

Documents & 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. Please contact the District Office at 530 674-5456 or kvalencia@sutter-yubamvcd.org

SUTTER-YUBA MOSQUITO & VECTOR CONTROL DISTRICT AGENDA

701 Bogue Road, Yuba City, CA. (530) 674-5456

Thursday, February 8, 2024, 4:30 P.M.

1. Call to Order
2. Pledge of Allegiance
- motion 3. Emergency Agenda Items
- motion 4. Consent Agenda:
The Consent Calendar groups together those items which are considered noncontroversial or for which prior policy direction has been given to staff and that requires only routine action by the Board. The Chair will advise the audience that the matters may be adopted in total by one motion; however, the Board may, at its option or upon request of a member of the public, consider any matter separately.
 - A. Minutes of January 11, 2024
 - B. Bills for January 2024
- motion 5. Declaration of District Property as Surplus: Board approval is needed to declare District property as surplus so it can be sold at auction.
- motion 6. Approval of the purchase of Cliffwater Corporate Lending shares, with proceeds from a matured CD in the District Defined Benefit Plan Portfolio. Monroe Capital does not permit pension money to be used to acquire shares.
7. Public Comments
8. Manager Comments: The manager will report on the following:
 - a) Staff and Trustees will provide written reports on the MVCAC Annual Conference held in Monterey, CA, January 22-24, 2024
 - b) MVCAC Legislative Day February 21, 2024
 - c) VCJPA Annual Workshop February 29-March 1, 2024
 - d) District activities
9. Trustee Comments
- motion 10. Adjournment

Any person, who needs a disability-related modification or accommodation to participate in this meeting, should contact the District at (530) 674-5456 or by fax at (530) 674-5534. Requests must be made as early as possible and at least 72 hours prior to the meeting for the District to make reasonable arrangements and ensure accessibility.

2023-2024
SUTTER-YUBA MOSQUITO & VECTOR CONTROL DISTRICT
BUDGET

SALARIES & BENEFITS	Expended		Budget	Spent YTD	Balance
	JANUARY 2024				
51010 PERMANENT SALARIES	116,287.33		1,395,000.00	758,303.87	636,696.13
51020 EXTRA HELP	0.00		245,500.00	117,276.35	128,223.65
51102 PAYROLL TAXES SPECIAL DIST	1,623.99		40,000.00	19,954.50	20,045.50
51110 RETIREMENT	0.00		30,000.00	15,916.00	14,084.00
51120 HEALTH,DENTAL,VISION INS	31,643.75		497,000.00	304,403.49	192,596.51
51121 DEF COMP	11,390.25		143,000.00	76,580.07	66,419.93
51130 UNEMPLOYMENT INSURANCE	6,522.00		40,000.00	876.00	39,124.00
51150 WORKERS COMPENSATION	0.00		75,203.00	74,675.00	528.00
TOTAL SALARIES & BENEFITS	167,467.32		2,465,703.00	1,367,985.28	1,097,717.72

SERVICES & SUPPLIES					
52040 CHEMICALS	217,975.73		1,080,000.00	883,811.79	196,188.21
52050 CLOTHING & PERSONAL	5,307.75		18,000.00	11,048.73	6,951.27
52060 COMMUNICATIONS	1,098.23		18,000.00	11,009.23	6,990.77
52090 HOUSEHOLD EXPENSES	136.33		2,000.00	1,306.20	693.80
52100 INSURANCE LIABILITY	10,202.00		102,022.00	91,749.00	10,273.00
52120 MAINTENANCE EQUIPMENT	3,174.27		37,500.00	20,411.17	17,088.83
52130 MAINT. STRU. & GRNDS	2,141.51		24,000.00	14,793.76	9,206.24
52150 MEMBERSHIPS	0.00		14,500.00	14,377.15	122.85
52170 OFFICE EXPENSES	1,587.19		32,000.00	13,493.44	18,506.56
52180 PROF. & SPEC. SERVICES	15,504.68		450,000.00	366,503.22	83,496.78
52190 PUBL. & LEGAL NOTICES	0.00		21,000.00	5,792.24	15,207.76
52200 RENTS & LEASES EQUIP	0.00		2,000.00	2,101.34	-101.34
52210 RENTS-LEASES STRU & GRN.	0.00		17,000.00	16,954.24	45.76
52220 SMALL TOOLS & INSTRUMENTS	73.29		3,500.00	394.86	3,105.14
52230 SPECIAL DEPT EXPENSES	546.00		10,000.00	4,944.00	5,056.00
52239 BIOLOGICAL CONTROL	99.96		10,500.00	3,374.66	7,125.34
52241 ENTOMOLOGY/LAB	288.23		26,500.00	19,792.86	6,707.14
52250 TRANSPORTATION-TRAVEL	4,278.77		75,000.00	36,554.24	38,445.76
52260 UTILITIES	5,623.77		15,500.00	9,724.73	5,775.27
TOTAL SERVICES & SUPPLIES	268,037.71		1,959,022.00	1,528,136.86	430,885.14

