



Mosquito and Vector Management District
of Santa Barbara County

Strategic Plan

2016 - 2021

Prepared by:
David Chang
General Manager
December 10, 2015

This page intentionally left blank.

Mosquito and Vector Management District of Santa Barbara County

2015

Board of Trustees

Robert Williams, President, County of Santa Barbara

Patty DeDominic, Vice-President, County of Santa Barbara

Charles Blair, Trustee, County of Santa Barbara

Larry Fausett, Trustee, City of Santa Barbara

Ronald Hurd, Trustee, City of Carpinteria

John Olson, Trustee, City of Goleta

Cathy Schlottmann, Trustee, County of Santa Barbara

Susan Swarbrick, Trustee, County of Santa Barbara

Staff

David Chang, General Manager

Kenneth Learned, Operations Manager / Vector Biologist

Jessica Sprigg, Administrative Assistant

Vector Control Technicians:

Donald Cram

Vesna Ibarra

Karen Schultz

Royce Sharp

This page intentionally left blank.

Mosquito and Vector Management District of Santa Barbara County

Strategic Plan 2016 – 2021

...approved by the MVMDSBC Board of Trustees on January 14, 2016

Table of Contents

INTRODUCTION	1
HISTORY	1
PROGRAM DESCRIPTION	2
THE BASIS FOR A STRATEGIC PLAN.....	3
MISSION.....	4
VISION	4
VALUES	4
THE STRATEGIC PLAN.....	4
GOALS.....	4
1. Facilities Improvement/Relocation – 2450 Lillie Ave, Summerland	5
a. Action Plan.....	5
2. Executive Succession and Employee Skills Development.....	6
a. Action Plan.....	6
3. Improve Program Supervision	8
a. Action Plan.....	8
4. Define Program Criteria	10
a. Action Plan.....	10
5. Evaluate Staff Compensation	10
a. Action Plan.....	10
MONITOR PLAN	10

This page intentionally left blank.

INTRODUCTION

Mosquitoes are human health pests that create nuisance and spread disease. Mosquitoes can spread deadly diseases like malaria, dengue fever, breakbone fever, yellow fever and encephalitis. More human deaths have been caused by mosquitoes than sharks, tigers, crocodiles, snakes, or bees combined.



Mosquitoes breed in water and are very mobile. Mosquitoes don't respect property boundaries and thus cause problems for entire communities. The Mosquito and Vector Management District of Santa Barbara County (the "District"), with the authority provided by the California Health and Safety Code (the "HSC"), is well suited to monitor and control mosquitoes and other disease and nuisance vectors such as flies, mites, ticks, rats and bees.



The Mosquito and Vector Management District of Santa Barbara County is an independent special district funded by ad valorem taxes paid by private landowners in the unincorporated areas of the county and areas annexed by the District; by special assessments on private property landowners in the enhanced services zones; and by payments by some public agencies and private entities for services provided. The District is governed by an eight member Board of Trustees (the "Board") appointed by the County of Santa Barbara and the cities within the enhanced services zone. The Board and District is committed to ensuring that public funding is appropriately used and conserved.

HISTORY

The Carpinteria Pest Control District was originally formed, under the purview of the Mosquito Abatement and Vector Control District Law of the State of California (HSC § 2000-2093), in 1936 to control nuisance mosquitoes. The name was changed in the early 1970s to the Carpinteria Mosquito Abatement District, to accurately identify the district's purpose.

The Isla Vista Mosquito Abatement District was formed in 1959 to control nuisance mosquitoes in the Goleta Slough. Eventually the Isla Vista Mosquito Abatement District grew to include Goleta within its jurisdiction. Name changes included the Goleta Valley Mosquito Abatement District and the Goleta Valley Vector Control District.

These two separate districts were performing the same functions with the same staff of three technicians from the same office but with two separate governing boards. In 1997, the District purchased its current headquarters located at 2450 Lillie Ave, Summerland CA 93067. The two districts merged in 1999 to become the Santa Barbara Coastal Vector Control District. The primary service areas were the City of Carpinteria, Isla Vista, Hope Ranch and the Goleta Valley.

In 2002, the District annexed all north county unincorporated areas. In 2004, the City of Santa Barbara, and the communities of Montecito, Summerland and Mission Canyon approved special assessments and along with City of Carpinteria, Isla Vista, Hope Ranch and the Goleta Valley came to be known internally as the Enhanced Services Zone. The District adopted its current name, "Mosquito and Vector Management District of Santa Barbara County", in 2006.

PROGRAM DESCRIPTION

The District provides three levels of services within its territory based upon the funding provided – no services, basic services and enhanced services.

