DATE:	June 2, 2009
SUBJECT:	S.L.O. County Vector Control Benefit Assessment Balloting
FROM:	Jim Throop, Director of Administrative Services
TO:	James L. App, City Manager

- **NEEDS:** For the City Council to determine the vote on the County's Vector Control Assessment ballots for City-owned properties.
- FACTS: 1. S.L.O. County proposes a special benefit assessment district to fund vector control services. Property owners are the beneficiaries of the service; therefore they decide whether to pay the assessment.
  - 2. The Assessment Engineer's Report (attached) defines the benefit assessment, services, and district formation and balloting process.
  - 3. The proposed vector control services consist of public education, surveillance, abatement, and response to disease outbreaks for all vectors and vector-borne diseases.
  - 4. SLO County is one of the few counties in California that does not have fully staffed, year-round mosquito, vector and disease-control services.
  - 5. A vector of disease is an insect or rodent that is capable of transmitting diseases to man.
  - 6. Primary focus of the County vector control program will be on mosquitoes, ticks, fleas, and rodents.
  - 7. It is reported that 25% of all (2007) vector complaints in San Luis Obispo County originated in or around Paso Robles.
  - 8. The County's proposed program cost is \$1,100,000. This equates to \$9.80 per year for a typical single-family residence. (See attachment for additional property type assessment examples).
  - 9. There are 278 city-owned parcels that are within the proposed assessment district. (See attachment for maps)
  - 10. City-owned parcel assessments total \$2,191 per year.
  - 11. The cost for the City to implement a similar plan is approximately \$427,000 onetime and \$275,000 on-going annual (1.5 staff, training, certification, equipment and supply purchases, etc.).

ANALYSIS & CONCLUSION:	Insects and rodents are capable of transmitting disease. Examples include West Nile virus carried by mosquitoes, Bubonic Plague and Hantavirus carried by rodents or their fleas, and Lyme Disease carried by ticks.
	County resident vector-type complaints rose from 230 in 2005, to more than 660 in 2007. In 2007, Paso Robles' area complaints to the County Health Department reportedly represented 25% of all vector complaints received.
	Vector surveillance and abatement efforts provide the most benefit to children and the elderly, as they are at the greatest risk because of underdeveloped or compromised immune systems. Healthy people, horses, and domestic flocks can also be impacted.
	In June 2007, the San Luis Obispo Grand Jury completed an investigation of vector control. The recommendation of the Grand Jury was for the County to inform residents of the benefits of additional mosquito abatement and pest control. It was also recommended this be followed-up with a voter survey to determine the likelihood of a special assessment passing. The survey found the overall weighted ballot support for funding the proposed annual rate of \$9.80 to be 53.8%.
	County-provided vector control services will cost \$1,100,000 per year (County- wide) versus \$275.000 if the City were to provide similar services (for properties within City limits only).
POLICY REFERENCE:	California Health & Safety Code Section 2000, et seq.
FISCAL IMPACT:	\$2,191 annually if the Assessment District is formed and approved.
OPTIONS:	<b>a.</b> Authorize an affirmative vote for the County Vector Control Benefit Assessment ballots for all city-owned parcels; or
	<b>b.</b> Amend, modify or reject above option.

#### Attachments (4):

- S.L.O. County Vector Control Measure Information Sheets •
- S.L.O. County Vector Control measure information sheets
  S.L.O. County Vector Control program Assessment Engineer's Report
  Vector Control Benefit Assessment Examples
  City-Owned Properties Map



# Mosquito, Vector & Disease Control Measure

by the San Luis Obispo County Mosquito and Vector Control Program

In early May of 2009, property owners in San Luis Obispo County will receive a ballot by mail. This ballot will allow property owners to decide if improved year-round mosquito, vector control and disease prevention services should be provided in the County. Below are some of the services that would be provided if this measure is approved:

# Reduce Mosquito Populations using Environmentally Safe Approaches

Improved year-round mosquito control by using environmentally safe approaches that focus on finding the sources of mosquito breeding (usually stagnant, standing water) and eliminating immature mosquitoes (larvae) before they emerge as adults and begin biting people and animals (and transmitting diseases).

# Surveillance and Prevention of Disease Outbreaks

Enhanced year-round testing for diseases transmitted by mosquitoes and other insects and rodents such as West Nile Virus, encephalitis, canine heartworm, Lyme disease, plague, hantavirus and malaria. Appropriate disease prevention services in locations in which a disease outbreak is discovered.

# **Response to Service Requests**

Property owners and residents could call the Program for a service request in the area of their property. A service technician would respond promptly and without extra cost.

# **Fiscal Accountability**

The Measure includes several layers of accountability to ensure that all funds are expended properly. Funds can only be spent on mosquito, vector and disease control services within San Luis Obispo County. The budget for the services proposed for each year will be presented to the public annually, including a professional audit.

# **Additional Information**

For additional information on the Mosquito, Vector and Disease Control Measure, please contact the Mosquito and Vector Control Program in the Department of Environmental Health Services at (805) 781-5544.

# Watch for Your Mail Ballot Early May 2009

# **MOSQUITO, VECTOR AND DISEASE CONTROL MEASURE**



by the San Luis Obispo County Mosquito and Vector Control Program

# Watch for Your Malled Ballot Early May 2009

In early May, ballots will be mailed to property owners in San Luis Obispo County for a proposed Mosquito, Vector and Disease Control Measure. If approved, this measure would fund year round services for:

- Improved control and elimination of mosquitoes and vectors using environmentally safe approaches.
- Improved testing and control of disease outbreaks associated with rodents, ticks or fleas.
- Improved control of the diseases transmitted by mosquitoes and other vectors, including: encephalitis, canine heartworm, and West Nile Virus.

# The Mosquito, Vector & Disease Control Measure

The San Luis Obispo County Mosquito and Vector Control Program was created in January 2005 with limited funding from the County General Fund. Due to its restricted funding, the Program currently only provides limited disease surveillance services and limited mosquito control efforts.

In May 2009, property owners will receive a ballot by mail that will allow them to decide if comprehensive, year round mosquito control and vector-borne disease prevention services should be provided in the County. If this measure is approved, other disease carrying insects and rodents, such as ticks and rats, would also be monitored.



Mosquitoes spread diseases like West Nile Virus and encephalitis

#### **Environmentally Safe Services.**

Mosquitoes would be successfully controlled by using environmentally safe approaches that focus on finding the sources of mosquito breeding (usually stagnant, standing water) and eliminating immature mosquitoes (larvae) before they emerge as adults and begin biting people and animals.

#### Why Is This Measure Needed?

Uncontrolled mosquito populations are a health risk. Without this measure there likely will be no mosquito, vector and disease control services in the County. As one of the only populated areas in the State without full year round control, the County would be unprepared in the event of a disease outbreak. This measure is needed to prevent diseases and to protect people, animals and property from the nuisance and harm caused by mosquitoes and other vectors and to prevent disease outbreaks.



Technicians would test for disease year-round

#### Why is this Measure Needed Now?

The recent economic condition is increasing the need for comprehensive mosquito, vector and disease control services. In fact recently there were 140 confirmed human cases of West Nile Virus in nearby Kern County, an outbreak that no one predicted, that was attributed to high foreclosure rates and unattended properties that may result in increased mosquito breeding sources. This measure is perhaps more important now because of these factors.

