

Santa Clara County Vector Control District

Operations and Surveillance Report

October 2018



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District Mission

To detect and minimize vector-borne diseases, to abate mosquitoes, and to assist the public in resolving problems with rodents, wildlife, and insects that can cause disease, discomfort, or injury to humans in the County.

Services Provided

- Detection for the presence/prevalence of vector-borne diseases, such as plague, West Nile virus, rabies, and Lyme disease, through ongoing surveillance and testing
- Routine inspections and treatment, as necessary, of known mosquito and rodent sources
- Response to customer initiated service requests for identification, advice, and/or control measures for mosquitoes, rodents, wildlife, and miscellaneous invertebrates (ticks, yellowjackets, cockroaches, bees, fleas, flies, etc.)
- Free educational presentations for schools, homeowner associations, private businesses, civic groups, and other interested organizations
- Free informational material on all vectors and vector-borne diseases

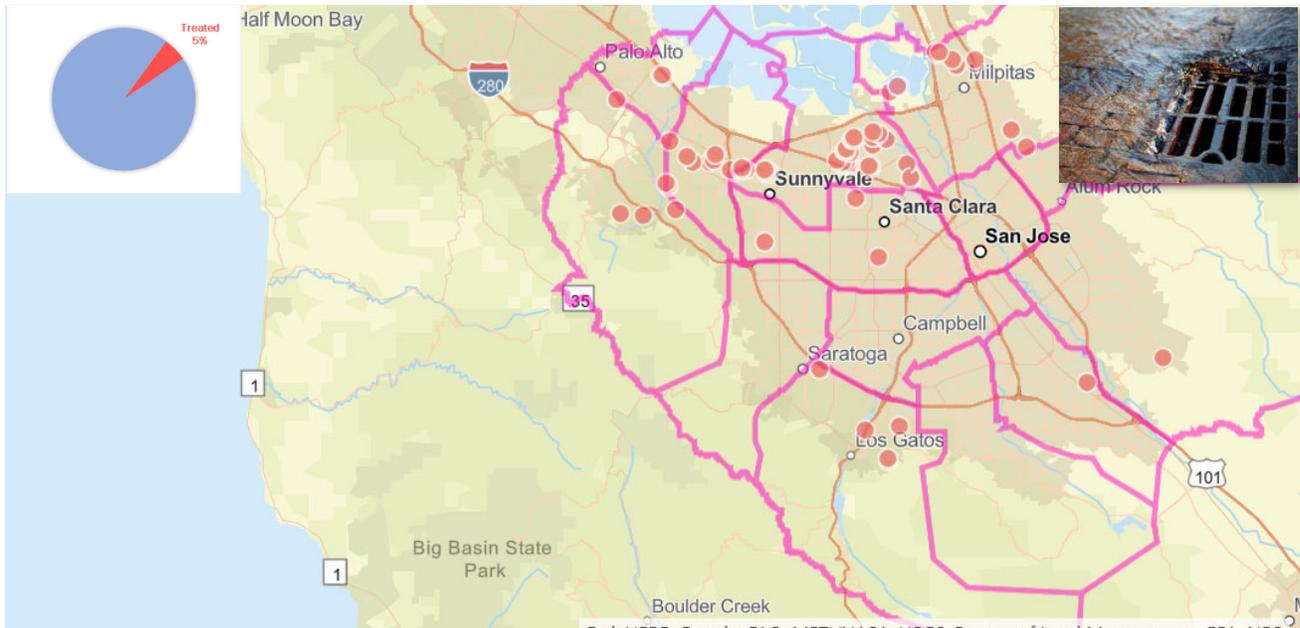
Manager's Message

Part of Santa Clara County Vector Control District's mission is to educate the public about vector-borne diseases. Vector Control reminds the public to dump standing water to reduce mosquito breeding and the spread of West Nile Virus.

