

Responses to Public Comments

2015 Environmental Evaluation Report

Santa Clara County Vector Control District

This document provides responses to the Public Comments received by the Santa Clara County Vector Control District (District) during the public evaluation period (December 2014-February 2015) for its Draft Environmental Evaluation (EE) Report. During the public review period, the District received a total of 229 comments from 30 individuals and five organizations.

The District has produced two types of responses. The first type are designated as **Master Responses**, which address those issues that were repeatedly raised by multiple individuals. The second type are designated as **Individual Responses**, which address those comments that need more specific response than those covered in the Master Responses.

Introduction and Summary:

- Some of the comments received were not directed specifically to the EE and its contents. However, since the goal for the EE is to provide information about the District’s programs, the District has responded where information might prove helpful.
- Acronyms & Abbreviations used in this document:

○ EE – Environmental Evaluation	○ CDPH – California Department of Health Services
○ CDPR or DPR – California Department of Pesticide Regulations	○ CEQA – California Environmental Quality Act
○ EPA – Environmental Protection Agency (Federal)	○ USFWS – United States Fish & Wildlife Service
○ CFWS – California Fish & Wildlife Service	○ IPM – Integrated Pest Management
○ PL – Pesticide Label	○ MSDS – Material Safety Data Sheet
○ ULV – Ultra Low Volume	○ District – Santa Clara County Vector Control District
○ WNV – West Nile Virus	○ USDA – United States Department of Agriculture
○ BTI – <i>Bacillus thuringiensis</i> var. israelensis	○ VTA – Valley Transportation Authority
○ EIR – Environmental Impact Report	○ ULV – Ultra Low Volume

○ SCVAS - Santa Clara Valley Audubon Society	○ PEIR – Programmatic Environmental Impact Report
○ SCVWD - Santa Clara Valley Water District	○ MVCAC – Mosquito & Vector Control Association of California
○ USACE – United States Army Corps of Engineers	

- **In response to the public comments, the District will modify the EE before July 2016 as follows:**

- Include relevant information about wildlife impacts due to aerial pesticide applications for comment 214
- Review and incorporate the newer information regarding second-generation rodenticides into the final report per comment 19
- Modify the sentence referenced in comment 22 to clarify its intended meaning
- Make modifications to the text where needed to clarify where pertinent information is located per comment 35
- Include language into the final report which makes it clear that the District does not currently use herbicides, in response to comments 44 and 208
- Include more information regarding the current fogging protocols in response to comment 135
- Modify section 2.3.2.1 to clarify that there has been no use of dredging techniques by the District since 1995, in response to comment 165
- Remove the redundant language in paragraph 10 of 2.3.2.1 per comment 205

- **In Addition, the District will:**

- Remove CEQA-related language in some of the appendix introductory sections
- Modify language in 2.3.2.1 pgr.10 which states that the District has a 5-year USACE permit for vegetation management. The District currently does not carry this permit, but this is a future option if needed
- Report any additional corrections or changes discovered during preparation of the final document and include that information on the website along with the final report

Master Responses:

Subject / Comment	Response
Pesticide operations (especially fogging) will have a negative effect on air quality .	Current scientific evidence indicates that the District’s pesticide applications does not have a negative impact on air quality. The effects of applications (including spraying) of specific chemicals are specifically addressed in Section 6.2 for ecological health and Section 7.2 for human health. More detail for adulticides can be found in Appendix B at Section 4.1.11.
Alternatives to the use of pesticides, especially ULV fogging.	<p>In most years, ULV fogging operations are less than one percent of VCD’s total mosquito-abatement efforts. The vast majority of our mosquito-abatement efforts are directed towards larval control through education, surveillance for breeding sites, breeding site reduction, and selective pesticides that kill mosquito larvae in the water.</p> <p>In IPM, chemical controls are not used by themselves, but may be used simultaneously with other IPM techniques to maximize control while minimizing potential risks to human health and the environment. The District consistently monitors, reviews and evaluates new science and pesticide formulations including “natural” treatments and carefully weighs the scientific data and credibility of the many reports that are published.</p>
Autism increases are linked to the use of pesticides.	There is no scientifically-valid evidence of a direct link between autism and mosquito adulticiding.
Bee declines are linked to the District’s fogging operations	<p>There is no scientifically-valid evidence linking declines in bee population to ULV applications. Many scientifically-valid studies, however, demonstrate that ULV applications are not harmful to bees:</p> <ul style="list-style-type: none"> • Nontarget effects of aerial mosquito adulticiding with water-based unsynergized pyrethroids <p>This study found that water-based unsynergized pyrethroids did not cause significant non-target mortalities in honey bees, mealybug destroyers, and green lacewings. The study further found that no exposed bees exhibited signs of sublethal exposure to insecticides. And the study determined that beehives exposed to the insecticidal applications remained healthy and productive, and performed as well as the control hives.</p> <ul style="list-style-type: none"> • Mortality of Nontarget Arthropods from An Aerial Application of Pyrethrins <p>This study monitored the mortality of non-target insects and arthropods from ULV aerial application of pyrethrins. Midges and ants made up 61% of the arthropods collected from the treatment area. The study observed that no exposed insects larger than 1/3 of an inch were</p>

Subject / Comment	Response
	<p>killed by the fogging. This study supports previously-obtained evidence that the impact of a single ULV application of pyrethrins was limited to a variety of small-bodied insects.</p> <ul style="list-style-type: none"> • NONTARGET EFFECTS OF THE MOSQUITO ADULTICIDE PYRETHRIN <p>In this study, the Sacramento–Yolo Mosquito and Vector Control District sprayed a pyrethrin insecticide synergized with piperonyl butoxide (PBO) in ultra-low volumes over the City of Davis, CA, to control mosquitoes transmitting West Nile virus. The study found no effect of spraying on non-target sentinel species including dragonflies, spiders, butterflies and honeybees. All of the dead non-target species found on tarps laid in the treatment area were small-bodied arthropods. .</p> <ul style="list-style-type: none"> • A CRITICAL REVIEW OF ULTRALOW-VOLUME AEROSOLS OF INSECTICIDE <p>Among the many conclusions drawn from this review, the authors found that applications of ULV ground aerosols of insecticide in accordance with label directions following sunset do not pose a serious threat to humans, non-target beneficial animals, or automotive paints.</p>
<p>Concern over the District’s use of pesticides or chemicals, including ULV fogging operations</p>	<p>The District only uses mosquito and rodent-control measures approved by the United States Environmental Protection Agency and the California Department of Pesticide Regulation. These agencies study every known route of exposure and hazard, including toxicity, mutagenicity, teratogenicity and reproductive effects before determining that the measures are safe for their approved use.</p> <p>Voluminous research evaluating the risks associated with fogging operations demonstrates that the risks due to WNV far outweigh the very small risk of negative impacts due to fogging. Some examples of prior risk analysis include:</p> <ul style="list-style-type: none"> • Efficacy of Aerial Spraying of Mosquito Adulticide in Reducing Incidence of West Nile Virus, California, 2005 <p>This study found that the odds of WNV infection after ULV fogging were approximately six times higher in untreated areas than in treated areas and that the treatments successfully disrupted the WNV transmission cycle. These results provide direct evidence that aerial mosquito adulticiding is effective in reducing human illness and potential death from WNV infection.</p> <ul style="list-style-type: none"> • Pesticide Spraying for West Nile Virus Control and Emergency Department Asthma Visits in New York City, 2000

Subject / Comment	Response
	<p>This study determined that the number of emergency-department asthma visits was nearly identical in the 3-day periods before and after ULV fogging operations. It further found that daily rates of asthma visits were not associated with ULV fogging.</p> <ul style="list-style-type: none"> • Evaluation of efficacy and human health risk of aerial ultra-low volume applications of pyrethrins and piperonyl butoxide for adult mosquito management in response to West Nile virus activity in Sacramento County, California. <p>According to this study, the Sacramento and Yolo Mosquito and Vector Control District conducted aerial applications of Evergreen pyrethrins and piperonyl butoxide for a period of three nights over approximately 83 square miles in Sacramento County. The applications significantly reduced mosquito population and WNV infection rates. The study also demonstrated that human-health risks from exposure to the insecticide were below thresholds set by the United States Environmental Protection Agency.</p> <ul style="list-style-type: none"> • A human-health risk assessment for West Nile virus and insecticides used in mosquito management. <p>This study used worst-case risk assessment to evaluate human-health risks for WNV and the insecticides most commonly used to control adult mosquitoes. It determined potential 1-day and 90-day residential exposures from each insecticide. Results from this risk assessment affirmed scientific understanding that human-health risks from residential exposure to mosquito insecticides are insignificant. Based on human-health criteria, the health risks from WNV exceed the risks from exposure to mosquito insecticides.</p> <ul style="list-style-type: none"> • Bystander Exposure to Ultra-Low-Volume Insecticide Applications Used for Adult Mosquito Management <p>This study estimated skin exposures to the insecticide active ingredient permethrin (another synthetic pyrethroid) using water (Aqua-Reslin®) and oil-based (Permanone® 30-30) formulations. It determined that the estimated average absorbed skin exposure was 0.00005 to 0.00009 mg/kg body weight. The study supported previous risk assessments' findings that exposure to ULV applications used for mosquito management are below the safe thresholds determined by the United States Environmental Protection Agency and the California Department of Pesticide Regulation.</p>