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#### How Do I Know the Funds Will Be Used Wisely and for Their Intended Purpose?

The Measure includes several layers of accountability to ensure that all funds are expended properly on mosquito, vector and disease control:

- Funds can only be spent on mosquito, vector and disease control services within San Luis Obispo County.
- The budget for the services proposed each year will be presented to the public annually, including a professional audit.
- The budget and services will be overseen by the San Luis Obispo County Board of Supervisors.

#### What Are the Specifics of the Measure?

The measure would provide funding for the following:

<u>Mosquito Control</u> - Year round control of mosquito sources before immature mosquitoes (larvae) emerge as adults and begin biting people and animals, using environmentally sensitive methods.

- Mosquito-eating fish would be provided to the public free of charge.
- · Certified technicians will identify breeding sources and prevent larvae from hatching.
- Year round identification of additional and new mosquito-breeding locations.

<u>West Nile Virus Disease Prevention</u> - Enhanced year-round testing for West Nile Virus and other disease prevention services in locations in which the disease is found.

- · Mosquito traps throughout County to provide early warning of disease outbreaks.
- Dead-bird testing for presence of West Nile Virus and other diseases.

<u>Response to Service Requests</u> - Property owners and residents could call the Program for a service request in the area of their property. A service technician would respond directly to the caller's problem.

**Disease Surveillance/Prevention** – Innovative state of the art surveillance system would be used to proactively and routinely identify the presence, absence, location, types and quantities of vectors. This is a critical step in assessing the health risk and establishing an appropriate response to disease outbreaks.

- Testing and monitoring for diseases carried by mosquitoes, such as encephalitis, canine heartworm, and malaria.
- Surveillance and testing of ticks, rodents and the diseases they carry such as Lyme disease, relapsing fever, plague and hantavirus.

<u>Community Education</u> - Regularly educate the public about protecting themselves and their pets from diseases carried by mosquitoes and other insects, and how to prevent mosquito breeding in backyard locations.

- Public education provides awareness and information about vectors, the diseases they carry and how people can
  protect themselves.
- The Program would distribute brochures, media releases, group presentations and information on the internet.

#### What are the Proposed Rates?

Single family residential properties on one acre or less would contribute \$9.80 per year, while other residential property types would be assessed according to the number of dwelling units and size. Commercial, industrial, and agriculture properties would be assessed according to their parcel size and property type.



#### **Additional Information**

For additional information on the Mosquito, Vector and Disease Control Measure, please contact the Mosquito and Vector Control Program in the Department of Environmental Health Services at (805) 781-5544.

Backyard mosquito breeding sources

Look for your ballot in your mail box in early May 2009. Agenda item 10 Page 5 of 62

# SAN LUIS OBISPO COUNTY VECTOR CONTROL PROGRAM

**MOSQUITO, VECTOR AND DISEASE CONTROL ASSESSMENT** 

# **ENGINEER'S REPORT**

FISCAL YEAR 2009-10

MARCH 26, 2009

Pursuant to the Health and Safety Code, Government Code and Article XIIID of the California Constitution

ENGINEER OF WORK:

# **SCIConsultingGroup**

4745 MANGELS BOULEVARD FAIRFIELD, CALIFORNIA 94534 PHONE 707.430.4300 FAX 707.430.4319 www.sci-cg.com

# SAN LUIS OBISPO COUNTY VECTOR CONTROL PROGRAM

#### **BOARD OF SUPERVISORS**

Bruce S. Gibson, Chairperson Frank R. Mecham, Vice-Chairperson Adam Hill, Supervisor K.H. "Katcho" Achadjian, Supervisor James R. Patterson, Supervisor

#### DIRECTOR OF ENVIRONMENTAL HEALTH

Curtis Batson

#### **ENGINEER OF WORK**

SCI Consulting Group Lead Assessment Engineer, John Bliss, M.Eng., P.E.

SAN LUIS OBISPO COUNTY VECTOR CONTROL PROGRAM

MOSQUITO, VECTOR AND DISEASE CONTROL ASSESSMENT

ENGINEER'S REPORT, FY 2009-10

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#### INTRODUCTION

#### Overview

The San Luis Obispo County Vector Control Program (the "Program") was created in 2005 with limited funding from the County General Fund. The Program is under the authority of the County Board of Supervisors (the "Board"). Due to its restricted funding, the Program currently only provides limited disease surveillance services and limited mosquito control efforts. Due to budget restrictions, the Program has recently been recommended for elimination, so without another source of funding the current limited mosquito and vector borne disease control services in the County will likely be discontinued.

The County of San Luis Obispo (the "County") covers an area of approximately 3,304 square miles. Within the County there are 4,500 miles of streams, 24 square miles of lakes and 119 miles of coastline. The County also accommodates a significant population of over 269,000 residents. It is significant to note that San Luis Obispo County is one of the last populated areas in the State without full year round mosquito, vector and disease control services.

This Engineer's Report was created to propose a new funding source, a benefit assessment, for continued and improved year-round mosquito and vector control and disease prevention services throughout the County. If approved the proposed new mosquito, vector and disease control assessment would provide funding for mosquito, vector and disease control services provided to properties throughout the County.

The following is an outline of the primary programs, projects, services and improvements (collectively "Services") that would be funded by the proposed Mosquito, Vector and Disease Control assessment:<sup>1</sup>

- Response to resident requests concerning mosquitoes, insects, rodents, and other vectors
- Mosquito inspections, surveillance and control
- Treat sources with environmentally safe products wherever mosquito larvae and/or pupae are found
- Initiate mosquito fish program which would provide free mosquito-eating fish for backyard ponds and other water features to property owners

<sup>&</sup>lt;sup>1</sup> The proposed improved mosquito and vector control and disease prevention services would materially increase the usefulness, utility, livability and desirability of properties in the County.

- Identification of mosquitoes, ticks and other arthropods
- Testing for mosquito and other vector-borne diseases
- Surveillance and testing of ticks and rodents and the diseases they carry
- Adult mosquito control when necessary to protect public health
- Community education, presentations to schools and civic groups, and other outreach programs to educate residents about mosquitoes, vectors and the diseases they can transmit

This Engineer's Report ("Report") defines the benefit assessment, which would provide funding for these mosquito, vector and disease control services throughout the County, as well as related costs for equipment, capital improvements and services, and facilities necessary and incidental to mosquito, vector and disease control programs.

As used within this Report and the benefit assessment ballot proceeding, the following terms are defined:

"Vector" means 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 (Health and Safety Code Section 2002(k)).

"Vector Control" means any system of public improvements or services that is intended to provide for the surveillance, prevention, abatement, and control of vectors as defined in subdivision (k) of Section 2002 of the Health and Safety Code and a pest as defined in Section 5006 of the Food and Agricultural Code (Government Code Section 53750(I)).

The Program operates under the authority of the Mosquito Abatement and Vector Control District Law of the State of California. Following are excerpts from the Mosquito Abatement and Vector Control District Law of 2002, codified in the Health and Safety Code, Section 2000, et seq. which serve to summarize the State Legislature's findings and intent with regard to mosquito abatement and other vector control services:

2001. (a) The Legislature finds and declares all of the following:

(1) California's climate and topography support a wide diversity of biological organisms.

(2) Most of these organisms are beneficial, but some are vectors of human disease pathogens or directly cause other human diseases such as hypersensitivity, envenomization, and secondary infections.

