DELTA MOSQUITO & VECTOR CONTROL DISTRICT

Dr. Mustapha Debboun General Manager

Hector Cardenas Operations Program Manager

> Mary Ellen Gomez Administrative Analyst

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Mir Bear-Johnson Assistant Manager

Crystal Grippin
Scientific Program Manager

Erick Arriaga

Community Education and
Outreach Coordinator

### REPORT OF THE MANAGER FEBRUARY 2022

#### I. Water and Weather

The temperature remained low throughout the month of February. As of February 22, 2022, the Delta Mosquito and Vector Control District (DMVCD) Weather Station reported an average high temperature of 68.0°F with an average low of 40.3°F and 0.2 inches of rainfall. The National Oceanic and Atmospheric Administration 1981-2010 seasonal averages for high and low temperatures in February were 61.3°F and 42.1°F respectively, with average rainfall of 1.85 inches.

Water storage at Pine Flat Reservoir increased to 316,645 acre-feet by February 23. By February 23, 2022, Pine Flat Reservoir's inflow had increased to 641 cubic feet per second (CFS) and its release decreased dramatically to 116 CFS. The Lake Kaweah Reservoir had more water than the previous month with 37,032 acre-feet on February 23, 2022. Lake Kaweah's inflow decreased, with the reading from February 23, 2022, showing 50 CFS and its release was increased slightly to 9 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 11 fleet vehicle inspections for the month of February. In addition, The maintenance inspection for specialized equipment has been completed for the A1 Super Duty spay unit, and two ARGO's have been completed.

Staff completed the remainder of the District paint project. Staff painted the remaining roof gutters and additional touch-ups needed. In addition, staff repaired all damaged drywall in the vehicle garage. Staff also replaced wash bay lighting with new LED lights. Equipment calibration also began with hand cans, and backpack sprayers. All equipment is reviewed for any defects or damage and repaired before completion of calibration.

Field operations completed 13 service requests and are currently conducting catch basin mapping. Catch basin mapping consists of surveying local maps for additional storm drains and updating paper maps for historical data. In addition, all new or deleted storm drains are recorded in our local mosquito database to provide accurate and consistent storm drain treatments.

Target Specialties Products delivered our PrecisionVision 35X Unmanned Aircraft System. This system includes a ground station control system, three payload systems, six battery packs and two chargers. In addition, three staff members recently passed the U.S. Department of Transportation Federal Aviation Administration Airman Knowledge exam for Unmanned Aircraft General on February 1, 2022. Currently the District has 4 qualified staff members licensed to fly unmanned aircrafts. Between January 31, 2022, and February 1, 2022, two staff members observed the training program from Leading edge on the PrecisionVision 35X operating system. In addition, five staff members were sent to Placer County Mosquito and Vector Control District to gather information on flight operations, calibrations, safety briefings, risk assessment, and aerial equipment needed to support unmanned aircraft operations.

The District has acquired two new vehicles in the month of February. The Community Outreach vehicle was purchased on February 17, 2022, from Visalia Ford. The enclosed drone trailer was purchased on February 18, 2022, from Jacobsen's Trailers in Fowler. Currently the District has sent an unutilized Carson trailer to auction on GovDeals a liquidity services marketplace which closes on February 25, 2022.

The Community Outreach vehicle, which will also be used as an employee transport vehicle for events and conferences, is in queue for its vinyl wrap in mid-March. Since receiving the enclosed drone trailer, a new design for a vinyl wrap is complete and pending board approval.

Jorge Lopez, our Seasonal Technician II since June 6, 2003, has resigned from his position to join Tulare Mosquito Abatement District as a full-time technician on March 1, 2022. Due to this action Paul Raper has joined our operation team on February 22, 2022. Paul Raper has been with the District since August 5, 2019 and will be taking role as a Seasonal Technician II.

Sheri Davis, Administrative Assistant, had her last day on February 28, 2022, having resigned from her position to join Tulare Mosquito Abatement District in March. Mary Ellen Gomez, formerly Administrative Analyst, has been promoted into the Administrative Assistant position. And the chain of command has been edited to better illustrate the new organizational structure. (Please see Attachment A.)

Mosquito surveillance did not take place in January because of the cool weather. Arbovirus testing for West Nile virus (WNV), St. Louis Encephalitis virus (SLEV), and Western equine encephalitis virus (WEEV) also did not take place. To date, no mosquito samples have been tested in 2022.

There was one technician mosquitofish request in February to distribute 60 fish. A total of 33 mosquitofish fry were produced in February. Routine fish hatchery maintenance took place weekly as well as building maintenance.

One field larval sample was brought to the lab for processing. A susceptible *Culex quinquefasciatus* colony was started as a control for insecticide resistance testing in the 2022 mosquito season.