Subject / Comment	Response
<p>The ULV fogging product Zenivex E4 is harmful to wildlife, beneficial insects and the environment.</p>	<p>See Bee declines response regarding invertebrates.</p> <p>The active ingredients used in ULV fogging applications are short lived in the environment, have very low toxicity to mammals and birds, and are applied at the low dosage label rates mandated by the United States Environmental Protection Agency and the California Department of Pesticide Regulation such that they are safe. In addition to the thorough analysis in Appendix B, Page 7 of the “Report on West Nile Virus (WNV) Fogging” presented to the County Board of Supervisors on September 23, 2014 provides a concise summary of the facts about ULV fogging operations.</p>
<p>Concern over the inert ingredients in pesticides.</p>	<p>When the United States Environmental Protection Agency and California Department of Pesticide Regulation evaluate a pesticide formulation, those agencies test the products as a whole; all required testing and conclusions reached thereabout include all ingredients, inert and active.</p>
<p>The District should use natural predators as an alternative to pesticides.</p>	<p>Mosquitofish are the only widely-adopted predator used by vector-control districts as a biological-control agent. Some have suggested that VCD use a wide variety of other predacious species to enhance its mosquito-control program.</p> <p>There are several potential mosquito predators. As stated above, Examples of mosquito predators include representatives from a wide variety of taxa: coelenterates, <i>Hydra</i> spp.; platyhelminths, <i>Dugesia dorotocephala</i>, <i>Mesostoma lingua</i>, and <i>Planaria</i> spp.; insects, Anisoptera, Zygoptera, Belostomatidae, Gerridae, Notonectidae, Veliidae, Dytiscidae, and Hydrophilidae; arachnids, <i>Pardosa</i> spp.; mosquitofish (<i>Gambusia affinis</i>), <i>Gasterosteus aculeatus</i>; bats; and birds, anseriformes, apodiformes, charadriiformes, and passeriformes.</p> <p>A much more detailed description and analysis on the use of predators can be found at 2.8.1 of Appendix E. There are currently no viable biological control agents for adult mosquitoes. Research demonstrates that use of other predators, such as, bats, swallows, or dragonflies, which do not feed exclusively on adult mosquitoes but take advantage of a wide variety of available prey, are not effective for mosquito control. Mass-rearing or habitat enhancement to promote these species is difficult. We must also assure that the biological controls themselves do not cause negative environmental impacts.</p>

Subject / Comment	Response
<p>The District should use natural control products instead of synthetics.</p>	<p>While some assume that products labeled “natural” are safer to humans and the environment, “naturally derived” materials are still classified as pesticides and must pass the same testing protocol as synthetic pesticides. To maximize the safety and effectiveness of mosquito abatement operations, the District only uses products registered by both the Federal Environmental Protection Agency and the California Department of Pesticide Regulation, relying on the research and testing and risk-analysis processes of these agencies to ensure that it uses the safest and most effective pesticides.</p> <p>The District has begun initial efficacy testing of two products, Essentria and Merus, which have recently been registered with the Federal Environmental Protection Agency and California Department of Pesticide Regulation for adult mosquito control. Essentria’s active ingredients include rosemary oil, peppermint oil and geraniol (found in many essential oils). Merus is a pyrethrin-based botanical insecticide that meets USDA’s National Organic Program standard for use around crops. This material, made from chrysanthemum flowers, breaks down quickly and is listed by Organic Materials Review Institute (a non-profit organization that reviews products to determine whether they meet standards for organic use).</p>
<p>Citations from the pesticide labels (PL) and Material Safety Data Sheets (MSDS).</p>	<p>Pesticide labels (PL) and MSDA both list all known potential hazards of a given pesticide but have very different purposes.</p> <p>The PL is the legal document derived from research and information gathered during the pesticide registration process and tells the District how to use the product for its intended purpose in a safe and effective manner. The PL must always include a category to indicate how hazardous a product is. The lowest level of concern is “CAUTION” and all of the products used by the District are in this lowest category.</p> <p>The MSDS, on the other hand, does not address the operational use of the pesticide in the field, but focuses on handling, storing and transporting an undiluted product in bulk. It also includes information about the basic nature of the product (i.e. toxicity, flammability, corrosiveness), and provides information on how to address extreme situations such as accidental ingestion or spills, or how to fight fires where the product may be involved.</p> <p>Both documents list a product’s potential hazards, but a potential hazard statement such as “harmful to fish” does not mean that using the product <u>as directed on the PL</u> will inevitably lead to fish being harmed. In fact, the instructions on the PL are based on specific information that has proven that a product will not produce negative effects, such as fish die-offs or wildlife impacts, when used as the instructions direct. For example, Zenivex may potentially harm bees,</p>

Subject / Comment	Response
	<p>but the PL explains how to minimize any potential impact by instructing to “[t]ime applications to provide the maximum possible interval between treatment and the next period of bee activity” and “not [to] apply to blooming crops or weeds when bees are visiting the treatment area.” Therefore, the District follows the PL and routinely begins its fogging operations at 11:00 p.m. and completes them by 3:00 a.m., when bees, which are diurnal, are not out or active.</p> <p>Discussion of pesticides begins at Section 6.2.7 in the EE, which includes specific reference points for further detail in Appendix B, Risk Assessment.</p>
<p>The District is not CEQA Compliant.</p>	<p>The Santa Clara County Superior Court recently held that the District’s program did not violate CEQA, which requires that state and local agencies identify the significant environmental impacts of their actions, because the District had fully informed the citizens of Santa Clara County about its entire program, dating back to 2007.</p> <p>The District filed and was approved for a CEQA exemption in 2007, and currently is categorically and statutorily exempt under CEQA. At that time, the District produced a Comprehensive Description and Analysis of Programs and Services and continues to provide that information publically on an annual basis.</p>
<p>The risk of WNV is exaggerated and much lower than the risk posed by ULV fogging.</p>	<p>There is no evidence to support this assertion. Since the use of ULV technology over the last three decades, there has not been a single documented illness or fatality due to ULV operations. In contrast, there have been 4,805 documented illnesses in California cause by WNV since 2003, and 176 of those were fatal.</p> <p>For a more complete discussion of the relative risks of fogging and WNV, see Page 9 of the “Report on West Nile Virus (WNV) Fogging” presented to the County Board of Supervisors on September 23, 2014, which provides a concise summary of the facts about WNV.</p>

Individual Responses:

Comment #	Comment	Response
121	The public would like to know about SCCVC's budget and the diversity of employees working for them. Please break it down into cost per program. We are especially interested in the costs of each part of the West Nile Program.	Budget information for County of Santa Clara programs can be found here: https://www.sccgov.org/sites/scc/countygovernment/Pages/Budget-and-Finance.aspx The County strives to maintain a diverse workforce representative of the public served, and the District is no exception.
123	1) Where do you get the authority to "issue a locally-focused, comprehensive environmental study, instead of the PEIR?	The District was not required to issue a PEIR because, as stated above, it was already CEQA compliant. The District voluntarily issued the EE as a service to its constituents. The EE provides information nearly identical to that required by a PEIR without the time and expense to taxpayers of unnecessarily reopening settled legal issues.
195	Page A-31 Reproduction has damaged the flow of and obscured the content of this document. Pages are missing and some pages have print overs and missing pieces.	The District has examined the document " SCCVCD Evaluation- APPENDIX A " as listed on the EE webpage , and is unable to find any corruption to the document on page A-31.
196	Page 7.3 ¶ 1 Wrong. Toxicity does not depend on exposure. Toxicity does not always increase as dose increases. In many cases, the more dose mimics natural hormones in amount and structure, the more it disrupts functioning hormones.	The information provided on page 7-3 of the report is a brief general description of the factors which contribute to the overall science of toxicology. It also describes how this knowledge fits into the context of the report. The comment provides no references to support their statement. The District does not use any mammalian hormone analogs in its IPM program.
201	Most of the land within the District's Service Area has never been directly treated for vectors. This statement is substantially misleading. In 2014, 19 treatments encompassing 4.1 SQUARE MILES each resulted in 77.9 square miles contaminated or re contaminated. With drift, more than half of the urban Santa Clara North County was contaminated by Vector Control in the summer of 2014.	The District made this statement on page 2-4 of the report. Of the 1,304 square miles in the County , the District's services encompass approximately 1,291 square miles. The bulk of the District's operations occur in the more urbanized areas of the County, amounting to approximately 800 square miles. In 2014, the geographic area included in <i>all</i> of the District's treatments (including larvicides) was no more than 76 square miles. The District estimates that the additive area treated during the 19 fogging operations was about 62 square miles, and that the geographic area within which fogging operations were conducted was about 49 square miles. Using a baseline of 800 square miles, the 76 square miles treated amount to only one percent of the