Currently, the District does not receive funding from the public within the incorporated cities of Santa Maria, Buellton, Solvang, Lompoc and Guadalupe. District services are generally not provided within these areas. Services may be provided to non-service areas at the discretion of the District and to prevent vectors from moving into service areas.

Basic services are provided to all unincorporated areas of Santa Barbara County and areas within the cities of Carpinteria, Goleta and Santa Barbara where the District is receiving a portion of the property tax, known as the ad valorem tax.

Basic service includes mosquito and vector-borne disease surveillance primarily through specific mosquito trapping surveys, WNV Detection Dead Bird Surveillance Program, deployment of sentinel chicken flocks and vertebrate and arthropod disease surveys. Public information service on vectors and vector-borne diseases are available to basic service areas.

Enhanced services are provided to areas on the South Coast of Santa Barbara County, south of the Santa Ynez Mountains, west of the Santa Barbara – Ventura County boundary to the Rancho Embarcadero neighborhood (see Figure 1.) Private property

Figure 1: Enhanced Services Zone



landowners within the enhanced services zone are assessed an additional parcel tax that in 2015 was \$9.18 per single family equivalent benefit unit. (A dollar is added to the assessment by the Treasurer-Tax Collector.) The assessment is adjusted depending on the use of a property. Public property does not pay taxes or benefit assessments and may enter into an agreement to receive enhanced services. See the District's Annual Engineer's Report for additional details.

Enhanced services include all surveillance activities that basic service areas receive and additionally includes regular targeted surveillance and treatment of mosquito habitat to reduce mosquito larvae production; regular monitoring and surveillance for vectors and vector-borne diseases such as West Nile virus, Hantavirus, Lyme disease, dengue fever, chikungunya, plague, malaria, yellow fever, spotted fevers and dog heartworm.

Enhanced service includes inspection and advice for property owners who report bee swarm behavior. The District maintains a list of beekeepers who collect swarms. The District will respond to emergency situations where bee swarms are an immediate threat to the public congregating at schools, parks, churches and hospitals.

Enhanced service includes the enforcement of the Health and Safety Code where vermin, such as mosquitoes, rats and bedbugs, create unsafe and unhealthy conditions for tenants and community.

The District maintains a culture of mosquito fish (*Gambusia affinis*) for biological control of mosquitoes for distribution, as requested, by the public within the enhanced services zone. Mosquito fish are available for built aquatic systems only.



The District's primary role is to monitor and control mosquitoes in Santa Barbara County via larvicide application, habitat/source reduction and mosquito fish distribution. In 2014 the District achieved, through the work of four technicians and three administrative staff over 700 applications of larvicide – mostly applications of *Bacillus thuringiensis israelensis*, methoprene, some *Bacillus sphaericus*, and a lesser amount of spinosad larvicide. On average, approximately 170 citizens receive, in total, 2,500 mosquito fish, annually.

Enhanced services may be provided to non-service areas and basic service areas at the discretion of the District.

THE BASIS FOR A STRATEGIC PLAN

The District has experienced significant challenges over recent years, such as the expansion of the District; the creation of the enhanced service zones; executive turnover and post-employment benefit liability; and is expected to see continuing challenges over the next five years due to the spread of invasive *Aedes* species mosquitoes; climate change; property development; relocation or remodeling of the District's facilities; retirement of management staff; and trustee turnover, besides the challenge of maintaining normal operations.

This strategic plan is intended to provide focus to, and clarify the roles of the District's staff, management and Board on the District's direction in the next five years. This strategic plan implements the current leadership's vision and values. Board and staff involvement is important to the success of the District. A strategic plan coordinates effort for long-term sustainability.

In order to ensure that the public is protected from vector-borne disease and the nuisance that mosquitoes cause, now and in the future, District management hereby outlines its strategic plan for scrutiny by staff, the Board, public health agencies, the public and other stakeholders.

The following principles guide the development of this strategic plan:

MISSION

The Mosquito and Vector Management District of Santa Barbara County is committed to providing effective, efficient, environmentally compatible management of human health pests, especially mosquitoes, to prevent their public nuisance and prevent outbreaks of vector-borne diseases.

VISION

The Mosquito and Vector Management District of Santa Barbara County strives to modernize its methods and facilities to become an even more effective and essential component of public health management and vector-borne disease prevention.

VALUES

The Mosquito and Vector Management District of Santa Barbara County recognizes that certain values guide the District in the implementation of its vision.

