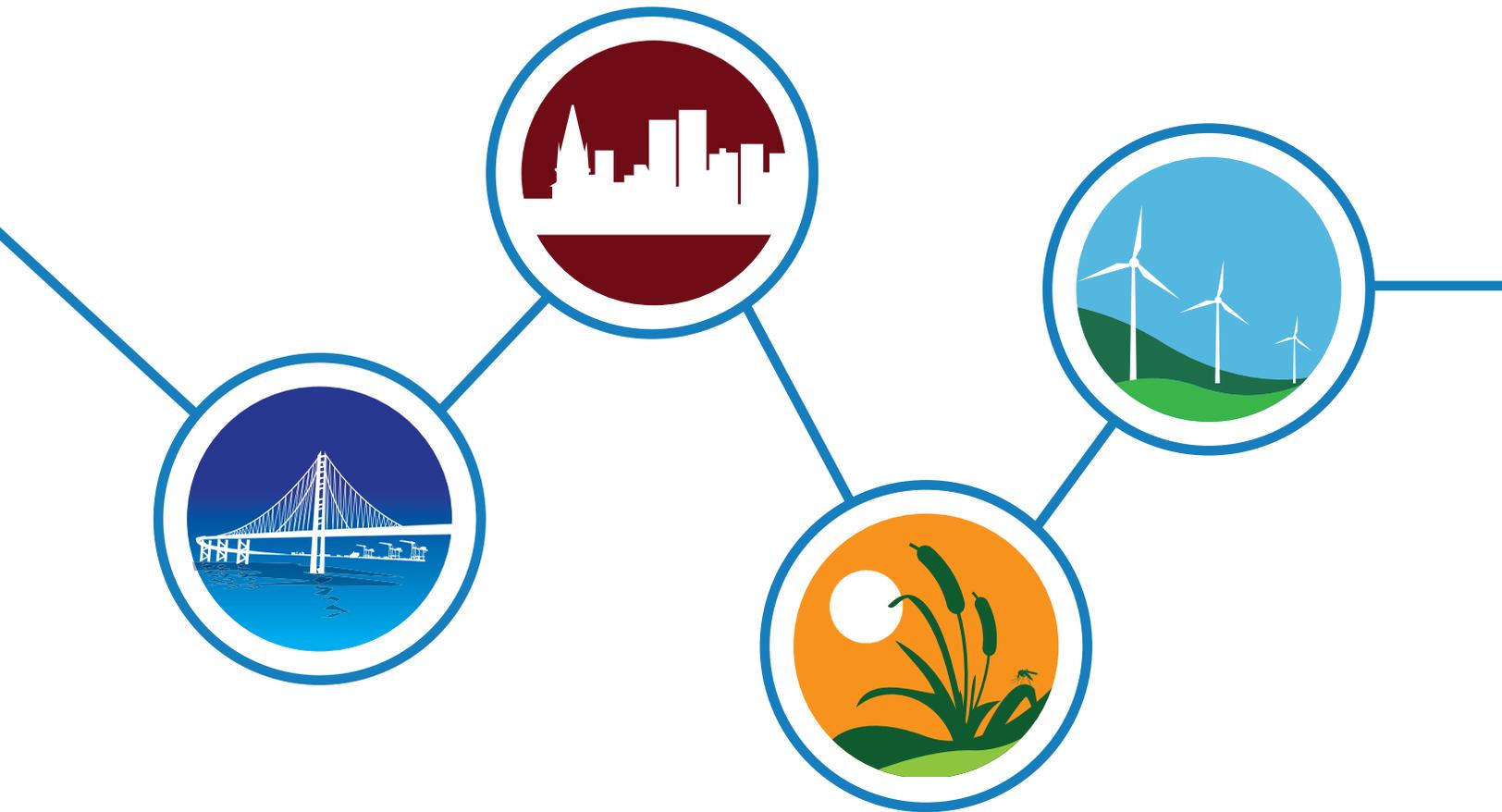


ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

STRATEGIC PLAN

2021-2023



INTRODUCTION

As we look to the future and develop our strategic plan, Alameda County Mosquito Abatement District (ACMAD) is setting goals that will help us maintain the same level of excellence you've come to expect from us. We plan to utilize our existing assets and resources to address future challenges, both known and unforeseen. We aim to align individual performance goals with a comprehensive District strategy that is effective and efficient. In order to realize these goals, we will improve our internal and external communication. Finally, we will formalize performance and accountability measures by documenting improvements to the District's operating procedures.

