BOARD OF TRUSTEES MEETING

Tuesday, March 19, 2019
1:00 P.M.

All proceedings before the Board of Trustees are conducted in English. The District does not furnish interpreters and, if one is needed, it shall be the responsibility of the person needing one. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in the meetings of the District, please contact the Manager at (209) 982-4675 at least 48 hours prior to the meeting to enable the District to make reasonable arrangements to ensure accessibility.

1. CALL TO ORDER; ROLL CALL

2. PUBLIC COMMENT PERIOD – This time is reserved for members of the public to address the Board of Trustees relative to matters within the jurisdiction of the San Joaquin County Mosquito & Vector Control District. No action may be taken on non-agenda items unless authorized by law. Speakers should hold comments on items listed as a Public Hearing until the Hearing is opened. Comments will be limited to five minutes per person.

3. CONSENT CALENDER

   a. Minutes of the February 19, 2019 regular meeting of the Board of Trustees
   b. Expenditure and financial reports for February 2019
   c. District activities report for February 2019
   d. Public Information and Outreach Month End report for February 2019
   e. Manager’s report
   f. Correspondence

4. REVIEW / DISCUSSION / ACTION TO ACCEPT THE 2018 DISTRICT ANNUAL REPORT

5. REPORT OF ATTENDANCE AT THE AMERICAN MOSQUITO CONTROL ASSOCIATION (AMCA) ANNUAL CONFERENCE HELD FEBRUARY 25 – MARCH 1, 2019

6. REQUEST FOR AUTHORIZATION TO DISPOSE OF SURPLUS DISTRICT EQUIPMENT
7. REQUEST FOR AUTHORIZATION TO DEVELOP AN ELIGIBILITY LIST FOR THE POSITION OF MOSQUITO CONTROL TECHNICIAN II AND TO FILL THE VACANT POSITION OF FISH HATCHERY TECHNICIAN I

8. UPDATE ON STATUS OF STOCKTON OFFICE LOBBY AND MEN'S LOCKER / RESTROOM REMODEL PROJECT

9. COMMUNICATION FROM SAN JOAQUIN MOSQUITO EMPLOYEES ASSOCIATION (SJMEA) REGARDING MEETING AND CONFERING WITH DISTRICT TO BARGAIN FOR A SUBSEQUENT AGREEMENT

10. COMMENTS FROM TRUSTEES AND STAFF ON NON-AGENDA ITEMS

11. OTHER BUSINESS; ANNOUNCEMENT OF FUTURE BOARD AND COMMITTEE MEETINGS

   • The next regular meeting of the Board of Trustees will be 1:00 p.m. Tuesday, April 16, 2019

12. ADJOURN
Board Meeting Information

To: Board of Trustees
From: Eddie Lucchesi, Manager
CC: Chris Eley, Legal Counsel
Date: 3/13/2019
Re: March 2019 BOT Meeting, Agenda Item 3

3. CONSENT CALENDER

a. Draft minutes of the February 19, 2019 regular meeting of the Board of Trustees
b. Expenditure and Financial reports for February 2019
c. District activities report for February 2019
d. Public Information & Outreach report for February 2019
e. Manager’s report
f. Correspondence

The Consent Calendar consists of items that require approval or acceptance but are self-explanatory and generally require no discussion. If the Board would like to discuss any item listed, it may be pulled from the Consent Calendar and discussed separately.

If there are no items that the Board would like to discuss separately, it is recommended that the Board of Trustees approve the Consent Calendar as presented.

Attachments
1. Call to Order
The regular meeting of the Board of Trustees of the San Joaquin County Mosquito and Vector Control District was held Tuesday, February 19, 2019, at the District’s Stockton office. President Khweiss called the meeting to order at 1:00 p.m.

Trustees Present:                      Staff Members Present:
Gary Haskin                               Eddie Lucchesi, Manager
Gary Lambdin                              John Fritz, Assistant Manager
Jay Colombini                             Jamie Tuggle, Secretary
Francis Groen                             Emily Nicholas, Administrative Assistant
Jack Fiori                                
Mike Manna                                
Omar Khweiss                               
Greg Selna                                 
Glenn Page                                 
Marc Warmerdam (Arrived at 1:07 p.m.)

Trustees Absent:                       Legal Advisor: Chris Eley, Attorney at Law
Greg O’Leary                             

Other: None

2. Public Comment Period
There was no public comment

3. Consent Calendar
   a. Minutes of January 15, 2019 regular meeting of the Board of Trustees
   d. Manager’s report
   e. Correspondence

Manager Lucchesi added to the correspondence a letter received this morning from the City of Ripon stating that Trustee Groen was reappointed for another
term. Following review and discussion of the Consent Calendar, it was moved by Trustee Fiori, seconded by Trustee Page, to approve the Consent Calendar as presented; motion passed unanimously.

4. 2018 Annual Statements of Economic Interest Filings (FPPC FORM 700: District Policy 1020).

Manager Lucchesi and Legal Counsel Eley reviewed with the Board the 2018 Annual Statements of Economic Interests. Following discussion, Trustees Groen, Khweiss, Page, Colombini, Selna, Manna, Warmerdam, Haskin, Fiori, and Lambdin, Legal Counsel Eley, and Manager Lucchesi signed and submitted Form 700 for CY 2018. Trustee O’Leary, will be presented the forms at the next regular Board meeting.

5. Resolution 18/19-05 (DRAFT) of the Board of Trustees directing the preparation of the engineer’s report for the Mosquito, Vector, and disease control benefit assessment for fiscal year 2019-2020.

Manager Lucchesi introduced a draft resolution directing the preparation of the engineer’s report for the Mosquito, Vector, and Disease Benefit Assessment for fiscal year 2019-20. Following review and discussion, it was moved by Trustee Lambdin, seconded by Trustee Groen, to approve resolution 18/19-05 as presented; the motion was unanimously approved.

6. Update on status of Stockton office lobby and men’s locker/restroom remodel project,

Manager Lucchesi reviewed with the Board the progress on the remodel project. He informed the Board that design and associated construction drawings for the remodel project were completed and were provided to the County’s Community Development Department for review. As part of the County’s Building Permit application process, the District took action to seek review and paid the associated fees to the required agencies. In addition, the District signed a “Special Inspection and Testing Agreement” with Kleinfelder for any future inspection that may be required during the construction period as required by the County. He informed the Board that on February 22, 2019, LDA Partners will present a proposed bid package for staff review. Once finalized, the District will advertise a notice of request for bidders through the local builder’s exchange. Mr. Lucchesi presented a proposed time-line that illustrates the steps the District will follow in the process to award the bid to a general contractor.
7. Executive Committee Report.

President Khweiss informed the Board that the Executive Committee met to review and discuss the Managers performance evaluation for the 2018 calendar year. There was no reportable action taken. Following his report, President Khweiss directed the Board into closed session.

8. CLOSED SESSION (Pursuant to CGC §54957)

A. Public Employee Performance Evaluation (§54957)
   Title: Manager

Prior to convening to closed session, President Khweiss announced the reason for the closed session. The Board convened to closed session at 1:11 p.m. and reconvened to open session at 1:42 p.m.

REPORT OF CLOSED SESSION:

President Khweiss called upon Legal Counsel Eley to provide a report of the closed session. Legal Counsel Eley reported that the Board of Trustees had met in closed session to discuss the performance evaluation of the Manager. The Board stated the Manager has done an outstanding job and it was motioned by Trustee Groen and seconded by Trustee Lambdin to award a salary increase of 5%; the motion passed unanimously. There was another motion by Trustee Selna and seconded by Trustee Fiori to approve the Manager Evaluation report; the motion passed unanimously. The Board also discussed a new ranking system for the position of Manager, and would like it to be added to the agenda for the Policy Committee to discuss.

9. Other Business; Announcement of future Board and Committee meetings.
   - The next regular meeting of the Board of Trustees will be 1:00pm Tuesday, March 19, 2019.

10. Adjournment

There being no further business, it was moved by Trustee Warmerdam, seconded by Trustee Groen to adjourn the meeting at 1:46 p.m.; the motion passed unanimously.
MR. GREG SELNA, BOARD SECRETARY

MR. EDDIE LUCCHESI, MANAGER
### San Joaquin County Mosquito & Vector Control District

