Innovative Pilot Program Leverages Sterile Male Mosquitoes to Combat Vector-Borne Diseases in Los Angeles County

Santa Fe Springs, CA (April 12, 2024) – Since their initial detection in the City of El Monte in 2011, invasive *Aedes* mosquitoes have significantly altered the outdoor experience for millions of Los Angeles residents. These aggressive daytime biters not only disrupt outdoor activities but also raise concerns about the transmission of diseases such as dengue, chikungunya, and Zika. In response to the persistent threat posed by *Aedes* mosquitoes, the Greater Los Angeles County Vector Control District (GLACVCD/District) and Orange County Mosquito and Vector Control District are collaboratively spearheading a groundbreaking initiative launching in the counties of Los Angeles and Orange. This initiative introduces X-ray sterilized male mosquitoes in target areas as part of a Sterile Insect Technique (SIT) pilot program.

SIT, a proven global method, involves systematically releasing sterile male insects into the defined areas, where they mate with wild females resulting in no offspring and a declining pest population. The technology, successfully employed by the California Department of Food and Agriculture to control the Mediterranean fruit fly and by the United States Department of Agriculture to control the screwworm, has been available since the 1950s. However, it is a relatively new tool for mosquito and vector control agencies combating invasive *Aedes* mosquitoes, commonly called "ankle-biters," because they are difficult to control by conventional means and can become resistant to commonly used insecticides.

"SIT offers a sustainable and environmentally friendly solution to reduce mosquito populations and ultimately minimize the transmission of diseases," said Steve Vetrone, the District’s Director of Scientific-Technical Services. By releasing X-ray sterilized male *Aedes aegypti* mosquitoes into the environment, the program aims to suppress the wild mosquito population by disrupting reproduction cycles. Once the sterile males mate with the local females, the resulting eggs will not hatch, decreasing the overall mosquito population over time.

Under the pilot program, the District will release locally reared, non-biting, sterile male *Aedes aegypti* mosquitoes in two Sunland-Tujunga neighborhoods. "While the introduction of male mosquitoes may lead to an increase in noticeable overall insect presence, residents should be able to notice a reduction in biting activity," said Vetrone. "Male mosquitoes don't bite, so despite their increased presence, residents won't experience an uptick in mosquito bites." Sunland-Tujunga residents have been and will continue to be informed about the initiative through extensive outreach efforts, including community presentations and events, social media, and educational materials.

"District staff will conduct ongoing monitoring and evaluation to assess the effectiveness of the intervention and to inform future strategies for *Aedes* mosquito control and disease prevention," said District General Manager Susanne Kluh. "SIT will not replace traditional mosquito control methods but rather serve as an additional tool in our toolbox, enhancing our ability to manage mosquito populations effectively."

For more information, residents can contact the Greater Los Angeles County Vector Control District at 562-944-9656, online at [www.GLAmosquito.org](http://www.GLAmosquito.org), or on social media: Facebook, X, Instagram, Nextdoor, and YouTube.
About GLACVCD

The Greater Los Angeles County Vector Control District is a public health service agency formed under the authority of the California State Health & Safety Code. Our mission is to reduce populations of public health vectors below nuisance levels and prevent human infection associated with mosquito-transmitted diseases.