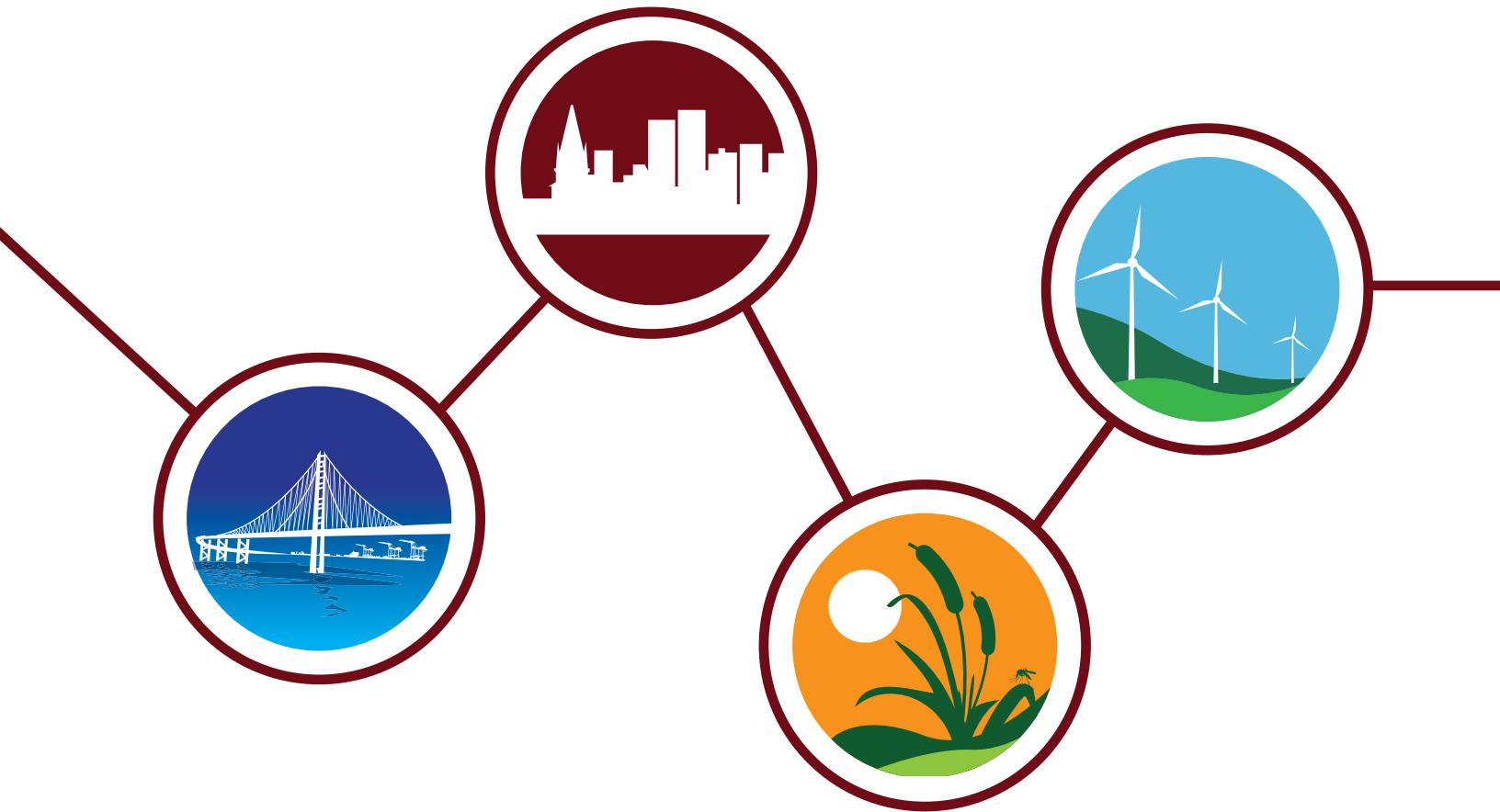


ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

STRATEGIC PLAN

2024-2026





EMPLOYING A STRATEGIC ADVANTAGE

This third strategic plan in the Alameda County Mosquito Abatement District's (ACMAD) 93-year history prepares for known obstacles to our district's mission while striving to achieve our ambitious vision through its strategic priorities and associated projects. ACMAD elects to conduct this strategic planning process every three years so that our stakeholders—both internal and external— are aware of and can contribute to the direction of our actions. The district uses a 3-year cycle to ensure that our goals are achievable, measurable, and timely. The goals should anticipate challenges while providing a solid foundation with the flexibility to adjust.

Before introducing the 2024-2026 goals, it is necessary to review the status of the 2021-2023 Strategic Report with its three overarching goals:

- Ensure ACMAD has the training, equipment, personnel, partnerships, and financial support to limit the introduction of invasive *aedes* mosquitoes.
- Leverage ACMAD assets towards efficient approaches to mosquito control.
- Employ the best practices for mosquito control districts and local governments.