**Budget and Actual Comparison**  
**FY 2018-19, 75% Completed**  
**July 2018 through February 2019**

<table>
<thead>
<tr>
<th></th>
<th>Jul '18 - Feb 19</th>
<th>Budget</th>
<th>% of Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Revenues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. Revenues</td>
<td>$394,075.17</td>
<td>$590,227.00</td>
<td>66.77%</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>2,917,531.77</td>
<td>5,191,821.00</td>
<td>56.2%</td>
</tr>
<tr>
<td>Interest Income</td>
<td>116,222.94</td>
<td>172,555.00</td>
<td>67.35%</td>
</tr>
<tr>
<td>Intergovernmental Revenues</td>
<td>54,596.69</td>
<td>116,639.00</td>
<td>46.81%</td>
</tr>
<tr>
<td>Charges for Services</td>
<td>1,667,904.98</td>
<td>3,138,637.00</td>
<td>53.14%</td>
</tr>
<tr>
<td><strong>Total General Revenues</strong></td>
<td>5,150,331.55</td>
<td>9,209,879.00</td>
<td>55.92%</td>
</tr>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>1,613,926.68</td>
<td>2,761,683.00</td>
<td>58.44%</td>
</tr>
<tr>
<td>Benefits</td>
<td>1,594,403.61</td>
<td>2,592,081.00</td>
<td>61.51%</td>
</tr>
<tr>
<td>General Services and Supplies</td>
<td>1,851,016.02</td>
<td>2,982,660.00</td>
<td>62.06%</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>5,059,346.31</td>
<td>8,336,424.00</td>
<td>60.69%</td>
</tr>
<tr>
<td><strong>Other Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Charges</td>
<td>1,008.84</td>
<td>37,550.00</td>
<td>2.69%</td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>69,432.51</td>
<td>825,000.00</td>
<td>8.42%</td>
</tr>
<tr>
<td><strong>Total Other Expenditures</strong></td>
<td>70,441.35</td>
<td>862,550.00</td>
<td>8.17%</td>
</tr>
<tr>
<td><strong>Net Change Surplus (Deficits)</strong></td>
<td>$20,543.89</td>
<td>$10,905.00</td>
<td></td>
</tr>
<tr>
<td>Vendor</td>
<td>Feb 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACE Hardware</td>
<td>$ 44.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACME Saw N Industrial Supply</td>
<td>239.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airgas</td>
<td>164.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon Marketplace</td>
<td>395.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>679.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B&amp;H Photo</td>
<td>432.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big W Sales</td>
<td>425.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bills Mower and Saw</td>
<td>26.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C &amp; R Fence Contractors, Inc.</td>
<td>1,408.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CalPERS</td>
<td>53,771.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Rubber Co., Ltd.</td>
<td>92.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caribe Royale Resort</td>
<td>2,462.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chevron and Texaco Card Services</td>
<td>743.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cintas (G&amp;K Services)</td>
<td>1,482.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Lodi</td>
<td>4,255.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Stockton</td>
<td>226.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clutch &amp; Brake Xchange Inc.</td>
<td>151.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative Outdoor Environments, Inc.</td>
<td>820.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D&amp;J Rosa Welding Service</td>
<td>385.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>De La Vega, Sumiko (conference, travel reimbursement)</td>
<td>91.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta Dental</td>
<td>5,020.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta Sound &amp; Telephone</td>
<td>90.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devencenzi, P Aaron (conference, travel reimbursement)</td>
<td>119.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eley, Christopher K</td>
<td>1,072.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Google Service Apps</td>
<td>66.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grainger</td>
<td>254.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harbor Freight Tools</td>
<td>9.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huang, Shaoming (conference, travel reimbursement)</td>
<td>102.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyatt Hotels (conference)</td>
<td>1,584.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iland Internet Solutions</td>
<td>402.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imperial Building Maintenance</td>
<td>430.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC Truck</td>
<td>331.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference, meals</td>
<td>357.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference, toll</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motion Industries</td>
<td>23.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nestle Pure Life Direct, Nestle Water</td>
<td>214.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Depot</td>
<td>142.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Gas &amp; Electric Co.</td>
<td>3,298.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raley's</td>
<td>26.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ray Morgan Company</td>
<td>88.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Joaquin County ISD</td>
<td>1,302.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Joaquin County Treasurer</td>
<td>1,616.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Joaquin Magazine</td>
<td>550.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCI Consulting Group</td>
<td>12,400.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Awareness Day</td>
<td>250.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart&amp;Final</td>
<td>217.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Star Milling Co.</td>
<td>1,711.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stericycle Inc.</td>
<td>204.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockton Auto Parts</td>
<td>138.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockton Filter Supply Co., Inc.</td>
<td>109.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockton Scavengers Association, Inc</td>
<td>241.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Home Depot CRC/GECF</td>
<td>56.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIAA Bank</td>
<td>280.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tom Hillier Ford</td>
<td>190.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor</td>
<td>Feb 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uber (conference, local transportation)</td>
<td>43.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unum Life Insurance</td>
<td>2,894.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Health Works Medical Group</td>
<td>144.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utility Telecom</td>
<td>439.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verizon Wireless</td>
<td>233.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision Service Plan CA</td>
<td>727.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilbur-Ellis</td>
<td>1,810.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 107,502.19</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Work Completed:

CONTINUATION OF SWIMMING POOL INSPECTIONS

District staff began visiting pools that were identified as empty in last summer's aerial pool flyover. Pools have already been found to be breeding mosquitoes this year even with the below average temperatures we are currently seeing.

GENERAL FIELD ACTIVITIES

February delivered above average rainfall in the valley and heavy snow in the mountains this year. River levels have increased significantly and we are already seeing river seepage along the Stanislaus, Mokelumne and San Joaquin Rivers due to high flows. District staff continues to monitor the seepage for mosquito breeding and time will tell how long these elevated flows will continue and to what extent the flooding will ultimately be. Preparations are being made to see a much more active spring this year as compared to last year. Technicians completed treehole applications in February as well as continued to work on source reduction projects as weather permitted. As needed, technicians assisted the shop in cleaning vehicles/spray equipment and participated in yard maintenance activities at both facilities.

Training

Mandatory safety training for employees continued in February and will continue into April to ensure that we meet and exceed all training requirements required by the Department of Pesticide Regulation, OSHA, County Environmental Health and the Districts General Safety Program. March training will include drivers education and pesticide label review.
TOTAL TREATMENT WORK CONDUCTED DURING THE MONTH OF FEBRUARY

GROUND WORK  AERIAL WORK

3 Acs Larvicided  0 Acs Larvicided
0 Acs Adulticided  0 Acs Adulticided
10 Acs Herbicided

SERVICE REQUESTS

15 Mosquitoes  15 Fish Requests
37 Neglected Pools

WORK SCHEDULED FOR MARCH

- CONTINUE TO INSPECT NEGLECTED SWIMMING POOLS.

- BEGIN LIMITED ZONE INSPECTIONS.

- BEGIN CEMETERY URN TREATMENTS.

- CONTINUE TECHNICIAN TRAINING REQUIREMENTS.

- FINALIZE BRUSH REMOval FOR SOURCE REDUCTION AND ACCESS.

- CONTINUE EQUIPMENT MAINTENANCE AND CALIBRATION.

3/12/2019 ACTIVITY.REP
PUBLIC INFORMATION & OUTREACH MONTH END REPORT
For month ending February, 2019

To: Ed Lucchesi, Manager
From: Aaron Devencenzi, PIO

Monthly Activities

- **District Communication:** I completed the first draft of the 2018 Annual Report and submitted the report for review. I also posted the District’s agenda, board packet and minutes to the website.

- **Advertisement:** I updated a half-page ad, as well as a “District Profile” for the March issue of San Joaquin Magazine. I also interviewed with a reporter for a full-page article about the District to run in the April issue. The final article was reviewed by the District.

- **Events:** The District sent an application and sponsorship to the organizers of San Joaquin Senior Awareness Day to be held May 22, 2019.

- **Website statistics:** For February there were 4,083 visitors to the website averaging 145 visitors per day.

- **Education:** We provided four presentations to six classes in Manteca. We applied to Tracy Unified School District and received approval to give presentation to 5th and 6th grade classes. Fifty-two letters were sent to Tracy schools.

- **Social media, newspaper digital:** The Record continued to run an ad encouraging “Mosquito prevention on your property” through our Facebook page. An information post to FB regarding “Mosquito Hibernation” was posted on February 20th, 2019. The post reached 118 people with 53 engagements. The Facebook site has 135 followers.

- **Safety:** I provided a safety training make-up day for several employees who missed the first safety meeting. I also helped setup and attended the forklift safety training.

- **Other:** I attended the MVCAC conference. I began working with video software to produce the District’s first informational video. The video focuses on mosquito surveillance. The final product will be placed on YouTube and Facebook.
Continued work on the Stockton office lobby and men's locker / restroom remodel project. Legal Counsel Eley reviewed the bid package prepared by LDA partners, and I worked with the Vector Control Joint Powers Association (VCJPA), the District's pooled insurance group, who reviewed the package and identified insurance requirements for the contractors to maintain. Once reviewed and completed, the bid package was submitted to the Builders’ Exchange of Stockton for posting. The Bids will be reviewed by staff and the District's Legal Counsel in preparation for review by the Board at the April BOT regular meeting. This item will be covered in more detail during the meeting. (Item # 8)

Emily Nicholas and I attended the 31st Annual Vector Control Joint Powers Authority (VCJPA) Workshop and Board meeting, in Santa Cruz, CA. The VCJPA Workshop was held on March 7th, followed by the VCJPA Board meeting on March 8th. Formerly administered by Bickmore and Associates, the company has sold to York Risk Services. York maintains the existing staff, so the transition has been relatively seamless. The Workshop covered our self-insurance program that includes, but not limited to, pooled General Liability, Safety and Loss Control, Pooled Workers’ Compensation and our pooled Auto Physical Damage Program. Additional optional coverages were reviewed and now offered that include Unmanned Aircraft coverage (Drones), Cyber Security coverage, and Deadly Weapon Response coverage. The last coverage provides financial protection for “active shooter” risks. In addition, we reviewed the VCJPA investment portfolio and the current investment policy. We also received a legal update from the VCJPA legal counsel Mr. Dick Shanahan. He reviewed several State and Federal laws that could affect the District both as an employer and operationally. Highlights include the State response to the Janus Bill that ruled agency shop rules as unconstitutional. California responds with AB 119 and SB 846 & 866. These bills essentially state the employer cannot deter union membership and that any employee request to cancel union membership must be communicated through the union. The other being the “#MeToo Movement”, most importantly SB 1343, effective January 1, 2020, which expands sexual harassment prevention training requirements for employers, whereby training is mandatory for non-supervisory employees, including seasonal / temporary employees, to one hour every two years. Operationally, the EPA and Army Corps of Engineers proposes to rescind the 2015 definition of the “Waters of the U.S.” to the more reasonable language prior to 2015. However, the State may intervene to maintain the current definition by using the State Wetlands Policy to strengthen protection of waters of the State that are no longer protected under the Federal Clean Water Act. Stay Tuned.

I participated in the annual “Spray Safe” meeting held at the San Joaquin county Ag Commissioner’s office on February 26, 2019. I was requested to provide a presentation on the District's approach to our spraying procedures in both public and private settings. The presentation included our public notice for large scale aerial applications and localized ground applications in designated neighborhoods, contact with city and County administrators, and the notification to private landowners. In addition, the “behind the scenes” preparation to spraying, that includes calibration of all our spray equipment, selecting appropriate mosquito control material, timing of treatment, and assessing human, traffic, and domestic animal, and wild life activity. Other topics included an update from the Department of Pesticide Regulation, Climatology, Changes in the Laws and Regulations, Protecting Water Quality, and Bee Protection. Attached is the agenda for the event.
Ed Luchenbill, San Joaquin Vector Control and Land Risk, City of Tracy

Ed is concerned that San Joaquin County is facing severe water quality issues. The region has experienced a significant decline in water quality, and the issue is likely to affect agriculture. Ed emphasizes the importance of understanding the water quality data and making informed decisions to protect the water resources.

