

CONSOLIDATED MOSQUITO ABATEMENT DISTRICT

13151 E. Industrial Dr., Parlier, CA 93648 559-896-1085 | <u>www.mosquitobuzz.net</u>

> Board of Trustees Meeting Monday, April 15, 2024 1:00PM

AGENDA

1. Roll Call:

2. Introduction of Visitors:

The public may address the Board on each agenda item during consideration of that item.

3. Public Comments:

This is an opportunity for public comment on non-agenda items. The President reserves the right to limit the duration of each speaker to five (5) minutes. It is customary for the Board not to answer any questions impromptu.

4. Items of General Consent:

The following items are routine in nature and may be approved by one blanket motion upon unanimous consent. The President or any member of the Board of Trustees may request an item be pulled from Items of General Consent for a separate discussion.

- a. Approval of March Minutes
- b. Approval of March Payroll
- c. Approval of March Bills

5. <u>Closed Session:</u>

a. Pursuant to Government Code Section 54957 Public Employee Evaluation: District Manager

6. Report From Closed Session:

7. Trustee Representative and San Joaquin Valley alternate on the VCJPA Board: The Board will consider the nomination of trustee Taylor for re-election as San Joaquin Valley/Southern CA Trustee Director on the VCJPA Board.

8. District Collaboration with Synvect:

The Board will consider partnership with Synvect to evaluate next-generation Sterile Insect Technique (ngSIT) technology.

9. District Participation at Meetings:

The Board will consider approval of travel expenses for District Manager Holeman's attendance at Senate Committee hearings for Senate Bill 1251 in Sacramento, CA.

10. 2023 Annual Report Approval:

The Board will consider approval of the 2023 Annual Report and distribution list.

11. Board General Discussion:

This is an opportunity for Board Members to ask questions for clarification, provide information to staff, request staff to report back on a matter or direct staff to place a matter on a subsequent agenda.

12. Staff Reports:

This is an opportunity for staff to report on District activities.

13. Adjournment:

Minutes of a Meeting of the Board of Trustees of the Consolidated Mosquito Abatement District March 18, 2024

A meeting of the Board of Trustees of the Consolidated Mosquito Abatement District was held at the District Office, in Parlier at 1:00 PM on March 18, 2024.

1. Roll Call:

Trustees Present:

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Tokuo Fukuda	Kingsburg	
Leonard Hammer	Fowler	
Mary Anne Hill	County of Fresno	
Abe Isaak	Reedley	Arrived at 1:07 PM
Charles Lockhart	Orange Cove	
Michelle Lopez	Parlier	
Ward Scheitrum	Fresno	
Charles Smith	Selma	
Karen Steinhauer	Sanger	
Bruce Taylor	County of Fresno	
Jennifer Willems	Clovis	

Trustees Absent:

Others Present at the Parlier Office:

Jodi Holeman	District Manager
Karan Cox	Office Administrator
Drew Kellogg	Enterprise Fleet Management
Joseph LeGrand	Enterprise Fleet Management

2. President Lockhart called the meeting to order at 1:00 PM:

3. **Public Comments:** None.

- 4. **Items of General Consent:** Trustee Isaak arrived. The following items are routine in nature and may be approved by one blanket motion upon unanimous consent. The President or any member of the Board of Trustees may request an item be pulled from Items of General Consent for a separate discussion.
 - A. Approval of February Minutes
 - **B.** Approval of February Payroll
 - C. Approval of February Bills

A motion was made by Trustee Fukuda, seconded by Trustee Taylor, and passed by unanimous vote to approve the items of General Consent with an amendment to the minutes.

- 5. **Automotive Fleet Lease Option:** Enterprise Fleet Management presented a fleet synopsis on the District's vehicles and a program to replace and upgrade the District's vehicles with a leased vehicle plan. No action was taken.
- 6. **GovDeals Online Auction Memo of Understanding (MOU):** A motion was made by Trustee Fukuda, seconded by Trustee Isaak and passed by unanimous vote to approve an online auction MOU with GovDeals for the sale of surplus district property and to allow the Manager to execute the MOU.
- 7. **Support to UC Mosquito Research Lab:** A motion was made by Trustee Hill, seconded by Trustee Willems and passed by unanimous vote to continue collaboration and in-kind support of mosquito research projects with Dr. Anthony Cornel and the University of California Mosquito Research Laboratory.
- 8. **Purchase of Ultra-Low Temperature Freezer:** A motion was made by Trustee Smith, seconded by Trustee Lopez and passed by unanimous vote to approve the purchase of a new ultra-low temperature freezer for the laboratory from PHC Corporation of North America at a cost of \$13,672.01.
- 9. **Selma Facility:** The Manager provided an update on a meeting with the City of Selma regarding the lease of the District's Selma facility. No action was taken.
- 10. **2023 Annual Report:** The 2023 Annual Report of District activities was presented to the Board for their input. The Board will be asked to approve the 2023 Annual Report at the next Board meeting.
- 11. Meeting Reports: A written report was submitted by Trustee Steinhauer on her attendance at the MVCAC Annual Meeting on January 21 24, 2024 in Monterey, Ca. Trustee Fukuda submitted a report on his attendance at the AMCA Annual Meeting in Dallas, TX on March 4 8, 2024. Trustee Taylor and Manager Holeman gave oral reports on their attendance at the VCJPA Annual Workshop in Santa Cruz, CA on February 29 March 1, 2024. Manager Holeman gave oral reports on her attendance at the MVCAC Spring Meeting and Legislative Conference in Sacramento, CA on February 20 February 22, 2024 and on her attendance at the AMCA Annual Meeting on March 4 8, 2024 in Dallas, TX.

- 12. **Board General Discussion:** Trustee Taylor asked for and received an update on the District's solar parking structure project and on the purchase of new vehicles that were approved by the Board.
- 13. **Staff Reports:** District Manager Holeman gave the Board an update on the District's current activities and informed the Board that we have begun hiring seasonal staff.
- 14. **Adjournment:** The meeting ended at 2:35 PM. The next Board meeting will be held on Monday, April 15, 2024.

Attested Member, Board of Trustees

Consolidated Mosquito Abatement District Payroll Expenses March 2024

	Gross	Net		
Check #	Pay	Pay	Payee	Description
30252	\$3,124.00	\$2,128.96	Amy Garcia	Full-Time Employee
30253	\$0.00	\$0.00	Voided check	Voided & replaced
30254	\$0.00	\$0.00	Voided check	Voided & replaced
30255	\$3,625.00	\$2,597.64	Chris Monis	Full-Time Employee
30256	\$3,805.50	\$2,715.42	Derek Hill	Full-Time Employee
30257	\$3,480.00	\$2,305.95	Devon Cornel	Full-Time Employee
30258	\$2,940.00	\$2,137.07	Donald McNiel	Full-Time Employee
30259	\$3,480.00	\$2,479.59	Gha Vang	Full-Time Employee
30260	\$6,041.67	\$3,863.39	Jodi Holeman	Full-Time Employee
30261	\$3,480.00	\$2,089.52	Jose Moreno	Full-Time Employee
30262	\$3,000.50	\$2,053.32	Jovana Benavides	Full-Time Employee
30263	\$3,777.00	\$2,714.66	Karan Cox	Full-Time Employee
30264	\$0.00	\$0.00	Katherine Brisco	Voided & replaced
30265	\$4,726.50	\$2,947.48	Katherine Ramirez	Full-Time Employee
30282	\$1,866.75	\$1,392.92	Anita Munoz	Seasonal Employee
30283	\$2,104.97	\$1,535.32	Brittany Deegan	Full-Time Employee
30284	\$3,120.48	\$2,163.17	Katherine Brisco	Full-Time Employee
30285	\$300.00	\$277.05	Abraham Isaak	Trustee
30286	\$3,124.00	\$2,128.96	Amy Garcia	Full-Time Employee
30287	\$2,280.00	\$1,665.26	Anita Munoz	Seasonal Employee
30288	\$3,162.41	\$2,139.76	Brittany Deegan	Full-Time Employee
30289	\$300.00	\$277.05	Bruce Taylor	Trustee
30290	\$300.00	\$277.05	Charles Lockhart	Trustee
30291	\$200.00	\$184.70	Charles Smith	Trustee
30292	\$3,625.00	\$2,597.63	Chris Monis	Full-Time Employee
30293	\$1,680.00	\$1,402.39	Chulong Vang	Seasonal Employee
30294	\$3,805.50	\$1,534.15	Derek Hill	Full-Time Employee
30295	\$3,480.00	\$2,305.95	Devon Cornel	Full-Time Employee
30296	\$2,940.00	\$2,137.07	Donald McNiel	Full-Time Employee
30297	\$2,200.00	\$1,525.66	Eric Ferguson	Seasonal Employee
30298	\$3,480.00	\$2,479.59	Gha Vang	Full-Time Employee
30299	\$2,172.50	\$1,816.83	Jacob Uribe	Seasonal Employee
30300	\$6,041.67	\$3,863.39	Jodi Holeman	Full-Time Employee
30301	\$1,170.00	\$1,006.44	Jorge Rivas Maya	Seasonal Employee
30302	\$3,480.00	\$2,089.51	Jose Moreno	Full-Time Employee
30303	\$3,000.50	\$2,053.34	Jovana Benavides	Full-Time Employee
30304	\$3,777.00	\$2,714.65	Karan Cox	Full-Time Employee
30305	\$300.00	\$277.05	Karen Steinhauer	Trustee
30306	\$2,836.80	\$2,011.85	Katherine Brisco	Full-Time Employee
30307	\$4,726.50	\$2,947.48	Katherine Ramirez	Full-Time Employee

Consolidated Mosquito Abatement District Payroll Expenses March 2024

	Gross	Net		
Check #	Pay	Pay	Payee	Description
30308	\$200.00	\$184.70	Leonard Hammer	Trustee
30309	\$300.00	\$277.05	Mary Anne Hill	Trustee
30310	\$2,227.25	\$1,754.31	Michael Scotty Dunn	Seasonal Employee
30311	\$300.00	\$277.05	Michelle Lopez	Trustee
30312	\$1,980.00	\$1,658.16	Robert Martinez	Seasonal Employee
30313	\$300.00	\$277.05	Tokuo Fukuda	Trustee
30314	\$1,540.00	\$1,193.13	Tracy Autrey	Seasonal Employee
30315	\$200.00	\$184.70	Ward Scheitrum	Trustee
Total	\$114,001.50	\$78,643.37		

Employee Deductions and Liabilities

Check #	Amount	Payee	Description
30266	\$1,773.92	EDD	State Income Tax
30267	\$8,516.67	CMAD	Federal, Social Security, Medicare
30268	\$3,519.78	CalPERS	Retirement
30269	\$625.00	Mission Square	457K Retirement
30270	\$150.00	Valley First Credit Union	Credit Union
30271	\$71.68	Aflac	Disability Insurance
30316	\$159.54	EDD	State Income Tax
30317	\$2,128.97	EDD	State Income Tax
30318	\$591.49	CMAD	Federal, Social Security, Medicare
30320	\$11,032.70	CMAD	Federal, Social Security, Medicare
30321	\$4,361.94	CalPERS	Retirement
30322	\$2,125.00	Mission Square	457K Retirement
30323	\$150.00	Valley First Credit Union	Credit Union
30340	\$151.44	Mutual of Omaha	Life Insurance
Total Deductions	\$35,358.13		
Total Net Pay	\$78,643.37		
Total Gross Pay	\$114,001.50		

Consolidated Mosquito Abatement District Maintenance and Operations Expenses March 2024

Bank of the West Checks

Check #	Amount	Payee	Description
30267	\$3,509.67	CMAD	District Social Security & Medicare
30268	\$4,414.11	CalPERS	Retirement - District portion
30272	\$601.94	City of Clovis	Water Sewer Disposal - Clovis facility
30273	\$49.50	Matson Alarm Co.	Alarm System - Caruthers facility
30274	\$435.04	PG&E	Electric charges - Clovis facility
30275	\$117.73	PG&E	Electric & Gas charges - Selma facility
30276	\$15.54	PG&E	Electric charges - Selma facility
30277	\$10.51	PG&E	Electric charges - Caruthers facility
30278	\$37.96	PG&E	Gas charges - Clovis facility
30279	\$101.25	City of Sanger	Water Sewer Disposal - Sanger facility
30280	\$15,093.20	SDRMA	Health, dental & vision insurance premium
30281	\$2,011.43	Wex Bank - Valero	Fuel charges
30318	\$210.49	CMAD	Social security & medicare - District portion
30319	\$5,814.28	EDD	Unemployment insurance - quarterly
30320	\$5,007.70	CMAD	Social security & medicare - District portion
30321	\$5,301.99	CalPERS	Retirement - District portion
30325	\$39.22	AT&T	800 Number
30326	\$586.67	AT&T	Telephone / internet - Clovis facility
30327	\$40.09	FedEx	Mosquito sample shipping
30328	\$532.26	Industrial Electrical Company	Electrical repairs - Parlier facility
30329	\$138.00	Katherine Brisco	Travel Expenses - Pac-Vec Annual Meeting
30330	\$25.00	KCAPS	Health fair - Kingsburg
30331	\$815.70	City of Parlier	Water Sewer Disposal - Parlier facility
30332	\$19.68	PG&E	Electric & Gas charges - Sanger facility
30333	\$2,098.95	PG&E	Electric charges - Parlier facility
30334	\$715.39	SoCal Gas	Gas charges - Parlier facility
30335	\$15.78	SoCal Gas	Gas charges - Caruthers facility
30336	\$1,800.91	Verizon Wireless	Cellphone / tablet service
30337	\$42.34	Waste Management	Disposal - Selma facility
30338	\$300,000.00	CalPERS	Additional UAL payment - Classic plan
30339	\$25,000.00	CalPERS	Additional UAL payment - PEPRA plan
30340	\$136.01	Mutual of Omaha	Life Insurance - District portion
30341	\$300.00	All-Pro Janitorial Services	Janitorial services - Parlier facility
30342	\$48,932.12	Adapco, Inc.	Insecticides
30343	\$311.91	AutoZone, Inc.	Repair parts, battery & oil
30344	\$2,279.92	Battery Systems, Inc.	Batteries, battery chargers
30345	\$1,955.61	California Industrial Rubber	Rubber boots & waders
30346	\$36.34	California Water Service	Water - Selma facility
30347	\$5,296.51	Carson Trailer, Inc.	Drone trailer
30348	\$63,756.93	Clarke Mosquito Control	Insecticides

Consolidated Mosquito Abatement District Maintenance and Operations Expenses March 2024

Check #	Amount	Payee	Description
30349	\$43.95	DoorKing, Inc.	Gate monthly cellular service
30350	\$145.05	Kimball Midwest	Shop supplies
30351	\$71.02	Linde Gas & Equipment, Inc.	Dry ice
30352	\$379.50	Matson Alarm Co.	Alarm systems - various locations
30353	\$1,412.19	Mission Uniform Service	Uniforms & safety supplies
30354	\$495.62	Nelson's Ace Hardware	shop supplies / building & ground / fish program
30355	\$113.21	O'Reilly Auto Parts	Repair parts
30356	\$1,825.00	Pacific Engineering & Consulting	Environmental Consulting
30357	\$1,038.96	PBM Supply & Mfg, Inc.	Field equipment
30358	\$37.73	Republic Services	Disposal - Clovis facility
30359	\$758.80	Silvas Oil Company, Inc.	motor oil
30360	\$92.27	Tifco Industries	Hand cleaner dispenser
30361	\$2,403.48	Verizon	Vehicle GPS tracking units
30362	\$16,631.76	Veseris	Insecticides
30363	\$90.58	Wizix Technology Group, Inc.	Copier maintenance
30364	\$32.23	World Oil Environmental Services	s Oil recycling
30365	\$7,390.41	U.S. Bank Corporate Payment	Credit card statement - see transaction list
Total	\$530,569.44		

