

SACRAMENTO-YOLO
MOSQUITO & VECTOR
CONTROL DISTRICT

FEBRUARY 16, 2021

BOARD OF TRUSTEES
REGULAR MEETING

BOARD PACKET

10:00 A.M.

8631 Bond Road
Elk Grove, CA 95624

This page intentionally left blank

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

8631 Bond Road
Elk Grove, CA 95624

**AGENDA
February 16, 2021
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 January 21, 2021 Board of Trustees Meeting**
 - b. **Expenditures for January 2021**
 - c. **Board Review and Consideration to Extend a Temporary Work Assignment until April 30th, 2021**
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 Trustees Attending the MVCAC Annual Conference**
 - c. **Reports from District Departments**
 - **Lab/Surveillance**
 - **Ecological Management**
 - **Biological Control**
 - **Larval and Adult Control**
 - **Public Outreach**

4. **Board Review and Consideration of \$295,000 to Fund the Public Outreach Advertising Plan for the 2021 Mosquito Season**
5. **Board Review and Consideration of Public Health Pesticide Purchases Containing *Bti* and *Bsph***
6. **Board Review and Consideration of Contract for Aerial Adulticiding Services**
7. **Board/Staff General Discussion**
8. **Adjournment**

Sacramento-Yolo Mosquito and Vector Control District

February 16, 2021 Board Meeting

1. Items for Approval by General Consent:

- a. Minutes of the January 19, 2021 Board of Trustees Meeting;
- b. Expenditures for January 2021;
- c. Board Review and Consideration of to Extend a Temporary Work Assignment until April 30th, 2021.

Recommendation:

Approve the Items by General Consent

**MINUTES OF THE JANUARY 19, 2021
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:

Jayna Karpinski-Costa	President	Citrus Heights
Craig Burnett	Vice President	Folsom
Gar House	Secretary	Winters
Raul DeAnda		West Sacramento
Sean Denny		Woodland
Bruce Eldridge		Yolo County
Lyndon Hawkins		Elk Grove
Raymond LaTorre		Sacramento
Susan Maggy		Sacramento County
Robert McGarvey		Rancho Cordova
Marcia Mooney		Galt
Christopher Barker		Davis
Vacant		Isleton

TRUSTEES ABSENT:

None

LEGAL COUNSEL:

Jennifer Buckman

STAFF PRESENT:

Gary Goodman	Manager
Samer Elkashef	Assistant Manager
Janna McLeod	Administrative Manager
Marcia Reed	Laboratory Director
Steve Ramos	Program Coordinator
Daniel Fisher	IT Administrator
Ruben Rosas	GIS Coordinator
Michael Fike	Field Supervisor

CALL TO ORDER

The meeting was called to order at 10:01 a.m. by President Jayna Karpinski-Costa.

Roll Call

This meeting was held and attended by Video Teleconference. Trustee Eldridge was absent during roll call and joined the meeting at 11:35am; however, a quorum was present. The Isleton position is vacant.

Pledge of Allegiance

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

1. ITEMS FOR APPROVAL BY GENERAL CONSENT

Prior to discussion, legal Counsel Jennifer Buckman noted item c., would need to be pulled from General Consent and discussed separately; therefore, President Karpinski-Costa pulled Item c. and called for the vote on Items a., b., d., and e. On a motion by Trustee Denny seconded by Trustee Mooney, the Board voted to approve General Consent Items a., b., d., and e. The vote was taken by roll call and the motion passed by the following vote: Ayes: 11, Noes: 0, Absent: 1.

- a. Minutes of the December 15, 2020 Board of Trustees Meeting;
- b. Expenditures for December 2020;
- d. Board Review and Consideration of District Annual Safety Committee Report;
- e. Board Consideration of Resolution Honoring Marti Towery for Her Years of Service.

Item c. was pulled to discuss the need to meet and confer with the Local OE3 representing the MOAT unit. OE3 Representative, Felix Huerta, Jr. was in attendance and spoke to the Board. Mr. Huerta indicated that the Union and the represented employees were in support of the District extending the 80 hours and that the Union and Represented employees in the MOAT unit waive the right to meet and confer on this item.

- c. Board Review and Consideration of Extending the FFCRA 80 Hour COVID Leave to March 31st.

On a motion by Trustee Mooney seconded by Trustee Burnett, the Board voted to approve General Consent Item c. The vote was taken by roll call and the motion passed by the following vote: Ayes: 11, Noes: 0, Absent: 1.

2. OPPORTUNITY FOR PUBLIC COMMENT

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

None

3. REPORTS TO THE BOARD

a. Manager's Report:

District staff is taking earned vacation time and completing annual training during this time of year including remote work when available. Staff is working on the annual NPDES report that will be due to the SWRCB in March.

The MVCAC Annual Conference will be conducted online-Feb 1-3.

Please be advised that you will need to submit your Conflict of Interest Form 700 prior to April 2020. The District will provide you with the Form 700 and we need to date stamp the Form when you return it. Please submit the Form as soon as possible.

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

Department reports from Supervisors that were unable to attend the December meeting:

Information Technology: Information Technology Administrator, Dan Fisher reported on department activities and highlights for the year including ensuring staff ability to work remotely and access programs and files when appropriate due to COVID-19. In addition, Dan has performed upgrades to MapVision and other District software to improve processes and notification procedures. He has also been assisting with the planning and operation of the MVCAC conference in the virtual format.

Geographic Information Systems: Geographic Information Systems Coordinator Ruben Rosas reported on department activities for the year. The department is integral in the data analysis and visualization of mosquito abundance, West Nile virus and Aedes aegypti detections. An aerial flight to survey for neglected swimming pools was conducted in June 2020 resulting in mailers and service requests for those identified as needing inspections and/or treatments. Routing software providing turn by turn and spray on and off directions for technicians has been effective allowing for applications to be made in areas that were previously considered unfeasible.

Control Operations, North Yolo County: Field Supervisor, Michael Fike reported on department activities for the year including a summary of service requests and treatments performed during the mosquito season. Rice field acreage increased about 8 percent over the previous year with both aerial and ground treatments performed to reduce abundance and West Nile virus when detected.

Lab/Surveillance: Laboratory Director, Marcia Reed reported on department activities including winter mosquito abundance, chicken coop winterizing and maintenance, Tick surveillance, and collaboration and study progress updates.

Ecological Management: Ecological Management Supervisor, Marty Scholl provided a written report.

Biological Control: Fisheries Supervisor, Tony Hedley provided a written report.

Larval and Adult Control: Program Coordinator, Steve Ramos reported on department activities including winter work such as brush cutting and site access projects, annual training, and technician manual updates. Steve also provided a summary of larval and adulticide applications.

Public Outreach: Public Information Officer, Luz Robles provided a written report.

4. BOARD REVIEW OF DISTRICT 5 YEAR PLAN

Assistant Manager, Samer Elkashef presented the item and was available to answer any questions. Samer's oral report highlighted projects and accomplishments during the past year as well as ongoing and newly added projects for each department. These were included in the summary section for each department in the written report. No Board action was taken as this was an information only item.

5. BOARD REVIEW AND CONSIDERATION FOR DISTRICT FIRE ALARM SYSTEM UPGRADE

Assistant Manager, Samer Elkashef presented the item and was available to answer any questions. On a motion by Trustee Burnett seconded by Trustee Hawkins, the Board voted to

authorize staff to work with Valley Fire & Security to upgrade the District's fire suppression system and approve a project budget not to exceed \$72,000. The vote was taken by roll call and the motion passed by the following vote: Ayes: 11, Noes: 0, Absent: 1.

At 11:30am President Karpinski-Costa closed the regular meeting, with a 5 minute break to go into closed session for Item 6.

6. CLOSED SESSION-CONSIDERATION AND POTENTIAL ACCEPTANCE OR REJECTION OF CLAIM FOR LIABILITY (Gov. Code § 54956.95): claimant J. Shurnas

Claim for: Alleged property damage to exterior house and car paint due to pesticide spraying on property

Date of claim: October 1, 2020 – present

Agency Claimed Against: Sacramento-Yolo Mosquito & Vector Control District

At 11:35am President Karpinski-Costa called the Board into closed session for Item 6. Upon returning to the regular meeting from all closed sessions at 12:24pm, the Board reported after consideration of the claim, on a motion by Trustee Burnett seconded by Trustee Denny, to reject the claim and notification of the rejection will be sent to the claimant. The vote was taken by roll call and the motion passed by the following vote: Ayes: 12, Noes: 0, Absent: 0.

7. CLOSED SESSION-PUBLIC EMPLOYEE PERFORMANCE EVALUATION (Gov. Code § 54957): MANAGER

At 11:46 am President Karpinski-Costa adjourned the closed session for item 6 and the Board went into closed session for item 7. The Board re-opened the regular meeting at 12:24pm with no Board actions to report on this item.

8. BOARD CONSIDERATION AND APPROVAL OF DISTRICT OFFICERS FOR PRESIDENT, VICE PRESIDENT, AND SECRETARY AND DELEGATING THE MANAGER TO PERFORM THE RESPONSIBILITIES OF THE SECRETARY

At this time President Jayna Karpinski-Costa opened up the nominations for the 2021 Board Officers. Trustee Karpinski-Costa nominated, and Trustee McGarvey seconded, Craig Burnett to serve as Board President. Trustee Burnett nominated, and Trustee Hawkins seconded, Garfield House to serve as Vice President. Trustee Karpinski-Costa nominated, and Trustee Burnett seconded, Marcia Mooney to serve as the Secretary. The Board voted and approved the nominations and delegation of the responsibilities of Secretary to the Manager. The vote was taken by roll call and the motion passed by the following vote: Ayes: 12, Noes: 0, Absent: 0.

9. BOARD/STAFF REPORTS AND REQUESTS

The upcoming MVCAC and AMCA conferences will be held virtually instead of in person due to the coronavirus pandemic and registration is now open for Trustees interested in attending.

10. ADJOURNMENT

The meeting adjourned at 12:33 pm

* * * * *

I certify that the above minutes substantially reflect the general business and actions taken by the Board of Trustees at the January 19, 2021 meeting.

Gary Goodman, Manager

Approved as written and/or corrected by the Board of Trustees at the February 16, 2021 meeting.

Gar House, Board Secretary

January 2021 Check Register
Activity From: 1/1/2021 to 1/31/2021
Sacramento Yolo MVCD (SYC)

Check Number	Check Date	Vendor Number	Name	Check
Bank Code: U US Bank				
054486	1/4/2021	0000504	US Bank	10,303.20
054487	1/5/2021	0000014	Alhambra & Sierra Springs	35.78
054488	1/5/2021	0001046	All Star Rents	8,659.95
054489	1/5/2021	0000018	ANDKO Building Maintenance Inc.	4,804.94
054490	1/5/2021	0001011	Buckmaster Office Solutions	114.08
054491	1/5/2021	0001019	Cintas Corporation	2,266.29
054492	1/5/2021	0000119	Clarke Mosquito Control Products Inc	569.40
054493	1/5/2021	0000126	Complete Welders Supply Inc	333.68
054494	1/5/2021	0000154	DBA Yolo Smog	280.00
054495	1/5/2021	0000240	Hunt & Sons Inc	123.33
054496	1/5/2021	0000277	Kimball Midwest	298.36
054497	1/5/2021	0000367	PG & E	3,983.20
054498	1/5/2021	0002350	Praxair Welding Gas and Supply	68.48
054499	1/5/2021	0000388	Republic Services #922	89.08
054500	1/5/2021	0001270	Rubicon Global, LLC	200.26
054501	1/5/2021	0001465	Sacramento Control Systems, Inc.	664.50
054502	1/5/2021	0000451	SMUD	3,742.54
054503	1/5/2021	0000516	Valley Truck & Tractor Co	87.82
054504	1/5/2021	0000522	Verizon Wireless	3,025.35
054505	1/12/2021	0000006	Adapco Inc	627.82
054506	1/12/2021	0000034	AutoZone Inc	401.69
054507	1/12/2021	0000076	CA Dept.of Fish and Wildlife	400.00
054508	1/12/2021	0000117	City of Woodland	361.59
054509	1/12/2021	0000126	Complete Welders Supply Inc	804.52
054510	1/12/2021	0000128	Consolidated Communications	2,376.66
054511	1/12/2021	0000186	Elk Grove Water District	1,165.02
054512	1/12/2021	0000240	Hunt & Sons Inc	60.37
054513	1/12/2021	0000497	Magnegas Welding Supply - West	84.75
054514	1/12/2021	0000320	Mettler Toledo Rainin LLC	1,620.00
054515	1/12/2021	0001012	Riebes Auto Parts	347.23
054516	1/12/2021	0000459	Star Milling Co	2,757.22
054517	1/12/2021	0001234	T-Mobile	688.53
054518	1/12/2021	0000494	Totlcom Inc	2,438.00
054519	1/12/2021	0000529	Waste Management	164.96
054520	1/14/2021	0000083	CA Department of Tax and Fee	2,133.00
054521	1/14/2021	0000171	Eagles Nest Union, LLC	62.08
054522	1/14/2021	0000267	Kaiser Foundation Health Plan	26,559.34
054523	1/14/2021	0000267	Kaiser Foundation Health Plan	3,905.80
054524	1/14/2021	0000267	Kaiser Foundation Health Plan	20,612.76
054525	1/14/2021	0000357	P & A Administrative Services Inc	85.50
054526	1/14/2021	0000373	Preferred Benefit Ins Administrators	8,393.90
054527	1/14/2021	0000141	PRISM	323.61
054528	1/14/2021	0000957	Sutter Health Plus	6,409.50
054529	1/14/2021	0000531	Western Health Advantage	7,152.97
054530	1/14/2021	0000531	Western Health Advantage	3,025.49
054532	1/21/2021	0000003	Aatrix Software	VOID
054533	1/21/2021	0000014	Alhambra & Sierra Springs	20.88

