MEMORANDUM

TO: Governmental Officers and Interested Parties

FROM: Colusa County Grand Jury

SUBJECT: Colusa County Grand Jury 2019-2020 Final Report

DATE: November 5, 2020


A copy of California of California Penal Code Section 933 is attached which provides for comments in response to the Report.
PENAL CODE - PEN

PART 2. OF CRIMINAL PROCEDURE [681 - 1620]  (Part 2 enacted 1872. )
TITLE 4. GRAND JURY PROCEEDINGS [888 - 939.91]  (Title 4 repealed and added by Stats. 1959, Ch. 501. )

CHAPTER 3. Powers and Duties of Grand Jury [914 - 939.91]  (Chapter 3 added by Stats. 1959, Ch. 501. )

ARTICLE 2. Investigation of County, City, and District Affairs [925 - 933.6]  (Heading of Article 2 amended by Stats. 1973, Ch. 1036. )

933. (a) Each grand jury shall submit to the presiding judge of the superior court a final report of its findings and recommendations that pertain to county government matters during the fiscal or calendar year. Final reports on any appropriate subject may be submitted to the presiding judge of the superior court at any time during the term of service of a grand jury. A final report may be submitted for comment to responsible officers, agencies, or departments, including the county board of supervisors, when applicable, upon finding of the presiding judge that the report is in compliance with this title. For 45 days after the end of the term, the foreperson and his or her designees shall, upon reasonable notice, be available to clarify the recommendations of the report.

(b) One copy of each final report, together with the responses thereto, found to be in compliance with this title shall be placed on file with the clerk of the court and remain on file in the office of the clerk. The clerk shall immediately forward a true copy of the report and the responses to the State Archivist who shall retain that report and all responses in perpetuity.

(c) No later than 90 days after the grand jury submits a final report on the operations of any public agency subject to its reviewing authority, the governing body of the public agency shall comment to the presiding judge of the superior court on the findings and recommendations pertaining to matters under the control of the governing body, and every elected county officer or agency head for which the grand jury has responsibility pursuant to Section 914.1 shall comment within 60 days to the presiding judge of the superior court, with an information copy sent to the board of supervisors, on the findings and recommendations pertaining to matters under the control of that county officer or agency head and any agency or agencies which that officer or agency head supervises or controls. In any city and county, the mayor shall also comment on the findings and recommendations. All of these comments and reports shall forthwith be submitted to the presiding judge of the superior court who impaneled the grand jury. A copy of all responses to grand jury reports shall be placed on file with the clerk of the public agency and the office of the county clerk, or the mayor when applicable, and shall remain on file in those offices. One copy shall be placed on file with the applicable grand jury final report by, and in the control of the currently impaneled grand jury, where it shall be maintained for a minimum of five years.

(d) As used in this section “agency” includes a department.

(Amended by Stats. 2002, Ch. 784, Sec. 538. Effective January 1, 2003.)

http://leginfo.legislature.ca.gov/faces/printCodeSectionWindow.xhtml?lawCode=PEN&sc... 11/5/2020
2019-2020
COLUSA COUNTY
GRAND JURY
FINAL REPORT
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreperson Letter</td>
<td>3</td>
</tr>
<tr>
<td>Grand Jury Oath</td>
<td>4</td>
</tr>
<tr>
<td>Grand Jury Members</td>
<td>5</td>
</tr>
<tr>
<td>Report 1: Tri-County Juvenile Rehabilitation Facility &amp; The Maxine Singer Youth Guidance Center</td>
<td>6</td>
</tr>
<tr>
<td>Report 2: Colusa County Jail Inspection</td>
<td>10</td>
</tr>
<tr>
<td>Report 3: Mosquito Abatement: Taking a Bite Out of Colusa</td>
<td>14</td>
</tr>
</tbody>
</table>
September 12, 2020

Honorable Jeffrey A. Thompson, presiding Judge
Superior Court of California, County of Colusa
532 Oak Street
Colusa, CA 95932

Dear Judge Thompson,

As foreperson of the 2019-2020 Grand Jury, I am honored to present you with the final report.

On behalf of my fellow jurors, we appreciate the extraordinary experience and opportunity to learn about the vital function of the Grand Jury and its importance to the supervision and balance of our local government.

During our term we had the challenge (as past juries have) of meeting quorums and retaining members. Our most challenging event this year was the same challenge affecting every community in America, the pandemic of COVID 19. Its limitations affected continuing investigations and restricted our assembly as a group. However, all issues brought to the attention of the jury were investigated and received the required consideration.

I am grateful for all jury members who attended meetings, worked on committees and served as officers for their commitment to the process and assisting me in finding our way through the extended year. I would also like to recognize Cheryl Jenkins and Erin Kalfsbeek for their sacrifice and devotion to ensure the completion of our reports.

I would like to thank all the public officials who cooperated in interviews and contributed their time, provided information and shared their knowledge as requested by jury members. Also, I am indebted to the assistance provided by Jennifer Sutton, our Senior Deputy County Counsel, who gave us direction at all crossroads we encountered.

Although our work may have been hindered, it has been an enlightening experience and I extend my best wishes to the next Grand Jury selected to procure the best experience possible.

Sincerely,

[Signature]

Kristen Simmons, Foreperson
2019/2020 Colusa County Grand Jury
Grand Jury's Oath

“I do solemnly swear (or affirm) that I will support the Constitution of the United States and of the State of California, and all laws made pursuant to and in conformity therewith, will diligently inquire into, and true presentment make, of all public offenses against the people of this State, committed or triable within this county of which the Grand Jury shall have or obtain legal evidence. Further, I will not disclose any evidence brought before the Grand Jury, nor anything which I or any other Grand Juror may say, nor the manner which I or any other Grand Juror may have voted on any matter before the Grand Jury. I will keep the charge that will be given to me by the court.”