County of Fresno Checks

Check #	Amount	Payee	Description
306535	\$72,171.45	Consolidated Mosquito	Transfer funds to checking
306536	\$416,280.94	Consolidated Mosquito	Transfer funds to checking
306537	\$156,118.55	Consolidated Mosquito	Transfer funds to checking
	\$644,570.94		

Summary of March Expenses

Total March 2024 Expenditures	\$644,570.94
March 2024 Maintenance & Operations	\$530,569.44
March 2024 Salaries & Wages	\$114,001.50

Consolidated Mosquito Abatement District Monthly Expenditures

ACCOUNT BUDGET SPENT BALANCE					
NUMBER	ACCOUNT NAME	FY 2023/2024	TO DATE	MAR 31, 2024	
	S, WAGES & EMPLOYEE BENEFITS			,,	
6101-01	Salaried Wages	\$1,340,000.00	\$866,762.06	\$473,237.94	
6101-06	Hourly Wages & Extra Help	\$730,000.00	\$364,601.47	\$365,398.53	
6101-02	FICA Employers Contribution	\$162,000.00	\$94,290.16	\$67,709.84	
6101-03	Unemployment Insurance	\$24,000.00	\$11,523.75	\$12,476.25	
6101-04	Retirement District's Payment	\$475,000.00	\$415,676.56	\$59,323.44	
6101-05	Group Health Insurance	\$300,000.00	\$166,273.85	\$133,726.15	
6101-07	Pre-Employment & Misc. Expenses	\$8,000.00	\$1,274.92	\$6,725.08	
	TOTALS	\$3,039,000.00	\$1,920,402.77	\$1,118,597.23	
OPERATI	NG & MAINTENANCE SUPPLIES & EXPENSE				
6102-01	Insecticides & Herbicides	\$500,000.00	\$454,114.89	\$45,885.11	
6102-02	Power Spray & Field Equipment	\$25,000.00	\$13,458.02	\$11,541.98	
6102-03	Misc Operating Supplies & Expense	\$5,000.00	\$2,801.41	\$2,198.59	
6102-04	Fish Program	\$25,000.00	\$1,658.28	\$23,341.72	
6102-05	Building & Ground Maintenance	\$30,000.00	\$21,100.98	\$8,899.02	
6102-06	Airplane Expense	\$50,000.00	\$600.00	\$49,400.00	
	TOTALS	\$635,000.00	\$493,733.58	\$141,266.42	
MOTOR V	VEHICLE SUPPLIES & EXPENSE				
6103-01	Fuel & Lubricants	\$180,000.00	\$94,844.76	\$85,155.24	
6103-02	Repairs & Shop Tools	\$45,000.00	\$25,643.86	\$19,356.14	
6103-03	Tires & Batteries	\$12,000.00	\$9,492.79	\$2,507.21	
	TOTALS	\$237,000.00	\$129,981.41	\$107,018.59	
UTHATIF	S & COMMUNICATIONS				
<u>6104-01</u>	Heat, Light & Power	\$40,000.00	\$35,028.59	\$4,971.41	
6104-04	Water Sewer & Disposal	\$18,000.00	\$12,140.76	\$5,859.24	
6105-01	Telephone	\$25,000.00	\$15,195.04	\$9,804.96	
6105-02	Cellular Phones & Tablets	\$30,000.00	\$18,091.84	\$11,908.16	
	TOTALS	\$113,000.00	\$80,456.23	\$32,543.77	
OFFICE S	UPPLIES & EXPENSE				
6106-02	Postage, Printing & Stationery	\$6,000.00	\$2,525.90	\$3,474.10	
6106-04	Repairs & Maintenance	\$6,000.00	\$2,178.38	\$3,821.62	
6106-05	Misc Office Supplies	\$13,000.00	\$8,380.10	\$4,619.90	
6106-06	Office Equipment & Furniture	\$10,000.00	\$1,425.56	\$8,574.44	
	TOTALS	\$35,000.00	\$14,509.94	\$20,490.06	
INSURAN	CE				
6107-01	Liability, Property & Auto	\$128,000.00	\$125,066.99	\$2,933.01	
6107-02	Workers Compensation	\$80,000.00	\$78,467.01	\$1,532.99	
	TOTALS	\$208,000.00	\$203,534.00	\$4,466.00	

Consolidated Mosquito Abatement District Monthly Expenditures

ACCOUN NUMBER		BUDGET FY 2023/2024	SPENT TO DATE	BALANCE MAR 31, 2024
	& SUBSISTENCE EXPENSE	F 1 2023/2024	TODATE	MAK 31, 2024
6108-01	Meetings & Travel Allowance	\$75,000.00	\$40,010.14	\$34,989.86
6108-02	Trustee Allowance	\$1,000.00	\$0.00	\$1,000.00
6108-03	Meal Allowance	\$8,000.00	\$595.32	\$7,404.68
	TOTALS	\$84,000.00	\$40,605.46	\$43,394.54
MISCELI	ANEOUS EXPENDITURES			
6109-01	Rent: Land, Buildings and Equipment	\$2,000.00	\$0.00	\$2,000.00
6109-02	Dues, Subscriptions and Fees	\$32,000.00	\$20,361.50	\$11,638.50
6109-02	Education & Publicity	\$30,000.00	\$13,507.54	\$16,492.46
6109-04	Accounting	\$14,000.00	\$12,300.00	\$1,700.00
6109-05	Legal	\$12,000.00	\$2,892.76	\$9,107.24
6109-06	County Service Charge	\$63,000.00	\$0.00	\$63,000.00
6109-07	Uniforms, Safety Apparel & Equipment	\$32,000.00	\$13,122.90	\$18,877.10
6109-08	Surveillance & Research	\$65,000.00	\$26,896.27	\$38,103.73
6109-09	Other Miscellaneous Expenditures	\$18,000.00	\$4,919.18	\$13,080.82
6109-10	GIS & GPS	\$82,000.00	\$41,519.70	\$40,480.30
	TOTALS	\$350,000.00	\$135,519.85	\$214,480.15
	TOTAL OPERATIONAL EXPENDITURES	\$4,701,000.00	\$3,018,743.24	\$1,682,256.76
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CAPITAL	OUTLAY			
6110-01	Office & Lab Furniture & Equipment	\$15,000.00	\$0.00	\$15,000.00
6110-02	Auto Equipment	\$500,000.00	\$0.00	\$500,000.00
6110-03	Shop Equipment	\$10,000.00	\$8,416.14	\$1,583.86
6110-04	Field Equipment	\$150,000.00	\$77,532.73	\$72,467.27
6110-05	Building & Ground Improvement	\$1,500,000.00	\$498,968.00	\$1,001,032.00
6110-06	Loan & Lease Purchase Payments	\$290,000.00	\$287,590.79	\$2,409.21
	TOTAL CAPITAL OUTLAY EXPENDITURI	\$2,465,000.00	\$872,507.66	\$1,592,492.34
	TOTAL EXPENDITURES	\$7,166,000.00	\$3,891,250.90	\$3,274,749.10
Special Pr	ojects Reserve	\$150,000.00	\$0.00	\$150,000.00
	SSJVR Mutual Aid Reserve	\$100,000.00	\$0.00	\$100,000.00
	cy Reserve	\$175,000.00	\$0.00	\$175,000.00
Building H		\$2,000,000.00	\$0.00	\$2,000,000.00
Equipmen		\$500,000.00	\$0.00	\$500,000.00
General R		\$3,126,000.00	\$0.00	\$3,126,000.00
	TOTAL RESERVES	\$6,051,000.00	\$0.00	\$6,051,000.00
	TOTAL EXPENDITURES AND RESERVES	\$13,217,000.00	\$3,891,250.90	\$9,325,749.10
	I VIAL EAI ENDIIUKES AND KESEKVES	φ13,417,000.00	<i>ф3,071,4</i> 30.90	φ 7,3 23,749.10

Consolidated Mosquito Abatement District Monthly Expenditures

FRESNO COUNTY ACCOUNT- BANK OF THE WEST	
CASH ON HAND, FEBRUARY 29, 2024	\$8,675,919.75
PROPERTY TAXES WITHHELD BY FRS COUNTY	\$0.00
MARCH REVENUE	\$0.00
MARCH INTEREST	\$44,840.72
TAXES - FRESNO COUNTY / KINGS COUNTY	\$221,557.78
TOTAL REVENUE FOR MARCH	\$266,398.50
SUB-TOTAL	\$8,942,318.25
COUNTY ADMIN COST FOR FY WITHHELD BY COUNTY	\$0.00
MONEY TRANSFERRED TO CHECKING	(\$644,570.94)
CASH ON HAND, MARCH 31, 2024	\$8,297,747.31
YEARLY REVENUE THROUGH 02-29-24 MARCH REVENUE YEARLY REVENUE THROUGH 03-31-24	\$2,651,379.66 \$266,398.50 \$2,917,778.16
CMAD CHECKING ACCOUNT - BANK OF THE WEST CASH ON HAND, FEBRUARY 29, 2024 MONEY TRANSFERRED FROM FRS CO ACCT MARCH EXPENDITURES	\$135,000.00 \$644,570.94 (\$644,570.94)
CASH ON HAND, MARCH 31, 2024	\$135,000.00
CADII ON HAND, MARCH 31, 2027	φ 133,000.00

SALE OF REEDLEY DEPOT	\$185,000.00
DOWN PAYMENT	(\$25,000.00)
MONTHLY PAYMENTS PAID TO DATE	(\$46,438.00)
BALANCE DUE AS OF MARCH 31, 2024	\$113,562.00



P.O. BOX 6343 FARGO ND 58125-6343



ACCOUNT NUMBER	
STATEMENT DATE	04-08-2024
AMOUNT DUE	\$7,390.41
NEW BALANCE	\$7,390.41
PAYMENT DUE ON RECEIPT	

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00000038101 SP 106481007057057 S CONSOLIDATED MOSQUITO ATTN KARAN COX 13151 E. INDUSTRIAL DR. PARLIER CA 93648-9661

AMOUNT ENCLOSED	
\$	

Please make check payable to"U.S. Bank"

U.S. BANK CORPORATE PAYMENT SYSTEMS P.O. BOX 790428 ST. LOUIS, MO 63179-0428

Please tear payment coupon at perforation.

		CORPOR	RA'	TE ACCO	UNT SUN	IMARY			
CONSOLIDATED MOSQUIT	Previous Balance	Purchases And Other + Charges	+	Cash Advances +	Cash Advance Fees +	Late Payment Charges	- Credits	- Payments	New = Balance
Company Total	\$5,608.68	\$7,407.30		\$0.00	\$.00	\$0.00	\$16.89	\$5,608.68	\$7,390.41

CORPORATE ACCOUNT ACTIVITY						
CONSOLIDATED MOSQUITO TOTAL CORPORATE ACTIVITY \$5.608.68 CR						
Post Tran Date Date Refer	rence Number	Transaction Description		\$0,000.00 Ort	Amount	
03-25 03-25 74798	8264085408500015330	PAYMENT-THANK YOU Q		:	5,608.68 PY	
		NEW ACTIVITY				
KATHERINE RAMIR	REZ CRED \$0.		CASH ADV \$0.00	FOTAL ACTIVITY \$1,297.65		
Post Tran Date Date Refer	rence Number	Transaction Description			Amount	
03-08 03-07 2403	5964067634002235044	KATHERINE RAMIREZ	331 FORT WORTH T 03-08-24	X	30.00	
03-11 03-08 24034	4544069001056311320	DFW AA C FAT CITY OF FRESNO AIRPOR	T PA FRESNO CA		90.00	

CUSTOMER SERVICE CALL	ACCOUNT	NUMBER	ACCOUNT SUMMARY		
			PREVIOUS BALANCE	5,608.68	
800-344-5696		1	PURCHASES & OTHER CHARGES	7,407.30	
	STATEMENT DATE	DISPUTED AMOUNT	CASH ADVANCES	.00	
	04/08/24	.00	CASH ADVANCE FEES	.00	
			LATE PAYMENT CHARGES	.00	
SEND BILLING INQUIRIES TO:			CREDITS	16.89	
U.S. Bank National Association	AMOUNT DUE		PAYMENTS	5,608.68	
C/O U.S. Bancorp Purchasing Card Program P.O. Box 6335 Fargo, ND 58125-6335	7,390.41		ACCOUNT BALANCE	7,390.41	



Company Name: CONSOLIDATED MOSQUITO
Corporate Account Number:
Statement Date: 04-08-2024

				NEW ACTIV	/ITY		
	Tran Date	Reference Number		Transaction Description	on		Amount
)3-11	03-08	24755424069270699		SHERATON DALLAS D 3045582	ALLAS TX ARRIVAL: 03-03-24		1,177.65
DEVO	N CORI	NEL	CREDI \$0.00		CASH ADV \$0.00	TOTAL ACTIVITY \$175.00	
	Tran Date	Reference Number		Transaction Description	on		Amount
04-02	04-02	24492154093745212	382566	PSI SERVICES LLC 81	8-847-6180 CA		175.00
BRITT	FANY DE	EEGAN	CREDI \$0.00		CASH ADV \$0.00	TOTAL ACTIVITY \$180.36	
Post Date	Tran Date	Reference Number		Transaction Description	on		Amount
03-27	03-15 03-27 03-27	24011344087000016	497963	Carolina Biologic Amazon Ret* 112-809 Uline *Ship Supplie	9115 WWW.AMAZON.		83.08 77.36 19.92
CHRIS	STOPHE	ER MONIS	CREDI \$0.00		CASH ADV \$0.00	TOTAL ACTIVITY \$1,902.23	
	Tran Date	Reference Number		Transaction Description	on		Amount
	03-08 03-07	24692164068103341 24717054068870682	376203	SQ *AFRAM@JET TAX AMERICAN AI 0014429 MONIS/CHRISTOPH		тх	110.93 30.00
03-11	03-08	24755424069270699	248114	SHERATON DALLAS 2 3045624	14-9228000 TX ARRIVAL: 03-08-24		942.12
04-05	04-04	74247284095820127		NOHOWE PRODUCT N			819.18
KATH	ERINE	BRISCO	CREDI \$0.00		CASH ADV \$0.00	TOTAL ACTIVITY \$431.20	
Post Date	Tran Date	Reference Number		Transaction Description	on		Amount
04-08	04-05	24755424097170978		HYATT PLACE TEMPE 36193662	AZ ARRIVAL: 04-03-24		431.20



Company Name: CONSOLIDATED MOSQUITO
Corporate Account Number:
Statement Date: 04-08-2024

