

## Initial Study Checklist

1. Project title:  
**Orange County Vector Control District Integrated Vector Management Practices:  
Orange County, California**
2. Lead agency name and address:  
**Orange County Vector Control District  
13001 Garden Grove Boulevard  
Garden Grove, CA 92843- 2102**
3. Contact person and phone number:  
**Albert J. Beck, Principal Analyst (530) 342-5991 ext 201**
4. Project location:  
**All of Orange County**
5. Project sponsor's name and address: **Same as above**
6. General plan designation: **Mixed**                      7. Zoning: **Mixed**
8. Description of project: **Covers all ongoing activities of the Orange County  
Vector Control District**
9. Surrounding land uses and setting: Briefly describe the project's surroundings:  
**Mixture of urban and natural lands plus limited agricultural areas**

Other public agencies whose approval is required: Regional Water Quality Control Board, (larvicide and adulticide permits), U.S. Fish & Wildlife Service, (blood sampling [take] of migratory and resident birds for viruses). Additional permits or agreements may be required from the California Department of Fish and Game, the California Regional Water Quality Control Board, and the U.S. Army Corps of Engineers

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics

Agriculture Resources

Air Quality

- Biological Resources
- Hazards & Hazardous Materials
- Mineral Resources
- Public Services
- Utilities/ Service Systems

- Cultural Resources
- Hydrology /Water Quality
- Noise
- Recreation
- Mandatory Findings of Significance

- Geology / Soils
- Land Use / Planning
- Population/ Housing
- Transportation/Traffic

DETERMINATION:

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

<p style="font-size: 1.2em; font-family: cursive;">Albert Beck (AS)</p> <hr style="border: 0.5px solid black;"/> <p>Signature</p>	<p style="font-size: 1.2em; font-family: cursive;">August 19, 2010</p> <hr style="border: 0.5px solid black;"/> <p>Date</p>
<p style="font-size: 1.2em; font-family: cursive;">Albert Beck</p> <hr style="border: 0.5px solid black;"/> <p>Printed Name</p>	<hr style="border: 0.5px solid black;"/> <p>For</p>

## EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parenthesis following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-sensitive screening analysis).
- 2) All answers must take into account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration, Section 1506(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable, legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into a checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria of threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance

# INITIAL STUDY

## Orange County Vector Control District Integrated Vector Management Practices: Orange County, California

### Executive Summary

**This Initial Study analyzes the ongoing methods utilized by the Orange County Vector Control District (OCVCD) in the control of mosquitoes, rats, red imported fire ants, black flies, and miscellaneous public health vector and nuisance species. Review of the information available from the OCVCD indicates that additional assessment is required on biological resources, water quality, air quality, and hazardous materials. A Program Environmental Impact Report focusing on these topics will be prepared.**

### 1.0 Introduction

This Initial Study is prepared using documents supplied by OCVCD and with information supplied by staff members of OCVCD. The provided information was assessed to determine if the information is adequate to determine if OCVCD operations create any adverse environmental impacts, have the potential to create any adverse impacts, or have no adverse environmental impacts.

Mosquito and vector control districts operate under the California Health and Safety Code § 2000-2093. The current law was approved in 2002 and contains explicit policy statements that were not included in the original 1939 statute. The opening provisions of the current law state that “surveillance, protection, abatement and control” are the primary purposes of these districts. Under Article 4 of the California Health and Safety Code § 2040-2055, a district may exercise its powers to check for vectors, take any and all action to control vectors and vector-borne disease, including abatement proceedings within the district and in adjoining lands from which vectors and vector-borne disease may enter the district.

## **2.0 Project Description**

### **2.1 Location**

The project area includes all land within the political boundaries of Orange County, or 798.7 square miles, and immediately adjacent areas which may produce vectors and create the potential for disease transmission within Orange County (Figures 1 & 2).

