

2025

PUBLIC REVIEW DRAFT MUNICIPAL SERVICE REVIEW

ORANGE COUNTY
MOSQUITO AND VECTOR
CONTROL DISTRICT

MSR 23-07 SOI 23-08



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Acronyms and Abbreviations

CKH	Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000
CAN	County Administrative North
DUC	Disadvantaged Unincorporated Community
FY	Fiscal Year
G.C.	Government Code
IVM	Integrated Vector Management Plan
LAFCO	Local Agency Formation Commission
OC LAFCO	Orange County Local Agency Formation Commission
OCMVCD	Orange County Mosquito and Vector Control District
MSR	Municipal Service Review
SOI	Sphere of Influence
SIT	Sterile Insect Technique

I. EXECUTIVE SUMMARY

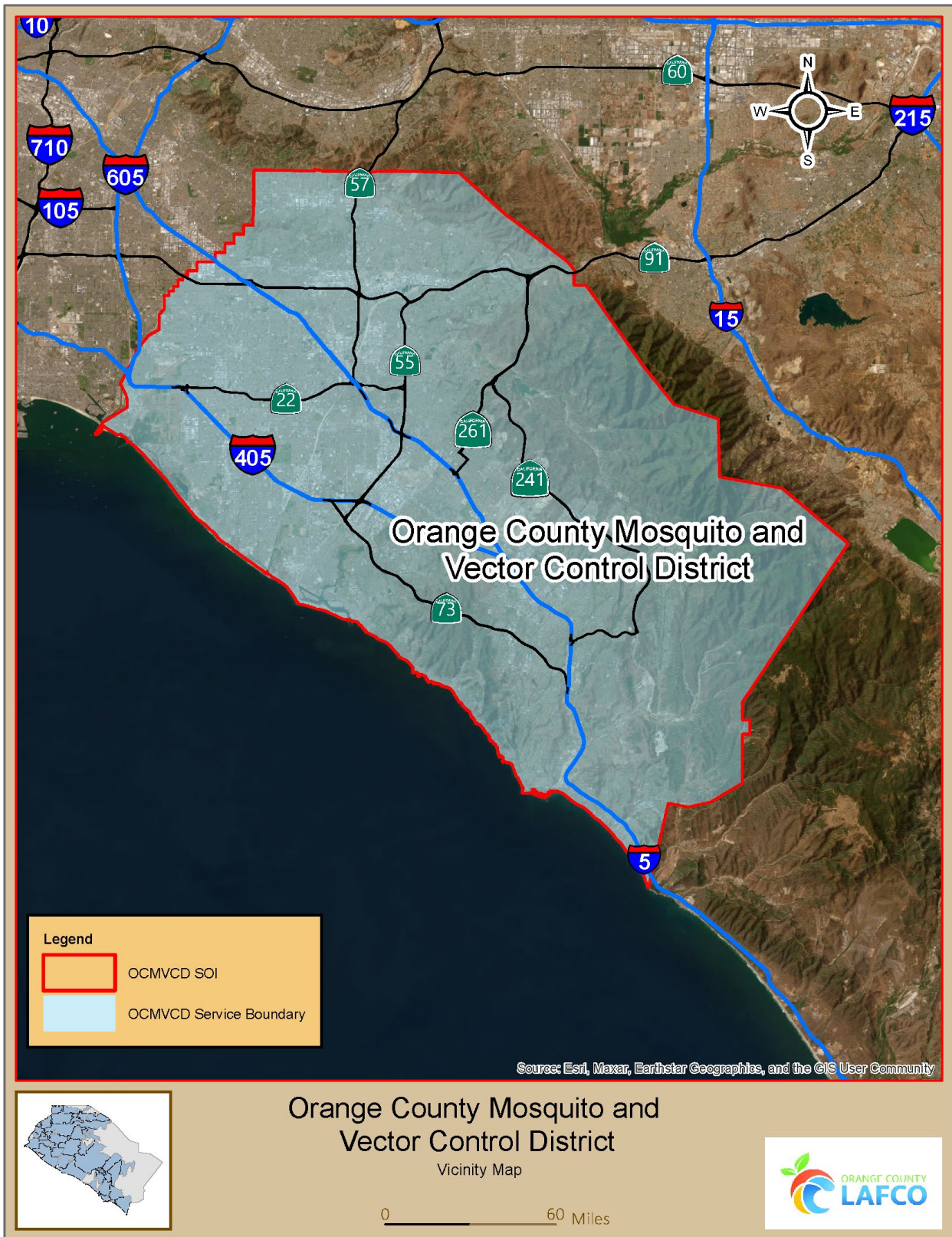
INTRODUCTION

The Local Agency Formation Commission of Orange County (OC LAFCO) is required to conduct a Municipal Service Review (MSR) for all cities and special districts within Orange County. OC LAFCO's policy for this process involves preparing future-oriented studies that are educational and valuable to stakeholders and the public by raising awareness about effective service delivery and opportunities to provide municipal services efficiently, equitably, and reliably. Since 2003, OC LAFCO has responded to this mandate by routinely completing a review of each city and special district's sphere of influence (SOI) and preparing focused and regional MSRs.

ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT REVIEW

The service area for the Orange County Mosquito and Vector Control District (OCMVCD) is coterminous with Orange County's geographic boundary, encompassing the jurisdictional limits of 34 cities and several county unincorporated areas extending from the City of Los Alamitos to the southern region of the County nearby the cities of Rancho Santa Margarita, San Clemente, and San Juan Capistrano. The District's service area and sphere of influence boundary are depicted in Exhibit 1.

Exhibit 1:



MSR STATEMENT OF DETERMINATIONS

In accordance with Government Code Section 56430, the following MSR Statement of Determinations, as shown below, have been prepared for OCMVCD.

Determination 1: Growth and population projections for the affected area.

OCMVCD currently provides vector control services to approximately 3.1 million people in Orange County, including residential and business communities. Over the next 15 years, the population within the District's service area is expected to increase to approximately 3.2 million. As rural land and open spaces are developed for housing to accommodate the population increase, the presence of mosquitoes or vectors will increase. The District is planning to allocate the necessary resources accordingly to meet the increase in vector control service requests by residents.