		NEW ACTIVIT	γ		
Post Tran					
Date Date	Reference Number	Transaction Description			Amount
03-22 03-20	24943014081010187321585	THE HOME DEPOT #8529	SELMA CA		87.47
KARAN COX		ITS PURCHASES 00 \$656.89	CASH ADV \$0.00	TOTAL ACTIVITY \$6556.89	
Post Tran Date Date	Reference Number	Transaction Description			Amount
03-13 03-11 03-20 03-18 03-26 03-25 04-03 04-03 04-04 04-03 04-05 04-04	24137464073001531196800 24427334079710037022264 24137464086001614075231 24692164094101273350934 24692164094101831487491 24137464096001610039262	USPS KIOSK 0528999550 SAVEMART #654 KINGS H USPS PO 0558560648 PA AMZN MKTP US*124UB29 AMZN MKTP US*HS3W18 USPS PO 0516560612 CL0	FRESNO CA KINGSBURG CA RLIER CA S3 AMZN.COM/BILL Z33 AMZN.COM/BILL DVIS CA	WA WA	34.49 32.08 14.58 83.30 36.44 456.00
JOSE MORE	NO CRED \$0.0	ITS PURCHASES 00 \$631.27	CASH ADV \$0.00	TOTAL ACTIVITY \$631.27	
Post Tran Date Date	Reference Number	Transaction Description			Amount
03-11 03-07 03-18 03-14 03-18 03-15 03-22 03-22 03-25 03-23 03-27 03-26 04-08 04-05	24692164068103473984860 24137464076001678116949 24943014076010182107697 24692164082104412575134 24692164083105626632545 24431064087400261000064 24231684097091010001829	AMZN MKTP US*RH6R096 AMZN MKTP US*RH9J48L	02 AMZN.COM/BILL	WA WA	81.33 81.36 54.32 102.63 90.76 37.41 183.46
JODI HOLEM	AN CRED \$16.	ITS PURCHASES 89 \$2,045.23	CASH ADV \$0.00	TOTAL ACTIVITY \$2,028.34	
Post Tran Date Date	Reference Number	Transaction Description			Amount
03-07 03-07 03-07 03-07 03-08 03-08	24492154067745755603123 24492154067745771952579 24035964068634002323252	LIBER TRIPHELPLIBER	COM CA	тх	16.66 15.56 30.00
03-08 03-08	24035964068634002323260	AMERICAN AIR001442974 JODI HOLEMAN DFW AA C FAT	3286 FORT WORTH 03-08-24	ТХ	30.00
03-11 03-08 03-11 03-08	24492154068717025230580 24755424069270699244428	UBER TRIP HELP.UBER.	COM CA 9228000 TX RRIVAL: 03-03-24		95.03 1,177.65
03-19 03-18 03-19 03-18 03-21 03-21 03-25 03-25 04-04 04-02 04-05 04-03	24445004079000968169210 24551944078027014780169 2401134408100001311977 24204294085000301563038 24755424094260947763161 24000974095390103225170	DOLLAR GENERAL #1822 KABAB CITY REEDLEY C, AMCA* CA HTTPSWWW.N MSFT * E0700RMJLY 800- CA DEPT PEST REGS LIC BEST WESTERN CAPITAL	0 PARLIER CA A 10SQ CA 6427676 WA ENSI 916-4453891 C	Δ	7.45 214.01 125.00 82.50 110.00 124.48
04-08 04-08 04-08 04-07	74492154099743288517776 24492154098743241421567	UBER TRIP 8005928996	CA		16.89 CR 16.89



Company Name: CONSOLIDATED MOSQUITO
Corporate Account Number:
Statement Date: 04-08-2024

Department: 00000 Total: Division: 00000 Total: \$7,390.41 \$7,390.41

						CMAD	
Name	Date	Reference Number	Merchant Name	Amount	Item Description	Account #	Purchase Purpose
K. Ramirez	2024/03/07	24035964067634002235044	AMERICAN	\$30.00	checked bagged fee	6108-01	AMCA Annual Meeting
K. Ramirez	2024/03/08	24755424069270699242414	SHERATON DALLAS	\$1,177.65	lodging	6108-01	AMCA Annual Meeting
K. Ramirez	2024/03/08	24034544069001056311320	CITY OF FRESNO	\$90.00	airport parking	6108-01	AMCA Annual Meeting
D. Cornel	2024/04/02	24492154093745212382566	PSI SERVICES LLC	\$175.00	Part 107 certification exam	6109-03	unmanned aircraft certification
B. Deegan	2024/03/15	24493984075014000216093	CAROLINA BIOLOGIC	\$83.08	Yeast Brewers PWD 500G	6109-08	ingredient to make gravid water
B. Deegan	2024/03/27	24011344087000016497963	AMAZON RET* 112-	\$77.36	large laundrey basket	6109-08	carry catch containers to lab
B. Deegan	2024/03/27	24692164087108513887780	ULINE *SHIP SUPPLIES	\$19.92	63/445 WHITE PP CAP 50/CT	6109-08	replace broken caps on gravid jugs
C. Monis	2024/03/07	24717054068870682376203	AMERICAN AI	\$30.00	checked bagged fee	6108-01	AMCA Annual Meeting
C. Monis	2024/03/08	24755424069270699248114	SHERATON DALLAS	\$942.12	lodging	6108-01	AMCA Annual Meeting
C. Monis	2024/03/08	24692164068103341296570	SQ *AFRAM@JET TAXI		transportation	6108-01	AMCA Annual Meeting
C. Monis	2024/04/04	74247284095820127980220	NOHOWE PRODUCT	\$819.18	2 - electric backpack sprayers	6102-02	field equipment
K. Brisco	2024/04/05	24755424097170978658452	HYATT PLACE	\$431.20	lodging	6108-01	Pac-Vec Annual Meeting
J. Benavides	2024/03/20	24943014081010187321585	THE HOME DEPOT	\$87.47	40LB SALT	6102-04	fish program
K. Cox	2024/03/11	24137464073001531196800	USPS KIOSK	\$34.49		6106-02	mail Board packet
K. Cox	2024/03/18	24427334079710037022264	SAVEMART #654 KINGS	\$32.08	coffee, pastry	6108-03	Board meeting refreshment
K. Cox	2024/03/25	24137464086001614075231	USPS PO 0558560648	\$14.58	First-Class Lg Env	6106-02	postage to mail various items
K. Cox	2024/04/03	24692164094101273350934	AMZN MKTP	\$83.30	ipad chargers, labels, batteries	6106-05	misc office supplies
K. Cox	2024/04/03	24692164094101831487491	AMZN MKTP	•	Neenah Recycled Paper	6106-05	misc office supplies
K. Cox	2024/04/04	24137464096001610039262	USPS PO 0516560612		Annual Bulk Mail Fee	6106-02	01
J. Moreno	2024/03/07	24692164068103473984860	THE HOME DEPOT			6102-02	storing chemicals in vehicle bed
J. Moreno	2024/03/14	24137464076001678116949	TRACTOR SUPPLY CO		locking storage box	6102-02	storing chemicals in vehicle bed
J. Moreno	2024/03/15	24943014076010182107697	THE HOME DEPOT		HOMER BUCKET 5 gal, lids	6102-02	vehicle organization
J. Moreno	2024/03/22	24692164082104412575134	AMZN MKTP	•	20x20 tarp, walkie talkies	6102-02	communication during drone use
J. Moreno	2024/03/23	24692164083105626632545	AMZN MKTP	-	big airflow box fan	6102-02	drone cooling
J. Moreno	2024/03/26	24431064087400261000064	FRESNO PIPE &		2' X 1/4" pipe		sprayer repair
J. Moreno	2024/04/05	24231684097091010001829	HARBOR FREIGHT	\$183.46	tools and toolbox	6103-02	Clovis shop tools
J. Holeman	2024/03/07	24492154067745755603123	UBER TRIP	-	transportation	6108-01	AMCA Annual Meeting
J. Holeman	2024/03/07	24492154067745771952579	UBER TRIP		transportation	6108-01	AMCA Annual Meeting
J. Holeman	2024/03/08	24755424069270699244428	SHERATON DALLAS	\$1,177.65	0 0	6108-01	AMCA Annual Meeting
J. Holeman	2024/03/08	24492154068717025230580	UBER TRIP	•	transportation	6108-01	AMCA Annual Meeting
J. Holeman	2024/03/08	24035964068634002323252	AMERICAN	-	checked bagged fee	6108-01	AMCA Annual Meeting - Holeman
J. Holeman	2024/03/08	24035964068634002323260	AMERICAN	\$30.00	checked bagged fee	6108-01	AMCA Annual Meeting - Fukuda
J. Holeman	2024/03/18	24551944078027014780169	KABAB CITY	\$214.01	meals	6108-03	policy committee meeting
J. Holeman	2024/03/18	24445004079000968169210	DOLLAR GENERAL	•	bottled water	6108-03	Board meeting refreshment
J. Holeman	2024/03/21	24011344081000001311977	AMCA* CA	\$125.00	AMCA 26th Annual Washington	6108-01	registration - AMCA Washington
J. Holeman	2024/03/25	24204294085000301563038	MSFT * E0700RMJLY		Microsoft subscription	6106-05	mntly Microsoft subscription
J. Holeman	2024/04/02	24755424094260947763161	CA DEPT PEST REGS			6109-03	drone program
J. Holeman	2024/04/03	24000974095390103225170	BEST WESTERN	\$124.48	lodging	6108-01	travel (pending approval)

						CMAD
Name	Date	Reference Number	Merchant Name	Amount	Item Description	Account # Purchase Purpose
J. Holeman	2024/04/07	24492154098743241421567	UBER TRIP	\$16.89	inadvertent charge	
J. Holeman	2024/04/08	74492154099743288517776	UBER TRIP	(\$16.89)	inadvertent charge - credited	
			Total	\$7,390.41		
		6102-02	2 Field equipment	\$1,266.99)	
		6102-04	4 Fish program	\$87.47	,	
		6103-02	2 Vehicle repairs, tools	\$183.46	5	
		6106-02	2 Postage	\$505.07	,	
		6106-0	5 Office supplies	\$202.24	l .	
		6108-0 ⁻	1 Meetings & travel	\$4,426.28	3	
		6108-03	3 Meals	\$253.54	Ļ	
		6109-03	3 Education & Publicity	\$285.00)	
			8 Surveillance	\$180.36	5	
			Total	\$7,390.41		

Agenda Item 5: Closed Session

Pursuant to Government Code Section 54957 Public Employee Evaluation: District Manager

Consolidated Mosquito Abatement District District Manager Evaluation of Job Performance

Rating scores: 5=Outstanding, Exceptional performance that is definitely well beyond requirements; 4=Very Good, Consistently exceeds expected performance; 3=Satisfactory, Fully competent with performance consistently meeting requirements; 2=Needs Improvement, Performance is frequently below that expected; 1=Unsatisfactory, Performance definitely inferior to the standards required for position; NR=Not rated, Not able to rate the job performance.

Category

Board Relations:

Interactions with Board: _____ Board policy development: _____ Report and document preparation: _____ Board meetings: _____

Comments:

Category score: _____

Budgeting and Accounting:

Administration of budget: _____ Accounting system and process: _____ Effective use of resources: _____

Comments:

Category score: _____

District Manager Performance Evaluation Approved 08-15-2011

Policies, District Organization and Employee Relations:

Personnel and operating policies:
Organizational structure, assignment of functions, salary structure:
Employee recruitment, training and interaction:

Comments:

District Functions and Operations:

Development of programs and operations: _____ Response to problems and current issues: _____ Innovation and use of collaborators: _____ Compliance with laws and regulations: _____

Comments:

Category score: _____

Category score: _____

Public, Community and Governmental Relations:

Direction of public awareness and education programs: _____ Media and community interactions: _____

Governmental and other interactions: _____

Category score: _____

Comments:

District Manager Performance Evaluation Approved 08-15-2011

Professional Development:

Keeps informed: _____ Participates in professional associations and meetings: _____ Maintains professional skills: _____ Maintains management skills: _____

Comments:

Category score: _____

Overall score: _____

General Comments:

Date: _____

Board Representative: _____

Agenda Item 7: Trustee Representative and SJV Alternate on the VCJPA Board

Background:

Per the Vector Control Joint Powers Agency (VCJPA) bylaws: All directors (including Trustee representatives) and alternates shall serve a two-year term. The terms of the directors and the Agency Region elected alternates from the Southern California and the San Joaquin Valley (SJV) Regions shall expire on June 30th of the even numbered years.

The term of the Trustee-elected alternate shall expire on June 30th of the even-numbered years. All directors and alternates elected to the Board in accordance with these procedures shall begin their term of office on July 1 in the year of their election.

Travel expenses for Trustee Taylor include one night's lodging and per diem for two travel days minus meals provided by the VCJPA to attend Board of Directors Meetings in April and June.

- Lodging Estimate: \$200-250/night
- Mileage: \$255
- Per Diem rate for Sacramento (two travel days minus one lunch): \$86.50

There will be no travel expenses for Manager Holeman to serve as an alternate.

Action Requested:

The Board will consider the nomination and vote for Trustee Taylor to another two-year term as Trustee Representative on the VCJPA Board of Directors and associated travel expenses.

The Board will consider Manager Holeman as an alternate for the San Joaquin Valley representative and associated travel expenses.

Agenda Item 8: District Collaboration with Synvect

Background:

CRISPR, which stands for Clustered Regularly Interspaced Short Palindromic Repeats, is a technology that allows scientists to edit genes with unprecedented precision. It's based on a natural process that bacteria use to defend themselves against viruses.

Here's how it works:

- Guide RNA (gRNA): CRISPR uses a small piece of RNA called guide RNA, which is designed to match a specific sequence of DNA in the target gene.
- Cas9 Protein: The guide RNA is attached to a protein called Cas9, which acts as molecular scissors.
- DNA Editing: When the guide RNA finds its matching sequence in the target DNA, the Cas9 protein cuts the DNA at that precise location.
- Repair Mechanisms: After the DNA is cut, the cell's natural repair mechanisms come into play. There are two main repair pathways: Non-Homologous End Joining (NHEJ) and Homology-Directed Repair (HDR). NHEJ tends to introduce small insertions or deletions, which can disrupt the gene's function. HDR can be used to insert new DNA sequences at the cut site, allowing precise changes to be made to the gene.

CRISPR technology has numerous applications, including:

- Biomedical Research: Scientists use CRISPR to study gene function and disease mechanisms by creating animal models with specific genetic modifications.
- Gene Therapy: CRISPR has the potential to treat genetic disorders by correcting diseasecausing mutations in patients' cells.
- Agriculture: CRISPR can be used to develop crops with desirable traits, such as improved yield, disease resistance, and nutritional content.
- Drug Development: CRISPR is used to identify and validate potential drug targets by studying the effects of specific gene mutations on cellular processes.

The District continues to face challenges in controlling *Aedes aegypti* mosquitoes and providing residents with the level of relief they were accustomed to before *Aedes aegypti* was established in the District. Districts must continue to partner with developers of new technologies to advance control strategies for mosquito species that present the greatest threat to public health.

In 2018, the District demonstrated success with the Debug Fresno program. While suppression was achieved, the technology remains out of reach for many due to the mass-rearing system not being accessible to districts. Synvect offers a viable solution for mosquito suppression, eliminating the need for mass mosquito rearing and sex sorting. The enclosed details how Synvect is using CRISPR technology to sterilize and sex-sort *Aedes aegypti* mosquitoes.

Action requested:

The district manager is requesting feedback on the collaborative project enclosed with Synvect. No action is requested at this time.

Synvect, Open Pilot

Consolidated Mosquito Abatement District

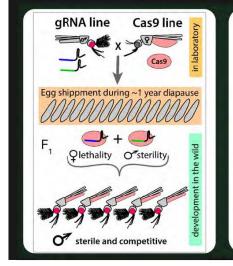
April 2024

Synvect Introduction: Synvect provides bioengineered mosquito control solutions that leverage CRISPR and Sterile Insect Technique to dwindle dangerous mosquito populations. Synvect's core product is next-generation Sterile Insect Technique (ngSIT). ngSIT is an easily deployable egg-to-adult box containing sterilized male mosquito eggs. These eggs can be activated at any time with the addition of water and fish food. Synvect is preparing for global safety and efficacy field pilots to gain regulatory approval via the Environmental Protection Agency.

Synvect has developed the ngSIT SV0001/2 eggs for suppression of *Aedes aegypti* mosquitoes. The ngSIT technology relies on CRISPR-mediated disruption of two genes essential for female flight and male fertility. Two components of CRISPR, *Cas9* and multiple guide RNAs (gRNA), are expressed separately in two *Ae. aegypti* SV0001 and SV0002 strains, respectively, that are maintained as homozygous stocks. The genetic cross between SV0001 and SV0002 strains generates the F₁ SV0001/2 eggs harboring one copy of both CRISPR components, resulting in activation of highly specific cutting of both genes by Cas9/gRNA complexes throughout the entire mosquito development. The development of the SV0001/2 eggs results in the release of sex-sorted, sterilized, and yet competitive male mosquitoes into the environment.

The ngSIT technology enables the cost efficient deployment of ngSIT eggs. The *Ae. aegypti* SV0001/2 eggs are deployed inside the egg-to-adult box, where eggs undergo complete development, and only flightable male mosquitoes are released into the environment, while flightless female mosquitoes remain trapped in the box. Once in the environment, the ngSIT males compete effectively with wild *Ae. aegypti* males for matings with wild conspecific females. Since *Ae. aegypti* female mosquitoes mate only once in their lifetime, every mating of wild female mosquitoes with ngSIT males results in the lifelong sterility of the females leading to fewer mosquitoes in the next generation. Therefore, the SV0001/2 eggs can be considered a species-specific bio-pesticides targeting *Ae. aegypti* mosquitoes.