054534	1/21/2021	0000038	Bartkiewicz Kronick & Shanahan	1,755.00
054535	1/21/2021	0001011	Buckmaster Office Solutions	114.08
054536	1/21/2021	0000182	Elk Grove Ford	253.71
054537	1/21/2021	0000958	GreatAmerica Financial Services	372.82
054538	1/21/2021	0001233	Grow West	15.10
054539	1/21/2021	0000240	Hunt & Sons Inc	2,426.08
054540	1/21/2021	0000367	PG & E	1,497.17
054541	1/21/2021	0000372	Platt Electric	16.61
054542	1/21/2021	0001497	Pure Water Partners	1,438.47
054543	1/21/2021	0001270	Rubicon Global, LLC	203.26
054544	1/21/2021	0000424	Safe Side Security	384.00
054545	1/21/2021	0000427	Safety Kleen Corp	585.86
054546	1/21/2021	0000448	Sigma-Aldrich Inc	120.18
054547	1/21/2021	0000461	Stericycle Inc	81.78
054548	1/21/2021	0000510	US Postal Service	1,500.00
054549	1/21/2021	0001471	Walker's Office Supply	440.28
054550	1/21/2021	0000534	Wiley Price & Radulovich	1,827.00
054551	1/31/2021	0000043	Benefit Coordinators Corporation	3,274.69
054552	1/31/2021	0000084	CA State Disbursement Unit	350.00
054553	1/31/2021	0000339	Nationwide Retirement Solutions	1,550.00
054554	1/31/2021	0000339	Nationwide Retirement Solutions	4,250.00
054555	1/31/2021	0001035	Operating Engineers Local Union No. 3	1,254.00
054556	1/28/2021	0000029	Arthur J Gallagher Risk Mngmt Svcs	5,449.00
054557	1/28/2021	0000240	Hunt & Sons Inc	78.39
054558	1/28/2021	0000504	US Bank	11,964.96
W00176	1/29/2021	0000086	CalPERS 457 Plan	21,396.45
W00177	1/29/2021	0000087	CalPERS Financial Reporting & Accounting	81,332.40
W00178	1/29/2021	0000176	EDD	15,136.89
W00179	1/29/2021	0000561	United States Treasury	56,318.47
Bank U Total:				<u>348,020.08</u>
Report Total:				<u><u>348,020.08</u></u>

I hereby authorize the use of my signature plate on
the above-listed warrants, 054486-054558
(check # 54531 and 54532 VOID to Test Check Signature Alignment),
and EFTs W00176-W00179

Signature	Date
Jayna Karpinski-Costa, 2020 President of the Board	

Signature	Date
Craig Burnett, 2021 President of the Board	

S.Y.M.V.C.D
FY 2020-2021 Budget Update
January 2021

Account #	Account Description	7 Months Ended January 31, 2021	FY 20-21 Annual Budget	Unused
4000	REVENUE	\$ -	\$ -	\$ -
5000	SALARIES/BENEFITS/WC	\$ 5,456,512.90	\$ 8,793,710.68	\$ 3,337,197.78
5200	OPERATIONAL	\$ 3,447,606.58	\$ 6,478,412.05	\$ 3,030,805.47
5210	LIABILITY INSURANCE	\$ 167,211.05	\$ 171,762.05	\$ 4,551.00
5250	AUDITING/FISCAL	\$ 14,500.00	\$ 17,750.00	\$ 3,250.00
5270	COMMUNICATIONS	\$ 43,742.24	\$ 79,500.00	\$ 35,757.76
5310	PUBLIC INFORMATION	\$ 168,419.94	\$ 502,500.00	\$ 334,080.06
5340	STRUCTURE & GROUNDS	\$ 57,243.13	\$ 65,000.00	\$ 7,756.87
5370	MEMBER/TRAINING	\$ 40,160.82	\$ 113,000.00	\$ 72,839.18
5390	DISTRICT OFFICE EXPENSES	\$ 8,441.73	\$ 17,500.00	\$ 9,058.27
5430	PROFESSIONAL SERVICES	\$ 79,190.47	\$ 203,250.00	\$ 124,059.53
5440	MATERIALS & SUPPLIES	\$ 7,692.20	\$ 13,000.00	\$ 5,307.80
5450	RENTS & LEASES	\$ 5,382.22	\$ 11,550.00	\$ 6,167.78
5470	SAFETY PROGRAM	\$ 1,140.00	\$ 5,000.00	\$ 3,860.00
5480	UTILITIES	\$ 60,971.93	\$ 110,000.00	\$ 49,028.07
6120	AIRCRAFT SERVICES	\$ 515,306.07	\$ 955,000.00	\$ 439,693.93
6140	ECOLOGICAL MANAGEMENT	\$ 811.89	\$ 18,600.00	\$ 17,788.11
6160	MICROBIAL	\$ 761,321.17	\$ 1,550,000.00	\$ 788,678.83
6170	BIORATIONALS	\$ 757,007.79	\$ 1,000,000.00	\$ 242,992.21
6180	INSECTICIDES	\$ 467,455.70	\$ 1,100,000.00	\$ 632,544.30
6220	FISHERIES	\$ 10,396.48	\$ 27,000.00	\$ 16,603.52
6280	GEOGRAPHIC INFO SYSTEMS	\$ 2,900.00	\$ 9,100.00	\$ 6,200.00
6320	INFORMATION TECHNOLOGY	\$ 26,195.98	\$ 68,500.00	\$ 42,304.02
6350	CONTROL OPERATIONS	\$ 21,337.98	\$ 40,200.00	\$ 18,862.02
6370	SHOP	\$ 63,702.02	\$ 98,000.00	\$ 34,297.98
6420	LAB SERVICES	\$ 95,585.27	\$ 148,200.00	\$ 52,614.73
6450	GAS & PETROLEUM	\$ 71,490.50	\$ 154,000.00	\$ 82,509.50
7000	CAPITAL ACCOUNTS	\$ 50,898.05	\$ 615,651.27	\$ 564,753.22
7011/1510	Capital Outlay/Construction In Progress	\$ 31,646.86	\$ 233,000.00	\$ 201,353.14
7030	Contingency	\$ -	\$ 72,651.27	\$ 72,651.27
7030	Research Fund	\$ -	\$ 25,000.00	\$ 25,000.00
7035	Building Improvement	\$ 19,251.19	\$ 285,000.00	\$ 265,748.81
	TOTALS			
	Salaries/Benefits	\$ 5,456,512.90	\$ 8,793,710.68	\$ 3,337,197.78
	Operational	\$ 3,447,606.58	\$ 6,478,412.05	\$ 3,030,805.47
	Capital Accounts	\$ 50,898.05	\$ 615,651.27	\$ 564,753.22
	Total Budget	\$ 8,955,017.53	\$ 15,887,774.00	\$ 6,932,756.47

SYC Balance Sheet
As of 1/31/2021

Sacramento Yolo MVCD (SYC)

Assets

Current Assets

Cash in Bank-FSA	17,260.93	
Cash with LAIF	9,257,819.12	
Petty Cash	600.00	
US Bank	1,109,714.98	
Accounts Receivable	29,640.17	
Interest Receivable	30,439.00	
Assigned - Cash With VCJPA	1,607,140.00	
Inventory	720,666.68	
Total Current Assets:		12,773,280.88

Fixed Assets

LAND, BLDG., IMPROVEMENT	1,175,092.88	
Construction in Progress	1,897.20	
EQUIPMENT	4,436,427.83	
BOND ROAD	5,061,395.00	
WOODLAND FACILITY	708,574.00	
ACCUMULATED DEPRECIATION	(7,131,794.54)	
Total Fixed Assets:		4,251,592.37

Other Assets

Deferred Outflows of Resources	5,285,357.00	
Deferred Outflows of Resources-GASB 75	950,064.00	
Total Other Assets:		6,235,421.00
Total Assets:		23,260,294.25

Liabilities

Current Liabilities

Accounts Payable	25,197.71	
Payroll Taxes Payable	(0.30)	
Voluntary TL & AD&D	(643.93)	
Voluntary STD	(459.92)	
FSA Deductions	132,685.61	
P.E.R.S. Deductions	(1.04)	
Safety Program	(1,530.00)	
Accumulated Vacation	386,052.62	
Total Current Liabilities:		541,300.75

Long-Term Liabilities

Net Pension Liability	10,328,549.00	
Net OPEB Liability	1,790,183.00	
Deferred Inflow of Resources	3,197,032.00	
Deferred Inflow of Resources-GASB 75	90,090.00	
Total Long-Term Liabilities:		15,405,854.00
Total Liabilities:		15,947,154.75

Equity

INVESTMENT IN FIX ASSETS	4,251,591.96	
RESERVED CASH (INS.)	1,607,140.00	
Committed-Capital Outlay	700,000.00	
Unassigned - Dry Financing	6,000,000.00	
GENERAL FUND	(4,980,393.77)	
Retained Earnings-Current Year	(2,265,198.69)	
Committed - Vector/Disease Response	2,000,000.00	
Total Equity:		7,313,139.50

SYC Balance Sheet
As of 1/31/2021

Sacramento Yolo MVCD (SYC)

Total Liabilities & Equity:

23,260,294.25

1. Items for Approval by General Consent:

c. Board Review and Consideration to Extend a Temporary Work Assignment until April 30th, 2021

The District has a Field Control Supervisor who is planning to retire at the end of April 2021. The District has posted the position and is in the process of interviewing candidates. The District would like to temporarily overlap the position to allow for training and mentorship under the outgoing supervisor.

Section 8.01 of the Personnel Manual states, *The Manager may temporarily, for up to thirty (30) days, assign an employee to perform work normally performed by an employee at a different level of salary.* The overlap is expected to last more than 30 days so the Manager is seeking approval to temporarily assign the candidate to perform the work of a Field Control Supervisor until the current supervisors last day of work.

Recommendation:

Approve the Extension of a Temporary Work Assignment until April 30th, 2021.

Sacramento-Yolo Mosquito and Vector Control District

February 16, 2021 Board Meeting

3. Reports to the Board

- a. Manager's Report**
- b. Reports from Trustees Attending the Mosquito and Vector Control Association of California (MVCAC) Annual Conference**
- c. Reports from District Departments**
 - **Lab/Surveillance (Marcia Reed)**
 - **Ecological Management (Marty Scholl)**
 - **Biological Control (Tony Hedley)**
 - **Larval and Adult Control (Steve Ramos)**
 - **Public Outreach (Luz Maria Robles)**

a. Manager's Report

District staff is taking earned vacation time and completing annual training during this time of year. The weather has started to warm up and we are beginning to see more mosquito activity.

Staff did an excellent job with their presentations at the virtual MVCAC Annual Conference earlier this month. The District gave five talks at the meeting and most of staff registered for the meeting to earn continuing education credits.

Staff has submitted the National Pollutant Discharge Elimination System (NPDES) Annual Report to the State Water Resources Control Board.

The MVCAC and AMCA are working on organizing their respective Legislative Days and both events are being planned on a virtual platform. One of the main efforts of both organizations is to try and secure funding for VectorSurv. Establishing and building a comprehensive surveillance system is a priority for everyone as we have learned from the current pandemic that preparation is much better than reaction.

Our Vector Control Joint Powers Authority will be holding their annual workshop virtually on February 25th and 26th.

Please be advised that you will need to submit your Conflict of Interest Form 700 prior to April 2021.

b. Reports from Trustees Attending the MVCAC Annual Conference

c. Reports from District Departments

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

LABORATORY

Monthly Report for the February 2021 Board Meeting

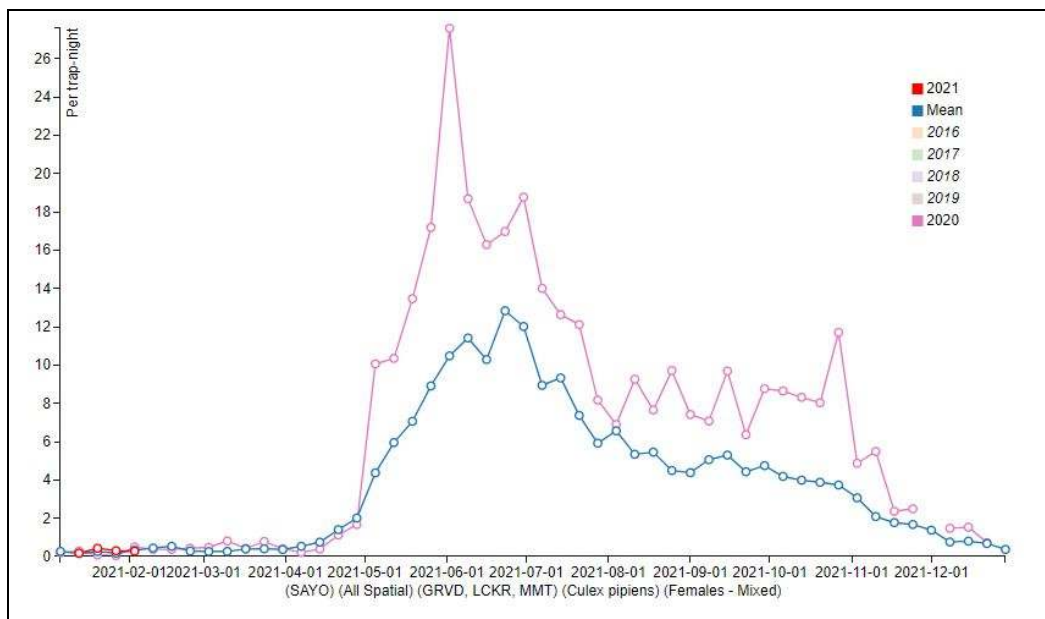
Insectary:

Colonies maintained: *Culex tarsalis* Kern National Wildlife (susceptible)
Culex quinquefasciatus Cq1 (susceptible)
Culex pipiens Woodland (resistant)
Culex tarsalis Vic Fazio (resistant)
Aedes sierrensis wild - Marin - Sonoma County (in egg form)

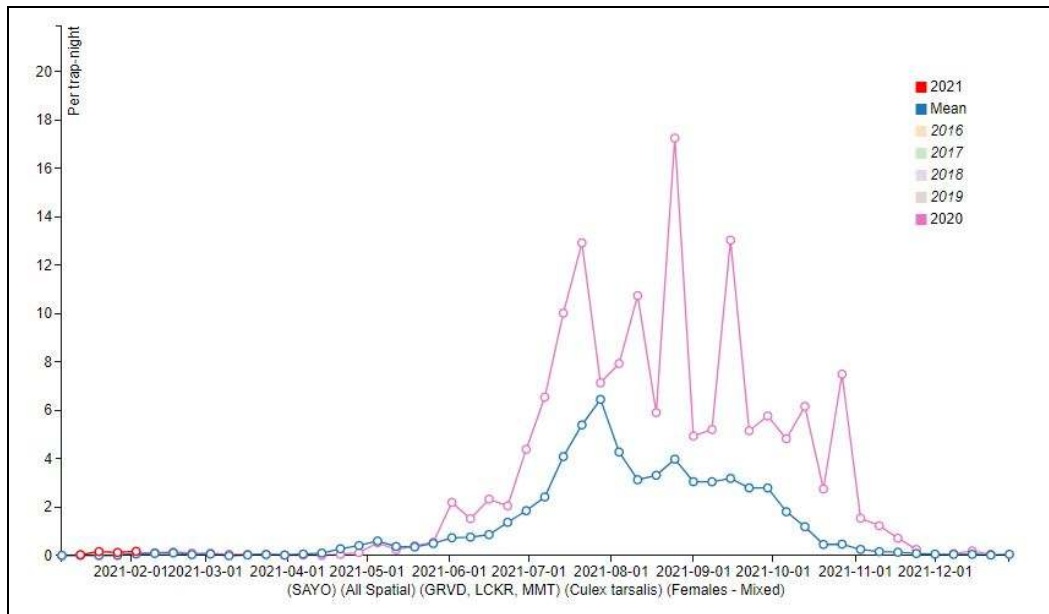
Surveillance:

Weekly collections –As can be seen in the following graphs, both *Culex pipiens* and *Culex tarsalis* populations are showing their usual very low activity during the winter months. There is also a graph showing the activity of our winter mosquito; *Culiseta inornata*. We have seen a small peak in 2021 already for this mosquito, we did see a higher than usual population of this mosquito last November and December as well.