PAGE 2

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(3) Some of these diseases, such as mosquitoborne viral encephalitis, can be fatal, especially in children and older individuals.

(4) California's connections to the wider national and international economies increase the transport of vectors and pathogens.

(5) Invasions of the United States by vectors such as the Asian tiger mosquito and by pathogens such as the West Nile virus underscore the vulnerability of humans to uncontrolled vectors and pathogens.

(b) The Legislature further finds and declares:

(1) Individual protection against the vectorborne diseases is only partially effective.

(2) Adequate protection of human health against vectorborne diseases is best achieved by organized public programs.

(3) The protection of Californians and their communities against the discomforts and economic effects of vectorborne diseases is an essential public service that is vital to public health, safety, and welfare.

(4) Since 1915, mosquito abatement and vector control districts have protected Californians and their communities against the threats of vectorborne diseases.

(c) In enacting this chapter, it is the intent of the Legislature to create and continue a broad statutory authority for a class of special districts with the power to conduct effective programs for the surveillance, prevention, abatement, and control of mosquitoes and other vectors.

(d) It is also the intent of the Legislature that mosquito abatement and vector control districts cooperate with other public agencies to protect the public health, safety, and welfare. Further, the Legislature encourages local communities and local officials to adapt the powers and procedures provided by this chapter to meet the diversity of their own local circumstances and responsibilities.

Further the Health and Safety Code, Section 2082 specifically authorizes the creation of benefit assessments for vector control, as follows:

(a) A district may levy special benefit assessments consistent with the requirements of Article XIIID of the California Constitution to finance vector control projects and programs.

This Report was prepared by SCI Consulting Group ("SCI") to establish the estimated costs for mosquito and vector control, disease surveillance and related services and costs (the "Services") that would be funded by the proposed assessments, to determine the special benefits and general benefits received by property from the Services and to

apportion the proposed assessments to lots and parcels within the County based on the estimated special benefit each parcel receives from the Services funded by the benefit assessment.

#### Assessment Process

In order to allow property owners to ultimately decide whether funding should be provided for the Services summarized above, the Board authorized proceedings for a benefit assessment in September 2008. This Engineer's Report was prepared to establish the estimated costs for the mosquito, vector, disease surveillance and control services and related costs that would be funded by the assessments, to determine the special benefits and general benefits received from the Services, and to apportion the assessments to lots and parcels within the County based on the estimated special benefit each parcel receives from the Services funded by the benefit assessment.

Following submittal of this Report to the Board for preliminary approval, the Board may, by Resolution, call for an assessment ballot proceeding and Public Hearing on the proposed establishment of the Mosquito, Vector and Disease Control Assessment ("Assessment").

If the Board approves such Resolution and calls for the mailing of notices and ballots, a notice of assessment and assessment ballot will be mailed to property owners at least 45 days prior to the date of the Public Hearing set by the Board. Such notice would include a description of the proposed assessments as well as an explanation of the method of voting on the assessments. Each notice would include a ballot on which the property owner could mark his or her approval or disapproval of the proposed assessments and a postage-prepaid ballot return envelope.

After the ballots are mailed to property owners, a minimum 45-day time period must be provided for the return of the assessment ballots. Following this 45-day time period, a public hearing must be held for the purpose of allowing public testimony regarding the proposed assessments and Services. At this hearing, the public would have the opportunity to provide input on this issue and would have a final opportunity to submit ballots. After the conclusion of the public input portion of the hearing, the hearing may be continued to a future date to allow time for the tabulation of ballots.

With the passage of Proposition 218 on November 6, 1996, The Right to Vote on Taxes Act, now Article XIIIC and XIIID of the California Constitution, the proposed assessments can be levied for fiscal year 2009-10, and future years, only if the ballots submitted in favor of the assessments are greater than the ballots submitted in opposition to the

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assessments. (Each ballot is weighted by the amount of proposed assessment for the property that it represents).

If it is determined, when the tabulation results are announced, that the assessment ballots submitted in opposition to the proposed assessments do not exceed the assessment ballots submitted in favor of the assessments (weighted by the proportional financial obligation of the property for which ballots are submitted) the Board may take action, by resolution, to approve the levy of the assessments for fiscal year 2009-10 and future fiscal years. If the assessments are so confirmed and approved, the levies would be submitted to the San Luis Obispo County Auditor for inclusion on the property tax rolls for fiscal year 2009-10.

If the assessments are so confirmed and approved, the Program would commence in fiscal year 2009-10 to establish and provide the Services described in this report. The fiscal year 2009-10 assessment budget includes outlays for West Nile Virus surveillance and mosquito control, other vector surveillance and control, capital equipment, supplies and disease testing programs, as well as outlays to cover some of the costs of establishing the assessments.

If the assessments are so confirmed and approved, they may be continued in future years and may be increased in future years by an annual adjustment tied to the Los Angeles Area Consumer Price Index, with a maximum annual adjustment not to exceed 3%. The procedures for the levy of the assessments in future years commence with the creation of a budget for the upcoming fiscal year's costs and services, an updated assessment roll listing all parcels and their proposed assessments for the upcoming fiscal year and the preparation of an updated Engineer's Report. After these documents are prepared and submitted, they could be reviewed and preliminarily approved by the Board at a public meeting. At this meeting, the Board could also call for the publication in a local newspaper of the intent to continue the assessment and set the date for a noticed public hearing. At the annual public hearing, members of the public could provide input to the Board prior to the Board's decision on continuing the services and assessments for the next fiscal year.

#### **PROPOSITION 218**

This proposed assessment is to be formed consistent with Proposition 218, The Right to Vote on Taxes Act, which was approved by the voters of California on November 6, 1996, and is now Article XIIIC and XIIID of the California Constitution. Proposition 218 provides for benefit assessments to be levied to fund the cost of providing services, improvements, as well as maintenance and operation expenses to a public improvement which benefits the assessed property.

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Proposition 218 describes a number of important requirements, including a property-owner balloting, for the formation and continuation of assessments, and these requirements are satisfied by the process used to establish this proposed assessment. When Proposition 218 was initially approved in 1996, it allowed for certain types of assessments to be "grandfathered" in, and these were exempted from the property–owner balloting requirement.

Beginning July 1, 1997, all existing, new, or increased assessments shall comply with this article. Notwithstanding the foregoing, the following assessments existing on the effective date of this article shall be exempt from the procedures and approval process set forth in Section 4:

(a) Any assessment imposed exclusively to finance the capital costs or maintenance and operation expenses for sidewalks, streets, sewers, water, flood control, drainage systems or vector control.

Vector control was specifically "grandfathered in," underscoring the fact that even the drafters of Proposition 218 were satisfied that funding for vector control is an appropriate use of benefit assessments, and therefore confers special benefit to property.

#### SILICON VALLEY TAXPAYERS ASSOCIATION, INC. V. SANTA CLARA COUNTY OPEN SPACE AUTHORITY

In July of 2008, the California Supreme Court issued its ruling on the Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority ("SVTA vs. SCCOSA"). This ruling is the most significant legal document in further legally clarifying Proposition 218. Several of the most important elements of the ruling included further emphasis that:

- Benefit assessments are for benefit to property
- The services and / or improvements funded by assessments must be clearly defined
- Benefit assessments are for special, not general benefit
- Special benefits are directly received by and provide a direct advantage to property in the assessment district

This Engineer's Report, and the process used to establish this proposed assessment are consistent with the SVTA vs. SCCOSA decision.