Comment #	Comment	Response
		geographic area in which the District performs most of its control operations, and 25 percent of the approximately 300 square miles of urbanized North Santa Clara County.
204	2-3 Table, p. 2-32 Yellow Jacket and bee Swarm Control Abatement These toxic chemicals listed for yellow jackets are completely unnecessary as yellow jacket traps are completely effective without contaminating the environment. These traps with their attractant can be used year after year so are low impact and cost little.	The District’s experience with yellow jacket control in County parks has shown that for traps to be highly effective, the trapping program must begin early in the season. However, even with a good control program in place, active nests represent a direct threat of envenomation and must therefore be controlled and removed. As formulated and used by the District, all of the products listed in Table 2-3 represent a very low risk to human health, and are not persistent in the environment. They do however rapidly eliminate active yellow jackets. The M-pede product occasionally used for bee swarms is in essence a soap that clogs the bees’ breathing apparatus. The majority of bee calls taken by the District are referred to local beekeepers for removal and subsequent use in their apiaries.
212	This report claims Vector Control provides trapping service for other vectors other than mosquitoes. I have not found this to be the case. I have asked for help with deer (which spreads lime disease) and no help is available.	Deer are not considered as vectors by the District. They do not appear to be a significant component as a reservoir for Lyme disease in this County, and do not spread it into new areas. The most significant reservoir hosts for Lyme disease in our area appear to be small rodents and passerine birds. On average, only 5-10 confirmed diagnoses of Lyme disease occur in the County each year.
213	2.3.3 Biological Control Bti is not specific to mosquitoes and can cause other creatures, including humans, to fail to thrive as it kills the intestinal bacteria and incorporates into human cells. There is now much discussion about obesity being caused by Bti in the corn, corn oil and other GMOs. Many people avoid these foods now due to this biological agent. It should not be in our water.	Section 2.3.3 is about vegetation management, not biological control. Section 2.3.4 (page 2-16) refers to biological control. BTI (<i>Bacillus thuringiensis</i> var. <i>israelensis</i>) is not the same organism used in genetically modified corn (Bt). The comment does not provide any evidence to support the statement that Bti causes a failure to thrive, or that it incorporates into human cells. In fact, the Bti products used by the District do not contain live bacteria.

Comment #	Comment	Response
214	In addition, the hazard to airborne wildlife from the helicopters or fixed wing aircraft and the hazard to the aircraft from airborne wildlife should be addressed in the EIR.	The District rarely uses aerial applications and then these only occur over the marshes. The United States Fish & Wildlife Service favors helicopter applications rather than ground applications because the aforementioned cause less disturbance to wildlife.
223	The Specimen Label says: "Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from water in order to minimize incidental deposition into the water body. Thus any pesticide fogging on or near any bodies of water can only be done if mosquitoes are present there, not a mile away AND when the winds can blow the pesticide in such a way it does not enter the water, an almost impossible task.	<p>The language quoted appears on most PL for ULV adulticides. In urban areas of Santa Clara County, the aquatic habitats most frequently encountered during fogging operations are creeks.</p> <p>The District complies with PL to avoid any statistically-significant water contamination. The District avoids ULV applications running in parallel and close to significant lengths of creek habitat. In many areas, dense riparian vegetation prevents significant amounts of ULV fogging material to enter the aquatic habitat. The District's extensive trapping experience has established that mosquitos are ubiquitous in the urban areas and can be found in the vast majority of traps set. The effective swath of ground based ULV applications in urban areas is usually considered to be 300 feet, with the material becoming more dilute as it travels downwind.</p>
224	The reservoir recharges our aquifers, which provide our predominant water supply in the drought. No water treatment is known or available to remove Zenivex from our water. So the entire population dependent on this water is not only breathing this toxic pesticide, but also sooner or later drinking it.	The likelihood of finding any significant amounts of etofenprox (the active ingredient in Zenivex) in the potable water supply following ULV fogging operations is extremely low. Etofenprox breaks down rapidly in water, with a half-life of about four days.
226	Nothing has addressed the effect of methoprene on the young of the species present in the baylands, young and pregnant females being extra sensitive to hormone altering substance.	<p>The known environmental impacts of methoprene are well documented in this report at Section 4.2.7.1.2 (page 4-21). Methoprene and other control agents are discussed in detail in Appendix B and listed in Table 5-3.</p> <p>Assuming that the comment refers to mammalian and avian species in the Baylands, methoprene is one of the least toxic materials used by the District. It mimics certain insect juvenile insect hormones which regulate the transformation of larval mosquitoes into adults, and causes mortality to mosquitoes during that phase of their development.</p>

Comment #	Comment	Response
17	<p data-bbox="401 116 1043 181">Re: PUBLIC DRAFT ENVIRONMENTAL EVALUATION OF THE SANTA CLARA COUNTY VECTOR CONTROL PLAN</p> <p data-bbox="401 233 1035 337">Subject: THE SERIOUS NATURE OF THE HEALTH RISKS ASSOCIATED WITH LARGE NUMBERS OF FERAL CATS AND FALLACIES OF TNVR</p> <p data-bbox="401 386 1058 526">I have attached the letter image scan from JAVMA, Feb 15, 2015, Vol 246, No 4, sent to me kindly by the wildlife veterinarian David A. Jessup DVM, MPVM, Dipl. ACZM.</p> <p data-bbox="401 574 1047 760">It points out the serious nature of the health risks associated with large numbers of feral cats, the devastation they cause to wildlife, and the fallacy that once established TNVR sites diminish and expire on their own.</p> <p data-bbox="401 808 1058 1143">TNVR cat colony extinguishment simply doesn't happen under most prevailing circumstances, or unless people remove large numbers (not just trap, neuter, vaccinate and reabandon). Those cats removed are usually dropped off at other sites, simply metastasizing the problems. The JAVMA letter has 11 signers representing six large zoo, wildlife, avian, reptile, PUBLIC HEALTH and ONE HEALTH professional associations with a total membership in the thousands.</p> <p data-bbox="401 1192 1052 1377">I had mentioned the letter in a previous comment, but failed to attach the letter, as it is an image file and wasn't sure if it would be receivable in comments. Let me know if further source information would be useful.</p>	<p data-bbox="1085 116 1883 149">The District is not involved in feral cat issues as part of its program.</p>

Comment #	Comment	Response
	<p>Quotes from the JAVMA letter follow:</p> <p>“...Outbreaks of hookworm infection and typhus at sites where dense populations of feral cats, rats, and fleas coexist are serious human public health problems. Feral cats remain the most common rabid domestic animal, and exposure to rabid cats leads to post exposure prophylactic treatment of more humans than exposure to any other species. Rabies vaccination of feral cats does not reduce the incidence of post exposure prophylaxis or the associated public health risks and costs. Cats are the only known shedder of <i>Toxoplasma</i> oocysts, which are increasingly recognized as causes of waterborne and point-source community outbreaks. Toxoplasmosis is a devastating disease in a wide array of marsupials, sea otters, and other marine animals and poses a health risk for many species that generally do not ingest raw meat. An increasing body of evidence is implicating it as a factor in several serious human behavioral, neurodegenerative, and dementia conditions....</p> <p>...Public funds spent on TNVR programs could, we believe, be better spent promoting and enforcing mandatory spay-neuter provisions and adopting out homeless cats...</p> <p>...We strongly believe that TNVR does not serve one health goals or the welfare of feral cats or wildlife or advance public health...”</p>	
18	<p>1. Since cumulative impacts were not evaluated in the document, the District has failed to ensure public health and safety, and an assessment of the combined effects of multiple biocides and toxicants in the environment is needed. An assessment of the cumulative impacts to human and environmental</p>	<p>The 2015 EE and the annually-prepared Comprehensive Description and Analysis of Programs and Services, presented to the County of Santa Clara Board of Supervisors, address the cumulative impact of the Department’s programs. A legally-</p>

Comment #	Comment	Response
	<p>health is needed, as well as a detailed schedule that clearly delineates how the timing and planning of the use of pesticides and other toxicants will be coordinated with other agencies in a given area. Without such assessment and schedule, the document fails to disclose the full impacts of the actions it seeks to permit, and the District cannot ensure that there will not be a significant impact to human health or the environment. It is imperative to evaluate the combined effects of different toxicants, and inform the appropriate agencies of any unscheduled spraying prior to the release of toxicants into the environment. Please provide a protocol for coordination with all other Cities and other government agencies that use biocides in the County (for example, the Santa Clara Valley Water District, VTA, Caltrans etc.).</p>	<p>unnecessary EIR would not contain an assessment of the information requested.</p> <p>The District is not aware of another municipality within the County that is presently engaged in the regular application of pesticides or adulticides as suggested by the comment but it coordinates with the County of Santa Clara Office of Integrated Pest Management regarding other County pest-management efforts.</p> <p>While the overall use of pesticides (from all sources) throughout the Program Area may be environmentally significant, the District’s relatively small contributions to this impact are not. The District’s BMPs described in Section 2.8 substantially reduce the District’s pesticide use. Given the overall low dosages of the District’s control products, and the relatively low contribution of its pesticides to the total County use of pesticides for agriculture and private pest control, it is neither scientifically necessary nor legally required to develop the kind of coordination mentioned in the comment.</p>
19	<p>2. SCVAS remains concerned over the use of second-generation anticoagulants to control. The District failed to mention concerns over the use of second-generation anticoagulants California and changes in legislation. The California Department of Pesticide Regulations released a memorandum on June 27, 2013 calling for a restricted use designation for all second generation anticoagulant rodenticides. DPR analyzed 492 animals from 1995 to 2011 and that “approximately 73% had residues of at least one second generation anticoagulant rodenticide” (DPR 2013). DPR found second-generation anticoagulants in a range of including bobcats, mountain lions, coyotes, foxes, skunks, hawks, crows, and owls. indicate that exposure and toxicity to non-target wildlife from second-generation anticoagulant rodenticides is a statewide problem. In addition, the data suggest that</p>	<p>The problem of secondary poisoning is acknowledged in 6.2.7.4.1 Anticoagulants at pp. 6-19 – “The acute toxicity of second-generation rodenticides presents a greater hazard to wildlife and pets as they are retained much longer in body tissues of primary consumers (Hartless and Jones, 2011). Second-generation anticoagulants also have a significantly longer liver half-life than first generation anticoagulants (<i>Id.</i>). Brodifacoum has the greatest acute toxicity of the Program rodenticides, but the District uses it very infrequently. Anticoagulants may pose some risk to secondary avian predators and scavengers (e.g., birds of prey, coyotes), which may feed on poisoned rodents.”</p> <p>However, the District will review and incorporate the newer information regarding second-generation rodenticides into the final report. Furthermore, we will continue to review the literature and weigh the risk to non-targets when considering application of these materials.</p>