Office
Jessie Fowler, San Joaquin County Agricultural Commissioners

Jessie will discuss recent updates on the Office of Agriculture, including recent regulations and new initiatives. She will also provide a general update on the Office's activities and focus areas.

Laws and Regulations Update
Mike Lawson, Dyer

Mike will present an overview of recent law changes and new regulations. He will provide an in-depth analysis of the latest laws and regulations that impact agriculture, including pesticide management and application practices.

Renee Fenske (Session Moderator), Spray Safe of San Joaquin

Renee will provide an introduction to the day's topics and set the stage for the discussions. She will briefly outline the importance of pesticide safety and emphasize the need for collaboration between all stakeholders.

Introduction

Spray Safe Session

8:00 am - 8:15 am

Spray Safe Registration - 7:30 am - 8:00 am

CE Code: M-429-15; 2.5 Hr Law; 1 Hr Other

Robert J. Casals Agricultural Center

February 26, 2019
San Joaquin County

A farm to food experience to you

WWW.WESTERNX.COM/MAP/MOD/MOD
WWW.WESTERNX.COM/MAP/MOD/MOD
WWW.WESTERNX.COM/LMW

San Joaquin County Agricultural Commissioners

Agriculture Commissioner (AFC) Update
Regulation (DPR) Update

Teresa Maris, Acting Director, DPR

Teresa will discuss the current state of pesticide regulation, including recent updates and changes. She will also provide an overview of the DPR's role in ensuring compliance with pesticide laws and regulations.

Understanding the Weather—How all aspects of the Weather affect various application methods and pesticide formulations.

Dan Gudgel, Retired Meteorologist for NWS/NOAA

Dan will provide a detailed analysis of recent weather patterns and conditions. He will explain how weather conditions affect pesticide application and the importance of understanding these factors for effective pesticide management.
Does the applicator know that you want him/her to stop if something goes wrong?

Is there direct communication with the ground applicator or the pilot so that an application can be stopped or altered immediately if necessary?

Communicate with Your Applicator.

This mechanism visible to ground or aerial applicators? Are there wind patterns associated with a certain time of day? Do you have a mechanism to monitor wind changes or the lack of wind?

Check Wind Patterns and Weather Conditions.

When is ready? When field positioning or movement is required, make certain is done prior to the start of the application.

Has the ground preparation been done correctly to ensure that the soil is ready? Has the ground preparation been done correctly to ensure that the soil is ready?

Prepare Fields Properly.

Has the ground preparation been done correctly to ensure that the soil is ready? Have you prepared the field properly prior to the application?

Inform Your Workers.

Has your work crew or labor contractor been informed about activities taking place in your field or in surrounding fields? Do they know they should stop work and leave the premises if there is a possibility of exposure to pesticides or unsafe conditions?

Has your work crew or labor contractor been informed about activities taking place in your field or in surrounding fields? Do they know the names and phone numbers of neighboring farmers and/or their foremen?

Talk to Your Neighbors.

Are you informed with your neighboring farmers about upcoming pesticide application? Do you have the names, addresses and phone numbers of neighbors nearby?

Watch for Crop, Crops, Pedestrians and Others.

Have you communicated effectively with your PCA, applicators and neighboring farmers? Are you aware of5 crops produced in the surrounding area?

Have you noticed any unusual activity or unexplained movements during an application? If so, do you report it to the nearest police or law enforcement agency?

Think About the Consequences.

Will a pesticide application cause a negative impact on your company's reputation?

Have you thought about the consequences of a disaster under the present conditions? Will you expose people or make them ill? Will you stop an application before a potential disaster occurs?
Board Meeting Information

To: Board of Trustees
From: Eddie Lucchesi, Manager
CC: Chris Eley, Legal Counsel
Date: 3/12/2019
Re: March 2019 BOT Meeting, Agenda Item 3f

3f. Correspondence Information

1. Letter from City of Ripon notifying District of the Re-appointment of Trustee Francis Groen

2. Letter from District to Assembly Member Bill Quirk in support of his Assembly Bill AB 320 – CalSurv Gateway.

3. Letter from District to Senator Dianne Feinstein requesting her consideration and support for three (3) proposals to be funded in the appropriations process.

Attachments
February 19, 2019

Eddie Lucchesi, Manager
SJC Mosquito & Vector Control District
7759 South Airport Way
Stockton, CA 95206

Re: The reappointment of Mr. Francis Groen as the City of Ripon’s Trustee to the Board of the San Joaquin County Mosquito and Vector Control District

Dear Eddie,

Thank you for notifying us that Mr. Francis Groen’s term as a Trustee to the Board is coming to an end with the SJC Mosquito & Vector Control District.

I reached out to Mr. Groen who agreed to continue as the representative for the City of Ripon and on Tuesday, February 12, 2019, the City Council approved his reappointment.

If you should have any questions, please feel free to contact me.

Thank you,

Lisa Roos
City Clerk
City of Ripon
March 4, 2019

The Honorable Bill Quirk
Chair, Assembly Environmental Safety and Toxic Materials Committee
State Capitol, Room 2163
Sacramento, CA 95814

RE: AB 320 (Quirk) – Support

Dear Chairman Quirk:

On behalf of the San Joaquin County Mosquito and Vector Control District, I write to express our support for your AB 320 (Quirk). AB 320 would establish the California Surveillance Gateway (CalSurv Gateway) in state statute and codify existing operations. The CalSurv Gateway provides centralized data collection, analysis, and storage related to the presence of mosquitoes and mosquito-borne diseases throughout the state. It is currently managed by the Center for Vectorborne Diseases at the University of California at Davis. AB 320 is sponsored by the Mosquito Vector Control Association of California, of which our District is a member. As such, our agency supports this important bill.

Currently, the San Joaquin County Mosquito and Vector Control District utilizes CalSurv Gateway to record and provide data on mosquito collection numbers and the associated geographic sites, mosquito-borne virus surveillance results from the testing of mosquitoes and recovered dead birds, and information on the District’s West Nile virus vector index and minimum infection rates of collected mosquitoes. In addition, we plan on using the Gateway system for future pesticide resistance testing that will aid the District in planning control treatments in specific geographic locations.

It is in the interest of the state’s public health to acknowledge the enhanced surveillance tools currently available via the CalSurv Gateway that track vector hot spots. These systems can predict and model where invasive species are likely to emerge and provide real-time data to facilitate efficient responses to mosquito and disease activity. It is time for the state to recognize the CalSurv Gateway as a vital resource for the protection of public health. For these reasons, we support AB 320.

Sincerely,

Eddie Lucchesi
Manager

CC: Nathan Little, Office of Assemblyman Bill Quirk
    Vanessa Cajina, Legislative Advocate, KP Public Affairs
The Honorable Dianne Feinstein  
U.S. Senate  
Washington, DC 20515

Re: Fiscal Year (FY) 2020 Appropriations Requests

Dear Senator Feinstein,

I am writing on behalf of the San Joaquin County Mosquito and Vector Control District, a member of the American Mosquito Control Association (AMCA), a not-for-profit professional association of approximately 1700 public health officials, academicians, county trustee/commissioners and mosquito control professionals dedicated to providing leadership, information and education leading to the enhancement of health and quality of life through the suppression of mosquito and other vector transmitted diseases and the reduction of population levels of mosquitoes and other vectors and pests to promote the public welfare.

Because of the vital work needed to control mosquitoes and other vectors, we request your consideration and support for inclusion of the following programs in the FY 2020 appropriations:

1. **Centers for Disease Control (CDC) - Division of Vector-Borne Diseases (DVBD)** - For the protection of public health through the suppression of mosquito and other vector transmitted diseases, $90,000,000 is requested. A sustainable nationwide capacity for the control of mosquito vectors is critical in our nation. Therefore, additional resources are needed to support existing state, county, district or municipal mosquito control programs in their operations, innovation and discovery of diagnostic tools, identification of new and emerging vectors and diseases, and research and development to foster new vector control technologies and laboratory building to support arbovirus-related programs and activities.

   Toward this end, it is requested that half of the increased funding be directed for building vector control capacity and half for innovation and discovery. The Committee should also provide direction to the CDC that the majority of increase would go to states and territories through the ELC mechanism to fund vector control efforts on a local level. In addition, the CDC American Mosquito Control Association’s Train the Trainers agreement has proved effective and should be continued, and well as the Vector Control Regional Centers of Excellence, which should be extended. Finally, funding is requested in support of programs for mosquito-borne and other vector-borne disease surveillance and control as designated under the Mosquito Abatement for Safety and Health Programs (SMASH Act). (Labor/HHS)

2. **SMASH Act - Centers for Disease Control (CDC) Division of Vector-Borne Diseases (DVBD)** - Funding of $130,000,000 is requested in support of programs for mosquito-borne and other vector-borne disease surveillance and control, including programs to address emerging infectious mosquito-borne diseases at the local and regional level, as reflected in the reauthorization of the Mosquito Abatement for Safety and Health Program through the Strengthening Mosquito Abatement Safety Health Act (SMASH Act).

   The national capacity to control mosquito-borne disease at present and in the future will largely depend to the extent to which our public health infrastructure is appropriately funded. Resources for prevention and control programs must be made available - and - employed so that future imported cases of exotic diseases can be contained and eliminated before their
establishment and spread. As such, funding is requested to address such current and emerging critical threats to the protection of public health. (Labor/ HHS)

3. IR-4 Public Health Pesticide Program (PHP) - Renewed funding is requested of $300,000 to ensure adequate resources to maintain public health and welfare. The IR-4 PHP has provided publicly funded assistance for vector control, including regulatory and other support needed for bringing new tools to market, expansion of allowed use patterns, protection of existing tools from regulatory or challenges. The most current funding cycle expired FY 2016 of $250,000 and must be renewed and sustained to meet vital public health challenges. (Agriculture)

Given the federal commitment to ensuring the public health of Americans, we believe these small preventative investments are vastly preferable to the enormous health care costs required after large mosquito-borne disease outbreaks. Establishing sustainable training research and suppression programs for vector-borne disease surveillance and control will ensure a robust capacity to mitigate the impacts of not only the current Zika threat but also dangerous exotic viruses yet to reach our shores.