(California Penal Code 911)
Grand Jury Members

2019-2020

Officers
Kristen Simmons, Foreperson & Special District Chairperson
Derrick Ash, Pro Tem and Parliamentarian
Doris Zoller, Recording Secretary
Jim Imhoff, Corresponding Secretary, City Chairperson
Gustavo Sanchez, Sgt At Arms
Cindy Campbell, County Chairperson
Tom Stephens, Criminal Justice Chairperson
Habib Muharam, Audit and Finance Chairperson

Members
Erin Kalfsbeek
Diane Helms
Roger Schantz
Tim Coreless
Mariana Medina
Florina Medina
Gerry Hernandez
Anays Jimenez
Cesar Ramos-Campos
Cheryl Jenkins
Tri-County Juvenile Rehabilitation Facility and The Maxine Singer Youth Guidance Center Inspection
Tri-County Juvenile Rehabilitation Facility and The Maxine Singer Youth Guidance Center Inspection

Summary

Members of the Colusa County Grand Jury conducted their yearly inspection of the Tri-County Juvenile Rehabilitation Facility and The Maxine Singer Youth Guidance Center (Camp Singer) located at 1023 14th Street, Marysville, CA on January 24, 2020. The two facilities located on the same grounds are the primary sites for Colusa County to house youth offenders. While touring both facilities, grand jurors had the opportunity to speak with administration, supervisors, staff and offenders.

Background

The Grand Jury is authorized to visit and inquire into the conditions of any public jail within the county, as outlined in section 919 (a) and (b) of the California Penal code. Even though the Facility is physically located in Yuba County, Colusa County sends their juvenile offenders to the facility. Because of this, the Colusa County Grand Jury feels it is our duty to ensure the safety and security of the facility for our county’s youth. The Colusa County Grand Jury completed an in-depth investigation that included programs offered and a comprehensive comparison between the juvenile hall and Camp Singer. The goal of the inspection was to ensure that no drastic changes had been made in the previous year and that the juvenile hall and Camp Singer remain adequate to house Colusa County’s youth.

Methodology

Information for this investigation was sourced from the following:

- Grand Jury Criminal Justice committee toured of the juvenile hall and Camp Singer facilities
- Interview with the administrative staff, and line personnel who work in the facilities on a daily basis;
- Interviews with a minimum of two inmates from juvenile hall and Camp Singer concerning facility conditions and programs;
- Review of inspections conducted by other agencies;
- Research on data concerning services, including contracted services;
- Fire, health, and safety inspection reports;
- Review of past Grand Jury reports;
- www.suttercounty.org

Discussion

Colusa County does not have a juvenile facility of their own, therefore the county utilizes the Tri-Counties Rehabilitation Facility and Maxine Singer Youth Guidance Center located in Marysville, Ca. On January 24, 2020, five members of the Colusa County Grand Jury conducted an inspection of the juvenile hall and Camp Singer. The Grand Jury members were taken on a tour of the facilities, led by facility staff, who answered questions as the tour was conducted.
When a Colusa County juvenile is arrested, they are either released into parental custody or taken to the juvenile hall, where they await court appearances, serve juvenile sentences or are placed at the Camp Singer Program.

**Condition of the Grounds**

The facility was built in stages beginning in the 1950's, with improvements done in the 1970's and expansions in the 1980's. Considering the age and wear on the buildings, they are in good condition. The maintenance on the grounds and the facility are important until the new facility can be built. In the Camp Singer side of the facility the laundry room, classroom, gymnasium and living area appeared clean and well organized. Each juvenile was responsible for keeping their bunk area clean. The juvenile hall side has personal cells for each youth and they too are required to keep their cell clean. The kitchen and dining hall, which is shared by juvenile hall and Camp Singer, was exceptionally clean and well organized. The classrooms in both facilities were also well maintained with adequate lighting, materials and temperature.

**General Information**

The juvenile hall and Camp Singer house youth between 13-19 years old. At the time of our tour, one (1) female and thirteen (13) males were being housed in the juvenile hall. At the time of the tour, two (2) of the juveniles were from Colusa County. Camp Singer housed fifteen (15) males and one (1) female. At the time of the tour, Colusa County did not have a juvenile placed in the camp.

The facility is equipped with an Intervention Counselor. The program focuses on Anger Management, Antisocial Emotions, Gang rehabilitation and Parenting classes to name a few. Most sessions are individual but there could be groups from 4-8 juveniles. The hall also provides a tattoo removal program.

Currently there are fourteen (14) Juvenile Correction Officers (JCO's) employed at the juvenile hall. The facility is allocated for twenty-five (25) Juvenile Correction Officers and seven (7) supervisor positions. They are currently short seven (7) supervisor positions and three (3) Juvenile Correction Officer positions institution wide. The JCO's work 12 hour shifts to provide continuous supervision. When the youth are awake the staff ratio is one (1) to ten (10) youth. When the youth are asleep the staff ration is one (1) to thirty (30) youth. The staff is trained in two sessions on weaponless defense, Trauma Course, Positive Behavior Intervention System (PBIS), and behavioral health classes. The primary role of staff is to mentor, counsel and guide youth. Every January, the staff must review and sign off on the Emergency Preparedness Plan. Training is conducted throughout the year. Supervisors must receive forty (40) hours of training and JOCs receive twenty-four (24) hours of training annually.

From January 1, 2019 to December 31, 2019, there were thirty-eight (38) juvenile peer assaults and three (3) youth on staff assaults. If there is any use of force within the institution an incident report is written. The incident report is reviewed by the Deputy Superintendent and Superintendent of the juvenile hall. The report is reviewed by a weaponless defense instructor to see if any changes should be made moving forward. The incident is debriefed with all involved staff. Additionally, all physical altercation are automatically reviewed on camera.

Medical staff is available for the youth at both facilities. These services include psychological, pharmaceutical, and physical medical needs. Minor medical needs are addressed on site, and other needs are assessed on a case by case basis. A registered nurse is available 6 hours a day/five days a
week along with a doctor being available five (5) days a week, for several hours a day and on call when off site.

The juveniles are allowed visiting hours six days a week limited to one hour with parents, guardians, or their own children. They can earn additional visiting privileges, based on the P.B.I.S (Positive Behavioral Interventions and Supports Program)

Meals are served cafeteria style. Youth are served three (3) hot meals and two (2) snacks a day. Special diets are verified through medical and served as needed. All youth eat in the dining hall. Staff are present and encouraged to sit at a table while eating their meal. Serving sizes are outlined per the School Nutrition Program. The youth are encouraged to eat. Should any youth skip meals a referral is made to both medical and behavioral health.

**Inmate Interviews**

The inmate interviews were conducted during the tour. Inmates from Camp Singer and the juvenile hall were randomly selected and agreed to talk to us. They all agreed that they were treated well, and the grievance process is fair. When asked what they wanted to do after they were released, they all mentioned some branch of the military. They were all very motivated to finish High School and then go into the military. They explained that many of the guards had served in the military and that they like the idea of going to a place that was just as structured as the juvenile hall and Camp Singer.

