448 CFS and its release was increased to 39 CFS.

### **II. Narrative**

Operations continued with fleet vehicle winter maintenance. All vehicles receive a multi-point inspection which include engine, transmission, cabin filter, air conditioning, heater system, front and rear brake pads, rotors, parking brake, fluids (brake fluid, engine oil, etc.), lights, and more. Staff have completed 12 fleet vehicle inspections and completed mounted spray tank calibrations for 15 vehicles for March. Staff continued to complete calibrations for 25 hand-can sprayers, 2 Herd seeders, and 2 ARGO liquid spray tanks.

Field operations completed 30 mosquito field inspections and 10 pesticide applications for March. Staff completed 22 service requests and are currently conducting catch basin mapping which consists of surveying local maps for additional storm drains and updating paper maps for historical data. All new or deleted storm drains are recorded in our local mosquito database to provide accurate and consistent storm drain treatments. Alysia Ingram, our previous seasonal storm drain operator, rejoined our operations team on 3/21/2022 to assist with storm drain activities.

Regarding facility maintenance, staff have repaired and replaced the front office sprinklers system. Front office sprinkler repair consisted of new valves, sprinkler heads, and PVC pipe on all nonfunctioning sections. Staff also repaired the entire

underground sprinkler system in front of the lab building. In addition, staff prepared the front of the laboratory landscaping area for decorative gravel installation.

Refurbishment of old bookshelves were installed in the office of both the Community Education & Outreach Coordinator and the new Biologist office. Staff have also designed a temporary wash station to comply with vehicle washing needs by installing consumable storm drain filters for any oil residue.

On March 21, the District conducted annual training on subjects of pesticides, respirators, respirator fit tests, field safety, and sterile insect techniques. In addition, 3 employees attended an all-terrain vehicle and a recreational off highway vehicle safety course hosted by Consolidated Mosquito Abatement District in Fresno, California.

On March 28 and 29, 2022, Leading Edge Aerial Technologies conducted a hands-on field training for our four District's Drone pilots. Training consisted of navigating the PrecisionVision ground control station and creating autonomous mission flights. Staff was also trained on flight simulations while operating the PrecisionVision 35X unmanned aircraft system.

Fieldseeker, the mosquito data operating system is undergoing maintenance with the implementation of the District rezoning. Adjustments include the redrawing of zone boundaries, updating employee login information associated with work cell phones, and edits to all existing source sites corresponding to zone boundaries. In addition, the District has moved to a different time clock system called Teambridge which was provided by our previous vendor Zira at no additional cost. The new system allows for customization when creating timecards and much more.

Some mosquito surveillance traps were placed in March as part of seasonal training. There were not enough mosquitoes of a single species captured for arbovirus testing, and thus, arbovirus testing for West Nile virus (WNV), St. Louis Encephalitis virus (SLEV), and Western equine encephalitis virus (WEEV) did not take place. To date, no mosquito samples have been tested in 2022.

There were 4 technician and homeowner mosquitofish requests in March to distribute a total of 75 fish. Mosquitofish rearing began again to prepare for summer demands. A total of 1,297 mosquitofish fry were produced in March. Routine fish hatchery maintenance took place weekly as well as the fish hatchery building maintenance.

Three mosquito larvae samples were brought to the laboratory for processing. Susceptible *Culex quinquefasciatus* and *Aedes aegypti* colonies were maintained for insecticide resistance testing.

The California Department of Public Health (CDPH) Proficiency Panel for mosquito-borne disease testing was completed in March. A passing result for the CDPH Proficiency Panel is required for the District to submit in-house disease test results to the state. The CDPH will report the results for Districts who passed in April.

A dead bird, reported in February, was tested in March. It was negative for mosquito-borne disease. Dead birds can be reported directly to the District as well as online at

westnile.ca.gov year-round. The California WNV and Dead Bird Call Center (877-WNV-BIRD; 877-968-2473) will open in April.

Laboratory staff continued to work winter maintenance, repairs, and equipment calibration for the 2022 mosquito season. Additionally, laboratory staff participated in continuing education webinars to maintain their Vector Control Technician Certification through the California Department of Public Health.