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### CERTIFICATES

1. The undersigned respectfully submits the enclosed Engineer's Report and does hereby certify that I have prepared this Engineer's Report, and the Assessment and Assessment Diagram herein, have been prepared by.

Engineer of Work, License No. C52091

 I, the Clerk of the Board of Supervisors of the County of San Luis Obispo, California, hereby certify that the enclosed Engineer's Report, together with the Assessment and Assessment Diagram thereto attached, was filed and recorded with me on \_\_\_\_\_\_\_, 2009.

Clerk of the Board

3. I, the Clerk of the Board of Supervisors of the County of San Luis Obispo, California, hereby certify that the Assessment in this Engineer's Report was approved and confirmed by the Board of Supervisors on \_\_\_\_\_, 2009 by Resolution No. \_\_\_\_\_

Clerk of the Board

 I, the Clerk of the Board of Supervisors of the County of San Luis Obispo, California, hereby certify that a Copy of the Assessment and Assessment Diagram was filed in the office of the County Auditor of the County of San Luis Obispo, California, on \_\_\_\_\_\_, 2009.

Clerk of the Board

 I, the County Auditor of the County of San Luis Obispo, California, hereby certify that Assessment Roll and Assessment Diagram for fiscal year 2009-10 were filed with me on \_\_\_\_\_\_, 2009.

County Auditor, County of San Luis Obispo

San Luis Obispo County Vector Control Program Mosquito, Vector and Disease Control Assessment Engineer's Report, FY 2009-10 Agenda Item 10 Page 16 of 62

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#### **GENERAL DESCRIPTION OF THE DISTRICT AND SERVICES**

#### ABOUT THE VECTOR CONTROL DISTRICT

As mentioned previously, since the Program was created in January 2005 with limited funding from the County General Fund, it has been providing very limited disease surveillance and mosquito abatement services in the County. The Program has recently been recommended for elimination due to a shortfall in the County General Fund budget. Without another source of funding the Program will likely be discontinued and would not be able continue providing even the limited disease surveillance and mosquito abatement services it has been providing. Therefore, in absence of the Assessments, the baseline level of service for properties in the County is very limited or no mosquito, vector and disease control services. The Assessments, if approved, would fund the Services listed below that would be provided throughout the County, extending above and beyond the baseline level of service and the likely elimination of services projected for future years in the County.

#### SUMMARY OF SERVICES

The assessment would provide funding for the provision of improved comprehensive mosquito, vector and disease control services, including the surveillance, disease prevention, abatement, and control of mosquitoes for properties within the Assessment Area (alternatively described as the "Assessment District"). Such mosquito abatement and disease prevention services, projects and programs include, but are not limited to, source reduction, biological control, larvicide applications, adulticide applications, disease monitoring, public education, reporting, accountability, research and interagency cooperative activities, as well as capital costs, maintenance, and operation expenses (collectively "Services").

#### INTRODUCTION

Following are the proposed Services and resulting level of service for the Assessment Area. As previously noted, the currently limited level of mosquito and disease control service in the County will likely be eliminated unless an alternative funding source is established. Therefore, the baseline level of service in the County, absent the assessments, is very minimal or no Services. These proposed Services in this Report are over and above the baseline level of service. The formula below describes the relationship between the final level of service, the baseline level of service, and the enhanced level of service to be funded by the proposed assessment.

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# Final Level of Service = Baseline Level of Service + Enhanced Level of Service

#### SERVICES DESCRIPTION

The Services fall into four major categories as described below.

#### PUBLIC EDUCATION

Proactive/routine public education provides awareness and educates the general public about vectors, the diseases they carry, what people can do to protect themselves, and notifies people about ways to avoid exposure to vectors. Public education can consist of brochures, media releases, group presentations, information on the internet and one-on-one discussions. Public education is a key component in preventing the public health impacts of exposure to various vectors.

#### SURVEILLANCE

The purpose of surveillance is to proactively and routinely identify the presence, absence, location, types and quantities of vectors. Identifying the presence, absence, types, quantities and the location of vectors is a critical step in assessing the health risk associated with vectors. Using various traps and surveillance techniques allows vector programs to target and prioritize public education and abatement efforts. Surveillance is also critical in establishing appropriate response to disease and vector outbreaks.

#### ABATEMENT

Proactive/routine vector abatement services reduce the vector population which reduces the risk of transmission of diseases associated with various vectors. It can include such services as pesticide application, habitat modification, introduction of natural predators and introduction of sterilized males or females to reduce reproduction of vectors. Abatement efforts are done in response to vector complaints and as a result of proactive surveillance activities.

#### RESPONSE TO OUTBREAKS

Response to vector and disease outbreaks includes public education, surveillance and abatement. An outbreak is defined as an unusual or sudden increase in the incidence of a vector-borne disease or the numbers of a vector species within a particular area. A response to vector and disease outbreaks is reactive rather than proactive and there is a perceived emergency situation requiring immediate response.

The following three tables provide a brief overview of existing and the proposed Services.

#### PROPOSED VECTOR CONTROL CORE SERVICES

The proposed vector control services will greatly expand the capacity to proactively and routinely provide public education, surveillance, and abatement services as well as the ability to respond to vector complaints and vector and vector-borne disease outbreaks for a wide range of vectors primarily focusing on mosquitoes, ticks, fleas and rodents. As part of the public education and surveillance services, the Program proposes to provide notification to the public of identified public health risks associated with vectors and vector-borne diseases. Details about proposed Services are provided below. The following table further identifies the Services.

VECTORS	SERVICES				
	PUBLIC EDUCATION	SURVEILLANCE	ABATEMENT	RESPONSE TO OUTBREAKS	
Mosquitoes	Yes	Yes	Yes	Yes	
Ticks	Yes	Yes	Not Practical	Yes	
Fleas	Yes	Yes	Not Practical	Yes	
Rodents	Yes	Yes	Assist Property Owner **	Yes	
Other Vectors	Yes	Yes	Not Practical	Yes	
Yellow Jackets	Yes	No	***	Situation Dependent***	
Red-Imported Fire Ants	Yes****	No	****	Situation Dependent****	
Africanized Honey Bees	Yes****	No	***	Situation Dependent****	

\*\* The Agricultural Commissioner sells rodent bait for agricultural use.

\*\*\* May require the assistance of a pest control operator.

\*\*\*\* In cooperation with the Agricultural Department

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# MOSQUITOES:

### PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Educate the public about minimizing mosquito breeding and protecting themselves and their animals from the bite of a mosquito; encourage the public to participate in the statewide WNV dead bird surveillance program.
- 3. Disseminate information to local schools, civic group, libraries and other public and private organizations; target at-risk communities such as the elderly.
- 4. Inform sensitive populations about the risks of contracting the disease and precautionary measures necessary to avoid exposure.
- 5. Inform the media about local and statewide mosquito-borne disease surveillance and control efforts and develop public service announcements.
- 6. Provide information on a website about mosquitoes and mosquito-borne diseases.