**Findings**

F1. In its current state, the facility continues to function adequately.

F2. Inspections of the facility are up to date and a Safety plan is in place for staff and inmates.

**Recommendations**

R1. The Colusa County Grand Jury recommends that Yuba County continue with its existing plans of constructing a new, modern facility that incorporates up to date safety and inmate management features.

R2. Continue to fill open positions to ensure the safety of staff and juveniles

**Bibliography**

Tri-County Rehabilitation Faculty Orientation Manual

Sutter County Website

[Http://www.suttercounty.org](http://www.suttercounty.org)

Yuba County Probation Program

[Http://www.bscs.ca.gov](http://www.bscs.ca.gov)
Colusa County
Jail Inspection

EXISTING JAIL & CONCEPT PLAN
Colusa County Jail Inspection

Summary

The management and operation of the Colusa County Jail was observed and recorded by every visiting Grand Jury from 2012 to 2018, as well as the Board of State and Community Corrections (BSCC) and the United States Marshals Service. The 2019/2020 Grand Jury Criminal Justice committee toured and interviewed staff and inmates in the jail.

Within the Colusa County Jail security risks exist to both staff and inmate populations due to the outdated liner design that necessitates frequent contact with prisoners during periods of inmate control and movement. The American Correctional Association states that "linear design should absolutely be avoided." The proposed new jail facility will implement a more modern and secure design.

Background

The Grand Jury is authorized to visit and inquire into the conditions of any public jail within the county, as outlined in section 919 (a) and(b) of the California Penal code. Inspecting safety and security in jails are priorities along with ensuring inmates are treated in a safe and humane manner. The California Board of State and Community Corrections (BSCC) is the state regulatory agency that establishes and oversees standards for the construction, operation, and administration of the county detention facilities.

Methodology

Information for this investigation was sourced from the following:

- Grand Jury Criminal Justice committee tour of the jail facility;
- Interview with the Sheriff, administrative staff, and line personnel who work in the jail on a daily basis;
- Interviews with a male and female inmate concerning jail conditions;
- Review of jail inspections conducted by other agencies, including the Board of State and Community Corrections (BSCC) and by the United States Marshals Service;
- Research on data concerning jail services, including contracted services;
- Fire, health, and safety inspection reports;
- Review of past Grand Jury reports;

Discussion

October 25, 2019, the Grand Jury members and jail staff held an introductory meeting. The meeting served to acquaint the members with the overall custodial responsibilities of the Colusa County Jail.
On the same day, members of the Colusa County Grand Jury conducted an in-depth inspection of the Colusa County Jail, located at 929 Bridge Street in Colusa. The Grand Jury members were taken on a tour of the 57 year-old jail facility by the jail commander that included interviews with the sheriff, correctional staff and inmates.

The Colusa County Jail is connected to the main Colusa County Sheriff’s Office. It is a single floor facility with an authorized housing capacity of 92 inmates. In addition to holding recently arrested prisoners, the jail also houses inmates who are awaiting further court hearings, and inmates serving jail sentences. The jail is also used as a holding facility for federal prisoners awaiting court hearings in federal court. At the time of the Jury’s inspection, there were 81 inmates in custody. The jail is staffed by 13 Sheriff’s department employees.

Interviews with a male and female inmates confirmed they are provided with all their physical needs, i.e. three meals daily, bathroom facilities, and a bed, while they serve their various sentences, or await sentencing. Reasonable commissary, educational facilities, basic liberal arts classes and religious services are also available for interested inmates.

An explanation was given by staff of the critical services, including the medical and food preparation facilities, both of which are contracted. Psychological services are provided by Colusa County Behavioral Health. The food storage area, the medical station, kitchen, laundry, and commissary were observed during the tour and appeared adequate. The current linear jail design does not allow for continuous observation of inmate living areas. Security and how it might be improved was discussed, including safety features in the proposed new detention facility. The new facility plans were shared during the tour and the members were shown where the new construction would be expanded with the existing facility.

**Findings**

F1. In its current state, the Colusa County Jail continues to function adequately.

F2. Inspections of the facility are up to date and a Safety plan is in place for staff and inmates.

F3. The current linear jail design does not allow for continuous observation of inmate living areas. The American Correctional Association stipulates that the linear design should be absolutely avoided in order to maintain safe, secure custody, and control of inmates.

**Recommendations**

R1. The Colusa County Grand Jury recommends that the County of Colusa continue with its existing plans of constructing a new, modern jail facility that incorporates up to date safety and inmate management features.
Bibliography

California Penal Code 919

Board of State and Community Corrections Title 24 (Minimum Standards for Adult Facilities)

Grand Jury Jail Inspection Reports 2012-2018


Board of State and Community Corrections and Inspection Reports (2016/2018)

United States Marshals Service Inspection Report. Form USM-218

California State Fire Marshal Inspection Report

Colusa County Fire Inspection Report
Mosquito Abatement:
Taking a Bite Out of Colusa
Mosquito Abatement: Taking the Bite Out of Colusa

Table of Contents

SUMMARY Page 17
BACKGROUND Page 17
METHODOLOGY Page 17
DISCUSSION AND FACTS Page 18
   Mission Page 18
   District Boundaries Page 18
      LAFCo Review Page 18
      Annexation of other areas of Colusa County Page 19
Oversight of Colusa Mosquito Abatement District Page 19
Administration of the Colusa Mosquito Abatement District Page 19
Factors Contributing to Mosquito breeding and vector-borne Illness Page 20
   Mosquito Habitat Page 20
   Mosquito Life Cycle Page 20
   Disease-carrying Mosquitos Page 20
Mosquito Control Page 21
   Surveillance Page 21
   Abatement Page 21
   Source Reduction Page 22
   West Nile Virus Page 22
   Chemicals Used Page 23
Training Page 23
Safety/Inspections Page 24
Complaints/Concerns Page 24
Education and Prevention Page 24
Communication/Public Notice Page 25
   MCAD Website Page 25
   Local Newspapers Page 25
   Board of Trustee Meetings Page 25
SUMMARY

The 2019/20 Colusa County Grand Jury (Grand Jury) launched a review of the Colusa Mosquito Abatement District (CMAD or District) operations. The Grand Jury was motivated to examine the comprehensive operations of the CMAD because the District had not been reviewed in recent years. This review looked into the District’s responsibilities, boundaries, abatement operations/procedures, incidence of West Nile Virus, safety, training, education/prevention and communicarion strategies.