Next-generation SIT (ngSIT) is CRISPR-mediated biotechnology platform



- Cas9 and gRNA components of CRISPR are separated into two mosquito strains: Cas9 and gRNA strains
- gRNA strain expresses multiple gRNAs targeting two genes essential for female viability and male fertility
- Cas9 or gRNA strains are maintain as homozygous strains
- The genetic cross between Cas9 and gRNA strains bring CRISPR components together in F₁ embryos
- Both female removal (aka. sex-sorting) and male sterilization happen hand-free during the development of F₁ embryos resulting in eclosure of sex-sorted and sterilized males
- Only two specific genes are knocked out in the ngSIT males resulting in high fitness, competitiveness, and longevity

Project Objective: Synvect aims to conduct safety and efficacy open field pilots with the Consolidated Mosquito Abatement District (CMAD) commencing in Summer 2025. CMAD is an ideal partner as they have

PROJECT PROPOSAL

a growing *Ae. aegypti* population, are deeply engaged in cutting edge research, maintaining close community engagement, and have immense experience after conducting the largest mosquito pilot with Verily's Debug.

Project Overview: Three study trial designs are proposed and outlined in Table 1. These designs are subject to change given CMAD's input. Trial A is proposed to assess parameters for optimal dosage and coverage, and the environmental safety of ngSIT SV0001/2 egg development, and may commence at any time during a year. Trials B and C are intended to assess efficacy parameters and a dosage for single and multiple release points with the intention of satisfying product label claims and the future commercial registration of the ngSIT SV0001/2 product. Trials B and C will commence in the advance of the local mosquito season. Table 2 outlines the scale and details for the proposed trials, including numbers of replicate sites and suggested trial sizes for both treated and untreated sites. Site locations will be selected alongside CMAD officials in late 2024 or early 2025.

Trial	Release type	Main objective and Characteristics
Trial A	Single release study	A single release point to assess an optimal dosage and maximum coverage, up to 16 hectares (160,000m², 39.5 acres, 0.06 same)
Trial B	Individual household study	A single release point to suppress mosquitoes at individual household, up to 0.25 hectare (2,500m ² , 0.62 acres, 0.001 sqmi)
Trial C	Household neighborhood study	Multiple release points to suppress mosquitoes over a single neighborhood, up to 25 hectares (250,000m ²), 61.78 acres, 0.09 sqmi)

Table 1. Three different trial designs to be conducted in CMAD.

Table 2. Maximum number of sites, replicates, and doses of released male mosquitoes for Trials A, B,
and C, including the treated and untreated (aka. control) acreages.

Trial	Number of untreated sites	Number of treated sites		Area per trial site (hectares)	Number of released male mosquitoes per 1000m ² per two weeks	Maximum number of released male mosquitoes
A	0	9	6	16	2,500 - 5,000	135,000
В	5	25	28	0.25	2,500 - 5,000	4,375,000
С	3	3	28	25	2,500 - 5,000	52,500,000
Total maximum number of released male mosquitoes during all trials =						57,010,000

PROJECT PROPOSAL

Example Areas

CMAD Headquarters (1.82ha)

City of Sanger Urban Area (~25ha)



Riverdale Urban Area (0.3ha and 15.65ha)



PROJECT PROPOSAL

Quality Control Measures: Synvect ngSIT sterile male mosquitoes are classified as Genetically Modified (GM) mosquitoes and fall under the jurisdiction of the Environmental Protection Agency (EPA) as a biopesticide. EPA requires an assessment of the safety and efficacy of a novel bio-pesticide in open-air trials under the Experimental Use Permit. Synvect will conduct open-air trials of the *Ae. aegypti* SV0001/2 ngSIT eggs in partnership with CMAD regulatory authorities using the mutually approved procedures and protocols to validate: (i) safety and (ii) efficacy of Synvect's ngSIT eggs for the suppression and local elimination of wild *Ae. aegypti* mosquitoes.

Synvect will take multiple control measures to ensure the safety and efficacy of open-air trials of Synvect's ngSIT eggs. There are two features about *Ae. aegypti* ngSIT eggs that make their trial safe. First, while *Ae. aegypti* are invasive mosquitoes, they have occurred locally for more than 10 years and are an established species in the area. Second, since both CRISPR-induced gene knockouts happen during the entire development of the mosquito and induce 100% female flightlessness and male sterility confining the biopesticide activity by the ngSIT male mosquito longevity. The additional safety and quality control measures include:

- The active ngSIT genetic components of both Cas9 and gRNAs strains will be integrated into the local genetic background of *Ae. aegypti*, and the released ngSIT eggs will be 'localized' for the area of open-air trials.
- Prior to commencement of the open-air trials, Synvect will conduct extensive tests validating that no ngSIT female mosquito will be released into the environment in the laboratory setting.
- As quality control of production process, Synvect will test a small sample of ngSIT eggs from each egg batch to validate: (i) presence of both Cas9 and gRNA tagged with different dual-color SERPARATORs; and (ii) complete penetrance of female flightlessness and males sterility.
- Finally, before the large trials B and C will commence, the small-scale trial A will be conducted to validate the deployment procedures and equipment, as well as to assess the parameters for proper mosquito release dosage. Trial A will be a decision point for the full scale trials: go or no-go.

Project Funding: Synvect has been backed by the Gates Foundation and will fund the proposed project with CMAD. It is integral that CMAD and Synvect work as true partners moving towards the same goal of bettering the overall health of the community. Accordingly, Synvect will rely on the expertise of CMAD's staff in protocol guidance, community engagement, monitoring and evaluation, etc.

Next Steps: Gain partnership from local MAD, align on protocol locations, and proceed with regulatory paperwork.

Agenda Item 9: District Participation at Meetings

Background:

On March 14th KP Public Affairs, the legislative, regulatory, and public relations team for the Mosquito and Vector Control Association of California (MVCAC) reached out to District Manager Holeman and District Manager Conlin Reis (Fresno Westside MAD) to give witness testimony for the Senate Committee on Local Government hearing on Senate Bill (SB) 1251.

On April 3rd, 2024, Manager Holeman testified before the Senate Committee on Local Government on SB1251 and has been requested to testify at the Senate Energy, Utilities, and Communications Committee on April 22nd, 2024.

Action requested:

The Board will be asked to retroactively approve travel expenses for Manager Holeman's participation at the committee hearing on April 3rd, 2024 at the expense listed below. The Board is also requested to approve future travel not exceeding the travel budget and for up to one night for any future travel required to give additional testimony on SB1251.

- Hotel (one night): \$124.48 (paid on CalCard)
- Per Diem (two days travel): \$103.50
 - Sacramento per diem rate for travel day: \$51.75

Total Expense: \$227.98

Estimated Expense for April 22nd hearing: One day travel per diem \$51.75

Agenda Item 10: 2023 Annual Report Approval

Background:

The Board was presented with the 2023 Annual Report for review at the March regular board meeting. Trustees were asked to provide feedback on the content of the annual report. Any comments or suggestions received were considered and incorporated as appropriate. A final copy is submitted for approval. Enclosed is the printing cost for the Annual Report in quantities of 75 (\$9.35 each) and 100 (\$8.53 each). The cost covers printing in gloss finish book, similar to the 2022 Annual Report. Also, provided is an annual report distribution list that has been previously used by the District, listing 73 recipients.

Action requested:

The Board will be asked to approve the 2023 Annual Report and distribution list.

	Agency	Mailing Address	Title	Name
1 2 3 4 5 6	City of Clovis 324-2060	1033 Fifth St. Clovis, CA 93612	Mayor Mayor Pro Tem Councilmember Councilmember City Manager	Lynne Ashbeck Vong Mouanoutoua Matt Basgall Drew Bessinger Diane Pearce John Holt
7 8 9 10 11 12	City of Fowler 834-3113	128 S Fifth St. Fowler, CA 93625	Mayor Mayor Pro Tem Councilmember Councilmember Councilmember City Manager	Daniel Parra Juan Mejia Amarjeet Gill Leonard Hammer Karnig Kazarian Wilma Tucker
13 14 15 16 17 18 19	City of Fresno 621-8000	2600 Fresno St. Fresno, CA 93721	Mayor <u>Council President</u> <u>Councilmember</u> Councilmember Councilmember Councilmember Council Vice-President Councilmember Councilmember Councilmember City Manager	Jerry Dyer Annalisa Perea Miguel Arias Gary Bredefeld Luis Chavez Nelson Esparza Mike Karbassi Tyler Maxwell Georgeanne White
20 21 22 23 24 25	County of Fresno 488-3529	Hall of Records 2281 Tulare St. Fresno, CA 93721-2198	Chairman Vice-Chairman Supervisor Supervisor Supervisor Administrative Officer	Nathan Magsig Buddy Mendes Steve Brandau Brian Pacheco Sal Quintero Paul Nerland
26 27 28 29 30 31	City of Kingsburg 897-5821	1401 Draper St. Kingsburg, CA 93631	Mayor Mayor Pro Tem Councilmember Councilmember Councilmember City Manager	Brandon Pursell, Jr Vince Palomar Laura North David Silva Staci Smith Alexander Henderson

32 33 34 35 36 37 38	City of Orange Cove 626-4488	633 Sixth St. Orange Cove, CA 93646	Mayor Mayor Pro Tem Councilmember Councilmember Councilmember City Manager City Clerk	Diana Guerra Silva Gilbert Garcia Josie Cervantes Esperanza Rodriguez Maria Vacio Daniel T. Parra Cynthia Cisneros
39	City of Parlier	1100 E. Parlier Ave.	Mayor	Alma M. Beltran
40 41 42 43 44	646-3545	Parlier, CA 93648	Mayor Pro Tem Councilmember Councilmember Councilmember City Manager	Sabrina Rodriguez Diego G. Garza Juanita "Janie" Molina Cathryn "Kathy" Solorio Sonia Hall
45 46 47 48 49 50	City of Reedley 627-4200	1733 9th St. Reedley, CA 93654	Mayor Mayor Pro Tem Councilmember Councilmember Councilmember City Manager	Anita Betancourt Matthew Tuttle Suzanne Byers Mary Fast Scott Friesen Nicole R. Zieba
51	City of Sanger	1700 7th St.	Mayor	Frank Gonzalez
52 53 54 55 56	875-2587	Sanger, CA 93657	Mayor Pro Tem Councilmember Councilmember Councilmember City Manager	Daniel Martinez Esmeralda Hurtado Dolores Melendez Michael Montelongo Nathan Olson
57 58 59 60 61 62	City of Selma 891-2200	1710 Tucker St. Selma, CA 93662	Mayor Mayor Pro Tem Councilmember Councilmember Councilmember City Manager	Scott Robertson Beverly Cho Sarah Guerra Blanca Mendoza-Navarro John Trujillo Fernando Santillan
63	County of Fresno	1221 Fulton St	Director of Public Health	David Luchini
64	Department of Public Health	Fresno, CA 93721	Assistant Director of Public Hea	

	Agency	Mailing Address	Phone #	Manager
65	Delano MAD https://www.delanomosquito.com/	PO Box 220 Delano, CA 93216 11281 Garzoli Avenue Delano CA 93215	661-725-3114 661-725-3179 fax	Thai "Jay" Thao
66	Delta MVCD https://deltamvcd.org/	PO Box 310 Visalia, CA 93279-0310 1737 W Houston Ave Visalia, CA 93291	559-732-8606 559-732-7441 fax	Interim Manager
67	Fresno MVCD https://www.fresnomosquito.org/	2338 E McKinley Ave Fresno, CA 93703	559-268-6565 559-268-8918 fax	Ryan McNeil
68	Fresno Westside MAD https://www.fresnowestmosquito.com/	2555 N St Firebaugh, CA 93623	559-659-2437	Conlin Reis
	Kern MVCD https://www.kernmosquito.com/	4705 Allen Rd Bakersfield, CA 93314	661-589-2744 661-589-4913 fax	La Thao
69	Kings MAD https://kingsmosquito.net/	13960 Power Way Hanford, CA 93230	559-584-3326 559-584-3310 fax	Michael Cavanagh
70	Madera MVCD https://maderamosq.org/	3105 Airport Dr Madera, CA 93637	559-662-8880 559-662-8883 fax	Teresa Hamilton
71	South Fork MAD	PO Box 750 Kernville, CA 93238	760-376-4268	Genel Hodges
72	Tulare MAD https://www.tularemosquito.com/	6575 Dale Fry Rd Tulare, CA 93274	559-686-6628	Michelle Dempsey
73	West Side MVCD https://www.westsidemosquitovcd.com	PO Box 205 // Taft, CA 93268 7004 Gas Company Rd Taft, CA 93268	661-763-3510 661-763-5793 fax	Travis Bauer



Consolidated Mosquito Abatement District

13151 E Industrial Drive Parlier, CA 93648 Phone: 559-896-1085 Fax: 559-896-6425 www.mosquitobuzz.net info@mosquitobuzz.net

Date

David Silva, Councilmember City of Kingsburg 1401 Draper St. Kingsburg, CA 93631

Dear Councilmember Silva:

As your Consolidated Mosquito Abatement District representative on the Board of Trustees, I am pleased to present to you the 2023 Annual Report of the District. The past year marked the 77th year of District operations since its formation in 1946. The report represents the effort staff made in carrying out the District's mission of prevention, surveillance, and control of mosquitoes and mosquito-borne diseases.

The District, its Board, and its personnel have endeavored to protect the residents of the City of Kingsburg and our larger community through an Integrated Mosquito Management (IMM) program. It is a team effort that relies on our dedicated staff and participation from our community and agency partners. The District will continue to be proactive, accountable, efficient, and effective in achieving its mission.

It has been an honor and pleasure to represent the city on the District Board, and I look forward to continuing to serve the City of Kingsburg as your representative.

Sincerely,

Tokuo Fukuda Trustee, City of Kingsburg

ANNUAL REPORT 2023 CONSOLIDATED

BOSOLITO ABATEMENT DIST

INFO@MOSQUITOBUZZ.NET

559-896-1085

WWW.MOSQUITOBUZZ.NET



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MANAGER'S FORWARD

I am proud to present our 2023 Annual Report highlighting the effort and commitment of District staff to safeguard public health and enhance the quality of life in our communities. As I reflect on my first year as District Manager, I recognize the full value of the relationships I've built over my 20year career in mosquito control. Relationships with staff, collaborators, board members, agency partners, and fellow mosquito control professionals up and down the state of California have enabled me to succeed as a new manager. The most valuable resource we have to drive success is each other.

After working under Steve Mulligan's leadership and guidance for 20 years, I was well-prepared to take on the role of District Manager at the beginning of 2023. However, as is often the case, you can never truly understand the responsibilities of a job until you actually do them. Steve did an outstanding job at the district for over three decades, setting a high bar for me to follow. Sometimes, in order to move forward, it's necessary to reflect on past accomplishments. Looking back at what the District has achieved, I was confident about the path ahead.

I anticipated challenges early in the season. The high snowpack level heading into the season would certainly result in a significant amount of snowmelt, not seen in the past forty years. With water availability being at a historic high, the District experienced an increase in mosquito production early in the spring, previously not encountered in my career. With a common goal in mind, I looked to our staff and our partners to support our efforts to manage what could be an unprecedented mosquito control season. Our dedicated team worked tirelessly to implement control strategies and leverage existing tools and resources to combat mosquito populations effectively over a long 2023 mosquito season.



District Manager, Jodi Holeman (right) and keynote Dr. Jannell MacAulay (left), Lt Col, USAF, retired Combat Vet/Air Force Pilot at the California Special Districts Association Leadership Conference.

MINDFUL LEADERSHIP Dr. Jannell MacAulay

- Mindful leaders stay calm and focused, setting the tone for their teams.
- They assess, gather information, and make well-informed decisions under pressure.
- Mindful leaders understand and address the emotional impact on their teams.
- They pivot and adjust strategies as new information arises.