Determination 2: Location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.

There are eleven (11) disadvantaged unincorporated communities (DUCs) located within the boundary of OCMVCD. These DUCs are adjacent to and located within the spheres of influence of the cities of Anaheim, Stanton, and Westminster and include residential, commercial, and recreational land uses. The land use within the DUCs includes residential, commercial, industrial, and recreational.

Determination 3: Present and planned capacity of public facilities and adequacy of public services, adequacy of public services, infrastructure needs, or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.

In 2011, OCMVCD acquired additional property adjacent to its existing district headquarters in order to address the deficiency of its capacity for public facilities. However, the District quickly outgrew the space, facing challenges such as operational efficiencies and parking constraints. Despite these challenges, the District continues to provide effective vector control services. To address these limitations, in 2024, the Board of Trustees decided to move forward with developing a plan to rebuild and remodel on the current property, utilizing the existing space more efficiently. Staff is developing this plan with efforts to minimize disruption to services during construction.

Determination 4: Financial ability of agencies to provide services.

The financial capacity of OCMVCD is adequate for existing vector control service levels. Based on OC LAFCO financial indicators, the agency reports moderate revenues, low expenditures, and high reserves. The District notes that the reserves are largely attributed to the Capital Improvement Fund and will be used to support the development of a plan for rebuilding onsite to accommodate OCMVCD operations. OCMVCD's key funding sources are taxes and assessments, which provide approximately 90% of its annual revenues.

Determination 5: Status of, and opportunities for, shared facilities.

The District currently participates in a shared agreement with the Greater Los Angeles County Vector Control District involving equipment for providing vector control services. As the sole provider of vector control services to Orange County communities, opportunities for shared agreements between OCMVCD and other agencies are limited.

Determination 6: Accountability for community service needs, including government structure and operational efficiencies.

OCMVCD is an independent special district that operates under the Mosquito Abatement and Vector Control Districts Principle Enabling Act. The District maintains an accessible website that includes a wide range of information, including an overview of the vector services provided to residents, audited financial statements, service area map, agency meeting agendas, notices and minutes, and other written reports and studies. Additionally, the website includes information on appointment terms, current vacancies, and election processes for the trustee members.

Determination 7: Any other matter related to effective or efficient service delivery, as required by Commission Policy.

No other matters were identified during the District's MSR.

SOI STATEMENT OF DETERMINATIONS

In accordance with Government Code Section 56425, the following SOI Statement of Determinations, as shown below, has been prepared for OCMVCD.

Determination 1: The present and planned land use in the area, including agricultural and open space lands.

OCMVCD's SOI boundary is coterminous with Orange County's jurisdictional boundary and includes 34 cities and unincorporated areas. The County and respective cities govern land use throughout the District's SOI and service area, which is identified as residential, commercial, industrial, agricultural, and open space lands. The District addresses the present and future needs of the population served through the agency's integrated vector management plan and fiscal budget.

Determination 2: The present and probable need for public facilities and services.

OCMVCD provides adequate services within its respective service area and designated sphere of influence. To support its current and future operational needs, the District is developing a plan to rebuild and remodel existing buildings at its headquarters, ensuring the continued capacity to accommodate operational demands.

Determination 3: The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

OCMVCD currently has adequate facilities and infrastructure to provide vector control services. However, the District is in an ongoing process of increasing its equipment and facility size to

appropriately accommodate both growth within OCMVCD's service area and the increased need for vector control services.

Determination 4: The existence of any social or economic communities of interest in the area.

OCMVCD was established to ensure the efficient delivery of vector control services and effectiveness in reducing the potential for vector-borne diseases in Orange County's residential and business communities.

Determination 5: If a city or special district provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, the present and probable need for those facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

A total of 11 disadvantaged unincorporated communities (DUCs) were identified within the boundary of OCMVCD during this review. The District does not provide public facilities or services related to sewers, municipal and industrial water, or structural fire protection services. However, vector control services provided by OCMVCD are available and accessible to all Orange County communities, including DUCs, located within the District's SOI.

II. BACKGROUND

LEGAL REQUIREMENTS AND PURPOSE

PLANNING AUTHORITIES

LAFCOs' planning authorities are carried out through the establishment and updating of agencies' SOIs, which are tools used to define a city or special district's future jurisdictional boundary and service areas. Through the reform of CKH in 2000, LAFCO's planning responsibility includes the preparation of comprehensive studies (MSRs) that analyze service or services within the county, region, subregion, or other designated geographic area. The determinations that LAFCOs must review, analyze, and adopt for SOIs and MSRs are discussed in the next sections.

SPHERE OF INFLUENCE UPDATES

In 1972, LAFCOs throughout the State were tasked with determining and overseeing the SOIs for local government agencies. An SOI is a planning boundary that may be outside of an agency's jurisdictional boundary (such as the city limits or a special district's service area) that designates the agency's probable future boundary and service area. The purpose of an SOI is to ensure the provision of efficient services while discouraging urban sprawl and the premature conversion of agricultural and open space lands, and by preventing overlapping jurisdictions and duplication of services. On a regional level, LAFCOs coordinate the orderly development of a community through reconciling differences between different agency plans. This is intended to ensure the most efficient urban service arrangements are created for the benefit of area residents and property owners. Factors considered in an SOI update include current and future land use, capacity needs, and any relevant areas of interest, such as geographical terrain, location, and other aspects that would influence the level of service.

From time to time, an SOI may be modified as determined by LAFCO using the procedures for making sphere amendments as outlined by CKH. Pursuant to Government Code Section 56430, a LAFCO must first conduct an MSR prior to updating or amending an SOI.

Per Government Code Section 56425, a LAFCO shall consider and prepare a written statement of its SOI determinations on the following five (5) factors:

- 1) The present and planned land use in the area, including agricultural and open space lands.
- 2) The present and probable need for public facilities and services in the area.
- 3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
- 4) The existence of any social or economic communities of interest in the area if the Commission determines that they are relevant to the agency.
- 5) If a city or special district provides public facilities or services related to sewers, municipal industrial water, or structural fire protection, the present and probable need for those facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

MUNICIPAL SERVICE REVIEW

Section 56425(g) of CKH requires that LAFCOs evaluate an SOI every five years or when necessary. The vehicle for doing this is known as a Municipal Service Review.