The district completed all seven projects listed under the first goal that prepared the district for invasive *Aedes* mosquitoes. These preparations include an internal parcel inspection plan for a door-to-door response, a Community Emergency Response Plan in coordination with the County's Emergency Managers Association, and a formal identification training process led by the district's laboratory. In year two, we began implementing

our school-age educational program while modeling the dispersal of our Wide Area Larvicide System in a marsh setting. By the final year of this report, field staff improved their ability to identify adult mosquitoes while lab staff submitted a research publication detailing a new rapid assay that identifies *Aedes* mosquitoes.

There were 25 projects under the broad category of leveraging assets towards efficient approaches. Of these projects, 20 were completed, 3 were dropped, and 2 were carried over to the next plan. The dropped projects focused on technology upgrades that were found to be unnecessary (e.g., replacing iPads and Virtual Desktops) and recoating the shop floor. The carried-over projects are related to the aquaculture facility which we had hoped to build in 2022; this goal has been delayed until 2024. The twenty completed projects include improvements to the credit card process, IT infrastructure, 3D printing capabilities, exterior painting, parking lot enhancements, Microsoft SharePoint sites, software and data storage, digitizing fleet processes, source reduction data, professional development, dashboards, reserve funding, and increased use of unmanned aircraft systems.

All fifteen of the district's projects in the strategic plan related to best practices were completed between 2021-2023. District staff improved the quality of the Comprehensive Annual Financial Report and annual budget, noticed improved methods in all Alameda County cemeteries, created new connections with community groups as well as state and local government officials, reclassified the Accounting Association position to a Financial & HR Specialist, determined when the district



will withdraw from the section 115 pension stabilization fund, began research on predictive modeling methods, developed new relationships within the educational community, improved salt marsh mosquito methods, and finally, implemented operational improvements recommended through a third party health equity research project.

The projects associated with each priority in this strategic plan begin from the broadest perspective (what improvements can we make for the environment?), to a community-based focus (how can we improve our external programs and relationships?), and end with an internal focus (how can we improve the way we operate?). This district-community-global systemic approach to mosquito control allows ACMAD to address the connection between our internal programs for mosquito controls, such as transitioning from fossil fuels, to increased tropical human diseases in Alameda County due to the climate crisis.

This strategic plan is a product of the collaboration between the ACMAD Board of Trustees and the ACMAD staff. With honest input from both parties a plan was devised to implement the Board's vision. Finally, thank you residents of Alameda County for trusting us to safeguard your health and comfort by controlling mosquitoes and limiting the transmission of mosquito-borne diseases.

Sincerely,
 Trustee Valerie Arkin,
 Trustee P. Robert Beatty,
 Trustee Hope Salzer,
 Trustee Jan O. Washburn, and
 Trustee Subru Bhat, Committee Chair





OUR STRATEGY

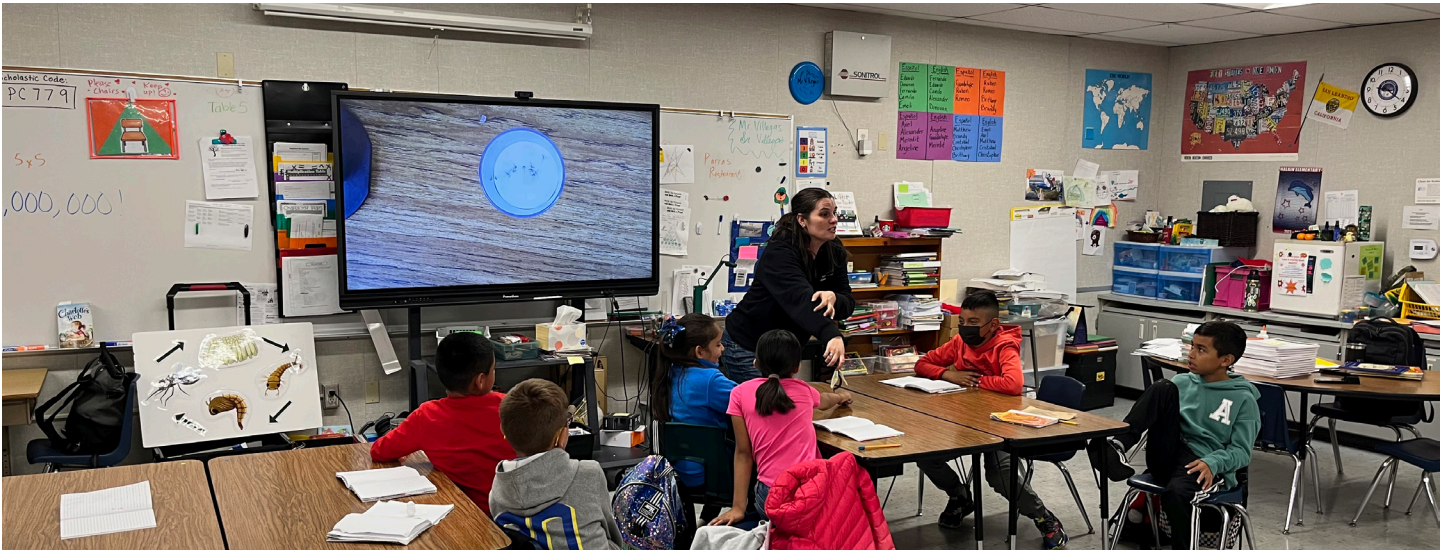
OUR MISSION

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, accountability, and community outreach.