Comment #	Comment	Response
	<p>the problem exists urban and rural areas. Furthermore, it has been well established that individuals chronically exposed to sub-lethal doses of anticoagulants can and do experience negative effects that have been known to reduce an individual’s biological fitness (DPR 2013). In addition to DPR restricting the use of all second generation anticoagulants in California, the State Congress passed AB 2657, which was later signed into law by Governor Brown in 2014 “prohibiting, except as specified, the use of any pesticide that contains one or more of specified anticoagulants, including brodifacoum and bromadiolone, in wildlife habitat areas, as defined” (California Food and Ag Code: 12978.7.). The bill includes restrictions for brodifacoum, bromadiolone, difenacoum and difethialone in sensitive wildlife areas, including state parks, state wildlife refuges, and state conservancies. The bill does not apply to the use of pesticides for agricultural activities. Generally speaking, the District evaluated and provided mitigation measures for primary exposure to second-generation anticoagulants by using bait boxes or dangling the bait block a wire; however, the District failed to consider or evaluate anywhere within the document secondary exposure pathways, which are the primary threat to predators including owls raptors. It is well established that due to the nature of anticoagulants individuals take anywhere from 5 to 12 days after exposure to die from the toxicant. Additionally, toxicant individuals often experience sublethal affects making them a perfect target for predators. SCVAS would like the District to discontinue the use of these toxicants in the county and find alternative rodent control methods. Ideally, we would like to see the District agree to abolish the</p>	

Comment #	Comment	Response
	<p>use of second-generation anticoagulants throughout the District, as some other cities and counties have already done (for example, Marin County). The hazards to both birds and wildlife are too high and they compound the danger to children, and domestic animals. At the very least the District must evaluate and mitigate for secondary exposure to second-generation anticoagulants, in addition to ensuring that they are not used in areas with known wildlife habitat.</p>	
20	<p>Section 2.3.4.4 proclaims, “No effective predators exist to control high rodent populations in urban areas. Although they sometimes inhabit residential neighborhoods, raptors... do not provide adequate rodent control in urban environments.” The EIR provides no evidence to support this statement. Considering the pervasive documented impacts of anticoagulant rodenticides to wildlife and the risks to children and household pets, the District should make an effort to increase raptor and owl populations in urban areas by a) providing owl nest boxes and b) educating the public about alternatives such as biological control and traps.</p>	<p>The District is unaware of a large, unmitigated rodent population in the County that requires augmentation of predators in an urban environment to reduce rodents.</p> <p>Moreover, the District’s use of rodenticides has markedly declined since information about the environmental issues with rodenticides became more readily available almost 20 years ago. Since 2010, the District has recorded only 20 rodenticide applications, all of which were limited in extent. As with other jurisdictions, the bulk of the District’s effort focuses on educational approach to urban rodent control. Roof rats are commonly found in the County in urbanized areas. The District conducts free home and yard inspections and provides advice to residents to create long-term solutions.</p>
21	<p>4. Section 2.8.2 proposes, “Survey all predetermined treatment sites every year prior to work to determine the potential presence of special-status plants and terrestrial wildlife using the CNDDDB, relevant Habitat Conservation Plans (HCPs), NOAA Fisheries and USFWS websites, CALfish.org, and other biological information developed for other permits.” Considering that the District proposed to introduce toxicants and biocides into the environment, it is not sufficient to limit surveys to only a data search of databases that are often years behind, or are developed for other</p>	<p>There is no evidence that District activities adversely affect special-status species. The District will continue to work with the USFWS and other stakeholders to continue to ensure that special-status species are not negatively affected by District activities</p>

Comment #	Comment	Response
	permits. The District must provide on-the-ground endangered species surveys prior to application of any biocides and toxicants into any habitat that could support endangered species.	
22	In addition, the DEIR proposes, “Establish a predetermined buffer of reasonable distance from known special-status species locations and do not allow application of pesticides/rodenticides (including fumigants) within this buffer without further agency consultations”. Please provide scientifically based criteria for the establishment of “reasonable distance” and explain the process for application for “agency consultation” within this buffer.	<p>The District will clarify this sentence. The modified version will read, “Under consultation with the proper agency, establish a predetermined buffer, if needed, of adequate distance from known special-status species locations to ensure that they are not impacted by these operations.”</p> <p>The scientifically-based criteria for the establishment of buffers primarily concerns drift or application of pesticides into areas in which they would have adverse impacts. In fact, the District currently uses pesticides in natural areas which have very narrow spectrum of activity against mosquitoes, and extremely low toxicity to vertebrates when used according to their labels.</p>
24	Question/Comment #2 Why did Santa Clara County Vector Control recruit Dr. Sarah Cody to come in and speak on the risks VS the benefits? When we (some HAP members) spoke with Dr. Sarah Cody we found out she did not know what a MSDS therefore she truly cannot give an accurate report as to risk VS the benefits. Furthermore, why did Dr. Cody not address the signs and symptoms of pesticide poisoning to inform bay area doctors as she did with the signs, symptoms and diagnostics of WNV.	<p>Dr. Cody, a licensed physician is the Public Health Officer for the County and addresses issues of public health as she deems appropriate or necessary. Since 1998, Dr. Cody has overseen surveillance and investigation of 83 reportable diseases, conducted investigations of outbreaks, participated in planning for public health emergencies, infectious diseases, and bioterrorism, and responded to SARS, H1N1 and other public health emergencies.</p> <p>Dr. Cody has not informed doctors about the signs and symptoms of pesticide poisoning as she did with the signs, symptoms and diagnostics of WNV because there have been no documented cases of pesticide poisoning related to the District’s activities, but there have been dozens of WNV cases during the past several years.</p>
25	Question/Comment #3 Many people have complained of the adverse effects of the pesticide spraying. I and others gave a report to the Dept. of Agriculture. Nothing has been done about it. Is the	The Agricultural Commissioner in each county in the State is responsible for ensuring the safe use of pesticides in accordance with the PL and State laws. They investigate pesticide usage when doctors issue reports of pesticide related injuries or illnesses and also investigate reports of such issues from the public.

Comment #	Comment	Response
	Dept. of Agriculture the right Dept. to give an adverse reporting to? If not, what is the correct procedure?	
35	In 1.5.3 Biological-Terrestrial the DEE states that the following concerns will be addressed in Chapter 5 or Appendix A: "Describe the effects of all chemicals that are used and/or proposed for use on wildlife and natural ecosystems, including insect prey, birds, mammals, fish, vegetation and site topography." This subject is not addressed in any serious detail. The great loss of mosquito predators, bees, butterflies, beneficial insects, and birds is not addressed. The increased diseases in plants because of these loses and the need for increased pesticide spraying because SCC Vector Control has been killing our ecosystem which keeps mosquitoes in balance is not addressed.	<p>The statement provided on page 5-8 reads "Ecosystem effects are minimal due to use of selective materials, such as methoprene, that only target mosquitoes that are still available for predation." However, the serious details and analysis begin on pages 5-15 under Section 5.2.7 and continue through the remainder of Chapter 5. The reference to Appendix A should in fact be a reference to Appendix B. The District will make modifications to the text where needed to clarify where pertinent information is located.</p> <p>General concerns about the District's use of pesticides, as expressed in the latter part of this comment, are addressed in the Master Comments section.</p>
38	The major portion of this DEE was clearly written by the State for all its Vector Control programs. It lacks the details of exactly what is done in SCC and these need to be added. The DEE is too general and not specific to our Santa Clara County. It needs to be rewritten to address our particular situation and problems.	<p>The District works collaboratively with nine Bay Area districts. Some of the information in the EE addresses information applicable to all of the Districts, some addresses County-specific details.</p> <p>The statement that the EE is "too general" is too broad for an effective response. The District may review and clarify specific portions of the EE as requested.</p>
39	The DEE needs to be reorganized to address each program and not lump all of them together. The way it is written hides the details of what SCC Vector Control actually does. This is especially true of SCC Vector Control's most visible program, the West Nile Program.	Given the extent of the EE and Appendices and the frequent use of internal cross references and citations, the District does not plan to reorganize the study.
44	Use of Herbicides for Vegetation Management - We would like to introduce an additional concern concerning the use of herbicides. The continual use of herbicides as a method of vegetation control ultimately results in the creation of "super weeds" that become	In current practice, the District is not using herbicides. The related information and materials are intended to describe what the District might do if the need arises and the potential impacts of these operations. The District will clarify this point in the final draft.

