

SACRAMENTO-YOLO
MOSQUITO & VECTOR
CONTROL DISTRICT

AUGUST 18, 2015

BOARD OF TRUSTEES
REGULAR MEETING

BOARD PACKET

10:00 A.M.

8631 BOND ROAD
ELK GROVE, CA 95624

**SACRAMENTO/YOLO MOSQUITO
& VECTOR CONTROL DISTRICT
BOARD OF TRUSTEES REGULAR MEETING**

8631 Bond Road
Elk Grove, CA 95624

**AGENDA
August 18, 2015
10:00 AM**

In compliance with the Americans with Disability Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the District office at (916) 685-1022 or (916) 685-5464 (fax). Requests must be made as early as possible, and at least one-full business day before the start of the meeting. Documents and materials relating to an open session agenda item that are provided to the SYMVCD Board less than 72 hours prior to a regular meeting will be available for public inspection and copying at 8631 Bond Road, Elk Grove, Ca 95624. The documents will also be available on the agency's website at www.fightthebite.net.

CALL TO ORDER:

- **Roll Call**
- **Pledge of Allegiance**

1. **Items for Approval by General Consent:**
 - a. **Minutes of the July 21, 2015 Board of Trustees Meeting**
 - b. **Expenditures for July 2015**

2. **Opportunity for Public Comment**

This item is reserved for members of the public who wish to speak on items not on the agenda

3. **Reports to the Board**
 - a. **Manager's Report**
 - b. **Reports from District Departments**
 - **Lab/Surveillance**
 - **Ecological Management**
 - **Biological Control**
 - **Larval and Adult Control**
 - **Public Outreach**

4. **Status of West Nile Virus Activity and District Response**

5. **Board/Staff Reports and Requests**

6. **Adjournment**

Sacramento-Yolo Mosquito and Vector Control District

August 18, 2015 Board Meeting

1. Items for Approval by General Consent:

- a. Minutes of the July 21, 2015 Board of Trustees Meeting;
- b. Expenditures for July 2015.

Recommendation:

Approve the Items by General Consent

**MINUTES OF THE JULY 21, 2015
REGULAR MEETING OF THE BOARD OF TRUSTEES OF THE
SACRAMENTO-YOLO MOSQUITO & VECTOR CONTROL DISTRICT**

PLACE: 8631 Bond Road, Elk Grove, CA 95624

TIME: 10:00 a.m.

TRUSTEES PRESENT:

Craig Burnett	President	Folsom
Bruce Eldridge	Vice President	Yolo County
Sean Denny	Secretary	Woodland
Lyndon Hawkins		Elk Grove
Jayna Karpinski-Costa		Citrus Heights
Raymond LaTorre		Sacramento
Susan Maggy		Sacramento County

TRUSTEES ABSENT:

Christopher Barker	Davis
Frederick Goethel	Galt
Robert McGarvey	Rancho Cordova
Rosemarie Moore	Isleton

LEGAL COUNSEL:

Richard Shanahan

STAFF PRESENT:

Gary Goodman	Manager
Mario Boisvert	Assistant Manager
Janna McLeod	Administrative Manager
Paula Macedo	Laboratory Director
Luz Rodriguez	Public Information Officer
Tony Hedley	Fisheries Supervisor
Dan Fisher	Information Technology Administrator
Sarah Wheeler	Biologist

CALL TO ORDER

The meeting was called to order at 10:03 a.m. by President Craig Burnett.

Roll Call

Trustees Christopher Barker, Frederick Goethel, Robert McGarvey, and Rosemarie Moore are absent; however, a quorum is present.

Pledge of Allegiance

All phones and electronic devices are requested to be silenced during the meeting.

At this time President Craig Burnett pulled Item 1c to be considered separately from the remainder of the General Consent Items.

1. ITEMS FOR APPROVAL BY GENERAL CONSENT

On a motion by Trustee Denny, seconded by Trustee Eldridge, the Board voted to approve General Consent items a., b., d., and e. The motion passed by the following vote: Ayes: 9, Noes: 0, Absent: 4.

- a. Minutes of the June 16, 2015 Board of Trustees Meeting;
- b. Expenditures for June 2015;
- c. Board Consideration of Resolution Honoring Gary Forrester for His Years of Service;
- d. Board Consideration of VDCI Contract Amendment and MOU to Include Turlock MAD;
- e. Board Consideration of Revised Job Descriptions-Program Coordinator and Ecological Management Supervisor.

President Craig Burnett now called for a vote on Item 1c. On a motion by Trustee Hawkins, seconded by Trustee Maggy, the Board voted to approve General Consent item 1c., Resolution 7-21-15 Honoring Gary F. Forrester for His 21 Years of Service. The motion passed by the following vote: Ayes: 9, Noes: 0, Absent: 4.

President Burnett asked Gary Forrester to step forward and presented him with the Resolution. The Board thanked Mr. Forrester for his service. Mr. Forrester thanked the Board and the District.

2. OPPORTUNITY FOR PUBLIC COMMENT

This item is reserved for members of the public who wish to speak on items not on the agenda.

There were none.

3. REPORTS TO THE BOARD

a. Manager's Report:

Manager Goodman provided written and verbal reports. He reported on West Nile virus activity in bird and mosquito populations within the District. The first human death in California from West Nile virus was reported in Nevada County. Manager Goodman indicated a few members of the Sacramento Valley region are exploring topics related to mosquito control costs associated with conventional and organic rice grown within the region. The MVCAC continues to push for research funding in the state budget from the cap and trade fund. They do not expect a resolution until September at the earliest. The federal NPDES fix is ongoing and Manager Goodman will continue to provide updates as developments occur. Negotiations with the City of Elk Grove regarding the proposed Bike Path along the western side of the property at Bond Road are ongoing as well. A meeting will be held with the UCSF Malaria Initiative at UC Davis and they will visit the District to meet with our staff. The MVCAC Board meeting is coming up on Thursday, July 23rd and no committee meetings will be taking place. The District Financial Audit field days are scheduled for the end of August. The new sick leave law has been implemented and the lighting retrofit is just about complete. Staff will be meeting with the District benefits brokers in August to begin the renewal process for the 2016 benefit year.

b. Written Reports from District Departments: Written reports were provided in the Board packet from each department. The department supervisors each gave an oral presentation and were available to answer any questions.

Lab/Surveillance: Lab Director, Paula Macedo discussed surveillance activities including mosquito abundance, mosquito trapping, and dead bird reports. Two thousand and twenty-one mosquito pools have been tested in 2015 and 26 have tested positive for West Nile virus. In June, 213 dead birds were reported with 15 positives. Sentinel chickens remain negative and will continue to be tested every other week. Twenty-two traps have been set to detect invasive species with no eggs detected so far this year. At this time the new District Biologist, Sarah Wheeler was introduced. Ms. Wheeler briefly discussed her education and experience including her work with sugar bait traps for mosquito and West Nile virus surveillance. The Board welcomed her to the District.

Ecological Management: A written report was included in the Board packet. Manager Goodman indicated staff has been working with the City of Elk Grove on their CDFW routine maintenance agreement in addition to obtaining a warrant to gain access to a property with a pool needing inspected for producing mosquitoes. During the process the property changed hands and the new owner allowed technicians access to the property.

Biological Control: Fisheries Supervisor, Tony Hedley indicated Fisheries staff is in the middle of their busy season for fish planting, typically mid-June to mid-August. The pond dye study continues and the dye seems to be doing a good job of protecting the mosquitofish from predatory birds as well as preventing aquatic weed growth in the ponds.

Larval and Adult Control: A written report was included in the Board packet. Manager Goodman indicated ULV trucks are using the new MapVision software and VDCI has been busy performing adulticide applications with recent weather issues delaying some treatments.

Public Outreach: Public Information Officer Luz Rodriguez discussed department activities including Billboards, TV, and radio spots, Repellent distribution at special events including the upcoming National Night Out to be held in August.