Pursuant to Government Code Section 56430, MSRs make determinations on seven (7) required topics as follows:

- 1) Growth and population projections for the affected area.
- 2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.
- 3) Present and planned capacity of public facilities, adequacy of public services, infrastructure needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.
- 4) Financial ability of agencies to provide services.
- 5) Status of, and opportunities for, shared facilities.
- 6) Accountability for community service needs, including government structure and operational efficiencies.
- 7) Any other matter related to effective or efficient service delivery, as required by Commission Policy.

The focus of an MSR is to ensure that public services are being carried out efficiently and the residents of any given area or community receive the highest level of service possible. If an MSR determines that certain services are not being carried out to an adequate standard, OC LAFCO

can initiate changes through sphere amendments and dissolution or consolidation of service providers to provide the best service possible to the population.

AUTHORITY AND POWERS OF LAFCO

Codified within CKH are the procedures and processes for LAFCOs to carry out their purposes as established by the Legislature. LAFCOs' purposes are guided and achieved through their regulatory and planning powers and acknowledge that the local conditions of the 58 California counties shall be considered in part to the Commission's authorities.

CKH ACT (G.C. SECTION 56301) - PURPOSES OF LAFCOs

"Among the purposes of a commission are discouraging urban sprawl, preserving open space and prime agricultural lands, encouraging the efficient provision of government services, and encouraging the orderly formation and development of local agencies based upon local conditions and circumstances."

LAFCO RESPONSIBILITY

LAFCOs' regulatory authorities include the reviewing, approving, amending, or denying of proposals to change the jurisdictional boundaries of cities and special districts. Specifically, these types of boundary changes, commonly referred to as "changes of organization," include:

- City Incorporation
- City Disincorporation
- District Formation
- District Dissolution
- City and District Annexations and Detachments
- City and District Consolidations
- Merger of a City and District
- Establishment of Subsidiary District
- Activation of new or different functions or classes of services or divestiture of power to provide services for special districts.

ORANGE COUNTY LOCAL AGENCY FORMATION COMMISSION

OC LAFCO is responsible for overseeing the boundaries, establishing and updating SOIs, and preparing MSRs for the County's 34 cities and 34 independent and dependent special districts. Since its creation, the Commission has formed nine cities, approved multiple changes of organization and reorganization involving cities and special districts, and encouraged orderly development through the establishment of agency SOIs and preparation of numerous studies. OC LAFCO has also provided proactive leadership on efficient

OC LAFCO MISSION STATEMENT:

OC LAFCO serves Orange County cities, special districts, and the county to ensure effective and efficient delivery of municipal services.

government through its annexation of unincorporated islands and an innovative presence through its Shared Services and Fiscal Indicators web-based programs. In addition to State law, the Commission's authority is guided through adopted policies and procedures that assist in the implementation of the provisions of CKH and consideration of the local conditions and circumstances of Orange County. Those policies and procedures may be found on the OC LAFCO website at: <https://oclafco.org/about-us/transparency/>.

COMMISSION COMPOSITION

OC LAFCO is comprised of 11 members, with seven serving as regular members and four serving as alternate members. The members include: three (3) County Supervisors, three (3) City Councilmembers, three (3) Independent Special District members, and two (2) at-large representatives of the general public. All members serve four-year terms and there are no term limits. In accordance with the statute, while serving on the Commission, all commission members shall exercise their independent judgment on behalf of the interests of residents, property owners, and the public as a whole. Table 1 below depicts current members of the Commission and their respective appointing authority and terms.

Table 1: OC LAFCO Commission Roster

Commissioners	Appointing Authority	Current Term
Regular Members¹		
Donald P. Wagner, Chair County Member	Board of Supervisors	2022-2026
Wendy Bucknum, Vice Chair City Member	City Selection Committee	2024-2028
Douglass Davert, Immediate Past Chair Special District Member	Independent Special District Selection Committee	2022-2026
James Fisler Special District Member	Independent Special District Selection Committee	2024-2028
Derek J. McGregor Public Member	Commission	2022-2026
Peggy Huang City Member	City Selection Committee	2022-2026
Alternate Members		
Kathryn Freshley Alternate Special District Member	Independent Special District Selection Committee	2022-2026
Carol Moore Alternate City Member	City Selection Committee	2024-2028
Lou Penrose Alternate Public Member	Commission	2021-2025
Luis Tapia, Interim Assistant Executive Officer Scott C. Smith, General Counsel		
¹ County Regular and Alternate Member seats are currently vacant.		

MEETING AND CONTACT INFORMATION

The Commission's regular meetings are held on the second Wednesday of the month, beginning at 8:15 a.m. The meetings are conducted at the County Administration North (CAN), First Floor Multipurpose Room 101, 400 W. Civic Center Drive, Santa Ana, CA 92701. The OC LAFCO administrative offices are centrally located at 2677 North Main Street, Suite 1050, Santa Ana, CA 92705. Commission staff may be reached by telephone at (714) 640-5100. The agency's agendas, reports and other resources are available online at www.oclafco.org.

III. REVIEW OF OCMVCD SERVICES

PRIOR MUNICIPAL SERVICE REVIEWS

OCMVCD's last comprehensive MSR was completed in 2005, followed by a reconfirmation of MSR determinations in subsequent reviews conducted in 2008 and 2013. The District's 2005 MSR noted that the district should explore acquiring an adjacent property or a new location to accommodate OCMVCD's operations sufficiently. During that MSR process, the District's Board of Trustees increased the capital improvement fund to approximately \$1.8M to address OCMVCD's infrastructure deficiencies, including timely replacement of the District's fleet vehicles. Following the 2005 MSR, OCMVCD replaced 31 vehicles and established a schedule for future vehicle replacements.