### **2.2 Project Background and Proposed Actions**

The Orange County Mosquito Abatement District was originally established in 1947. In 1975, rodent and fly control, including bubonic plague surveillance, was added to the District's functions, and the District's name was changed to Orange County Vector Control District (OCVCD). Control of red imported fire ants (RIFA) was added in 2004. OCVCD is supported by property taxes, a service fee (added in 1990-1991), and a Proposition 218 assessment approved by the voters in July 2004. OCVCD also currently provides vector control under contract to the University of California at Irvine, the San Joaquin Marsh of the University of California Natural Reserve System, Orange County Sanitation District, the Irvine Ranch Water District, the California State Lands Commission, and the Naval Weapons Station at Seal Beach.

OCVCD uses Integrated Vector Management (IVM) techniques to guide its comprehensive control programs. IVM includes surveillance for vectors and disease, source reduction, public education, and chemical and biological control. Future objectives of the current programs involve the increased use of vector species- or genus-specific chemicals and species- and genus-specific biological control, use of less persistent chemicals, and improved methods of delivery, including replacement of gasoline-fueled vehicles with those using alternative fuels. Public information efforts may be expanded or modified as new disease threats arise.

### **2.3 Permits and Approvals**

As an independent special district, OCVCD is its own lead agency. Mosquito Abatement and Vector Control Districts operate under cooperative agreements with the California Department of Public Health (CDPH). These agreements specify that the Districts only use pesticides on the CDPH official list of pesticides, maintain pesticide use reports for review by appropriate government agencies, and do not produce harmful residues on agricultural products.

The State Water Resources Control Board issues the National Pollutant Discharge Elimination System (NPDES) permits for the discharge of aquatic pesticides to surface waters of the United States. OCVCD currently has two current larvicide permits for the discharge of aquatic pesticides to Surface Waters of the United States, Water Quality Order 2004-0008-DWQ from both the Santa Ana (Region 8) and San Diego (Region 9) Regional Water Quality Control Boards.

Additional permits and agreements may be required for future operation from the U.S. Army Corps of Engineers, the California Department of Fish and Game, Regional Water Quality Control Board, and/or the U.S. Fish and Wildlife Service.



Figure 1. Location of Orange County, California.