4. BOARD REVIEW AND APPROVAL OF DISTRICT BUDGET FOR 2015-2016

Manager Goodman presented the item with updated property tax revenues and operational expenses. On a motion by Trustee Denny, seconded by Trustee DeAnda, the Board voted to approve the 2015-2016 Budget. The motion passed by the following vote: Ayes: 9, Noes: 0, Absent: 4

5. BOARD AUTHORIZATION TO PAY 2015/2016 ANNUAL PREMIUM INVOICE OF \$293,404 FOR COVERAGE THROUGH THE VECTOR CONTROL JOINT POWERS AGENCY

Manager Goodman presented the item. On a motion by Trustee Hawkins, seconded by Trustee Denny, the Board voted to authorize the payment of the 2015-2016 annual premium invoice of \$293,404 for coverage through the Vector Control Joint Powers Agency. The motion passed by the following vote: Ayes: 9, Noes: 0, Absent: 4

6. BOARD AUTHORIZATION TO PAY CALPERS UNFUNDED LIABILITY INVOICE OF \$437,652

Manager Goodman presented the item and held a brief discussion on potential options for future payments towards the unfunded accrued liability. On a motion by Trustee Denny, seconded by Trustee DeAnda, the Board voted to authorize payment of the CalPERS unfunded liability invoice of \$437,652. The motion passed by the following vote: Ayes: 9, Noes: 0, Absent: 4

7. BOARD REVIEW AND DISCUSSION OF DISTRICT 5 YEAR PLAN

Manager Goodman presented the item and reviewed the updated 5 year plan including items that are in progress and items that have been completed. A chart indicating the anticipated timeline and costs associated with each department’s plan was included with the update. This was an information only item and no action was taken by the Board.

8. BOARD/STAFF REPORTS AND REQUESTS

Manager Goodman discussed holding the October Board meeting at the Stone Lakes Wildlife Refuge which would be followed by a tour of the Refuge and a review of ongoing collaborative effort to control mosquito activity at the refuge.

Northwest Mosquito Control Association has requested Manager Goodman speak at their annual meeting to be held in October.

President Burnett indicated he had recently received the Mosquito Research Foundation’s Newsletter which featured a study done last year by Dr. Christopher Barker on controlling the invasion and spreading of *aedes albopictus* in the Los Angeles Basin. Manager Goodman then mentioned Dr. Lark Coffey’s project was also funded through the MRF.

9. ADJOURNMENT

President Craig Burnett adjourned the meeting at 11:20 a.m.

* * * * *

I certify that the above minutes substantially reflect the general business and actions taken by the Board of Trustees at the July 21, 2015 meeting.

Gary Goodman, Manager

Approved as written and/or corrected by the Board of Trustees at the August 18, 2015 meeting.

Sean Denny, Board Secretary

Aug 11, 2015

10:57 am

Sacramento/Yolo M.V.C.D. July 2015 Check Register

Check Number	Date	EFT #/ Vendor	Name	Discounts	Net Amount
48463	07/07/15	AIRGAS	Airgas Dry Ice	0.00	1529.87
48464	07/07/15	ANDKO	ANDKO Building Maintenance Inc.	0.00	2777.94
48465	07/07/15	APPLIED ENER	Applied Energy Innovation, Inc.	0.00	61417.00
48466	07/07/15	AT&T	AT&T	0.00	101.16
48467	07/07/15	AWARDS BY KA	Awards by Kay	0.00	190.31
48468	07/07/15	CA CUST POWE	California Custom Trailers & Power Sport	0.00	2092.09
48469	07/07/15	CARQUEST	CarQuest Auto Parts	0.00	73.87
48470	07/07/15	CCI	Consolidated Communications	0.00	2377.08
48471	07/07/15	CLR CHNL OUT	Clear Channel Outdoor	0.00	17000.00
48472	07/07/15	CSAC EXCESS	CSAC Excess Insurance Authority	0.00	501.15
48473	07/07/15	EG WATER	Elk Grove Water Service	0.00	269.57
48474	07/07/15	FARM AIR	Farm Air Flying Service	0.00	18405.75
48475	07/07/15	FASTENAL	Fastenal Company	0.00	199.06
48476	07/07/15	FERRELLGAS	Ferrellgas	0.00	422.78
48477	07/07/15	GALT PIPE	Galt Pipe Company	0.00	164.87
48478	07/07/15	HUNT & SONS	Hunt & Sons, Inc.	0.00	7946.04
48479	07/07/15	INLAND	Inland Business Systems	0.00	90.48
48480	07/07/15	KAISER FHP	Kaiser Foundation Health Plan	0.00	20363.04
48481	07/07/15	KAISER FHP	Kaiser Foundation Health Plan	0.00	1192.57
48482	07/07/15	KAISER FHP	Kaiser Foundation Health Plan	0.00	3577.69
48483	07/07/15	KAISER FHP	Kaiser Foundation Health Plan	0.00	16432.61
48484	07/07/15	LINA	Life Insurance Company of North America	0.00	1867.91
48485	07/07/15	MCES	MCES, LLC	0.00	47.40
48486	07/07/15	O'REILLY	O'Reilly Automotive Stores, Inc.	0.00	849.71
48487	07/07/15	P.E.R.S. 170	Fiscal Services Division-Cashier Unit	0.00	1700.00
48488	07/07/15	PARTS CENTER	The Parts Center	0.00	1513.19
48489	07/07/15	PG&E	PG & E	0.00	98.31
48490	07/07/15	PREFERRED	Preferred Benefit Ins. Administrators	0.00	8404.60
48491	07/07/15	REPUBLIC	Republic Services #922	0.00	29.04
48492	07/07/15	SAFE SIDE	Safe Side Security	0.00	1000.50
48493	07/07/15	SAFETY KLEEN	Safety Kleen Corp.	0.00	499.35
48494	07/07/15	SMUD	S.M.U.D.	0.00	4077.94
48495	07/07/15	SPARK	Spark Creative Design	0.00	945.01
48496	07/07/15	STAPLES	STAPLES	0.00	113.39
48497	07/07/15	US BANK	U.S. Bank	0.00	12649.98
48498	07/07/15	US BANK EQUI	U.S. Bank Equipment Finance	0.00	570.35
48499	07/07/15	VDCI	Vector Disease Control International	0.00	30333.34
48500	07/07/15	VERIZON WIRE	Verizon Wireless	0.00	4408.25
48501	07/07/15	WASTE MGMT	Waste Management	0.00	350.43
48502	07/07/15	WOODLAND	City of Woodland	0.00	256.62
48503	07/22/15	ADAPCO	Adapco, Inc.	0.00	181835.15
48504	07/22/15	ADVENTURE	Tender Corporation-US	0.00	39871.00
48505	07/22/15	AGRIFORM	The Tremont Group, Inc.	0.00	452.49
48506	07/22/15	AIRGAS NCN	Airgas USA, LLC	0.00	58.94
48507	07/22/15	ALHAMBRA	Alhambra & Sierra Springs	0.00	504.77
48508	07/22/15	AMCA	A.M.C.A.	0.00	5000.00
48509	07/22/15	ARAMARK UNI	AUS Sacramento	0.00	3669.92
48510	07/22/15	AT&T	AT&T	0.00	36.55
48511	07/22/15	AUTOZONE	AutoZone, Inc.	0.00	491.68
48512	07/22/15	BARTKIEWICZ	Bartkiewicz, Kronick & Shanahan	0.00	2769.18
48513	07/22/15	CHP	California Highway Patrol	0.00	10.00
48514	07/22/15	CLARKE & RUS	Clarke & Rush Mechanical	0.00	105.00
48515	07/22/15	CLARKE MOSQ	Clarke Mosquito Control Products, Inc.	0.00	89213.81

48516	07/22/15	EG FORD	Elk Grove Ford	0.00	841.77
48517	07/22/15	EG WATER	Elk Grove Water Service	0.00	100.38
48518	07/22/15	FASTENAL	Fastenal Company	0.00	40.08
48519	07/22/15	HUNT & SONS	Hunt & Sons, Inc.	0.00	7008.30
48520	07/22/15	INLAND	Inland Business Systems	0.00	457.04
48521	07/22/15	INTERSTATE	Interstate Oil Co.	0.00	123.91
48522	07/22/15	KIMBALL MID	Kimball Midwest	0.00	304.97
48523	07/22/15	MAITA CHEVY	MAITA CHEVROLET	0.00	594.60
48524	07/22/15	MURRAY MCDAN	Murray McDaniel	0.00	197.50
48525	07/22/15	P.E.R.S. 170	Fiscal Services Division-Cashier Unit	0.00	437652.00
48526	07/22/15	PG&E	PG & E	0.00	862.38
48527	07/22/15	SAC ICE	SAC ICE	0.00	909.83
48528	07/22/15	SAFE SIDE	Safe Side Security	0.00	95.00
48529	07/22/15	STERICYCLE	Stericycle, Inc.	0.00	77.57
48530	07/22/15	STERLING MAY	Sterling May Co.	0.00	319.18
48531	07/22/15	TARGET SPECI	Target Specialty Products	0.00	167432.17
48532	07/22/15	TRICO	TriCo Welding Supplies	0.00	77.22
48533	07/22/15	VALLEY TIRE	Valley Tire Center	0.00	78.95
48534	07/22/15	VECTOR	California Dept. of Public Health	0.00	6840.00
48535	07/22/15	VERIZON CA	Verizon	0.00	63.52
48536	07/22/15	WESTERN HEAL	Western Health Advantage	0.00	16227.71
48537	07/22/15	WILEY PRICE	Wiley Price & Radulovich	0.00	944.50
48538	07/22/15	ZEP	Zep Sales & Service	0.00	157.49
48539	07/23/15	FARM AIR	Farm Air Flying Service	0.00	24807.75
48540	07/23/15	HUNT & SONS	Hunt & Sons, Inc.	0.00	3076.69
48541	07/31/15	PAYROLL	CA Tax Deposit		13606.08
48542	07/31/15	CAL- DISB	California State Disbursement Unit	0.00	694.00
48543	07/31/15	CAL- DISB	California State Disbursement Unit	0.00	350.00
48544	07/31/15	NAT'L DEFERR	Nationwide Retirement Solutions	0.00	1125.00
48545	07/31/15	P.E.R.S. 170	Fiscal Services Division-Cashier Unit	0.00	63839.81
48546	07/31/15	PERS 457	Cal PERS 457 Plan	0.00	14322.00