BACKGROUND

The mosquito population is high in the City of Colusa and the outlying area due to the large areas of agricultural land, multiple wetland areas, and close proximity to the Sacramento River. CMAD is integrally important in the control of the mosquito population. The Grand Jury reviewed the CMAD’s comprehensive operations, including district boundaries and sphere of influence, mosquito surveillance, monitoring and testing, chemical usage and application, equipment and maintenance, spraying methods and schedules, mechanisms for reporting and responding to mosquito hot spots, dead birds and incidences of West Nile Virus, safety and training, prevention and education, communication, recordkeeping, complaints/concerns, and budget resources.

 METHODOLOGY

Information for this investigation was sourced from the following:

Interviews with CMAD Employees, Board of Trustees and the Colusa County Department Health & Human Services

Tour of the CMAD facility

Review of the CMAD website


Review of the CMAD Boundary Map

Review of CMAD Board of Trustees Meeting Schedules/Agendas/Minutes

Review of the Colusa Local Agency Formation Commission (LAFCo) Municipal Service Review (MSR) and Sphere of Influence (SOI) Report, LAFCo Resolution 2008-13, October 2, 2008

Review of Colusa Local Agency Formation Commission (LAFCo) Municipal Service Review and Sphere of Influence Report, Adopted March 1, 2018

Review of CMAD fiscal budget

Review of 2008 Annexation Ballot Measure

Review of 2014 Mosquito, Vector, and Disease Control Measure (Prop 218)

Conducted independent internet research of mosquito breeding, mosquito-borne illness, abatement and prevention

Evaluated information from other government agencies, including the State of California, CDC, other regional Counties
Review of public notices and news articles (Pioneer Review/Sun Herald)

DISCUSSION and FACTS

The Colusa County Mosquito Abatement District (CMAD/District) was formed in 1958. The mission of CMAD is to protect the public's health from vector borne diseases, through a comprehensive mosquito and vector control program. A vector is an animal or insect that can transmit disease to the human population. The District operates under California Health and Safety Code #2200.

Through mosquito and vector control, CMAD works to prevent mosquitos and other pest populations from transmitting infectious diseases (such as West Nile Virus, Western equine encephalomyelitis, and Malaria) to the human population, which also reduces annoyance and discomfort to the public.

The District encompasses 160 square miles that includes large areas of agricultural land, wetlands and river banks, which provide prime breeding conditions for mosquitos that are in close proximity to humans.

The district uses an integrated pest management plan (Best Management Practices to Reduce Mosquitos) to provide control measures that include biological control using mosquito fish, chemical control using EPA (Environmental Protection Agency) registered materials and source reduction strategies.

District Boundaries

The District's boundary encompasses 160 square miles in eastern Colusa County, including the City of Colusa, and includes 20 square miles in Sutter County, the Butte Sink National Wildlife Refuge. The Butte Sink region is not included in the Sutter-Yuba Mosquito & Vector Control District; however, because the area is a significant contributor to the large mosquito population in Colusa County, the region was annexed by the CMAD in 1974. The District's boundaries do not include Colusa County areas of Arbuckle, College City, Grimes, Lodoga, Maxwell, Princeton, Sites, Stonyford or Williams. See attached Colusa Mosquito Abatement District Map (Attachment 1).

Local Agency Formation Commission (LAFCo) Review

Local Agency Formation Commissions (LAFCo) in California are independent agencies created for the purpose of encouraging the orderly formation of local government agencies and conserving and preserving natural resources. LAFCo is responsible for coordinating logical and timely changes in local governmental boundaries, conducting special studies that review ways to reorganize, simplify, and streamline governmental structure, preparing a review of services called a Municipal Service Review (MSR), and preparing a Sphere of Influence (SOI) thereby determining the future 'probable' boundary for each city and special district within each county. The Commission's efforts are directed toward seeing that services are provided efficiently and economically while agricultural and open-space lands are protected. LAFCo does not have enforcement authority, nor do they have the authority to initiate a city or district annexation or detachment proceeding.

LAFCo completed a MSR and SOI of the CMAD in 2018. The report notes that Colusa County has a large agricultural industry, with one of the largest crops being rice and that rice growing can provide a large area for mosquito breeding. It also notes that Sutter County is also an agricultural county and has nearly as much rice acreage as Colusa County. The report supports the need for the CMAD and the services it provides and notes that the need will continue into the future.
LAFCo's recommendation for the SOI for the District is that the boundary of the District be the same as the SOI. Should annexation of other areas within the county be proposed, the District would have to have a new SOI adopted prior to requesting annexation.

Annexation of other areas within Colusa County

The annexation of other areas of Colusa County had been considered in the past. A ballot measure that would have expanded mosquito-fighting efforts across most of Colusa County went before voters in October 2008. The ballot measure was not successful, thus no additional areas of Colusa County were annexed by the District.

Oversight of Colusa Mosquito Abatement District

The District reports to a Board of Trustees. The Board of Trustees has five members, appointed by the Colusa County Board of Supervisors. Per Health and Safety Code 2020, one member must be a city representative and the other four must be from within the district boundaries, representing each incorporated area. The board is currently full. Meetings are scheduled for the last Monday of each month at the District office; however, depending on need, meetings may be cancelled. For the year 2019, the meetings averaged every other month, which allowed discussion of items, operational updates, and approval of bills to be paid. Minutes are maintained as public record and are available upon request at the District office. Meeting notices and agendas are posted on the District's office door.

Administration of the Colusa Mosquito Abatement District

The District has one full-time manager and two full-time employees that do surveillance, monitoring, ground fogging, shop fabrication, maintenance and repair, chemical loading and application, as well as administrative responsibilities, such as required reporting, responding to calls, and website maintenance. Full-time staff work year round with the height of their season being April through November when mosquito control is most needed. Staff work long hours during this period. The District also employs 3-5 part-time seasonal employees (based on need) that provide ground fogging generally for the period of July to November. The District reports that the current staffing levels are adequate to achieve a good control level for the population.

The District has 8 trucks mounted with fogging equipment and ATVs that are used for wooded areas or areas where vehicles would be prohibited due to terrain. Aerial application is also used for large agricultural and hard to reach areas. Aerial application is provided through Bob's Flying Service.