Thank you for considering these critical proposals and we urge their inclusion in the pending appropriations process.

Sincerely,

Eddie Lucchesi,
Manager
San Joaquin County Mosquito and Vector Control District
Board Meeting Information

To: Board of Trustees
From: Eddie Lucchesi, Manager
CC: Chris Eley, Legal Counsel
Date: 3/13/2019
Re: March 2019 BOT Meeting, Agenda Item 4

4. REVIEW / DISCUSSION / ACTION TO ACCEPT THE 2018 DISTRICT ANNUAL REPORT

Attached is a copy of the District’s 2018 Annual Report. The report summarizes administrative, operational, and technical aspects of the District’s mission and services.

Following review and acceptance by the BOT, staff will make the report available on the District’s website and distribute electronic copies of the report to the following entities:

1. City of Escalon
2. City of Lathrop
3. City of Lodi
4. City of Manteca
5. City of Ripon
6. City of Stockton
7. City of Tracy
8. San Joaquin County Board of Supervisors
9. SJC Agricultural Commissioner
10. SJC Public Health Services
11. SJC Environmental Health Department
12. SJC Grand Jury
13. Local Legislatures

This item requires Board action.

Attachment
The District’s Board of Trustees meets on the third Tuesday of each month at 1:00 p.m. at the District’s office:

7759 S. Airport Way Stockton, CA 95206

(209) 982-4675 or 1-800-300-4675
Forward

On behalf of the Board of Trustees and staff of the San Joaquin County Mosquito and Vector Control District (District), I am pleased to submit the 2018 Operational and Fiscal Year Report. This report includes information on District administration and operations during the past year.

Financially, the District experienced approximately 5% increase in revenues from that of 2017, primarily due to an increase in property taxes and an increase in property assessments due to commercial and residential real estate development. In addition, the District receives revenue from the Mosquito, Vector, and Disease Control assessment approved by County landowners in 2005. This nominal charge generates a revenue stream that helps address vector-borne disease surveillance and operational control measures, community education and outreach activities, and most recently to address the arrival of invasive mosquito species.

Operationally, 2018 West Nile virus (WNV) activity increased from that of 2017 regarding collected mosquitoes infected with the virus. The District recovered 533 WNV positive mosquito pools (50 mosquitoes / pool) compared to 242 positive pools in 2017. Although higher mosquito vector populations were collected, the number of confirmed human cases for San Joaquin County decreased to 13, as compared to 14 cases in 2017. The District emphasizes virus detection in local mosquito populations in the efforts to prevent the further spread of mosquito-borne diseases to the residents and visitors of San Joaquin County. These efforts were extremely important during this past year.

In 2017, the District was faced with the challenge of responding to mosquito breeding in areas affected by the aftermath of record storms. We applied for FEMA reimbursement funds to offset the unforeseen expenses associated with the District’s mosquito control efforts along designated areas most affected by related flooding. The District spent $381,429.35 on those efforts. In early 2018, the District received word from FEMA denying our request for reimbursement funding. The District then pursued the appeal process in May of 2018 that included writing a letter to Congressman McNerney’s office requesting his assistance. Currently, the District is working with Cal OES in pursuit of the requested funding. As of December 2018, the District was informed our appeal is in review. Since a major disaster declaration was approved by the Federal Government for this event, we are hopeful our appeal will be successful.

The District’s surveillance and control measures were implemented using our integrated vector management (IVM) plan and the California Mosquito-Borne Disease Surveillance and Response Plan. These plans are used to detect and respond to West Nile virus activity. The District continues the use of specific trapping devices to collect new invasive mosquito species such as Aedes aegypti (the yellow fever mosquito) and Aedes albopictus (the Asian tiger mosquito). Since the Yellow Fever mosquito was recently detected as far north as Merced County, the District expanded trapping locations where we would anticipate our first find. These sites include the Port of Stockton, cemeteries, wholesale nurseries, and mobile home parks. In addition, our Lab continues to conduct diagnostic work to consistently test the effectiveness of mosquito control products.

Public education is invaluable to ensuring landowners are vigilant to prevent mosquito breeding. To stay current, the District developed a Facebook page and updated our web-site in an attempt to expand our reach, and to ensure the public has multiple options to receive information and request service.

Mosquito and vector control is an important service of public health protection. We remain vigilant in the effort to consistently prevent the spread of West Nile virus, we review and evaluate our response strategies in preparation for arrival of invasive mosquito species capable of spreading mosquito-borne diseases, and we annually examine our revenue sources and budget expenditures to remain fiscally sound. The Board of Trustees and staff should be commended for their continued dedication and tireless work in providing a quality mosquito and vector control program for the residents and visitors of San Joaquin County.

Eddie Lucchesi
Eddie Lucchesi, Manager
San Joaquin County Mosquito and Vector Control District is an independent special district. The District’s operations are funded by San Joaquin County property taxes, a special tax, and a benefit assessment. The District is governed by an eleven member Board of Trustees, seven representing each incorporated city and four representing the County at large. The Board employs a manager who oversees program functions, hires and supervises staff. The staff consists of full and part-time employees to facilitate the daily operations.
In 1932, San Joaquin County health officials enlisted the aid of Civilian Conservation Corps to remove brush along streams to reduce mosquito producing stagnant water. In 1942, local citizens organized a petition signed by 3,800 residents to form a district. The Board of Supervisors formed the Northern San Joaquin County Mosquito Abatement District on January 22, 1945. A second district, the San Joaquin Mosquito Abatement District, was formed in 1955, for the remaining portion of the County. Due to the growing concern of encephalitis in the County, demands for mosquito control continued to increase. In 1980, by mutual consent of their governing bodies, the two independent districts combined to form San Joaquin County Mosquito Abatement District. The District expanded its mission to include another vector, ticks in 1992 & 1993. To reflect the newly adopted tasks, the District changed its name to San Joaquin County Mosquito & Vector Control District. To date, the District provides service to all of the residents and visitors of San Joaquin County covering 1,420 square miles.

Mission Statement

Adopted by the Board of Trustees
On May 21, 1996

San Joaquin County Mosquito and Vector Control District provides comprehensive vector surveillance and control services to enhance the public health and quality of life for the residents and visitors of San Joaquin County. As a locally controlled independent agency, we seek to fulfill our mission through the following commitments:

> To utilize the most advanced administrative and operational technology available;

> To provide stewardship for public funds by stressing efficiency in our operations;

> To encourage citizen participation in achieving our mission;

> To educate the public regarding the health implications of disease transmitting pests;

> To provide services consistent with an awareness and concern for environmental protection;

> And lastly, to provide and maintain a safe and effective public health pest management program.
"Vector" Defined

According to the California State Health and Safety Code, Section 2002(K): “Vector” means any animal capable of producing discomfort or injury, including, but not limited to arthropods (mosquitoes, flies, fleas, lice, ticks, mites, etc.), small mammals (rabbits, rodents, etc.) and other vertebrates, but not including domestic animals.

Vectors can transmit infectious organisms that cause human and animal diseases. These diseases can be serious and sometimes fatal. Arthropods, particularly hematophagous insects, are the major group of vectors transmitting diseases (vector-pathogen) including encephalitis (mosquito-virus), malaria (mosquito protozoan), typhus (flea/lice-bacterium), plague (flea-bacterium), dog heartworm (mosquito-roundworm), and Lyme disease (tick-bacterium). Encephalitis-causing viruses transmitted by arthropods are called arboviruses (Arthropod-borne viruses). The California Arbovirus Surveillance Program emphasizes forecasting and monitoring activity of St. Louis encephalitis (SLE), western equine encephalomyelitis (WEE), and West Nile virus (WNV). These viruses are maintained in the wild bird-mosquito cycles, and therefore are not dependent upon infections of humans or domestic animals for their persistence. Infections of humans and domestic animals by these viruses are transmitted by bites of infected mosquitoes that have fed on infected wild birds. WNV is currently of most concern in San Joaquin County. It was first detected in San Joaquin County in 2004 and reached epidemic risk levels from 2005 - 2008 and 2012 - 2018.

There are 17 mosquito species found in San Joaquin County. Three of them are of major public health concern; Culex tarsalis, is the principal vector of WEE, SLE and WNV, Culex pipiens, is the vector of WNV, and SLE, and Anopheles freeborni, the vector of malaria.

1. Culex tarsalis: Western Encephalitis mosquito
2. Culex pipiens: Northern House mosquito
3. Culex stigmatosoma: Banded fowl water mosquito
4. Culex erythrothorax: Tule mosquito
5. Anopheles freeborni: Western malaria mosquito
6. Anopheles franciscanus: No common name
7. Anopheles punctipennis: Woodland malaria mosquito
8. Aedes melanomus: No common name
9. Aedes dorsalis: No common name
10. Aedes nigromaculis: Irrigated pasture mosquito
11. Aedes sierrensis: Western treehole mosquito
12. Aedes washinai: No common name
13. Aedes vexans: Inland flood water mosquito
14. Culiseta inornata: Cool-weather mosquito
15. Culiseta particeps: No common name
16. Orthopodomyia signifera: No common name

---

Culex tarsalis
Western Encephalitis Mosquito

Culex pipiens
Northern House Mosquito
Mosquito Development

Mosquitoes complete a full metamorphosis: egg, larva, pupa, and adult. Critical to the mosquito's life cycle is water. Egg rafts of the genus *Culex* are laid on still or standing water. Each raft contains 100 - 300 eggs. The eggs hatch to larvae. The larvae grow through 4 instars, shedding their outer skin as they grow to the next stage. Once the larvae reach the 4th stage (or instar), they then transform to pupae. The pupal stage is the equivalent of the cocoon, where the adult insect body develops. Once development is complete, the pupae hatch off the water as adult mosquitoes. The adult female then needs to take a “blood meal” to provide necessary nutrients to her eggs. In warmer weather, mosquitoes complete a full metamorphosis, on average, in seven to ten days. Mosquito development around residential properties is the primary source for urban mosquitoes.