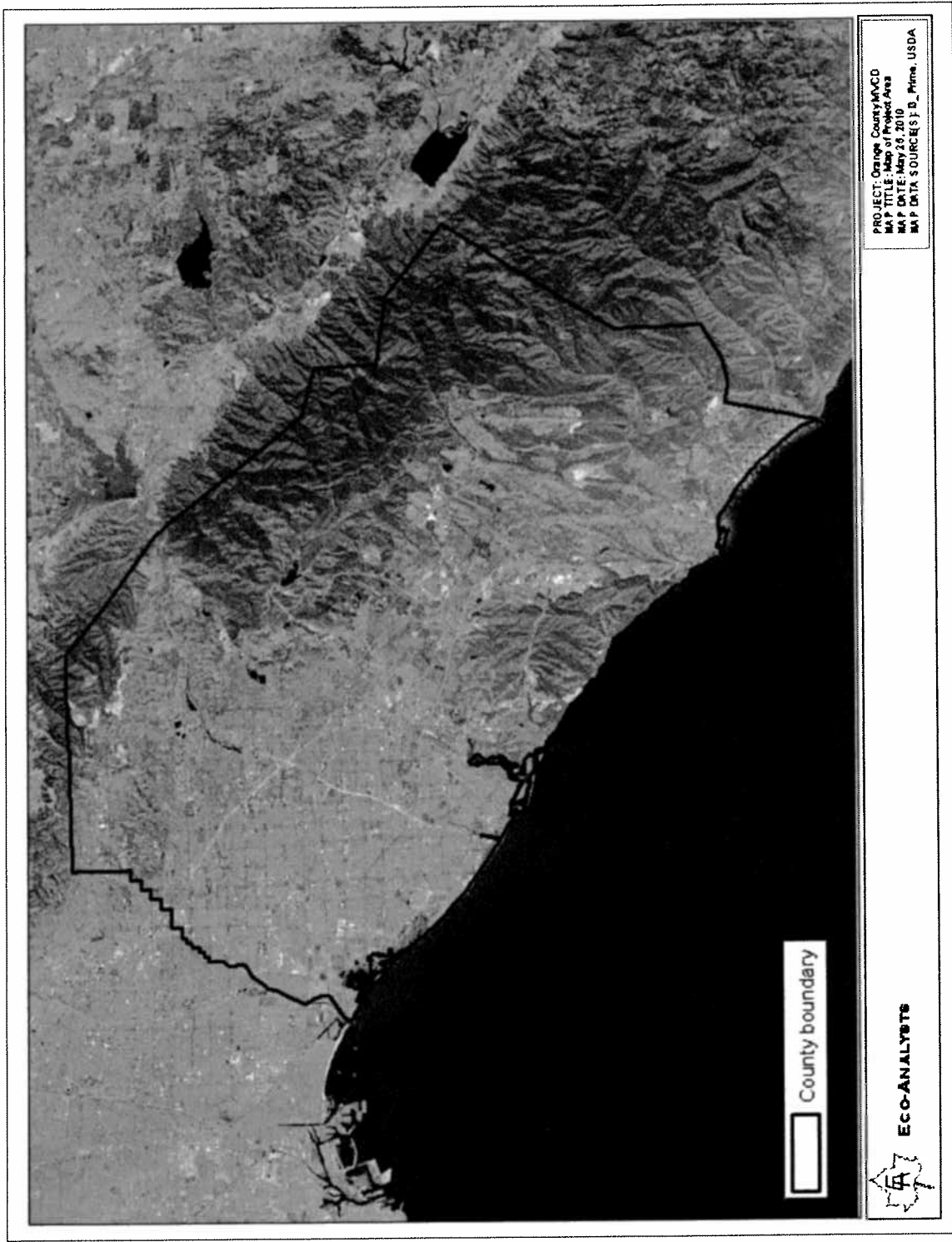


Figure 2. Aerial map of Orange County, California.

### 3.0 Evaluation of Potential Environmental Effect

Following are environmental effects checklists based on criteria suggested by the State of California Office of Planning and Research and presented in Appendix G of the current California Environmental Quality Act (CEQA) Guidelines (Public Resources Code § 21000 et seq.). A discussion of reasons for the conclusions in the checklist is presented below along with references to supporting data. As required by CEQA, measures to mitigate the potentially significant adverse impacts of the project follow in Section 4.

#### 3.1 Aesthetics

Table 1. Environmental Effects Checklist for Aesthetics

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>AESTHETICS</b> -- Would the project:					
a) Have a substantial adverse effect on a scenic vista?				X	None
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X	None
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X	None
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				X	None

Source: OCVCD, Orange County General Plan Scenic Element.

OCVCD operations do not create any physical structures that would obscure or otherwise impact any recognized scenic resources), scenic vistas, degrade the visual character of the county, or create new sources of light and glare. No impacts to aesthetics are identified.

3.2 Agricultural Resources

Table 2. Environmental Effects Checklist for Agricultural Resources

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>AGRICULTURE RESOURCES</b> -- Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X	None
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X	None
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X	None

Source: Orange County General Plan, Resources Element.

Activities of the OCVCD will not convert prime farmland, do not conflict with existing agricultural zoning, or result in the conversion of any farmlands to non-agricultural uses. No impacts to agricultural resources are identified.

3.3 Air Quality

Table 3. Environmental Effects Checklist for Air Quality

Effect	Potentially Significant Impact	Less Than Significant with Mitigations Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>AIR QUALITY</b> -- Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?				X	None
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X			Yes
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?		X			Yes
d) Expose sensitive receptors to substantial pollutant concentrations?				X	None
e) Create objectionable odors affecting a substantial number of people?				X	None

Source: South Coast Air Quality Maintenance District (SCAQMD) Guidelines.