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 2024-2026 STRATEGIC PRIORITIES

Proactively mitigate and adapt to climate change impacts on ACMAD by reducing carbon emissions, planning for climate extremes, and coordinating with stakeholders.

2024

- Transition three treatment sites from ground-based equipment to Unmanned Aircraft Systems (UAS) for larval mosquito control applications in environmentally sensitive areas.
- Transition from purchasing mosquito fish from a 3rd party supplier to rearing at least 50% in-house.
- Deliver a report to the Board of Trustees on future self-sustainable energy requirements and budget for service upgrades.
- Evaluate the environmental impact of mosquito control products and equipment that are not included in our Programmatic Environmental Impact Report.

2025

- Purchase fully electric alternatives, if available, to gasoline-powered equipment (ATV, blowers, vehicles, boat), when replacement is needed.
- Geolocate malaria mosquito habitats in the county and update the response plan for travel-related cases of tropical diseases that are reported by public health departments.
- Engage with U.S. Fish and Wildlife Service to understand the limitations on the use of Unmanned Aircraft Systems on the properties they manage.
- Ensure projects that will help the shoreline be more resilient to climate change impacts include in the design and monitoring plan language that addresses the risks of mosquito production.

2026

- Report to the General Manager a cost-benefit analysis of purchasing an electric forklift rather than rely upon oversized lift-gate trucks to receive large product deliveries.
- Transition from ground-based larvicide applications to UAS on U.S. Fish and Wildlife Service properties.
- Leverage our mosquito control expertise to aid rural African communities facing malaria challenges, thereby fostering global disease vector management practices that can inform and enhance climate adaptation strategies in Alameda County.

Broaden our presence and depth of service to the community by supporting field staff efficiency and leveraging outreach.

2024

- Contract with a provider to acquire aerial imagery for the unmaintained swimming pool program.
- Ensure that at least 80% of the initial unmaintained swimming pool communications are made by office staff so that field staff efforts are preserved for mosquito control.
- Quantify the number of requests for service from the community that are resolved through educational outreach by office staff.
- Hire a new full-time invasive *Aedes* field outreach position that also participates in operations and laboratory duties.
- Identify and translate key documents into several of the primary languages spoken within Alameda County.

2025

- Implement an outreach strategy for members of the county that may be most affected by mosquito populations and diseases.
- Establish new agency partnerships that should be leveraged to amplify our mission of mosquito control.
- Develop a digital resource that enables the public and staff to identify mosquitoes and other insects that are common in the county.
- Provide Trustees with quarterly reports on mosquito control issues or updates that they bring to city council or supervisorial meetings.
- Solicit quarterly reports from Trustees on land-use decisions that may affect mosquito production.

2026

- Ensure that at least half of our new agency partners have deployed community messages that amplify our mosquito control mission.
- Quantify differences in water and soil composition in pickleweed habitats that are used or avoided by *Aedes dorsalis*, and report outcomes in scientific publication and conference presentation.
- Develop a collaborative mosquito control strategy with Lawrence Livermore National Laboratory or other similarly restricted sites.

Ensure that we provide residents and visitors to Alameda County with effective, inclusive, and efficient mosquito control.

2024

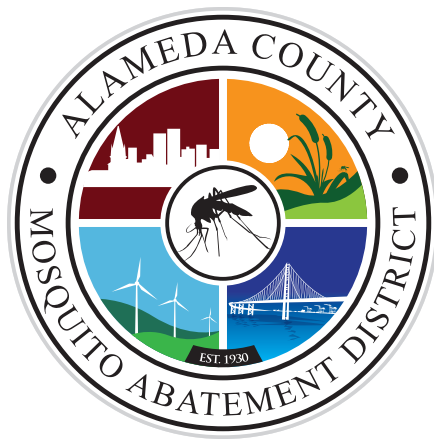
- Update the district holiday schedule to align with federal and state holidays that reflect our communities' values.
- Revise the seasonal employee job description and recruitment strategy to ensure a fully staffed district.
- Increase workplace professionalism by transitioning permanent employees out of hourly clock requirements.
- Deploy the new Mapvision 3.0 geospatial data management system with a revised catch basin mapping system and new capabilities that are requested by staff and management.
- Improve cybersecurity practices by ensuring that data and systems are secure through annual vulnerability assessments, penetration testing, and automatic patching of district IT equipment.

2025

- Automate and review staff certifications and training requirements quarterly.
- Develop a written executive management commitment that documents the Districts dedication to diversity, equity and inclusion.
- Evaluate use of a larger granular pesticide spreader for land-based treatments.

2026

- Create succession plans for support staff positions.
- Assess the alignment of immature mosquitoes with adult mosquito abundance data.
- Evaluate and implement automation opportunities for routine tasks such as green pool identification, insect identification, and fleet management.



510-783-7744

 www.mosquitoes.org

 Alameda County Mosquito Abatement District

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