The District believes in striving for, and expecting excellence from its staff, managers and governing board. To that end, the District is committed to provide fair treatment in compensation, benefits and working conditions and equal opportunity to its staff for the work that they do. The District prohibits discrimination in all of its activities, in accordance with federal civil rights law and District policy.

The District believes that in order to accomplish its mission – protecting the public health – it must deliver its services professionally, equitably and effectively while ensuring the fiscal stability of the District in an open and ethical manner.

Mosquito and vector management is guided by the principles of integrated pest management where the District uses a combination of pest control methods that minimize the impact on the nontarget environment and public health. The District will use education, exclusion, and biological, physical, cultural and chemical methods to control pests. Pest control materials are selected and applied in a manner that minimizes the risks to human health, beneficial and nontarget organisms, and the environment.

THE STRATEGIC PLAN

GOALS

District management, its Board and staff have identified certain goals to maintain the mission and attain the vision described previously.

The goals are:

1. Facilities Improvement
2. Executive Succession Preparation
3. Improve Program Supervision
4. Define Program Criteria
5. Evaluate Staff Compensation

1. Facilities Improvement/Relocation – 2450 Lillie Ave, Summerland

The Board has expressed a desire to more centrally locate the District's headquarters in proximity to its worksites. The current facility is located more on the eastern end of its territory. More of the District's work occurs in the western end of its territory. A more central location could save some travel costs.



Additionally, a larger office space is desired to gain more meeting space, working space, equipment storage, parking for staff and visitors, file space, a break room, a computer/office equipment room, a library, and an improved mosquito fish production facility.

The Carpinteria Summerland Fire Protection District ("CSFPD") is interested in purchasing the District's real estate and has an agreement (MOU) with the District that formalizes that interest. The CSFPD placed Bond Measure Z on the ballot in May 2015. Measure Z—Facilities Improvement requested CSFPD voters to approve the sale of bonds to finance fire district facility improvement, including the purchase and redevelopment of the District's Lillie Ave real estate. The bond measure narrowly failed by a margin of just 25 votes, ultimately receiving 54% yes and 46% no votes – 55% of the vote was required to pass

a. Action Plan

The complexity and size of the task will require expert consultation and financial assistance. Some study of the issue has already been accomplished. Additional study is needed to ensure that the task is successfully accomplished. Some of these tasks can be achieved concurrently. Staff will be involved in the planning and implementation process to engender ownership of the plan. The following issues need to be addressed to fully comprehend the impact on the District and to determine the best strategy.

1. *Assess Program Requirements.* An objective will be to determine the geographic distribution of workload. Knowing where the work is being conducted can be used to confirm that moving the District's office is a desired goal. The operations manager is tasked with determining where the majority of the work is performed. The NPDES application map can assist in this determination.

Another objective will be to determine the space and growth needs. This is one of the tasks that has already been accomplished.

2. *Assess the Financial Capability and Manage Risks.* This is a critical component to determining the feasibility of the goal and how to achieve it. The high cost and limited inventory of an existing building for purchase presents some difficulty for the task. Study of the below issues will allow consideration of the options which include sale of the current office; purchase of an existing building; construction of a new building; lease of an existing building; or a remodel of the current office.

The general manager is tasked with answering the following questions:

- a. Current real estate value
- b. Determine current financial conditions and future needs
- c. Estimated cost of remodeling of current and future site
- d. Current inventory and cost of available real estate for purchase
- e. Permitting costs

- f. Relocation costs
 - g. Funding and financing options
 - h. Projecting new operations and monthly cash flow
3. *Board Decision.* The Board will be requested to evaluate the information and decide between the options – stay and remodel or sell and relocate.
 4. *Select Strategy and Confirm Funding and Financing.*
 5. *a. Implement Relocation.*
 - a. Select new real estate to include selection of realtor.
 - b. Develop moving project to include selection of architect, general contractor, moving company, holding site, and relocation schedule.
 - c. Begin construction
 - b. Implement Remodel*
 - a. Develop remodeling project to include selection of architect, general contractor, moving company, storage site, and transition schedule.
 - b. Begin construction
 6. *Complete Project*

2. Executive Succession and Employee Skills Development

The District's current general manager and operations manager/vector biologist are expected to retire within the next five to six years. Ultimately the District's Board determines the executive leadership of the District. The general manager should foster an environment conducive to professional growth. The District's small size and limited organizational hierarchy present some challenges to providing management opportunity.

Previously, a lack of opportunity to demonstrate supervision and management skills presented a dilemma for staff's ability to compete for management positions. Current job qualification standards stratify the District's hierarchy and make it difficult for field staff to promote.