The Ultra Low Volume (ULV) fogging machines used on the trucks are built and maintained on-site by District staff. The District has found that they are able to build a more durable machine for less money than is available commercially. Each ULV machine fabricated by District staff costs approximately $3,500 in materials, plus labor, versus purchasing new machines commercially for approximately $12,000. In-house fabrication allows the staff to build the equipment to their environment needs. This saves the District thousands of dollars on purchases and saves time and money in repairing the machines. The District calibrates the fogging machines and has the calibration checked annually to ensure accuracy.

A tour of the District's facility in early December by the Grand Jury included the shop space, fabrication area, fogging machines, truck parking area, chemical storage and loading area, and office space. The facility was very clean, orderly and appeared as a safe environment with appropriate space for work and storage, and had required signage and safety equipment/information throughout the facility.
The Grand Jury reviewed the District's training records, operation manuals, policies and procedures, complaints, safety and inspection records.

Factors Contributing to Mosquito breeding and vector-borne Illness

Mosquito Habitat

Colusa County topography is primarily flat, consisting of agricultural land, wetlands, and the Sacramento River. The climate in Colusa is described as semi-arid. Rainfall is primarily in the winter months and varies from 15-20 inches. Summers are typically hot and dry. The agricultural land, including many rice fields, wetland areas and river banks provide a prime mosquito breeding habitat due to the large areas of standing water during the hot summer months (LAFCo 2008/2018). Mosquitos breed in both large bodies of standing water, such as rice fields, wetlands, river beds and wildlife preserves, as well as small bodies of standing water, such as flower pot basins, unmaintained swimming pools, and storm drains.

Mosquito Life Cycle

CMAD actively monitors and treats the District for mosquitoes in the larva and adult stages of their life cycle. Mosquitos go through four separate and distinct lifecycles: Egg, larva, pupa and adult. All mosquitos must have water to complete their lifecycle. Eggs are laid on water or near where water will be and most eggs hatch within 48 hours. The larvae live and feed in the water until the pupa stage. When the pupa stage is complete, the adult mosquito emerges. Mosquitos sit on the surface of the water until dry and then take flight. Female mosquitos need a blood meal to develop eggs. Male mosquitos feed on plant nectar. The life span depends on factors such as species, temperature, humidity, gender and time of year. Info about the mosquito lifecycle can be found on the Mosquito Vector Control Association of California (MVCAC) website at (https://www.mvcac.org/vectors-and-public-health/mosquitoes/).

Disease-carrying Mosquitos

The CMAD primarily deals with three types of disease-carrying mosquitos: Culex, Aedes, and Anopheles. The Culex mosquito is active at dawn, dusk and after dark, breeds in standing water (such as ponds, drains and agricultural land), and can carry the West Nile Virus, Western Equine Encephalitis and St. Louis Encephalitis; the Aedes mosquito is active in the daytime and near dawn and dusk, breeds in small areas of standing water (such as buckets, bowls, flower pots), thrives in urban areas, and can carry the Zika Virus, Dengue, Chikungunya, Yellow Fever and canine heartworm; the Anopheles mosquito is active at dawn and dusk, breeds in vegetated pools, agricultural areas and can carry Malaria. Additional information can be found on the MVCAC website at https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/GuidetoImportantMosquitoesinCA.pdf.
Mosquito Control

The CMAD achieves mosquito control through surveillance, abatement and source reduction.

**Surveillance**

The District uses adult and larval population thresholds to determine control measures (see Attachment 2). The threshold numbers are based on the large wetlands and agricultural areas that are within close human proximity. There are three ways of determining mosquito population thresholds: the Dipper count and or the New Jersey Light Trap Count, for determining larval and future adult mosquito control, and the Landing counts for determining if adult mosquito control is needed. Records are kept of dipper and landing counts, along with larval samples on a weekly basis in areas that breed mosquitoes. The District collects New Jersey Light Traps weekly to monitor adult mosquito populations and species. Surveillance occurs between 7 AM and 12 noon and includes going to various sites within the district to visually check the larval stage, do on-site landing tests (which helps determine the active number of mosquitoes in the area), as well as monitor the outside temperatures. Larvae is collected and brought back to the District office to determine species. Surveillance forms are used to record the information. Blood samples are also taken from the District-maintained Sentinel chicken flock and are tested for West Nile Virus.

**Abatement**

From late April to early November, CMAD provides abatement services in the City of Colusa and outlying areas within the District boundary. Application of pesticide is based on mosquito populations and disease activity determined by surveillance.

The CMAD follows an integrated mosquito management program that is an ecosystem based strategy. It focuses on long term prevention of mosquitoes through a combination of techniques, including biological control, using mosquito fish (Gambusia), chemical control through ULV ground spraying, aerial spraying and larvacide briquettes, as well as source reduction strategies. Pesticides are used only after monitoring indicates they are needed according to established guidelines and are applied in a manner that minimizes risk to human health, to beneficial and non-targeted organisms, and the environment. These materials are registered by the Environmental Protection Agency (EPA) and applied according to label by the District's trained and certified technicians. Treatments are made with the goal of eradicating only mosquitoes.

Mosquito fish (Gambusia) are used in ponds and areas of standing water for managing mosquito larvae. The mosquito fish are grown in ponds managed by the District and moved to the District’s location during the abatement season. The mosquito fish are used by the District in areas they find need treatment and control, and are also available free to the public for the use in mosquito control. The fish are typically available in April.

Ground fogging occurs in two ways. Populated and easier to reach areas use truck mounted Ultra Low Volume machines; ATVs may be used in hard to reach and wooded areas, such as along river banks. Ground spraying in the City of Colusa and outlying areas is scheduled on Mondays and Thursdays typically between 8 p.m. and 12 midnight. The remaining outlying areas within the district boundaries are sprayed using ground control on Tuesdays and Wednesdays typically between 8 p.m. and 10 p.m. Nighttime spraying is necessary to take advantage of temperature inversion, which facilitates the spray staying near the ground.
Aerial spraying was implemented in 2002 and is used for approximately 25% of the control. It is used for large areas that are hard-to-reach by conventional ground spraying, typically large agricultural and wetland areas. Aerial spraying is dependent upon the mosquito hatch and can begin as early as March. It is also used when local ag fields are flooded and is subject to change based on field conditions. The number of times aerial spraying is used is dependent upon what surveillance shows is needed.

Larvae briquettes are primarily used in water basins and storm drains. The briquettes, which last 150 days, are put in place in late May.