HISTORY OF DISTRICT

The Orange County Mosquito and Vector Control District (OCMVCD) was established in 1947 to provide vector control services to the county's residential and business communities following an examination conducted by the State of California involving the presence of mosquitoes in various Orange County areas. Vectors are defined by the California Department of Public Health as "any insect or other arthropod, rodent or other animal of public health significance capable of harboring or transmitting the causative agents of human disease, or capable of causing human discomfort and injury." Originally established under the name of the Orange County Vector Control District, the District's abatement responsibilities were expanded nearly 30 years following its inception to include the protection of County communities from other vectors, such as flies, ants, and rats, and education and prevention of vector-borne diseases services.

OCMVCD Mission Statement:

"The mission of the Orange County and Vector Control District is to educate and protect Orange County from vectors and prevent vector-borne diseases in an environmentally responsible manner."

In 2015, the District officially changed its name to reflect and align with its service responsibilities and jurisdiction. Today, the District's service area includes a population of approximately 3.1 million, encompassing residential and business communities. In 2024, OCMVCD noted in its District's Year In Review the treatment of 419 acres of flood channels and 7,777 inspections and treatments to pools and spas in Orange County.

IV. AGENCY PROFILE

This section provides information on OCMVCD, including the governing structure, population, service area, services provided, and a demographic summary of the District. A summary of OCMVCD's financial trends for Fiscal Years 2021-22 to 2023-24 are also shown in this section.

Table 2: OCMVCD Information and Demographics

Orange County Mosquito and Vector Control District Formed in 1947	
District Information	
Address	13001 Garden Grove Boulevard, Garden Grove, CA 92843
Primary Contact	Lora Young, General Manager
Contact Information	(714) 971-2421
Website	https://www.ocvector.org
Governance	35 Trustees, appointed by their respective city and the Orange County Board of Supervisors.
District Type	Independent Special District
Total Agency Staff	70 Full-Time Employees
Service Area Information	
District Service Area (Sq. Mi.)	799
Communities Served	34 cities and county unincorporated areas
Population Served	Approximately 3.1 million
Population	
2020 Population	3,186,326
2024 Population	3,150,835
2030 Population	3,287,447
Unincorporated Population	131,391
Area (Square Miles)	799.8
2024 Housing	
Housing Units	1,157,425
Owner Occupied (%)	56.5%
Renter Occupied (%)	43.5%
2024 Employment	
Employed	1,522,600
Unemployed	57,800
Unemployment rate	3.7%
Services Provided	
<ul style="list-style-type: none"> Public health protection by controlling the populations of rats, flies, mosquitoes, Red Imported Fire Ants, and other vector-related problems. 	

General Fund Cash Flow FY 2021-22 to FY 2023-24

Financial Summary ¹	2021-22	2022-23	2023-24
Revenue	\$16,241,370	\$18,408,624	\$20,452,123
Expenditures	\$13,811,529	\$14,584,755	\$14,843,306
Net	\$2,429,841	\$3,823,869	\$5,608,817
Reserves	\$10,296,720	\$12,637,224	\$14,470,947

V. GROWTH AND POPULATION PROJECTIONS

The efficient and effective delivery of municipal services relies on deliberate planning for the existing population and anticipated growth in Orange County. Understanding the impacts of existing and future levels of demand for services assists service providers with planning, maintaining, and expanding adequate service infrastructure.

The current population in OCMVCD's service area is approximately 3.1 million residents and, as reflected in Table 3, is projected to increase to approximately 3.34 million by 2040. In concert with population growth, additional housing units throughout the county are expected to be built.

With the addition of more livable spaces to accommodate population growth, there may be an assumption of a lesser presence of mosquitoes or vectors due to the decrease in rural land or open space. Contrary to this theory, constructing a new structure provides a habitat where vectors can thrive and repopulate. Therefore, it is expected that with an increase in population and housing, the demand for services provided by OCMVCD will concurrently increase, as depicted in Table 3. The District's current capacity and adequacy of its facilities, services, and future opportunities are discussed in section seven of this MSR.

Table 3: OCMVCD Population Projections		
Year	Population	Housing
2024	3,150,835	1,157,425
2025	3,239,474	1,176,165
2030	3,287,447	1,220,390
2040	3,345,665	1,252,783
Source: Orange County Progress Report 2024 ²		

¹ "Reserves" are based on unassigned fund balance.

Source: OC LAFCO Fiscal Indicators, OCMVCD's Audited Financial Statements.

² Center for Demographic Research, *Orange County Progress Report 2025*, Vol. 53

VI. LOCATION AND CHARACTERISTICS OF ANY DISADVANTAGED UNINCORPORATED COMMUNITIES (DUCs)

Collectively, OCMVCD's jurisdictional boundary includes eleven (11) DUCs adjacent to the cities of Anaheim, Stanton, and Westminster. There are four DUCs situated within the unincorporated area of Southwest Anaheim, two others within the City of Stanton's sphere of influence, and five DUCs located in the City of Westminster's sphere of influence.

The DUCs within the Southwest Anaheim area include 192 acres. The City of Anaheim provides water and wastewater services within these areas. Garden Grove Sanitary District provides solid waste services for the DUCs through an agreement with the County.

The DUCs located within the City of Stanton's SOI receive municipal services from various agencies. Located near the intersection of Dale and Chapman Ave, the Dale/Augusta DUC includes 27 acres and receives water services from the City of Garden Grove and Hynes Estates Mutual Water Company. The Mac/Syracuse DUC is located near the intersection of Katella Avenue and Magnolia Street, consists of 34 acres, and receives water services from Golden State Water Company, a private water purveyor. Garden Grove Sanitary District provides wastewater services to both DUCs, and solid waste services to the same areas are provided by Republic Waste Services.

The five DUCs located within the City of Westminster's SOI also receive municipal services from various providers. Collectively, the DUCs encompass a total of 288 acres, three of which are located east of Beach Boulevard in an unincorporated area referenced as Bolsa/Midway. Water service to the Bolsa/Midway DUC is provided by four providers, including the City of Westminster, Midway City Mutual Water Company, Eastside Water Association, and South Midway City Mutual Water Company. The remaining two DUCs, referred to as Bolsa/Pacific and Bolsa/McFadden, are located west of Beach Boulevard and receive retail water services from the City of Westminster. Midway City Sanitary District provides wastewater and solid waste disposal services to all five DUCs located in the City of Westminster's SOI.