Vector control treatments involve the use of a fleet of motor vehicles for application of chemicals. Air quality impacts from operation of motor vehicles must be estimated. Impacts on air quality and greenhouse gases must be assessed using Environmental Protection Agency generation data and compared to SCAQMD thresholds to determine if vector control activities contribute substantially to any existing air quality violation or result in a cumulatively considerable net increase of any criteria pollutant. The OCVCD has a vehicle replacement policy that includes an analysis of using alternative fuel vehicles, as vehicles in the current fleet need replacement. Chemical sprays used in vector control, in general, no longer contain odor causing substances and for mosquito control are applied in very small amounts over large areas (e.g., less than 0.5 ounces per acre). Therefore, vector control activities are unlikely to cause objectionable odors or affect sensitive receptors.

*Potential Impacts: To be determined.*

**MITIGATION MEASURE(s): to be determined.**

3.4 Biological Resources

Table 4. Environmental Effects Checklist for Biological Resources

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Needed
<b>BIOLOGICAL RESOURCES -- Would the project:</b>					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X			Yes
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		X			Yes
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X		Yes
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X	None
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X	None
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X	None

Source: Orange County Central and Coastal Region Natural Community Conservation Plan/Habitat Conservation Plan, California Natural Diversity Data Base (CNDDB).

OCVCD cooperates with the California Department of Fish and Game and U. S Fish and Wildlife Service in its field practices. OCVCD works within the local Habitat Conservation Plan areas but may require incidental take permits for impacts created in gaining access to mosquito breeding areas. The OCVCD will develop a Safe Harbor Agreement if native fishes are used for larval mosquito control.

USFWS has identified a number of listed plant and wildlife species as occurring in Orange County. Eco-Analysts reviewed the USFWS list with consideration to the habitats present in the study area. CNDDDB records also identified a number of wildlife species of concern that occur within the County.

*Potential impacts: To be determined.*

**MITIGATION MEASURE(S): To be determined.**

**3.5 Cultural Resources**

Table 5. Environmental Effects Checklist for Cultural Resources

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Needed
<b>CULTURAL RESOURCES -- Would the project:</b>					
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X	None
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				X	None
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X	None
d) Disturb any human remains, including those interred outside of formal cemeteries?				X	None

Source: OCVCD Project Description.

No modification of historical resources is proposed and no surface disturbance is anticipated at any known archaeological site. No impacts to cultural resources are identified.

3.6 Geology and Soils

Table 6. Environmental Effects Checklist for Geology and Soils

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Needed
<b>GEOLOGY AND SOILS -- Would the project:</b>					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X	None
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X	None
ii) Strong seismic ground shaking?				X	None
iii) Seismic-related ground failure, including liquefaction?				X	None
iv) Landslides?				X	None
b) Result in substantial soil erosion or the loss of topsoil?				X	None
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X	None
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X	None
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X	None

Source: OCVCD Project Description.

No surface soil disturbance is proposed by OCVCD during vector control activities. No structures that might be susceptible to seismic activity are planned by OCVCD. No impacts to geology and soils are identified.

3.7 Hazards and Hazardous Materials

Table 7. Environmental Effects Checklist for Hazards and Hazardous Materials

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Needed
<b>HAZARDS AND HAZARDOUS MATERIALS -- Would the project:</b>					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X		Yes
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X		Yes
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X	None
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X	None
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X	None
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X	None
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X	None
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?				X	None

Source: OCVCD Operations reports. California Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) Water Quality Order **2004-0008-DWQ** for Vector Control Permit No. CAG 990004.

Hazards presented to the public from chemicals used for vector control need summary and additional review. The OCVCD has an accidental spill policy to reduce the risk of accidental release of large quantities of vector control chemicals into the environment that needs to be formally adopted by the Board of Trustees. The field operations of the OCVCD are not located on hazardous materials sites, will not result in a safety hazard for people residing or working near airports or airstrips, will not impair emergency response or evacuation plans, nor expose people or structures to risk of wildfire.