			Cash account Total	0.00	1413434.96
					=====
			Report Total	0.00	1413434.96

I hereby authorize the use of my signature plate on
the above listed warrants 48463-48546

Craig Burnett, President of the Board

SACRAMENTO-YOLO
**MOSQUITO
& VECTOR
CONTROL**
D I S T R I C T

MAILING ADDRESS

SACRAMENTO COUNTY
8631 BOND ROAD
ELK GROVE, CA 95624

YOLO COUNTY
1234 FORTNA AVENUE
WOODLAND, CA 95695

**Sacramento-Yolo Mosquito and Vector Control
STATEMENT OF FINANCIAL CONDITION**

1.800.429.1022
FIGHTtheBITE.net

Please Note: Due to Year-End closing activities we have not yet received our final month end General Ledger for June 2015 or July 2015 from Yolo County. These financial reports reflect the transactions of the District that were authorized, and June has been balanced with A PRELIMINARY copy of the Yolo County Auditor-Controller's General Ledger.

Gary Goodman, MANAGER

Please contact Administrative Manager, Janna McLeod prior to the meeting if you have any questions or concerns on the financial reports.

2015 BOARD OF TRUSTEES

CHRISTOPHER BARKER
DAVIS

CRAIG R. BURNETT
FOLSOM

RAUL DeANDA
WEST SACRAMENTO

SEAN DENNY
WOODLAND

BRUCE ELDRIDGE
YOLO COUNTY

FREDERICK GOETHEL
GALT

LYNDON HAWKINS
ELK GROVE

JAYNA KARPINSKI-COSTA
CITRUS HEIGHTS

GREGORY C. LANZARO
WINTERS

RAYMOND LaTORRE
SACRAMENTO

SUSAN MAGGY
SACRAMENTO COUNTY

ROBERT J. MCGARVEY
RANCHO CORDOVA

ROSEMARIE MOORE
ISLETON

Sacramento/Yolo M.V.C.D.
STATEMENT OF FINANCIAL CONDITION

July 2015

Assets

Current Assets

Cash In Bank	8,291,724.16
Cash in Bank-FSA	19,474.58
Petty Cash	600.00
Accounts Receivable	1,247.50
Sac County Revenue Receivable	379,061.07
Assigned - Cash With Fiscal Agent	752,709.00
Inventory	372,474.39
LAND, BLDG., IMPROVE	898,306.00
OPEB Asset	17,063.00
Net Pension Asset	948,272.00

TOTAL Current Assets	11,680,931.70
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Land, Building and Equipment Fund

EQUIPMENT	3,143,507.53
BOND ROAD	5,061,395.00
WOODLAND FACILITY	708,574.00
ACCUMULATED DEPRECIATION	(5,929,563.72)

TOTAL Land, Building and Equipment Fund	2,983,912.81
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TOTAL Assets	14,664,844.51
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Liabilities

Current Liabilities

Accounts Payable	450,156.89
Insurance Deduction	15,804.02
Accumulated Vacation	325,561.30
Retiree Premiums	3,741.81

TOTAL Current Liabilities	795,264.02
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TOTAL Liabilities	795,264.02
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Fund Balance

INVESTMENT IN FIX ASSETS	3,837,300.96
RESERVED CASH (INS.)	952,987.00
Committed-Capital Outlay	700,000.00
Unassigned - Dry Financing	6,000,000.00
Committed - Vector/Disease Response	2,000,000.00
GENERAL FUND	2,586,534.16
Excess of Revenue over Expenditures	(2,207,241.63)

TOTAL Fund Balance	13,869,580.49
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TOTAL Liabilities & Fund Balance	14,664,844.51
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Sacramento/Yolo M.V.C.D.

STATEMENT OF OPERATION

	1 Month Ended July 31, 2015	1 Months Ended July 31, 2015
Revenue		
REVENUE	2,686.73	2,686.73
TOTAL Revenue	2,686.73	2,686.73
Expenditures		
SALARIES/BENEFITS/WC		
SALARIES/BENEFITS/WC	958,438.98	958,438.98
TOTAL Salaries	958,438.98	958,438.98
OPERATIONAL		
LIABILITY INSURANCE	0.00	0.00
AUDITING/FISCAL	0.00	0.00
COMMUNICATIONS	2,413.63	2,413.63
PUBLIC INFORMATION	48,568.50	48,568.50
STRUCTURE & GROUNDS	4,542.81	4,542.81
MEMBER/TRAINING	14,563.70	14,563.70
DISTRICT OFFICE EXPENSES	146.28	146.28
PROFESSIONAL SERVICES	4,255.33	4,255.33
MATERIALS & SUPPLIES	504.77	504.77
RENTS & LEASES - Admin	467.74	467.74
SAFETY PROGRAM	130.08	130.08
UTILITIES	6,185.40	6,185.40
AIRCRAFT SERVICES	55,141.09	55,141.09
ECOLOGICAL MANAGEMENT	77.66	77.66
MICROBIAL	330,001.84	330,001.84
INSECT GROWTH REGULATOR	49,344.64	49,344.64
INSECTICIDES	386,780.99	386,780.99
FISHERIES	56.64	56.64
COMMUNICATIONS-Operations	4,471.77	4,471.77
GEOGRAPHIC INFO SYSTEMS	0.00	0.00
INFORMATION TECHNOLOGY	1,917.23	1,917.23
CONTROL OPERATIONS	1,255.52	1,255.52
VEHICLE PARTS/LABOR	7,801.95	7,801.95
LAB SERVICES	10,990.61	10,990.61
GAS & PETROLEUM	19,916.12	19,916.12
TOTAL Total Operational	949,534.30	949,534.30
TOTAL Expenditures	1,907,973.28	1,907,973.28
Program Revenue over Expenditures	(1,905,286.55)	(1,905,286.55)
Other Income & Expenses		
CAPITAL OUTLAY	0.00	0.00
DEPRECIATION	0.00	0.00
Amortization Expense	0.00	0.00
TOTAL Other Income & Expenses	0.00	0.00
	(1,905,286.55)	(1,905,286.55)
Capital Expenditures		
CAPITAL OUTLAY	8,551.08	8,551.08
RESEARCH FUND	0.00	0.00
BUILDING IMPROVEMENT	0.00	0.00
TOTAL Capital Expenditures	8,551.08	8,551.08
Excess of Revenue over Expenditures	(1,913,837.63)	(1,913,837.63)

Sacramento/Yolo M.V.C.D.