Laboratory staff continued to work winter maintenance, repairs, and equipment calibration for the 2022 mosquito season. Laboratory organization and restocking continued in February. The woodshop was reorganized, and shelving units were installed to store vector surveillance equipment and repair equipment. 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, the Assistant Manager, the Operations Program Manager and two DMVCD biologists attended the Mosquito and Vector Control Association of California (MVCAC) Annual Conference in Sacramento. At the conference, Mark Nakata gave a presentation on the design and installation of automatic mosquitofish feeders, and Dr. Mustapha Debboun gave a presentation on the DMVCD upcoming collaboration with Oxitec. Andrea Troupin presented a poster on pyrethrum resistance in *Culex quinquefasciatus* mosquitoes within the District, Hector Cardenas presented a poster about our Aedes aegypti surveillance and making operational decisions from the data, and Mir Bear-Johnson presented a poster on triatomine surveillance beginning within the District.

The first ad of the year was submitted at the beginning of February to be published in the March issue of "The Good Life" Newspaper. There was a meeting in February with the Director of Community & Entertainment for the Visalia Rawhide to plan our presence at the ball games this season.

There were 13 service requests in February:

2022	Fish	Inspection	Mosquito	Source	Other	Total
January	0	0	0	5	0	5
February	1	6	0	6	0	13
Total	1	6	0	11	0	18

2022 Service Request Summary

#### III. Vector and Disease Surveillance

#### **Delta MVCD Summaries**

<u>Humans</u>: There were no human cases of an arbovirus reported by the local public health department for the month of February 2022.

<u>Birds</u>: There was 1 dead bird reported to the District. Testing for WNV, SLEV, and WEEV will take place in early March.

Mosquitoes: No mosquito samples were tested in February.

#### **State Surveillance:**

Humans: To date, human case data is not available for the state.

Birds: To date, human case data is not available for the state.

Mosquitoes: To date, human case data is not available for the state.

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

TOTAL BUDGET

\$3,974,072.78

EXPENDITURES – July 1, 2021 – February 28, 2022

TOTAL EXPENDITURES	\$3,107,737.17
Long Term Debt	\$58,914.03
Capital	\$455,113.89
Tax Admin Fee	\$34,248.50
Services & Supplies	\$710,349.81
Salaries	\$1,849,110.94

## REVENUE RECEIVED – July 1, 2021 – February 28, 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*	
TOTAL REVENUE TO DATE	\$2,717,347.89

## V. <u>Time Sheet Summary</u>

Month	Available Work	Sick Hrs Used	Total Hrs	Pct. Of Hrs	
	Hrs		Available for	Avail for	
			Work	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	
December	1,920	60.00	1,860.00	96.88	
January	2,720	178.50	2,541.50	93.44	
February	2,720	16.00	2704.00	99.42	

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.

<sup>\*</sup>February revenue not available as of 03/04/2022.

# **Attachment A: Updated Chain of Command**

	D	General Manager r. Mustapha Debboun*	#	
		<b>V</b>	··	
		Assistant Manager		
		Mir Bear-Johnson* #		
				$\downarrow$
		$\downarrow$		Administrative Assistant
				Mary Ellen Gomez* #
		$\downarrow$		•
				Administrative Analyst
		$\downarrow$		Vacant #
<b>\</b>	$\downarrow$		$\downarrow$	
Comm. Ed. & Out. Coord.	Scientific Prog. Mgr.		Operations Prog. N	lgr.
Erick Arriaga*	Crystal Grippin *#		Hector Cardenas*	#
	,		$\downarrow$	
	Biologist	<b>\</b>	·	$\downarrow$
	Mark Nakata *	VC Supervisor		Foreman
		Rick Alvarez * #		Paul Harlien *#
	Biologist			
	Javier Valdivias *	Zone 13-17	нтс	Zone 1
		5 - VC Tech I	Bryan Ruiz	VC Tech II
		(Urban inspection	,	
	Biologist	crew)	VC Tech III	
	Andrea Troupin *			Zone 2
		Floater	Zone 60 (HTC)	Bryan Ferguson
	Biologist	VC Tech I	2 - VC Tech II	VC Tech III/Mechanic
	Vacant*			
				Zone 3
	Lab Assistants			Vacant*
	2 - Lab Tech II			VC Tech III/Mechanic
	Trap Zones			Zone 4
	6 - Lab Tech I			VC Tech II
				Zone 5
				Mario Sanchez
				VC Tech III/Mechanic
				<u>.</u>
				Dairy Crew
Marana.				3 - VC Tech I
<mark>Vacant</mark> * Exempt				Catch Basin
# Confidential				VC Tech I