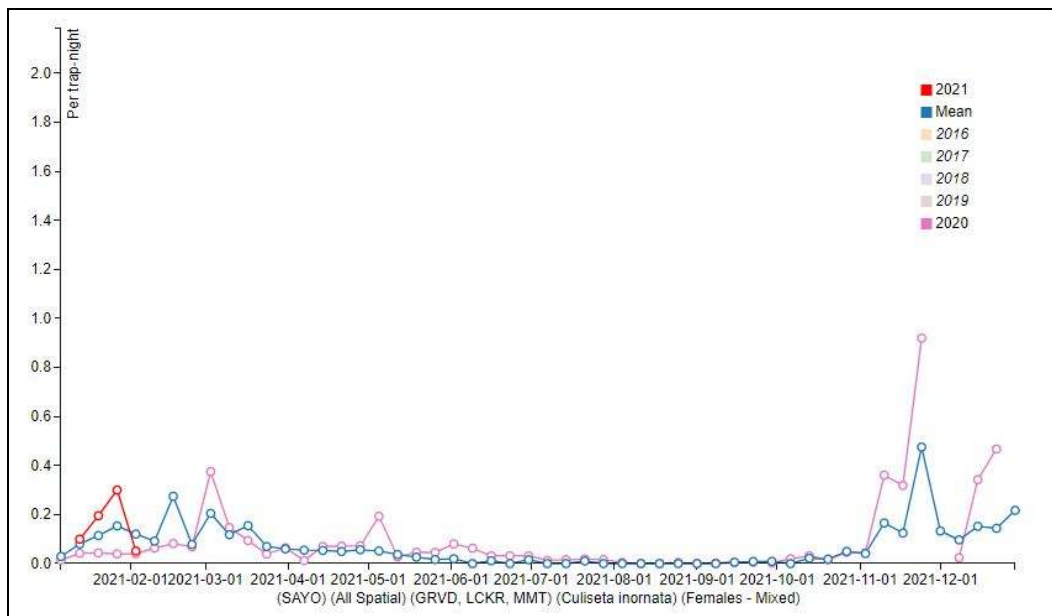
Culex pipiens in weekly abundance traps (LCKR, GT):



Culex tarsalis in weekly abundance traps (LCKR, GT)



Culiseta inornata in weekly abundance traps (LCKR, GT)



Invasive *Aedes* spp. Surveillance –

We currently have ten trap sites in the Winters area and nine sites in the Arden area being monitored weekly for any invasive *Aedes* mosquitoes. We have not detected any *Aedes aegypti* since November of last year.

Encephalitis virus surveillance (EVS) – Mosquitoes – We are evaluating the permanent site trap locations to determine if we will make any changes for the upcoming season. We will begin EVS trapping in April, with testing of mosquito pools to begin in May. Vector index data will be included in the board updates once we begin testing for virus.

Encephalitis virus surveillance (EVS) – Sentinel Chickens – We are planning on continuing with the chicken surveillance program of the last several years; two flocks in Yolo County and three flocks in Sacramento County. We will also have a mosquito-proof coop here at Bond Rd to maintain spare chickens to be used to replace any chickens which seroconvert during the season. The field technicians have constructed a new chicken coop here at Bond Rd for this purpose. Thanks should go to the control staff for building this for the lab.

Encephalitis virus surveillance (EVS) – Dead Birds – We will begin picking up and sampling dead birds once the hotline resumes operation. We will be testing these samples when we start mosquito pool testing in May.

Tick and Lyme disease surveillance – We are in the midst of conducting monthly surveillance for ticks at twenty locations in the District. Testing has begun as well, and we have currently found two positive *Ixodes pacificus* pools from the Upper Sunrise trail along the American River.

BG Counter Traps – We plan on utilizing these again as an integral part of our rice surveillance program this season. We are also currently using a few of them in our invasive *Aedes* monitoring in Winters and Arden.

Mosquito Resistance Testing – We will be running assays this winter on our new Vic Fazio wild *Cx. tarsalis* colony to determine its resistance characteristics. We will utilize our susceptible Kern National Wildlife *Cx. tarsalis* colony as the control.

Disease Response Surveillance – In the month of January, we were not notified of any imported mosquito-borne disease cases.

District Studies –

Sugar Bait Project – We are currently designing our surveillance program with this new tool. We will begin setting sugar baits in the early spring.

***Aedes aegypti* traps –** We have continued to primarily utilize the BG sentinel traps for *Aedes aegypti* surveillance. We will evaluate other trapping and surveillance methods when we see activity begin next season.

Collaborations –

Catch Basin Residue and Resistance study – We have had one online meeting to discuss the plans for this study this season. We are still working out the details of the next step. Nathan Sy from UC Riverside presented his progress on this study at the MVCAC annual meeting.

Additional Projects – We are working with two recipients of Pac-Vec Center of Excellence training grants. Dr. Tara Thiemann from UOP (the University of the Pacific in Stockton) is studying *Culex tarsalis* resistance. Dr. Monika Guila-Nuss from UNR (the University of Nevada at Reno) is working with ticks. We have begun collecting ticks samples to be sent to her lab.

The California Arbovirus Surveillance Bulletin updates will begin again in the spring.

ECOLOGICAL MANAGEMENT DEPARTMENT

Monthly Report for the February 2021 Board Meeting

Storm Water / Drainages Program

US Bureau of Reclamation (USBR), Delta Meadows: Staff have been working on clearing brush out of and along the various drainage ditches on the USBR owned portion of Delta Meadows.

City of Folsom: Staff cleared brush out of a series of detention basins that are owned by the City of Folsom. City staff then removed the debris that District piled up for removal.

Wetland Program

Annual Plans: Tyler Island LLC duck club located near Isleton reached out for information on how to reduce the need for mosquito treatments on their property. They will be working to reduce the durations of irrigations, and to delay or improve fall flooding to further reduce mosquito larvae breeding.

Cemetery Program

Staff worked to make water soluble single use packets of Watersorb to be used in cemetery vases for the season. This will be the first year of trying the packets in an effort to encourage greater use of Watersorb by cemetery staff to reduce the available water for mosquito breeding.

UAS Program

Staff assisted with the making of a virtual District tour to be used for training of new employees. Aerial videos of District buildings were filmed and will be incorporated into the final internal training video.



Presentations

Staff presented Managed Wetland Mosquito Control Strategies for the Western Flood Water Summit hosted by Valent Biosciences, LLC in mid-January.

Staff will also be recording a ten minute presentation for the American Mosquito Control Association Annual Conference that will be virtually held the first week in March.

BIOLOGICAL CONTROL

Monthly Report for the February 2021 Board Meeting

In the month of January the Fisheries Department completed many of our planned winter projects. One such project was making tank covers (Picture 1) for the mosquitofish checkout tanks to keep debris out as well as block ultraviolet light to inhibit algal growth. Other projects include the repainting inside and outside of the fisheries building (Picture 2). Weed control around netted ponds was performed with the help of the Sacramento technician staff. Without the overwhelming support from over 20 field technicians and supervisors this project would have likely taken fisheries staff multiple weeks to complete. Daily activities such as tank cleaning were also performed to maintain the high quality of our fish population. The Fisheries department also continued to gather weekly data for all of our ongoing projects including traditional fertilization techniques, crayfish control and the use of solar aerators to maintain dissolved oxygen levels.

Log of Treatment Applied for January

<u>Material</u>	<u>AMT</u>	<u>Area Treated</u>	<u>Treatments</u>
Mosquitofish	0	0 Acres	0

Log of Treatment Applied for the year 2021

<u>Material</u>	<u>AMT</u>	<u>Area Treated</u>	<u>Rate</u>	<u>Treatments</u>
Mosquitofish	0 lbs	0 Acres	0	0

Fisheries Budget

<u>Total</u>	<u>Spent</u>	<u>Remaining</u>	<u>% Spent</u>
27,000.00	9,615.90	17,384.10	36%



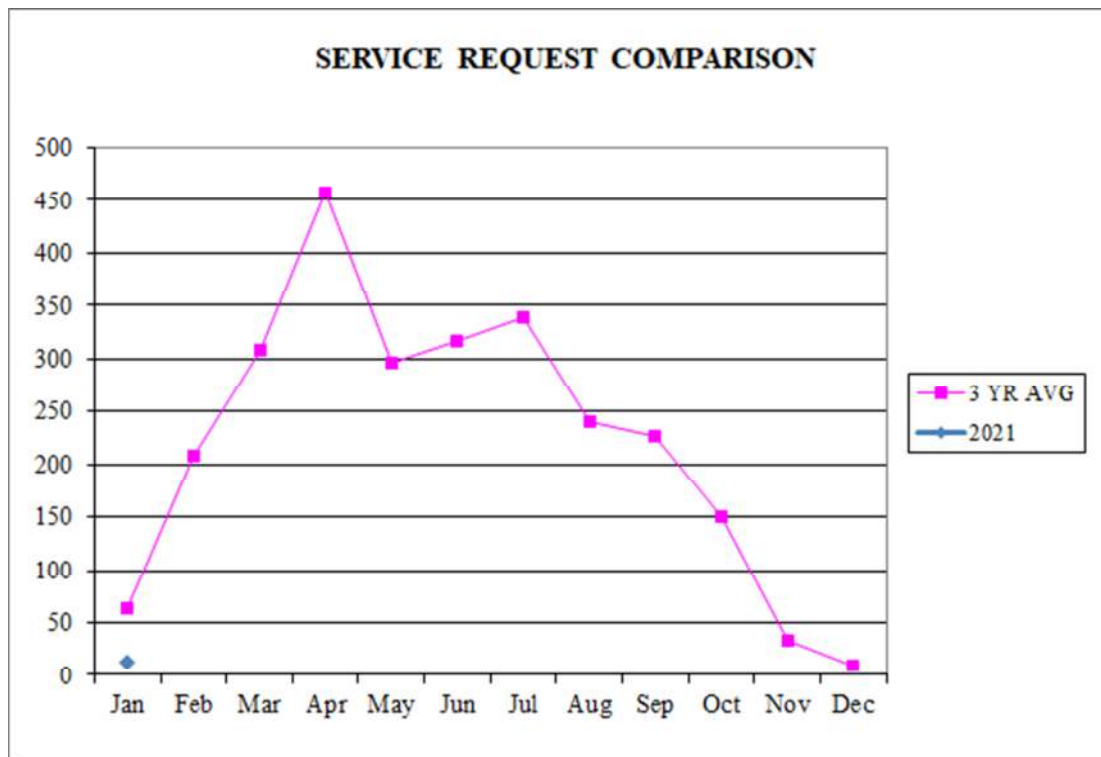
CONTROL OPERATIONS

Monthly Report for the February 2021 Board Meeting

Field crews have been continuing to prepare for the upcoming season by working through their continuing education modules and performing in-house training. Crews have also been busy creating water soluble packets for use in the 2021 season. All staff have been helping to complete maintenance and improvement projects at District properties. Crews have also continued work on brush clearance and removal projects and will continue to do so into spring. As the weather allows in the upcoming weeks the pool inspection program is expected to begin.



New Chicken Coop for onsite Sentinel Chickens



There have been no larvicide or adulticide applications performed through January 31, 2021

PUBLIC INFORMATION AND EDUCATION
Monthly Report for the February 2021 Board Meeting

Advertising

As part our 2021 Fight the Bite advertising campaign we will once again use our consultant Gary Benjamin to assist in placing the media buys once the advertising plan is approved. We will also soon begin to meet virtually with account executives and evaluate their proposals for the upcoming campaign. One of the biggest changes for this year is extending the advertising season due to invasive mosquitoes being detected later in the year. Traditionally our campaign has begun in April and goes thru mid-September, however moving forward it will likely be extended thru the end of October so we are able to disseminate messages specific to invasive mosquitoes and utilize the television spots that were created last year.

Events

Due to ongoing Covid concerns, many of the events that we typically attend in spring will not be held. However, we have recently gotten inquiries regarding our participation in virtual events by hosting a virtual booth, being available for a live question/answer session or submitting a short video describing our services and highlighting the District as a valued partner in this new way of connecting with residents virtually. We will explore these options as they become available.

2021 Fight the Bite Contest

The flier for the 2021 Fight the Bite contest has been updated and will soon be disseminated to teachers for distribution. Students who wish to participate can do so by submitting their contest entry electronically or mailing it directly to the District. The contest will be promoted via social media and we will also reach out to previous contest participants and teachers.

