

# 2018

## Placer Mosquito and Vector Control District Strategic Plan



February 2018



## **PLACER MOSQUITO AND VECTOR CONTROL DISTRICT 2018 BOARD OF TRUSTEES**

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## A Message from the General Manager

The Placer Mosquito and Vector Control District has been protecting the residents of Placer County since 2001. During that time, there have been many changes and challenges across our region from the introduction of West Nile Virus in California, population growth, to a struggling economy that has reinforced the need for the responsible and efficient use of our public's tax dollars. While the economic outlook has been slowly improving, we have encountered other challenges such as the risk of invasive mosquitoes and pesticide resistance.

Since the last update of the District's strategic plan in 2015, we have become leaders in data analytics and visualization as well as integration of unmanned aircraft systems. We have also created an Applied Research program that will help to answer important questions and continue to improve our ability to serve our community effectively and efficiently. Our outreach programs have increased the public's awareness of and interaction with the District, and we value and continue to grow our partnerships with other local agencies.

This strategic plan serves two important purposes. First, it is one of the many ways we communicate our on-going commitment to serving the public and ensuring that public funds continue to be used in a responsible and transparent manner. Second it provides direction by which all District programs, projects, and initiatives can be measured. This plan helps the board of trustees, management, and staff to continue to strive for excellence in the governance, administration, and operation of the District to the benefit of the people of Placer County.



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Joel Buettner,  
General Manager





## HISTORY

The original Placer Mosquito and Vector Control District (District), then known as the “Placer Mosquito Abatement District” was originally formed in 1996 to provide mosquito abatement services within the original District boundaries. It was not until 1998, however, that the City of Lincoln passed a special tax measure to actually fund mosquito abatement services. In July of 2000, in response to additional community requests for funding mosquito abatement, the Board of Trustees authorized proceedings for a proposed special assessment. At the conclusion of the assessment process which included public hearings and balloting, 72.7% of the weighted ballots returned were in favor of the assessment. The authority granted by the ballot proceedings established a funding mechanism to provide services within the western portion of Placer county starting in July of 2001.

Later, in 2004, the District annexed the area around the community of Sheridan from Sutter-Yuba Mosquito and Vector Control District and with it the property tax allocations attributed to Sheridan to fund mosquito control services.

In 2005, the District increased its service area by completing the annexation of the areas in Placer County that previously did not receive any mosquito abatement or insect/rodent disease surveillance and abatement services, including the cities of Auburn and Colfax, as well as the communities in the high country all the way to the shores of Lake Tahoe.

In 2006, in response to growing community concern regarding level of vector control services, combined with the District staff’s professional concern over vector-borne public health issues in Placer County, the District began exploring ways to improve and expand its vector control services. The proposed improvements and expansion would require additional funding, and would include mosquito and vector control services, surveillance, disease prevention, abatement, and control of vectors within the service area. The improvements and expanded services would focus on vector control and disease prevention projects and programs such as source reduction, biological control, disease monitoring, public education, reporting, accountability, research and interagency cooperative activities.

In 2007, the District initiated a ballot proceeding to fund a permanent facility and expanded services which resulted in 67% residents of Placer County supporting the increased assessment.

In 2009, the District opened its current headquarters in Roseville, and substation in the Tahoe area. In the following years, the District has established itself as a full-service, mosquito and vector control district providing an integrated vector management program to protect public health in Placer County.

## BACKGROUND

Over the past years, the District has grown from a small, mosquito abatement district operating out of a temporary building in Lincoln, to a comprehensive, county-wide mosquito and vector control district with contemporary facilities in Roseville. Given the size and complexity of the Placer County, foreseeable growth and development, and continued concerns about vector-borne diseases, the Board of Trustees agreed it was an appropriate time to develop a Strategic Plan to guide the District forward. The District developed that plan in 2011, and updated the plan in 2012. In the spring of 2015, the Board of Trustees and key staff began a new strategic planning process, which included two workshops, the first was held on April 13, 2015, and the second on June 6, 2015. This report reflects the items and discussion that came from those two sessions, as subsequent input provided by staff as directed by the Board of Trustees. In 2018, at the request of the Board of Trustees, a Strategic Planning workshop was held on February 5, 2018 for the purpose of updating objectives and goals, as well as providing new Trustees and staff a more in depth orientation to the District's strategic planning process.