**Source Reduction**

Source reduction includes District staff eliminating breeding sources when they are engaged in surveillance and abatement efforts. They also ask the public to help by inspecting their homes and yards for sources that contribute to mosquito breeding, such as standing water in fish ponds, bird baths, flower pot saucers, old tires, buckets, troughs, gutters, basements that flooded during the winter, and unattended swimming pools.

At a cost, the District can also provide abatement services to communities within Colusa County that are outside of the District boundaries. In recent years, the City of Williams has taken advantage of this service, contracting with the District for a specified number of aerial sprays. The District is occasionally asked to provide spraying services prior to large events (at a cost to the organizer); however, this is not a common request since spraying occurs twice a week.

**West Nile Virus**

The CMAD’s abatement effort helps control the spread of vector-borne illness, such as West Nile Virus (WNV). Based on the heightened awareness of the potentially serious illness over the past several years, the Grand Jury was interested in learning more about the incidence of WNV in Colusa County, as well as abatement efforts to mitigate the issue.

Data gathered through Colusa County Public Health and the California West Nile Virus website shows that Colusa County has not seen a high number of WNV cases. In the past five years (2015-2019), there have been three confirmed cases and no deaths from WNV.

The Colusa County Public Health Department (Public Health Department) receives information about positive WNV test results in a variety of ways: from individual labs, from health providers and through the California Department of Public Health’s CalREDIE system. They do not receive any advanced warning of testing, only after-the-fact information when a test is positive. Per California Code of Regulations (CCR) Title 17 Section 2500, the Public Health Department is required to notify the California Department of Public Health when they receive notice from a lab or physician of a positive WNV test. This is done through the CalREDIE system. A second test is then completed to confirm the WNV diagnosis, as there can be a false-positive result. This process can delay confirmation of a positive WNV test several weeks. The Public Health Department noted that many physicians have not been actively testing for WNV, since it is a virus that has no treatment and has not been problematic in recent years. Once notified, the Public Health Department will reach out to the physician, as well as the individual, if the individual has agreed to release their information. Under HIPAA laws, the individual’s information is protected and cannot be disclosed. No notice is provided to the general public when a West Nile Case is confirmed, unless the problem is pervasive.
CMAD has an interest in knowing when WNV cases are reported so that they can form a quick response to treat the area; however, even if the affected individual has allowed the release of their information, it cannot be assumed that the individual’s residence is the same as the location where the infection occurred. The District receives notification of confirmed cases through regular reports from the State of California. The reporting process and the time to confirm a WNV case can take 2-3 weeks. This lag time, as well as not having the specific location, does not aid the District in providing immediate response. The District’s regular schedule of spraying twice a week is the control measure that is relied upon to fight WNV. If a generalized location of active WNV is provided by Public Health, the District uses that information for spraying, monitoring and surveillance and will modify their spray plan accordingly. The Public Health Department does not have any expectation of a different approach in controlling WNV than the District’s current practices and abatement schedule. The current plan of defense against vector-borne illness is through prevention, education, and the established mosquito management program.

More information about West Nile Virus can be found on the California West Nile Virus website at http://www.westnile.ca.gov/.

**Chemicals Used**

All chemicals used by the District are approved by the Environmental Protection Agency (EPA) and are non-toxic to humans and other animals (see Attachment 3). This information is also posted on the District’s website and is provided annually as a public notice in the local paper.

Daily spray sheets are completed to record spraying locations, date/time, and amount. Chemical application is required to be recorded on a daily basis and entered into the Gateway system at Cal Ag DPR (California Department of Food and Agriculture, Department of Pest Regulation). The District reviews the reports from the Cal Ag DPR system during the mosquito season to evaluate trends and activity, making adjustments as needed.

District employees follow District policies and procedures and adhere to pest management practices and usage guidelines for chemicals. Each employee uses protective equipment (gloves, goggles, face mask, coveralls, and boots, as required), when using Class 3 materials. Each truck is equipped with an operator’s manual, 3 gallons of water, safety checklist, ear protection, safety kit, and accident forms.

**Training**

The District’s full-time employees are required to complete a Vector Control Technician Certification Program every two years through the California Department of Health Certification and Training Program. The manager and one of the senior technicians have all four levels of the State certifications, A, B, C, and D. Training is comprised of 12 hours of (A&B) Pesticide Application and Safety (A), and Mosquito Biology and Control (B), as well as 8 hours of (C) Terrestrial Invertebrates Vector Control and 8 hours of (D) Vertebrate Vector Control. The third full time technician obtains levels A & B. Certified Vector Control Technicians are also required to obtain Continuing Education units in the categories which they are certified. The Mosquito and Vector Control Association (MVCAC) maintains a log of all training. Part-time employees operate under the District Manager’s certification and are trained by District staff on chemical labels and usage, Material Safety Data Sheets, truck and fogger operations, and safety protocols.
Employees are provided training on fire extinguisher use and fork lift operation. Employees also complete the required California Ethics (AB1234) training and Sexual Harassment Training through VCJPA.

Safety/Inspections

The District’s manager is responsible for the implementation and maintenance of the District’s Injury Illness Prevention Program (IIPP), which outlines responsibilities, facility inspections, hazard assessment and control, accident investigations, recordkeeping, safety rules, training on the IIPP and continuing education. The District has a Safety Officer that is charged with conducting a monthly facility Safety Survey of all working areas and equipment within the facility. All full-time employees are to observe and assist the Safety Officer with the monthly inspections, and to take part in making corrections. The Safety Officer keeps a log of the safety surveys and documents any corrections or improvements completed. The District reported that is has monthly safety meetings; however, records reviewed indicate these meetings happen less frequently.

Annual inspections are conducted by the Colusa County Agricultural Commissioner representative. Records reflecting these inspections were on file and available for the Grand Jury’s review.

The facility and equipment is inspected annually by the Department of Agriculture and Vector Control. The District has voluntarily had the California Division of Occupational Safety and Health (Cal/OSHA) come inspect District facilities in the past, but is it not a requirement by the District or by Cal/OSHA.

The District has a written Hazard Communication Plan in place that outlines container labeling, material safety data sheets, employee information and training, and a list of hazardous substances.

Material Safety Data Sheets are maintained on site and available to all employees.

Operating Manuals are provided in each truck, including accident and spill reports, if needed.

New employees receive instruction on general safety, as well as job safety training regarding equipment and materials for those employee assigned to field jobs.