Annual Report

Individual department reports and general information for the 2020 annual report have been submitted to our graphic designer. We are currently reviewing all information and a final version of the report will soon be ready for printing.

Government Affairs:

We are currently in the process of updating our local elected officials contact list. Due to Covid concerns city council meetings are still being held virtually, we will be reaching out to each city/county to schedule a Zoom presentation in the near future and provide a summary of mosquito activity in each of the municipalities. In case this is not possible the District will submit a written report.

This page intentionally left blank

Sacramento-Yolo Mosquito and Vector Control District

February 16, 2021 Board Meeting

4. Board Review and Consideration of \$295,000 to Fund the Public Outreach Advertising Plan for the 2021 Mosquito Season

Staff Report:

The District's Public Information and Education Department strives to raise awareness of mosquitoes, prevention of mosquito transmitted diseases as well as District services and activities. We also seek to spread this messaging as effectively and efficiently to as many residents of Sacramento and Yolo Counties. We purposely seek to increase messaging to homeowners, adults with children and to seniors 55 years of age and above. This is achieved by utilizing various tools including a paid advertising campaign, digital media, social media, numerous special events, on-air interviews and public service announcements, media relations, government affairs, as well as ongoing general public outreach and community involvement.

Campaign Overview:

This year, the District's Public Information and Education Department will:

- Continue to raise awareness of our ongoing efforts to protect our residents from mosquitoes and the transmittable diseases that they carry.
- Effectively communicate how our communities and individuals can participate in the prevention and mitigation of mosquitoes and assist us in our abatement efforts to stem the spread of mosquito transmitted diseases.
- Inform our communities about the discovery of the invasive species *Aedes aegypti*. We will explain how they are identified and demonstrate the steps that our District takes to protect us from this new species.
- Extend our messaging as needed with any special considerations relating to our services during the COVID pandemic.

The District plans to continue to use research and demographic data to help us deliver our messaging to those residents who are best suited to receive it and are also the most vulnerable.

- We are always looking to increase our "messaging weight" to families with children ages 0-17; and to seniors 55+; especially senior homeowners.
- This campaign carefully considers the market composition, profile, and geographic distribution of these primary targets and how they consume media.
- This campaign provides the most effective and efficient media utility designed to reach as many of these adults as possible who reside in Sacramento and Yolo Counties.
- We utilize various media tools including paid advertising campaign such as traditional TV, radio and outdoor media. This year we plan to increase our use of

various Digital Media assets – including social media and several other digital forms of media.

- We also utilize on-air interviews and public service announcements, media relations strategies, government affairs, as well as ongoing general public outreach and community involvement.

We have developed a plan that has the flexibility to extend our traditional messaging season that predominantly runs from Memorial Day through the end of October. Invasive mosquitoes have been detected late in our season the past couple years, therefore our media plan has been extended to mirror the seasonality of this mosquito.

Campaign Goals:

- Educate and inform the community about mosquitoes, prevention of West Nile virus and other vector-borne diseases, paying careful attention this year to the detection of invasive mosquitoes and the threats they pose.
- Highlight and continue to emphasizing District messages that include draining standing water, using personal protection and enlisting community support as to the overall importance of why mosquito control matters to all of us and how our residents can help.
- Increase public awareness of how residents can participate to prevent mosquito breeding sites
- Inform the public about all the services the District provides.
- Build public trust and enhance our brand by advancing awareness that we are a reliable and responsive resource in the community.
- Increase public recognition of the Fight-the-Bite campaign, our website, information, and the District's 7 D's.
- Increase the use of WNV survivors' stories.

Advertising creative:

In 2020, we produced some great new creative ads that focused on invasive mosquitoes. We are looking forward to using these ads and believe they will work to further expand our brand's portfolio of messages and help the residents understand how they can help us prevent the spread of invasive *Aedes*.

Advertising Strategy:

The 2021 advertising campaign will incorporate a mix of several media elements including television (broadcast TV, cable TV and digital TV), radio, print, social media, and digital media. Digital media may include the use of longer format placements to disseminate a depth of messaging objectives. Messages will focus on the importance of controlling mosquitoes, personal protection and awareness of West Nile virus. We will also include messaging relating to invasive mosquito species and the importance of being on the lookout for these types of mosquitoes.

TELEVISION: Television, both traditional and cable, along with an increased use of digital television will be a strong foundation of the advertising campaign and provide the audio and visual aspect of the messaging strategy. COVID has increased the number of people who

are working from home which recent research shows has increased TV usage. TV commercials will be done in English, Spanish, and Russian.

RADIO: Radio ads will also be a significant element of the campaign and will again include various sponsorships, on-air appearances, interviews and public service announcements. We anticipate a significant amount of bonus commercials from the stations due to less car travel and will be increasing our streaming radio options to coincide with the change to on demand radio. We will have spots done in English, Spanish, and Russian.

DIGITAL MEDIA: Due to the increasing consumer utility of digital media – especially for news and entertainment - we will continue to implement and expand our use of digital platforms. This will include more targeted digital and social media ads- utilizing Facebook, Twitter, Instagram and Nextdoor. We will focus on increasing the number of fans by using Facebook Ads, as we post timely, relevant, interesting, and shareable content. This will increase our exposure to the online community giving the District even higher visibility. We will continue to utilize and grow our use of Nextdoor for a targeted approach, especially in neighborhoods where invasive mosquitoes are detected.

TIMING: We will debut the advertising campaign during Mosquito Awareness Week in April to kick off the season and we will seek as much value-added support from our media partners during this time. The primary campaign will launch at the end May as we lead into the Memorial Day holiday. As we know, Memorial Day is recognized as the season's first major outdoor weekend when people are enjoying the outdoors and messages will especially focus on the use of repellent for personal protection and that this is the time to be most cognizant of mosquito prevention.

Beginning in mid-June when the weather starts to get warm and we begin to see more virus activity, the program will continue to build public awareness of our core messaging. Television, radio, and outdoor ads start slowly and then build in reach and frequency as the summer heats up.

July, August, and September are the hottest months and when virus activity peaks. The campaign will continue to build through these months and we plan to extend the campaign into October to account for the detection of invasive mosquitoes. Heavier messaging will occur around the Fourth of July Holiday, National Night Out and Labor Day.

As part of our paid advertising negotiations, we obtain a high amount of free public service announcements and bonus coverage that also includes the opportunity to appear in various Public Affairs Shows. These shows are hosted by several different stations and we use these shows to disseminate more of our messaging objectives as described herein. Media partners also distribute our materials and repellent at many of their station's promotional events and community appearances. The paid campaign will also be supported by press releases and the free news coverage they help us to generate.

Recommendation:

Approve the 2021 Advertising Plan not to exceed \$295,000

This page intentionally left blank

Sacramento-Yolo Mosquito and Vector Control District

February 16, 2021 Board Meeting

5. Board Review and Consideration of Public Health Pesticide Purchases Containing *Bti* and *Bsph*

Staff Report:

The District purchases public health pesticides (larvicides and adulticides) from a small number of vendors due to the fact that the market share for these products is very small and there are only a few companies that can provide what we need. The vendors themselves tend to only sell specific products so negotiating to get the best price is almost impossible for most of the products because there is typically only one source. Products like methoprene, spinosad, naled and sumithrin are only supplied by one company.

The District's main larvicides use bacterial agents (products using the active ingredients *Bti* and/or *Bsph*). These products are produced by a limited number of manufacturers and the manufacturers have specific formulations that they make. The District initially entered into a contract with Valent Biosciences for these products in 2011 for three years renewed the contract in 2015 for another 3 years and most recently in 2018 whose contract expired in 2020.

Valent products are sold exclusively by Adapco and the District worked with Adapco and Valent to propose another agreement. Staff negotiated terms and prices along with a generous rebate program to help save additional money. The rate sheet and terms are attached.

Recommendation:

Approve, and authorize the General Manager to negotiate, finalize and sign, a three year contract with Adapco for the purchase of Public Health Pesticides containing *Bti* and *Bsph*.



Mr. Gary W. Goodman,
District Manager
Sacramento-Yolo MVCD
8631 Bond Rd
Elk Grove CA 95624

January 20, 2021

SUMMARY OF PROPOSED EXTENSION OF PURCHASE AGREEMENT BETWEEN SACRAMENTO-YOLO MVCD AND ADAPCO

In accordance with the Term-Extension Provision of the 2018-2020 purchase agreement, ADAPCO proposes to the Sacramento-Yolo Mosquito and Vector Control District (the District) a 3 year extension to the purchasing agreement (The Agreement) for specified Biological & IGR Larvicide formulations. The purpose of this summary is to briefly clarify the amended terms and conditions of the proposed extension of The Agreement.

The Agreement Term and Products Offered

Effective Term of The Agreement is to be extended for an additional 3 years beyond December 31, 2020, to be effective from January 1, 2021 through December 31, 2023. The Mosquito Control Products subject to this agreement are the VectoBac®, VectoLex®, VectoMax®, VectoPrime® and MetaLarv® formulations.

The Agreement stipulates Annual Product Pricing, Payment Terms, Freight Terms, Minimum Order Quantity, Shipment and Delivery, Annual Purchase Volume and Rebates. A calendar year is from January 1 through December 31 each year.

Annual Price Commitment (Per Calendar Year)

Refer to Attachment A

Annual Rebate Credit (Per Calendar Year)

Refer to Attachment A

Annual Minimum Purchase (Per Calendar Year)

The prices offered are based on the district's anticipated purchase of \$850,000 or more of the products each calendar year, excluding sales tax.

Order and Delivery quantities

While there is no minimum order quantity other than those specified on Schedule A, it is understood that the district will place and take title to Full Truckload (FTL) orders of granule products whenever possible and practical to do so.

SUMMARY OF PROPOSED EXTENSION OF PURCHASE AGREEMENT BETWEEN SACRAMENTO-YOLO MVCD AND ADAPCO (continued)

Payment, Taxes, Freight

Freight is Prepaid, FOB Sacramento and Yolo Counties.

Sales tax will be applied based on sales tax rate at delivery location.

Payment Terms are Net 30 days.

Amendments to The Agreement

Amendments or changes to The Agreement may be proposed by the District or ADAPCO, at any time during the term of the Agreement. The Agreement may be amended only if the District and ADAPCO mutually agree to the changes or amendments that are proposed.

Extension of The Agreement

ADAPCO proposes to extend the current Purchase Agreement for an additional 3 years beyond December 31, 2020. Upon mutual agreement to the pricing and terms proposed herein The Agreement would continue to be effective from January 1, 2021 through December 31, 2023. At the end of that term, the district and ADAPCO would have the option to renew and extend the term of The Agreement. Such an extension would require mutual consent, by both ADAPCO and the Sacramento-Yolo MVCD, to all conditions or amendments for extending The Agreement.

If the District has any questions or concerns regarding the proposed Purchase Agreement, please contact me at (877) 875-6353, or by email at dcandito@myadapco.com.

Once again, thank you for considering our proposal, and for giving us the opportunity to serve you.

Best regards,

Dennis Candito [electronically signed]

Dennis Candito

Key Account Representative

ADAPCO, an Azelis Americas company

ATTACHMENT A

PRICE SCHEDULE:

Client: Sacramento-Yolo MVCD		Extended Contract Pricing		
Price Schedule		Jan 1 -Dec 31, 2021	Jan 1 -Dec 31, 2022*	Jan 1 -Dec 31, 2023*
Item Description	Pkg Size	Unit Price/ Unit	Unit Price/ Unit	Unit Price/ Unit
VECTOBAC				
VECTOBAC 12AS	2 X 2.5 JG	\$ 29.28 GL	\$ 29.87 GL	\$ 30.46 GL
VECTOBAC 12AS	30 GL DR	\$ 29.14 GL	\$ 29.72 GL	\$ 30.32 GL
VECTOBAC 12AS	264 GL TT	\$ 28.57 GL	\$ 29.14 GL	\$ 29.72 GL
VECTOBAC G 5/8	40 LB BG	\$ 1.48 LB	\$ 1.51 LB	\$ 1.54 LB
VECTOBAC G 5/8 [4 BAG MIN]	1200 LB	\$ 1.46 LB	\$ 1.49 LB	\$ 1.52 LB
VECTOBAC GS 10/14	40 LB BG	\$ 1.48 LB	\$ 1.51 LB	\$ 1.54 LB
VECTOBAC GS 10/14 [4 BAG MIN]	1200 LB	\$ 1.46 LB	\$ 1.49 LB	\$ 1.52 LB
VECTOBAC GR 10/20	40 LB BG	\$ 1.81 LB	\$ 1.85 LB	\$ 1.88 LB
VECTOBAC GR 10/20 [4 BAG MIN]	1200 LB	\$ 1.79 LB	\$ 1.83 LB	\$ 1.86 LB
VECTOBAC WDG	24X1LB	\$ 36.97 LB	\$ 37.71 LB	\$ 38.46 LB
VECTOBAC WDG	25 LB DR	\$ 36.97 LB	\$ 37.71 LB	\$ 38.46 LB
VECTOLEX				
VECTOLEX FG 10/14	40 LB BG	\$ 6.44 LB	\$ 6.57 LB	\$ 6.70 LB
VECTOLEX WDG [1-17 CS]	24 X 1LB	\$ 56.73 LB	\$ 57.86 LB	\$ 59.02 LB
VECTOLEX WDG [18 CS+]	24 X 1LB	\$ 55.21 LB	\$ 56.31 LB	\$ 57.44 LB
VECTOLEX WDG [1-11 CS]	25 LB DR	\$ 56.11 LB	\$ 57.23 LB	\$ 58.38 LB
VECTOLEX WDG [12 CS+]	25 LB DR	\$ 55.02 LB	\$ 56.12 LB	\$ 57.24 LB
VECTOLEX WSP	800/CS	\$ 0.92 PCH	\$ 0.94 PCH	\$ 0.96 PCH
VECTOMAX				
VECTOMAX FG 10/14	40 LB BG	\$ 8.62 LB	\$ 8.79 LB	\$ 8.97 LB
VECTOMAX WSP	800/CS	\$ 1.62 PCH	\$ 1.65 PCH	\$ 1.69 PCH
VECTOPRIME & METALARV				
VECTOPRIME FG	40 LB BG	\$ 3.77 LB	\$ 3.85 LB	\$ 3.96 LB
METALARV S-PT	40 LB BG	\$ 28.80 LB	\$ 28.80 LB	\$ 28.80 LB

Prices do not include sales tax. Applicable sales tax will be added to the invoice

Prices include CDPR Pesticide Mil Tax assessment.

