

# ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT

## MONTHLY REPORT: Yorba Linda



### December

	Monthly	Year to Date (YTD)	County Monthly	County YTD
<b>OPERATIONS</b>				
Service Requests Completed:	2	174	62	4,970
Mosquitoes:	2	137	42	3,792
Rats:	0	25	14	591
Rifa:	0	10	6	528
Number of Swimming Pools Treated/Inspected:	6	367	382	8,625
Hours Spent Treating/Inspecting Gutters	0	122	0	6,738.4
Undergrounds Treated:	0	129	233	24,761
Acres of Flood Channels Treated:	0	13.333	4.6325	1007.1376
Acres of RIFA Treated/Inspected:	38	2,535	1,544	64,420
Number of Inspection Treatments:	35	474	1,191	17,654
<b>LABORATORY</b>				
Adult Mosquitoes Collected:	0	2087	3,155	199,354
Collected From Trustee Home:	0	0	0	2
Invasive Aedes	0	49	8	4,502
Mosquito Pools (Samples) Tested:	0	87	86	5,899
WNV Positive Samples:	0	0	0	51
WNV Positive Birds:	0	1	0	7
Number of Human Infections/Deaths:	0	0	0	3
Fleas, Ticks, and Others Tested:	-	-	-	2,820
<b>COMMUNICATIONS</b>				
Outreach Events Attended:	0	0	0	13
General Presentations:	1	3	5	44
Educational Program Presentations:	0	0	7	130
Calls Received	-	-	92	2,913

#### PROJECTS IN COLLABORATION WITH OCMVCD

None at this time

#### COUNTY RESPONSE LEVEL / AVERAGE RATING:

Normal Season (1.0 to 2.5)  
 Elevated Risk (2.6 to 4.0)  
 High Risk (4.1 to 5.0)

TOTAL	7
AVERAGE	1.75

# Transportation Corridor Agencies Select Board Leadership for 2022

**Yorba Linda Council Member Peggy Huang will continue to lead F/ETCA; Newport Beach Council Member Will O'Neill to helm SJHTCA**

*IRVINE, Calif. - January 14, 2022*

At its meeting on Thursday, the Transportation Corridor Agencies' (TCA) two Boards of Directors selected Chairs and Vice Chairs to lead the Agencies in continuing the pursuit of enhanced mobility in Orange County and practice of strong fiscal management.

The Foothill/Eastern Transportation Corridor Agency (F/ETCA) unanimously elected Yorba Linda Council Member Peggy Huang to another term as Chair for 2022. Dana Point Mayor Joe Muller was also re-elected as Vice Chair.

The San Joaquin Hills Transportation Corridor Agency (SJHTCA) unanimously elected Newport Beach Council Member Will O'Neill to serve as Chair and Laguna Hills Council Member Janine Heft to serve as Vice Chair.

Chair O'Neill joined the SJHTCA Board of Directors in 2019. He was elected to the Newport Beach City Council in 2016 and re-elected in 2020, when he was chosen by his peers on the City Council to serve as Mayor of Newport Beach.

"I am grateful to my colleagues and honored to serve as Chair," he said. "I look forward to working with our Boards to reduce the Agencies' debt, serve our riders and continue to provide transportation solutions for our region."

In his remarks, Chair O'Neill also offered to visit the SJHTCA member cities to update each city council on the success the Board has made in managing the Agency's debt.

Chair Huang joined the F/ETCA Board of Directors in 2017. She serves as TCA's appointed representative to the Southern California Association of Governments (SCAG), where she has attained a strong leadership position due to her focus and depth around sound policies and legislation including various quality-of-life policy matters, such as transportation. SCAG is the largest Metropolitan Planning Organization (MPO) in the nation, encompassing six counties, 191 cities, six county transportation commissions, tribal governments and air quality control districts. Chair Huang has served on the Yorba Linda City Council since 2014, serving as Mayor twice.

"I'm grateful for the opportunity to continue to lead the F/ETCA as its Chair," she said. "I think we have accomplished quite a bit over the past year, particularly with developing our Strategic Plan. It is important for us to work in the best interest of the public to enhance mobility while overseeing the Agency's efforts to reduce debt service and ensure the long-term financial health and wellbeing of the Agency."