Our long-standing integrated approach, combining surveillance, larval and adult control measures, community engagement, and education, vielded significant reductions in mosquito populations and minimized the potential for disease transmission across the District. While we continue to make excellent strides in our program, there is still room for improvement in the services we provide to our residents who look to us to safeguard their health from mosquito-borne disease.

I would like to express my sincere appreciation to our hard-working staff, whose dedication and efforts are the driving force behind the District's success, and to our Board of Trustees for their unwavering support of District staff and our mission. Together, we will continue to make meaningful strides in protecting public health in the Central Valley.

Sincerely

Jodi J. Holeman, District Manager



Consolidated Mosquito Abatement District Staff (1958).

DISTRICT HISTORY

The year 2023 marked the 77th year of service for the Consolidated Mosquito Abatement District. The District was organized on June 11, 1946, by the action of the Fresno County Board of Supervisors after petitions from residents and chambers of commerce in the cities of Fowler, Kingsburg, Sanger, and Selma. The District was formed to relieve the nuisance of biting mosquitoes and protect the public from the threat of mosquito-borne diseases, such as encephalitis and malaria. After its formation, the District encompassed about 242 square miles. Within three years, and following additional petitions, the District was expanded through annexations to include the cities of Clovis, Orange Cove, Parlier, Reedley, and adjacent areas; the communities of Caruthers, Del Rey, Friant, Laton, Riverdale, and surrounding areas; and approximately eighteen square miles in Kings County. Currently, the District covers about 1,058 square miles, including part of the City of Fresno.

OUR MISSION

To promote community health, comfort and prosperity by the effective and continuous control of disease-carrying and pest mosquitoes. To accomplish this mission, the District conducts surveillance of mosquitoes and mosquito-borne diseases; controls mosquitoes with suitable insecticides, natural predators and the elimination of mosquito-producing sources; and promotes public awareness. Legal authority for the formation and powers of the District and its function is found in the California Health and Safety Code Sections 2000 et seq.

DISTRICT ORGANIZATION

BOARD OF TRUSTEES



The District is governed by a Board of Trustees. The Board is composed of eleven members, a trustee appointed from each of the nine incorporated cities and two trustees appointed by the Fresno County Board of Supervisors from the District at large. Trustees are appointed to serve terms of two or four years and serve without compensation, except for an allowance in lieu of travel expenses to attend monthly Board meetings. The primary functions of the Board are to establish District policy and to provide direction for the fiscal administration of the District. The Board meets regularly on the third Monday of each month at 1:00 pm at the District office in Parlier. In 2023 the District welcomed newly appointed trustee Michelle Lopez from the City of Parlier.

DISTRICT ORGANIZATION

BOARD OF TRUSTEES



Pictured from left to right Leonard Hammer, Bruce Taylor, Karen Steinhauer, Pete Esraelian, Steve Mulligan, Jennifer Willems, Mary Anne Hill, Tokuo Fukuda, Charles Lockhart, and Abe Isaak

The Board of Trustees of the Consolidated Mosquito Abatement District was proud to pay tribute to its retired District Manager, Steve Mulligan, by naming the laboratory in his honor. The Steve Mulligan Laboratory is a testament to his remarkable 32 years of service to the District and his invaluable contributions to the scientific community in the field of mosquito control research.

TRUSTEE RECOGNITION

Long-time trustee, Pete Esraelian, chose not to seek reappointment after 38 years of faithful service to the Board as the representative for the City of Selma. It was a great honor to have known and worked alongside Mr. Esraelian. His dedication to public service has set a commendable standard for community involvement and civic responsibility. He will be deeply missed by the District.



DISTRICT ORGANIZATION MEET OUR TEAM



Pictured from left to right front row: Don McNiel, Karan Cox, Katherine Ramirez, Jovana Benavides, Katherine Brisco, Gha Vang, and Jodi Holeman. Back row: Jose Moreno, Derek Hill, Amy Garcia, B.Deegan, Chris Monis and Devon Cornel.

The Board of Trustees promoted Superintendent of Operations Jodi Holeman to the position of District Manager in 2023. Two positions had title; Urban Program Coordinator and Director of Science and Outreach. Not reflected in the 2023 organizational chart was the addition of long term seasonal Don McNiel as an Area Supervisor to the team in August 2023 and the creation of a new position, Vector Management Specialist. Twelve of the thirteen regular staff are certified in mosquito control by the California Department of Public Health (CDPH), and seven also have certification in vertebrate and invertebrate vector control. Certified employees are required to attend State of California approved education programs each year to maintain their professional competence.



Employee appreciation lunch, GIS Coordinator Conner Schaak farewell and 202 step challenge winners.

DISTRICT ORGANIZATION

MEET OUR TEAM

During the 2023 field season, a total of 28 seasonal employees were hired. Out of those, 8 employees have obtained limited certification in mosquito control by CDPH. The District depends on seasonal personnel to drive field operations. Seasonal employees perform various tasks to support control and surveillance programs under the direction of supervisors. They are often the first face or voice that our residents come into contact with. In 2023, more than 70% of our seasonal staff were returning seasonals and had worked the season prior.



CLERICAL ANNIE MUNOZ & RACHEL SHERMAN-CASTANON.



SURVEILLANCE MELISSA THIES, ROLANDO PEREZ-ORTIZ, & CLARITA RAMBLAS.



REEDLEY CREW ROGER VANG, JACOB URIBE, & CHA HER.



TRACY AUTREY, ERIC FERGUSON, JORGE RIVAS MAYA, WILLIAM MONGE, HEIDI HUBBARD, MARTY MARTINEZ, & DAVID RODRIGUEZ (NOT PICTURED).



WESTSIDE CREW ROGELIO BENAVIDES, LEWIS NUNES, TUACHENG VANG, & RICKY CASTANEDA.





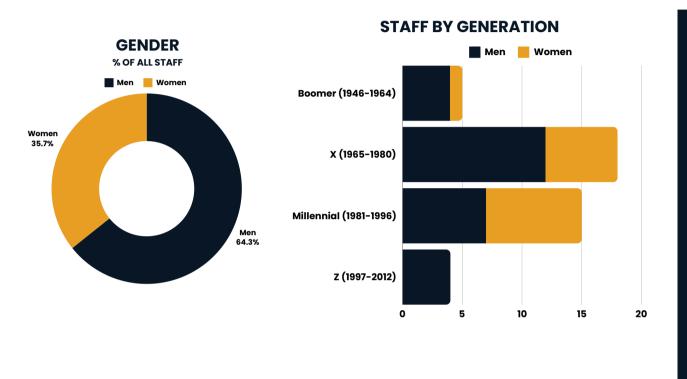


CLOVIS CREW ROBERT MARTINEZ, JESSE HERNANDEZ, & SCOTTY DUNN.

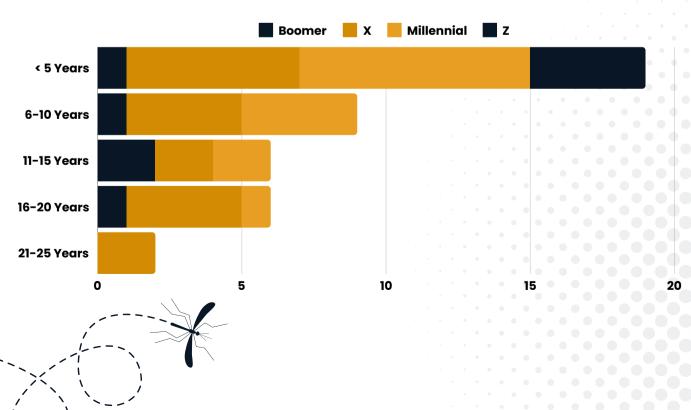
9

STAFF DEMOGRAPHICS

The District strives to recruit and retain the most qualified employees. District employees are our most valuable resource and we are dedicated to supporting a diverse, inclusive, and supportive work environment at the District.



YEARS WORKED PER GENERATION



ABOUT THE DISTRICT



MAIN OFFICE IN PARLIER.

Facilities: In January 2015, a parcel of land (8.6 acres) was purchased in the Parlier Industrial Park, which is a central location within the District's service area. Construction began in June 2017 and was completed in 2018. Staff relocated to the new facility in April 2018. Although the Parlier office is the main office, the District continues to utilize satellite offices in Caruthers and Clovis.

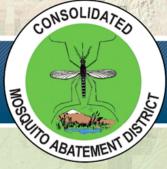
Fleet: The District has a large fleet of vehicles that includes forty-three trucks, six Jeeps, three sport utility vehicles, eighteen all-terrain vehicles, two Bobcats, five amphibious vehicles, one forklift, two mist sprayers, two boats, and various other handheld spray equipment used by staff to apply treatments throughout the District. A full-time mechanic is on staff to maintain the fleet of vehicles and equipment throughout the year.

Service Area: The District covers 1,058 square miles and provides area-wide mosquito control services to over half a million (ESRI Living Atlas) residents in Fresno and Kings counties.

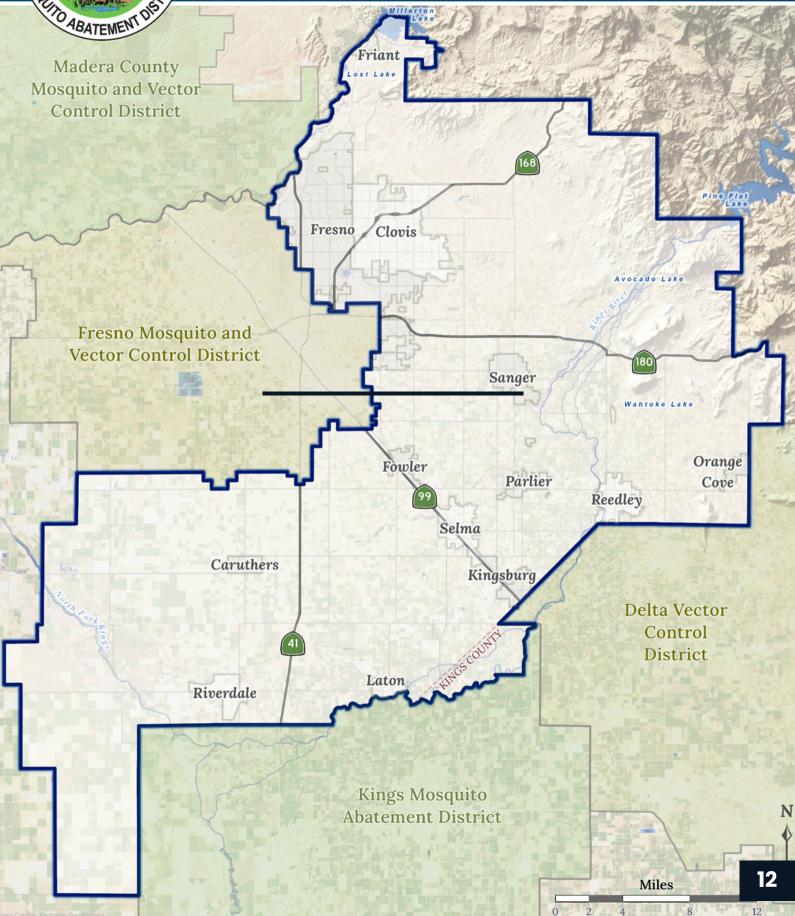


RURAL PROGRAM COORDINATOR DEVON CORNEL TREATING TIRE RUTS IN A CITRUS ORCHARD.



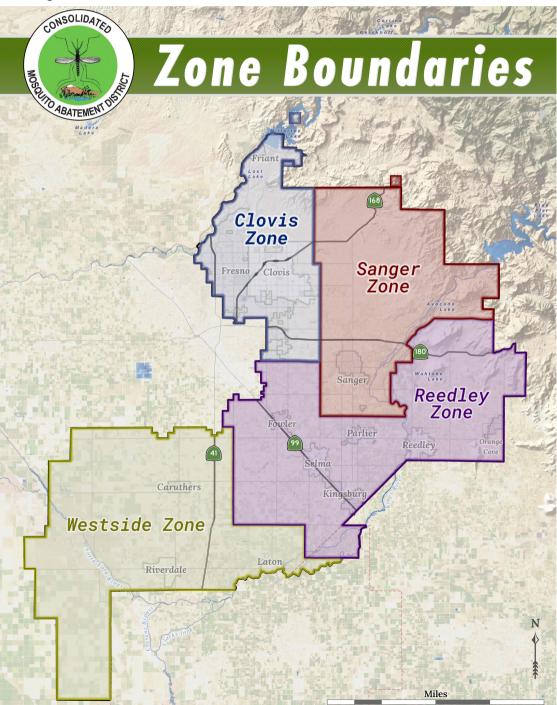


District Boundaries



DISTRICT ZONES

The District is divided into four primary work zones. Each zone is supervised by an Area Supervisor who oversees technicians working in distinct subzones within each zone. Each technician is responsible for certain source types within their subzone. Sources are broadly categorized as urban or rural. Urban sources are often small and don't require large equipment to access or treat. Rural sources can be large or small but often require additional equipment and/or product to address. This type of source distribution ensures technicians have the proper equipment, product, and support to consistently meet the demands of their area. The District has 31 distinct subzones to organize source types that need to be addressed throughout the District.



A male mosquito emerging from the pupal casing after undergoing metamorphosis (Getty Images). Male mosquitoes do not bite and only feed on plant nectar.

MOSQUITO CONTROL

The mosquito control program at the District prioritizes an integrated approach to manage mosquitoes effectively while minimizing any negative impact on the environment. This approach includes evaluating and treating mosquito sources using source reduction principles alongside biological and chemical control methods.

The District uses a variety of registered insecticides to control both immature and adult mosquitoes. Pyrethrins, various pyrethroid compounds, and malathion are used as adulticides. Larvicides used included the insect developmental inhibitors (IDI), methoprene, and pyriproxyfen; bacterial insecticides, Bacillus thuringiensis israelensis (BTI), B. sphaericus (BS), and spinosad; and mosquito larvicidal oils, BVA and CocoBear.

Methoprene and pyriproxyfen interfere with the development of mosquitoes and normal metamorphosis, and BTI and BS are stomach toxins that specifically target mosquitoes. When used at recommended application rates, these three biorational insecticides can be used in environmentally sensitive habitats. The active ingredients of spinosad, produced by the bacterium Saccharopolyspora spinosa, interfere with immature mosquito development by disrupting the nervous system.



Area Supervisor Devon Cornel, Vector Management Specialist Katherine Brisco and Azelis representative Dennis Candito calibrating a ULV fogger.

MOSQUITO CONTROL TRAINING

THE EXPERT IN ANYTHING WAS ONCE A BEGINNER.

TRAINING TOPICS

POLICIES

WORK DAY BASICS

SAFETY

RESIDENT COMMUNICATION

FIELDSEEKER USE

MOSQUITO BIOLOGY & CONTROL

PESTICIDE SAFETY HANDLING

ILLNESS & INJURY PREVENTION New and returning seasonals attend a two to three-day training workshop to cover a variety of topics that are critical to success in the field. The training is conducted by the Director of Science and Outreach, Vector Biologist, Associate Vector Biologist, Vector Management Specialist, and GIS Coordinator.



Specialized training on insect development inhibitors (IDI) provided by Central Life Sciences, Dr. Samer Elkashef, PhD and Target Specialty Products Joe Camacho.



Full-time and select seasonal staff receiving First aid and CPR-certified training.

MOSQUITO CONTROL

ΑCTVITY	COUNT
FIRST NOTICE	2897
ADULTICIDE TREATMENT	542
ADVISORY NOTICE	2
ASSISTED	357
BARRIER TREATMENT	55
FINAL NOTICE	318
FISH PLANT	487
INSPECTION	24494
LARVICIDE TREATMENT	11173
NO CONTACT	77
PHYSICAL CONTROL	278
PRE-TREATMENT	923
SECOND NOTICE	880
SEINING/TRANSPORT	15
SOURCE REMOVED	8
SPOKE TO RESIDENT	648
TREAT/FISH	300
VERIFICATION COMPLETE	653
VOICEMAIL	457
WARRANT ASSIST	141
WARRANT FISH PLANT	13
WARRANT INSPECTION	133
WARRANT LARVICIDE	79
WARRANT PHYSICAL CONTROL	6
WARRANT LARVICIDE AND FISH	45

In 2023, 67,423 mosquito control applications were made to mosquito development sites, including 6,842 acres and 23,268 acres of immature and adult mosquito treatments, respectively. There were also 43 acres stocked with mosquitofish.