## STRATEGIC PLANNING

The need for organizations to plan for their future has never been in doubt. Planning is in fact becoming more inevitable considering the unpredictable and dynamic environment in which organizations exist today. Strategic planning is now embraced by virtually every type of organization as a means of providing a road map for setting targets and achieving them in the future. The idea of strategic planning is even more important to special districts due to the many challenges facing them, particularly the increased demand put on district resources and the need to serve their constituents in an efficient and transparent manner.

Strategic planning, as a concept, can be seen in a variety of ways. One way is as a method through which an organization charts its future course, based on an assessment of its current circumstances. This is a process of asking and answering questions about the organization and formalizing the answers such that they can be used as guiding principles for implementing future results. Strategic planning can also be described as a way to ensure the best possible use of resources to achieve the greatest returns. In this way strategic planning can also serve as an approach to anticipatory planning in order to reduce or overcome uncertainties in the decision-making process by prioritizing activities to produce the most positive outcomes or results. In either case, strategic planning supports the process of developing and implementing plans to reach goals and objectives and helps keep all parts of the agency on track and working together.

Strategic Planning has three main components: **plan development, plan execution, and plan review.**

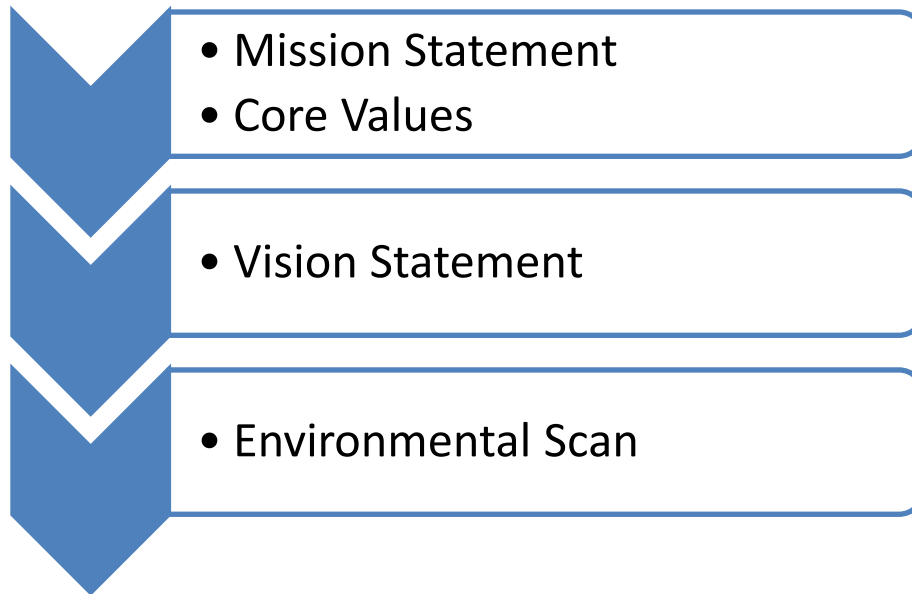
Many of the steps within these components are similar in that all three require a team concept that is based on: ensuring the player's roles are defined, educating team members about the process, and using quality communication when interacting.

## COMPONENT 1: PLAN DEVELOPMENT

The 2018 Placer Mosquito and Vector Control District Strategic Plan was developed by reviewing the District's 2015 plan development process, which consisted of three basic activities:

- A. **STRATEGIC ANALYSIS** (What is our environment?)  
This is a determination of the current strategic position both inside and outside the District. In answering this question, the group looked at internal environment of the District, its external environment, and the threats and opportunities that these pose. Furthermore, the group attempted to measure the gap between its priority areas and goals and its capacity to address priority areas and attain those goals.
- B. **STRATEGIC PRIORITIES** (Where are we going?)  
This activity involved the generation and selection of possible future directions and priority areas, goals, and objectives. Without a clear sense of direction, including a mission statement, clarity about the scope of operations, and a set of specific goals and objectives, any organization is set to go adrift.
- C. **IMPLEMENTATION** (How do we get there?)  
This is about putting the choices into action. (Implementation, Monitoring, Evaluation). Based on District objectives identified in the previous step, District management and senior staff will develop specific departmental procedures, plans, and work lists that will include specific activities that all staff will be implementing to achieve District goals.