Other genera of mosquitoes vary in egg laying. For instance eggs of the *Aedes*, *Anopheles* and *Psorophora* lay eggs singly in moist areas where flood water may come at a later date. These eggs can stay viable for years. *Culex* and *Culiseta* eggs are in rafts. For the *Anopheles*, each egg has two lateral air floats, which help them in floatation. For the invasive *Aedes* found in California, the eggs are glued to the sides of containers and hatch as containers are filled with water. This type of egg laying creates a particularly difficult situation in controlling this type of mosquito.

Prevent Mosquito Development By Eliminating Standing Water

- Seal all water deposits
- Fix water leaks
- Protect and clean pools and ponds
- Clean birdbath once a week
- Clean rain gutter
- Install screens on windows and doors
- Drain standing water in buckets, tires, flower pots
- Keep grass short
**Integrated Pest Management**

District operations are based on a concept that utilizes several different approaches to vector control. The concept is referred to as Integrated Pest Management (IPM). The District’s definition of IPM is “a sustainable approach, or plan, to managing public health pests and vectors, by combining, biological, chemical, legal, natural and physical control tactics in a way that minimizes economic, health and environmental risks.” IPM can also be considered as a systematic approach to public health pest management, which combines a variety of surveillance and control practices. With regards to implementing a plan to control vectors, IPM can be defined as socially acceptable, environmentally responsible and economically practical protection of the public’s health and well-being. In the spirit of IPM, Integrated Mosquito Management (IMM), is a process that is directly related to the specific control of mosquitoes.

Since the need for mosquito control was recognized in the early twentieth century, increased knowledge of mosquito biology has driven the formulation of a variety of methodologies designed to successfully reduce both mosquito nuisance levels and mosquito-borne disease transmission. As the technologies and knowledge base from which these methodologies were derived have matured, they have been increasingly seen as mostly complimentary or synergistic in nature, providing optimal control as part of an overall strategy. IMM has been developed to encourage a balanced usage of cultural and insecticidal methodologies and habitat manipulations in order to minimize adverse environmental impacts. IMM is knowledge-based and surveillance-driven, and when properly practiced is specifically designed to accomplish the following:

1. Protect human, animal and environmental health.
2. Promote a rational use of pesticides.
3. Reduce environmental contamination to soil, ground water, surface water, pollinators, wildlife and endangered species.
4. Utilize natural biological controls to conserve and augment other control methods.
5. Use target specific pesticides to the extent possible.
6. Emphasize the proper timing of applications.
Mosquito Population Surveillance

The District collects mosquitoes in various types of mechanical traps to target specific mosquito species that are vectors of encephalitis viruses. The trap types are referred to as Encephalitis Virus Surveillance (EVS) traps and gravid traps, which are used extensively throughout the District covering different types of mosquito breeding sources. Upon placement, the traps run for 24 hours prior to collection. Contents of the traps are analyzed each week. Each trap’s contents indicate the population in a specific area along with information about the mosquito species distribution. The data is submitted to the California Vector Borne Disease Surveillance Gateway system for compilation with other vector control agency data. In 2018, we collected record high numbers of mosquito vector populations since the arrival of WNV in 2004 with substantially higher mosquito numbers in the periods of August - October.

The data from surveillance is used in several important ways. First, the population counts help mosquito control technicians (MCT) find mosquito development sources. Sometimes these sources are new to the area and some are currently known to exist. Regardless, environmental conditions and land use change can result in unexpected mosquito development. Second, surveillance data provides information about mosquito species. This is useful information in determining what type of sources the mosquitoes may be developing in. For instance, Culex tarsalis are associated with fresh water while Culex pipiens are associated with polluted water. This information assists the MCT to find the source of development and take appropriate action. Third, mosquito population counts help determine areas where more aggressive treatment and surveillance are needed. Last, collected mosquitoes are separated and used to test for mosquito-borne disease. The results provide vital knowledge in suppressing mosquito populations and reducing the risk of disease to the public.
Mosquito Population Surveillance

2018 Total Mosquitoes Collected

Mosquito-Borne Disease Surveillance

In combination with mosquito population surveillance, early detection of mosquito-borne diseases is critical to developing a proactive and effective control and prevention response. The District uses several surveillance methods to test for the presence of encephalitis viruses and other pathogens. These methods include testing wild dead birds and groups of mosquitoes for the presence of pathogens within their bodies using quantitative RT-PCR. For many years, mosquitoes and dead birds have been the earliest indicators of WNV activity in San Joaquin County. The District calculates vector abundance*, WNV Minimum Infection Rate (MIR)* and Vector Index (VI)* as the main parameters to evaluate overall transmission risk.

In San Joaquin County, West Nile virus was first detected in 2004 with three human cases, followed by intensive amplification and transmission resulting in 36 human cases and 19 horse cases in 2005. WNV activity subsequently went through a pattern of 2-3 years of average or below average activity followed by 1-2 years of moderately high activity. This pattern generally agrees with what has been observed nationally, although regional variations exist and outbreaks occurred intermittently in the nation.

*:
- Vector abundance: the number of mosquitoes caught per trap per night
- WNV Minimum Infection Rate (MIR): the number of infected mosquitoes per 1,000 mosquitoes
- Vector Index (VI): vector abundance X MIR
Mosquito-Borne Disease Surveillance

Similar to 2017, the 2018 year is considered a high WNV activity year in the pattern cycle. Both the mosquito vector populations and the number of mosquito samples positive for WNV reached a historical high since 2004. Specifically, the WNV Minimum Infection Rate in mosquitoes was 4.9, which is at the upper range of previous 10-year average (3.9 ± 1.7), and the Vector Index was historically high at 333.9, compared to the previous 10-year average (140.1 ± 91.2). Due to the elevated values of these parameters, the overall WNV transmission in San Joaquin County reached and stayed at epidemic planning levels during most of the summer period. Consequently, there were 13 human cases and 1 equine case reported in our County.

From 2004 to 2018, a total of 29,663 mosquito pools of nine mosquito species were tested by VecTest™, RAMP® and/or RT-qPCR. There were 2,539 positive mosquito pools (8.60%) that were of species *Cx. tarsalis* (1,387), *Cx. pipiens* (1,129), *Cx. erythrothorax* (19) and *Ae. vexans* (4). In 2018, there were 3,475 mosquito samples tested for diseases, resulting in 533 collections being positive for WNV. In comparison, there were 242 out of 2,975 mosquito samples tested positive for WNV in 2017.

The District received dead bird reports from residents through the statewide WNV hotline (1-877-968-2473). The reports are used by the California Department of Public Health to create statewide risk maps. These maps assist the District in targeting areas for additional mosquito control efforts. From 2004 to 2018, the District received 13,976 dead bird reports and tested 1,903 birds, resulting in 587 positive birds. About 80% of the positive birds are corvids (crows, ravens, jays, magpies) and the rest are mostly passerine birds (sparrows, finches, robins). In 2018, the District received 209 dead bird reports. The District tested 42 of them and 16 tested positive for WNV infections.
Geographic mapping indicated that hot zones of WNV activity in mosquitoes are located in the Delta area, north portion of City of Stockton, and along the southern border. The District will continue to employ robust and sensitive methods to monitor WNV activity in dead birds and mosquitoes.
Invasive Mosquitoes: Special Report

Rapid international travel and trade results in the importation of both pathogens and vectors not found in California. The Asian tiger mosquito, *Aedes albopictus* and the yellow fever mosquito, *Aedes aegypti*, for example, has been introduced into North America in used vehicle tires, and has become established in some areas of southern California. The *Aedes aegypti* mosquitoes have migrated north and are also established in Fresno, Clovis, Madera County and in 2017, Merced County. These species can develop in artificial containers in warmer areas and are difficult to control with conventional methods. The District is taking a proactive approach in early identification of these mosquitoes as they move closer to San Joaquin County. From surveillance to education and advertisement, we are actively seeking these mosquitoes before they become established.

In 2018, The District continued surveillance activity on invasive *Aedes aegypti* and *Aedes albopictus* mosquito species, which are vectors of dengue, chikungunya, yellow fever and Zika virus. The District deployed mosquito adult and oviposition traps (Ovitrap®, GAT traps* and CDC AGO traps*) in approximately 195 locations in six cities that include residential neighborhoods, nurseries, the Stockton Port, cemeteries and public parks. These two mosquito species have not been found in San Joaquin County in 2018.

Throughout California those mosquito control districts that reported their first find of invasive mosquitoes, came from public service requests. With that knowledge, we used radio, magazines, and electronic billboards to request public call in of daytime biting mosquitoes. In addition, information on invasive mosquitoes is incorporated in the District’s education and outreach presentation. Our new website also addresses the issue and allows users to report daytime biting mosquitoes online.

<table>
<thead>
<tr>
<th>Location</th>
<th>Ovi</th>
<th>BGGAT</th>
<th>CDCAGO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lathrop</td>
<td>19</td>
<td>1</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Manteca</td>
<td>16</td>
<td>1</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Escalon</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Ripon</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Tracy</td>
<td>10</td>
<td>0</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Stockton</td>
<td>37</td>
<td>12</td>
<td>3</td>
<td>52</td>
</tr>
<tr>
<td>Lodi</td>
<td>19</td>
<td>2</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Mountain House</td>
<td>17</td>
<td>3</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Wholesale Nurseries</td>
<td>23</td>
<td>8</td>
<td>2</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>28</td>
<td>11</td>
<td>195</td>
</tr>
</tbody>
</table>

*: Ovitrap® or OVI are traps used to collect deposited mosquito eggs
BGGAT: Biogents Gravid Aedes Trap
CDCAGO: Centers for Disease Control and Prevention Autocidal Gravis Ovitrap
The District is divided into three operational regions under the direction of a regional supervisor. The North region has seven operational zones. The Central region has six operational zones, and the South region has six operational zones. Each zone is staffed with a state certified mosquito control technician. There are a total of 115 mosquito source types categorized by agricultural, natural, residential, and industrial/commercial sources. Examples include: field crops, animal waste ponds, irrigation ditches, natural drains, tree holes, containers, septic tanks, ornamental ponds, roadside ditches, railroad borrow pits, tires, storm water retention ponds, and catch basins.
Public Outreach

The District’s public outreach aims to inform and educate the public of all mosquito related issues pertinent to San Joaquin County. These issues range from mosquito development and control methods, to the risk of mosquito-borne diseases and invasive mosquito species. To communicate timely and accurate information, we utilize news releases, spray alerts, annual reports, website posting, social media, paid newspaper ads, radio, and magazine ads, as well as school presentations and informational booths to accomplish that goal.