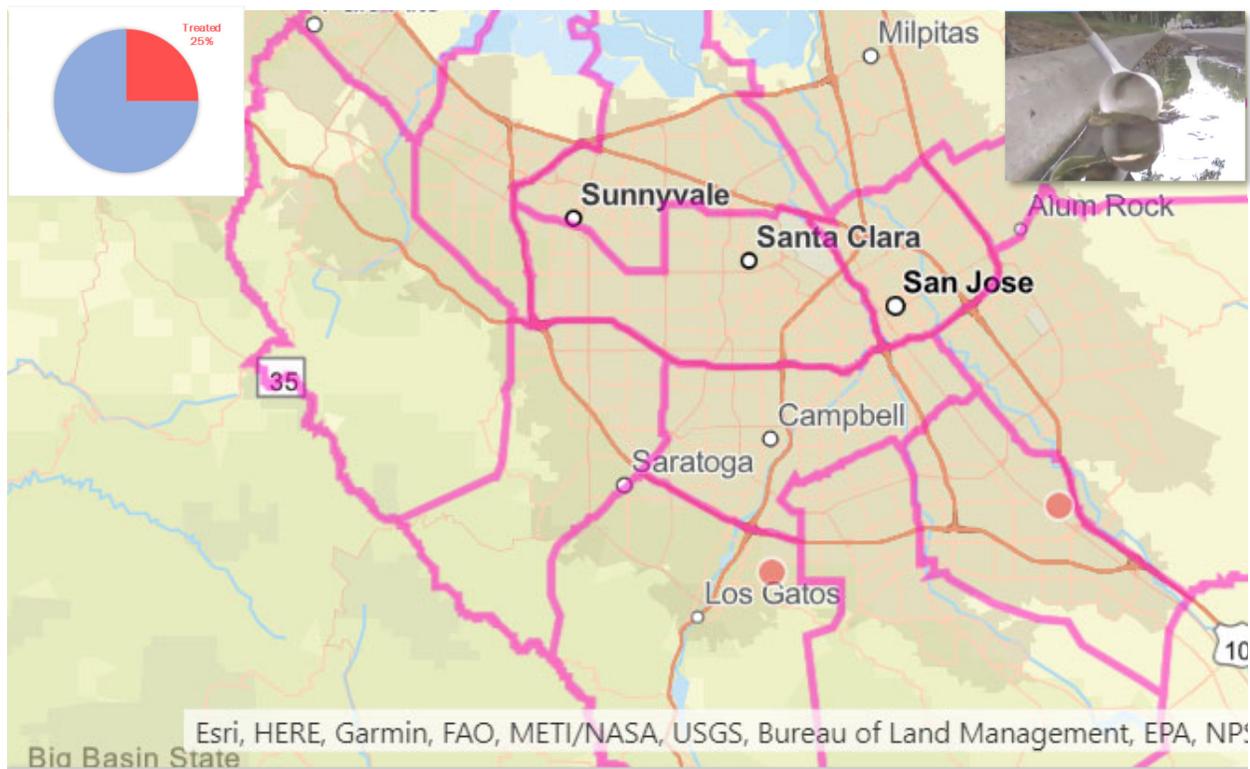
District staff members are also available to give presentations at schools and community organizations. If you would like to schedule a Vector Control presentation in your community, please reach out to us at:

(408) 918-4770
sccvector.org

Operations Report

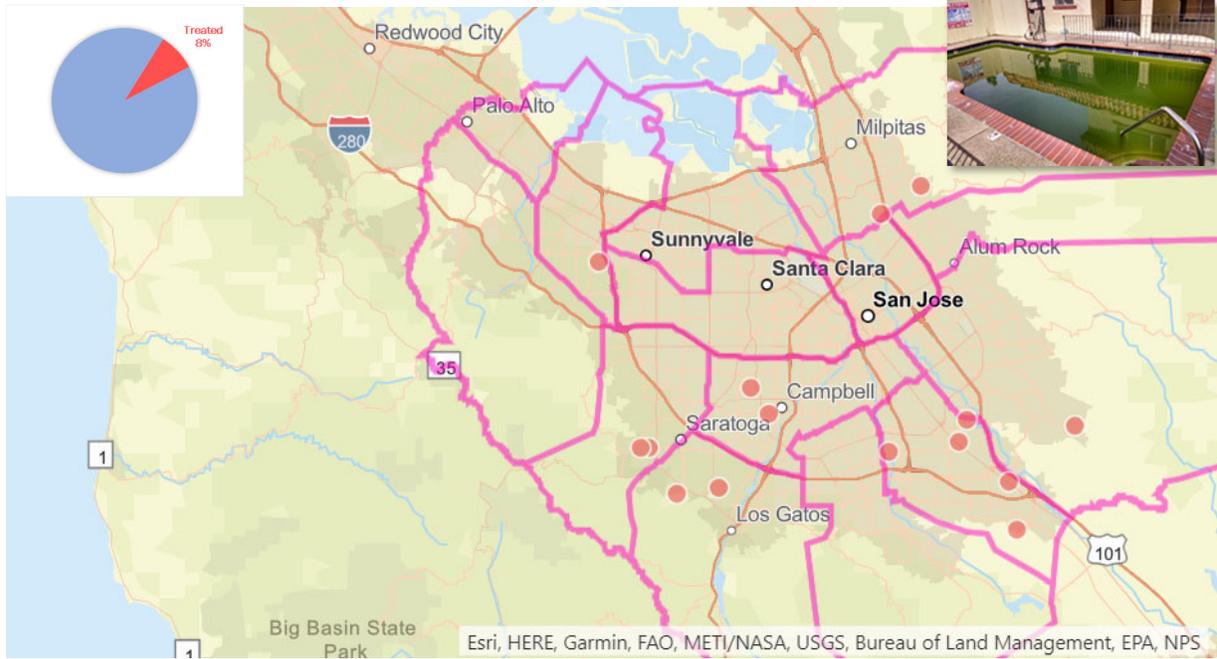


The District employs seasonal staff to check and treat mosquitoes in flooded street stormwater catch basins. These sites hold standing water due to rainfall or urban runoff from domestic water usage. **During October, our staff inspected 2,666 basins and treated 145, mainly in hot zones where West Nile virus was detected from birds.**