Complaints/Concerns

Complaints/concerns about mosquito infestations can be made directly to the District office or by contacting them through their web site, which generates an email to a staff member. Complaints are assigned to one of the supervisors based on the location (eastern/western district). Calls are returned or a field visit is made to the location. If the complainant is not at the location when District staff arrives, a door notification tag is left. District staff and the Board reported that the District has received relatively few complaints about mosquito issues and has good response time and resolution to complaints. The District does not maintain a complaint log; complaints and subsequent responses may be noted on daily log sheets by the responding technician. There were a few records of a few significant issues available for the Grand Jury’s review, however, there is no formal process for documenting and retaining all complaints received.

Education and Prevention

The District relies on community participation in prevention efforts to stem the breeding of mosquitoes and protection from mosquito bites. Educational and prevention information is provided to the community on the District’s website. The District has placed educational information in local papers and
provided handouts when there are upticks in mosquito populations and disease. The District reported a larger presence and outreach in the past through local clubs and schools, but has not been actively providing community-based educational opportunities over the past few years due to time/resource constraints. The District is available to provide educational presentations/resources upon request.

Communication/Public Notice

Information is available to the public through the following sources:

**MCAD Website**

The MCAD website is managed in-house by District employees and is typically updated each spring. The website provides basic information about the District’s mission, sphere of influence, district boundaries, spraying schedules, chemicals used, reporting of mosquito problems and/or dead birds, general information/answers to questions, contact information, etc. All comments left on the website are routed to a District employee via email. In reviewing the District’s website, as well as the websites of other Mosquito Abatement Districts, the Grand Jury found it difficult to navigate and lacking in a variety of information that could be useful to the public. The 2018 LAFCo report also notes that more information could be provided on the website.

**Local Newspaper**

Newspaper articles, which provide general information regarding mosquito season, abatement schedules, prevention, and other useful information, are regularly published in the Williams Pioneer/Tri-County News/Appeal Democrat.

**Board of Trustee Meetings**

The Board of Trustee meetings are open to the public. Schedules, agendas and minutes are available at the District Office.

**Revenue Sources**

The Colusa Mosquito Abatement District works with the County of Colusa Auditor-Controller to maintain District funds, pay claims and provide an annual audit. The annual budget for the Colusa Mosquito Abatement District for 2019/20 was approved at $614,747 (Attachment 4).

The District’s revenue sources come primarily from property taxes, a voter-approved property assessment (Mosquito, Vector, and Disease Control Measure - Prop 218) passed on September 2, 2014, as well as a 1995 property assessment.

The 2019/2020 property assessments were: $33.98 per home owner parcel and $67.96 per commercial, industrial, office and agricultural parcels.

The District also receives funding from Sutter County for the 20 square miles in the Butte Sink area.

Non-permanently budgeted funds may also be received from various consumers for specific spraying, such as the City of Williams (who has contracted with MCAD the past few years to provide aerial spraying), duck clubs and organic farms, all at the cost of the consumer.
In the past, the District received a special allocation from the State of California when West Nile Virus was at a high level; however, these were one-time funds earmarked for increased abatement activities to reduce mosquito populations at the time.

The District reports that their resources are adequate to control the mosquito population at the current service levels. Additional staffing resources would help with shop work and provide the opportunity for increased surveillance, prevention, monitoring, fogging and broader use of aerial application for more expedited and comprehensive control. The 2008 LAFCo’s Sphere of Influence report notes that mosquito abatement is more difficult and expensive in agricultural areas than in urban areas due to density, habitat and agricultural practices.

**OBSERVATIONS/CHALLENGES**

The Mosquito Abatement District Map provides information regarding the District’s boundaries, the Sphere of Influence, and the Colusa County boundary. The District boundary includes the City of Colusa and some outlying areas, while the Sphere of Influence is larger and also includes other incorporated areas within Colusa County, such as Williams and Arbuckle. The map is clear on the District’s boundary lines; however, the common use of terminology such as ‘outlying areas’ and ‘surrounding areas’ may be confusing and lead individuals that live in those communities that are outside of the ‘town of Colusa and outlying areas’ to assume that they are part of the referenced ‘outlying area’ and that they receive services from the District. In addition, the 2018 LAFCo report notes that the boundary of the District be the same as the Sphere of Influence. This can also be confusing because the District boundary on the map is not the same as the Sphere of Influence. Providing a map narrative on what areas are in the District and what areas are not in the District would help further clarify the District’s service boundaries for all communities in Colusa County.

The District takes the control of mosquito-borne illnesses seriously; however, due to HIPAA regulations, there is very little information that can be shared with the District regarding the location of a West Nile Virus case. In addition, it can take more than a week to get confirmation of a positive test for WNV, which impacts the District’s ability to respond immediately. The inability to respond immediately to reports of West Nile Virus presents a challenge for the District. The District primarily receives this information through a weekly report from the State of California. For positive WNV cases within the District, it is likely that the area in question has already been sprayed as part of CMAD’s regular spray schedule by the time notification comes. The District notes this as adequate, but not ideal. If they had the information sooner, they would do additional, immediate spraying. For WNV cases in Colusa County that are outside of the District boundaries (which are not sprayed by the District through their twice-weekly schedule), the District is willing to provide spraying; however, if they don’t receive timely information about the location, they cannot provide an immediate response.

The CMAD reports that resources are adequate for their current level of abatement services, but also notes that there are some challenges. The District’s mosquito population is impacted by mosquitoes that come into the District by surrounding communities that aren’t in the service area and do not have abatement efforts in place. Currently the district sprays four days a week, but has to be flexible to do additional spraying when current schedules do not meet increased needs. The District’s revenue is static and additional spraying costs must come from the existing budget. The District has done a good job managing and cutting costs through innovative efforts, such as training employees to perform multiple job tasks, fabricating their own equipment, and taking advantage of government surplus for equipment and supplies. An increase in resources would help in providing increased abatement and prevention efforts.
**FINDINGS**

In accordance with *California Penal Code Sections 933 and 933.05*, the 2019/20 Grand Jury requires (or as noted, requests) responses from each agency affected by the finding presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based on the investigation, the Colusa County Grand Jury has arrived at eight principle findings, as follows:

F1   The Grand Jury found that the CMAD provides a high-level of mosquito control services and public health protection. The District has good abatement practices and a confident multi-functional employee team. Their facility and equipment are well maintained, and the employees take pride in their work and service to the community. The District received high praise by the Board of Trustees and in the 2018 LAFCo Municipal Services Review.