ACMAD has a proud history of effective and efficient mosquito control through its prudent financial planning, collaborative decision-making, and balanced integration with partner agencies. With our 100-year anniversary of public service approaching in the next decade, it is important for ACMAD to reaffirm its strong relationship with our community. We plan to accomplish this through thoughtful planning that leads to effective allocations of public funds. Through the leadership of the Board of Trustees, District staff will continue to provide high-quality and valuable service to the people of Alameda County, even through unforeseen public health crises like the current global pandemic.



HISTORY OF STRATEGIC THINKING

Prior to the formation of organized control districts, mosquitoes hampered economic development within the Bay Area. During late 1928 and through the early months of 1929, the city councils of Alameda, Berkeley, Emeryville, Hayward, Oakland, Piedmont, and San Leandro passed a resolution endorsing the formation of the Alameda County Mosquito Abatement District (ACMAD). ACMAD was officially formed when the Board of Supervisors passed Ordinance B on March 11th, 1930; three days later, the California Secretary of State filed the certificate of incorporation, thereby formalizing formation of the District.

Initially, ACMAD focused its efforts on ditching in marshes along the San Francisco Bay to promote circulation of water in habitats where salt marsh mosquitoes breed. As residential populations and their use of water changed, freshwater mosquitoes became more prevalent and ACMAD expanded its efforts to counter the rise in their abundance. To fulfill the demands for mosquito control throughout the County, more personnel and equipment were needed to accommodate the increase in services. ACMAD funding from *ad valorem* property taxes was stable until Proposition 13 passed in 1978; after the passage of Prop 13, the District's funding was reduced by half. To provide adequate service to residents, Alameda County's Measure K was introduced in 1982 and approved by over two thirds of Alameda County voters. This allowed for a maximum assessment of \$1.75 per single home as a Special Tax to support the District's operations. Funds generated by this tax enabled the District in 1984 to consolidate its operations from three existing depots in Oakland, Pleasanton, and Union City into a single modern facility in Hayward in 1984.

Mosquito management changed dramatically when West Nile virus was introduced via wild birds into Alameda County during 2003. To control the mosquitoes that transmit the virus, ACMAD increased operation costs by \$280,000 a year. These funds supported additional seasonal staff, pesticides, equipment, and public outreach education programs. Adjusting to the newly introduced threat, ACMAD's Board of Trustees reviewed approaches to augment the District's revenue stream to meet the new needs for mosquito surveillance and control. Property owners approved levying a benefit assessment in the spring of 2008 for this purpose.

On May 14th, 2008, the ACMAD Board of Trustees formally passed the resolution approving the benefit assessment to increase the District's revenue. This allowed the District to provide enhanced services to the residents of Alameda County and to prepare the District for future public health threats caused by mosquitoes. Through sound fiscal policies, the District has not needed to increase the benefit assessment in over twelve years. In 2019, ACMAD expanded its boundary to include Albany, the last remaining city in the county to receive District mosquito control services.

Even though there have been many changes over the past 90 years, including mosquito control techniques and regulations, the dedication and effectiveness of the District have remained the same. ACMAD will continue to provide timely, reliable, professional, and effective service during the current global pandemic and impending introduction of invasive *Aedes* mosquitoes into Alameda County.



OUR STRATEGY

OUR MISSION

Alameda County Mosquito Abatement District is committed to improving the health and comfort of Alameda County residents by controlling mosquitoes and limiting the transmission of mosquito-borne diseases.

OUR VISION

To serve all residents of Alameda County in a transparent and equitable manner by providing knowledge-driven and environmentally-conscious mosquito control. We strive to provide an exemplary model of good government through fiscal transparency and accountability.