OPERATIONS

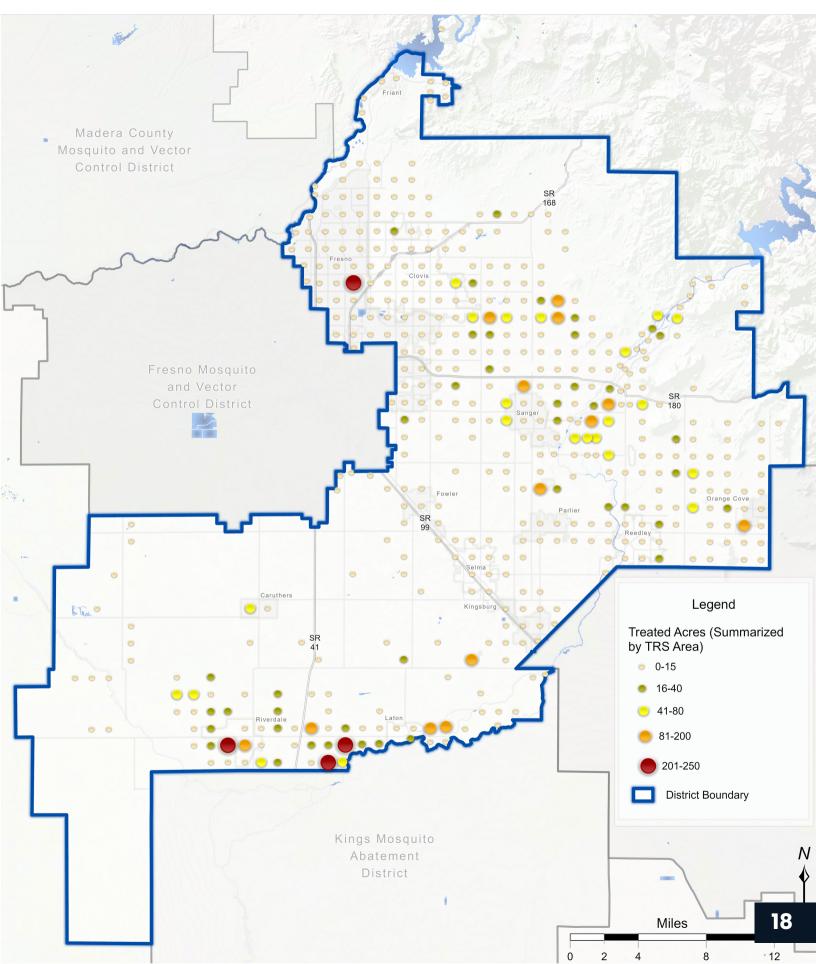
The District has over 100 miles of gutters mapped throughout the District that hold water for more than 7 days requiring treatment every 14 days.

At the end of 2023, the District had 8,592 active sources (excluding storm drains and utility enclosures) spread across the District requiring ongoing monitoring and/or treatment for mosquito development. The District monitors a variety of source types including but not limited to flood controls, ponds, pastures, canals, orchards, various crops, and wastewater ponds.

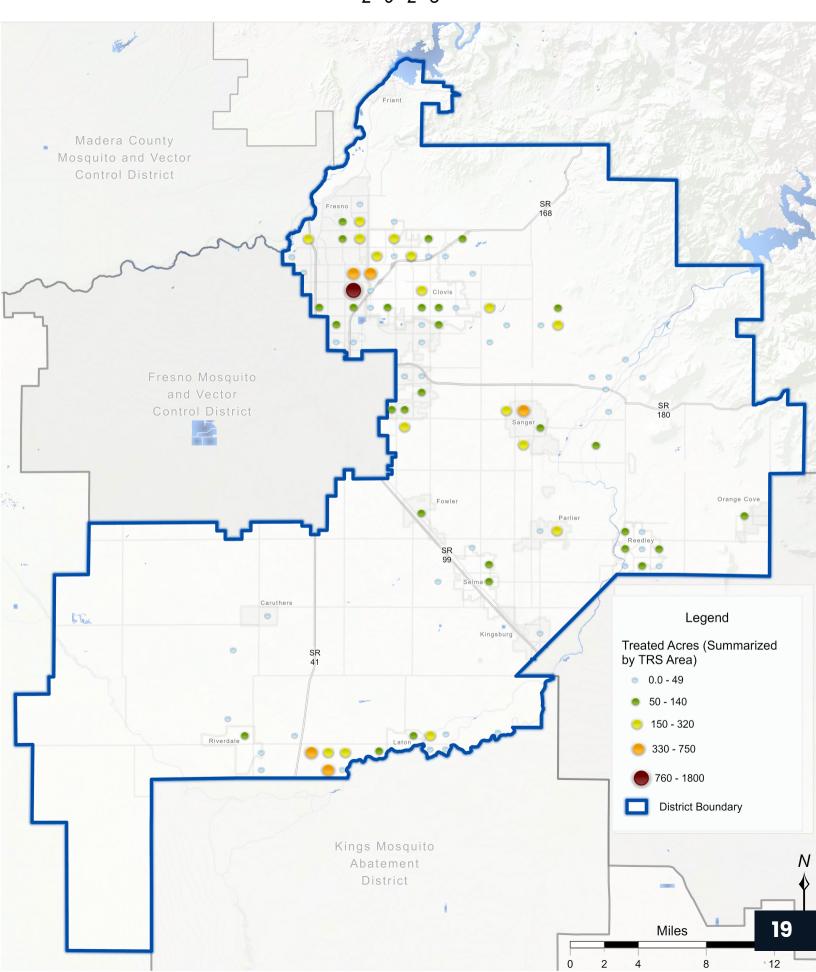


Field technician treating an orchard for mosquito development.

Larvicide Applications



Mosquito Adulticide Applications



MOSQUITO CONTROL UNDERGROUND UNDERGROUND PROGRAM

The District routinely treats over 12,000 underground structures/enclosures that hold water and can produce mosquitoes. While the majority of underground sources are located within dense urban areas, these sources can be found throughout the District and include storm drains and utility enclosures. In 2023, the District made 50,061 treatments to storm drains and utility enclosures to prevent mosquito emergence.

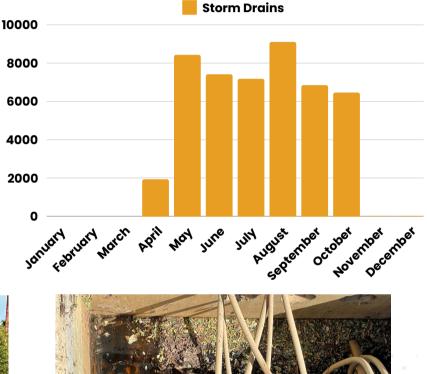
Utility Enclosure Program: Underground utility enclosures can be a significant source of mosquito production in residential neighborhoods for both *Culex* species and the invasive *Aedes aegypti*. In 2023, the District collaborated with Pacific Gas and Electric Company (PG&E) to treat subsurface utility enclosures. District staff accompanied by a PG&E technician worked together to access and treat over 2,600 underground utility enclosures within the District's jurisdiction. The District continues to focus on enclosures that hold water in spring or summer months. Due to the heavy spring rains treatment of subsurface enclosures did not begin until mid May and took approximately four weeks to complete.



CMAD and PG&E staff pre treatment meeting.

2024 PG&E Progress Dashboa	ırd				
DAILY OR CONTROLS INDECOTORS Last Treatment: 2/1/2024, 11:35 AM	Treated PG&E Vaults	Can't Access PG&E Vaults	Untreated PG&E Vaults		
Current Day Tota	0	0	2,636		
(0 vault difference from yesterday		0.00% to Completion			
Previous Day Total	142315 142315 142317 142316 142315 142315	142313	DAILY ZONE DISTRIBUTION		
	142319 142329 142320 142321 142322 142323	142324			
U	142350 142329 142329 142329 142329 142327 142327	14225	•		
(0 vault difference from Two Days Ago	142331 Contro 142332 142333 (142334) 142333	den on 142336	den 11 Jan 15 Jan 19 Jan 23 Jan 27 Jan 31 Chava Steelley		

Underground utility enclosures progress dashboard.



2023 STORM DRAIN TREATMENTS BY MONTH

MOSQUITO CONTROL YEARLY COMPARISON

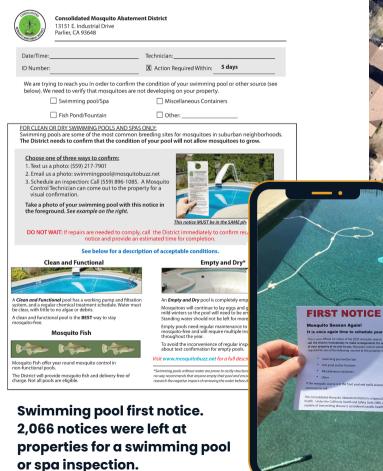
LARVICIDES	2018	2019	2020	2021	2022	5 YR AVG	2023
IDI LIQUID (GALS)	6.71	7.27	0.42	0.00	0.00	2.88	0.00
IDI DRY (LBS)	2,220.76	3,465.53	3,177.59	1,806.18	1,933.59	2,520.73	1798.75
BACTERIAL LIQUID (GALS)	773.50	946.21	220.54	194.45	242.47	475.43	436.93
BACTERIAL DRY (LBS)	13,052.37	17,442.7	14,221.08	13,065.52	12,168.08	13,989.95	21,788.2
OIL (GALS)	4,282	5,875.74	3,629.24	2,967.45	4,973.27	4,345.64	5,241.85
ADULTICIDE (GAL)	2018	2019	2020	2021	2022	5YR AVG	2023
	77.48	178.36	125.61	32.54	88.94	100.59	185.37
ACRES TREATED	2018	2019	2020	2021	2022	5YR AVG	2023
ADULTICIDE	9,771.89	30,155.25	5 22,266.04	4 6,450.99	11,933.56	16,115.55	23,268
LARVICIDE	9065.04	10,899.28	8 4866.57	3608.98	4874.05	6,662.78	6,842
FISH	36.94	128	57.46	23.25	22.77	53.68	43

MOSQUITO CONTROL

SWIMMING POOL PROGRAM

In 2023, the District identified 1,742 individual properties with unmaintained swimming pools or spas. Unmaintained swimming pools continue to be a major habitat for mosquito production in urban and suburban areas. Backyard sources are not easy to identify and can be difficult to treat. Mosquitoes that develop in such habitats, specifically *Culex quinquefasciatus*, a principal carrier (vector) of West Nile virus (WN) can create significant burden to a community. The District has obtained an area-wide inspection and abatement warrant issued by the Superior Court of Fresno County to help with access-related issues. This warrant allows District personnel to enter private properties to inspect and treat suspected unmaintained swimming pools, water features, and other backyard mosquito sources when owners do not respond to District requests for entry notices. In 2023 District staff were required to use the inspection warrant at ninety-three properties, or 5% of the total properties requiring a backyard inspection, many of which were vacant properties. Multiple opportunities are provided to residents to work with the District to resolve the concerns around their swimming pool, including in-person inspections or photo verification of a clean, maintained pool.

During the season, the District uses aerial photography to identify green swimming pools in cities and larger communities. The 2023 aerial photographic survey identified 1,134 new potential properties with unmaintained swimming pools or spas that were either unknown or previously identified as clean or dry in our system. This increase in new pools is likely due to the above average amounts of precipitation in the spring of 2023. The District continues to prioritize the identification and treatment of unmaintained swimming pools in dense urban residential areas.



630 photos texted or emailed to verify the condition of a swimming pool or spa.



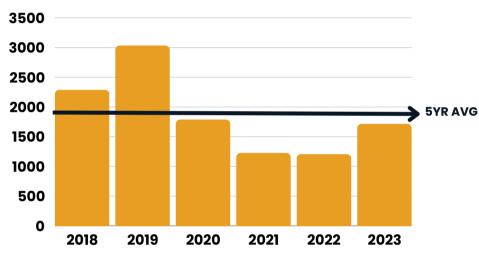
NearMap imagery of an unmaintained pool (not Fresno County).



Field technician Eric Ferguson inspecting an unmaintained swimming pool.

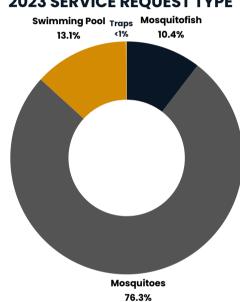
REQUESTS FOR SERVICE

District clerical staff responded to 1,716 telephone and website requests for service from the public. Residents, businesses, property managers, and schools routinely call in to request service. The District strives for a 48hr response time for site visits or follow-up call to schedule a site visit. Requests are tracked and recorded throughout the year and grouped into four broad categories; swimming pool, mosquitofish, mosquito, and traps. Service requests have remained stable over the past three years but a slight increase was seen in early 2023 due to the late winter, early spring precipitation.



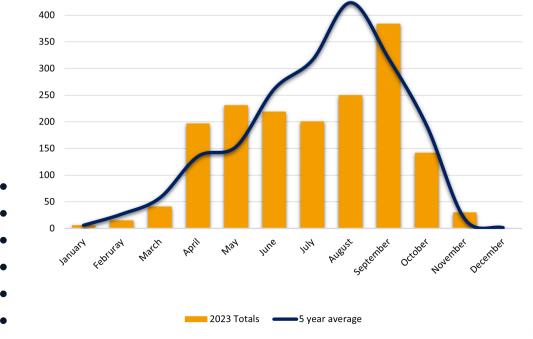
SERVICE REQUESTS 2018-2023 WITH 5YR AVG

2023 SERVICE REQUEST TYPE



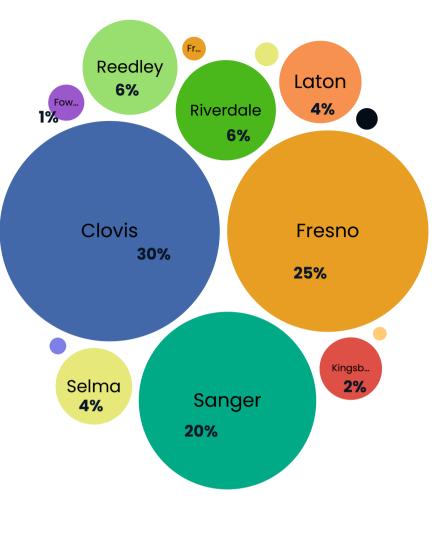
2023 Service Requests per Month

450



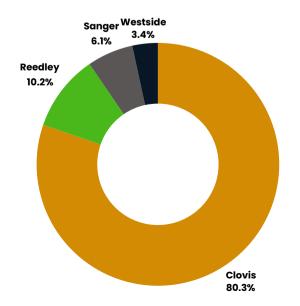


The majority of requests for service (55%) come from the cities of Fresno and Clovis, our most populated urban residential cities.



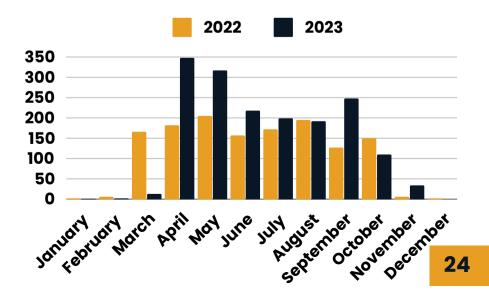
City	Service Requests
Clovis	522
Fresno	436
Sanger	339
Riverdale	108
Reedley	97
Laton	73
Selma	63
Kingsburg	42
Fowler	14
Friant	6
Parlier	6
Caruthers	5
Del Rey	3
Orange Cove	2

Service requests can be accommodated by the scheduling of an appointment for a specific date and time to conduct an inspection. The majority of appointments are scheduled in urban residential areas; however, some residents give anytime-access to inspect their property and do not require an appointment.