The existence and identification of a District succession plan is not a guarantee for the upward mobility of potential candidates for promotion. Regardless, District staff should be given the skill and opportunity to be able to compete for the executive, middle management and technical skill positions. Raising the skill level of staff provides benefit to the District and to the staff for a smooth transition during dynamic times, both sudden and gradual; for increased staff performance and morale; for skill retention and professional growth.

Additionally, the District needs to develop a program to prepare for new staff and train staff upon advancement.

a. Action Plan

Staff will be provided the opportunity to learn and perform supervision, management, information systems tasks and technical skills in addition to their normally assigned tasks and training to maintain their vector control technician licenses. Generally, extraordinary tasks and training are voluntary, unless they are directly related to their assigned tasks. Staff are encouraged to request tasks that require advanced skills. Staff are encouraged to document and demonstrate their accomplishments in order to enhance their records of experience.

The operations manager is critical to implementing this action plan. He is tasked with encouraging staff to improve, suggesting assignments, and to transfer his institutional memory and skills to staff. He is reminded to be specific in his evaluations of staff to assist them with documenting their skill set development.

Specifically, towards this end the following strategies will be employed:

1. *Provide learning opportunity.* As funding allows, staff will be invited to attend supervision, management, and other advanced skill training opportunities. Staff are encouraged to request training opportunities, especially during budget planning season, so that the general manager can consider funding for additional training. Resources include the County of Santa Barbara Employees' University, the California Special Districts Association, and mentorship by the general manager or a Board trustee.
2. *Identify skills.* The general manager is tasked with producing an environment that will impart the core skills and attributes needed for professional growth and identifying staff that possess or are developing leadership skills.

Those skills include:

- a. becoming a change leader by embracing creativity, continuously learning, taking initiative, being aware, being service oriented and thinking strategically
 - b. acquiring business acumen by developing financial, human resource, and technology skills
 - c. leading and nurturing people with fair judgment, cultural awareness, integrity, determination and trust
 - d. building coalitions through negotiation, interpersonal relationships, written and oral communication, and poise
3. *Provide management and supervision opportunity.* When opportunities arise, and as interest and workloads determine, staff will be assigned projects and programs that require management, supervision or other technical skills such as insect taxonomy or software expertise. The projects and programs will be clearly identified to allow reference by staff in their resumés and evaluations.

Opportunities include:

- a. Public speaking, both in-house and during public outreach
- b. Outreach materials production, such as webpage and brochure development
- c. Sharing specific knowledge. Staff are encouraged to learn management supervision and technical skills and share their knowledge
- d. Supervision assignments, such as a designation to be the District's safety officer, compliance officer, staff development lead, public information officer, and equipment supervisor
- e. Representing the District in MVCAC activities such as working groups, and inter- and even intra-agency committees
- f. Systems implementation, such as early pest detection and rapid response program or software implementations like time-management or geographic information systems. Implementation includes creation, procurement and/or installation

- g. Special projects, such as relocation management; creation of operations manuals; technical skills development manual; or management and supervision manual
- 4. *Create staff development procedures and materials.* The general manager, with staff's support, is tasked with producing materials for development of new and current staff in the areas of operations, technical skills, policy, human resource, benefits and new board trustee development.
- 5. *Assess current job descriptions and development program.* The general manager is tasked with assessing how well the current job descriptions, minimum qualifications, salary/benefits and hierarchy complements the development program.

3. Improve Program Supervision

Since 2006, the District has experienced significant executive turnover in six general managers over a period of seven years. While previous District general managers have improved and expanded services; it appears that the previous general managers were not able to provide the District with stability, through no fault of four of those general managers.

Attempts to improve and modernize program supervision over those seven years failed. Software (ArcView 8 and the Vector Control Management System) became obsolete. The County of Santa Barbara ceased to provide payroll services to the District. The current payroll vendor is not being used to categorize labor costs. And the District does not have a system to identify labor costs and associate labor costs with income.

Supervision is currently conducted through direct observation and manual review of logs and reports. Computerization of logs and reports could assist supervision and management, especially with historical and real-time analysis and resource mobilization to dynamic events.



The District's small size makes it difficult to afford and implement a packaged enterprise resources planning and geographic information software systems. An analysis of costs will be required.

a. Action Plan

Improve program supervision and management by improving the system that reports the labor costs and the value provided to its constituents that pay for the labor.