The following are the most notable outreach activities the District performed during 2018:

Large scale radio campaigns aim to increase awareness of mosquito development, mosquito-borne disease and invasive mosquito species. The District contracted with local radio stations to run 30 second ads on KATM 103.3, KWIN 97.7, KSJN 102.3 and KQOD 100.1. Also included in the purchase were two Hispanic stations KMIX 100.9, and KTSE 97.1. Partnering with East Side and Turlock Mosquito Abatement Districts, 1,235 commercials were contracted. The commercials ran from May through mid-September. The District also contracted to run 410 commercials on two local stations, KJOY 99.3 and KSTN 105.9 during the same time period. Live interviews were provided on KATM and KSTN.

The District ran three outreach campaigns during the year. The first was a campaign for reducing mosquito development sources around properties followed by the use of mosquitofish in June. Throughout the remainder of the summer and early fall we focused on mosquito bite prevention and reporting daytime biting mosquitoes.

The District website is posted with all news releases and news alerts for adult mosquito spraying. As a result, we interviewed thirteen times with radio, newspaper and television. We received several front page newspaper articles, as well as, radio, and television coverage. Frequently, local papers print many of our spray notifications. The District contracts with GovDelivery as an electronic communication platform designed to bring website users to the District’s website, www.sjmmosquito.org. During the year, seven news releases and 48 spray alerts were sent. The website had 144,724 total visitors for the entire year, which averages 12,060 visitors per month. This is an increase of 36,586 visitors from 2017.

A Facebook page was created and administered by the Record. Our goal is to post educational information to the site and draw the public to our website for more information. We encourage the public to comment or voice concerns by calling the District. Postings were created by the District and paid ads through the Record were all incorporated as a part community outreach.

• The District’s website was redesigned for ease of use for mobile and desktop users. The site was placed online in December of 2018.

• Third grade students participating in three Ag Venture programs: 83 presentations with 2,221 students and parents in attendance.

• Fifth and sixth grade elementary students: 41 presentations with 60 classes in attendance.

• Presentations were provided to the Delta Protection Advisory Committee, and Woodbridge Municipal Advisory Council.

• 140 contacts were made during the District’s tenth annual mosquitofish giveaway held throughout San Joaquin County.

• Educational Booths and Events: Earth Day, Senior Awareness Day at San Joaquin Fair Grounds, San Joaquin County Fair, and a health fair at Westwood School in Stockton.

• The SJC Master Gardeners helped to distribute daytime biting mosquito information. The information was handed out at Farmer’s Markets throughout San Joaquin County.
**Biological Control**

Biological mosquito control is one of the mainstays in protecting the public from mosquitoes and the transmission of mosquito-borne diseases. Biological mosquito control agents include a wide variety of pathogens, parasites and predators. The primary biological control agent used by the District is *Gambusia affinis*, the mosquitofish.

Mosquitofish are small live-bearing minnows closely related to the common guppy. These fish are a vivacious consumer of mosquito larvae and pupae and can survive in varying water temperatures. Because mosquitofish are surface feeders, they are extremely efficient mosquito predators. A single mosquitofish has been said to consume upwards of 80-100 mosquito larvae per day. They are capable of quickly populating a source if conditions are favorable. The fish are placed in a variety of permanent and semi-permanent fresh water habitats such as neglected swimming pools, water troughs, rice fields, and wetlands.

Mosquitofish are being seineed from a large rearing pond.

The District’s White Slough Fish Rearing Facility is located at the City of Lodi’s White Slough Water Pollution Control Facility. The facility consists of thirteen rearing ponds and four above ground tanks. The ponds are capable of rearing 3,500 - 4,000 pounds of fish per year.

---

**Mosquitofish Planting Sites / Pounds Planted**

<table>
<thead>
<tr>
<th></th>
<th>Fish Origination Site</th>
<th>Island &amp; Duck Club Flooding</th>
<th>Wildlife &amp; Ecological Reserves</th>
<th>Sewers, Retentions &amp; Private Ponds</th>
<th>Rice Fields</th>
<th>Miscellaneous</th>
<th>Service Request (fish ponds, swim pools &amp; Water troughs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>White Slough</td>
<td>763.1 lbs.</td>
<td>524.7 lbs.</td>
<td>37.2 lbs.</td>
<td>690.4 lbs.</td>
<td>48.0 lbs.</td>
<td>100.6 lbs.</td>
</tr>
<tr>
<td></td>
<td>Wild Fish</td>
<td>0 lbs.</td>
<td>0 lbs.</td>
<td>5 lbs.</td>
<td>0 lbs.</td>
<td>15.4 lbs.</td>
<td>18.50 lbs.</td>
</tr>
<tr>
<td>2018</td>
<td>White Slough</td>
<td>1169.1 lbs.</td>
<td>457.8 lbs.</td>
<td>130.8 lbs.</td>
<td>1560.4 lbs.</td>
<td>60.1 lbs.</td>
<td>479.9 lbs.</td>
</tr>
<tr>
<td></td>
<td>Wild Fish</td>
<td>0 lbs.</td>
<td>0 lbs.</td>
<td>0 lbs.</td>
<td>0 lbs.</td>
<td>0 lbs.</td>
<td>0 lbs.</td>
</tr>
<tr>
<td></td>
<td>Wild Fish</td>
<td>0 lbs.</td>
<td>0 lbs.</td>
<td>1 lbs.</td>
<td>0 lbs.</td>
<td>45.0 lbs.</td>
<td>6.5 lbs.</td>
</tr>
</tbody>
</table>
Physical Control

The term physical control refers to making an environmental or physical change to a mosquito-breeding source by physical or mechanical means. Physical control is also known as “source reduction”. Ultimately, physically changing the mosquito-breeding source can make the site less suitable for mosquito production.

Landowners and land managers have a responsibility to minimize mosquito production on their lands and play a key role in reducing mosquito populations throughout the District. The implementation of mosquito prevention Best Management Practices (BMPs) can reduce or eliminate the ability of aquatic sites to produce mosquitoes. BMPs are defined as actions landowners can take to reduce or eliminate mosquito production from water sources on their property in an environmentally and fiscally responsible manner, and to reduce the potential for transmission of disease from mosquitoes to humans.

In 2012, the California Department of Public Health and the Mosquito and Vector Control Association of California updated a manual of BMPs titled “BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL IN CALIFORNIA” (http://www.westnile.ca.gov/resources.php), which has been adopted by the District and is used as the standard set of recommendations for property owners to reduce or eliminate mosquito breeding sources on their property.

Each mosquito breeding source and property is unique, and the BMPs listed in this manual will apply to some properties, but not others. After evaluating their property, the District works with the landowner to implement applicable BMPs to reduce or prevent future mosquito breeding as well as to manage existing mosquitoes at that site.

Mosquito Control Best Management Practices At-A-Glance:

- Eliminate artificial mosquito sources,
- Ensure man-made temporary sources of surface water drain within four days (96 hours) to prevent development of adult mosquitoes,
- Control plant growth in ponds, ditches, and shallow wetlands.
- Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes.

Vegetation management, prior to flooding for salinity, reduces harborage for mosquitoes to develop.
**Chemical Control**

Larvicides may be applied to water in which larvae or pupae are developing. Pastures, septic tanks, irrigation ditches, animal waste ponds, creeks, sloughs, catch basins, treeholes, and roadside ditches are examples of areas the District’s technicians regularly inspect and treat to reduce mosquito populations.

Adulticides may be applied as space sprays, mists, or fogs to kill adult mosquitoes and as a residual insecticide on surfaces likely to be contacted by adult mosquitoes.

Herbicides are used to reduce mosquito habitat and provide better access for larvicide treatment, and biological control.

The chart below shows larviciding and adulticiding for 2018 with a comparison to a five year average. For acres treated with herbicide, see the table below the graph.

### Larvicide & Adulticide In Acres Treated

![Graph showing larvicide and adulticide treatment in acres treated over the year 2018 and five year average.]

<table>
<thead>
<tr>
<th>Table is in acres treated</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larvicide 2018</td>
<td>11</td>
<td>103</td>
<td>239</td>
<td>979</td>
<td>2325</td>
<td>11075</td>
<td>15041</td>
<td>14566</td>
<td>5186</td>
<td>5823</td>
<td>533</td>
<td>6</td>
</tr>
<tr>
<td>Larvicide 5 yr avg.</td>
<td>19</td>
<td>138</td>
<td>1642</td>
<td>1590</td>
<td>3423</td>
<td>10019</td>
<td>14824</td>
<td>15868</td>
<td>5606</td>
<td>4220</td>
<td>1203</td>
<td>13</td>
</tr>
<tr>
<td>Adulticide 2018</td>
<td>0</td>
<td>2.5</td>
<td>1</td>
<td>110</td>
<td>808</td>
<td>27728</td>
<td>70210</td>
<td>134871</td>
<td>95609</td>
<td>28343</td>
<td>1568</td>
<td>0</td>
</tr>
<tr>
<td>Adulticide 5 yr avg.</td>
<td>0</td>
<td>3</td>
<td>12</td>
<td>2043</td>
<td>7334</td>
<td>26131</td>
<td>66900</td>
<td>84330</td>
<td>65150</td>
<td>22417</td>
<td>413</td>
<td>0</td>
</tr>
<tr>
<td>Herbicide 2018</td>
<td>23</td>
<td>6</td>
<td>25</td>
<td>68</td>
<td>97</td>
<td>64</td>
<td>33</td>
<td>149</td>
<td>5</td>
<td>20</td>
<td>34</td>
<td>62</td>
</tr>
<tr>
<td>Herbicide 5 yr avg.</td>
<td>38</td>
<td>64</td>
<td>100</td>
<td>72</td>
<td>133</td>
<td>59</td>
<td>136</td>
<td>128</td>
<td>29</td>
<td>34</td>
<td>20</td>
<td>41</td>
</tr>
</tbody>
</table>
Legal Abatement

The District incorporates local, state and federal statues to regulate excessive mosquito breeding on private and public lands. Using provisions of the California Health and Safety Code, the District can legally require property owners to reduce or eliminate mosquito breeding when it becomes a public nuisance.