2023 APPOINTMENTS BY ZONE





A female *Culex* mosquito can lay between 100 and 300 eggs, which are glued together in a raft referred to as an egg raft (image source Vinivius Rodrigues de Souza).

SURVEILLANCE **ADULT MOSQUITOES**

The District has a comprehensive adult mosquito surveillance program. The program aims to investigate mosquito populations and mosquito-borne disease prevalence across the District. Surveillance traps are used to measure the mosquito population, identify species and inform control operations where to direct efforts

The District used three types of traps for surveillance in 2023: the encephalitis virus surveillance (EVS) trap, the gravid (GRVD) trap, and the BG-Sentinel (BGS) trap. These traps target adult female mosquitoes at different stages. The EVS and BGS traps collect host-seeking female mosquitoes, while the GRVD trap collects older females, which have been blood-fed and are ready to lay eggs.



BIOGENTS SENTINEL (BGS) Biogents sentinel traps are designed to attract and collect host-seeking and gravid adult female mosquitoes.

ENCEPHALITIS VIRUS SURVEILLANCE (EVS)

EVS traps are designed to attract and collect host-seeking female mosquitoes.

GRAVID (GRVD)

Gravid traps are designed to attract and collect gravid adult female mosquitoes.





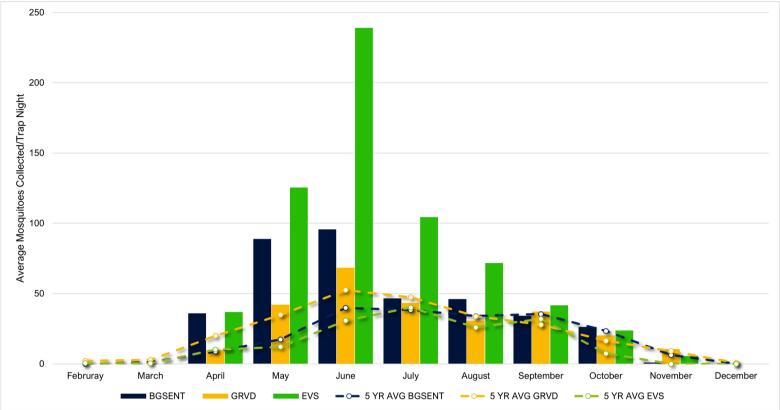


Culex tarsalis, Aedes nigromaculis and Culex quinquefasciatus.

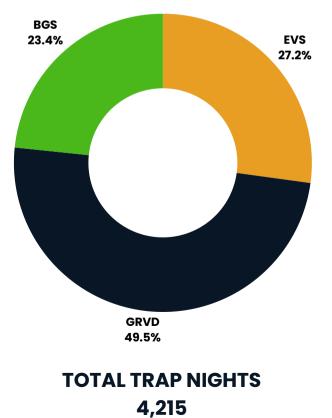
SURVEILLANCE

ADULT MOSQUITOES

2023 ADULT MOSQUITO COLLECTIONS BY TRAP TYPE



2023 TRAPS SET BY TYPE



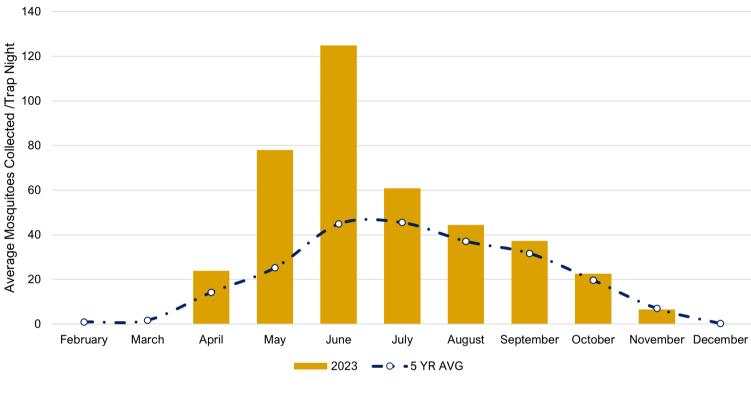
<image>

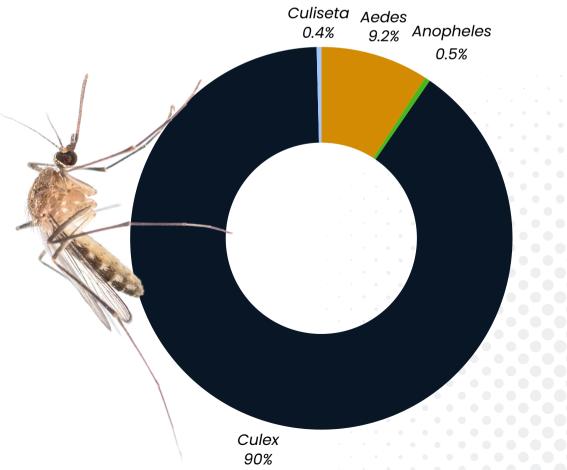
Vector Biologist Deegan identifying mosquitoes in the laboratory.

SURVEILLANCE

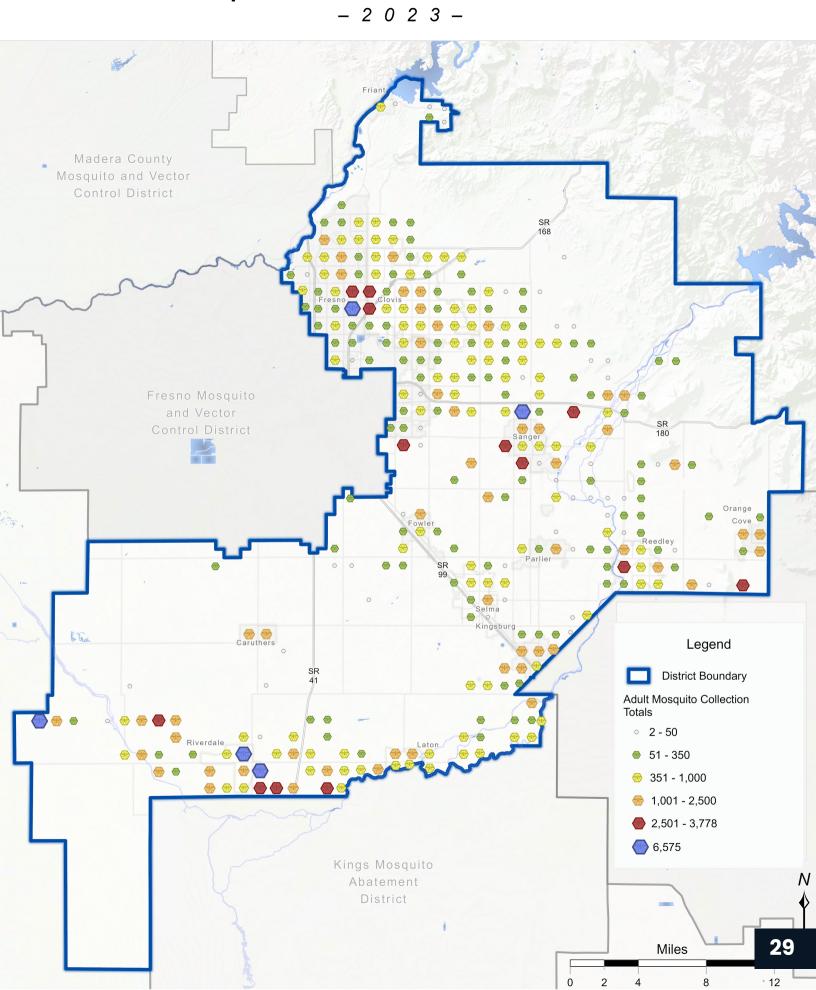
ADULT MOSQUITOES

2023 ADULT MOSQUITO COLLECTIONS BY MONTH





Mosquito Abundance Distribution



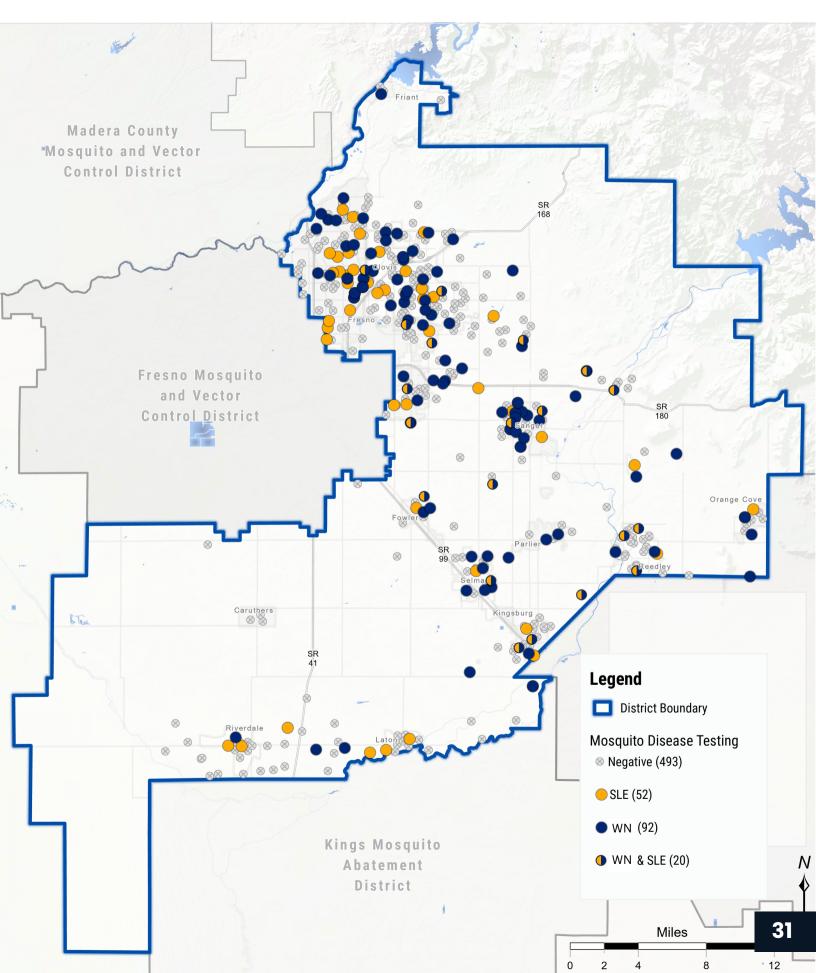
SURVEILLANCE ARBOVIRUS ACTIVITY

The District participates in a statewide system to monitor for the presence of West Nile virus (WN) and other mosquito-borne viruses, such as St. Louis encephalitis (SLE), and Western equine encephalitis (WEE). This statewide system monitors mosquito-borne viruses in populations of humans, birds, chickens, horses, and mosquitoes. The District focuses on monitoring the mosquito population by submitting samples* of adult female mosquitoes to the Davis Arbovirus Research and Training (DART) laboratory at the University of California, Davis. Submitted samples are tested for the presence of these viruses. A total of 657 (26,732 female) mosquito samples were submitted for testing.

Mosquito Samples Submitted By City/Community

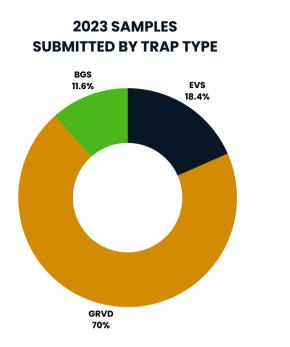
City	Samples	Total Mosquitoes Tested	WNV	SLE	WEE
Caruthers	9	421	0	0	0
Clovis	145	5666	26	14	0
Del Rey	12	492	1	1	0
Dinuba	5	225	1	0	0
Easton	1	13	0	0	0
Fowler	19	781	3	2	0
Fresno	161	6288	31	24	0
Friant	4	148	1	0	0
Kingsburg	31	1296	5	6	0
Lanare	3	150	0	0	0
Laton	27	1116	2	3	0
Orange Cove	25	1027	2	2	0
Parlier	9	356	2	0	0
Raisin City	3	75	0	0	0
Reedley	39	1422	7	5	0000
Riverdale	50	2230	. î	3	0
Sanger	90	4097	21	10	0
Selma	24	929	9	2	0000

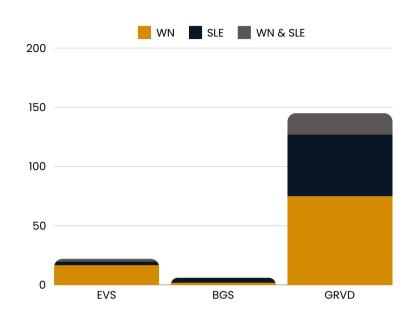
Mosquito Disease Testing



SURVEILLANCE

ARBOVIRUS ACTIVITY





ARBOVIRUS POSITIVE SAMPLES BY TRAP TYPE

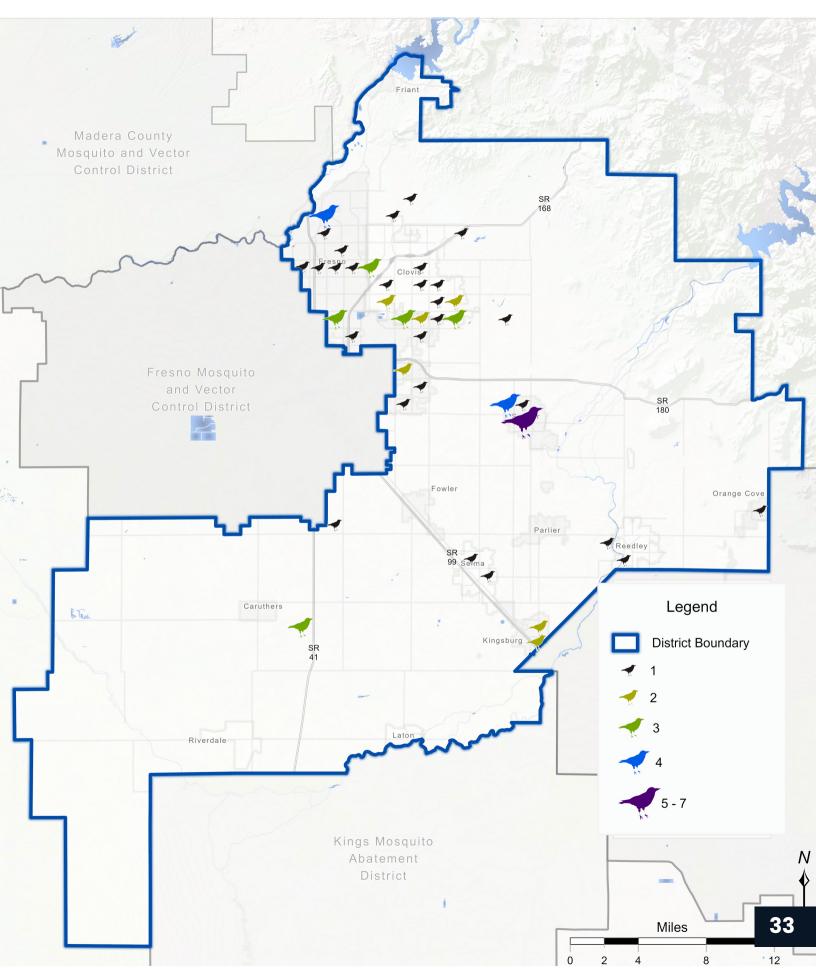
ARBOVIRUS ACTIVITY IN THE DISTRICT, COUNTY, AND STATE

DISTRICT	COUNTY	STATE
3 (1) WN	22 (1) WN 3 SLE	425 (19) WN 18 SLE
N/A	1 WN	857 WN
112 WN 72 SLE	232 WN 160 SLE	4,522WN 728 SLE
N/A	N/A	186 WN 1 SLE
2	2	31 WN
	3 (1) WN N/A 112 WN 72 SLE N/A	3 (1) WN 22 (1) WN 3 SLE N/A 1 WN 112 WN 232 WN 72 SLE 160 SLE N/A N/A



Catch buckets with collected adult mosquitoes.