The County of Orange provides all other general and municipal services within the DUCs. This includes land use planning, fire protection and prevention, law enforcement, street sweeping, library services, animal control, code enforcement, and parks and recreation.

VII. CAPACITY AND ADEQUACY OF PUBLIC FACILITIES AND SERVICES

One of the most critical components of providing municipal services is having the capacity and adequate public facilities to provide effective and efficient services. For OCMVCD, it involves the District's having sufficient infrastructure to support its operation's needs. The section of this MSR includes a review of OCMVCD's facilities and services.

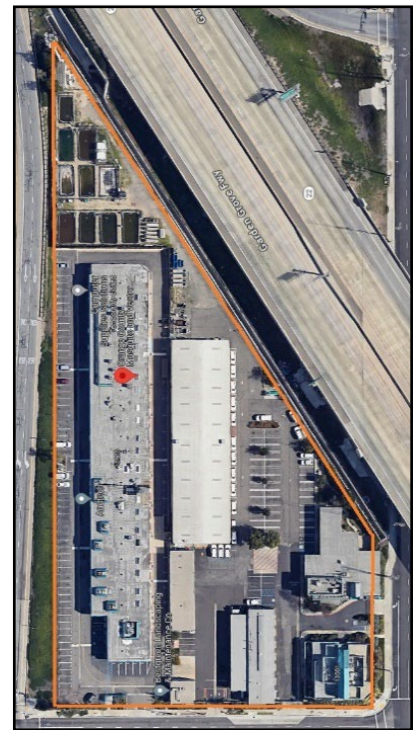


OCMVCD FACILITIES

With a significant service area that spans from the northern jurisdictional limits of the cities of La Habra and Brea to the boundaries of south Orange County adjacent to the City of San Clemente, OCMVCD's headquarters modestly accommodates various facilities, including its administrative offices, a laboratory, and storage areas for fleet and treatment equipment infrastructure. Throughout the years, the District has been challenged with completing improvements to the property due to the limitations of the existing space and right-of-way restrictions. Noted in 2005, one of the MSR findings indicated that the OCMVCD's facilities were not adequate for the District's operations due to the limitation of its size. During that same MSR process, the OCMVCD Board of Trustees approved a Facilities Improvement Fund to facilitate improvements to the District's headquarters or purchase land that would accommodate the staff and operations of OCMVCD.

Exhibit 2: OCMVCD Headquarters

In alignment with that directive, in 2011, OCMVCD purchased a property, Haster Business Park, adjacent to the District's headquarters. The purchase of the business park added approximately two acres to the District's then 3.24-acre operations. However, the District quickly outgrew the space, facing challenges such as operational efficiencies, parking constraints, and limitations on future program growth. Further build-out of the now approximate five-acre headquarters is restricted due to the proximity of the facilities to the SR 22 freeway. Despite the ongoing challenges of addressing these deficiencies and increasing service demand, the District continues to deliver effective vector control services. To address these challenges and accommodate the growing need for vector control services, in 2024, the Board of Trustees made the decision to develop a plan for rebuilding on the current property, utilizing the existing space more efficiently. District staff is currently



working on developing a plan as directed by the Board of Trustees and ensure minimal disruption to services during construction while accommodating both current and future operational needs.

OCMVCD EQUIPMENT

Maintaining the District's vehicle fleet is a critical component of OCMVCD's delivery of vector control services. The District's most recent comprehensive MSR noted the need for the replacement of aged vehicles in order to facilitate adequate services.

Recognizing the significance of this deficiency, the Board of Trustees established a vehicle replacement fund and schedule dedicated to replacing land and water vehicles. The District



maintains 98 vehicles within its fleet, including lightweight pick-up trucks, one medium-weight pickup truck, and right-wheeled jeeps. The District's fleet is utilized to complete daily field work, treatment of large areas, and the underground storm drain program. In addition to land vehicles, OCMVCD owns five golf carts, two Jon boats, and two drones. Golf carts are used for treatments within golf courses, large parks, or school sites. The boats are used to treat areas not accessible by land vehicles, which include lakes and ponds. Similarly, drones are used to view and

conduct control in sensitive habitat areas that are not accessible through land or water vehicles. Typically, the District replaces approximately six vehicles per year based on mileage, vehicle age, and maintenance issues.

During this MSR process, OCMVCD acknowledged new State regulations requiring the replacement of fleet vehicles with electric vehicles. Established to adopt regulations to reduce emissions and promote cleaner technologies, the California Air Resources Board adopted a regulation requiring local government agencies with medium and heavy-duty on-road vehicles to transition to electric vehicles in part to the State's effort to achieve carbon neutrality by 2045 or sooner. Vehicles under this regulation include solid waste trucks, buses, vans, and other heavy vehicles. The new law will not directly impact the District's fleet at this time. However, the District has expressed that it would need to commit significant investments into the agency's infrastructure should the regulation be expanded to include the characteristics of the District's fleet.

OCMVCD budgets annually for necessary equipment and is able to fund all the equipment needed to provide services. The district is currently exploring enhancing existing infrastructure to combat the spreading of vector-borne diseases by the mosquito population. OCMVCD is considering the purchase of new technologies, such as the Irradiation Sterile Insect Technique, to enhance its mosquito control efforts. This new technology would allow for a greater volume of mosquitoes to be sterilized. Another technology tool employed by OCMVCD is the use of

drones in nature preserves and wetlands to assist with the control of mosquitoes while minimizing impacts on the environment.

OCMVCD SERVICES

To carry out the District's mission, OCMVCD adopted its Integrated Vector Management Plan (IVM) to carry out the agency's forward planning strategies to reduce the presence of vectors in Orange County. Similar to a city's General Plan or a water district's Urban Water Management Plan, the OCMVCD IVM Plan combines scientific research and best management practices to fulfill the services and efforts discussed in the following sections.