OTHER CHARGES					
53401 Treasury Fee	1,435.71		10,000.00	2,995.62	7,004.38
53550 Taxes and Assessments	0.00		400.00	0.00	400.00
TOTAL OTHER CHARGES	1,435.71		10,400.00	2,995.62	7,404.38

FIXED ASSETS					
54501 EQUIPMENT	78,134.61		265,750.00	255,979.11	9,770.89
54502 STRUCTURES & GROUNDS	0.00		28,000.00	0.00	28,000.00
TOTAL FIXED ASSETS	78,134.61		293,750.00	255,979.11	37,770.89
TOTAL EXPENDITURES	515,075.35		4,728,875.00	3,155,096.87	1,573,778.13

EXPECTED REVENUE TOTAL:	TBD
REVENUE RECEIVED JANUARY:	\$1,854,141.52
REVENUE FY TO DATE:	\$3,222,932.16

Sutter-Yuba Mosquito and Vector control District

JANUARY 2024 BILLS				
Name	Date	Amount	Other	Total
Abshier, Stephen	2/8/2024	215.52		215.52
Adapco	"	217,179.98		217,179.98
Arete Advisors LLC	"	594.84		594.84
Arne's Paint Store, INC.	"	70.03		70.03
ATT	"	119.26		119.26
Blosser, Erik	"	233.16		233.16
City of Yuba City	"	168.59		168.59
Consolidated Electrical Distributors (CED)	"	6.05		6.05
Ghag, Lakhvir	"	300.43		300.43
Golden Bear Alarms	"	125.00		125.00
Grow West	"	872.17		872.17
Hartford Fire Insurance Company	"	10,202.00		10,202.00
Home Depot	"	1,670.10		1,670.10
Kirchner, Wade	"	100.00		100.00
Larry Geweke	"		76,803.72	76,803.72
Link, John	"	100.00		100.00
Napa Auto Parts	"	178.80		178.80
Norcal Gloves	"	3,928.05		3,928.05
PBM Sprayer	"	314.73		314.73
Petrakos Communications, INC	"	14,080.00	1,330.89	15,410.89
Redding Webb	"	137.50		137.50
Rich, Fuidge, Bordsen, & Galyean, INC.	"	45.00		45.00
Sanbrook, John	"	100.00		100.00
Santa Ana, Alfonso	"	649.00		649.00
Schmidl, David	"	100.00		100.00
Shadd Janitorial Supply	"	13.89		13.89
Sutter-Yuba MVCD/ EDD	"		6,522.00	6,522.00
Sutter-Yuba MVCD/ Petty Cash	"	75.54		75.54
Tractor Supply	"	219.15		219.15
UniFirst Corporation	"	737.03		737.03
United Textile Inc.	"	93.35		93.35
US Bank	"	14,730.60		14,730.60
Walmart/ Capital One	"	178.90		178.90
WEX Bank	"	499.04		499.04
TOTAL		268,037.71	84,656.61	352,694.32

The above referred to list is herein certified as a true and correct list of allowed claims which have been allowed by the Board of Trustees as dated:02/08/2024

Signature

Signature

Your role as Trustee of Vector board

If you are new to the Board, ask for Orientation.