* Prices listed indicate the price cap which the prices are not to exceed in that year. The actual prices may be lower, but cannot exceed the prices stated in that calendar year.

PAYMENT TERMS: Net 30 Days **FREIGHT TERMS:** Freight Prepaid to Sacramento and Yolo Counties.

ANNUAL VOLUME REBATE PROGRAM (Three year term agreement)

The following rebate is offered for Jan.1 thru Dec 31 in Calendar Years 2021, 2022, 2023.

Total Annual Purchase Amount is the combined purchase totals, excluding sales tax and shipping, of VectoBac, VectoLex, VectoMax, VectoPrime and MetaLarv products for that calendar year.

Total Annual Purchase Amount (excluding tax and shipping)

Less than \$1,000,000
\$1,000,000 to \$1,149,999
\$1,150,000 to \$1,299,999
\$1,300,000 to \$1,499,999
\$1,500,000 and above

Rebate Credit

7% rebate in form of a credit
8% rebate in form of a credit
9% rebate in form of a credit
10% rebate in form of a credit
11% rebate in form of a credit

Rebates will be paid in the form of a credit from ADAPCO to be used for purchases from ADAPCO in the following calendar year.

Rebate Credit earned in one calendar year will be issued and available by January 31st of the following year, and must be used in that calendar year. Any unused rebate credit at the end of that year will be void.

Qualifying products purchased with the rebate credit will be included in the Total Annual Purchases for that year in which they are purchased.

Sacramento-Yolo Mosquito and Vector Control District

February 16, 2021 Board Meeting

6. Board Review and Consideration of Contract for Aerial Adulticiding Services

Staff Report:

Adult mosquito control is accomplished through a variety of ways including truck ULV (Ultra Low Volume), backpack ULV, and aerial ULV applications with aerial adulticiding as an integral part of our control strategies. The District currently utilizes VDCI (Vector Disease Control International) for aerial adulticide work with ongoing contracts dating back to 2005.

There are currently only two vendors (VDCI and Dynamic Aviation) that conduct this type of work as twin engine airplanes are required to conduct aerial applications over congested areas. The District approached both companies for a quote and terms to provide these services as our current contract with VDCI expired at the end of 2020. We have attached the quotes for review along with a brief comparison analysis done by staff.

	VDCI	Dynamic
Total Acres	1 million	1 million
Price Per Acre	First Year: 62.5 cents. Subsequent years have a 2% escalator per year	80 cents
Length on Contract	5 years	1 year
Aircraft	A single 90 gallon plane and a single 60 gallon plane	One 180 gallon plane
3rd Aircraft	Available at 0.72 cents per acre	Yes, \$1,295 per day plus the 0.80 cents per acre charge
Application Rates	Not set by contract	Set by contract, may be an additional charge if material or rate is changed
Cost per 1M Acres	\$625,000	\$800,000

The total acreage (1,000,000) that is specified in the proposal is more than we do on average in Sacramento and Yolo Counties. We entered into previous MOUs with surrounding Districts (San Joaquin, Placer, and Turlock) to share in the services to utilize the acreage and help decrease the cost per acre. It should be noted that if we should need to treat more than the 1,000,000 acres in a particular year, that the increased acreage would be charged at the same rate. However, if we are unable to meet the committed acre contract amount, then the price per acre would increase.

Recommendation:

Authorize the Manager to enter into a contract with VDCI for aerial services and sign appropriate MOUs with San Joaquin, Placer, and Turlock Districts to share in the cost.

Gary Goodman
Sacramento-Yolo Mosquito and Vector Control District
8631 Bond Road
Elk Grove, CA 95624

2021 Contract for Aerial Mosquito Control Services

Dear Gary,

VDCI is excited to continue our relationship with your District by providing fixed-wing aerial adulticiding services. The purpose of this letter is to serve as an overview of our proposed price and offering to the District.

Aerial Adulticiding Services
\$0.625 Per Acre

Pricing Notes:

- VDCI will supply two (2) dedicated fixed-wing aircraft and supporting crew for the length of the District's mosquito abatement season.
- One (1) of aircraft provided will be equipped with a 60 gal tank. One (1) of the aircraft provided will be equipped with a 90 gal tank.
- The mission activity of the aircraft will be determined by the District.
- VDCI will bear all operational expenses associated to the aircraft and crew, with the exception of chemical product.
- The District will guarantee VDCI a minimum of 1,000,000 applied acres per calendar year. If the minimum acreage is not met, the District will credit the difference to VDCI.
- VDCI will provide aircraft maintenance support to ensure the two (2) dedicated aircraft are operationally available throughout the season. If at any point during the season, VDCI is unable to have either of the two (2) dedicated aircraft available to perform work scheduled by the District, those scheduled acres will be deducted from the 1,000,000 acre minimum guarantee. If one (1) of the aircraft incurs mechanical/structure damage/failure during a mission, VDCI has a maximum of 3 days from the time of the incident to repair/replace the aircraft. If unable to do so, any acres scheduled by the District that would have been assigned to that aircraft will be deducted from the 1,000,000 acre guarantee.
- Acres treated by VDCI in a calendar year above the 1,000,000 acre minimum will be invoiced to the District at \$0.625 per acre.
- The agreement would take effect on March 1st, 2021 and will remain in full force and effect until December 31st, 2025
- Payment to VDCI is to be delivered in twelve equal monthly installments on or before the 15th day of each month.
- Price Per Acre is to remain firm for the first contract year. In subsequent contract years, a 2% price increase can be requested. This request must be submitted in writing at least sixty (60) days prior to January 1.
- *Additional aircraft:* VDCI will provide a 3rd aircraft on a Call-When-Needed basis. The price per acre for the 3rd aircraft will be \$0.72 for the first contract year. In subsequent contract years, any increase/decrease in the price per acre for additional aircraft shall be consistent with any changes made to the original proposal.

Sincerely,

Jay Sandridge,
Business Development Director, VDCI



Sacramento-Yolo Mosquito & Vector Control District

2021 Proposal for Aerial Spraying for Mosquito Control

Submitted by:

Clarke Environmental Mosquito Mgmt, Inc., a Clarke Company

Representative:

Nancy Voorhees, Control Consultant

January 26, 2021



675 Sidwell Court
Saint Charles, IL 60174
630-894-2000 P
800-323-5727
630-443-3070 F
www.clarke.com



675 Sidwell Court
St. Charles, IL 60174
630.894.2000 P
630.443.3070 F
www.clarke.com

January 26, 2021

Mr. Gary Goodman
District Manager
Sacramento-Yolo Mosquito & Vector Control District
8631 Bond Road
Elk Grove, California 95624

RE: Proposal for Aerial Spraying for Mosquito Control

Dear Mr. Goodman:

Clarke Environmental Mosquito Management, Inc. (Clarke) is pleased to submit our proposal for the Sacramento-Yolo Mosquito & Vector Control District (SYMVCD) 2021 Aerial Spray Services Contract.

Since 1946, Clarke has been setting an unparalleled standard of excellence in the mosquito control industry and is the largest and most experienced provider of contract mosquito control services in the United States. The Clarke corporate office is based in suburban Chicago, and has twelve service offices in eight states. Clarke currently serves over 200 governmental Customers, including municipalities, townships, counties, parishes, mosquito abatement districts, states, and federal agencies (FEMA). The Clarke website (www.clarke.com) provides additional corporate background information.

For the implementation of the SYMVCD fixed-wing adulticiding services contract, Dynamic Aviation of Bridgewater, VA would serve as the subcontractor for Clarke. The Clarke-Dynamic Aviation Partnership is the leading provider of mosquito control application services to federal, state and local governments throughout the United States. Our diverse experience and success has been well documented. Much of our collaborative success is directly attributable to our ability to provide the turnkey services necessary to meet the Customer's specific needs. The Dynamic Aviation website (www.dynamicaviation.com) provides additional corporate background information.

Since 2003, the Clarke-Dynamic Aviation Partnership has sprayed over 40 million acres for routine and emergency response situations in 20 states around the USA. Our combined experience ensures the reliability demanded by public health officials facing emergencies arising from hurricanes, flooding, and outbreaks of mosquito-borne diseases, such as West Nile virus (WNV), Eastern Equine Encephalitis (EEE), and Zika virus.



675 Sidwell Court
St Charles, IL 60174
630 894 2000 P
630 443 3070 F
www.clarke.com

As a partnership, Clarke and Dynamic Aviation are able to provide an expert aerial application program with the following credentials and advantages for SYMVCD:

- Utilize **FAA Part 137-compliant, twin-engine, turbine-powered aircraft (Beechcraft King Air) that provide a superior margin of safety:**
 - ✓ With one engine out, King Air turbine aircraft are exempt from dumping the load (fuel or insecticide) over congested areas.
 - ✓ With one engine out, King Air turbine aircraft meet the single engine rate of climb requirement.
 - ✓ A copy of the FAA Exemption No. 18127A, Regulatory Docket No. FAA-2002-12484 is provided with this proposal. The expiration date is February 29, 2024.
- The aircraft are equipped with Ag-Nav® and FlightMaster® guidance systems. Navigation is linked to the onboard AIMMS-20 real-time weather system for the offset calculation to ensure optimal adult mosquito population efficacy.
 - ✓ Post mission GIS maps and reports, verifying aircraft performance and flight paths, acres sprayed, and amount of insecticide applied.
 - ✓ Record-keeping provided to SYMVCD for NPDES reporting requirements.
- **Military grade night vision goggles (NVG) worn by both captain and first officer for optimal safety of aerial.**
- Capable of treating 20,000 acres per hour per aircraft
- FAA approved congested area plan for approval to spray at a low-level altitude.
- Annual state-of-the-art pilot training program including FAA rules and regulations, low-level aerial spraying procedures, NVG certification, and flight simulator training for maximum proficiency and safety.
- Assistance with GIS mapping of spray blocks
- Public relations program and support
- Auto-flow control spray system for precise insecticide application and documentation.
- Flexible and on-demand application.
- Sky Connect Real-Time Flight Tracking System & website link provided to SYMVCD for real-time monitoring of the spray mission progress
- Pesticide flow-metering for insecticide dosage rate precision
- Comprehensive insurance coverage naming SYMVCD as *additional insured*, including a \$10 million umbrella policy. Please see the attached certificate of insurance.
- Pesticide loading in compliance with Federal and State guidelines



675 Sidwell Court
St. Charles, IL 60174
630.894.2000 P
630.443.3070 F
www.clarke.com

For your additional background, Dynamic Aviation has provided with our proposal the following document for enhanced information: *Dynamic Aviation Capabilities for Aerial Application*.

Our experience, expertise, procedures, thorough training programs, and exceptional track record have enabled us to obtain a level of liability insurance coverage that is unmatched in our industry. Clarke maintains an umbrella / excess liability policy of \$10 million, and the extremely important "pollution liability" coverage of \$15 million. SYMVCD would be named as "additional insured" on all policies.

We appreciate your consideration and look forward to providing SYMVCD with an unsurpassed level of quality services. If you have questions regarding our proposal, please do not hesitate to contact the following Clarke representatives:

Mike Muldoon, Director of Domestic Sales @ 630-453-3046; mmuldoon@clarke.com
Clark Wood, Vice President / Service Operations @ 630-605-1561; cwood@clarke.com
Nancy Voorhees, Control / Consultant @ 650-522-0394; nvoorhees@clarke.com

Sincerely,

Mike Muldoon
Director of Domestic Sales

1.0	Executive Summary	2
2.0	Introduction.....	3
3.0	Past Performance	4
4.0	Aircraft.....	4
5.0	Spray System	5
6.0	Personnel.....	10
7.0	Summary	10

1.0 Executive Summary

Since 2003, the Clarke-Dynamic Aviation team has sprayed over 40 million acres for routine and emergency response situations around the United States. Our combined experience ensures the reliability demanded by public health officials facing emergencies arising from hurricanes, flooding, and outbreaks of mosquito-borne diseases, such as West Nile virus (WNV), Eastern Equine Encephalitis (EEE) and Zika.

Dynamic Aviation is able to provide a superior aerial ULV application program that offers significant benefits to Sacramento-Yolo MVCD.

- **FAA Part 137-compliant, twin-engine, turbine-powered aircraft (Beechcraft King Air) provide a superior margin of safety:**
 - ✓ Due to its exceptional single engine climb performance, Dynamic Aviation's King Air turbine aircraft are exempt from dumping the load (fuel or insecticide) over congested areas.
- **Integrated use of aerial application technology provides precise application of adulticides:**
 - ✓ The aircraft are equipped with an AG-NAV FlightMaster guidance system. Navigation is linked to the onboard AIMMS real-time weather system for the offset calculation to ensure optimal adult mosquito population efficacy.
 - ✓ The Auto-flow control spray system provides precise insecticide application and documentation.
- **Military grade night vision goggles (NVG) worn by both the captain and first officer mitigate risks associated with low level applications at night:**



Figure 1: Pilot Demonstrating NVG

2.0 Introduction

Since 1981, Dynamic Aviation has been providing aerial application (AA) services to both private and commercial sectors to include the United States Department of Agriculture (USDA), as well as state and local governments, Wildlife Services (WS), and Animal Plant and Health Inspection Services (APHIS). Our nearly 50 years of aviation experience, coupled with a deeply rooted history in mosquito spray and treatment, provides our customers with proven solutions and allows for a more than 98% dispatch reliability rate. Located in Bridgewater, Virginia, Dynamic Aviation owns and operates a privately-owned public airport with more than 230,000 square feet of production space and a U.S. Federal Aviation Administration (FAA)-approved Part 145 repair station. Additionally, we are AS9100 certified, and maintain one of the world's largest inventories of aircraft spares and parts for the aircraft we own and operate to ensure the dispatch reliability and operational availability of our aircraft. Dynamic Aviation provides skilled personnel around the world, including qualified flight crews and a complete aviation support infrastructure composed of airframe and power plant (A&P) mechanics, engineers, avionics technicians, electricians, sheet metal technicians, welders, composite specialists, computer numerically controlled machinists, and logisticians. Dynamic Aviation has an extensive and successful track record of integrating, deploying, operating, and maintaining a modified fleet of special mission aircraft, configured with complex airborne systems.