Abatement of mosquitoes generally follows a three step process; whereby, the owner of mosquito-producing land is: 1) contacted and requested to take steps to prevent the occurrence of mosquito development and provided an “Information Sheet”; 2) if corrections do not take place, a “Notice to Comply” is issued; 3) if the condition persists, and the problem is not corrected, the District can initiate legal abatement proceedings per §2060 of the California Health and Safety Code. Fines of $1,000 per day can be levied for non-compliance once a legal abatement hearing has taken place and the property owner refuses to comply.

During the year, ninety-two information sheets were provided to property owners explaining how to reduce mosquito development on their property. In addition, two inspection warrants were served.

<table>
<thead>
<tr>
<th></th>
<th>Information Sheet</th>
<th>Notice to Comply</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2018</td>
<td>92</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

The District provided mosquito prevention Best Management Practices (BMPs) handouts for the reduction of mosquitoes to residential, agricultural, commercial, and industrial property owners. The handout is available from the District: Best Management Practices for Mosquito Control in California - July, 2012. The BMPs are often handed out upon request, during routine inspections, presentations, and public events.
Ticks & Tick Borne Disease

The most common ticks found in San Joaquin County (SJC) are: the American dog tick, *Dermacentor variabilis*; the Pacific Coast tick, *Dermacentor occidentalis*; and the Brown dog tick, *Rhipicephalus sanguineus*. The Pacific Coast tick is one of the most widely distributed ticks in California. Occasionally, the Western black legged tick, *Ixodes pacificus* is also found in San Joaquin County.

The District conducts surveillance for ticks in parks and river areas of SJC that are known habitat. Surveillance for adult ticks is typically performed during the months of November through April when ticks are most abundant. *Ixodes pacificus* is the primary species targeted during surveillance due to its ability to carry Lyme disease. Surveillance typically is conducted along waterways, riparian areas, and foothill areas used by the public for recreational activities. Ticks may be submitted by local veterinary hospitals and the general public for identification.

This year there were no ticks collected. The District received three specimens of *Dermacentor variabilis* from the public. *Dermacentor variabilis* is not a vector of Lyme disease and therefore was not tested for disease.

Lyme disease is a bacterial infection. The bacteria that causes Lyme disease is *Borrelia burgdorferi* and is transmitted primarily by the Western black-legged tick. Prompt removal of the tick will reduce risk of disease transmission. Early symptoms of Lyme disease may include head and muscle aches, sore throat, nausea, fever, stiff neck or fatigue. About 70-80% of those infected develop a rash (Erythema migrans or EM) at the bite site, which sometimes resembles a “bull’s eye.” The EM rash may appear on any area of the body within 3 to 30 days after a tick bite. Later symptoms may involve numbness or tingling of the limbs, joint swelling and pain, memory loss, and/or mood swings.
Appendix

Request For Service

The general public is encouraged to contact the District to request service. These requests generally are either to report a mosquito-related problem, request mosquito fish, inquire about information on ticks, insect/vector identification, or to request a property inspection. Paid for through public funding, there is no charge for these services. San Joaquin County residents can call the District at (209) 982-4675 or 1-800-300-4675 or request service at the District’s website www.sjmosquito.org. The District usually is able to respond within 24 to 48 hours. During the year the District responded to 1,705 service request calls.

<table>
<thead>
<tr>
<th>Mosquitoes</th>
<th>Property Inspections (Pools)</th>
<th>Fish</th>
<th>Ticks / Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>5</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>February</td>
<td>20</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>March</td>
<td>27</td>
<td>133</td>
<td>57</td>
</tr>
<tr>
<td>April</td>
<td>134</td>
<td>228</td>
<td>54</td>
</tr>
<tr>
<td>May</td>
<td>79</td>
<td>177</td>
<td>46</td>
</tr>
<tr>
<td>June</td>
<td>126</td>
<td>129</td>
<td>35</td>
</tr>
<tr>
<td>July</td>
<td>116</td>
<td>52</td>
<td>51</td>
</tr>
<tr>
<td>August</td>
<td>90</td>
<td>91</td>
<td>24</td>
</tr>
<tr>
<td>September</td>
<td>101</td>
<td>61</td>
<td>19</td>
</tr>
<tr>
<td>October</td>
<td>82</td>
<td>110</td>
<td>23</td>
</tr>
<tr>
<td>November</td>
<td>24</td>
<td>57</td>
<td>19</td>
</tr>
<tr>
<td>December</td>
<td>2</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>806</td>
<td>1063</td>
<td>393</td>
</tr>
</tbody>
</table>

On the District’s new mobile friendly website, users can access “request for service” from the home page.
San Joaquin County Mosquito & Vector Control District - Annual Report

SAN JOAQUIN COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT  
(excerpt from Financial Statements And Independents Auditors’ Report)  
Statement of Revenues, Expenditures and Changes  
In Fund Balance - Government Funds  

For the year ended June 30, 2018

<table>
<thead>
<tr>
<th>Revenues</th>
<th>General fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property taxes</td>
<td>$4,989,617</td>
</tr>
<tr>
<td>Property assessment</td>
<td>3,127,524</td>
</tr>
<tr>
<td>Investment income</td>
<td>172,454</td>
</tr>
<tr>
<td>Reimbursements and rebates</td>
<td>128,729</td>
</tr>
<tr>
<td>Property tax relief</td>
<td>109,817</td>
</tr>
<tr>
<td>Grant Revenue</td>
<td>51,400</td>
</tr>
<tr>
<td>Other revenues</td>
<td>3,189</td>
</tr>
<tr>
<td>Dividends</td>
<td>3,036</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td><strong>8,585,766</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td></td>
</tr>
<tr>
<td>Salaries and benefits</td>
<td>4,295,651</td>
</tr>
<tr>
<td>Services and Supplies</td>
<td>2,403,535</td>
</tr>
<tr>
<td>Debt service</td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>2,296</td>
</tr>
<tr>
<td>Interest</td>
<td>28</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>181,099</td>
</tr>
<tr>
<td><strong>Total expenditures</strong></td>
<td><strong>6,882,609</strong></td>
</tr>
</tbody>
</table>

| Excess of revenues over expenditures | 1,703,157 |

<table>
<thead>
<tr>
<th>Other financing sources (uses)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Proceeds from sale of capitol assets</td>
<td>39,171</td>
</tr>
<tr>
<td><strong>Total other financing sources (uses)</strong></td>
<td><strong>39,171</strong></td>
</tr>
</tbody>
</table>

| Net change in fund balances | 1,742,328 |

| Fund balances, beginning of year | 13,417,233 |

| Fund balances, end of year | $15,159,561 |
### Management & Administrative Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Lucchesi</td>
<td>Manager</td>
<td>33 yrs.</td>
</tr>
<tr>
<td>John Fritz</td>
<td>Assistant Manager</td>
<td>6 yrs.</td>
</tr>
<tr>
<td>Aaron Devencenzi</td>
<td>Public Information Officer</td>
<td>24 yrs.</td>
</tr>
<tr>
<td>Emily Nicholas</td>
<td>Administrative Assistant</td>
<td>16 yrs.</td>
</tr>
<tr>
<td>Jamie Tuggle</td>
<td>Secretary</td>
<td>4 yrs.</td>
</tr>
</tbody>
</table>

### Laboratory Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Shaoming Huang</td>
<td>Entomologist</td>
<td>9 yrs.</td>
</tr>
<tr>
<td>Sumiko De La Vega</td>
<td>Assistant Entomologist</td>
<td>6 yrs.</td>
</tr>
<tr>
<td>Andrew Provencio</td>
<td>Vector Ecologist</td>
<td>1 yr.</td>
</tr>
<tr>
<td>Mary Iverson</td>
<td>Lab Technician</td>
<td>20 yrs.</td>
</tr>
</tbody>
</table>

### Fishery Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Vignolo</td>
<td>Fish Hatchery Manager</td>
<td>28 yrs.</td>
</tr>
<tr>
<td>Emily Pope</td>
<td>Fish Hatchery Technician</td>
<td>9 yrs.</td>
</tr>
</tbody>
</table>

### Mechanic Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Moniz</td>
<td>Mechanic II</td>
<td>9 yrs.</td>
</tr>
<tr>
<td>Michael Miller</td>
<td>Mechanic I</td>
<td>4 yrs.</td>
</tr>
</tbody>
</table>

### Field Staff by Region

#### North Region

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keith Nienhuis</td>
<td>Mosq. Control Supervisor</td>
<td>30 yrs.</td>
</tr>
<tr>
<td>Chris Hiers</td>
<td>Mosq. Control Tech. II</td>
<td>11 yrs.</td>
</tr>
<tr>
<td>Adam Coles</td>
<td>Mosq. Control Tech. I</td>
<td>3 yrs.</td>
</tr>
</tbody>
</table>

#### South Region

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan Bennett</td>
<td>Mosq. Control Supervisor</td>
<td>10 yrs.</td>
</tr>
<tr>
<td>Martin Jucutan</td>
<td>Mosq. Control Tech. II</td>
<td>5 yrs.</td>
</tr>
<tr>
<td>Loni Wilkins</td>
<td>Mosq. Control Tech. I</td>
<td>1 yrs.</td>
</tr>
<tr>
<td>Dennis Keith</td>
<td>Mosq. Control Tech. I</td>
<td>33 yrs.</td>
</tr>
<tr>
<td>Juan Jimenez</td>
<td>Mosq. Control Tech. I</td>
<td>1 yrs.</td>
</tr>
</tbody>
</table>