### SURVEILLANCE:

- 1. Identify West Nile virus, St. Louis encephalitis and other viruses in mosquitoes to assess the level of transmission risk in the area.
- 2. Identify and quantify the adult mosquito abundances in hot spot locations so targeted control measures can be implemented in response to an increase in mosquito abundance.
- 3. Sample a wide variety of habitats for effective larval surveillance.
- 4. Survey adult mosquito populations using carbon dioxide baited traps.
- 5. Place traps in close proximity to urban populations, water sources and known breeding areas.
- 6. Inspect all known breeding sources within 1 mile of the traps.
- 7. Search for additional undetected mosquito-breeding sources.
- 8. Register all trap locations with the State Department of Health Services.
- 9. Detect West Nile Virus in wild birds by participating in the statewide dead-bird testing program.
- 10. Monitor cases of mosquito-borne disease infections in humans and horses.
- 11. Investigate human and horse cases of mosquito-borne diseases in order to efficiently focus surveillance and control activities. Surveillance for the virus in mosquito populations will be conducted in the areas adjacent to confirmed human and horse cases.

#### ABATEMENT:

- 1. Reduce mosquito populations through a coordinated, countywide integrated mosquito management program.
- 2. Manage mosquito populations so as to minimize the harm, nuisance and negative health effects resulting from exposure to mosquitoes.
- 3. Use breeding source reduction to reduce the mosquito population. Source reduction is the process of removing or modifying larval habitats to make them unsuitable for larval development. Source reduction focuses on activities the property owner can do such as eliminating discarded tires and emptying containers that can hold water. Large-scale source reduction such as clearing flood control channels, drainage of water bodies and removing vegetation from edges of persistent water sources will not take place at this time. However, through education and working with other agencies, the program will advocate for habitat modification as the best way to control mosquitoes.
- 4. Utilize larvicides to further reduce the mosquito population. Larviciding is the addition of a control product to a water source to kill mosquito larvae. Control products available include bacterial larvicide products that are forms of naturally occurring bacteria and Insect Growth Regulators (IGRs), which prevent the larvae from completing their development and lightweight larvicidal oils that place a film on the water surface thereby not allowing the larvae to breathe. San Luis Obispo County will preferentially use bacterial larvicide products where effective, but may use all of the above products depending upon the breeding source and to prevent resistance to the larvacides.
- 5. Develop and maintain mosquito fish breeding ponds to use in appropriate situations and provide them to the community upon request.
- 6. Use an integrated approach to respond to mosquitoes. Integrated Pest Management (IPM) as it pertains to mosquito control is an effective and environmentally sensitive approach used to manage mosquitoes, relying upon a combination of scientific knowledge, common sense, treatment and prevention methods. Successful IPM utilizes a combination of control strategies, including but not limited to mosquito surveillance, source reduction, and larva control.
- 7. Use data from the West Nile virus surveillance program to target mosquito control activities to minimize the risk of people becoming infected with the virus.
- 8. Comply with all applicable pesticide rules and regulations enforced by the Agricultural Commissioner

### **RESPONSE TO OUTBREAKS:**

1. Control adult mosquitoes at the direction of the Health Officer in emergency situations under the direction and assistance of the California Department of Health Services. Control of adult mosquitoes may be used when mosquito-borne diseases such as West Nile Virus have been identified and other methods of reducing the mosquito population have failed or are ineffective.

- 2. Use control products with specialized and calibrated equipment.
- 3. Notify affected residents (including people on the chemically sensitive registry) when adulticiding operations are necessary.
- 4. Issue public health advisories as necessary to respond to mosquito-borne disease outbreaks.
- 5. Alert physicians and veterinarians of disease outbreaks.
- 6. Coordinate with the California Department of Health Services, Vector-borne Disease Section.

# TICKS:

### PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Disseminate information to local schools, civic groups, libraries and other public and private organizations as requested.
- 3. Inform the media about local and statewide tick-borne disease surveillance efforts and develop public service announcements.
- 4. Provide information on a website about ticks and tick-borne diseases.
- 5. Advise homeowners with tick problems and conduct site visits to assist in tick prevention and control.
- 6. Post warnings at campgrounds and hiking trails as necessary.

### SURVEILLANCE:

- 1. Periodically, collect and test ticks for evidence of tick-borne diseases such as Lyme disease
- 2. Identify tick specimens brought in by the public.

### ABATEMENT:

Due to tick habitat, it is impractical to provide abatement services.

### **RESPONSE TO OUTBREAKS:**

- 1. Issue public health advisories as necessary to respond to tick-borne disease outbreaks.
- 2. Alert physicians of disease outbreaks.
- 3. Coordinate with the California Department of Health Services, Vector-borne Disease Section.

4. Post warnings at campgrounds and hiking trails.

### FLEAS:

### PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Disseminate information to local schools, civic groups, libraries and other public and private organizations as requested.
- 3. Inform the media about local and statewide flea-borne disease surveillance efforts and develop public service announcements.
- 4. Provide information on a website about fleas and flea-borne diseases.
- 5. Advise homeowners with flea problems and conduct site visits to assist in flea prevention and control.

#### SURVEILLANCE:

- 1. Periodically, collect and test ground squirrels and other rodents for evidence of fleaborne diseases such as plague.
- 2. Identify flea specimens brought in by the public.

### ABATEMENT:

Due to the flea habitat as it relates to the transmission of disease (plague), it is impractical to provide abatement services. We will coordinate with the Agricultural Commissioner on rodent bait sales and control measures.

### **RESPONSE TO OUTBREAKS:**

- 1. Issue public health advisories as necessary to respond to flea-borne disease outbreaks, such as plague.
- 2. Alert physicians of disease outbreaks.
- 3. Coordinate with the California Department of Health Services, Vector-borne Disease Section, County Agricultural Commissioner, California Department of Food and Agriculture Vertebrate Pest Division

### RODENTS:

PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Disseminate information to local schools, civic groups, libraries and other public and private organizations as requested.

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- 3. Inform the media about local and statewide rodent disease surveillance efforts and develop public service announcements.
- 4. Provide information on a website about rodents and the diseases, such as Hantavirus, they transmit.
- 5. Advise homeowners with rodent problems and conduct site visits to assist in rodent prevention and control.

### SURVEILLANCE:

Identify rodent specimens brought in by the public and Agriculture Commissioner.

# ABATEMENT:

No direct abatement services will be provided. Staff will provide direction to people requesting service on activities they can do to eliminate their rodent problem. We will coordinate with the Agricultural Commissioner on rodent bait sales and control measures.

# RESPONSE TO OUTBREAKS:

- 1. Issue public health advisories as necessary to respond to community-wide rodent problems.
- 2. Alert physicians of disease outbreaks associated with rodents.
- 3. Coordinate with the California Department of Health Services, Vector-borne Disease Section, County Agricultural Commissioner, California Department of Food and Agriculture Vertebrate Pest Division

# OTHER VECTORS:

# PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Disseminate information to local schools, civic groups, libraries and other public and private organizations as requested.
- 3. Inform the media about local and statewide disease surveillance efforts and develop public service announcements.
- 4. Provide information on a website about other vectors and the diseases they transmit.
- 5. Advise homeowners with vector problems and conduct site visits to assist in prevention and control.

SURVEILLANCE: Identify specimens brought in by the public.

# ABATEMENT:

No abatement services will be provided.