Comment #	Comment	Response
	<p>resistant to the herbicide resulting in a cycle of needing stronger and stronger chemicals to produce the result. We ask that herbicides be used as only an initial treatment and that other methods are then employed to prevent the reemergence of the weeds. One possible alternative would be the planting of California native groundcovers that would out-compete the weeds and stop the cycle of endless spraying. The new plantings would need to be managed to ensure the establishment of the plants.</p>	<p>The District is fortunate that in Santa Clara County, most of the vegetation management activities used by other districts are performed by the Santa Clara Valley Water District (SCVWD). The District estimates that the dollar value of the work performed by SCVWD averages about \$160,000 annually.</p>
46	<p>V.C.D. needs to present the public and Board of Supervisors with a summary of basic points and answer the six questions. This County has asked specific questions for at least the past 8 1/2 years, and V.C.D. needs to provide concise answers which focus on this County's V.C.D. Program of Activities. Mosquito-related activities are woven into and obscured in a broad general report that sometimes discusses Federal and State activities, regulations, and programs. Since this report was prepared for the public who are not all be physical scientists but who are, nevertheless, absolutely impacted by this Vector Control District's plans, and since the report was supposed to answer specific questions that pertain to this County, I do not see how it has achieved its purpose.</p>	<p>This EE was not intended to be a mere summary of the District's activities, but to be a detailed and comprehensive account of the District's programs and activities.</p>
50	<p>Table 10-4 I do not understand this. Please clarify what percentage of time, energy, and financial resources go into all the methods of mosquito control in this County.</p>	<p>Chapter 10 specifically addresses air-quality impacts at Table 10-4, found on page 10-30, entitled "Districts' Selected Components Applicability." The percentages are totaled to 100% for each District's row in the table, and are each District's estimate of the relative potential importance to air quality of each of the operational components. Neither the table, nor the EE are intended to provide an analysis of the District's resource allocations.</p>

Comment #	Comment	Response
52	B. Opt-out of further spraying/ fogging. I'm confused; I don't understand the difference between "No Project Alternative" and "Opting-Out" of V.C.D. Mosquito Fogging/ Spraying?	Neither the issue of "opting-out" of fogging operations, nor a "no project alternative" are addressed in the EE.
53	Brazil releases sterile male mosquitoes at certain times of the year. Who is studying sterilization of mosquitoes? Why couldn't this be tried, here, as part of V.C.D.'s efforts? I do not mean genetically-altered male mosquitoes; I mean sterilized male mosquitoes for any W.N. -carrying female mosquito population. How effective has this been, elsewhere, and how could it help reduce future mosquito populations here? How could it be detrimental? * In one of the reports, V.C.D. maintains that releasing sterile mosquitoes is only a temporary measure, so it should not be utilized, at all. "Knock-downs" of female mosquitoes in this County, over the past 8 years, using chemical pesticides, have been temporary measures.	The issue of sterile male releases and other genetic modifications is discussed in Appendix E beginning on page 2-43. The District is reviewing current research and efforts regarding these techniques, but as yet none have been adopted operationally in the United States due to the issues discussed in Appendix E. Should such techniques be found to be efficacious, it would likely be used against the container-breeding mosquitoes, which have not as yet become established in the United States.
54	Prior to mosquito season, devote more money to vigorously cleaning storm drains. It should be simple to ascertain if the storm drains are functioning effectively, or not.	Storm drain systems are typically managed by the local municipalities or sanitation districts, and the maintenance of those systems varies significantly among the cities. Depending on the construction of each system, cleaning often results in only a temporary decrease in the amount of water available for mosquito breeding. The District's current practice of treating catch basins with low-toxicity, extended-release products remains the most efficient means of addressing the problem Countywide.
55	It should be simple to demonstrate if positive female populations are flourishing around the same storm drains, year after year.	Over decades of operation, the District has gained a great deal of knowledge about the storm systems that breed mosquitoes in this County. Our current program involves the periodic inspection and verification of mosquito breeding in these systems.
56, 57	The storm drains (especially in areas of repeat mosquito populations) don't seem to be designed to sufficiently handle the mosquito population. If needed,	Altering storm systems and related "best management practices" for pollution prevention is beyond the purview of the District. While the District has extensively researched this issue over the past two

Comment #	Comment	Response
	<p>alter the storm drains so that they function more effectively.</p> <p>*If the alterations seem costly, start with the areas which have had the most female mosquito activity over the past few years.</p>	<p>decades and concluded that any system which is designed to hold water is at some point going to produce mosquitoes.</p> <p>The District however is in the early stages of developing new surveillance and treatment methods to better address and characterize the problems associated with these systems.</p>
59	<p>Stop using County money to pay for companies who use dogs to discourage geese, duck & bird populations (Vasona Creek & Vasona lake). Re-think the strategy & encourage back the population, as they are part of an eco-system that eats mosquitoes (& other "nuisance" insects).</p>	<p>The District does not use dogs for this purpose and cannot speak to whether other County departments do so.</p>
60	<p>V.C.D. could offer scholarships and/ or other incentives to any individual or organization who can find ways to neutralize female mosquitoes.</p>	<p>The District participates in professional associations such as the Mosquito and Vector Control Association of California (MVCAC), which have research committees to annually review research proposals. The District is also considering participation in the Mosquito Research Foundation, a nation-wide organization dedicated to financing research on vector-related issues.</p>
64, 65	<p>Perhaps Our City Forest can help with obtaining & planting specific trees that attract mosquito predators in those area that V.C.D. identifies as having repeat positive mosquito populations. Rather than an individual applying for a tree, V.C.D. work with Our City Forest to plant trees which will specifically support natural predators for decades to come.</p> <p>Our City Forest realizes that trees decrease noise and air pollution, increase oxygen for us all, support bird habitat, reduce energy costs and create a more beautiful Valley. Is there any plan to work with this organization to plant trees in V.C.D.'s recurring target areas?</p>	<p>The District is unaware of any tree species that attracts mosquito predators. As stated in the EE, the only known successful wide-scale implementation of biological control has been the mosquitofish. In general, these types of predators do not lend themselves to efficient mosquito control efforts because they feed on a wide variety of other prey. Therefore, the District does not plan to collaborate with any organizations on tree planting.</p>

Comment #	Comment	Response
70, 77	<p>* page 2-24: Integrated Mosquito and Vector Management Programs Appendix E, Alternatives Analysis Report:</p> <p>6. j). Rain barrels. V.C.D. could figure out which rain barrels will not attract mosquitoes and then let the public know. V.C.D. could help the public obtain these barrels free or at reduced prices. Why not offer rebates for residential as well as business owners who purchase and install these barrels? Why not offer rebates for residents who want to use water captured in rain barrels to cultivate plants that attract natural predators?</p>	<p>The District is aware that there has been an increase in the installation of rain barrels, both as a means of addressing runoff pollution and as a water conservation measure.</p> <p>There are two options for keeping rain barrels free from mosquitoes. The best option is to use window screening to prevent access to the water by adult mosquitoes. The second option is the use of mosquitofish where screening is not feasible.</p> <p>Since these options are simple, inexpensive, and adaptable to a wide variety of rain barrel configurations, it is not likely that rebates would contribute a benefit. However, the District is currently drafting language for its website dealing specifically with rain barrels.</p>
81-83, 85-88	<p>7. a). Encourage people to not be mosquito magnets.</p> <p>b). Encourage people to choose colors for clothing & outdoor landscaping that does not attract mosquitoes.</p> <p>c). Encourage people to not use floral & highly-scented products for laundry, clothing, socks, hats, picnic & sports' blankets & chairs.</p> <p>If W.N. virus and other mosquito viruses are a true threat and public health issue, in this County, then V.C.D. should contact fabric stores and textile manufacturers and have them donate mosquito netting for residents without central air-conditioning as well as residents who spend time outdoors (home patios).</p> <p>d). V.C.D. should have stores stop offering fabric colors to sports' teams that attract mosquitoes.</p> <p>e). V.C.D. should contact pool & patio shops; lawn & garden supply stores; pet stores and ask that they stop</p>	<p>While certain dark coloration may be a secondary attractant for certain mosquito species, the primary means used by mosquitoes to find their meals is carbon dioxide, followed at closer range by certain chemicals and odors which are emitted from the skin. Therefore, it is not likely that the suggestions here would enhance mosquito avoidance to any significant degree.</p>