Vector Control & Monitoring Services

A method and service implemented by OCMVCD from the IVM Plan is monitoring mosquito populations and vector-borne diseases. To facilitate this service, the District places over 100 mosquito traps throughout the County and collect samples to address the potential diseases (West Nile virus, St. Louis, and Western Equine Encephalitis) carried by mosquitoes that may present harm to Orange County's population. Traps used by OCMVCD include carbon dioxide-baited traps and gravid mosquito traps.

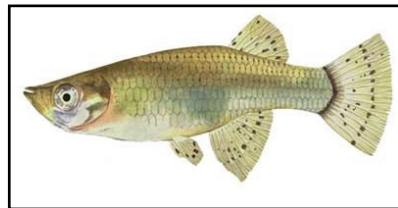


- ***Carbon Dioxide Baited Trap***
 - The carbon dioxide trap is used to attract and capture recently mated females. After females mate, they need to find a blood source to be able to produce eggs. The carbon dioxide trap mimics an animal's breathing emissions.
- ***Gravid Mosquito Trap***
 - The gravid trap is a foul-smelling trap that egg-laying female mosquitoes are attracted to as a potential place to lay their eggs.



Building on these monitoring efforts, the District integrates and maintains the collected data from the sampled mosquitoes on its agency's website. Additionally, OCMVCD staff conducts daily inspections of potential breeding sources such as drains, gutters, and ditches to identify and mitigate areas where stagnant water could facilitate mosquito development.

Effective mosquito control goes beyond monitoring and relies on a combination of biological, chemical, and physical methods. Biological controls include using Mosquitofish in isolated water sources such as non-chlorinated swimming pools and small ponds. Mosquitofish survive in diverse environmental conditions, making them a valuable tool for controlling mosquito larvae in specific settings. These fish are only used by OCMVCD according to environmental regulations in appropriate environments to protect natural ecosystems.



Innovative approaches are also being explored to complement traditional methods. For instance, the Sterile Insect Technique (SIT) is an emerging technology that OCMVCD is piloting in partnership with the neighboring district, Greater Los Angeles County Vector Control District. This technique involves mass rearing and sterilizing male mosquitoes using radiation, then releasing them to suppress invasive species like Aedes or “ankle biter” mosquitoes. By producing infertile eggs when mating with wild females, SIT offers a promising avenue for reducing populations resistant to chemical interventions.



Chemical controls remain a critical tool in managing mosquito populations, particularly in high-risk areas or during mosquito-borne disease outbreaks such as West Nile Virus. OCMVCD applies EPA-registered pesticides with minimal environmental impact through various delivery methods, including trucks, drones, and aircraft.

Physical control methods form the foundation of effective mosquito management, though they can be labor-intensive, depending on who you

ask. These methods include removing standing water, improving drainage, and maintaining clear flood channels, which significantly reduce mosquito populations. Removing standing water helps eliminate prime habitats for mosquito larvae.

EDUCATION SERVICES

Educating Orange County residents about vectors and vector-borne diseases is a critical component of the District’s mission, which is carried out through District programs and other tools focused on increasing public awareness of control and prevention methods. The District’s outreach efforts include the use of media, community events, and informational presentations. OCMVCD developed a program that is implemented in classrooms by collaborating with local schools and teachers to educate about mosquitoes and other services offered by the District. OCMVCD’s educational program includes a curriculum that follows core science and writing

standards, and students learn about the impacts of mosquito-borne diseases on human populations. Additionally, students learn how to share the responsibility of mosquito control. In 2024 alone, the program reached 15 schools and up to 1,233 students.

The District's educational presentations also extend to service-based organizations, businesses, neighborhood association meetings, and other agencies and organizations impacted by vectors. According to the OCMVCDs 2024 Year in Review Summary, District staff provided 35 presentations, attended 64 events, and conducted 16 media interviews to educate about the District's mission and services. OCMVCD also works annually in partnership with the county's 34 cities and the county of Orange to conduct messaging campaigns.



VIII. FINANCIAL ABILITY TO PROVIDE VECTOR CONTROL SERVICES

The development of the Fiscal Indicators web-based program (formerly fiscal trends) began in 2008. The intent of the program began with the opportunity to generally compare the performance of Orange County local agencies and ultimately became a resource for the Commission in the preparation of MSRs through the housing of accurate and meaningful data. Since that time, the web program has experienced functional improvements and structure enhancements that assist in evaluating the efficiency and effectiveness of municipal service delivery in Orange County. More recently, the fiscal indicators have been simplified while maintaining the goal of being effective as one of OC LAFCO's livable and ongoing resources.

OC LAFCO FISCAL INDICATORS

Fiscal indicators help measure and describe prospects for fiscal health. Indicators can flag trends that warrant further evaluation and planning to avoid potential service reductions and declining reserves. The OC LAFCO fiscal indicators were originally based on the State of California Auditor's indicators of cities' fiscal risk.³ Multi-year trends in growth (or decline) of agency operating revenues and expenditures and levels of reserves are adapted and applied to agencies in Orange County. Agency annual financial reports provide the source data for three key indicators used by OC LAFCO and further described below:

- **Annual Change in Revenues** compares revenue growth over multiple years to long-term inflation (historically about 2-3%). Low revenue growth below inflation indicates a potential long-term problem keeping pace with inflationary cost increases. Declining revenues can be a symptom of the pandemic and/or weakening economic conditions.

³ The California Auditor no longer publishes its risk analysis.

Indicator	Range (Average Annual Change)
Declining Revenues	Less than 0%
Low Growth	0% - 3%
Moderate Growth	3% - 6%
High Growth	> 6%

- **Annual Change in Expenditures** compares expenditure growth to long-term inflation. Expenditure growth consistently above inflation and/or above revenue growth indicates a potential structural imbalance and future revenue shortfalls. Excessive expenditure could require reserve drawdowns and service reductions.

Indicator	Range (Average Annual Change)
Declining Expenditures	Less than 0%
Low Growth	0% - 3%
Moderate Growth	3% - 6%
High Growth	> 6%

This indicator generally favors low or declining expenditures. A comparison of revenue indicators, if favorable, can help confirm that declining expenditures are a benefit and not an adverse response to weak revenues.