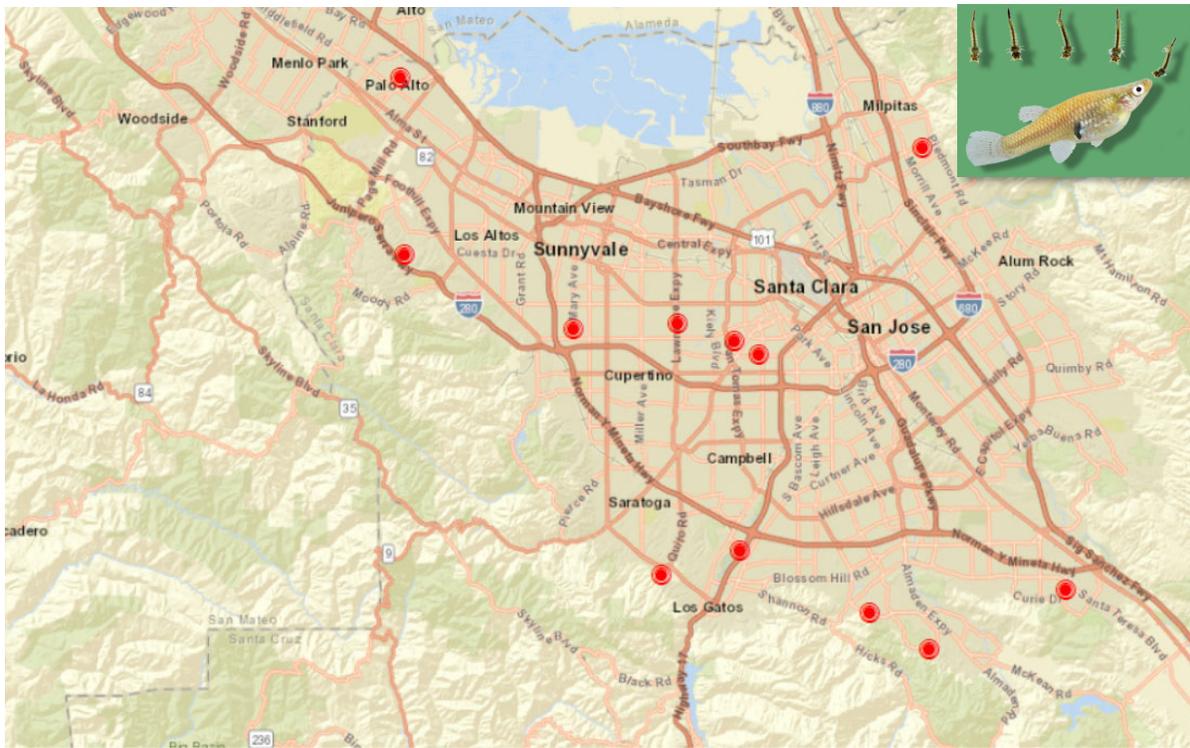


The District also employs seasonal staff to check and treat mosquitoes in flooded curbs. These sites hold standing water because of obstructions or depressions in the curbs. **Mosquito larvae were found and treated in 3 of the 12 inspected curbs during October.**

Operations Report



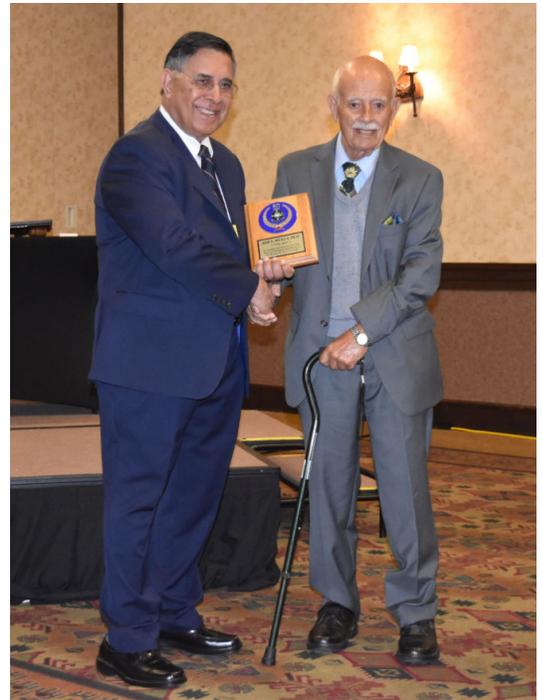
Stagnant water in neglected swimming pools can produce mosquitoes and cause a local nuisance to neighborhoods. **The District inspected 178 pools and treated 15 during October.**



The mosquitofish is a topminnow (*Gambusia affinis*) that is a natural predator of larval and pupal stage mosquitoes. District staff deliver free fish for stocking backyard sites like fountains, ponds, and rain barrels. **A total of 13 mosquitofish service requests were fulfilled during October.**

Professional Development

In October, four District members attended the Society for Vector Ecology (SOVE) 48th Annual Conference at Yosemite. Staff had the opportunity to present results on the distribution and infection rate of ticks throughout the County, and findings on canine heartworm disease in Santa Clara County Parks. This year's conference was dedicated to Dr. Mir Mulla for his services to SOVE over four decades. Key topics included new technologies and learning about vector bio-ecology. In addition, staff also periodically visit other districts and hosts their members to promote growth and cross-training among vector control personnel. In October, staff members visited Butte, Sacramento-Yolo, and Placer districts to gain more knowledge on their fish aquaculture and field operations.