### 3.8 Hydrology and Water Quality

Table 8. Environmental Effects Checklist for Hydrology and Water Quality

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>HYDROLOGY AND WATER QUALITY -- Would the project:</b>					
a) Violate any water quality standards or waste discharge requirements?			X		Yes
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?				X	None
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?				X	None
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?				X	None
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X	None
f) Otherwise substantially degrade water quality?				X	Yes
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X	None

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				X	None
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X	None
j) Inundation by seiche, tsunami, or mudflow?				X	None

Source: Orange County General Plan , Resource Element, OCVCD annual reports.

Chemicals used in the control of mosquitoes and other vectors have potential to affect water quality and this aspect of OCVCD's field operations needs further evaluation. NPDES permits should be evaluated and published studies of pesticide applications, dispersal, residues, and persistence should be discussed.

*Potential Impacts: To be determined.*

**MITIGATION MEASURES(s): To be determined.**

**3.9 Land Use and Planning**

Table 9. Environmental Effects Checklist for Land Use and Planning

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>LAND USE AND PLANNING -- Would the project:</b>					
a) Physically divide an established community?				X	None
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X	None
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X	None

Source: Orange County General Plan, Land Use Element.

No changes to community boundaries are proposed by OCVCD or result from its activities. Vector control activities do not conflict with land use plans or local NCP/HCCPs. No impacts to land use

and planning are identified.

### 3.10 Mineral Resources

Table 10. Environmental Effects Checklist for Mineral Resources

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>MINERAL RESOURCES</b> -- Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X	None
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X	None

Source: Project Description.

No removal of mineral resources is proposed, no over-covering of resource recovery sites is proposed. No impacts to mineral resources are identified.

### 3.11 Noise

Table 11. Environmental Effects Checklist for Noise

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>NOISE</b> -- Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X	None
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?				X	None
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X	None

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X		None
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X	None
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X	None

Source: OCVCD, Orange County General Plan

Operations of the OCVCD do not expose persons to noise levels in excess of standards or to excessive ground-borne vibrations. Operation of pesticide spray rigs may produce temporary or short term periodic increases in local ambient noise levels, but only for the duration of the treatments, and, therefore, are not considered significant. Operations do not routinely involve the use of airports and would not expose people near airports to excessive noise levels.

### 3.12 Population and Housing

Table 12. Environmental Effects Checklist for Population and Housing

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>POPULATION AND HOUSING -- Would the project:</b>					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X	None
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X	None
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	None

Source: OCVCD Project Description

No changes in housing stock will result from OCVCD activities. No impacts to population and housing are identified.

### 3.13 Public Services

Table 13. Environmental Effects Checklist for Public Services

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>PUBLIC SERVICES</b> – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
a) Fire protection?				X	None
b) Police protection?				X	None
c) Schools?				X	None
d) Parks?				X	None
e) Other public facilities?				X	None

Source: OCVCD Operations plan.

Neither the OCVCD, nor its activities, generates a need for other public services. No impacts to public services are identified.

### 3.14 Recreation

Table 14. Environmental Effects Checklist for Recreation

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>RECREATION</b> --					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X	None
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				X	None

Source: OCVCD Project Description.

Vector control activities will not generate increased use of recreational facilities. The only impact upon recreation facilities and opportunities will be a decrease in nuisance species and disease vectors. No impacts to recreation are identified.

**3.15 Transportation/Traffic**

Table 15. Environmental Effects Checklist for Transportation/Traffic

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>TRANSPORTATION/TRAFFIC -- Would the project:</b>					
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X	None
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X	None
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X	None
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X	None
e) Result in inadequate emergency access?				X	None
f) Result in inadequate parking capacity?				X	None
g) Conflict with adopted policies plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X	None

Source: OCVCD Project Description.