# **RESPONSE TO OUTBREAKS:**

- 1. Issue public health advisories as necessary to respond to community-wide vector problems.
- 2. Alert physicians of disease outbreaks associated with vectors.
- 3. Coordinate with the California Department of Health Services, Vector-borne Disease Section.

# YELLOW JACKETS/OTHER STINGING WASPS:

### PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Inform the media about local and statewide surveillance efforts and develop public service announcements.
- 3. Provide information on a website about yellow jackets and other stinging wasps.

# RESPONSE TO OUTBREAKS (Situation dependent):

- 1. Issue public health advisories as necessary to respond to community-wide problems.
- 2. Coordinate with the California Department of Health Services, Vector-borne Disease Section.

Yellow jackets are nuisance pests and are not vectors of disease.

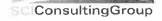
# **RED-IMPORTED FIRE ANTS:**

### PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Inform the media about local and statewide surveillance efforts and develop public service announcements.
- 3. Provide information on a website about red-imported fire ants.

### RESPONSE TO OUTBREAKS (Situation dependent):

- 1. Issue public health advisories as necessary to respond to community-wide problems.
- 2. Coordinate with the Agriculture Commissioner and California Department of Health Services, Vector-borne Disease Section.



Red-imported fire ants are an agricultural pest covered by the California Food and Agriculture Code and therefore the Vector Control Program will work cooperatively with the County Agricultural Commissioner as necessary.

# AFRICANIZED HONEY BEES:

#### PUBLIC EDUCATION AND OUTREACH:

- 1. Develop brochures, fact sheets, posters and other public education materials.
- 2. Inform the media about local and statewide surveillance efforts and develop public service announcements.
- 3. Provide information on a website about Africanized honey bees.

#### RESPONSE TO OUTBREAKS (Situation dependent):

- 1. Issue public health advisories as necessary to respond to community-wide problems.
- 2. Coordinate with the Agriculture Commissioner and California Department of Health Services, Vector-borne Disease Section.

Africanized Honey Bees are an agricultural pest covered by the California Food and Agriculture Code and therefore the Vector Control Program will work cooperatively with the County Agricultural Commissioner as necessary.

# FIGURE 1 - COST ESTIMATE - FY 2009-10 BUDGET

#### San Luis Obispo County Vector Control Program Mosquito, Vector and Disease Control Assessment Estimate of Cost

Fiscal Year 2009-10

			Total Budget
Mosquito & Vector Control Services and	Related Expenditures		
Mosquito & Vector Control and Di	sease Prevention Operat	ions	\$350,312
Materials, Utilities and Supplies			\$259,437
Capital Equipment and Fixed Assets			\$78,000
Total Mosquito Control Services and Re	\$687,749		
Less:			
Contributions from other Sources <sup>1</sup>			(\$34,387)
Net Cost of Mosquito & Vector Control, Fixed Asset Equipment, Operation			\$653,361
Contributions to Reserve/Contigency			\$36,085
Incidental Costs <sup>2</sup>			
Allowance for Uncollectable Assessm			\$43,000
Assessment District Formation Costs, Levy Administration, County Collection Fee, and Other Incidentals			\$372,500
Total Mosquito, Vector and Disease C (Net Amount to be Assessed)	Control Services and Inc	= identals	\$1,104,946
Budget Allocation to Property			
		Assessment	Tota
		4	
Zones of Benefit	Total SFE Units <sup>3</sup>	per SFE <sup>4</sup>	Assessment
Zones of Benefit Zone A	Total SFE Units <sup>3</sup> 110,508.88	per SFE* \$9.80	Assessment \$1,082,983
·			\$1,082,98
Zone A	110,508.88	\$9.80	

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#### Notes:

- 1. As determined in the following section, at least 5% of the cost of the Services must be funded from sources other than the assessments to cover any general benefits from the Services. Therefore, out of the total cost of Services of \$687,749 the Program must contribute at least \$34,387 from sources other than the assessments. The Program will contribute this amount, which covers any general benefits from the Services.
- 2. Incidental Costs includes allowance for uncollectible assessments from assessments on public agency parcels, assessments less than \$3.00 per parcel as the County Auditor will not levy assessments less than \$3.00 per parcel, County collection charges, assessment district formation costs and assessment administration costs. For fiscal year 2009-10, the first fiscal year the assessments are levied, this amount also includes the benefit assessment initial costs, such as initial assessment engineering services.
- 3. SFE Units means Single Family Equivalent benefit units. See method of assessment in the following Section for further definition.
- 4. The assessment rate per SFE is the total amount of assessment per Single Family Equivalent benefit unit.
- 5. The proceeds from the assessments will be deposited into a special fund for the Assessment. Funds raised by the assessment shall be used only for the purposes stated within this Report. Any balance remaining at the end of the fiscal year, June 30, must be carried over to the next fiscal year. The assessment amounts are rounded down to the even penny for purposes of complying with the collection requirements from the County Auditor. Therefore, the total assessment amount for all parcels subject to the assessments may vary slightly from the net amount to be assessed.

This section of the Report includes an explanation of the special and general benefits to be derived from the Services, and the methodology used to apportion the total assessment to properties within the Assessment Area.

The San Luis Obispo Vector Control Program service area includes all the parcels in San Luis Obispo County. The proposed Assessment Area consists of all the Assessor Parcels within the County, as defined by the approved boundary description (boundary will be coterminous with the county of San Luis Obispo). The method used for apportioning the assessment is based upon the proportional special benefits to be conferred to the properties over and above the general benefits conferred to real property in the Assessment Area or to the public at large. Special benefit is calculated for each parcel in the Assessment Area using the following process:

- 1. Identification of benefit factors derived from the Services
- 2. Calculation of the proportion of these benefits that are general
- 3. Determination of the relative special benefit within different areas within the Assessment Area
- 4. Determination of the relative special benefit per property type
- 5. Calculation of the specific assessment for each individual parcel based upon special vs. general benefit; zones, property type and other supporting attributes

#### **DISCUSSION OF BENEFIT**

In summary, the assessments can only be levied based on the special benefit to property. This benefit is received by property over and above any general benefits. With reference to the engineering requirements for property related assessments, under Proposition 218, an Engineer must determine and prepare a report evaluating the amount of special and general benefit received by property within the Assessment Area as a result of the improvements or services provided by a local agency. The special benefit is to be determined in relation to the total cost to that local entity of providing the service and/or improvements.

Proposition 218 as codified in Article XIIID of the California Constitution has confirmed that assessments must be based on the special benefit to property:

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"No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel."

Since assessments are levied on the basis of special benefit, they are not a tax and are not governed by Article XIIIA of the California Constitution.

The below benefit factors, when applied to property in the Assessment Area, confer special benefits to property and ultimately improve the safety, utility, functionality and usability of property in the Assessment Area. These are special benefits to property in the Assessment Area in much the same way that storm drainage, sewer service, water service, sidewalks and paved streets enhance the utility and functionality of each parcel of property served by these improvements, providing them with more utility of use and making them safer and more usable for occupants.

It should also be noted that Proposition 218 included a requirement that existing assessments in effect upon its effective date were required to be confirmed by either a majority vote of registered voters in the Assessment Area, or by weighted majority property owner approval using the new ballot proceeding requirements. However, certain assessments were excluded from these voter approval requirements. Of note is that in California Constitution Article XIIID Section 5(a) this special exemption was granted to assessments for sidewalks, streets, sewers, water, flood control, drainage systems and <u>vector control</u>. The Howard Jarvis Taxpayers Association explained this exemption in their Statement of Drafter's Intent:

"This is the "traditional purposes" exception. These existing assessments do not need property owner approval to continue. However, future assessments for these traditional purposes are covered."<sup>2</sup>

Therefore, the drafters of Proposition 218 acknowledged that vector control assessments were a "traditional" and therefore acknowledged and accepted use.