TCA's Chairs and Vice Chairs serve one-year terms and are permitted to serve multiple terms if elected by their peers.

"The continued strong leadership and policy oversight of the Agencies is critical to our future success," said CEO Samuel Johnson. "Congratulations to the elected leadership for the clear recognition from their peers for their leadership qualities and commitment to moving TCA forward."

For more information on TCA board members and priority projects, visit [TheTollRoads.com](http://TheTollRoads.com).

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***The Transportation Corridor Agencies (TCA)*** are two joint powers authorities formed by the California Legislature in 1986 to plan, finance, construct and operate Orange County's public toll road system comprised of the 73, 133, 241 and 261 Toll Roads.

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### *Vector of the Month*-Yellow Fever Mosquito, *Aedes Aegypti*

Since its original discovery in Anaheim during 2015, the yellow fever mosquito, *Aedes aegypti*, this year has been detected in 27 Orange County cities. This species of mosquito has also become well-established in our neighboring Los Angeles and San Diego counties. The likely mechanism for its expansion has been by transport of eggs and/or larvae-infested potted plants and adult mosquitoes by vehicles.

*Aedes aegypti* originated in tropical Africa and spread around the tropical and sub-tropical world with the movement of people and commerce. It likely reached the Americas by the 1600s and was responsible for outbreaks of yellow fever, as its common name implies, in many parts of the New World. This species is primarily associated with urban areas and is dependent on humans not only for their breeding sources, but often as a source for their blood meals. Adult mosquitoes are relatively small and are black with white stripes (Figure 1). Females (males do not bite) are active during the day and will readily bite indoors and outdoors in shaded areas around the home. Once established, they can become a severe nuisance to both people and pets, and are a potential vector of several mosquito-borne pathogens, such as yellow fever, dengue, chikungunya, and Zika viruses, as well as dog heartworm.

*Aedes aegypti* larvae do not develop in typical open water sources characteristic of most of our local mosquitoes; instead, they breed in water held in both natural and artificial containers. The range of sources include leaf axils, tree holes, discarded tires, flower pots, buckets, cemetery urns, discarded cups/cans, and occasionally larger sites, such as storm drains and even septic tanks. Its eggs can survive desiccation for long periods of time, facilitating this mosquito's spread to new locations with the movement of contaminated containers, or its ability to re-emerge after control efforts.

Historically, the failure of *Aedes aegypti* to become established locally in prior years may be related to our dry climate and lower humidity levels that reduce survival of adult mosquitoes. However, this scenario has been breached because human development has progressively changed arid regions of the American southwest into a well-irrigated, pseudo-rain forest system with suitable conditions throughout many areas of California. No longer confined to regions of the United States with high summer humidity, *Aedes aegypti* is now established in New Mexico, Arizona, and several counties of California.

Because of its ability to live in close proximity to humans, the most effective method to control *Aedes aegypti* is to prevent containers around the home from collecting water. To stop the spread of this and other invasive *Aedes* mosquitoes in Orange County, the District is requesting residents to do their part by following these steps:

- CALL and REPORT any sightings of small, black and-white mosquitoes, or if you are being bitten by mosquitoes during the day! Residents can contact the Orange County Mosquito and Vector Control District at 714-971-2421, or online at [www.ocvector.org](http://www.ocvector.org).

- DUMP and DRAIN all stagnant water around your home. Eliminate plant saucers and other unnecessary containers; thoroughly scrub outdoor pet water dishes weekly to remove eggs.
- DO NOT transport or share plant stems rooted in water, or keep outdoor buckets full of water.
- USE INSECT REPELLENT containing EPA-registered active ingredients such as DEET, Picaridin, or oil of lemon eucalyptus to avoid bites.

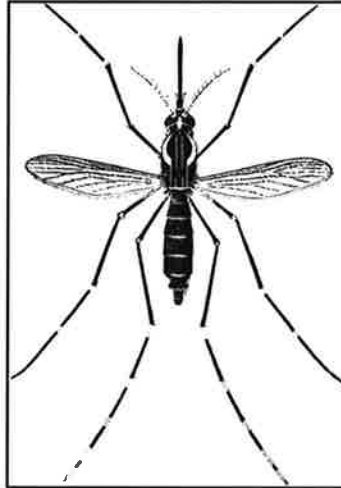


Figure 1. Drawing of an adult *Aedes aegypti* female mosquito.