## A. STRATEGIC ANALYSIS



During the strategic analysis, the planning group:

- Reviewed the District's Mission Statement
- Reviewed the District's Core Values
- Reviewed the District's Vision Statement
- Discussed staff findings that environmental scan was not substantially different than the one done in 2015

### *Mission Statement*

The group agreed that the mission statement developed in 2015 still reflects the District's overall mission.

**"To effectively and efficiently manage the risks from vectors and vector-borne disease in order to protect public health and improve quality of life in Placer County"**

## *Core Values*

Core Values are defined as inviolable commitments that express “who we are as a district” and what principles or qualities should infuse all practices and activities within the District. The group reviewed and retained the following as core values:

- Fiscal Responsibility
- Accountability
- Professionalism
- Transparency
- Innovation, Creativity
- Collaboration
- Science-based decision making
- Efficiency
- Effective Communication

## *Vision Statement*

A vision statement is intended to describe some future state of the District for which we as an organization strive. The District’s vision statement, updated in 2015, was reviewed and accepted without changes.

**“Provide the best public health protection from vector-borne disease through innovation, collaboration and science-based Integrated Vector Management (IVM) to make Placer County a safe place to live, work and play.”**

## **B. STRATEGIC PRIORITIES**

Staff conducted a planning session prior to the workshop to discuss and review the priority areas identified in 2015. The recommendations of staff were that the 2015 priority areas remain the same for the next 3 to 5 years, although objectives and goals within those priority areas needed to be updated.

The District's priority areas, last updated in 2015, were reviewed and accepted without changes:

### **Priority Areas**

1. Invasive Species
2. Pesticide Resistance
3. Professional Development
4. Use of Technology to Maximize Resources
5. Regulatory Readiness
6. Operational Review
7. Land-use Change Awareness

## **PRIORITY AREA 1: Invasive Vector Species and Emerging Vector-borne Diseases**

### **Goal 1.1 Understand the ongoing potential for emerging vector-borne disease risk in Placer County**

**Objective 1.1.1** Develop ongoing St. Louis Encephalitis Virus (SLEV) surveillance, analysis and reporting in Placer County and other relevant areas.

**Objective 1.1.2** Monitor, evaluate risk and report the extent and magnitude of tick vectors and tick-borne disease in Placer County and other relevant areas.

**Objective 1.1.3** Engage in activities that keep the District current on emerging research and information regarding vector-borne disease.

### **Goal 1.2 Develop capacity to manage the risks associated with emerging diseases.**

**Objective 1.2.1** Develop and implement a work plan for data system development that addresses the operational data and visualization needs for emerging vectors and diseases.

**Objective 1.2.2** Develop and implement a work plan to address the prospective need for vector and vector-borne disease surveillance of emerging vectors and diseases.

**Objective 1.2.3** Develop and implement a work plan to address the prospective need for vector control and response to emerging vectors and vector-borne diseases.

### **Goal 1.3 Prepare for invasive mosquito challenges**

**Objective 1.3.1** Evaluate and update pre-detection surveillance needs to integrate new processes, technology, and knowledge.

**Objective 1.3.2** Complete response plan to include external and internal/operational elements (eradication vs. maintenance, control tactics, enhanced surveillance response) and staff training.

**Objective 1.3.3** Develop strategies to identify and address resource gaps for invasive mosquito preparedness, eradication efforts, and management program should invasive mosquitoes become endemic.

## **PRIORITY AREA 2: Pesticide Resistance**

**Goal 2.1 Understand the potential impact and causes of insecticide-resistant populations of mosquitoes.**

**Objective 2.1.1** Determine geographic and species extent, and severity of insecticide-resistance in Placer County.

**Objective 2.1.2** Support efforts to develop state-wide resistance data collection and analysis through continuing collaboration with the Mosquito and Vector Control Association of California (MVCAC), UC Davis Arbovirus Research and Training (DART), and other partner agencies.

**Goal 2.2 Identify and assess options to manage insecticide resistance in mosquitoes**

**Objective 2.2.1** Compile and evaluate existing insecticide resistance management techniques.

**Objective 2.2.2** Identify potential stakeholders and collaborators to assist in managing the effect of insecticide resistance on public health.



### **PRIORITY AREA 3: Professional Development**

**Goal 3.1 Recruit and retain a workforce that is proficient in core vector control competencies**

**Objective 3.1.1** Identify training topics of interest to employees that align with District core values, and develop strategies to provide training opportunities.