Since all assessments, existing before or after Proposition 218 must be based on special benefit to property, the drafters of Proposition 218 inherently found that vector control services confer special benefit on property. Moreover, the statement of drafter's intent also acknowledges that any new or increased vector control assessments after the effective date of Proposition 218 would need to comply with the voter approval requirements it

<sup>&</sup>lt;sup>2</sup> Howard Jarvis Taxpayers Association, "Statement of Drafter's Intent", January 1997.

established. This is as an acknowledgement that additional assessments for such "traditional" purposes would be established after Proposition 218 was in effect. Therefore, the drafters of Proposition 218 clearly recognized vector assessments as a "traditional" use of assessments, acknowledged that new vector assessments may be formed after Proposition 218 and inherently were satisfied that vector control services confer special benefit to properties.

The Legislature also made a specific determination after Proposition 218 was enacted that vector control services constitute a proper subject for special assessment. Health and Safety Code section 2082, which was signed into law in 2002, provides that a district may levy special assessments consistent with the requirements of Article XIIID of the California Constitution to finance vector control projects and programs. The intent of the Legislature to allow and authorize benefit assessments for vector control services after Proposition 218 is shown in the Assembly and Senate analysis the Mosquito Abatement and Vector Control District Law where it states that the law:

Allows special benefit assessments to finance vector control projects and programs, consistent with Proposition 218.<sup>3</sup>

Therefore the State Legislature unanimously found that vector control services are a valuable and important public service that can be funded by benefit assessments. To be funded by assessments, vector control services must confer special benefit to property.

#### **MOSQUITO AND VECTOR CONTROL IS A SPECIAL BENEFIT TO PROPERTIES**

As described below, this Engineer's Report concludes that mosquito and vector control is a special benefit that provides direct advantages to property in the assessment district. For example, if approved, the assessment would provide reduced levels of mosquitoes, and other vectors on property throughout the Assessment Area. Moreover, the assessment will reduce the risk of the presence of diseases on property throughout the Assessment Area. Moreover, the assessment Area. Moreover, the assessment will fund Services that improve the use of property and reduce the nuisance and harm created by vectors on property throughout the Assessment Area. These are tangible and direct special benefits that will be received by property throughout the Assessment Area.

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<sup>&</sup>lt;sup>3</sup> Senate Bill 1588, Mosquito Abatement and Vector Control District Law, Legislative bill analysis

The following section, Benefit Factors, describes how and why vector control services specially benefit properties in the Assessment Area. These benefits are particular and distinct from its effect on property in general or the public at large.

#### **BENEFIT FACTORS**

In order to allocate the proposed assessments, the Engineer identified the types of special benefit arising from the aforementioned Services and that would be provided to property in the Assessment Area. The following benefit factors have been established that represent the types of special benefit to parcels resulting from the Services to be financed with the assessment proceeds. These types of special benefit are as follows:

# Reduced vector populations on property and as a result, enhanced desirability, utility, usability and functionality of property

The proposed assessments will provide enhanced services for the control and abatement of nuisance and disease-carrying mosquitoes. These Services will materially reduce the number of vectors on all property in the Assessment Area. This is a direct advantage to property that will serve to increase the desirability and "usability" of property. Clearly, properties are more desirable and usable in areas with lower mosquito populations and with a reduced risk of vector-borne disease. This is a special benefit to residential, commercial, agricultural, industrial and other types of properties because all such properties are more usable and functional with lower vector populations.

Excessive mosquitoes and other vectors in the area can materially diminish the utility and usability of property. For example, prior to the commencement of mosquito control and abatement services, properties in many areas in the State were considered to be nearly uninhabitable during the times of year when the mosquito populations were high.<sup>4</sup> The prevention or reduction of such diminished utility and usability of property caused by mosquitoes is a clear and direct advantage and special benefit to property in the Assessment Area.

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<sup>&</sup>lt;sup>4</sup> Prior to the commencement of modern mosquito control services, areas in the State of California such as the San Mateo Peninsula, Napa County and areas in Marin and Sonoma Counties had such high mosquito populations that they were considered to be nearly unlivable during certain times of the year and were largely used for part-time vacation cottages that were occupied primarily during the months when the natural mosquito populations were lower.

The State Legislature made the following finding on this issue:

"Excess numbers of mosquitoes and other vectors spread diseases of humans, livestock, and wildlife, reduce enjoyment of outdoor living spaces, both public and private, reduce property values, hinder outdoor work, reduce livestock productivity; and mosquitoes and other vectors can disperse or be transported long distances from their sources and are, therefore, a health risk and a public nuisance; and professional mosquito and vector control based on scientific research has made great advances in reducing mosquito and vector populations and the diseases they transmit." <sup>5</sup>

#### Increased safety of property

The proposed Assessments will result in improved year-round proactive Services to control and abate mosquitoes and other vectors. Mosquitoes and other vectors are transmitters of diseases, so the reduction of mosquito populations makes property safer for use and enjoyment. In absence of the assessments, these Services would not be provided, so the Services funded by the assessments make properties directly safer, which is a distinct special benefit to property.<sup>6</sup> This is not a general benefit to property or the public at large because the Services are tangible mosquito, vector and disease control services that will be provided directly to the properties in the Assessment Area and the Services are over and above what otherwise would be provided by the Program or any other agency.

This finding was confirmed in 2003 by the State Legislature:

"Mosquitoes and other vectors, including but not limited to, ticks, Africanized honey bees, rats, fleas, and flies, continue to be a source of human suffering, illness, death, and a public nuisance in California and around the world. Adequately funded mosquito and vector control, monitoring and public awareness programs are the best way to prevent outbreaks of West Nile Virus and other diseases borne by mosquitoes and other vectors."<sup>7</sup>

Also, the Legislature, in Health and Safety Code Section 2001, finds that:

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<sup>&</sup>lt;sup>5</sup> Assembly Concurrent Resolution 52, chaptered April 1, 2003

<sup>&</sup>lt;sup>6</sup> By reducing the risk of disease and increasing the safety of property, the proposed Services will materially increase the usefulness and desirability of certain properties in the Assessment Area.
<sup>7</sup> Assembly Concurrent Resolution 52, chaptered April 1, 2003

"The protection of Californians and their communities against the discomforts and economic effects of vectorborne diseases is an essential public service that is vital to public health, safety, and welfare."

#### Reductions in the risk of new diseases and infections on property

Mosquitoes have proven to be a major contributor to the spread of new diseases such as West Nile Virus, among others. A highly mobile population combined with migratory bird patterns can introduce new mosquito-borne diseases into previously unexposed areas.