## Climate change lets mosquitoes flourish — and feast — in Los Angeles

By: Erica Werner, Published on September 19, 2021



LOS ANGELES — Many try and fail to make it in L.A. But one group is proving unstoppable: mosquitoes, which have taken over Southern California and are driving the humans here crazy. New invasive, disease-bearing species originating from Asia and Africa are thriving in the increasingly long, hot and humid summers afflicting this region thanks to climate change, according to numerous public health officials. Their growing numbers are baffling and infuriating Angelenos, who, until recently, considered themselves largely exempt from the buzzing bloodsuckers that make summers miserable in much of the rest of the country.

Experts say they're here to stay. And even though mosquitoes don't pose the same danger to lives and livelihoods as wildfires or drought — at least not yet — they have become a biting reminder of an increasingly inhospitable natural world where climate change seems to pose constant new hazards.

A representative of the Greater Los Angeles County Vector Control District, right, looks into a mosquito problem at the L.A. home of Jessie Schiewe, 32. (Mark Abramson for The Washington Post)

"Californians have never experienced mosquito bites like they currently are having to endure due to these new daytime biters," said Susanne Kluh, director of scientific-technical services at the Greater Los Angeles County Vector Control District. "This is really, really putting a big burden on our lifestyle. It's life-changing for Californians."

Many Los Angeles residents like Krokhar have the impression that mosquitoes are new in town, but that's not technically the case. A small brown mosquito with the scientific name *Culex* has long resided here, emerging at dawn and dusk to bite birds and occasionally people. The *Culex* can spread West Nile virus but are often unobtrusive, and many people barely knew they existed.

What's new is a black-and-white-striped insect called *Aedes*, a nonnative variety that includes yellow fever mosquitoes and Asian tiger mosquitoes. The yellow fever mosquitoes in particular — technically known as *Aedes aegypti* — are aggressive biters drawn to humans at all hours. They breed in standing water, and their eggs can lie dormant for months or even years on dry surfaces. In addition to yellow fever, they can transmit Zika, dengue fever and other diseases to humans and pets.

Populations of these frightening insects have grown steadily around Southern California in the past several years, even explosively in some areas. Residents are increasingly aware of and alarmed about their presence, and the mosquitoes are overwhelming the efforts of local government agencies to control them. There have been no recent instances in Southern California of tropical diseases such as yellow fever or Zika spreading within the community, but officials fear that could happen and prove life-threatening for the public, given the growth of the mosquito populations in the area.

"These threats will continue to move and put our population at risk, so we need to all stay vigilant," said Umme-Aiman Halai, a medical epidemiologist at the L.A. County Department of Public Health. "A mosquito in one person's backyard affects the entire community."

The best advice scientists and public health officials have for residents is to eliminate any standing water where mosquitoes love to breed. But it has to be a neighborhood effort, since mosquitoes can easily travel from one yard to another, and despite the drought many Southern Californians are reluctant to limit watering their lush greenery and well-tended lawns, where water can collect within plant fronds or around sprinkler systems. Kluh expressed some frustration that L.A. residents have gone from not knowing her agency existed to finding it useless since she and her staff are unable to make mosquitoes disappear from people's yards.



Jessie Schiewe points to some of the mosquito bites that have left marks and scabs on her ankles and feet. (Mark Abramson for The Washington Post)

"Despite our best efforts, the population is still growing," Kluh said. "Every year the numbers in our traps have been multiplying. They just keep biting people like crazy."

Officials from Kluh's Vector Control District recently visited the home of Jessie Schiewe, 32, a writer who lives with her fiancé and two chihuahuas in the Eagle Rock neighborhood. A technician tramped up and down picturesque but rickety staircases in Schiewe's foliage-filled yard, examining an empty birdbath standing near a collection of ceramic mushrooms, and training a flashlight behind potted plants. The technician was looking for any standing water but didn't find any. That left Schiewe feeling "quite despondent" over her apparent inability to control the pests that have left bite marks and scabs all over her ankles and feet.

"I itch every bump — I can't stop myself!" she said. Like other sufferers, Schiewe will be left to endure the mosquitoes through a variety of methods, donning long sleeves and pants while watering, purchasing dubious mosquito-control gadgets from the Internet or simply hiding inside, with the doors closed when she'd rather be out on the porch.