OUR BOARD





OUR CORE VALUES

ENVIRONMENTAL STEWARDSHIP

- Ecologically responsible
- Proactive in environmental legislation
- Responsive to environmental changes
- Emphasis on biorational treatments for mosquito control

KNOWLEDGEABLE

- Science-based decision making
- Data-driven
- Technology enabled
- Safety program adherent

PROFESSIONAL

- Honest
- Reliable
- Respectful
- Responsive
- Committed
- Inclusionary
- Accountable

ENVIRONMENTAL SCAN

An Environmental Scan is a self-assessment process that allows organizations to identify their internal and external strengths, weaknesses, and foreseeable changes that may impact service delivery.

STRENGTHS

- Data sharing and integration of laboratory and operations
- Larval-based control program
- Financial stability and accountability
- Timely responses to public request for service
- Public accessibility to staff and District information
- Culture of independence that fosters effective collaboration
- Innovative methods to monitor mosquito abundance

WEAKNESSES

- Limited mosquito control products
- Limited ability to increase scale of operations in short amount of time
- Low diversity of revenue sources

FORESEEABLE CHANGES THAT MAY IMPACT SERVICE DELIVERY

- Climate change
- Insecticide resistance
- Changes in regulations
- Human population growth
- Introduction of invasive mosquito species
- Emerging mosquito borne infectious diseases
- Natural disasters

ACMAD GOALS: 2021-2023



Photo by James Gathany

ENSURE ACMAD HAS THE TRAINING, EQUIPMENT, PERSONNEL, PARTNERSHIPS, AND FINANCIAL SUPPORT TO LIMIT THE INTRODUCTION OF INVASIVE AEDES MOSQUITOES

2021

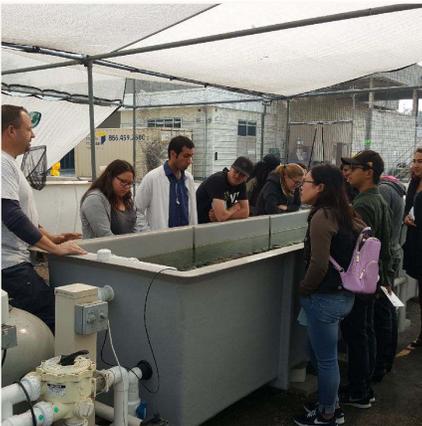
- Deploy a property Parcel Inspection Plan to monitor response efforts
- Create a Community Emergency Response Team forum from county affiliates to engage them in our Invasive *Aedes* Response Plan
- Ensure all field staff can accurately identify invasive *Aedes* mosquitoes

2022

- Provide school age children with mosquito prevention messaging
- Develop a model for pesticide deposition by Wide Area Larvicide System mosquito treatment technique

2023

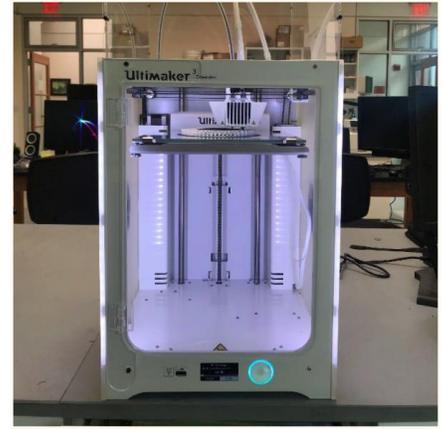
- Improve adult mosquito identification processes
- Develop a simple and rapid assay that discriminates *Aedes* species mosquitoes