- **Adequate Operating Reserves are essential to manage cash flow during the year, handle contingencies, provide a “rainy day” account for future economic downturns.** Operating reserves typically provide at least two months of operating funds (i.e., 16.7% of annual expenditures). If financial audits do not distinguish operating from capital and other reserves, other metrics include total unallocated fund balances or unrestricted net position. “Cash” does not always indicate unencumbered funds available for cash flow and contingencies. Additional reserves above the 16.7% are usually required for capital improvements, pensions, & other uses.

Reserve Indicator	Range
Low Growth	Less than 17% of Expenditures
Moderate Growth	17% - 40%
High Growth	> 40%

Depending on the type of agency and the timing of revenues and expenditures, higher minimum reserves may be required. Some agencies do not distinguish operating from capital and other reserves in their audit documents which may produce a “high” reserve indicator; further analysis is necessary to determine the adequacy of capital reserves.

The fiscal indicators are intended to provide an initial review of annually reported financial data. Further in-depth analysis may be needed to better understand the cause of financial trends and potential remedies. For example, additional research could clarify whether declining expenditures positively reflect prudent management or are the result of weak revenues. Other factors that could influence indicators include the impacts of the pandemic; the economic climate; State and Federal regulatory changes; infrastructure needs and improvements; changes in service levels and contracts; unfunded OPEB and pension obligations; development, population growth, and increased need for services.

OC LAFCO FISCAL INDICATORS FOR OCMVCD

The financial capacity of OCMVCD is adequate for providing services at the current service levels. This MSR relies on data from the concurrent Fiscal Indicators project conducted by Berkson & Associates on behalf of OC LAFCO, which assesses the agency's short-term financial trends. Table 4 provides a summary of trends reported by the Fiscal Indicators. Three variables (revenues, expenditures, and reserves) are measured for OCMVCD over six fiscal years (FY 18-19 to FY 23-24). The variables are then ranked on a scale from "high" to "declining." For revenues and reserves, the "high" designation indicates the most positive outcome, while "declining" represents the lowest. The inverse applies for expenditures with "high" indicating the most negative outcome and "declining" indicating the most positive one.

The Orange County Mosquito and Vector Control District experienced increasing revenues and relatively low expenditure growth from FY 2018-19 through FY 2023-24. Property taxes are a significant revenue source for OCMVCD. The revenue indicator shows a moderate growth rate as property values throughout the County have increased incrementally over the last three fiscal years. Expenditures grew at a minimal rate, less than revenue growth. Generally, the Board of Trustees budget for expenditures conservatively, and net balances are at the discretion of the Board. The Board's practice for net balances in previous years has been to allocate them to the Retirement Contingency Reserve for pension liabilities and the Facilities Improvement Reserve.

Table 4: Growth of Agency			
	Revenues	Expenditures	Reserves
Indicator	Moderate Growth	Low Growth	High
Percent (%)	5.9% Avg. Annual % Change	1.4% Avg. Annual % Change	97.5% of Expenditures

DEBT ADMINISTRATION

According to OCMVCD's financial statements, as of June 30, 2024, the District has an outstanding long-term debt of \$4,321,641. The outstanding debt is attributed to employee compensated absences, pension liability, and subscription-based information technology arrangements. While these are not typically classified as debt in other agency audits, the auditor for OCMVCD has included them as part of the long-term debt due to their treatment of these items as significant long-term financial commitments.

FUND BALANCES AND RESERVES

OCMVCD's projected revenues for fiscal year 2023-24 total \$20,452,123 with approximately 90% of its revenues generated from the collection of taxes and assessments. Of the Taxes and Assessments, 49% comes from the District's share of the ad valorem property tax and similar distributions, while the remaining 51% is from the District's property tax benefit assessments. The District's key funding sources are listed below:

- **Taxes and Assessments**
 - Revenues generated from property tax and District 2 benefit assessments, which are charges levied on property owners to fund operations and services that specifically benefit their property.
- **Intergovernmental**
 - Revenues generated from property tax passthroughs of existing Successor Agencies.
- **Charges for Services**
 - Revenues generated from various additional services provided by the District and charged to parcel owners.
- **Investment Income**
 - Revenues generated from cash held at bank and investment institutions largely consisting of interest income.
- **Property-related Income**
 - Revenues generated from residual funds distributed by the Successor Agency and State Housing and Opportunity Expenditures.
- **Miscellaneous**
 - Various revenues generated by the District, including proceeds from the sale of old equipment or auctioned vehicles.

OCMVCD's projected expenditures for fiscal year 2023-24 total \$14,843,306. The District's key expenditure sources are listed below:

- **General Government**
 - Cost of labor, operations, and administrative items associated with office staff.
- **Health and Sanitation**
 - Cost of labor, operations, and maintenance related to field operations and laboratory activities.
- **Capital Outlay**
 - Cost of capital equipment purchases by OCMVCD typically including vehicles and machinery.
- **SBITA Principal**
 - Cost of principal portion of software subscription, with amortization over the life of the subscription which is three years.
- **SBITA Interest**
 - Cost of interest portion of software subscription, with amortization over the life of the subscription which is three years.

Table 5: OCMVCD General Fund Cash Flow FY 21-22 to FY 23-24

Revenues			
	FY 2021-22	FY 2022-23	FY 2023-24
Taxes and Assessments	\$16,219,508	\$17,379,304	\$18,104,416
Intergovernmental	\$191,012	\$7,355	\$167,494
Charges for Services	\$136,953	\$68,257	\$126,561
Investment Income (Loss)	\$687,622	\$553,787	\$1,749,071
Property-related Income	\$352,691	\$299,610	\$194,947
Miscellaneous	\$28,828	\$100,311	\$109,634
Total Revenues	\$16,241,370	\$18,408,624	\$20,452,123
Expenditures			
	FY 2021-22	FY 2022-23	FY 2023-24
General Government	\$2,394,943	\$2,457,022	\$2,440,900
Health and Sanitation	\$11,058,512	\$11,777,793	\$12,093,410
Capital Outlay	\$358,074	\$320,584	\$279,640
Debt Service	0	0	0
SBITA Principal	0	\$26,971	\$28,049
SBITA Interest	0	\$2,385	\$1,307
Total Expenditures	\$13,811,529	\$14,584,755	\$14,843,306
Revenues/Expenditures			
	FY 2021-22	FY 2022-23	FY 2023-24
Net Change in Fund Balance	\$2,429,841	\$3,823,869	\$5,608,817
Reserves			
	FY 2021-22	FY 2022-23	FY 2023-24
Year-End Fund Balance	\$10,296,720	\$12,637,224	\$14,470,947 (97.5% of Expenditures)