#### Central Region

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deanna Hopkins</td>
<td>Mosq. Control Supervisor</td>
<td>18 yrs.</td>
</tr>
<tr>
<td>Larry Nolin</td>
<td>Mosq. Control Tech. II</td>
<td>34 yrs.</td>
</tr>
<tr>
<td>Josh Diaz</td>
<td>Mosq. Control Tech. I</td>
<td>1 yrs.</td>
</tr>
<tr>
<td>Carlos Romero</td>
<td>Mosq. Control Tech. I</td>
<td>1 yr.</td>
</tr>
<tr>
<td>Mike Corrales</td>
<td>Mosq. Control Tech. I</td>
<td>11 yrs.</td>
</tr>
</tbody>
</table>
Board Meeting Information

To: Board of Trustees
From: Eddie Lucchesi, Manager
CC: Chris Eley, Legal Counsel
Date: 3/13/2019
Re: March 2019 BOT Meeting, Agenda Item 5

5. REPORT OF ATTENDANCE AT THE AMERICAN MOSQUITO CONTROL ASSOCIATION (AMCA) ANNUAL CONFERENCE HELD FEBRUARY 25 – MARCH 1, 2019 IN ORLANDO, FLORIDA

Trustees, Manna, Warmerdam and Colombini, along with staff members Huang and Fritz attended the annual conference of the AMCA in Orlando, Florida, Louisiana held February 25 thru March 1, 2019.

Meeting attendees will provide either an oral or a written report re: their attendance.

This item is for information only and does not require Board action.
6. REQUEST FOR AUTHORIZATION TO DISPOSE OF SURPLUS DISTRICT EQUIPMENT

The District has a quantity of equipment that is considered surplus and available for disposal. The property consists of one outdated vehicle, an aluminum boat, and other miscellaneous items.

Vehicles considered surplus and proposed to be sold are:

1. #08-62, 2008 Ford F150 4X4, Serial Number 1FTRF14W38KD25848
2. #K3513 1956 Crestliner Aluminum Boat w/ trailer

It is recommended that the Board authorize staff to dispose of the surplus equipment with a local auction company, and that the proceeds of the disposal be deposited in the District's General Fund.

This item requires Board action.
7. REQUEST FOR AUTHORIZATION TO DEVELOP AN ELIGIBILITY LIST FOR THE POSITION OF MOSQUITO CONTROL TECHNICIAN II AND TO FILL THE VACANT POSITION OF FISH HATCHERY TECHNICIAN I.

Due to the planned retirement of a current employee in the Mosquito Control Technician II (MCT II) position, the District will have a vacancy in that position. The District anticipates filling the MCT II position using current employees qualified to be considered for appointment to the vacant MCT II position.

A MCT II eligibility list will be developed using current employees qualified to be considered for appointment to the vacant MCT II position. The eligibility list for the MCT II position shall remain in effect for a period of one year following the posting of the eligibility list.

For the Fish Hatchery Technician I (FHT I) vacancy, staff will develop an eligibility list of qualified candidates following exams (written and oral), interviews, and background reviews. The list will establish those qualified to be hired to fill the vacant FHT I position, and will be used to fill any position that may become vacant during this calendar year upon authorization by the Board of Trustees.

It is requested that the Board of Trustees authorize staff to fill the planned MCT II vacancy, and the current FHT I vacancy.

This request is consistent with the requirements outlined in District Policy #2900.

This item requires Board Action

(Attachment)
San Joaquin County Mosquito & Vector Control District

POLICY TITLE: FISH HATCHERY ASSISTANT
POLICY NUMBER: 2610

DEFINITION

Under direct supervision of the Fish Hatchery Manager, and general supervision from the Manager or his designee, performs routine fish hatchery work and related support activities of the District’s integrated pest management program vector control operations in connection with various vector surveillance and control projects; and does related work as required in accordance with District Policy #2900.

CLASS CHARACTERISTICS

An employee in this class assists in the maintenance and operations of the District’s mosquitofish rearing facilities and operations; participates in vector surveillance and control projects, and field and laboratory trials. Duties assigned to this position are generally performed in an outdoor environment and involve performance of general manual labor.

TYPICAL DUTIES

1. Prepares and supplies feed to mosquitofish rearing sites; harvest and transport mosquitofish to mosquito-breeding sites; assists in the analysis of water quality conditions at various mosquitofish rearing sites and mosquito breeding locations; maintains detailed records of work performed; may participate in conducting field and laboratory tests.

2. Helps maintain and care for fish rearing ponds, facilities and structures, field equipment, instruments, tools and vehicles used in connection with work; may assist in the arrangement of facilities for educational and public meetings.

3. Maintains records and prepares a variety of reports; may assist in vector surveillance and control projects; assist with purchasing of supplies and materials; participates in public education and outreach activities; may perform related work as necessary.

MINIMUM QUALIFICATIONS

Education: Education equivalent to completion of the 12th grade.

Experience: Two (2) years experience that provides familiarity with aquaculture techniques and vector surveillance and control methods, materials and practices.
OR

Education and experience: A combination of education, training and experience that demonstrates the ability to perform the typical duties of this position at the level specified.

AND

License: Possession and maintenance of a valid California Department of Motor Vehicles Driver’s License. Incumbent must be insurable and maintain insurability by the District’s insurance provider during the course of employment.

Certificate: Possession and maintenance of a valid California Department of Health Services Vector Control Technician certificate in categories “B” (Mosquito Control); required within one year of initial employment.

Knowledge of: Basic principles and practices of aquaculture and vector surveillance and control; methods of collecting, rearing, and processing field and laboratory specimens; safe use of pesticides and other job-related chemicals; field and laboratory safety precautions.

Ability to: Plan and perform the required tasks; operate and maintain field and laboratory equipment; maintain detailed and accurate records; follow oral and written instructions; perform basic mathematical calculations and formulations to set and compile results in aquaculture, vector surveillance and projects and laboratory and field tests; apply pesticides and job-related chemicals safely and effectively; communicate effectively both orally and in writing; establish and maintain effective working relationships.

Physical and Mental Requirements: Mobility – pushing/pulling, climbing, crawling, and frequently standing for long periods, walking, driving and bending/squatting; Lifting – Frequently lifting 50 pounds without assistance; Vision – Individual must be sighted with the ability to demonstrate measurable depth perception; frequent reading and close-up work; normal hand and eye coordination; Dexterity – Normal dexterity with frequent holding, reaching, grasping and writing; Hearing/Talking – Frequent hearing and talking on the telephone/radio and in person; Emotional/Psychological – Frequent concentration, public contact and decision making; Special Conditions – May require occasional overtime, weekend or evening work.

6/27/08
AMENDED 4/5/2013
Board Meeting Information

To: Board of Trustees
From: Eddie Lucchesi, Manager
CC: Chris Eley, Legal Counsel
Date: 3/13/2019
Re: March 2019 BOT meeting; Agenda Item 8

8. **UPDATE ON STATUS OF STOCKTON OFFICE LOBBY AND MEN’S LOCKER / RESTROOM REMODEL PROJECT**

The “Invitation to Bid” notices were drafted that included supplementary instructions to bidders. Those instructions included the bidding documents, bidding procedures, consideration of bids, insurance requirements, bond requirements, and execution of contract with prescribed agreements. The “Invitation to Bid” was provided to the “The Builders’ Exchange of Stockton” for posting. The District will provide a pre-bid conference for all bidders to be held at the District office on Friday, March 15, 2019 at 10:00 a.m.

An updated “Time-Line” is attached for the Board members to review. Legal Counsel Eley and I will provide a full report at the Board meeting.

Attachment
TIMELINE FOR 2019 STOCKTON OFFICE CONSTRUCTION PROJECT

FEB 22, 2019  LDA DELIVERS PROPOSED BID PACKAGE FOR REVIEW BY DISTRICT AND DISTRICT LEGAL COUNSEL

MARCH 4, 2019  STAFF AND LEGAL COUNSEL FINALIZE BID PACKAGE INCLUDING INSURANCE REQUIREMENTS FOR BIDDERS

MARCH 5, 2019  STAFF SUBMITS “INVITATION TO BID” NOTICE WITH THE STOCKTON BUILDERS’ EXCHANGE” FOR POSTING

MARCH 15, 2019  PRE-BID CONFERENCE AT DISTRICT OFFICE 10:00 A.M. STAFF AND LDA PARNTERS TO MEET WITH INTERESTED BIDDERS TO TOUR FACILITY RELATED TO SCOPE OF WORK

APRIL 5, 2019  BIDS DUE BY CLOSE OF BUSINESS, FRIDAY @ 3:30 P.M.

APRIL 8-12, 2019  STAFF AND LEGAL COUNSEL REVIEW BIDS TO ENSURE ALL MINIMUM REQUIREMENTS ARE MET – INCLUDING BUILDING PARAMETERS AND TIME-FRAME TO COMPLETE WORK

APRIL 16, 2019  BOARD OF TRUSTEES REVIEW BIDS, SELECT CONTRACTOR
9. COMMUNICATION FROM SAN JOAQUIN MOSQUITO EMPLOYEES ASSOCIATION (SJMEA) REGARDING MEETING AND CONFERING WITH DISTRICT TO BARGAIN FOR A SUBSEQUENT AGREEMENT

SJMEA-representative Robert Phibbs contacted me regarding meeting with the District to begin bargaining for a subsequent agreement; the current agreement expires 6/30/2019. We have set a date of March 29, 2019 @ 9:00 a.m. at the District's Stockton office. This meeting will be for receipt of information from the SJMEA, relative to a successor agreement between the District and SJMEA.

It is recommended that the Board acknowledge receipt of this information at this time on the agenda, and to provide direction to staff on meeting and conferring with SJMEA to bargain for a new agreement. The District will follow similar protocol with the un-represented employees and should set an informal meeting with that group as well. Historically, the Board has directed management, along with Legal Counsel Eley to meet with SJMEA to discuss this item.