Comment #	Comment	Response
	<p>offering fabrics for outdoor cushions, drapes, seating, banners, and so on that attracts mosquitoes.</p> <p>Or V.C.D. could, at a minimum, post warnings at all the above places that certain fabric colors & designs may attract mosquitoes so that parents, sports' team managers & participants, educators and residents would realize that what they're purchasing and using might attract rather dangerous biting mosquitoes.</p> <p>f). V.C.D. should definitely advise commercial enterprises in the Valley, as well as parents, educators, sports' teams, and residents that scented products will attract female mosquitoes. And then post warnings prior to mosquito season that the use of scented products may attract dangerous biting mosquitoes.</p>	
84	<p>If W.N. virus and other mosquito viruses are a true threat and public health issue, in this County, then V.C.D. should contact fabric stores and textile manufacturers and have them donate mosquito netting for residents without central air-conditioning as well as residents who spend time outdoors (home patios).</p>	<p>Mosquito netting has not been demonstrated to have significant benefit against WNV. Although it would likely reduce the numbers of mosquito bites in small degree, the public are exposed to <i>Culex</i> mosquitoes (the WNV vectors) during a wide range of outdoor and indoor activities that would render mosquito netting impractical. That is why the use of long clothing and insect repellants, along with tight-fitting window screens, are the best overall means of preventing human exposure to WNV infection.</p>
102	<p>In 1.5.3 Biological-Terrestrial the DEE states that the following concerns will be addressed in Chapter 5 or Appendix A: "Describe the effects of all chemicals that are used and/or proposed for use on wildlife and natural ecosystems, including insect prey, birds, mammals, fish, vegetation and site topography." This subject is not addressed in any serious detail. The great loss of mosquito predators, bees, butterflies, beneficial insects, and birds is not addressed. The increased diseases in plants because of these loses and the need for increased pesticide spraying because SCC</p>	<p>This is a duplicate question to Comment 35; please refer to that response.</p>

Comment #	Comment	Response
	Vector Control has been killing our ecosystem which keeps mosquitoes in balance is not addressed.	
109	Since natural alternatives will help create a healthier ecosystem, why are not more alternatives mentioned in the DEE?	Appendix E is a thorough review of the known current alternatives that may be incorporated into a mosquito control program. Since the commenter has not listed any specific natural alternatives, it is not possible to respond here in more detail.
110	7. In February 2015 approximately one-half of our Don Edwards National Wildlife Sanctuary (the only urban one in the U.S.) was sprayed by SCCVC to control mosquitoes. There is endangered wildlife living here. Since SCCVC was mandated to first try alternatives to chemical and pesticide spraying, why didn't they consider building solar panels around the edge of our sanctuary? The electricity from these solar panels could then run pumps which would move the stagnant water where mosquitoes live and thus eliminate their habitat here. This is a far more healthy alternative for all of life.	<p>The District works closely with Don Edwards' staff, and annually reviews mosquito-control options and endangered -species concerns.</p> <p>The installation of solar panels to control water levels in Federal wildlife refuges is far beyond the scope of a mosquito control program. But the District works with property managers to address water management as a means of mosquito control whenever feasible. One example of this is recent discussion with the Don Edwards' staff regarding water-level management in New Chicago Marsh during the warmer months to avoid production of salt marsh mosquitoes.</p>
112	9. Why has SCCVC ignored the SCC County Supervisor's 2012 mandate to first use alternative approaches in their programs? Why is this not clearly addressed in the DEE? Three years is sufficient time to develop such a program.	The District is transparent about its operations, and follows BOS policy. Appendix E is a thorough review of the known current alternatives which can be incorporated into a mosquito control program. Note that IPM programs do not preclude the simultaneous use of several available alternatives to address specific situations.
113, 114	<p>Most of this DEE was clearly written by the State Vector Control for its many state Vector Control programs. Therefore, it lacks the details of exactly what is done in SCC and these need to be added.</p> <p>The DEE is too general and not specific to our Santa Clara County. It needs to be rewritten to address SCC's particular situation and problems.</p>	Please refer to the response to Comment 38, above.

Comment #	Comment	Response
120	Question: Who is paying for the West Nile spraying advertising on billboards, television, and the radio? I have talked with local and state legislators and this is not in their budgets. This advertising is putting fear into our citizens and not a positive thing.	The District has a dedicated budget for advertising to educate the public about vectors and associated public health risks, as well as District services. The District has not received any information to support the claim that its advertising program is putting fear into the citizens of the County, and that is not the intent of the advertising.
121	2) Has the District received any compensation, lab equipment, or anything of value from any Pesticide company I corporation(s)?	This question is unrelated to the EE. However, the answer is no.
125	3) According to Jennie Loft, acting communications manager for San Jose's Environmental Services Department, "Anything that IS not storm water or rainwater is considered a pollutant. If it goes into a storm drain, that pollutant will harm wildlife and habitats in the creeks". How can Vector Control stop the pesticides from fogging from being washed into the storm drains by lawn sprinklers and rain? Does this not out the District in violation of this rule?	<p>Although the rule being cited is not provided by the commenter, the subject matter is related to the District's compliance with the California Water Quality Control Board's NPDES permit. The District remains in compliance with this permit.</p> <p>Fogging products are applied at ultra-low dosage rates (three tablespoons per acre), and given the relatively short half-life of Zenivex (the District's current fogging agent) of 4 days in water and 1.5 days above ground, it is not likely that any appreciable amounts of the active ingredient (etofenprox) would arrive at the creeks through the storm water runoff system.</p>

2012 PEIR Scoping Summary Report Comments:

129	A thorough and complete Project Description should be included in PEIR to facilitate meaningful environmental review of potential impacts, mitigation measures, and alternatives.	The current EE represents a complete Project Description of the District's programs.
130	> Expectation that the Program will be presented as a series of distinct but related sequential activities (as the Project is described as "Programmatic").	Since the EE is not a PEIR, this expectation does not apply.

132	> Request for details concerning the chemical component phase of vector management, how chemicals will be utilized, and distribution patterns. Provide map concerning spray zone/No Spray Zones.	The “chemical component” of the District’s IPM program is thoroughly described in Appendix E and in Section 2.3.5 of the EE.
133	> What substances are proposed to be fogged or otherwise broadcast? Provide label, MSDS, individual substances with specific formulas and as formulated for broadcasting.	The “chemical component” of the District’s IPM program is thoroughly described in Appendix E and in Section 2.3.5 of the EE.
134	> Provide a “No Project” alternative where no release of pesticides is made, and natural processes take the primary role in control.	A PEIR would normally include a discussion of a “No Project” option. Since the EE is not a PEIR created pursuant to CEQA, the report does not discuss this subject. It is not clear what is meant by “natural processes” in the comment.
135	> Provide rationale for size of fogging areas and proposed actions for reducing size of these areas.	The District will include more information regarding the current fogging protocols but it does not plan to reduce the current average of about 3 square miles
140	> Discuss the population density (age, health, disabilities, etc) within the designated residential developments and list the effects of pesticides on their health and daily activity.	Detailed analysis on Human Health effects can be found in Appendix B, “Ecological & Human Health Assessment Report.”
142	> Concern that title holders of foreclosed/neglected properties that provided habitat for mosquitoes have not paid a fine.	From the inception of the District’s aerial surveillance program in 2007, it has catalogued thousands of neglected pools. It became apparent that during the recent economic downturn, issuing fines would not be an effective use of resources. In fact, less than one percent of inspections have required legal recourse; the vast majority of noncompliant pool owners cooperate willingly in the control efforts.
143	> What effects will the proposed chemicals have on furniture, fabrics, exterior finishes and roofs of home, car paint, windows of any kind?	The comment at page 2-28 in Appendix E states, “Pyrethrins are not cholinesterase inhibitors, are noncorrosive, and will not damage painted surfaces.” This holds true of the other chemical alternatives used by the District.
144	Please be advised that use of any sovereign lands for any part of the Program would require the District to obtain a lease from the CSLC [California State Lands Commission]. Examples of sovereign lands within the County, under CSLC jurisdiction, include Guadalupe River, Alviso Slough, Steamboat Slough, and Coyote Creek. CSLC staff is requesting that more detailed information and Program maps be provided to the CSLC for our review as they become available. As the Program proceeds, the CSLC requests that the District contact the	The land use issues are addressed primarily in Chapter 3, “Urban and Rural Land Uses.” District activities and operations do not constitute a use of sovereign lands. The concept of “use” involves issues such as oil and mineral rights, and leasing of land to access those resources.

	Public Land Management Specialist listed at the end of this letter for further information on the extent of the CSLC's jurisdiction, and whether a lease or permit may be required.	
145	> Consider direct/indirect effects of using mosquito fish as control.	The District's protocol for use of mosquitofish, which addresses these concerns, is described in Section 2.3.4.3 starting on page 2-16. A discussion of mosquitofish as a biological control agent is provided in Chapter 4 (Biological Resources – Aquatic). Further details can also be found at Section 2.8.1.1.3 in Appendix E.
146	> Describe the impact of pesticides on the proposed mosquito fish control strategy.	Effects of ULV applications on mosquitofish and other organisms can be found beginning at Section 4.1.1.4 in Appendix B. None of the chemical alternatives used by the District are toxic to fish when used according to their labels.
151	> Coordinate with DFG, CNDDV, USFWS, and IPaC to identify special-status plant or wildlife species. If impacts are found to be significant, PEIR should identify adequate mitigation measure to reduce impacts to lower levels.	Please refer to the response to Comment 21.
154	> Describe the role of mosquitoes within the food chain, and subsequent impacts if they were removed in terms of amphibians, birds, reptiles, fish and insects.	From Section 6.2.1 on page 6-7: although larval and adult mosquitoes serve a positive role as prey items for some invertebrates, fish, avian insectivores, bats, small reptiles and amphibians, the loss of a focus area (infested or large population of mosquitoes) will not affect the predator populations overall. Many species of mosquitoes are short lived or seasonal so they generally serve as only one prey source for predators. The decline in one prey species generally means that a predator will shift its food preference. No predators are known that rely exclusively on mosquitoes (larval or adult) for prey.
155	> Upon application and broadcast of pesticides, what is the fate and transport of these chemicals? Droplet size, dispersal patterns given wind, conversion products (both in storage and environment) and impacts of conversion products.	Discussion of pesticides begins at Section 6.2.7 in the EE, which includes specific reference points for further detail in Appendix B, Risk Assessment.
162	> Provide a list of all rodent or wildlife species that could also be considered a threat to humans and management activities for said threat.	Discussion of the various vectors and their associated threats to human health begin at Section 2.2, Program Objectives.