Figure 2: Portion of King Air Fleet



Figure 3: Rotary Atomizers in Use

3.0 Past Performance

Dynamic Aviation's past performance demonstrates the depth of aerial spray experience we bring to support all customer standards and requirements. Since 1998, Dynamic Aviation has treated over 40 million acres for mosquitoes and invasive fly species. We have operated in austere locations and maintain our aircraft to an average of 98% of operational reliability and availability. Since 1981, Dynamic Aviation has been working closely with the USDA. It is our mission as well as priority to execute our customers' requirements to satisfaction



Figure 4: Ground Support and Loading

and FAA standards. We have extensive experience, which encompasses SIT, aerial spray, oil spill response, screwworm eradication, and bait distribution, flying a total of approximately 290,655 hours. Our work on these projects has proven successful with numerous scientific reports demonstrating the diminishing occurrences of rabies, the eradication of the screwworm population, lowered reports of mosquito population, and the prevention of medfly outbreaks. We have a successful history of responding to high-priority and emergency operations including, but not limited to: Deepwater Horizon oil spill, Arizona rabies vaccine, gypsy moth, California medfly, Florida medfly, Panama screwworm eradication, Jamaican screwworm eradication, and numerous mosquito outbreaks including post hurricanes Floyd, Isabel, Frances, Katrina, Dalia, Isaac, Ike, Harvey, Irma & Laura; the mosquito-borne encephalitis outbreaks in Massachusetts, Michigan and Texas; as well as the Zika emergency in Miami-Dade County.

Dynamic Aviation has provided aircraft for mosquito spray missions since 1998. Throughout our years of experience, we have taken our lessons learned from past Mosquito Spray and Sterile Insect Technique operations and used those lessons to restructure our management processes. This process provides an ongoing and continual update and refinement to our processes for a stronger, more efficient, and more reliable management structure for our customers and personnel. The following are areas where we excel in our performance regardless of project size or barriers.

4.0 Aircraft

Dynamic Aviation has selected the Beechcraft King Air A90, an exceptionally reliable and adaptable aircraft, for our mosquito control missions. The King Air A90 aircraft platform is an unpressurized, twin-engine turboprop-powered aircraft. This aircraft is low maintenance, and is

a stable, all-weather platform offering an ample, climate-controlled cabin. The benefits of a multi-engine aircraft cannot be overstated. Due to the power of the PT6A turbine engine, in an emergency situation with one engine out, the other engine has the power to climb and safely return to the nearest suitable airfield. Consequently, our King Air aircraft are exempt from dumping the chemical load. This attribute offers significant protection to the County, the environment, and your citizens. *(Please note that most aircraft, other than a helicopter, must be equipped with a device capable of jettisoning at least half of the aircraft's maximum authorized load of agricultural material within 45 seconds.)* In summary, the twin turbine powered King Air, with its increased load capacity, speed, quiet operation, power and safety margin is the ideal aircraft for the precision targeting and precision timing of ULV applications required to meet the needs of Sacramento-Yolo MVCD.



Figure 5: King Air A90

5.0 Spray System

Dynamic Aviation designed and operates an industry leading custom spray system in our King Air A90 that is built for accuracy, reliability, and effectiveness. The aerial application system uses a proprietary computer controlled auto-flow system coupled with the FlightMaster agricultural navigation system and AIMMS meteorological data probe providing real-time weather monitoring to deliver extremely accurate rates of spray to precise locations. This allows the system to maximize the effectiveness of the product while extending endurance on station and enlarging the area of spray by minimizing wasted product. In addition to gaining efficiency, the accuracy of our delivery makes our system the most environmentally friendly in the industry.

Auto-Flow System

At the heart of the aerial application system is the proprietary computer controlled auto-flow system. This system has been designed and built entirely in-house and utilizes decades of

experience combined with the most modern technology. This rugged and reliable system allows Dynamic Aviation to control application rates with an accuracy to within 0.01 ml per acre every single second of the flight. This industry leading system is orders of magnitude more accurate than our closest competitors who can only approximate an average dispersal rate. Our exact control of dispersal rate allows us to maximize the area sprayed per-mission by minimizing waste while delivering the precise rate of product needed for maximum effect.

Micronair

Capitalizing on the accuracy of the auto-flow system, the Micronair rotary atomizer delivers the product at the specific droplet size necessary for the application. Designed for specialized ultra-low volume (ULV) aerial application operations, the Micronair rotary atomizer uses airflow past the airplane to drive 5-bladed, adjustable-pitch centrifugal nozzles at variable speeds to accurately size the droplet being dispersed. Proper droplet size is essential for correct dispersion of product and efficacy of the application. The Micronair rotary atomizer is perfectly matched with Dynamic Aviation's proprietary auto-flow system to allow for the full potential of both components and thus an unmatched accuracy of product application.

AIMMS Air Data Probe

Environmental conditions greatly affect where the product will disperse once released from the aircraft. The AIMMS probe removes any guesswork by constantly monitoring the environmental conditions in which the product is being released. This highly accurate, on-board Air Data Probe (ADP) feeds this real-time information about the conditions around the aircraft to the FlightMaster agricultural navigation system for use in determining exactly where the aircraft needs to be to deliver the product by factoring in wind, temperature, and atmospheric pressure.



Figure 6: AIMMS Air Data Probe

FlightMaster

Proper dispersal means placing the product exactly where it needs to go every time. The AG-NAV FlightMaster system provides GPS pilot guidance to ensure proper dispersal as well as recording the spray operation for completion verification and to determine efficacy. The system features a moving map display for accurate flight lines as well as an obstacle warning device.

When utilized in conjunction with the AIMMS ADP, the FlightMaster device offers state-of-the-art drift offset technology. FlightMaster uses the meteorological data, droplet spectrum, and aircraft data to calculate drift offset and automatically adjust flight lines and pilot guidance as necessary to ensure the droplets go exactly where they should. In cases where missions are forced to operate high above ground level and the droplets have farther to travel once dispersed, this device is crucial to dispersal success. The FlightMaster can log and record data for each flight from takeoff to landing and can continuously record the following data: flight destination, date, time, spray system status (on/off), aircraft altitude, aircraft speed, exact latitude/longitude (decimal degrees), Universal Transverse Mercator (UTM) XY, GPS quality, flight line error (cross track error), wind speed and direction, temperature, and humidity.

In addition to providing real-time guidance, control, and data logging during flight, the FlightMaster also produces a map of the entire flight mission including the areas sprayed and not sprayed. It even allows for slow motion playback of the entire flight. These features, to include the data logging, ensure Dynamic Aviation is accountable for delivering the highest quality product to the customer.



Figure 7: FlightMaster Screen Displayed During Flight



Figure 8: AG-NAV GPS System

Spray Tank and Pumps

The two spray tanks, which hold 100 gallons (757 liters) each and 2200 lbs. (998 kgs) of the adulticide product, are located in the cabin area of the aircraft. The tank valves are fed by an electrically driven gear pump, which in conjunction with the auto-flow system, accurately

streams the product through the stainless supply lines to the Micronair rotary atomizer on each wing tip. The pump capacity is 4 gallons/minute or 15.1 liters/minute.



Figure 9: Spray system installed in the cabin area of King Air A90.



Figure 10: Micronair AU4000 device integrated on wing of King Air A90.

Dynamic Aviation installs state-of-the-art AG-NAV systems on all of our spray aircraft to log and display the date and time of the entire flight from take-off to landing as well as to differentiate between a standard flight and a flight when the dispersal system is on/off. Since 1994, Dynamic Aviation has operated this GPS electronic guidance and flight data recording system. Our proposed AG-NAV FlightMaster GPS system is compact and sealed to prevent external contamination, accepts the customer's pre-determined spray area data and displays flight line information based upon desired swath width and application rate. The system features a moving map display for accurate flight lines as well as an obstacle warning device, which detects oncoming obstacles such as power lines and towers.

The AG-NAV is a separate system from the aircraft with the ability to track the flight time upon the immediate dispersal of spray to project completion when the aircraft ferries back to base. The AG-NAV system is equipped with software for *flight data logging* that can store a minimum of 6 hours continuous flight log data with the logging rate set at one second intervals. The flight data log software is compatible with Windows-based PC computers, dot matrix, laser, or inkjet printers and plotters, in addition the system compensates for the lag in logging dispersal on/off. The system displays dispersal on/off at the and is capable of ending log files, renaming, and starting a new log in flight.



Figure 11: AG-NAV GPS antenna

The software can generate the *map of the entire flight* within a reasonable time (1 minute or less on a Windows XP-compatible computer). When viewed on the monitor or the printed hard copy, the flight path is clearly differentiated between dispersal on/off. In addition, the software is capable of replaying the entire flight in slow motion, as well as stopping and restarting the replay at any point during the flight. In order to give the customer a detailed view and analyses of the flight lines, our software is capable of zooming to any portion of the flight for viewing in greater detail and can print the entire flight or the zoomed-in portion. AG-NAV has a measure feature that makes it possible to measure distance in feet between swaths or any portion of the screen and AG-NAV can determine the exact latitude/longitude at any point on the monitor. The entirety of the flight information software Dynamic Aviation provides can interface with MapInfo in a “user friendly” manner.



Figure 12: Example of Mapping

6.0 Personnel

Dynamic Aviation’s Human Resources (HR) Department screens applicants based upon skill, expertise, experience, and project fit. We hire aviation professionals through this comprehensive selection process and a thorough evaluation of each individual’s technical competence and mission focus. Currently, we employ 241 mechanics and approximately 149 pilots, several of whom are dedicated to aerial ULV spraying. We require all pilots to be trained, qualified, and assigned in their aircraft. To remain current on licenses, medical information, and certificates, our pilots receive recurrent training annually to renew any expiring licenses. Dynamic Aviation’s progressive flight training program has trained over 1,000 pilots. Our privately-owned airport allows trainees to be prioritized and learn without interruption. Including recurrent training, our Certified Flight Instructors (CFIs) complete five training events each week on average. All Aerial Application personnel possess a commercial license and are trained in public health, Occupational Safety and Health Administration (OSHA), Integrated Pest Management Systems, and are experienced with the spray system.

7.0 Summary

The combination of Dynamic Aviation’s twin turbine aircraft, customized spray systems, application technology, skilled personnel and years of successful aerial ULV experience coupled with its culture focused upon safety and continuous improvement offers the Sacramento-Yolo MVCD and your citizens a valuable partner in mosquito control.



U.S. Department
of Transportation
**Federal Aviation
Administration**

Aviation Safety

800 Independence Ave
Washington, DC 20591

Exemption No. 18127A
Regulatory Docket No. FAA-2002-12484

Mr. Todd H. Early
Chief Supervisor, Part 137
Dynamic Aviation Group, Inc.
1402 Airport Road
P.O. Box 7
Bridgewater, VA 22812

Dear Mr. Early:

This letter is to inform you that the Federal Aviation Administration (FAA) has granted your petition to extend Exemption No. 18127. It transmits the FAA's decision, explains its basis, and gives you the conditions and limitations of the exemption, including the date it ends.

The Basis for the FAA's Decision

By letter dated November 6, 2020, you petitioned the FAA on behalf of Dynamic Aviation Group, Inc. (Dynamic Aviation) for an extension of Exemption No. 18127. That exemption from § 137.53(c)(2) of Title 14, Code of Federal Regulations (14 CFR) allows Dynamic Aviation to conduct aerial applications of insecticide materials without the aircraft being equipped with a device that is capable of jettisoning at least one half of the aircraft's maximum authorized load of agricultural materials within 45 seconds when operating over a congested area.

In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the original exemption.

The FAA's Decision

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to Dynamic Aviation.

The FAA has determined that the justification for the issuance of Exemption No. 18127 remains valid with respect to this exemption and is in the public interest. Therefore, under the authority provided by 49 U.S.C. 106(f), 40113, and 44701, which the FAA Administrator has delegated to me, I hereby grant Dynamic Aviation Group, Inc. (Dynamic Aviation) an exemption from § 137.53(c)(2) of Title 14, Code of Federal Regulations (14 CFR) to conduct aerial applications of insecticide materials without the aircraft being equipped with a device that is capable of

jettisoning at least one half of the aircraft's maximum authorized load of agricultural materials within 45 seconds when operating over a congested area, subject to the following conditions and limitations.

Conditions and Limitations

1. This exemption is limited to Beechcraft King Air 65A90-1, 65A90-4, and BE-90 aircraft equipped for agricultural operations in the restricted category in accordance with a field approved alteration, documented on FAA Form 337.
2. The authority of this exemption is to be used only in conjunction with conducting aerial agricultural operations.
3. During dispensing operations, aircraft operated in conjunction with this exemption are limited to a maximum gross weight that will ensure a single-engine climb performance capability of at least 200 feet per minute positive rate at the prevailing density altitude. Under no condition will the aircraft's gross weight exceed the maximum takeoff gross weight specified in the FAA-approved airplane flight manual.
4. Prior to each flight, a document must be prepared showing the weight and balance calculations and the altitude performance for the forecast operating density altitude. The document must be retained for at least 30 days and must be presented upon request to the FAA inspector assigned to oversee Dynamic Aviation's part 137 operation.
5. A copy of this exemption must be provided to each pilot-in-command (PIC) who operates under this exemption.
6. A copy of this exemption must be carried on the aircraft while conducting operations under the terms of this exemption.
7. Prior to operating under this exemption, each PIC must have successfully completed flight instruction from an appropriately rated flight instructor on single-engine operations, performance, and handling characteristics of the make and model aircraft. A record of this instruction must be made available by the PIC upon the request of the Administrator.
8. Dynamic Aviation must maintain a current list of aircraft used under the exemption and provide a copy of this exemption and a copy of the list of aircraft to the Washington Flight Standards District Office to be placed in its part 137 file. This list will identify the registration and serial numbers of the aircraft being used.
9. This exemption is not valid for operations outside of the United States.