Ask for a facility tour. If you are a veteran, take another tour of facility. Staff would appreciate it!

Do become engaged in the process and serve on Committee's

Learn about mosquitos as much as possible.

Do your research and ask questions.

Vector control can be complicated and staff doesn't expect you to be expert.

If you have questions. Call the district manager (Steve) and ask! He will be more than happy to answer your inquiry and provide insight and clarity or put you in touch with the right person.

You have professional staff let them do there work. It's your job to investigate things, question and learn.

You may not give direction to staff, that's the roll of the board, unless the board provide that authority to you.

The board sets the direction and policy. Staff Carrie's them out.

Promote on environment of respect and civility.

Free of harassment, bullying and inappropriate

Conduct and behavior.

Communicate openly with respect and consideration for others, valuing a devtrdity of view and openions.

Comply with applicable federal, state and local laws.

At conference respect and follow the rules and policies of the host staff, including those of the motel, convention center contracted facility or other venue.

Know the difference between a policy, procedure and regulation.

They each play a critical role in the day to day operation of your district.

Difference between a policy, procedure and regulation?

A policy is the basic principles by which an organization is guided. Essentially an organization is permitted to do.

A procedure can be defined as.

A particular way of accomplishing something.

It is series of steps to be followed as a consistent and repetitive approach or cycle to accomplish an end result.

Regulation is detailed direction devilries by the legislative body, staff and law that put policy into practice. They tell how by whom, where, and when things can or cannot be done.

Basically what one can and cannot do.

Example

Review investment policy annually, follow the state law.

Ensure your district reserve policy is up to date. You don't want reserve to be at risk of seizure.

Travel

Review your travel policy need to be clear and comprehensive.

Have a policy for rules of decorum.

What's new in Mosquito Control?

Sterile insect Technique (SIT)

Wolbachia, Irradiation, and Genetically Modified

Currently underway in Florida, and Many California agencies(including OCMVCD and GLACVCD Where pilot project is currently underway) are exploring SIT as a viable approach to reducing population of mosquitoes using environmentally sound technique. There are presently three different type of SIT.

What is WOLBACHIA?

Wolbachia is a common type of bacteria found in insects. Approximately 6 in 10 of all types of insects including butterflies, bees and Beetles around the world have Wolbachia .

Wolbachia bacteria cannot make people or non target animals (like fish, birds, pets) Sick.

When male ae aegypti mosquitoes with Walbachia mates with wild female mosquitoes that do not have walbachia the eggs will not hatch.

Non biting male mosquitoes with walbachia are regularly released into an area by mosquito control.

What is Irradiation?

Irrigation , such as with gamma rays and x-rays is used to sterilize mass- reared insects so that while they remain sexually competitive they cannot produce offsprings.

Large numbers of mosquitoes are raised in. Lab. Male mosquitoes pupae are separated from female pupae .

Males are irritated using ionizing radiation to make then sterile. Male mosquitoes are bred and sterilized using the same radiation found in x-rays.

Male mosquitoes are then regularly released to mate with wild females. The result the eggs will not hatch.

What are genetically modified mosquitoes

GM mosquitoes are mosquitoes that have been implanted with a gene that that was not originally present or naturally occurring in the insect.

There offspring will not survive to adulthood.

These labs grow Aedes aegypti mosquitoes would be released into the wild to mate with the wild population where there offspring's

Inability to grow to adulthood would lower the population of mosquitoes.

A male selecting gene that allows males to pass on there genes in a wild population for multiple generations, while the females never becomes adults.

I like to thank the board of trustees for opportunity to further my education on Vector Control and MVCAC policies.

Thank you
Lakhvir Ghag

MVCAC

Annual Conference

January 21 - 24 2024

Monterey, Ca

An overview of the aerial adulticide and larvicide program of the upper Butte Sink Wildlife area of the Butte County MVCD Ryan Rothenwander Butte County MVCD – Mr. Rothenwander provided an overview of the District's control measures both aerial adulticides and larvicides. The District maintains three aircraft and two support trucks for the loading of materials and fuel. Butte County MVCD has over 100,000 acres of rice and 40,000 acres of wetlands within their boundaries. In 2023 the areas treated included 14,000 wetland acres treated with SBG II larvicide granules at 9 pounds per acre. Additionally, 184,000 wetland acres were treated with Trumpet adulticide at 1oz. per acre. The threshold which triggers a larval treatment is 3 larvae per dip. Landowners that delay flooding until after the second Saturday in October incur no cost, prior to October they would pay all costs incurred including labor and materials.