#### **PRIORITY AREA 4: Use of Technology to Maximize Resources**

##### **Goal 4.1 Integrate analysis of various data sources into decision-making and operational workflows**

**Objective 4.1.1** Build data framework to dynamically integrate data collection, analysis and operational insight.

##### **Goal 4.2 Identify and evaluate emerging technologies and their potential application to vector control**

**Objective 4.2.1** Through the MAC-UAS Program identify, evaluate, and implement the use of UAS to achieve improvements in operational efficiency and efficacy.

**Objective 4.2.2** Understand emerging and existing biotech applications designed or potentially applicable to mosquito and vector control

##### **Goal 4.3 Identify and develop opportunities for collaboration to assess new vector control technologies.**

**Objective 4.3.1** Identify and develop collaborative relationships with academic institutions.

## **PRIORITY AREA 5: Regulatory Readiness**

**Goal 5.1 Be proactive in identifying and shaping regulatory and legislative issues that may impact the ability of the District to achieve its mission**

**Objective 5.1.1** Maintain District membership and participation in MVCAC, CSDA, and AMCA legislative and regulatory discussions and activities

**Goal 5.2 Ensure compliance with new regulations in a timely and efficient manner**

**Objective 5.2.1** Comply with FAA and CDPR regulations to apply public health pesticides by Unmanned Aircraft.

## **PRIORITY AREA 6: Operational Review**

**Goal 6.1 Obtain, develop, and implement efficacy and efficiency metrics and methodologies in all District functional areas**

**Objective 6.1.1** Perform annual operational review of one operational area, review metrics, and identify options for improvements.

**Objective 6.1.2** Evaluate, define metrics, and report on operational efficacy and efficiency of Eastern Placer operations.

**Objective 6.1.3** Evaluate the efficacy of public health insecticide application equipment and techniques for accuracy and efficacy.

## **PRIORITY AREA 7: Land Use Awareness**

**Goal 7.1 Be proactive in identifying and shaping changes in land use and land use policy that may impact the distribution of vectors and resources within the District**

**Objective 7.1.1** Update and improve the process to assess development plans for vector issues and communicate ways to reduce vector risk.

**Objective 7.1.2** Develop an internal process to inform field operations staff about development plans and District recommendations.

**Objective 7.1.3** Review existing and develop new realistic mosquito reduction best management best practices that address known vector issues.

**Goal 7.2 Improve our understanding of distribution and dispersal of mosquitoes in and around rice agriculture.**

**Objective 7.2.1** Assess options and efficacy for treatment of mosquitoes in and around rice agriculture.

**Objective 7.2.2** Engage, as appropriate, with stakeholders to determine options to address mosquito issues in rice agriculture.

## C. IMPLEMENTATION

Plan implementation is a primarily a staff-driven activity. This is about using goals and objectives as the foundation to develop activities and procedures. District management and senior staff will develop specific departmental procedures, plans, and task lists to be implemented by staff in the field to achieve District goals.



Image courtesy of [www.interaction-design.org](http://www.interaction-design.org)

## COMPONENT 2: PLAN EXECUTION

Plan execution is the second phase of strategic planning. In this step, District staff puts its plan into action through the allocation of resources. This step has three components:

1. **Programs:**  
District programs serve as blueprints for converting objectives into realities.
2. **Procedures:**  
Procedures and activities are the specific sequence of tasks required to complete the programs.
3. **Budgets:**  
The District should consider the strategic plan during the budget planning process and vice versa. Since the District budget is finite, careful consideration of expenditures as it relates to goals and objectives should be given priority during the budget planning process.

A focus on teamwork, roles, communication, and education are important, and apply to the plan execution phase. Periodic meetings to review progress on short-term goals and plans will be conducted. Lastly, flexibility is crucial to the plan execution phase since all plans will have weaknesses, and activities can be changed, so long as they still lead to attainment of goals and objectives.



### COMPONENT 3: PLAN REVIEW

Plan review is constantly required to improve the plan and ensure its execution. Part of the plan review occurs naturally when there's change in District management or staffing or changes in the law. In addition, plan review needs to be scheduled to ensure the plan is meeting the District's goals. This can be achieved through a variety of tools such as surveys, management review conferences, or discussions at meetings. Industry experts suggest that agencies and their governing entities should review their strategic plans annually, and completely overhaul their strategic plans every three to five years.