1. *Use staff timesheets to identify labor costs.* Previously labor coding by staff on their timesheets mixed cost centers, geographic areas, and income sources somewhat haphazardly. A new labor coding system has been developed and will be implemented in January 2016 to clearly associate the work with the income source and prepare staff for digital documentation.
2. *Develop a system to document tasks.* Staff's completed tasks are manually documented in diaries, logs and reports kept in disparate filing systems. Reports are compiled into monthly reports on the computer on spreadsheets and digital text documents. Staff documentation will be analyzed to determine an efficient

way to transition their manual processes to eventually become digital to allow ad hoc historical and real-time analysis or at least allow coordinated comparative analysis.

3. *Automate labor cost reporting.* Currently labor cost reporting is compiled manually. Ad hoc reporting and real-time and historical analysis becomes especially tedious as timesheets get filed and forgotten. Potential solutions include programming in-house; vendor subscription; a turn-key enterprise resource planning system or customizable ERP packaged system.
4. *Periodically review/report daily activity statistics.* Management of staff's daily activities can easily get lost in the details. The general manager will produce semiannual summaries of daily activity and productivity for presentation to the Board.
5. *Implement a geographic information system (GIS).* A GIS will assist the District's primary mission of vector pest management. Much of the work that the District performs is associated with locations. The District would benefit from knowing property ownership when delineating pest infestations, documenting disease occurrence, and enforcing community health standards. A GIS will allow the District to accurately demonstrate the value we are providing to stakeholders and to determine where the District is missing opportunities to earn income.

GIS has the potential to document the following attributes:

- a. Financial status. The District needs to determine the financial participation – how a property contributes financially to the District's operations – of each property where work is being performed. Currently, the categories are 1) no income, 2) ad valorem tax, 3) benefit assessed, and 4) contract income. A parcel's status can be different and change according to ownership, use, location and jurisdiction.
- b. Property ownership. GIS parcel layers from the County Assessor can be used to determine property ownership, parcel size, assessed value, district governance and current use. The County Assessor provides their parcel data layer without cost and updates the data regularly.
- c. Resource characteristics. Various data layers can be used to determine a type of resource – creek or lake, the size, and elevation of a resource.
- d. Chronic and ephemeral mosquito habitat. Vector technicians primary work is inspecting and treating mosquito habitat. Vector technicians often keep handwritten custom notes about a particular location. Currently those notes are kept in binders on paper that can degrade with repeated use.
- e. Pest delineations. New pests can be quickly delineated – location, density and spread – when combined with detection data.
- f. Dynamic data. When combined with task data, GIS data layers can be used to document treatments, inspections, investigations, access, seasonality, infestations, contact information, dynamic boundaries, and logistics. Individual memories become institutional memories.

The value and feasibility to automate labor cost reporting requires an analysis of:

1. *Data needs.* Determine the data attributes that will capture the required information. Balance the needs with the impact on staff.

2. *Impact on staff.* A software solution should be easy for staff to operate to ease the learning curve and keep staff on mission critical tasks.
3. *Cost of a software solution.* The various options' effect on cash flow will have to be analyzed.

4. Define Program Criteria

The types of activities that the District could be involved in are unlimited, as the species of vectors that cause health problems are innumerable. Of course, the District is limited by funding and can not manage all vectors.

Defining the District's programs will clarify its mission and allow discrete measures of performance. Supervision of staff and management will become more accountable. Staff transitions and new staff training will become smoother.

a. Action Plan

The general manager, with the assistance of staff, will clarify the levels of service provided by the specific programs of the District. Potential areas for clarification include:

1. *Priorities.* Identify the vectors that are priorities. Identify community needs.
2. *Describe the programs.* Identify the programs.
3. *Levels of service.* Identify the levels of services provided. Regions and vector biology will be factors in service levels.
4. *Early detection and rapid response.* Prepare for new diseases and vectors.
5. *Performance.* Define performance standards.

5. Evaluate Staff Compensation

The District believes in striving for, and expecting excellence from its staff, managers and trustees. Fair compensation, benefits, and working conditions are essential to employee retention and obtaining excellence. The goals of the evaluation are to clarify the value of employees and assist management and staff to realize a balanced budget.

The general manager will evaluate and compare employee compensation and job classifications.

a. Action Plan

1. *Comparisons.* Identify the job classifications and mosquito districts to compare.
2. *Evaluate.* Compare the mosquito districts' employee compensation and job classifications.

MONITOR PLAN

Attainment of the mission and vision of the strategic plan will be ongoing with all staff as assigned. Some aspects of the plan have already been completed. Some aspects will need regular attention. The general manager will provide updates and reports, at least quarterly, for presentation to the Board for their ultimate decision on how to proceed, as needed.

The Board and Staff's support is critical to the success of the District. Their assistance towards completing this Strategic Plan is appreciated.

Contact the general manager at (805) 969-5050, dchang@mvmdistrict.org to provide comments.