An outbreak of any vector-borne disease within the OCVCD may cause a temporary increase in motor vehicle trips, similar to that which occurred when West Nile Virus first appeared in Orange County. Traffic loads are not anticipated to increase substantially and levels of service will not be exceeded. Field activities will not result in change in air traffic, increase hazards or result in inadequate parking or emergency access. Vector control activities do not conflict with adopted transportation policies. No impacts to transportation/traffic are identified.

3.16 Utilities and Service Systems

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Special Studies Required
<b>UTILITIES AND SERVICE SYSTEMS</b> -- Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X	None
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X	None
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X	None
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X	None
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X	None
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X	None
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X	None

Source: OCVCD Project Description.

OCVCD operations will not change any current demands for wastewater treatment, water supply, or storm water facilities or affect solid waste disposal. No impacts to utilities and service systems are identified.

## 4.0 Mandatory Findings of Significance

Table 17. Environmental Effects Checklist for Mandatory Findings of Significance

Effect	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>MANDATORY FINDINGS OF SIGNIFICANCE --</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Source: State and federal requirements for pesticide application and source reduction, Cooperative Agreement with the CDPH, NPDES permits.

Some vector control activities of the OCVCD have the potential to affect plant and animal communities, particularly sensitive species. Published reports of scientific research on the impacts of pesticides on non-target species must be analyzed.

## **5.0 Mitigation Measures**

Implementation of design measures included in the project proposal and compliance with existing regulations will greatly minimize project impacts and result in “Less Than Significant” adverse environmental impacts. Existing environmental regulations applicable to the project include those of the California Endangered Species Act through the State of California Department of Fish and Game, air quality requirements through the South Coast Air Quality Maintenance District, migratory bird regulations through the US Fish and Wildlife Service, and hazardous materials regulations administered by the Regional Water Quality Control Board, the California Department of Public Health, and the Department of Pesticide Regulation. Mitigations will include the Best Management Policies being completed by the OCVCD. When finally adopted, they will become part of the project description and not mitigations.

## **6.0 Mitigation Monitoring Plan**

Implementation of a mitigation monitoring or reporting program is required under CEQA whenever a public agency approves a project that may have a significant adverse effect on the environment and the agency requires modification of the project or implementation of mitigation measures to avoid or substantially lessen the adverse effects of the project. The requirement to prepare a mitigation monitoring or reporting program applies to projects for which either a Mitigated Negative Declaration or Environmental Impact Report has been prepared. The objective of the program is to ensure that the required modifications and/or mitigation measures are indeed implemented.

The OCVCD has itself developed a Policy for Integrated Vector Management and is finalizing a Best Management Practices manual to incorporate necessary mitigation measures into formal operating procedures covering all district activities. When completed, they become part of the project description and are no longer mitigations.

## 7.0 References

Orange County Vector Control Staff. September 2009. Orange County Vector Control District Privatization Study.

Anonymous. (ND) Orange County General Plan. 2005. Resources Element.

R. J. Meade Consulting, Inc. 1995. Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan Pts I & II.

U. S. Army Corps of Engineers, Los Angeles District. 2009. A Special Area Management Plan (SAMP) for the San Diego Creek Watershed, Orange County California. Spec. Publ.

## **8.0 Report Preparation Personnel and Persons Contacted**

### **8.1 Report Preparation Personnel**

#### Eco-Analysts

Albert J. Beck, PhD, Principal and Senior Analyst, Principal Biologist

Lauren Wemmer, PhD, Senior Biologist, Ornithologist

Rodney Lacey, BS, Environmental Analyst, Botanist

### **8.2 Persons and Organizations Contacted**

#### Orange County Vector Control District

Robert Cummings                      Director of Scientific and Technical Services

Lawrence H. Shaw                      Director of Operations

Amber Semrow                          Biologist

Mike Saba                                Assistant Biologist