STATEMENT OF OPERATION

	<u>1 Months Ended July 31, 2015</u>	<u>Annual Budget</u>	<u>Unused</u>
Revenue			
REVENUE	2,686.73	11,595,834.39	11,593,147.66
TOTAL Revenue	<u>2,686.73</u>	<u>11,595,834.39</u>	<u>11,593,147.66</u>
Expenditures			
SALARIES/BENEFITS/WC			
SALARIES/BENEFITS/WC	958,438.98	7,123,442.62	6,165,003.64
TOTAL Salaries	<u>958,438.98</u>	<u>7,123,442.62</u>	<u>6,165,003.64</u>
OPERATIONAL			
LIABILITY INSURANCE	0.00	126,884.00	126,884.00
AUDITING/FISCAL	0.00	12,500.00	12,500.00
COMMUNICATIONS	2,413.63	40,000.00	37,586.37
PUBLIC INFORMATION	48,568.50	386,500.00	337,931.50
STRUCTURE & GROUNDS	4,542.81	61,000.00	56,457.19
MEMBER/TRAINING	14,563.70	88,000.00	73,436.30
DISTRICT OFFICE EXPENSES	146.28	15,000.00	14,853.72
PROFESSIONAL SERVICES	4,255.33	99,000.00	94,744.67
MATERIALS & SUPPLIES	504.77	10,000.00	9,495.23
RENTS & LEASES - Admin	467.74	8,250.00	7,782.26
SAFETY PROGRAM	130.08	5,000.00	4,869.92
UTILITIES	6,185.40	87,550.00	81,364.60
AIRCRAFT SERVICES	55,141.09	606,800.00	551,658.91
ECOLOGICAL MANAGEMENT	77.66	23,400.00	23,322.34
MICROBIAL	330,001.84	1,100,000.00	769,998.16
INSECT GROWTH REGULATOR	49,344.64	512,000.00	462,655.36
INSECTICIDES	386,780.99	680,000.00	293,219.01
FISHERIES	56.64	22,950.00	22,893.36
COMMUNICATIONS-Operations	4,471.77	44,000.00	39,528.23
GEOGRAPHIC INFO SYSTEMS	0.00	12,000.00	12,000.00
INFORMATION TECHNOLOGY	1,917.23	32,000.00	30,082.77
CONTROL OPERATIONS	1,255.52	21,000.00	19,744.48
VEHICLE PARTS/LABOR	7,801.95	132,000.00	124,198.05
LAB SERVICES	10,990.61	125,360.00	114,369.39
GAS & PETROLEUM	19,916.12	165,000.00	145,083.88
TOTAL Total Operational	<u>949,534.30</u>	<u>4,416,194.00</u>	<u>3,466,659.70</u>
TOTAL Expenditures	<u>1,907,973.28</u>	<u>11,539,636.62</u>	<u>9,631,663.34</u>
Program Revenue over Expenditures	<u>(1,905,286.55)</u>	<u>56,197.77</u>	<u>1,961,484.32</u>
Other Income & Expenses			
CAPITAL OUTLAY	0.00	0.00	0.00
DEPRECIATION	0.00	0.00	0.00
Amortization Expense	0.00	0.00	0.00
TOTAL Other Income & Expenses	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	<u>(1,905,286.55)</u>	<u>56,197.77</u>	<u>1,961,484.32</u>
Capital Expenditures			
CAPITAL OUTLAY	8,551.08	592,500.00	583,948.92
RESEARCH FUND	0.00	75,000.00	75,000.00
BUILDING IMPROVEMENT	0.00	100,000.00	100,000.00
TOTAL Capital Expenditures	<u>8,551.08</u>	<u>767,500.00</u>	<u>758,948.92</u>
Excess of Revenue over Expenditures	<u>(1,913,837.63)</u>	<u>(711,302.23)</u>	<u>1,202,535.40</u>

Sacramento-Yolo Mosquito and Vector Control District

August 18, 2015 Board Meeting

3. Reports to the Board

a. Manager's Report

b. Reports from District Departments

- **Lab/Surveillance (Paula Macedo)**
- **Ecological Management (Marty Scholl)**
- **Biological Control (Tony Hedley)**
- **Larval and Adult Control (Marcia Reed)**
- **Public Outreach (Luz Maria Rodriguez)**

a. Manager's Report

The District is continuing to see West Nile virus activity in both the bird and mosquito populations. Staff is following the Mosquito Borne Disease Management Plan to help respond to the positive locations.

District staff hosted UCSF's Malaria Elimination Initiative team members and discussed our program. The UCSF group is working with Google which the District hosted back in June. We also hosted a webinar with both groups to give them more background on how we use online tools and GIS to enhance public health in our District.

Senate Bill 1500 passed out of the Senate Environment and Public Works Committee and is now available to be heard on the Senate Floor. This is the first movement on the reducing regulatory burdens language that has been heard in the Senate. The accompanying House Bill, HR 897, has not moved as of yet but things are pointing in the right direction.

The SWRCB is in the process of reissuing the NPDES permit and plans on having a draft to their Board by the end of September. The District has arranged for two field trips with SWRCB staff to give them a better understanding of vector control activities.

The District purchased a new Argo for field operations. The current one will continue to be in operation when needed. District staff is also looking to add at least one more ATV to the fleet.

The District audit will begin on August 25th.

b. Reports from District Departments

- **Lab/Surveillance (Paula Macedo)**
- **Ecological Management (Marty Scholl)**
- **Biological Control (Tony Hedley)**
- **Larval and Adult Control (Marcia Reed)**
- **Public Outreach (Luz Maria Rodriguez)**



MVCAC

Mosquito and Vector Control Association of California

Date: August 1, 2015

Memo to: President, Board of Trustees Sacramento Valley Region

From: Lyndon Hawkins
Chairman, MVCAC Trustee Council

Re: Trustee Council elections

The Trustees of the Mosquito and Vector Control Districts of the MVCAC Sacramento Valley Region will be voting this fall for their trustee representative on the MVCAC Trustee Council. The first step in the process is to open up nominations.

Your board has the opportunity to nominate a trustee candidate to represent the region for two years starting in January 2016. When you make a nomination (the candidate needs to be a current trustee in the region), please send a letter with the name of the candidate to the Trustee Council, in care of Kim Andosca, MVCAC, One Capitol Mall, Suite 800, Sacramento, CA 95814. Or to kandosca@amgroup.us. We will also need a resume from the candidate to use in the election process.

The nomination letter needs to be received by September 21, 2015.

LABORATORY Monthly Report for August 2015 Board Meeting

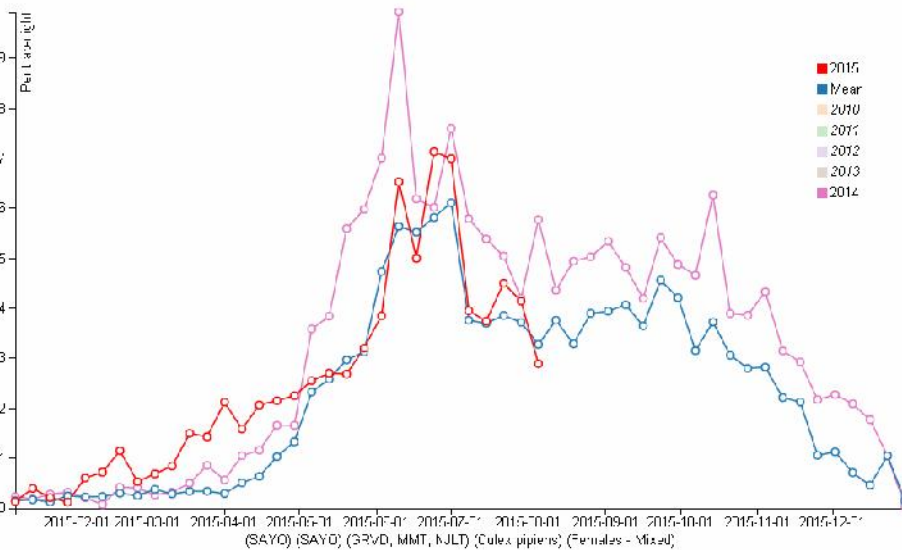
Insectary:

Colonies maintained: *Cx. tarsalis* Bakersfield from CDC (susceptible)
Cx. quinquefasciatus Cq1 (susceptible)
Cx. pipiens from Capitol Park (autogenous)

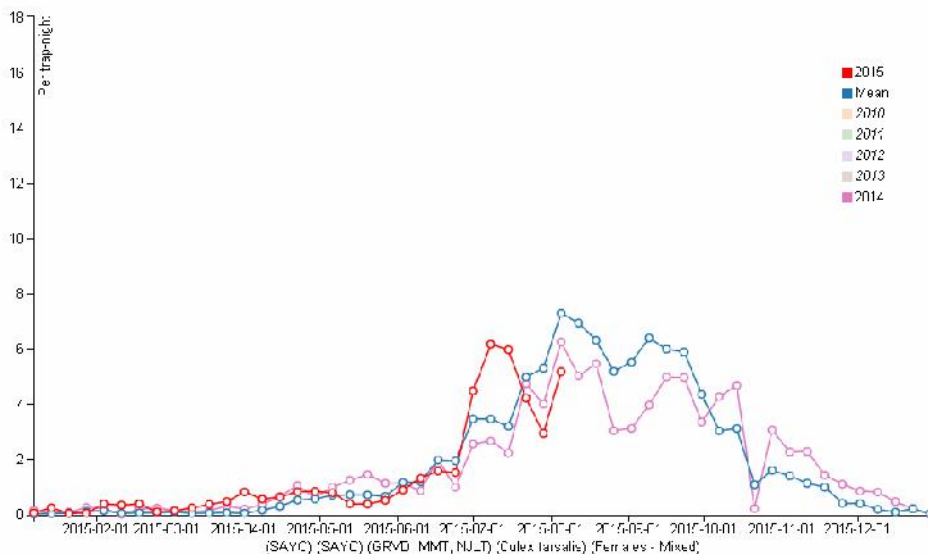
Surveillance:

- **Weekly collections** – American Light traps, Mosquito Magnet traps, and Gravid traps. (see graphs below).