F2   The Grand Jury finds that the CMAD boundaries do not include other incorporated/non-incorporated areas of Colusa County, such as Arbuckle, College City, Grimes, Lodoga, Maxwell, Princeton, Sites, Stonyford or Williams.

F3   The Grand Jury finds that the CMAD operates on a very tight budget, which requires the District to be innovative in its strategies and control efforts. Cost-saving efforts are achieved by staff providing in-house maintenance of District equipment, in-house fabrication of District spraying machines, in-house design and maintenance of the District website (in addition to their regular abatement responsibilities) and by using surplus options for purchasing materials.

F4   The Grand Jury finds that in the past five years Colusa County has not had high numbers of WNV.

F5   The Grand Jury finds that the District does not have a formal educational/outreach program to provide consistent educational opportunities and community engagement in prevention and abatement efforts.

F6   The Grand Jury finds that the District has no formal process for tracking complaints/resolutions/outcomes.

F7   The Grand Jury finds that the Injury and Illness Prevention Program and the Hazard Communications program are outdated and that although there are training records that correlate to various aspects of these programs, such as training on chemicals and safety, there are no records showing that employees have read or been trained on the overarching written documents.

F8   The Grand Jury finds that upon review the District’s website, the layout is difficult to navigate and is lacking in a variety of information that could be useful to the public.

**RECOMMENDATIONS**

In accordance with *California Penal Code Sections 933 and 933.05*, the 2019/20 Grand Jury requires (or as noted, requests) responses from each agency affected by the recommendations presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based on the investigation, the Colusa County Grand Jury makes the following six recommendations:

R1   The Grand Jury recommends providing clarifying narrative regarding areas that are included and areas that are not included in the District’s boundaries.
R2  The Grand Jury recommends the District consider options that would provide increased education/outreach and a more active presence at local events to foster community partnership in prevention efforts to control mosquito populations at homes and businesses.

R3  The Grand Jury recommends that the District implement a formal process for tracking complaints/resolutions/outcomes.

R4  The Grand Jury recommends the District review their ILPP to ensure it is up to date. The current ILPP does not indicate when it was last updated/created. The Grand Jury recommends dating the document each time it is updated.

R5  The Grand Jury recommends the District review their Hazard Communication Program document to ensure it is up to date. The current Hazard Communication Program document does not indicate when it was last updated/created. The Grand Jury recommends dating the document each time it is updated.

R6  The Grand Jury recommends that the District update its website to provide easier navigation, as well as more robust information to inform the public and foster community interest and partnership. Specific recommendations are:

a)  Include more information regarding mosquito population data, trends, control and numbers of West Nile Virus cases by providing direct links to helpful resources, such as FAQ’s, brochures and recommendations that are designed for public communication that are on the California West Nile Virus website, as well as the CDC website. Currently the website links the public to websites that require the consumer to wade through a lot of policy documents/guidelines to find helpful information for the general public.

b)  Include educational information as a way to foster awareness, such as videos, resources/activities for families and schools, as well as brochures to print.

c)  Include the names of the members on the Board of Trustees; post Board meeting schedules, agendas and minutes on the website (also suggested in 2018 LAFCo report).

d)  Consider using a web based service request form that tracks specific data about complaints, requests, and resolutions, with the ability to retain the data for future tracking and review of trends.

e)  Highlight the use of aerial fogging on their website.

f)  Clarify district boundaries and those areas that are not included in the District.

RESPONSES

The California Penal Code 933 requires the governing body of any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the governing body. Such comment shall be made no later than 90 days after the Grand Jury publishes its report (filed with the Clerk of the Court). Additionally, in the case of a report containing findings and recommendations pertaining to a department or agency headed by an elected County official (e.g. District Attorney, Sheriff, etc.), such elected County official shall comment on the findings and recommendations pertaining to the matters under that elected official’s control within 60 days to the Presiding Judge with an information copy sent to the Board of Supervisors.
(a) Furthermore, California Penal Code Section 933.05 (a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:

1. The respondent agrees with the finding;
2. The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefore.

(b) As to each Grand Jury recommendation, the responding person or entity shall report one of the following actions:

1. The recommendation has been implemented, with a summary regarding the implemented action;
2. The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation;
3. The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of the publication of the Grand Jury report;
4. The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefore.

(c) If a finding or recommendation of the Grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the Grand Jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some decision making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

Comments to the presiding Judge of the Superior Court in compliance with Penal Code section 933.05 are required or requested from:

**Required Responses**

Responses are required from the following governing bodies within 90 days of the date of publication of this report:

**Board of Trustees, Colusa Mosquito Abatement District (Findings 1-8; Recommendations 1-5)**

Responses are required from the following agency within 60 days of the date of publication of this report:

**Manager, Colusa Mosquito Abatement District (Findings 1-8; Recommendations 1-6)**

**INVITED RESPONSES**

None
GLOSSARY

Cal Ag DPR - California Department of Food and Agriculture, Department of Pest Regulation
Cal/OSHA –California Division of Occupational Safety and Health
CalREDIE – California Reportable Disease Information Exchange system
CMAD – Colusa Mosquito Abatement District
District – Colusa Mosquito Abatement District
EPA – Environmental Protection Agency
LAFCo – Local Areas Formation Commission
MVCAC – Mosquito and Vector Control Association of California
WNV – West Nile Virus

BIBLIOGRAPHY

Mosquito and Vector Control Association of California (MVCAC) website (https://www.mvcac.org/)
California West Nile Virus website (www.westnile.ca.gov)
LAFCo Website (2008 LAFCo report)
State of California West Nile Virus Website http://www.westnile.ca.gov/resources.php
Colusa Mosquito Abatement District Website https://colusamosquitoabatementdistrict.com/
Yuba-Sutter Mosquito & Vector Control District website https://www.sutter-yubamvcd.org/
Sacramento-Yolo Mosquito & Vector Control District website https://www.fightthebite.net/
Glenn County Mosquito and Vector Control District website https://glennmosquito.specialdistrict.org/

DISCLAIMER

It should be noted that the 2019/2020 Grand Jury term was interrupted by the COVID-19 Pandemic. During this time, stay-at-home orders and social distancing were put in place to help prevent the spread of the disease. This situation presented challenges for the Grand Jury that impacted (to some degree) timeliness and the Grand Jury’s ability to conduct additional interviews and gather additional documentation. The Grand Jury is confident that the information presented in this report is factual and verifiable. Any information gathering that could not be completed or verified was not included in the report.