164	> Describe, quantify, and evaluate impacts of dredge or fill activities.	Discussion of these activities begins at Section 2.3.2.1, Mosquitoes. The District will modify this section to clarify that there has been no use of these techniques by the District since 1995.
165	> Upon application and broadcast of pesticides, what is the fate and transport of these chemicals? Droplet size, dispersal patterns given wind, conversion products (both in storage and environment) and impacts of conversion products.	Please refer to the response to Comment 155.
167	> Request for a specific section within EIR for dealing with areas of controversy.	A short overview of the primary concerns is provided at ES.3. Some more detail is included at Section 1.4.1, and finally a detailed discussion of concerns begins at Section 5.1.
168	> Prohibit use of adulticides in vernal pool habitat (ensure only Bti or Bs will be applied in pools with California tiger salamander (CTS), vernal pool tadpole shrimp, or vernal pool fairy shrimp), within listed species habitat (CTS, vernal pool tadpole shrimp, vernal pool fairy shrimp, California red legged frog (CRLF), California clapper rails, salt marsh harvest mice), in open water, or at high tide.	The District's protocols related to this concern are addressed at Section 2.8.2, beginning on page 2-36 under "BMPs for Applications of Pesticides, and Surfactants".
169	> If adulticides must be used, ensure use is justified with documented, mosquito-borne disease activity within or within flight range of the tidal marsh.	The District complies with current USFWS mosquito management guidelines. However, these plans related to Federal properties are in continual development and refinement with reference to the issue of disease vs. nuisance, and there is increasing recognition that nuisance mosquitoes have a negative impact on human health.
172	> How many human cases of WNV have been documented in SCC? Proof? Provide lab documentation and source showing this testing confirming the presence of the virus.	It is beyond the scope and intent of this EE to provide laboratory documentation. According to westnile.ca.gov, SCC has had 28 confirmed human WNV cases (as of January 29th, 2016).
183	"the District intends to prepare written responses to all public comments to consider and address all public concern." ES-1 Are these comments and the earlier comments to become part of this document?	Comments and responses are being placed into their own separate documents, which will remain associated and placed with the EE and its Appendices.
185	Executive Summary, EC-1: "However, upon further review of the options available to accomplish this goal for local residents, the County has instead decided to issue a locally-focused, comprehensive environmental study, instead of the PEIR, that will	The EE is not an environmental impact report created under CEQA, because the District is currently CEQA compliant. The District filed and was approved for a CEQA exemption in 2007, and currently is categorically and statutorily exempt under

	<p>thoroughly inform the public about the environmental impacts associated with the District's activities authorized under the vector-control plan, specific to this County". An Environmental Impact Report is not to "thoroughly inform the public." It is to provide the decision makers a range of studied options for which to decide public policy.</p>	<p>CEQA. At that time, the District produced a Comprehensive Description and Analysis of Programs and Services.</p>
187	<p>Western Equine Encephalomyelitis, St. Louis Encephalitis (SLE), Malaria and many other tick and mosquito diseases are described in this document BUT they are not present here, so why are they in this document? Is this filler to intimidate people so they cannot get to the issues. This is said to be a document concerning Vector Control's response to local conditions so why are all these diseases of other places and climates appearing here?</p>	<p>Vectors and the diseases they transmit are dynamic biological systems which can vary widely over time. Prior to the arrival of WNV in California, WEE and SLE were the two major vector-borne viral diseases in the State, although WEE has not been documented in SCC since the 1960s. Malaria (as well as Chikungunya and Dengue viruses) can be transmitted locally if a human traveler from malaria-endemic areas has an active infection and gets bitten by local <i>Anopheles</i> mosquitoes. It is also known that bubonic plague occurs naturally in local rural rodent species.</p> <p>Another example of how rapidly the vector-borne disease climate can change is the recent expansion of Chikungunya (ChikV) virus into the western hemisphere. The number of diagnosed human cases in Central and South America have risen from zero in mid-2013, to hundreds of thousands since that time, and local transmission of this virus has been documented in Florida. In addition, the <i>Aedes aegypti</i> and <i>Aedes albopictus</i> vectors of ChikV appear to now be established in California, the former being detected recently in both San Mateo and Alameda Counties.</p>
189	<p>Relying on registration is no guarantee or even an indication of safety or benign effect, especially for broad scale use. For a long time chlorpyrifos (Dursban) was registered for use inside dwellings and other buildings. ...</p>	<p>The pesticide labels that govern the use of the District's chemical control agents, based on extensive testing in both the laboratory and the field, represent a great deal of knowledge about each product. Many of the products being re-evaluated at present were registered at a time when the requirements were not as stringent as they are now. Before these products come to market, they must pass a barrage of tests demonstrating their safety to humans and the environment, as well as their efficacy.</p>

190	<p>Neither the EPA nor the CDPR do independent testing for toxic or other effects. They accept the formulator's "studies" for what the chemical does and does not do.</p>	<p>In fact, although Federal EPA and the California Department of Pesticide Regulation are not testing the products, there are strict requirements in place governing the certification and qualifications of the researchers and laboratories who do. There are also extensive quality assurance standards and guidelines (see http://is.gd/arWOhv and http://is.gd/NaWLd2) that apply while the testing is being done. Given the extent of the information required, some of the testing may be delegated to independent certified laboratories and research companies who have nothing to gain and everything to lose by submitting false information to the regulatory agencies.</p> <p>It may cost a manufacturer ten years and hundreds of millions of dollars to get a single product through the testing gauntlet. The notion that the results of the testing are somehow tainted because the chemical companies pay for the testing facilities to do the work is unsupported and false.</p>
191	<p>Zenivex was "conditionally registered" in 2010 and this product seems to have been "conditionally registered" through at least part of 2014 and for most of those three years it has been used by Vector Control for fogging. The MSDS accurately admits it kills fish and bees. As we have seen here, it also apparently kills birds and their food, frogs and their food, mosquito eaters and their food, and as it is fogged just at the time bats come out it may also impact bats as used.</p>	<p>CDPR published a final decision to register Zenivex in 2011. See http://www.cdpr.ca.gov/docs/registration/nod/2011-03.htm</p> <p>Comments re the environmental impacts of ULV fogging with Zenivex are addressed in the Master Comments section.</p>
197	<p>There is no such thing as a "proven safe" dose of pesticide. Effects can show themselves even 45-50 years later as they have for Agent Orange Vietnam vets who now show chunks of skin peeling off 45 years later. Toxic chemicals are rarely tested for more than a few months, the tests never done by independent researchers prior to registration.</p>	<p>This statement is simply untrue. One of the outcomes obtained from all of the toxicity studies needed to get a product to market is called a No Observable Effect Level (NOEL). The NOEL is the point at or below which the effects of a toxic substance cannot be seen.</p> <p>The safe and effective use of pesticides, and medicines for that matter, is based on sound science leading to a wealth of information which allows a sound risk assessment. Speculation about what might happen decades into the future is not science and does not provide any additional benefits. The comment does not contain any evidence to support the assertions that</p>

		“chemicals are rarely tested for more than a few months”, and that “testing is never done by independent researchers.”
199	They fog right on homes advising people not even to close windows, thus actively poisoning people. This sensitive receptor, asked for accommodation for disability but it has not stopped Vector Control.	The District has consistently stated that generally speaking, there is no need to close windows given the ultra-low-volume used in fogging operations. This language is in line with that provided by CDPH. However, the District also provides information for concerned individuals regarding ways to minimize exposure, including closing of windows and turning off ventilation systems during the fogging period.
203	TESTING, Page 2-7 (37) This document is apparently designed to be used by many Vector Control Districts so the routine for testing may, but may not be the routine of the SCC. Vector Control District. The actual routine should be set forth.	The first paragraph on Page 2-7 is an accurate description of the testing for WNV conducted by the District.
205	2.3.2.1 Mosquitoes, §10 Asserts this district "maintains or improves habitat values for desirable species." No examples were given or described. Which species are desirable? Which habitats? The District asserts "endangered species review," however the Baylands, with it's endangered species was the target of pesticide fogging in spite of there being no West Nile there.	<p>The meaning of this statement is described in paragraph 9, which reads “Cultural practices include vegetation and water management, placing culverts or other engineering works, and making other physical changes to the land. They reduce mosquito production directly by improving water circulation and indirectly by improving habitat values for predators of larval mosquitoes (fish and invertebrates), or by otherwise reducing a site’s habitat value to mosquito larvae.”</p> <p>The District will remove the redundant language in paragraph 10.</p>
206	2.3.2.1.1The District has provided mosquito fish for fresh water bodies but has systematically killed them off with their pesticide fogging.	Effects of ULV applications on mosquitofish and other organisms can be found beginning at Section 4.1.1.4 in Appendix B. None of the chemical alternatives used by the District are toxic to fish when used according to their labels. The comment does not provide any evidence that the District’s fogging operations have systematically killed fish of any kind.
207	As for the birds, ducks and geese, the mosquitoes and their larva provide a portion of the food for these animals. The District has claimed a very large bird kill from the West Nile Virus largely based on the technique of swabbing the beaks of birds, throwing out the carcass, looking for West Nile antibodies in the swabs, but utterly failing to test the birds for pesticide poisoning from their pesticide	<p>The idea that mosquitoes form a substantial part of the food supply for wildlife and birds is addressed in the Master Comments section.</p> <p>Given the exceedingly low toxicity of the fogging products used by the District to mammals and birds, there is no reason to</p>