Standing water is a common source of mosquito problems, but a technician trying to address an issue at Jessie Schiewe's L.A. home was unable to find any, a result that left Schiewe "quite despondent." (Mark Abramson for The Washington Post)

The invasive mosquitoes are thought to have arrived in Southern California through various means, including in shipments of "lucky bamboo," the decorative bamboo arrangements that are meant to bring good fortune and have been transported from Asia, already prepared in small vases of water. Government officials were able to detect and stamp out some earlier incursions, but in recent years, the mosquitoes have gotten the best of the humans, and now no one thinks they're going anywhere.

A number of scientists say climate change has played a role in the mosquitoes' spread, with California summers growing longer and hotter. Less rainfall is creating ripe conditions for wildfires, yet at the same time, rising ocean temperatures have led to more humidity.

"These are tropical mosquitoes, so the fact they were able to entrench themselves in our Mediterranean climate — or what should be a Mediterranean climate — boggled our minds at first," said Levy Sun, communications director of mosquito and vector control in San Gabriel Valley, just east of L.A. "They just erupted across Southern California in a few short years."



Governing Board Member

# Carlos Rodriguez

Cities of Orange County

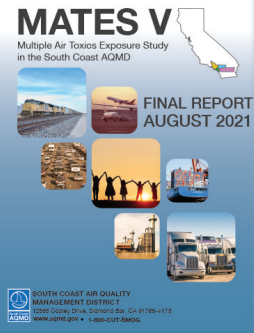


South Coast Air Quality Management District

Newsletter

Winter 2022

## Air Quality in 2021 - The Year in Review



At the South Coast AQMD, we are making progress in our core mission to improve air quality by passing some significant rules that will reduce emissions from warehouse operations and refineries. We've also made strides in reducing air toxic emissions. Here are a few highlights from 2021.

**Multiple Air Toxics Exposure Study (MATES) V Released** - Since 1986, South Coast AQMD has conducted the Multiple Air Toxics Exposure Study (MATES) every few years which provides data on the long-term impacts of regional air toxics levels in the South Coast Air Basin using air monitoring, emissions inventory, and health risk modeling. Earlier this year, the agency released MATES V, which shows a continuing trend of significant decreases in toxic emissions and exposures. Since the MATES IV Study was conducted in 2012, the estimated population-weighted multi-pathway cancer risk for Orange County residents has been reduced by about 53%. This cancer risk dropped from an average risk of 829 excess cancers per million people during MATES IV, to 390 excess cancers per million during MATES V. While cancer risks are still unacceptably high, these reductions were achieved with a comprehensive program of regulations and incentives to reduce air toxic emissions from both mobile and stationary sources.

**Local Airports Submit their First Annual Reports on MOU Implementation Progress** - To help meet emissions reductions, five local airports, including John Wayne Airport (JWA) in Orange County, entered Memoranda of Understanding (MOU) with South Coast AQMD. Beginning in 2021, then every year through 2032, the airports will submit detailed annual reports to document progress toward implementation of these MOU measures.

Implementation of these measures at John Wayne Airport will reduce nitrogen oxides (NOx) by 17.4 tons per year in 2023, the equivalent to removing more than 20,000 cars off the road. The MOU implemented three measures at JWA to achieve these emission reductions:

- Ground Support Equipment (GSE)- Refueling equipment, luggage/freight and food carts are required to be upgraded to fleets that are 58% and 78% cleaner in 2023 and 2031, respectively, than the 2017 pre-MOU fleets.
- Parking Shuttle Electrification - 50% of remote parking natural gas shuttle buses replaced with electric buses by 2023, and 80% by 2031.
- Jet Fuel Delivery trucks - A jet fuel pipeline was installed to eliminate jet fuel delivery trucks by 2023, reducing NOx emissions by about 0.8 and 0.6 tons per year in 2023 and 2031, respectively.

**Governing Board Adopts Warehouse Indirect Source Rule** - In May, the Governing Board adopted Rule 2305, known as the Warehouse Indirect Source Rule (ISR). The rule requires large warehouses to reduce NOx and diesel particulate matter (PM) emissions or facilitate emission and exposure reductions in nearby communities. Warehouses are a key destination for heavy-duty trucks and cargo handling equipment - all of which contribute to local pollution, including toxic emissions, to the communities that live near them. About half of the air pollutants that contribute to smog come from the goods movement industry, which include heavy-duty trucks heading to warehouses across Southern California. The rule is expected to reduce smog-forming emissions associated with warehouses by 10-15 percent.