LEVERAGE ACMAD ASSETS TOWARDS EFFICIENT APPROACHES TO MOSQUITO CONTROL

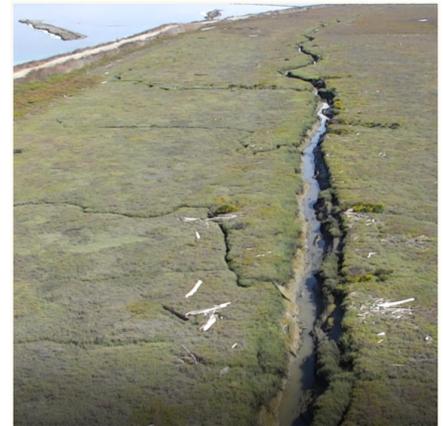
2021

- Improve the credit card process to incorporate updated technology that includes time-saving methods for employees and increased review options by management
- Replace tech room computers with Virtual Desktop Interface or chrome-based devices
- Begin 3-year infrastructure upgrade of network, routers, cable, switches, and firewall
- Improve 3D-printed Encephalitis Virus Survey mosquito traps
- Obtain quotes and coordinate the recoating of the covered parking structures, pesticide shed, vehicle wash rack, and shop exterior
- Obtain quotes and coordinate the recoating of the shop floor
- Reconfigure parking lines with updated spaces



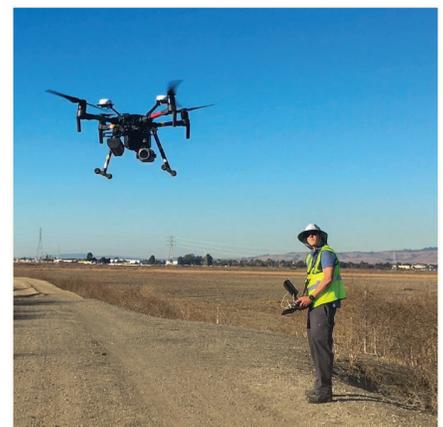
2022

- Rebuild Microsoft SharePoint sites to include Business Intelligence analytics
- Assess District phone contract
- Perform full human resources software audit
- Research and deploy cloud storage and software for research projects
- Digitize fleet and facility preventive maintenance processes
- Improve the physical facilities of the aquaculture program
- Locate cryptic drainage ditches for mosquito source reduction projects
- Update mosquito source reduction project maps
- Allocate time for research projects and professional development
- Evaluate adding a catch basin hotspot layer in the MapVision database and improve color-coding
- Develop a dashboard to analyze field staff workloads and display financial information



2023

- Make progress in funding the Repair and Replace account along with other reserve categories
- Assess alarm contract
- Research new technology to replace Apple iPads
- Fully automate drone information capture methods
- Improve production in the aquaculture program
- Repair or replace the front gate
- Increase the number of fully certified drone pilots and deploy more mosquito inspection and treatment missions





EMPLOY THE BEST PRACTICES FOR MOSQUITO CONTROL DISTRICTS AND LOCAL GOVERNMENTS

2021

- Improve financial visuals and projections to accompany the annual Comprehensive Annual Financial Report
- Research and improve mosquito source reduction efforts and treatments in cemeteries
- Create new partnerships with organizations within Alameda County that have established community connections
- Connect with city code enforcement departments regarding our aerial pool surveillance program to ensure consistent messaging to property owners
- Establish relationships with new state, county, and local elected officials
- Build relationships with Homeowners Associations near marsh communities

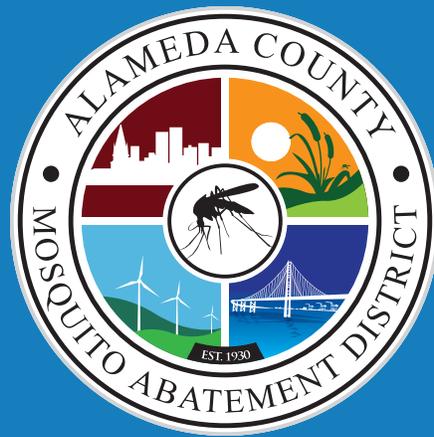
2022

- Convert annual budgets to multi-year with formatting changes that improve readability
- Evaluate Accounting Associate job description and duties
- Evaluate public perception of District services

2023

- Analyze future liabilities to determine when the District should withdraw from section 115 fund
- Begin work on predictive mosquito control modeling methods
- Establish mosquito control as a stakeholder in Alameda County development
- Develop new relationships with schools (principals, teachers, PTAs, etc.)
- Hone outreach efforts to incorporate an equity lens into community outreach
- Improve approaches for trapping *Aedes dorsalis* mosquitoes





510-783-7744

 www.mosquitoes.org

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