If you request an extension or amendment to this exemption, please submit your request by using the Regulatory Docket No. FAA-2002-12484 (<http://www.regulations.gov>). In addition, you should submit your request no later than 120 days prior to the exemption's expiration date listed below, or 120 days before you need the amendment.

Any extension or amendment request must meet the requirements of § 11.81 of 14 CFR.

The Effect of the FAA's Decision

The FAA's decision amends Exemption No. 18127 to 18127A and extends the termination date to February 29, 2024, unless sooner superseded or rescinded.

Sincerely,

/s/

Rick Domingo

Executive Director, Flight Standards Service

**Clarke Environmental Mosquito Management, Inc.
2021 Aerial Mosquito Control Service Agreement
For The Sacramento-Yolo Mosquito & Vector Control District**

PROFESSIONAL SERVICES OUTLINE

This Agreement for aerial adult mosquito control services is made and entered into this ____ day of _____, 2021, by and between Sacramento-Yolo Mosquito & Vector Control a body politic and corporate of the State of California ("The Agency"), and Clarke Environmental Mosquito Management, Inc., an Illinois corporation ("Clarke").

I. CONTRACTOR CREDENTIALS

- A. **Contractor Qualifications.** Clarke shall be an authorized certified business in aerial spraying with spray systems, handling systems, and qualified personnel to implement program services in full compliance with local, state, and federal regulations. To perform services for this contract, Clarke shall provide the Agency a copy of Federal Aviation Administration (FAA) operating certificate for commercial agricultural aircraft operations. In addition, Clarke and subcontractor, Dynamic Aviation, shall be currently licensed as a commercial applicator in the State of California by the Department of Pesticide Regulation in categories to enable the aerial application of a pesticide for adult mosquito control. A copy of the Clarke's State of California pesticide applicator business license must be provided. Application records shall comply with the requirements of the Department of Pesticide Regulation and be made available upon request.
1. **Prime Contractor and Subcontractor.** It should be understood that Clarke is the prime contractor for this agreement and will be the sole point of contact with regard to contractual matters, including the performance of services. Dynamic Aviation, Inc. of Bridgewater, VA is the aerial application subcontractor for Clarke.
- B. **Pesticide Licensing.** A current State of California pesticide certification and individual commercial applicator license, for each of the pilots, applicators, and support crew who will apply or direct the use of pesticides, is required. Clarke shall provide the Agency copies of certifications for pilots and handling personnel, as required by State of California regulations.
- C. **Pilot Qualifications.** Pilots must be qualified and certified in accordance with applicable Federal Aviation Regulations (FAR 137) and capable of

<p>WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the IL. Rev. Statutes)</p>
--

completing scheduled flight activities. Pilots shall possess a current FAA commercial pilot, fixed-wing certificate with a FAR 137 endorsement, and maintain currency with FAR 137. Pilots shall meet all requirements of the operator's certificate necessary for conducting operations specified in the contract and possess an appropriate medical certificate, as required by the FAR 137. Clarke shall provide to the Agency a copy of each pilot's qualification and certification, upon request.

- D. **Contact Person and Program Coordination.** Mr. Clark E. Wood, Vice President / Service Operations; and Ms. Nancy Voorhees, Control Consultant; Clarke Environmental Mosquito Management, Inc. shall be designated to provide supervision, on-going communication, coordinate servicing, answer questions, and ensure performance in accordance with contract terms.
- E. **Public Relations** – Clarke retains the services of The McGowan Group, a professional public relations firm, experienced in the handling of contingency response and West Nile virus outbreak situations. The Agency will have access to the resources of The McGowan Group, including, the preparation of public information announcements, news releases, service and pesticide product fact sheets, call center operations assistance and training, citizen Q & A responses, and assistance with news media interviews (television, radio, and press). Clarke agrees that any news releases produced by The McGowan Group on behalf of Clarke related to this agreement will not be made or issued to the media without the approval the Agency.
- F. **Insurance Coverage.** Clarke and Dynamic Aviation shall maintain aviation insurance policies. Prior to the award of this contract agreement, Clarke shall provide the Agency proof of insurance coverage. Certificates of insurance, separately from both Clarke and Dynamic Aviation, shall be submitted and include the following items or provisions:
- Current date shall be on the insurance certificate.
 - Name of Clarke/Dynamic as the insured contractor/subcontractor, specific job by name, name of the insurer, number of the policy, its effective date, and its termination date.
 - Statement that the insured will endeavor to mail notice to the owner, at least thirty (30) calendar days prior to cancellation of the policy.
 - The Agency shall be named as "additional insured" on the insured Clarke's and Dynamic's respective aviation liability and commercial general liability policies with respect to the operations of the named insureds.
 - Insurance carriers shall meet a minimum financial A.M. Best and Company rating of no less than – S&P Rating A "Excellent."

The required insurance provided by Clarke must include the following coverages and minimum limits, and be specified on the submitted certificate of insurance:

<p>WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)</p>
--

Worker's Compensation

- As required under Worker's Compensation rules in the jurisdiction, employers liability with limits of not less than:
\$1,000,000 per employee per accident
\$1,000,000 disease aggregate
\$1,000,000 employee per disease

Automobile Liability

- Bodily injury and property damage;
- Including all vehicles owned, leased, hired and non-owned;
- Limits of not less than \$1,000,000 combined single limit Bodily Injury and Property Damage
- Covering all work performed under this Agreement.

Aviation Liability

- Bodily injury and property damage for aircraft owned, leased, hired and non-owned, which are used to perform services under this agreement.
- \$5,000,000 per occurrence combined single limit aircraft liability, subject to \$250,000 passenger sub-limit
- Excess aircraft liability insurance, excluding occupants – at least \$15,000,000
- If any (contractor or subcontractor) passengers are required by the Agency for the performance of this contract:
 - ✓ At least \$250,000 passenger bodily injury, each person
 - ✓ At least \$10,000 medical expenses, each person subject to \$20,000 each occurrence

Note: Passenger exposure must be reported to aviation insurer prior to flight for coverage to apply.

Commercial General Liability / Pollution Legal Liability

- \$1,000,000 per occurrence
- \$2,000,000 products/completed operations aggregate
- \$2,000,000 general aggregate
Subject to the terms and conditions of the policy the bodily injury and property damage coverage provided by this policy if the drift of applied chemicals results in covered bodily injury and property damage.
- \$15,000,000 pollution

Umbrella Liability Coverage

- \$10,000,000 per occurrence / aggregate

The required insurance provided by Dynamic Aviation must include the following coverages and minimum limits, and be specified on the submitted certificate of insurance:

Worker's Compensation

- As required under Worker's Compensation rules in the jurisdiction, employers liability with limits of not less than:
\$1,000,000 per employee per accident
\$1,000,000 disease aggregate

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the Il. Rev. Statutes)

\$1,000,000 employee per disease

Commercial General Liability

- \$10,000,000 each occurrence
- \$5,000,000 personal and advertising injury
- \$10,000,000 products – completed operations aggregate

Aviation and Hull Liability

- \$5,000,000 each occurrence combined single limit aircraft liability, subject to \$100,000 passenger sub-limit
- \$300,000 aerial application chemical drift coverage

I. TECHNICAL SPECIFICATIONS

- A. **Equipment.** Clarke shall furnish the Agency FAA approved aircraft, equipped with ultra-low volume (ULV) spray systems for the dispersal of insecticides to control adult mosquitoes over populated areas within the Agency. Clarke shall provide all labor, materials (other than pesticides), equipment, supplies, insurance, and any other requirements to complete the terms, conditions and specifications herein. Any other fees, etc. are the responsibility of Clarke.

1. **Certifications / Aircraft Make and Model.** For aerial spray operations over congested areas, Clarke is required to utilize twin-engine turbine aircraft. Clarke shall provide a list, by make and model and registration number, of proposed application aircraft presently owned, leased, or subcontracted by the bidder and committed to this project. All aircraft noted in the proposal must be twin engine, FAA approved and certified at the time of the proposal submittal. Clarke shall provide for each listed aircraft a FAA certificate aircraft registration, and standard airworthiness certificate.
2. **Aircraft Performance.** Clarke shall be in full regulatory compliance with all parts of Federal Aviation Regulations (FAR 137). Clarke shall provide a statement and, if requested to do so, demonstrate the operational aircraft capability and compliance with FAR 137, Subpart C, 137.51.5.ii for the operation of aircraft over congested areas.

The aircraft to be utilized by Clarke are required to have sufficient enough power, with one engine out, to have an exemption of dumping the load (fuel / pesticide) over a congested area. Clarke shall provide the Agency a statement of proof of a FAA **exemption** for FAR 137, Subpart C, 137.53 [c] [2] – load jettisoning for the operation of aircraft over congested areas:

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the Ill. Rev. Statutes)

3. **Aircraft Maintenance.** Clarke shall be in compliance with FAR 137. The application aircraft must be in good mechanical condition with a current 100-hour inspection and a current annual inspection or progressive maintenance plan, per FAR 137. The aircraft logbook may be reviewed by the Agency before acceptance or bid award. New or overhauled engines shall have been flown for a minimum of five (5) hours before use on this project. Should a 100-hour inspection be performed on the aircraft during the course of the project, Clarke shall test fly the aircraft prior to its use and application of pesticides over congested areas. Current logbooks should be available to verify aircraft inspections. Clarke shall, prior to the start of the project, complete all flight tests and approvals required by the FAA to operate all aircraft over congested areas.

The Agency may reject any aircraft deemed not suitable for this contract. Qualifying tests of aircraft may be conducted by Clarke to assure that operational standards are met. All operational costs incurred in conducting these tests shall be borne by Clarke. All aircraft and equipment proposed for use in this project will be inspected prior to the start of the project. Clarke will provide and maintain an accurate daily flight record and furnish the Agency with a copy upon request.

4. **Spray System.** Clarke's aircraft shall be equipped with ultra-low volume (ULV) equipment capable of dispensing the approved product at the U.S.E.P.A. registered label rate per acre, and producing spray droplets in the labeled range to achieve optimum control of the adult mosquito population. Clarke shall provide the Agency a description of the spray system, including make & model, tank, pump, and nozzles, upon request.
5. **Spray System Calibration and Characterization, and Auto Flow Control.** Prior to the initial commencement of the provisions for aerial ULV applications under this contract, Clarke shall collaborate with the Agency to perform and document characterization and calibration of aircraft spray system(s). Clarke shall provide documentation of compliance with the *US EPA directive, Pesticide Registration (PR) Notice 2005-1, Notice to Manufacturers, Producers, Formulators and Registrants of Pesticide Products, Recommendation 5. Aerial Application:*

Calibration shall be monitored throughout the project with system flow meters. In addition, Clarke shall provide aircraft equipped an Auto-Flow Control system that ensures precise application of dosage rate to compensate for any ground speed changes during flight. Documentation of flow meter calibration shall be provided to the Agency upon request.

6. **Support Equipment.** Clarke must furnish all equipment necessary for the spraying project. All equipment and storage facilities are subject to inspection and approval by the Agency. Clarke shall provide a description of pesticide handling equipment, support truck(s), pumping system, and forklift equipment required to implement this project upon request.
7. **GPS Navigation System.** Clarke shall provide a Differentially Corrected Global Positioning System - Based Aircraft Tracking Guidance and Flight Path Recording System (hereafter referred to as DGPS for use by the pilot(s) operating the application aircraft(s) during spray operations that meet the following specifications.

A. Aircraft DGPS Capabilities

The Clarke aircraft DGPS must have the following capabilities:

1. DGPS with software designed for parallel offset in increments equal to the assigned swath width of the application aircraft. A course deviation indicator (CDI) or a course deviation light bar must be installed on the aircraft.
2. The DGPS being used will allow the flight log to be downloaded to an on-site (airport) independent computer for post-flight analysis and review. The flight log must differentiate between spray-on and spray-off when viewed on the computer monitor.
3. The DGPS proposed must have been used operationally in a similar type aerial application program and demonstrated success.
4. Pilot(s) proficiency or evidence of prior experience with the proposed system must be demonstrated prior to awarding of the contract.

B. Clarke equipment requirements and support for DGPS

Clarke shall provide the following:

<p>WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)</p>
--

1. All DGPS equipment, materials, computers (including additional computer other than aircraft computer for post flight analysis and review), printers, personnel, and services required for the system to be used. The guidance equipment shall be capable of accurately guiding the aircraft, while flying at application altitude, along parallel flight lines equal to the assigned swath width of the application aircraft, in blocks designated by the soliciting agency.
2. The aircraft shall be equipped with a GPS navigation system, such as AgNav, for precision mosquito control application. In addition, the aircraft shall be equipped with an onboard, in-flight weather system, such as the AIMMS-20® or AIMMS-30® to enable the measurement of real time weather data, including wind speed, wind direction, temperature and relative humidity, at the ULV application altitude.
3. The system shall be sufficiently sensitive to provide immediate deviation indications and sufficiently accurate to keep the aircraft on the desired flight path.
4. All equipment must be installed in accordance with STC or an FAA-ONE-TIME approval and FAA Form 337, by an appropriately qualified, licensed A & P mechanic/inspector.
5. Differential correction coverage for the complete operation area.
6. Post-flight processing computer and software capable of displaying track, altitude and ground speed of aircraft during flight, with differentiation between standard flight and flight when the application system is on/off. Export file format must be compatible with .shp format systems (ArcView) and must be on a mutually agreed-upon data storage medium.
7. Full 24-hour on-call equipment service and operator support.

C. DGPS technical requirements

The equipment offered must provide the following features:

1. Precision GPS tracking and guidance with pilot-selected cross-track error readout adjustable down to 3-feet.

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the Ill. Rev. Statutes)

2. Visual display monitor capable of displaying swath width over flight path. Monitor must be mounted in aircraft in a location that will allow the pilot to view the screen with direct or peripheral vision; may display in real time or be available for in-flight access immediately after application has ceased.
3. Variable swath width entry.
4. Record logging at a minimum rate of one-second intervals. Full record includes position, time, altitude, speed, track, application system on/off, aircraft number, pilot, job name or number, and differential correction status.
5. System memory capable of storing up to 8 hours of continuous flight log data.
6. Feature which alerts pilot when he/she is about to enter or exit a specific treatment block or an exclusion area within a block. A method to display exclusion areas to indicate sensitive, or no-spray areas within treatment blocks.
7. HOME navigational feature that provides instant range and bearing to home base airport.
8. MARK feature that allows return to point in any swath before or after equipment shutdown.