Dr. Mian, the SOVE's president, and Dr. Mulla (right)

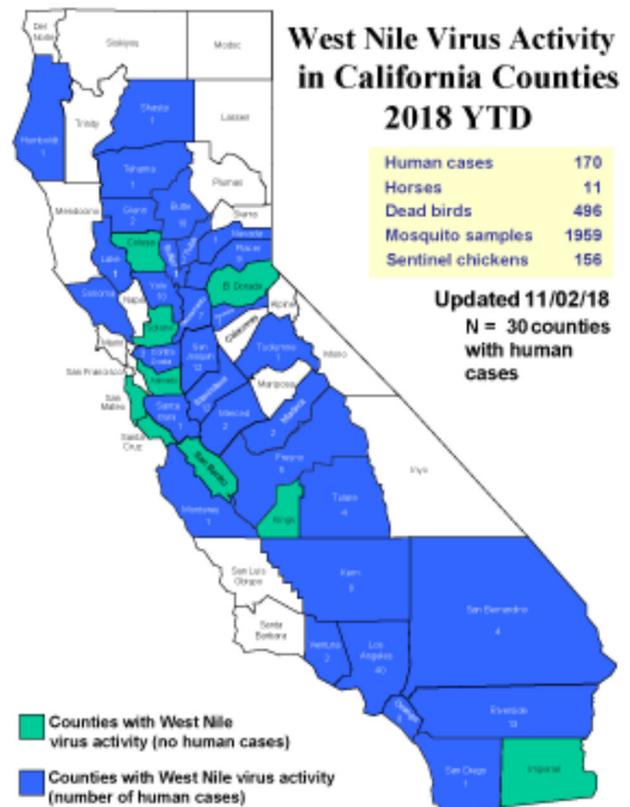
West Nile Virus Surveillance

Statewide

As of November 2, 496 dead birds have tested positive for West Nile Virus (WNV) in California (see map at right). At this time last year, 484 positive birds had been reported in 39 counties. Thus far in 2018, 1,956 positive mosquito samples were reported to the state. To date, 170 human cases have been reported this year.

Santa Clara County

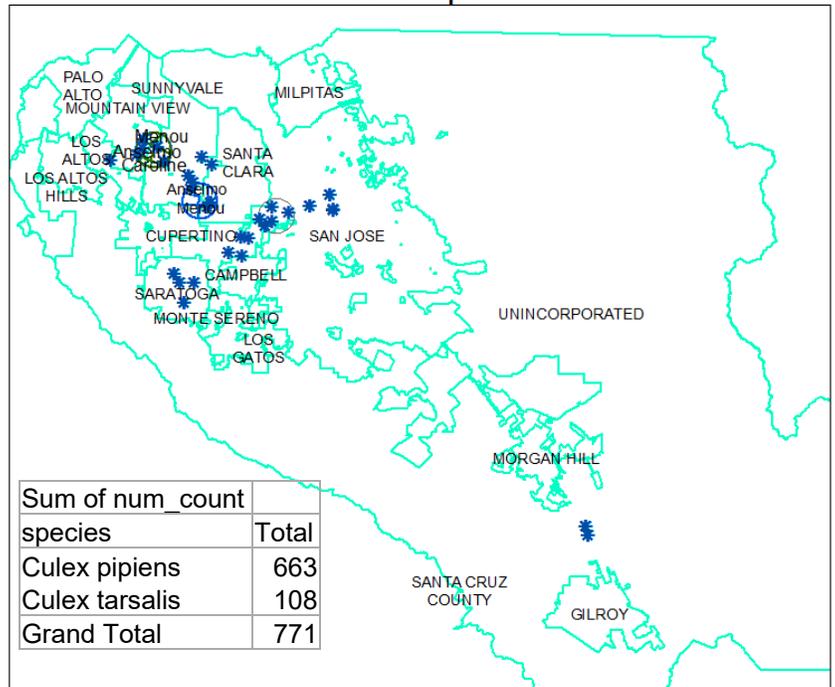
As of October 28, 646 dead birds have been reported in Santa Clara County. Of these reported birds, 231 were tested for WNV and 64 were found positive. In October, the Sentinel Chicken Program had two new positive chickens at the Heritage Park site in Sunnyvale.