OCMVCD's current reserve and fund balances as of November 2024 are in compliance with the District's reserve policy. The OCMVCD reserve policy follows the best practices for industry standards and specifically sets guidelines for the appropriate level of fund balance to mitigate current and future risks that may affect the District's operational finances. The two major fund balances, Operating and Other Funds, are further described below.

- **Operating Reserves** is established to address risks involving economic downturns, limitations on increases to the District's benefit assessments, insurance and claims experience, and future operating needs. The District's policy requires the operating fund to maintain a balance of two to six months (minimum of 17 up to 50 percent) of annual operating fund expenditures.
- **Other Reserves**, for budgeting purposes, contains sub-categories that have been established for specified uses only that include the following:
 - **Vehicle Replacement and Equipment Reserve**
Managed to fund vehicle and equipment replacement.
 - **Facilities Improvement Reserve**
Managed to fund the rehabilitation of existing facilities.
 - **Liability Reserve**
Managed to fund accrued employee vacation leave balances in the form of paid-time off or upon resignation or termination
 - **Emergency Vector Control Reserve**
Managed to fund major emergencies relative to vector control services.
 - **Habitat Remediation Reserve**
Managed to fund habitat remediation projects.
 - **Retiree Medical Insurance Reserve**
Managed to fund a portion of post-employment benefits (OPEB).
 - **Retirement Contingency Reserve**
Managed to address uncertainties of future pension costs.

IX. OPPORTUNITIES FOR SHARED FACILITIES

Cooperative efforts and agreements amongst multiple agencies present opportunities to support more efficient and cost-effective delivery of municipal services through the sharing of facilities and resources. As the sole provider of vector control services in Orange County, partnership opportunities for OCMVCD with other agencies that do not provide this specialized service are limited. However, the District participates in a cost-sharing agreement with the Greater Los Angeles County Vector Control District. The effort involves sharing equipment for the Sterile Insect Technique, which saves the District approximately \$70,000.

X. ACCOUNTABILITY FOR COMMUNITY SERVICE NEEDS

Overall, the OCMVCD implements policies and procedures that ensure accountability, transparency, and accessibility to the public. Established in 1947, the District operates accordingly under the Mosquito Abatement and Vector Control Districts Principle Enabling Act and is governed by a 35-member Board of Trustees appointed by an Orange County city or the Board of Supervisors. Terms of office for trustee members are set by their respective appointing authority to two-year or four-year terms. A roster of the current trustees is provided in Exhibit 3. The internal operations and adopted policies are supported and implemented respectively by the District's 70 full-time staff and approximately 55 seasonal employees during the summer months to assist with the increase of mosquito and mosquito-borne disease activity, as depicted in the organizational chart as Exhibit 3.

To facilitate accountability, transparency and accessibility to the public, the District maintains a robust website that houses a wide range of information, including an overview of the vector services provided to residents, audited financial statements, and a map of service area, agency meeting agendas, notices and minutes, and committee and other written reports and studies. Additionally, the appointment terms, current vacancies, and election process for trustee members are also published on the agency's website.

Exhibit 3: OCMVCD Board of Trustees

Exhibit 3: OCMVCD Board of Trustees		
Date Formed:	July 2, 1947	
Principal Act:	Mosquito Abatement and Vector Control Districts Principle Enabling Act (1915)	
Headquarters	13001 West Garden Grove Blvd., Garden Grove, CA 92843	
Board Meetings:	3 rd Thursday, 10:00 a.m.	
Board of Trustees	Appointing Authority	Term Ending
Richard Hurt	Aliso Viejo	2027
Carlos Leon	Anaheim	2028
Cecilia Hupp, President	Brea	2028
Lamiya Hoque	Buena Park	2027
William Turpit	Costa Mesa	2027
Leo Medrano	Cypress	2026
John Gabbard	Dana Point	2027
Kim Constantine	Fountain Valley	2026
Shana Charles	Fullerton	2028
Ariana Arestegui	Garden Grove	2029
Gracey Van Der Mark	Huntington Beach	2026
Tammy Kim	Irvine	2026
James Gomez	La Habra	2027
Debbie S. Baker	La Palma	2026

Board of Trustees	Appointing Authority	Term Ending
Mark Orgill	Laguna Beach	2027
Erica Pezold	Laguna Hills	2026
Gene Johns	Laguna Niguel	2027
Pearl Lee	Laguna Woods	2027
Robert Pequeño	Lake Forest	2028
Tanya Doby	Los Alamitos	2026
Robert Ruesch, Vice President	Mission Viejo	2026
Erik Weigand	Newport Beach	2027
Sean Chavarria	Orange	2026
Chad Wanke	Placentia	2027
April Josephson	Rancho Santa Margarita	2027
Steve Knoblock	San Clemente	2026
John Taylor	San Juan Capistrano	2027
Nelida Mendoza	Santa Ana	2026
Nathan Steele	Seal Beach	2027
Gary Taylor	Stanton	2027
Rebecca Gomez	Tustin	2028
Crystal Miles, Secretary	Villa Park	2026
Carlos Manzo	Westminster	2027
Peggy Huang	Yorba Linda	2027
Lisa Fernandez	Board of Supervisors	2027
Board Compensation	<p>Board compensation includes a monthly stipend of \$100 and reimbursables for District related events and conferences occurring more than one day such as milage, meals, conferences, and transportation.</p> <p>OCMVCD does not provide benefits (healthcare, dental, retirement) to Trustee members.</p>	

XI. WORKS REFERENCED

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