D. Treatment site information furnished by the Agency

1. Treatment area locations will be provided to Clarke in the following format options (listed in order of decreasing preference):
2. Polygon SHP files with metadata (ArcView) or MIF files (MapInfo) or mutually agreed upon alternate file format [perhaps Microsoft MapPoint].
3. Individual spray block corner coordinates (Lat/Lon, WGS84) within electronic files (DBF, XLS, CSV, or TXT)
4. Color image file of map with electronic mark-up of treatment areas, exclusion areas, and known hazards.
5. In the absence of electronic media, useful paper maps indicating treatment areas, exclusion zones, and hazards. Paper maps should be clear, 8.5 by 11 inches or no larger than 36 by 36 inches, and suitable for rapid processing.

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)

6. Clarke will include the cost associated with the DGPS Tracking and Guidance system in the per acre application price.

E. GPS Navigation System Requirements. All aircraft are equipped with the AG-NAV® GPS navigation system for precision mosquito control application

Aircraft GPS capabilities shall include pre-flight planning, programmable swath width, in-flight, light bar parallel swath guidance, post-flight data viewing and mapping, and output records of acres treated, and pesticide product applied for each application mission. Post mission GPS maps and reports, verifying the performance of each aircraft, acres treated and amount of product applied will be supplied within 24 hours of the mission.

F. Meteorological Onboard Weather System. Primary aircraft shall be upgraded to include the AIMMS-20® or AIMMS-30® meteorological station. The AIMMS systems provide real time meteorological data including, wind speed, wind direction, temperature and relative humidity. AIMMS enables the aircraft to receive real-time weather data at the aerial ULV application spray altitude.

G. Aerial ULV Spray Guidance System. Primary aircraft shall be equipped with the FlightMaster® aerial spray guidance system. This system links AgNav® and the AIMMS-20® or AIMMS-30® for real time optimization of aerial ULV applications. This system uses real-time weather data to calculate spray cloud position and redirection of the aircraft to ensure effective control of flying adult mosquitoes within the spray block. FlightMaster® provides the unique capability of providing flight line guidance to maximize adult mosquito mortality and minimize spray deposit in an exclusion zone.

H. Real Time Position Reporting. Aircraft shall be equipped with the EMS Sky Connect Mission Management System. This system enables one to track and text message the aircraft on a real time basis through a website. This system also includes a satellite phone to permit voice communications with the crew.

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)

The Agency shall be provided with a web login to track the aircraft at their discretion.

8. **Aircraft Communication.** Each aircraft will be required to communicate directly with other spraying aircraft, ground crew, and FAA air traffic control, as required. Each spray aircraft is required to have at least two operating 720 channel VHF aircraft communication radio on board. Bidder shall provide a description of radio equipment with this bid proposal.
9. **Response Time.** Clarke guarantees to have an aircraft Sacramento, California for immediate response for aerial ULV spray mission assignments between May 1 and October 31, 2021. A second aircraft will be available for a daily charge as specified in the Professional Services Agreement, Section IV, of this proposal.
10. **Minimum Spray Block Size and Project Acreage.** The minimum spray block size for an aerial ULV project is preferred to not less than 5,000 acres. The minimum annual and guaranteed project acreage shall not be less than 1,000,000 acres.

Irregular shapes or significant exclusion areas that significantly decrease the application efficiency will be reviewed with the Agency. Agency-proposed spray blocks are subject to the approval for feasibility by Dynamic Aviation.

III. SAFETY AND REGULATORY COMPLIANCE

- A. **Pilot Safety and Night Vision Goggles.** The pilot(s) shall determine any and all hazards and shall, if requested by the Agency, fly each zone to be sprayed prior to the first application. Pilot(s) are responsible for locating and avoiding navigation hazards such as radio towers, and high voltage power lines. The pilot in command is responsible for the safety of the aircraft, its occupants and cargo, and is responsible for the spraying only the approved spray blocks. Pilot(s) shall operate the aircraft in accordance with FAA requirements and safety regulations. Flight safety shall include, but not be limited to, flight hours logged, and rest periods. Upon request by the Agency, Clarke shall provide the pilot safety plan for review.

Since aerial applications for adult mosquito control are performed after sunset at an approximate altitude of 300 feet above ground level, the Clarke will be required to equip the pilot staff with military grade night vision goggles (NVG).

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)

As part of the pilot safety plan, Clarke shall provide a description of NVG equipment (make and model), pilot training program and certifications, NVG experience of each pilot, and compliance with CFR 14 FAR 61.31(k) regulations.

- B. **Regulatory Compliance: FAA Congested Area Plan, Pesticide Storage, Spill Containment and Pesticide Handling.** Clarke shall provide with this contract a FAA Congested Area Plan (CAP) for compliance with Federal Aviation Regulations (FAR 137.51). The plan should include the letter of authorization and public notification, as well as, anticipated map(s) of spray zone block(s). The FAA CAP process can take several weeks to obtain final approval. For an emergency situation, there is another approach in which the governmental agency can declare an emergency in a written letter. Per FAA regulations, the letter should be signed by an elected official. With the letter in-hand, aerial applications can be performed immediately, and file the FAA paperwork after the project is completed.

In addition, the Clarke shall provide a description of storage and spill containment systems and methods to comply with state and federal regulations, including The Federal Water Pollution Control Act (commonly referred to as the Clean Water Act [CWA]), Resource Conservation and Recovery Act (RCRA), and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

- C. **Regulatory Compliance: Health and Safety Plan.** Clarke shall ensure its employees observe and exercise all necessary caution and discretion so as to avoid injury to person or damage to property. Upon request, Clarke shall provide the Agency a project specific Health and Safety Plan (HASP) in accordance with Occupational Safety and Health Standard 29 CFR 1910.120, "Hazardous Waste Operations and Contingency Response." The HASP shall be designed to identify, evaluate, and control safety and health hazards, and provide for contingency response activities.

- D. **Regulatory Compliance: Clean Water Act / NPDES Permit.** Clarke shall be in full compliance with the applicable state Aquatic Pesticide National Pollution Discharge Elimination System (NPDES) Permit, including notifications, required plans, and reporting. Clarke shall either make the required filings or coordinate to ensure compliance with the Agency's permit and plan. If Clarke is not the "operator" as defined by the state NPDES, the Agency will ensure permit coverage is obtained and provide Clarke with confirmation of coverage (e.g., certificate of coverage, authorization letter, as appropriate to state) in compliance with the state deadline (usually with-in 30 days of the first application). If Clarke is not the operator, the Agency will provide Clarke a copy of their NPDES permit number and PDMP prior to service. Clarke shall provide the Agency with compliant recordkeeping as part of routine post-mission reports.

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the Ill. Rev. Statutes)

E. **Security Plan.** Clarke must abide by any current regulations issued by the FAA with regard to aircraft and insecticide safeguarding and security. The bidder shall submit with this proposal a security plan that addresses the following requirements:

1. All spray aircraft must be disabled when not in use, and only authorized personnel can start and operate the aircraft
2. All support equipment and insecticide containers must be secured when not in use.
3. All spray aircraft must be attended or guarded at all times, unless the airport is secured and gated.
4. When guard service for aircraft, insecticide, and / or equipment is required, the Clarke will provide the necessary security personnel.

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)

Clarke Environmental Mosquito Management, Inc.
2021 Aerial Contingency Mosquito Control Service Agreement
For The Sacramento-Yolo Mosquito & Vector Control District

PROFESSIONAL SERVICES AGREEMENT

- I. **Term and Termination.** This Agreement has an automatic **Renewal Clause**. The term of the Agreement shall commence on the date when both parties have executed this Agreement and shall continue for a period ending on December 31, 2021 (the "Initial Term"). Unless either party hereto provides the other party with written notice at least Ninety (90) days prior to the end of the Initial Term or any subsequent renewal term, this Agreement shall automatically continue to renew for additional term, each term having duration equal to the Initial Agreement. If a party hereto fails to comply with a provision of this Agreement, then the other party shall have the right to terminate this Agreement if it gives written notice of the default to the defaulting party and the defaulting party fails to cure the default within sixty days of receipt of said notice.
- II. **Price Increases.** The price for the services rendered hereunder may be increased by Clarke Environmental Mosquito Management, Inc. ("Clarke") on the first day of any calendar year commencing on January 1, 2022 (a "Price Increase Date") by a percentage which shall not exceed a 5% increase (the "Price Increase Percentage") over the preceding contract calendar year period. Clarke Environmental Mosquito Management, Inc. may petition the Agency at any time for an additional rate adjustment on the basis of extraordinary and unusual changes in the cost of operations that could not be reasonably foreseen by a prudent operator.
- III. **Adult Mosquito Control Product.** It is understood that adult mosquito control products for this aerial ULV contract shall be supplied by the Agency.
- IV. **Program Payment Plan, Commitments and Conditions.** The following chart summarizes our price proposal and commitments with associated special notes and conditions:

Item No.	Parameter	Commitment	\$ Price
1	Core Acreage	Guaranteed core contract of 1 million acres	
2	Price	Core contract value of 1 million acres @ \$0.80 per acre	\$800,000
3	Price	Payments in calendar year 2021 to equal \$800,000. For example \$66,666.66 per month.	\$66,666.66 / month
4	Price	Price per acre for application of SYMVCD-supplied products, and price per acre beyond the 1 million core acreage\$0.80	\$0.80
5	Participating MVCDs	Sac-Yolo, San Joaquin, Turlock and Placer	

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)

Item No.	Parameter	Commitment	\$ Price
6	Aircraft #1	Maximum operational period for aerial ULV spraying May 1 – October 31, 2021	
7	Aircraft #2	Incremental charge of \$1,295 per day for a 30 day minimum requirement for each day the second aircraft is reserved for this contract. The incremental daily cost of NOTE: The second aircraft price (\$1,295 per day) is in addition to the ULV application price of \$0.80 per acre.	\$38,850 for a 30 day period
8	Aerial Products & Dosage Rates	Dibrom @ 0.61 fl. oz./ acre; Pyronyl 525 @ 0.80 and Merus 3.0 @ 0.88	
9	Spray System	Two 100 gallon tanks onboard each aircraft with capability of spraying two products on the same sortie	
10	Spray Window	Spray-on @ 30 minutes after local sunset time until spray-off @ 10:30 pm to coincide with peak mosquito activity period of target species	
11	Spray swath	1,000 feet	
12	Spray Altitude	300 feet as the primary application altitude over congested areas, and consideration of 200 – 250 over non-congested areas to penetrate inversion layer	
13	Night Vision Goggles	Both Captain and First Officer wear military grade NVGs during aerial ULV missions	
14	Dump Exemption	Per FAA approval, with one engine out, aircraft have sufficient power to be exempt from dumping its chemical load.	
15	Spray Block Design	Irregular shapes or significant exclusion areas that significantly decrease the application efficiency will be reviewed with the Agency. Agency-proposed spray blocks are subject to the approval for feasibility by Dynamic Aviation.	
16	Base of Operation	McClellan Airport, Sacramento, CA	
17	Price Adjustments	During the contract period, if the Agency requests a change in the insecticide dosage rate per acre, a contract amendment for a price change may be required. This agreement will establish a revised price per acre based on the increase application costs.	
Special Notes and Conditions			
A	Contract	Dynamic Aviation will not begin any engineering, installation or work of any type until an Agreement for Services or Purchase Order has been received correctly incorporating the rates and terms contained within our proposal.	
B	Journeyman Pilot	Pricing is contingent upon Dynamic Aviation being able to employ a fully qualified journeyman pilot prior to April 1, 2021	
C	Pilot CA DPR Pesticide Licensing	Pricing is contingent upon Dynamic Aviation's pilots being able to schedule and take the required examinations prior to April 15, 2021.	

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the II. Rev. Statutes)

V. Payment Terms.

Payment terms for monthly, daily aircraft, or additional charges for acres sprayed beyond the core of 1 million acres are net 30 days after the issuance of invoices.

VI. EPA National Pollutant Discharge Elimination System (NPDES) Permit assistance and compliance:

****NPDES Permit:** A National Pollutant Discharge Elimination System (NPDES) permit is necessary for the execution of the work for mosquito control effective October 31, 2011. Any additional costs associated with activities and/or services that may be required by Clarke in order to comply with an NPDES permit are not included in this proposal.

For: Sacramento-Yolo Mosquito & Vector Control District.

Title Date: _____

For: Clarke Environmental Mosquito Management, Inc.



Mike Muldoon Director Domestic Sales Date: 1/26/2021
Title

WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the Ill. Rev. Statutes)

**Clarke Environmental Mosquito Management, Inc.
2021 Aerial Contingency Mosquito Control Service Agreement
For The Sacramento-Yolo Mosquito & Vector Control District.**

VI. ADMINISTRATIVE INFORMATION:

Invoices should be sent to:

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Office Phone: _____ Fax: _____ E-Mail: _____
Purchase Order Number: _____

Contact Person for Sacramento-Yolo Mosquito & Vector Control District:

Name: _____ Title: _____
Office Phone: _____ Fax: _____ E-Mail: _____
Home Phone: _____ Cell: _____ Pager: _____

Alternate Contact Person for Sacramento-Yolo Mosquito & Vector Control District:

Name: _____ Title: _____
Office Phone: _____ Fax: _____ E-Mail: _____
Home Phone: _____ Cell: _____ Pager: _____

Please sign, fax, and mail a copy of the complete contract for our files to:

Clarke Environmental Mosquito Management, Inc.
Attn: Mike Muldoon
675 Sidwell Court
Saint Charles, IL 60174

PH) 800-323-5727

Fax) 630-443-3070

www.clarke.com

<p>WARNING: This document is the property of Clarke Environmental Mosquito Management, Inc. Any unauthorized use of this property will be prosecuted as a theft of labor, services, or property. (Chapter 38, §16-1 and §16-3 of the IL. Rev. Statutes)</p>
--

This page intentionally left blank