The General Manager, Assistant Manager, Scientific Program Manager, and a Biologist attended the American Mosquito Control Association (AMCA) Annual Conference in Jacksonville, Florida the first week of March. At the conference, Crystal Grippin presented a poster on using Wide Area Larvicide Systems (WALS) to control *Aedes aegypti* in a cemetery and a poster on the design and installation of automatic mosquitofish feeders, while Javier Valdivias presented a poster on pyrethrum resistance in *Culex quinquefasciatus* mosquitoes within the District.

Six seasonal Laboratory Technician I staff were hired for mosquito surveillance routes. Their training began during the last week of March. In addition, the open Biologist position was offered to Courtney Chagolla who will start on May 1, 2022.

In March, new content was created for the 2022 season, i.e., employee portraits for the website, ID photos, and images of services provided by the District. The drone trailer and community education and outreach van had the vinyl wrap completed. The 100-year logo was created and finalized, as well as the date for the 100-year celebration is scheduled for June, 11 2022. New ID cards have been printed and distributed to all current employees. Our community education and outreach schedule has been set for this mosquito season at the 2022 Rawhide baseball games season.

There were 22 service requests in March:

2022 Service Request Summary

2022	Fish	Inspection	Mosquito	Source	Other	Total
January	0	0	0	5	0	5
February	1	0	7	7	0	15
March	1	0	7	14	0	22
<b>Total</b>	<b>2</b>	<b>0</b>	<b>14</b>	<b>26</b>	<b>0</b>	<b>42</b>

**III. Vector and Disease Surveillance**

**Delta MVCD Summaries**

Humans: There were no human cases of an arbovirus reported by the local public health department for March 2022.

Birds: No dead birds were reported in March. So far in 2022, two dead birds have been reported to the District, with only one in good enough condition for testing. It was negative for WNV, SLEV, and WEEV.

Mosquitoes: Up to date, no mosquito samples were tested in 2022.

**State Surveillance:**

Humans: Up to date, no human cases have tested positive in 2022.

Birds: Up to date, no dead birds have tested positive in 2022.

Mosquitoes: Two mosquito samples from Orange and Riverside Counties have tested positive for WNV.

**IV. Expenditures & Revenues – 2021/22**

TOTAL BUDGET \$3,974,072.78

EXPENDITURES – July 1, 2021 – March 31, 2022

Salaries	\$2,020,950.56
Services & Supplies	\$782,250.35
Tax Admin Fee	\$34,248.50
Capital	\$455,113.89
Long Term Debt	\$58,914.03
<b>TOTAL EXPENDITURES</b>	<b>\$3,351,477.33</b>

REVENUE RECEIVED – July 1, 2021 – March 31, 2022

July	\$137.48
August	\$0
September	\$12,309.21
October	\$35,667.25
November	\$0
December	\$2,379,114.09
January	\$290,119.86
February	\$0
March*	
<b>TOTAL REVENUE TO DATE</b>	<b>\$2,717,347.89</b>

**V. Time Sheet Summary**

Month	Available Work Hrs	Sick Hrs Used	Total Hrs Available for Work	Pct. Of Hrs Avail for Work
July	5,376	119.25	5,256.75	97.79
August	5,808	210.00	5,598.00	96.40
September	5,712	134.50	5,577.50	97.65
October	4,200	105.50	4,094.50	97.49
November	2,584	40.00	2,544.00	98.46

<b>December</b>	<b>1,920</b>	<b>60.00</b>	<b>1,860.00</b>	<b>96.88</b>
<b>January</b>	<b>2,720</b>	<b>178.50</b>	<b>2,541.50</b>	<b>93.44</b>
<b>February</b>	<b>2,720</b>	<b>16.00</b>	<b>2,704.00</b>	<b>99.42</b>
<b>March</b>	<b>3,864</b>	<b>38.00</b>	<b>3,826.00</b>	<b>99.02</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.

*\*March revenue not available as of 04/01/2022*