Carbon Dioxide Baited Traps

Carbon dioxide baited traps or EVS traps targeted San Jose, Campbell, Saratoga, Santa Clara, Mountain View and San Martin. All 771 mosquitoes trapped were negative for West Nile and Saint Luis Encephalitis viruses. In September, there was a single pool of *Culex tarsalis* positive out of 40 pools submitted. During October, sample testing was outsourced to the DART lab at University of California, Davis.

Carbon Dioxide Traps in October



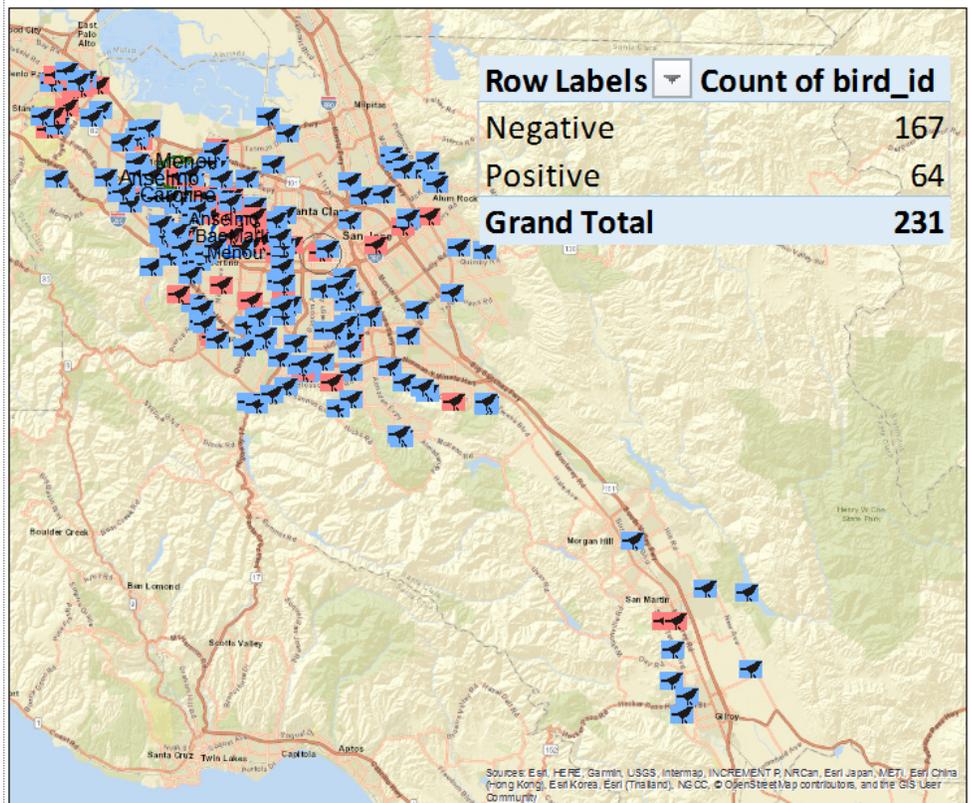
West Nile Virus Update

By Reports

The summary provided is for October, 2018.

- Santa Clara: 62
 - Acorn Woodpecker: 2
 - American Coot: 2
 - American Crow: 23
 - Black Phoebe: 1
 - Bluebird: 1
 - Common Raven: 1
 - Cooper's Hawk: 1
 - Finch: 2
 - Fox Sparrow: 1
 - Goldfinch: 1
 - House Sparrow: 2
 - Lesser Goldfinch: 1
 - Northern Flicker: 1
 - Red-shouldered Hawk: 1
 - Song Sparrow: 2
 - Sparrow: 2
 - Unknown: 6
 - Unknown-hawk: 1
 - Unknown - pigeon or dove: 3
 - Unknown - songbird: 6
 - Virginia Rail: 1
 - Yellow-rumped Warbler: 1

Dead Bird Program Results to Date: Nov 7, 2018



Outreach Programs

Vector Control staff were able to reach over 2,000 community members throughout October during outreach events. Santa Clara County Vector Control District participated in five fairs including Day on the Bay, Xilinx Safety Fair and student fairs at Gavilan College. Staff also provided educational presentations to Hughes Elementary students. Some presentation highlights included preventative techniques to avoid mosquito bites and reminders to dump standing water. Vector Control reminds the public to report mosquito breeding locations by calling **(408) 918-4770**.