	<p>fogging. They are not even tested for starvation, their food having been killed by the pesticide fog. The actual reason for the bird deaths is not investigated.</p>	<p>suspect the ULV applications are causing bird mortality. It is not the intent of the District to perform bird autopsies. The testing indicates whether or not a bird was infected by WNV. Over 80% of the nearly 1,000 dead birds tested during 2014 were WNV-positive.</p>
208	<p>The report says “vegetation management” but does not mention the types of vegetation that they intend to “manage” or how it is to be managed. (In the later chapters it calls for certain removals.) .) This report says they may mandate the use of herbicides even though herbicides are extremely toxic and can poison the recharge water and the Bay. This report contains no disclosure of these chemicals they may mandate. No mention is made of the toxic aspect of their “vegetation management” in this document. Further the vegetation they may remove, or demand a property owner remove, may be critical habitat for the predators of the mosquitoes.</p>	<p>There are many types of vegetation in the aquatic and riparian habitat throughout the County. The District typically conducts vegetation management activities in collaboration with other public stakeholder agencies working under special permits.</p> <p>Section 3.5.3.2 in Appendix E references the very short list of herbicides which could potentially be used by the District. An even more detailed listing is found in Table 3-2 of Appendix B.</p> <p>In current practice, the District is not using herbicides. The related information and materials are intended to describe what the District might do if the need arises and the potential impacts of these operations. The District will include language into the final report which makes this point clear.</p> <p>The District is fortunate that in Santa Clara County, most of the vegetation management activities used by other districts are performed here by the Santa Clara Valley Water District. The District estimates that the dollar value of the work performed by the SCVWD averages about \$160,000 annually.</p>
209	<p>This document though voluminous actually gives almost no specific information on how this is all to be done, or how it is to be done in an environmentally acceptable manner. It does not provide a range of alternatives as required by the California Environmental Quality Act.</p>	<p>The EE is not being created as a CEQA document. The commenter has not provided any example or evidence that the EE "gives almost no information on how this is all to be done".</p>
210, 211	<p>The Bayland mosquitoes are not vectors of anything so should not even be a part of the Districts business.</p> <p>Yet this District uses helicopters to spread methoprene, a hormone disrupter, and Bti, a digestive bacteria disrupter, in the Baylands to kill off the mosquitoes at a time of year exactly when the</p>	<p>The definition of “vector” as stated in the California Health and Safety Code section 2002(k) is “any animal capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including, but not limited to, mosquitoes, flies, mites, ticks, other arthropods, and rodents and other vertebrates.” Aggressive day-biting mosquitoes which breed in the marshes fit this definition.</p>

	<p>mosquitoes are emerging to feed hundreds of thousands of migrating birds.</p>	<p>Methoprene is one of the least toxic materials used by the District. The District is unaware of any evidence to support the notion that methoprene is a “hormone disruptor,” nor is any evidence provided in the comment. In fact, methoprene is not in any way related to mammal or bird hormones. It mimics certain insect juvenile hormones which regulate the transformation of larval mosquitoes into adults, and kills mosquitoes during that phase of their development.</p> <p>The comment does not provide any references or evidence that Bti is a “digestive bacteria disruptor.”</p>
215	<p>2.7.1.2, page 65: No State Water Resources Control Board Permit has been issued for either the Baylands toxic applications nor the direct and deliberate contamination of our reservoirs. These contamination projects do not have a West Nile excuse. Furthermore the pesticide Zenivex 4E was not in a District's permit. The Vector Control District was in violation of their permit for three years for using Zenivex 4E and has been issued a violation. The Water Board may be exempt from CEQA. The District is not.</p>	<p>The District’s NPDES Permit is current. The inadvertent omission of Zenivex 4E from the District’s Pesticide Application Plan led to a minor violation and was corrected in 2014.</p> <p>With regard to the CEQA Exemption, The Santa Clara County Superior Court recently held that SCCVD’s program did not violate the California Environmental Quality Act, which requires that state and local agencies identify the significant environmental impacts of their actions, because the District had fully informed the citizens of Santa Clara County about its program, dating back to 2007.</p>
218	<p>"All applicators and handlers will use proper personal protective equipment." This is not the case as drivers fogging pesticide have been observed in shirt sleeves with no protective gear.</p>	<p>The caution statement on the Zenivex 4EC label reads “Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Applicators and other handlers must wear long-sleeved shirt, long pants, socks and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and launder before reuse. Repeated exposure to etofenprox can cause skin irritation.” There is no stated protective gear required beyond this.</p> <p>The vehicles are operated with their ventilation system set to positive pressure to prevent entry of the fogging agent into the cab of the vehicle. In the event that the fogging agent does</p>

		enter the cab of the vehicle The District provides additional protective equipment in the form of disposable respirators.
220	How is one to avoid repeated exposure when it hangs in the air as a fog and may re-arise for several days, must be breathed as in a pesticide fog because there is no fresh air, and coats the skin, eyes clothing and surfaces one must touch?	ULV fogging operations produce a temporary fine mist which drifts with the wind currents. There is no known mechanism by which the fogging agent can “re-arise for several days.” The mist created consists of microscopic droplets applied at a total amount of three tablespoons per acre, and so the amount is too low to produce the other effects described by the commenter.
221	"Urban ULV Mosquito Control Applications For control of resting or flying adult mosquitoes, biting flies and non-biting midges in areas such as utility tunnels, sewers, storm drains and catch basins, pipe chases, underground basements, underground passages, parking decks, crawl spaces or uninhabited buildings, apply Zenivex® E4 RTU using mechanical foggers, hand-held or truck-mounted ULV equipment, thermal foggers or other spray equipment suitable for this application. Apply Zenivex® E4 RTU at rates up to but not exceeding 0.0070 pounds of etofenprox per acre. [Emphasis added.] Nowhere does this label say: occupied residential houses. It specifically says: ""uninhabited buildings"". Thus Zenivex is fogged by the District on occupied residential neighborhoods, workplaces, commercial buildings, schools and other public facilities in outright violation of the label.	Page 2 of the pesticide label for Zenivex, under “GENERAL,” states: “ZENIVEX® E4 RTU is an effective insecticide used at low volumes to control adult mosquitoes, non-biting midges, biting and non-biting flies. Use Zenivex® E4 RTU undiluted as Ultra Low Volume (ULV) for the control of pest species in or near residential, industrial, commercial, urban, recreational areas, woodlands, golf courses, and other areas where these pests are a problem.” The section cited by the comment references certain specific situations encountered in urban environments, but does not restrict use exclusively to them.
222	Application rates, amounts: The Specimen Label includes a table linking pesticide application rates and amounts to vehicle speed. Thus the assertion that ultra low rates are used could very well be 100% false as the vehicles cannot keep a particular speed as they go in and out of neighborhood streets and often must stop, meaning very heavy applications in intersections and other places where the vehicle must slow or stop. Spraying does not stop at corners of blocks, so corner lots can be doused at least twice doubling the dose. The Specimen Label says: "Apply when wind is ? 1 mph. Do not apply when wind speeds exceed 10 mph." Nevertheless the Districts fogging has proceeded when announced despite absolutely still air,	<p>The District’s fogging units are equipped with radar speed-sensing technology which regulates the output of fogging material based on vehicle speed. If the vehicle slows down, the output of the fogging unit is adjusted accordingly to achieve the desired application rate.</p> <p>The vehicle application areas are pre-determined, and the truck operations proceed so that application is not duplicated. In cul-de-sacs, the vehicles enter with the fogging units turned off, and activate it on the way out of the cul-de-sac.</p> <p>Since the fogging volume is only three tablespoons of liquid per acre, the very fine mist will drift with the air currents. Fogging</p>

	<p>and when wind speeds have been well over 10 miles per hour in violation of the label.</p>	<p>operations are conducted in winds at or above 1mph, which is the typical situation encountered. There is, however, some variability in wind currents throughout the fogging zone. The District also reviews online private weather station data prior to each operation, but often those stations are not located within the fogging zone. Each vehicle crew is also equipped with wind-measuring devices to ensure that winds are sufficient. The District has not encountered winds over 10 mph during any fogging operations.</p>
227	<p>The code requirement for posting notice when pesticide is applied to public property has been in effect the whole time of the West Nile issue. I have seen no such posting in all this time.</p>	<p>County Ordinance Code Section B28-7 does not apply to vector control activities.</p> <p>The District does however deliver tens of thousands of informational door-hangers to all residents and businesses within each fogging zone prior to operations, and also publishes information to Twitter, SCCVECTOR iPhone and Android apps, Yahoo email notice group, AlertSCC and our home page.</p>