**Diversity, Equity and Inclusion Officer Hired** - In 2021, the South Coast AQMD hired its first Diversity, Equity and Inclusion Officer (DEIO). The DEIO's role is to help the executive management team develop and implement strategies that focus on the advancement of racial justice and equity, and to encourage historically underrepresented groups to better engage in air quality decision-making that affects them at the community level.

## Happy New Year!

Welcome to my newsletter for the residents and businesses of Orange County to help keep you informed about the policies and programs at the South Coast AQMD that improve the air quality in our basin, which benefit you, our cities and our economy. If you have suggestions for improving our air quality, or how we can do business at South Coast AQMD, please feel free to contact me at [crodriguez.scaqmd@gmail.com](mailto:crodriguez.scaqmd@gmail.com).

Sincerely,

Mayor Carlos Rodriguez,

Yorba Linda City Council



## South Coast AQMD Governing Board adopts rules to reduce pollution from refineries by nearly 8 tons per day, protect communities

In November, my fellow members on the South Coast AQMD Governing Board and I unanimously adopted Rule 1109.1 which requires additional emissions controls on equipment, reducing NO<sub>x</sub> pollution by almost eight tons per day (tpd). NO<sub>x</sub> contributes to ozone (smog) and the reductions achieved by this rule will make up 40 percent of the overall reductions needed by stationary sources to meet federal standards by 203.

As part of the rule, facilities are required to apply for a permit that limits NO<sub>x</sub> and carbon monoxide (CO) emissions from combustion equipment used as part of refinery operations. The rules are projected to reduce between 7.7 to 7.9 tpd of NO<sub>x</sub> over the next 14 years, with nearly half of those reductions expected by 2023. Approximately 75 percent of the emission reductions are anticipated to be achieved by 2027 with 90 percent being achieved by 2031.

The rule will also have a positive economic impact resulting in over 200 jobs added to the workforce every year. In addition to petroleum refineries, Rule 1109.1 establishes NO<sub>x</sub> limits for asphalt plants, biofuel plants, hydrogen production plants and sulfuric acid plants. The rule covers 16 facilities and nearly 300 pieces of combustion equipment such as boilers, gas turbines and vapor incinerators in the South Coast Air Quality Management's jurisdiction.

Estimated public health benefits achieved through this rule will help avoid 370 premature deaths and more than 6,200 asthma attacks.



## Governing Board Approves Funds to Replace 53 Diesel School Buses in Orange County with Cleaner Ones

Replacing older, high-polluting buses and trucks is one of the most effective ways to reduce emissions from mobile sources in the South Coast Air Basin. As part of the South Coast AQMD's commitment to cleaner technologies, the Lower Emission School Bus Program was created to replace older, higher polluting buses, with cleaner ones. These cleaner school buses will reduce smog-forming pollution and protecting students from exposure to cancer-causing pollutants.

On December 3, 2021, the South Coast AQMD Governing Board approved funds to replace a total of 178 diesel buses in the South Coast Air Basin. In Orange County, more than \$13.6 million was awarded to 18 school districts in Orange County to replace 53 dirtier buses with zero and near-zero emission school buses, including supporting infrastructure.



## 32nd Annual Clean Air Awards Winners Announced



On December 3rd, South Coast AQMD honored individuals and organizations that have made outstanding contributions to reduce air pollution and advance the science of air quality to improve the health of our communities and the economy. This year's Clean Air Award recipients are:

- **S. Roy Wilson Memorial Award for Leadership in Government**  
Former California Governor  
Arnold Schwarzenegger
- **Robert M. Zweig, M.D. Memorial Award**  
Dr. Ryan Sinclair, Loma Linda University
- **Dr. William A. Burke Award for Leadership in Environmental Justice**  
Former South Coast AQMD and CARB  
Governing Board Member Judith Mitchell
- **Youth Leadership in Air Quality**  
Daniel Randall
- **Innovative Clean Air Technology**  
Volvo Group North America
- **Leadership in Air Quality**  
Breathe Southern California