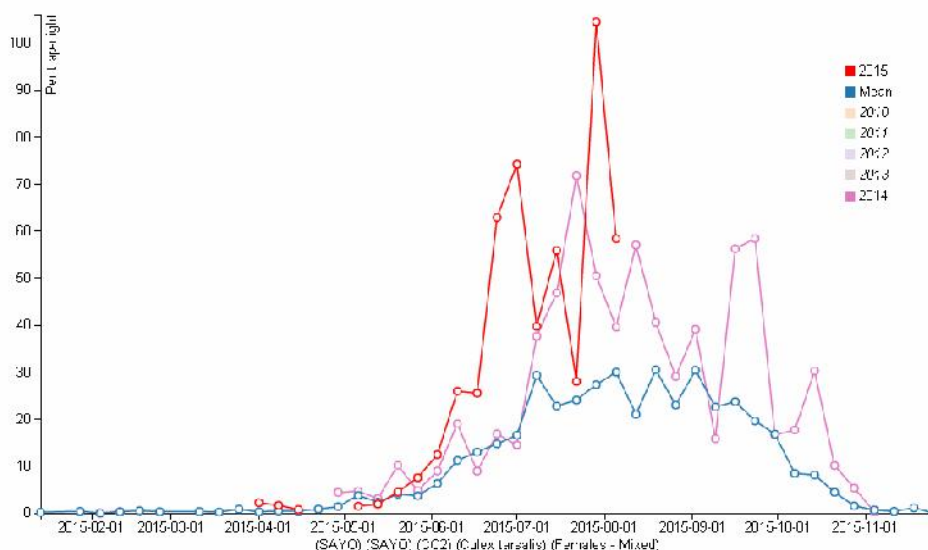
Culex pipiens abundance:



Culex tarsalis abundance weekly traps:



Culex tarsalis abundance CO₂-baited traps:

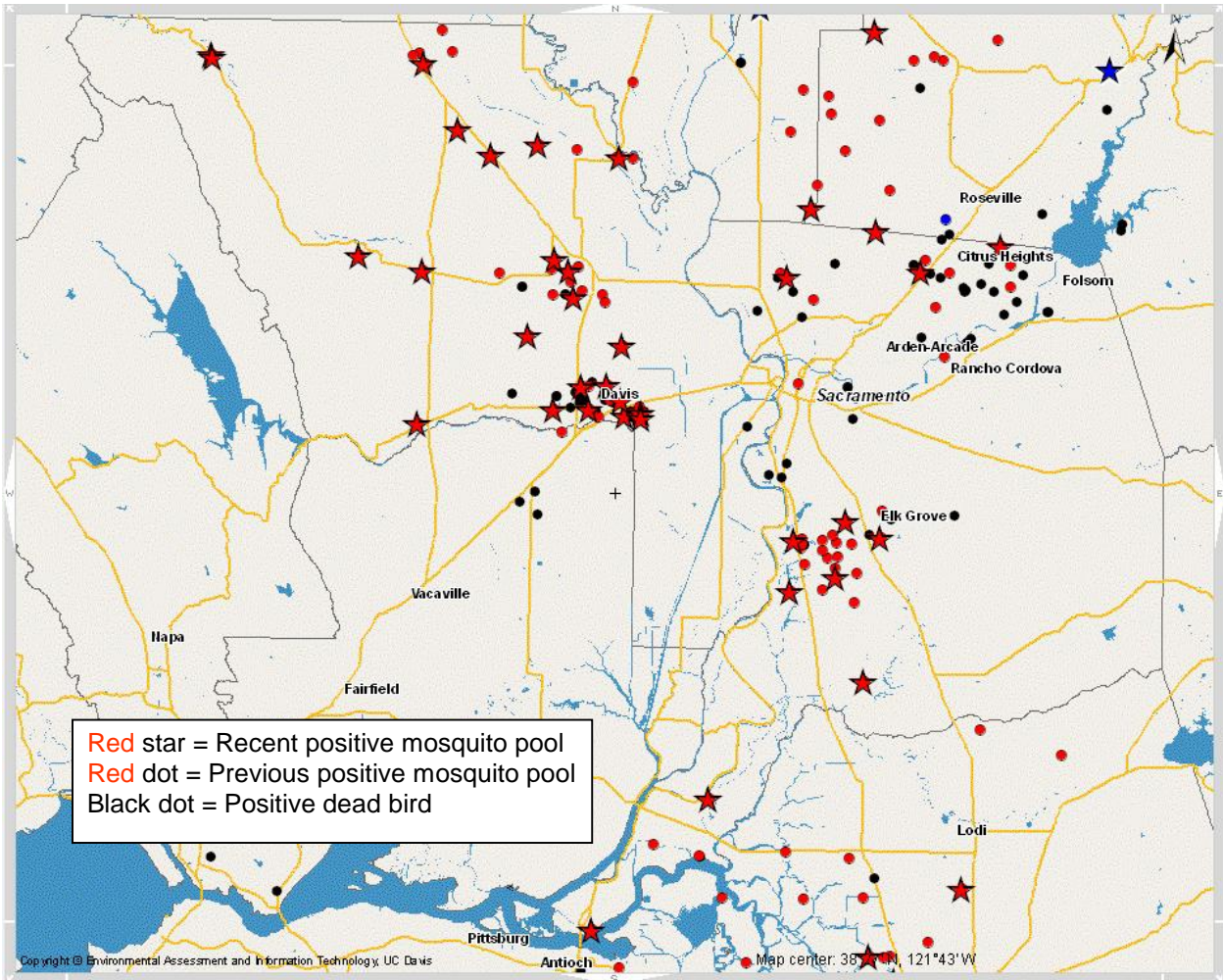


- Encephalitis virus surveillance (EVS)** – We have tested 3587 mosquito pools so far in 2015 and **169** (4.71%) were positive for West Nile virus. At this time last year we had tested 4389 mosquito pools and 445 (10.14%) had been positive. We have identified 3 areas of elevated WNV activity: Elk Grove, Davis, and Woodland. Most of the positive mosquito pools detected have been from Yolo County this year.

	2015*	2014	2013	2012	2011	2010	2009	2008
Total tested	3587	7554	6760	6796	6679	6244	4343	8672
Total positive	169	708	630	641	388	215	52	288
Sacramento Co.	54	487	384	487	381	205	38	276
Yolo Co.	115	221	246	154	7	10	14	12

*numbers for 2015 reflect positive samples detected up to date (08/10/15) only.

- Dead bird surveillance** – In July, 233 dead birds (176 from Sacramento Co. and 57 from Yolo) were reported to the hotline. So far this year, we have found **72** positive dead birds (38 from Sacramento County and 34 from Yolo County). At this time last year we had identified 246 positive dead birds.
- Sentinel chicken surveillance** – We continued to collect blood samples from all chickens and test them every other week. So far this year **2** chickens from 2 flocks – Esparto and Isleton/Tyler Island have been positive for antibodies towards WNV. These are awaiting confirmation from the California department of Public Health. The positive samples were collected on July 29, 2015.



- **Exotic/Invasive species surveillance** – We have set traps at 22 fixed areas in both Sacramento and Yolo counties. We collect the strips from the ovicups on a weekly basis and check under the microscope for any eggs.
- **Tick and Lyme disease surveillance** – We have concluded tick surveillance and will resume in November.

West Nile Virus Activity in California as of August 07, 2015

2014 & 2015 YTD West Nile Virus Comparisons		
	2014	2015
Total # Dead Bird Reports	7,660	6,559
# Positive Counties	35	37
# Human Cases	19	18
# Positive Dead Birds / # Tested	1,014 / 1,972	362 / 1,616
# Positive Mosquito Pools / # Tested	1,268 / 15,277	1,333 / 18,508
# Seroconversions / # Tested	56 / 8,394	90 / 7,542

YTD Activity by Element and County, 2015				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda		7	2	
Butte	6	17	67	32
Colusa		3		
Contra Costa		2	2	6
El Dorado		2		
Fresno			20	
Glenn	4	3	18	4
Humboldt		2		
Kern		1	91	
Kings		3	53	
Lake		2	10	2
Los Angeles	1	3	34	1
Madera		1		
Marin		2		
Merced		1	3	2
Nevada	1	4		
Orange		10	65	
Placer		4	35	3
Riverside	2	20	89	
Sacramento		38	54	
San Bernardino		1	80	2
San Diego		74	7	
San Joaquin		7	100	
San Mateo		7	4	
Santa Barbara			1	
Santa Clara		54	2	
Shasta		4	29	7
Solano		5	3	3
Sonoma		4	8	
Stanislaus		9	18	2
Sutter		12	44	13
Tehama				2
Trinity		1		
Tulare	4	19	358	
Ventura		2		
Yolo		34	115	
Yuba		4	21	11
Totals	18	362	1,333	90

ECOLOGICAL MANAGEMENT DEPARTMENT
Monthly Report for August 2015 Board Meeting

Stormwater / Creeks / Streams Program

California Department of Water Resources (DWR): DWR drainage staff continue to work with the District on a weekly basis in determining where to perform stream or channel maintenance.