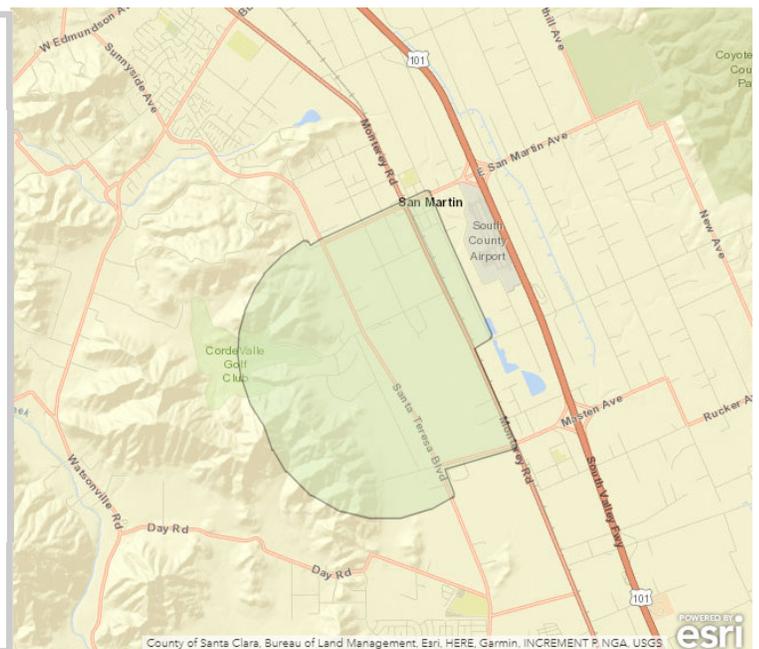
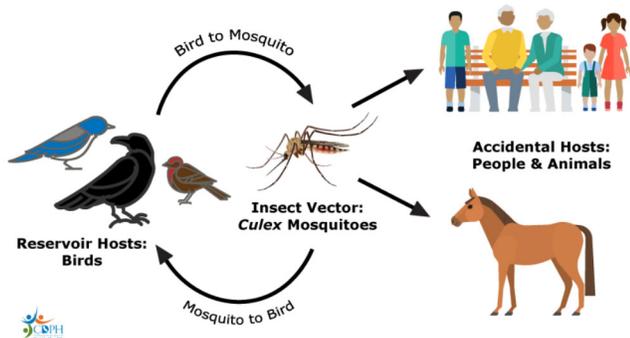


West Nile Virus Treatments

Fourth Adult Mosquito Treatment of 2018

On October 4, the District conducted the fourth treatment of 2018 to suppress adult mosquitoes carrying West Nile virus. Several birds and mosquito samples were found to be positive in San Martin. The treatment was successfully completed during the early morning to avoid traffic and when pollinators, such as honey bees, are not active. All treatments utilized are approved by the Federal and State Environmental Protection Agencies.

West Nile Virus Transmission Cycle





Santa Clara
County Vector
Control District

1580 Berger Dr.
San José, CA
95112

Vector Control History

The Vector Control District was formed in 1988 and is one of 12 special districts located in the greater San Francisco Bay Area charged with providing vector control per California health, safety, and government codes. The District is one of six in the State where the County Board of Supervisors acts as the trustee and oversees operations. Funding for District work comes from a county-wide property tax assessment.



“A VECTOR is any animal that can transmit disease to animals or people.”