CDPH Bird Reporting



PUBLIC AWARENESS

The District provides a comprehensive public information program to educate residents about preventing mosquito development and protecting themselves from mosquito bites. The information is offered through inperson and virtual platforms. The District provides this information at local health fairs, festivals, parades, small group in-person presentations, and a virtual learning platform. Organizations, schools, and businesses can request presentations or staff attendance at educational events.

In 2023 District staff participated in twenty in-person outreach events throughout the community, and two small group education presentations.



Director of Science and Outreach Katherine Ramirez & Outreach Assistant Rachel Sherman-Castanon educating residents at the National Night Out in Parlier.



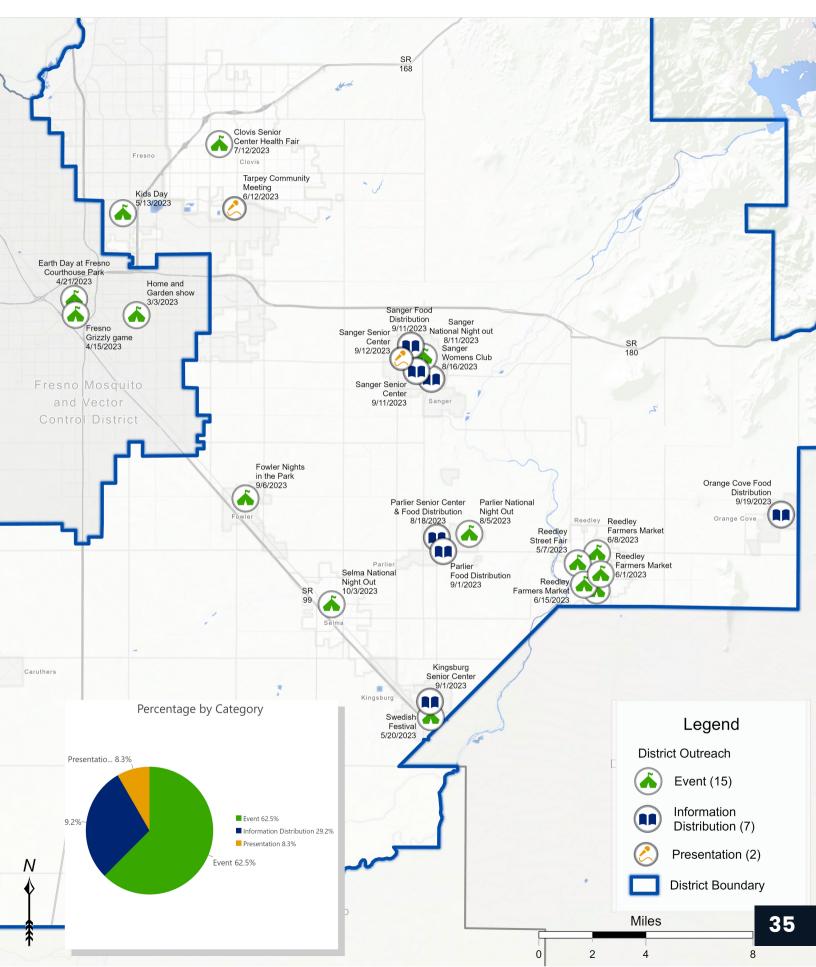
Outreach Assistant Rachel Sherman-Castanon passing out mosquito prevention information to residents at food distribution in Parlier.



Area Supervisor Chris Monis working the Fowler parade.

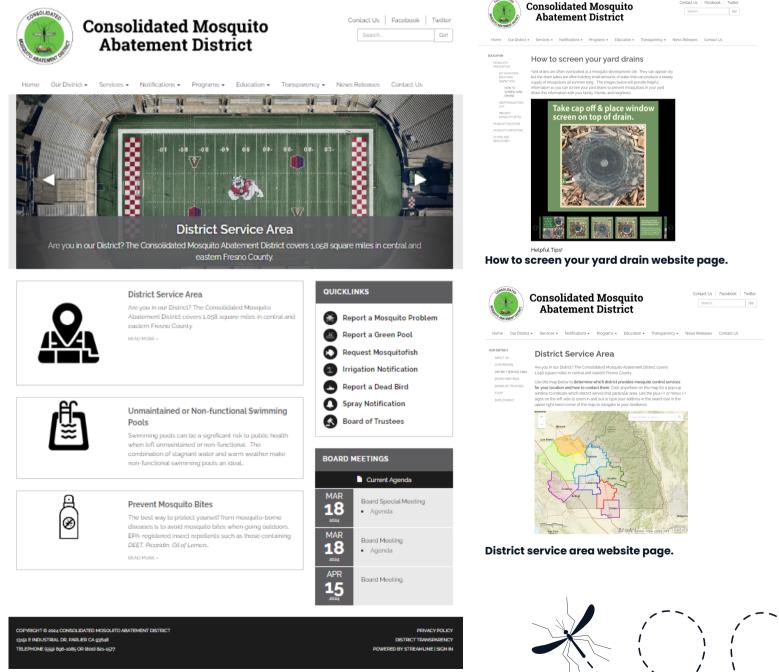
Outreach and Education

- 2 0 2 3 -



WEBSITE

A website is indispensable for a mosquito control district as it serves as a multifaceted tool to educate, engage, and empower communities in the ongoing battle against mosquito-borne diseases. Through centralized information dissemination, real-time updates on mosquito-borne disease and treatment areas; the website enhances public awareness, facilitates efficient reporting and fosters collaborative efforts between the District and residents. By harnessing the power of digital platforms, the District can effectively mobilize resources, collect information from residents, and empower individuals to take proactive measures, ultimately safeguarding public health and promoting a safer, healthier community for all.



District website homepage.

SOCIAL MEDIA

The District posts regularly on Facebook, Instagram, Twitter, and Nextdoor. Posting on social media platforms has served to educate the community for several years, and posting regularly is an essential aspect of the Districts' outreach strategy. In 2023, the District posted 927 times across all platforms. The District has noted an increase in direct subscribers by 17,306 on all platforms combined*.

PLATFORM	NUMBER OF SUBSCRIBERS (CHANGE FROM 2022)	NUMBER OF POSTS
FACEBOOK	460 († 26)	293
TWITTER	401 (↑ 57)	199
INSTAGRAM	261 (↑ 76)	217
NEXTDOOR	141,428* (↑ 17,147)	219

*Nextdoor users are not direct subscribers. They are not subscribing specifically to CMAD content but are new users to the platform.



Social media posted images.



Dump the water and plant the cuttings!



	PLATFORM	ENGAGEMENT RATE
A	FACEBOOK	6.7%
Ø	INSTAGRAM	8.8%
	TWITTER	3.9%
n	NEXTDOOR	0.6%

The engagement rate is a metric that will track how actively involved the audience is with social media content. Engagement is seen when people interact with the platform through likes, comments, sharing, or retweeting.



COMMUNITY AWARENESS

In 2023, multiple public service announcements (PSAs) were issued by the District when mosquito-borne viruses were detected. This information was shared by news outlets, cities, and local community agencies and groups. The District worked together with the Fresno County Department of Public Health (FCDPH), Fresno Mosquito and Vector Control District, and Fresno Westside Mosquito Abatement District on June 29th, July 19th, and November 1st. Joint news releases were issued to announce the confirmation of WN and SLE virus-positive mosquitoes, as well as a human death from WN virus.

DATE	PUBLICATION	ARTICLE TITLE	MARCH 23RD MY TV53 KMCC
MARCH 23RD	STEWAWEL NEWS (ONLINE ONLY)	NEWS STORY	KMSG KSEE 24
JULY 26	CLOVIS ROUNDUP	WEST NILE AND ST LOUIS ENCEPHALITIS VIRUS- POSITIVE MOSQUITOES COLLECTED WITHIN CITY LIMITS	
JULY 26	ABC 30	TULARE COUNTY RECORDS THE FIRST HUMAN CASE OF WEST NILE VIRUS	O PREPARING FOR MOSQUITO SEASON
JULY 28	HANFORD SENTINEL	KINGS COUNTY MOSQUITO ACTIVITY IS 'EXPONENTIALLY WORSE' THAN USUAL	Accuives there remove standing water after recent rain
SEPT. 20TH	FOX 26 NEWS	SMELL SOMETHING FUNNY AT NIGHT? MOSQUITO ABATEMENT SPRAYS NEIGHBORHOOD FIGHTING BACK BUGS	PARTNER AWARENESS
NOV. 2ND	MID VALLEY TIMES	FRESNO COUNTY MAN DIES FROM WEST NILE VIRUS	KINGSBURG CARRIER (WEEKLY NEWSLETTER) – AUGUST 31ST
NOV. 2ND	– CBS 47 & KSEE 24	FRESNO COUNTY HEALTH DEPARTMENT WARNS ABOUT THE DANGERS OF WEST NILE VIRUS	VARIOUS FACEBOOK PAGES; CITY OF SELMA, CITY OF KINGSBURG, CITY OF CLOVIS, CITY OF SANGER, AND MORE – FROM JUNE THROUGH OCTOBER
			38

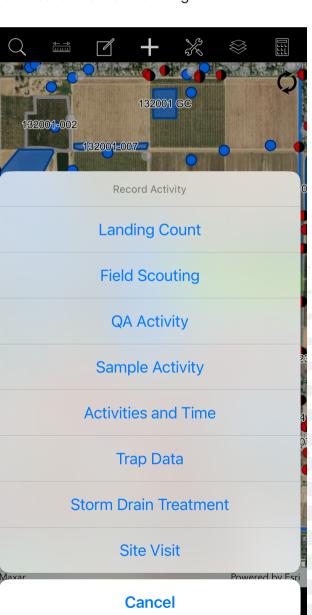
INFORMATION TECHNOLOGY/GIS

The District has a geographic information system (GIS) to manage field records and enable staff to monitor all operational activities to determine effectiveness and efficiency. The system is fully integrated and allows for cross-references between records, minimizing the need for unnecessary inspections and/or treatments.

Field staff use an application called FieldSeeker to capture data in the field, from inspection and treatment information to larval and adult mosquito activity. This system enabled the District to effectively manage the 22,761 actively monitored potential mosquito breeding sources and the 112,735 records associated with monitoring those sites in 2023. These records include 45,302 inspection and 67,433 treatment records.

In addition to internal communication on field data, the District also leverages GIS and online mapping to provide residents with information on where mosquitoes are testing positive for disease and where the District is spraying at night for adult mosquito control. Residents can request a spray notification that will notify them when an adult mosquito control spray application is scheduled for their neighborhood.





PARTNERSHIPS & COLLABORATION

The District participates as an active member of the Central Valley Emerging Issues in Public Health Consortium, which meets regularly to stay current with public health issues, including WN, and works closely with the Fresno County Department of Public Health and other Fresno County mosquito abatement and vector control districts. The District utilizes the Davis Arbovirus Research and Training (DART) laboratory for mosquito sample testing and works closely with the California Department of Public Health in data exchange.

In 2023 the District supported an outreach campaign lead by the Fresno County Department of Public Health as a Healthy Fresno campaign to generate awareness in Fresno County about eliminating standing water and personal protection from mosquito bites. The campaign also promoted the FresnoCountyMosquito.org website maintained by the District that provides educational information and allows residents to determine which District they are in.

The District is a sustaining member of the American Mosquito Control Association (AMCA), the premier national and international association for mosquito control. The District is also a corporate member of the Mosquito and Vector Control Association of California (MVCAC) and a sustaining member of the Society for Vector Ecology (SOVE). In 2023, the District became a member of the California Special Districts Association (CSDA). These associations offer invaluable education, training, and advocacy opportunities. The District Manager continues to serve on the MVCAC Board of Directors as the Regional Representative for the South San Joaquin Valley region and various staff serve on MVCAC committees.

The District continues to have an ongoing interest in and recognition of the benefits of being actively involved in scientific research and developing novel and innovative strategies, techniques, and tools for the surveillance and control of mosquitoes. To keep further abreast of current scientific methods, the District will continue its collaboration with universities and other institutional researchers through in-kind support with staff time, data exchange, and the funding of research projects.



Healthy Fresno County Mosquito Awareness campaign.



FINANCIALS FISCAL YEAR 2022/2023

Sampson, Sampson & Patterson, LLP · CERTIFIED PUBLIC ACCOUNTANTS

CONSOLIDATED MOSQUITO ABATEMENT DISTRICT SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGE IN FUND BALANCE – BUDGET AND ACTUAL FOR THE YEAR ENDED JUNE 30, 2023

	Dudantad	A		Variance Final Budget-
	¥	Amounts Final	A atrial	Positive
DEVENILIES	Original	Final	Actual	(Negative)
REVENUES Proporty toyog	\$4,046,301	\$ 4,046,301	\$4,681,262	\$ 634,961
Property taxes	99.629	99.629	107.347	7,718
Intergovernmental Charges for corrigos	10,000	10,000	7.003	(2,997)
Charges for services Use of money and property	70,000	70,000	40,241	(29,759)
Insurance recoveries and adjustments	/0,000	70,000	18,970	18,970
Other			3,853	3,853
Total Revenues	4,225,930	4.225.930	4,858,676	632,746
Total Revendes	4,225,550	4,225,550	4,000,070	052,740
EXPENDITURES				
Current:				
Salaries and wages	1,939,000	1,939,000	1,728,566	210,434
Employee benefits	647,000	647,000	474,179	172,821
Supplies and maintenance	484,000	484,000	590,637	(106,637)
Motor vehicles	237,000	237,000	188,165	48,835
Insurance	168,000	168,000	166,956	1,044
Surveillance and research	50,000	50,000	33,760	16,240
GIS & GPS	65,000	65,000	41,427	23,573
County service charge	55,000	55,000	62,204	(7,204)
Utilities	58,000	58,000	54,053	3,947
Communications	55,000	55,000	43,358	11,642
Rent	2,000	2,000		2,000
Travel and subsistence	84,000	84,000	45,231	38,769
Dues and subscriptions	28,000	28,000	14,892	13,108
Office supplies	37,000	37,000	20,345	16,655
Uniforms	30,000	30,000	23,636	6,364
Legal and accounting	24,000	24,000	16,398	7,602
Education and publicity	30,000	30,000	18,074	11,926
Capital outlay	425,000	425,000	36,466	388,534
Debt service:				
Loan and lease purchase payments	290,000	290,000	287,591	2,409
Total Expenditures	4,708,000	4,708,000	3,845,938	862,062
Excess (deficit) of revenues				
over expenditures	(482,070)	(482,070)	1,012,738	1,494,808
OTHER EDIANCING COURCES				
OTHER FINANCING SOURCES			7.400	
Interest income			7,409	7,409
Insurance proceeds			1,669	1,669
Total Other Financing Sources			9,078	9,078
Net change in fund balance	(482,070)	(482,070)	1,021,816	1,503,886
Fund Balance, Beginning of Year	8,244,593	8,244,593	8,244,593	
Fund Balance, End of Year	<u>\$7,762,523</u>	<u>\$7,762,523</u>	\$9,266,409	<u>\$1,503,886</u>

CMAD REPORT ON AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTARY INFORMATION (YEAR ENDED JUNE 30, 2023) GENERATED BY SAMPSON, SAMPSON & PATTERSON, LLP.



DISTRICT HEADQUARTERS

13151 E. INDUSTRIAL DRIVE PARLIER, CA 93648 559-896-1085 WWW.MOSQUITOBUZZ.NET

SUBSTATIONS

CARUTHERS 16800 S MARKS AVENUE CARUTHERS, CA 93609

> CLOVIS 3555 LIND AVENUE CLOVIS, CA 93612

SANGER 1717 ACADEMY AVENUE SANGER, CA 93657

SELMA 2425 FLORAL AVENUE SELMA, CA 93662