The majority of the creeks and streams remain dry or with isolated pockets of remaining water that require additional inspections. Staff continues to monitor various beaver dam related blockages caused from isolated agricultural irrigations. The City of Elk Grove has been working with the District to plan long term maintenance in and around the City limits.

Wetland Program

California Department of Fish and Wildlife (CDFW) Yolo Bypass Wildlife Area: The Manager of the Wildlife Area has initiated discussions with the Department regarding Fall Flooding and options that recognize drought conditions, coupled with impacts to the District.

Tyler Island Habitat LLC: Staff started the disking project in the brood pond. Staff will be working with NRCS and the duck club membership to develop a new irrigation schedule and management plan next year that is reasonable to all parties.

Agricultural Program

DWR: State personnel continue to take proactive measures to reduce off site standing water that has originated on their irrigated pastures near the community of Hood.

Staff continues to assist Control Operations with rice dipping, treatments, and field inspections on a weekly basis.

Field Trials

Various product field trials have been conducted by the Department in conjunction with the Laboratory and Control Operations to test rates of new and current control larvicide products.

Pool Program

One inspection and abatement warrant was granted at the beginning of the month. At time of warrant posting on the property, the new residents met us and are continuing to work very cooperatively with the District.

Biological Control Monthly Report for August 2015 Board Meeting

Projects

Performed monthly safety inspections.
 Supervisors meetings
 Helped fill ULV trucks, ULV backpacks
 Helped calibrate ULV Trucks
 Held informal training sessions on safety minutes, Heat Illness
 Provided Mosquitofish and Guppies to the State Fair
 Provided 10lbs of Mosquitofish to Northern Salinas Valley Mosquito Abatement District.
 Seasonal employees rotated as needed to help Catch Basin crew and have been given more responsibilities performing creek inspections/ treatments as needed.
 Fisheries pond dye study continues to be monitored. The dye is working great to prevent aquatic weed growth and provide protection from predatory birds.. This study will be ongoing and monitored monthly / yearly as to the yield of our seining for mosquitofish.
 In the month of July the Fisheries staff has planted 2,036 pounds of Mosquitofish in 11,260.50 Acres of rice. These rice fields are located in Cosumnes River Preserve, Conway and Natomas area.

General Fisheries Maintenance

This time of year we are performing pond chemistry every Monday. Fertilizing as needed to maintain plankton populations.
 Herbicide around outside ponds and mowing of weeds around ponds edges.

Fisheries Budget

<u>Total</u>	<u>Spent</u>	<u>Remaining</u>	<u>% Spent</u>
\$22,950.00	\$819.09	\$ 22,130.91	4%

Finished the year 2014-2015 under budget

Log of Treatment Applied

<u>Material</u>	<u>AMT</u>	<u>Area Treated</u>	<u>Applic Rate</u>	<u>Treatments</u>
Mosquitofish	2113.40 lbs	11,586.35 acre	.18 lb/acre	491 times
Guppies	.95 1lb	.288 acre	24.86 lb/acre	9 times

Mosquitofish Supplied to the Operators Tanks

Elk Grove Facility	60 lbs.
Woodland Facility	21 lbs.

Fish usage in month of July

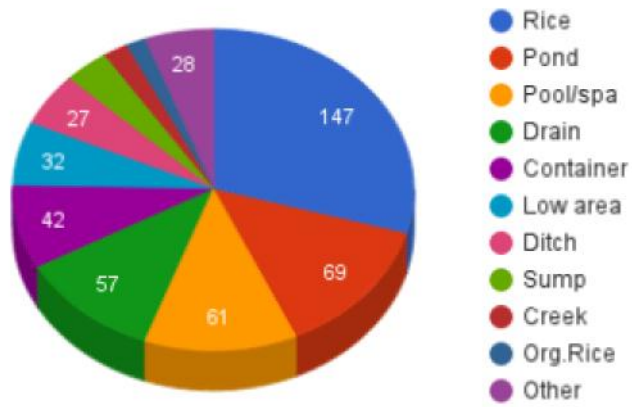
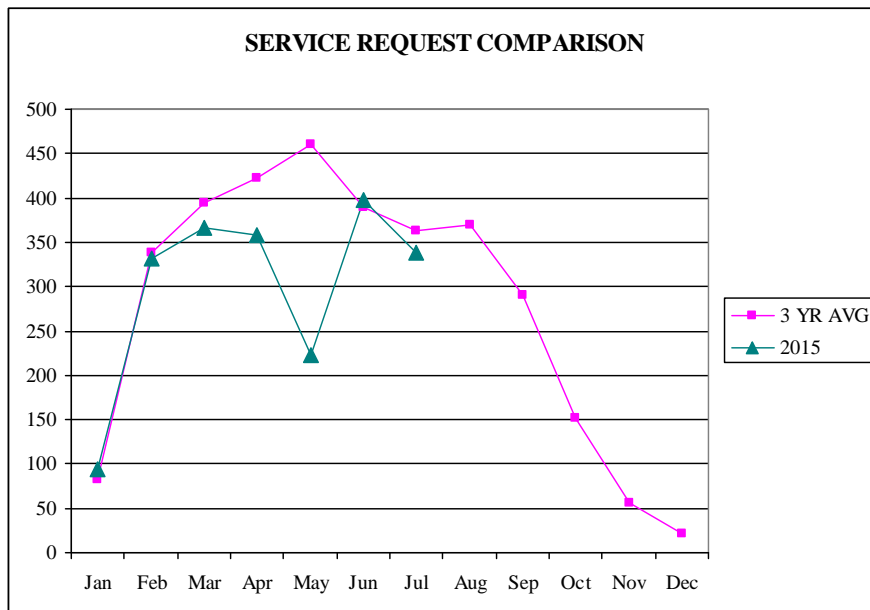


Chart above shows the number of sources visited by source type.
For example 147 rice fields were treated with fish in the month of July

CONTROL OPERATIONS Monthly Report for August 2015 Board Meeting

We are currently in mid-mosquito season and thus control technicians are responding to West Nile virus positives and high mosquito abundance trapping results in addition to their routine monitoring and treating of mosquito sources. Evening truck, quad and backpack ULV applications have increased during the month of July where positive West Nile virus activity has been identified. Field techs initially respond to positive mosquito pools with localized treatments utilizing backpack, quad or truck mounted ULV spray equipment. After these localized responses, trapping and testing of mosquitoes occurs again. So far, in all urban areas of concern, West Nile virus risk indicators have decreased sufficiently that urban aerial adulticide treatments have not been initiated. We have been utilizing VDCI to perform some “buffer” aerial blocks which are designed to control adult mosquitoes which are moving from high abundance areas, such as the rice fields into populated areas, specifically, Woodland and Davis. These aerial buffer treatments are supplemented with truck ULV applications as well. Farm Air is continuing to perform our aerial larvicide applications in a timely manner and have been completing orders with 1-4 days. We have completed fewer treatments, both in sources treated and in acres treated for aerial larviciding this season. The Natomas area is still being monitored weekly, rather than the twice monthly dipping that is routine, but the fields have not shown the mosquito larval densities that would require aerial treatments. The dip counts and adult trapping counts are increasing dramatically this week, however, so this may change by the next update. The Yolo County aerial larviciding is also less than this time last year. We are continuing to monitor the rice fields and will treat as necessary.