Exclusion of *Ae. aegypti* from yard drains reduces adult abundance in Madera, California Abraham Velazquez, Madera County MVCD. The District has identified yard drains as a significant invasive mosquito source in urban areas of Madera. A neighborhood within the Madera District was selected to test the efficacy of screening of yard drains for controlling invasive *Aedes aegypti* in yard drains. A total of 492 drains were screened at 90 homes. The screening material used was a pond filter media. Abundance Trapping was done utilizing the BG sentinel traps, pre and post screening. The results showed an impressive 34.6 percent reduction in adult mosquito numbers.

Aerial and ground larvicide applications for *Aedes aegypti* in the Coachella Valley

Gregorio Alvarado, Coachella Valley MVCD. A series of eight (six weekly followed by 2 bi-weekly) ground applications were made in the city of Rancho Mirage. The same series of applications were made Aerially in the city of Palm Springs. Prior to the treatments postcards were sent to households along with signs posted within the treatment areas. The mixing of the material required to complete the mission took two and a half hours. The truck treatment utilized an A-1 Super Duty mist blower; 1,000 acres was treated with VectoBac WDG at 4 ounces per acre. The aerial application was performed by helicopter equipped with Micronair rotary atomisers. The aerial treatment area consisted of 1700 acres treated with VectoBac WDG at 4 ounces per acre. The ten-week study required a great deal of manpower and expense, with the result having very little impact on the adult invasive *Aedes* population.

Mervin Hunt

MVCAC 2024 meeting report – Erik Blosser

Interesting presentations this year included a symposium on this summer's local dengue cases in southern California. For the first time in California's history dengue cases were classified as "locally transmitted" after people with no travel history tested positive for the virus. They had excellent communication between departments with the Pasadena public health official notifying vector control of a "suspected" local dengue case before the confirmatory test results came back so that vector control could respond quickly to control nearby mosquitoes rather than finding out weeks later. The vector control manager also emphasized the importance of having a response plan in place since everything moved very quickly. However, it was revealed during the presentation that public health has now detected a second locally acquired case in the area despite the seemingly optimal response (however the details were not shared so it is not clear if the case was around the same time as the first case or much later after extensive local vector control, etc.). It is helpful to learn lessons from these examples but also important to note that the current risk for Sutter-Yuba is far lower (though not impossible that an unusual incident could occur). The huge *Aedes aegypti* populations in the LA/Orange county area combined with the large number of travel-related dengue cases (53 out of 105 total in CA 2023) create much higher risk in LA than in Sutter-Yuba where no travel-related dengue was detected last year (<https://www.cdc.gov/dengue/statistics-maps/current-data.html>). In addition, the situation in Florida (where *Aedes aegypti* has been established for hundreds of years) shows that outside the biggest cities local transmission is rarely detected despite high mosquito numbers. Miami/Dade (470 travel-related cases in 2023) has had most of Florida's local transmission the last few years. However, one unknown variable is that dengue cases worldwide have been spiking the last few years (leading to more travel-related cases) and it is unclear if this is temporary or part of an upward trend.

Another highlight of the conference was a symposium on 3D printing. A number of districts have been designing mosquito trapping and sampling equipment with 3D printers the last few years and presented examples of their creations. Mosquito sampling devices have always been a fringe market with entomologists cobbling together traps from a wide array of commercially available components or purchasing overpriced equipment from a few specialist companies. When plastic parts break or something purchased from Amazon is discontinued, entomologists are left scrambling for an alternate source. With last year's closing of Bioquip, the biggest entomology supply company, all these issues have intensified. After seeing the array of designs at this symposium, it seems that 3D printing is a good solution. Printers can replace broken flaps, fan blades, plastic tube housing on current traps and print whole new traps all of which would be pricey to purchase. In addition, custom modifications to create hand aspirators, insectary rearing lids, larval sentinel cages, etc. are possible. Best of all, any designs from another district or entomologist can be quickly downloaded and printed without design effort.