Larvicide Applications thru July 31st				
<u>Locations/Roles</u>	<u>2015</u>		<u>2014</u>	
	<u>Treatments</u>	<u>Acres</u>	<u>Treatments</u>	<u>Acres</u>
Sacramento County	4,161	4,145	4,843	4,410
Sac County Aerial	6 orders, 76 sources	2,387	10 orders, 142 sources	7,808
Yolo County	1,221	5,608	1,280	4,871
Yolo County Aerial	32 orders, 389 sources	37,903	39 orders, 519 sources	50,540
CB Treated (July only)	26,761	--	17,516	--
CB Inspected -not treated (July only)	26,960	--	23,471	--
Pools Treated	959	--	1,211	--
Pools Inspected (not treated)	2,872	--	3,334	--

Aerial Adulticide Summary thru August 6th				
<u>County</u>	<u>2015</u>		<u>2014</u>	
	<u># Applications</u>	<u>Acres</u>	<u># Applications</u>	<u>Acres</u>
Sacramento Ag	1	3,200	4	33,936
Sacramento Urban	0	0	4	72,022
Yolo Ag	45	371,551	35	320,529
Yolo Urban	0	0	2	26,419

VDCI Summary through August 6th, 2015

Contract Acres (our portion) = 530,000
 Acres used = 374,751
 Acres remaining = 155,249
 % Acres used = 71%
 % Acres remaining = 29%

San Joaquin has done six applications for a total of 78,296 acres so far this season as well.

PUBLIC INFORMATION AND EDUCATION
Monthly Report for August 2015 Board Meeting

July Projects

- Coordination with various news outlets for a three in-depth media projects on our mosquitofish and sentinel chicken program (2 television stations and the Sacramento Bee)
- Live radio news interview for a station in Davis
- Participated as a guest in a public affairs program for a Central Valley radio station
- Updates to local elected officials regarding our spraying activities
- Work with radio stations for summer campaign messages to air on various stations
- Repellent distribution for 4th of July
- Coordinate repellent buy with other districts
- Record of Spanish radio commercials
- Partnership building and outreach with various organizations including city and county Neighborhood Services Departments
- Coordinate with staff and develop schedules for events
- New staff training
- Distribution of District materials and repellent for events where we will not have a presence
- Update community and classroom presentations as needed
- Re-stocking of materials needed for events
- Promotion of the District and all activities on Facebook and Twitter
- Media tracking of District media coverage
- Promotion of free repellent
- Monthly MVCAC Public Relations call
- Participate in the monthly WNV Educator call

Press Releases

- July 2: WNV Activity on the Rise, Protect Yourself During 4th of July
- July 22: West Nile Virus Activity Increases as More Dead Birds and Mosquitoes Test Positive
- July 28: Free Repellent Available for National Night Out
- July 29: Concerns Grow as West Nile Virus Activity Intensifies in Sacramento and Yolo Counties

Website:

Total visitors

7452 Users
11089 Sessions
20223 Page views

Top 3 visited pages

4227 - Home page
4175 - Ground spraying maps
3792 - Spraying updates

New email notification subscribers in July: 261

Total subscribers: 13, 028 Subscribers

July presentations

- Community presentation: City of Sacramento Code Enforcement
Total presentations: 1
Total reach: 45 adults

July events

- Courtland Pear Fair
Total reach: approximately: 200

August Projects

- Coordination with community organizations, law enforcement agencies and neighborhood associations regarding National Night Out
- Repellent distribution during National Night Out
- Notification of spraying activities to local elected officials
- Work with radio stations for ongoing campaign messages to air on various stations
- Work with media partners to disseminate our materials at events where we will not be able to participate
- Distribution of District materials and repellent among media partners
- Finalize all details for Yolo County fair event
- Develop staff schedule for Yolo County Fair
- Re-stocking of materials needed for events
- Partnership building with various organizations including city and county Neighborhood Services Departments
- Participate in the WNV Educator call
- Continuous updates to social media sites regarding District activities
- Respond to all media inquiries
- Media tracking of District media coverage

August presentations

- Community presentation: Winters Rotary Club
Total presentations: 1
Total reach: 35 adults

August scheduled events

- National Night Out
- Yolo County Fair (5 days)
- Health fair at the California Lottery
Total events: 3

Sacramento-Yolo Mosquito and Vector Control District

August 18, 2015 Board Meeting

4. Status of West Nile Virus Activity and District Response

Staff Report:

The District continues to follow the Mosquito and Mosquito Borne Disease Management Plan which highlights the steps that personnel take in responding to high abundance or infections in the mosquito population. When a dead bird or mosquito is found to have been infected with WNV, lab personnel enhance surveillance efforts around the location to determine the potential spread of the detection. Control operation personnel then conduct a radius of both larval and adult sources to help reduce the number of mosquitoes in the area and to reduce the risk of transmission to the population. The District then continues to monitor the area to determine the geographic extent of the infection and to see if the number of infections decreases from the effort of the control personnel. If infections persist in the area, then more aggressive measures are considered.

The District has experienced a few areas of concern regarding West Nile virus activity: Elk Grove, Davis, and Woodland. These areas have seen a decline in activity in recent testing, thus delaying the decision to treat urban areas. The District has been very active in treating rural/agricultural areas to reduce populations and infection to date.

The State of California is seeing a significant amount of WNV activity especially in the mosquito collections and sentinel chicken flocks as compared to last year. A number of the Districts to our north are seeing increased activity as compared to past years.

Recommendation: **Information Only**

Table 1. Mosquito-borne Virus Risk Assessment.

WNV Surveillance Factor	Assessment Value	Benchmark	Assigned Value	
			Cx tars	Cx pip
1. Environmental Conditions High-risk environmental conditions include above-normal temperatures with or without above-normal rainfall, runoff, or snowpack. Weather data link: http://ipm.ucdavis.edu	1	Avg daily temperature during prior 2 weeks $\leq 56^{\circ}\text{F}$		
	2	Avg daily temperature during prior 2 weeks $57 - 65^{\circ}\text{F}$		
	3	Avg daily temperature during prior 2 weeks $66 - 72^{\circ}\text{F}$		
	4	Avg daily temperature during prior 2 weeks $73 - 79^{\circ}\text{F}$	4	
	5	Avg daily temperature during prior 2 weeks $> 79^{\circ}\text{F}$		
2. Adult <i>Culex tarsalis</i> and <i>Cx. pipiens</i> complex relative abundance* Determined by trapping adults, enumerating them by species, and comparing numbers to those previously documented for an area for the prior 2-week period.	1	Vector abundance well below average ($\leq 50\%$)		
	2	Vector abundance below average ($51 - 90\%$)		
	3	Vector abundance average ($91 - 150\%$)		3
	4	Vector abundance above average ($151 - 300\%$)	4	
	5	Vector abundance well above average ($> 300\%$)		
3. Virus infection rate in <i>Culex tarsalis</i> and <i>Cx. pipiens</i> complex mosquitoes* Tested in pools of 50. Test results expressed as minimum infection rate per 1,000 female mosquitoes tested (MIR) for the prior 2-week period.	1	MIR = 0		
	2	MIR = 0.1 - 1.0		
	3	MIR = 1.1 - 2.0		
	4	MIR = 2.1 - 5.0	4	4
	5	MIR > 5.0		
4. Sentinel chicken seroconversion Number of chickens in a flock that develop antibodies to WNV during the prior 2-week period. If more than one flock is present in a region, number of flocks with seropositive chickens is an additional consideration. Typically 10 chickens per flock.	1	No seroconversions in broad region		
	2	One or more seroconversions in broad region	2	
	3	One or two seroconversions in a single flock in specific region		
	4	More than two seroconversions in a single flock or two flocks with one or two seroconversions in specific region		
	5	More than two seroconversions per flock in multiple flocks in specific region		
5. Dead bird infection Number of birds that have tested positive (recent infections only) for WNV during the prior 3-month period. This longer time period reduces the impact of zip code closures during periods of increased WNV transmission.	1	No positive dead birds in broad region		
	2	One or more positive dead birds in broad region		
	3	One positive dead bird in specific region		
	4	Two to five positive dead birds in specific region		
	5	More than five positive dead birds in specific region	5	
6. Human cases Do not include this factor in calculations if no cases are detected in region.	3	One or more human infections in broad region		
	4	One human infection in specific region		
	5	More than one human infection in specific region		
			Cx tars	Cx pip
Response Level / Average Rating:				
Normal Season (1.0 to 2.5)			TOTAL	19
Emergency Planning (2.6 to 4.0)				18
Epidemic (4.1 to 5.0)			AVERAGE	3.8
				3.6

* Calculation of separate risk values for *Cx. tarsalis* and the *Cx. pipiens* complex may be useful if their distributions (e.g., rural vs. urban) differ within the assessment area.

Table 1. Mosquito-borne Virus Risk Assessment.

WNV Surveillance Factor	Assessment Value	Benchmark	Assigned Value		
1. Environmental Conditions High-risk environmental conditions include above-normal temperatures with or without above-normal rainfall, runoff, or snowpack. Weather data link: http://ipm.ucdavis.edu	1	Avg daily temperature during prior 2 weeks $\leq 56^{\circ}\text{F}$			
	2	Avg daily temperature during prior 2 weeks $57 - 65^{\circ}\text{F}$			
	3	Avg daily temperature during prior 2 weeks $66 - 72^{\circ}\text{F}$			
	4	Avg daily temperature during prior 2 weeks $73 - 79^{\circ}\text{F}$		4	
	5	Avg daily temperature during prior 2 weeks $> 79^{\circ}\text{F}$			
			<i>Cx tars</i>	<i>Cx pip</i>	
2. Adult <i>Culex tarsalis</i> and <i>Cx. pipiens</i> complex relative abundance* Determined by trapping adults, enumerating them by species, and comparing numbers to those previously documented for an area for the prior 2-week period.	1	Vector abundance well below average ($\leq 50\%$)			
	2	Vector abundance below average (51 - 90%)			
	3	Vector abundance average (91 - 150%)		3	
	4	Vector abundance above average (151 - 300%)	4		
	5	Vector abundance well above average ($> 300\%$)			
3. Virus infection rate in <i>Culex tarsalis</i> and <i>Cx. pipiens</i> complex mosquitoes* Tested in pools of 50. Test results expressed as minimum infection rate per 1,000 female mosquitoes tested (MIR) for the prior 2-week period.	1	MIR = 0			
	2	MIR = 0.1 - 1.0			
	3	MIR = 1.1 - 2.0			
	4	MIR = 2.1 - 5.0			
	5	MIR > 5.0	5	5	
4. Sentinel chicken seroconversion Number of chickens in a flock that develop antibodies to WNV during the prior 2-week period. If more than one flock is present in a region, number of flocks with seropositive chickens is an additional consideration. Typically 10 chickens per flock.	1	No seroconversions in broad region			
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	3	One or two seroconversions in a single flock in specific region			
	4	More than two seroconversions in a single flock or two flocks with one or two seroconversions in specific region			
	5	More than two seroconversions per flock in multiple flocks in specific region			
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	2	One or more positive dead birds in broad region			
	3	One positive dead bird in specific region			
	4	Two to five positive dead birds in specific region			
	5	More than five positive dead birds in specific region	5		
6. Human cases Do not include this factor in calculations if no cases are detected in region.	3	One or more human infections in broad region			
	4	One human infection in specific region			
	5	More than one human infection in specific region			
			<i>Cx tars</i>	<i>Cx pip</i>	
Response Level / Average Rating:			TOTAL	20	19
Normal Season (1.0 to 2.5)					
Emergency Planning (2.6 to 4.0)			AVERAGE	4.0	3.8
Epidemic (4.1 to 5.0)					

* Calculation of separate risk values for *Cx. tarsalis* and the *Cx. pipiens* complex may be useful if their distributions (e.g., rural vs. urban) differ within the assessment area.

California Arbovirus Surveillance Bulletin #23

Week 31 Friday, August 7, 2015



Weekly Update

Humans

Ten new human cases of West Nile virus (WNV) illness were reported this week from the following four counties: Butte (3), Glenn (3), Riverside (2), and Tulare (2). These are the first cases reported from Riverside County this year. As of August 5, a total of 18 human cases of WNV illness have been reported to the California Department of Public Health from six counties. Of the 18 case-patients, 14 (78%) had neuroinvasive illness. The median age of the 18 individuals is 59 years (range: 5-91 years); 11 (61%) are male. Dates of symptom onset ranged from May 15 to July 26. One WNV-related fatality has been reported to CDPH. In addition, six asymptomatic WNV-positive blood donors have been reported this year from two counties. At this time last year, 19 WNV cases had been reported from eight counties.

Dead Birds

A total of 61 WNV positive dead birds were reported this week from the following 17 counties: Alameda (2), El Dorado (1), Kings (2), Marin (1), Nevada (3), Orange (5), Riverside (4), Sacramento (11), San Diego (9), Santa Clara (5), Shasta (1), Solano (1), Sonoma (1), Stanislaus (1), Sutter (2), Tulare (1), and Yolo (11). In 2015, 362 birds have tested positive for WNV from 34 counties. At this time last year, 1,014 WNV positive birds had been detected in 33 counties.

Mosquito Pools

A total of 275 WNV positive mosquito pools were reported this week from the following 19 counties: Fresno (6), Kern (15), Kings (23), Lake (2), Los Angeles (18), Orange (44), Placer (2), Riverside (8), Sacramento (12), San Bernardino (43), San Diego (1), San Joaquin (16), San Mateo (2), Shasta (6), Solano (3), Stanislaus (6), Sutter (4), Tulare (24), and Yolo (40). **In addition, six mosquito pools tested positive for St. Louis encephalitis virus (SLEV) this week from Riverside County (Coachella Valley). This is the first detection of SLEV activity in California since 2003.** In 2015, 1,333 WNV positive mosquito pools have been reported from 28 counties. At this time last year, 1,268 WNV mosquito pools had been reported from 29 counties.

Sentinel Chickens

A total of 45 WNV seroconversions were reported this week from 21 flocks located in 11 counties: Butte (14), Contra Costa (4), Glenn (1), Lake (2), Merced (2), Shasta (5), Solano (3), Stanislaus (2), Sutter (6), Tehama (2), and Yuba (4). **This is the first detection of WNV activity in Tehama County, and the first WNV positive chickens detected in Lake, Solano, and Stanislaus counties this year.** In 2015, 90 WNV seroconversions have been detected among 28 flocks located in 14 counties. At this time last year, 56 WNV positive chickens had been reported from 23 flocks in 11 counties.

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YTD Activity by Element and County, 2015				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda		7	2	
Butte	6	17	67	32
Colusa		3		
Contra Costa		2	2	6
El Dorado		2		
Fresno			20	
Glenn	4	3	18	4
Humboldt		2		
Kern		1	91	
Kings		3	53	
Lake		2	10	2
Los Angeles	1	3	34	1
Madera		1		
Marin		2		
Merced		1	3	2
Nevada	1	4		
Orange		10	65	
Placer		4	35	3
Riverside	2	20	89	
Sacramento		38	54	
San Bernardino		1	80	2
San Diego		74	7	
San Joaquin		7	100	
San Mateo		7	4	
Santa Barbara			1	
Santa Clara		54	2	
Shasta		4	29	7
Solano		5	3	3
Sonoma		4	8	
Stanislaus		9	18	2
Sutter		12	44	13
Tehama				2
Trinity		1		
Tulare	4	19	358	
Ventura		2		
Yolo		34	115	
Yuba		4	21	11
Totals	18	362	1,333	90

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2014 & 2015 YTD West Nile Virus Comparisons		
	2014	2015
Total # Dead Bird Reports	7,660	6,559
# Positive Counties	35	37
# Human Cases	19	18
# Positive Dead Birds / # Tested	1,014 / 1,972	362 / 1,616
# Positive Mosquito Pools / # Tested	1,268 / 15,277	1,333 / 18,508
# Seroconversions / # Tested	56 / 8,394	90 / 7,542

TESTING SUMMARIES

Humans

		WNV	SLE	WEE
Human Cases	Week	10	0	0
	YTD	18	0	0

Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	122	61
	YTD	1,616	362

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	449	45	0	0
	YTD	7,542	90	0	0
Mosquito Pools	Week	1888	275	6	0
	YTD	18,508	1,333	6	0

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Test Protocols

Humans:

Specimens are tested by local laboratories with an IgM or IgG immunofluorescent assay (IFA) and/or an IgM enzyme immunoassay (EIA). Specimens with inconclusive results are forwarded to the California Department of Public Health Viral and Rickettsial Disease Laboratory (VRDL) for further testing or confirmation.

Dead Birds

Oral swab samples from corvids are collected onto RNA preservation cards and tested by the UC Davis Center for Vectorborne Diseases (CVEC) for West Nile virus by the singleplex RT-PCR Taqman assay and confirmed with a second primer set. Some local agencies test birds using the RAMP[®] test or conduct RT-PCR on tissue samples.

Sentinel Chickens:

Dried blood spot specimens from sentinel chickens are submitted to the California Department of Public Health Vector-Borne Disease Laboratory and tested for the presence of antibodies to West Nile, western equine encephalomyelitis, and St. Louis encephalitis viruses by EIA. Positive samples are confirmed by IFA, western-blot, or PRNT.

Mosquito Pools:

Mosquito pools are submitted to CVEC and screened for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a Taqman multiplex RT-PCR. CVEC no longer performs confirmatory testing on PCR-positive pools of *Cx. tarsalis* and *Cx. quinquefasciatus* but will continue to confirm multiplex PCR-positive results for other mosquito species using singleplex RT-PCR.