2024 MVCAC Annual Conference, Monterey, CA, Jan 21-24, 2024

Prepared by Stephen Abshier

Plenary Session- The Conference began with a presentation by Dr. Gordon Patterson, providing a brief history of mosquito and vector control researchers and practitioners, such as Dr. William Herms and Dr. Bill Reeves, and how they have left a pioneering legacy for us in their discovery of processes of disease transmission and effective ways to mitigate risk of vector-borne disease. Dr. Wakoli Wekesa shared his work in Africa and how he is educating public health officials to conduct mosquito abatement in countries where mosquito-borne disease fatalities account for more than 50% of all mosquito illnesses worldwide. Dr. Darvin Smith brought the reality of vector-borne illness closer to home, by presenting real cases from Redwood City, California.

Natural Lands Symposium- Evaluation of a field trial in Contra Costa County with larvicide Natular G30 provided 100% control of *Aedes dorsalis* in a tidal salt marsh. The material was applied with a drone at 10lbs per acre. They achieved 100% control but did not get 30 days of control.

Alameda County discovered that some species of mosquito larvae were more abundant where certain species of bacterium were present.

L.A. County Vector Control presented on black flies. These flies produce a painful bite in humans. In 1994, a tax assessment was passed to address the black fly problem. The larvae develop along the banks of the LA River, which is a concrete drainage channel to convey surface water from rain events. They have been successful in eliminating the flies using Vectobac 12AS at 18 to 25 parts per million.

Butte County MVCD provided an overview of their mosquito control pesticide applications by air in 2023. The District treated 100,000 acres of rice and 40,000 acres of wetlands with Vectobac 12AS at 8 to 16 oz per acre. Adulticides were applied over 184,000 acres of rural lands.

District Preparedness and Planning- Sac-Yolo MVCD provided an overview of methodology to evaluate effectiveness of pesticide applications on target mosquitoes. Bioassays, field cage trials, and field cage trials with abundance trapping are the standard measurement tools used to evaluate the effectiveness of an application. These methods can be used to evaluate both larvicides and adulticides.

Hannah Romo of the CDPH Vector-Borne Disease Section presented data on WNV in California. Her data showed a significant uptick in the number of human cases of WNV in California in 2023. A slide showing total annual cases going back to 2003 suggests that WNV may have high and low cycles that repeat in 5-year periods. We may be at the beginning of a high cycle.

The West Valley MVCD from San Bernardino County presented results of a trial where they released irradiated male *Aedes aegypti* mosquitoes at 3 different sites, in an effort to control this invasive species. BG Sentinel traps were used to evaluate mosquito population reduction. Traps were set up in concentric circles around the release point at 100 yards and 200 yards. Pre-release trapping indicated 50 or more mosquitoes /trap/night at each site. Results showed reductions of 17%, 71%, and 49% at 100 yards at the 3 sites. Reductions were not as favorable at 200 yards. Results were optimized when the timing of the irradiated male mosquito releases were prior to the peak abundance for the season. There is no approval process, nor is a release of irradiated mosquitoes a pesticide application.

The CalSurv data management system has been developing new tools to forecast disease risk. A calculator called the Vector Index uses climatic conditions, mosquito abundance, and virus detections to provide advance warning of high-risk conditions.

Cyber Security Symposium- The MVCAC has an Information Technology Committee. Members of the committee provided some best management practices to members. They recommended that District staff be trained to recognize imposters (hackers trying to acquire credentials by acting like a trusted person in your organization) and scams (attempts to pressure you to click a link or respond to an urgent request to provide or update passwords). Employees should change passwords as often as 2 times per year. Accounts with sensitive data should have 2-factor authentication for login. Employees should check via phone call when getting unexpected email requests for personally identifying information, a social security number, a payment, account information or credentials and passwords. Employees should maintain a suspicious nature for requests of these kinds.