"Vector-borne diseases (including a number that are mosquito-borne) are a major public health problem internationally. In the United States, dengue and malaria are frequently brought back from tropical and subtropical countries by travelers or migrant laborers, and autochthonous transmission of malaria and dengue occasionally occurs. In 1998, 90 confirmed cases of dengue and 1,611 cases of malaria were reported in the USA and dengue transmission has occurred in Texas."<sup>8</sup>

"During 2004, 40 states and the District of Columbia (DC) have reported 2,313 cases of human WNV illness to CDC through ArboNET. Of these, 737 (32%) cases were reported in California, 390 (17%) in Arizona, and 276 (12%) in Colorado. A total of 1,339 (59%) of the 2,282 cases for which such data were available occurred in males; the median age of patients was 52 years (range: 1 month--99 years). Date of illness onset ranged from April 23 to November 4; a total of 79 cases were fatal." <sup>9</sup> (According to the Centers for Disease Control and Prevention on January 19, 2004, a total of 2,470 human cases and 88 human fatalities from WNV have been confirmed).

The Services funded by the proposed assessments will help prevent on a year-round basis the presence of vector-borne diseases on property in the Assessment Area. This is another tangible and direct special benefit to property in the Assessment Area that would not be received in absence of the assessments.

#### Protection of economic activity on property

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<sup>&</sup>lt;sup>8</sup> Rose, Robert. (2001). Pesticides and Public Health: Integrated Methods of Mosquito Management. Emerging Infectious Diseases. Vol. 7(1); 17-23.

<sup>&</sup>lt;sup>9</sup> Center for Disease Control. (2004). West Nile Virus Activity --- United States, November 9--16, 2004. Morbidity and Mortality Weekly Report. 53(45); 1071-1072.

As recently demonstrated by the SARS outbreak in China and outbreaks of Avian Flu, outbreaks of pathogens can materially and negatively impact economic activity in the affected area. Such outbreaks and other public health threats can have a drastic negative effect on tourism, business and residential activities in the affected area. The proposed assessments will help to prevent the likelihood of such outbreaks in the County.

Mosquitoes hinder, annoy and harm residents, guests, visitors, farm workers, and employees. A vector-borne disease outbreak and other related public health threats would have a drastic negative effect on agricultural, business and residential activities in the Assessment Area.

The economic impact of diseases is well documented. According to a study prepared for the Centers for Disease Control and Prevention, the transmission of West Nile Virus in Louisiana was estimated to cost over \$20 million over approximately one year:

The estimated cost of the Louisiana epidemic was \$20.1 million from June 2002 to February 2003, including a \$10.9 million cost of illness (\$4.4 million medical and \$6.5 million nonmedical costs) and a \$9.2 million cost of public health response. These data indicate a substantial short-term cost of the WNV disease epidemic in Louisiana.<sup>10</sup>

Moreover, a study conducted in 1996-97 of La Crosse Encephalitis (LACE), a human illness caused by a mosquito-transmitted virus, found a lifetime cost per human case at \$48,000 to \$3,000,000 and found that the disease significantly impacted lifespans of those who were infected. Following is a quote from the study which references the importance and value of active vector control services of the type that would be funded by the proposed assessments:

The socioeconomic burden resulting from LACE is substantial, which highlights the importance of the illness in western North Carolina, as well as the need for active surveillance, reporting, and prevention programs for the infection. <sup>11</sup>

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<sup>&</sup>lt;sup>10</sup> Zohrabian A, Meltzer MI, Ratard R, Billah K, Molinari NA, Roy K, et al. West Nile Virus economic impact, Louisiana, 2002. Emerging Infectious Disease, 2004 Oct. Available from http://www.cdc.gov/ncidod/EID/vol10no10/03-0925.htm

<sup>&</sup>lt;sup>11</sup> Utz, J. Todd, Apperson, Charles S., Maccormack, J. Newton, Salyers, Martha, Dietz, E. Jacquelin, Mcpherson, J. Todd, Economic And Social Impacts Of La Crosse Encephalitis In Western North Carolina, Am J Trop Med Hyg 2003 69: 509-518

The Services to be funded by the proposed assessments will help prevent the likelihood of such outbreaks on property and will reduce the harm to economic activity on property caused by existing mosquito populations. This is another direct advantage received by property in the Assessment Area that would not be receive in absence of the assessments.

#### Protection of agriculture, tourism, and business industries

The agriculture, tourism and business industries will benefit from reduced levels of harmful or nuisance mosquitoes and other vectors. Conversely, any outbreaks of emerging vectorborne pathogens such as West Nile Virus could also materially negatively affect these industries. Diseases transmitted by mosquitoes and other vectors can adversely impact business and recreational functions.

A study prepared for the United States Department of Agriculture in 2003 found that over 1,400 horses died from West Nile Virus in Colorado and Nebraska and that these fatal disease cases created over \$1.2 million in costs and lost revenues. In addition, horse owners in these two states spent over \$2.75 million to vaccinate their horses for this disease. The study states that "Clearly, WNV has had a marked impact on the Colorado and Nebraska equine industry." <sup>12</sup>

Pesticides for mosquito control impart economic benefits to agriculture in general. Anecdotal reports from farmers and ranchers indicate that cattle, if left unprotected, can be exsanguinated by mosquitoes, especially in Florida and other southeast coastal areas. Dairy cattle produce less milk when bitten frequently by mosquitoes <sup>13</sup>

The proposed assessments will serve to protect the tourists, employees and other businesses and residents that benefit from these industries. This is a direct advantage and special benefit to property in the Assessment Area.

#### Reduced risk of nuisance and liability on property

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<sup>&</sup>lt;sup>12</sup> S. Geiser, A. Seitzinger, P. Salazar, J. Traub-Dargatz, P. Morley, M. Salman, D. Wilmot, D. Steffen, W. Cunningham, Economic Impact of West Nile Virus on the Colorado and Nebraska Equine Industries: 2002, April 2003, Available from

http://www.aphis.usda.gov/vs/ceah/cnahs/nahms/equine/wnv2002\_CO\_NB.pdf

<sup>&</sup>lt;sup>13</sup> Jennings, Allen. (2001). USDA Letter to EPA on Fenthion IRED. United States Department of Agriculture, Office of Pest Management Policy. March 8, 2001.

In addition to health related factors, uncontrolled mosquito and vector populations create a nuisance that diminishes the usability of property. Properties directly benefit from the reduced nuisance factor that will be created by the Services. Agricultural and rangeland properties also benefit from the reduced nuisance factor and harm to livestock and employees from lower mosquito and vector populations.

Agricultural, range, golf course, cemetery, open space and other such lands in the Assessment Area contain large areas of mosquito and vector habitat and are therefore a significant source of mosquito and vector populations. In addition, residential and business properties can also contain significant sources.<sup>14</sup> It is conceivable that sources of mosquitoes could be held liable for the transmission of diseases or other harm. For example, in August 2004, the City of Los Angeles approved new fines of up to \$1,000 per day for property owners who don't remove standing water sources of mosquitoes on their property.

The proposed Services to be provided by the Program will reduce the mosquito and vector related nuisance and health liability to properties. The reduction of nuisance and liability constitutes a special benefit to property and this special benefit would not be received in absence of the Services funded by the assessments.

#### Improved marketability of property

As described previously, the proposed Services will specially benefit properties by making them more useable, livable and functional. The Services also make properties more desirable, and more desirable properties also benefit from improved marketability. This is another tangible special benefit to property which will not be enjoyed in absence of the Services.<sup>15</sup>

#### **BENEFIT SUMMARY**

In summary, the direct special benefits described in this Report ultimately enhance the economic values of benefiting real properties in the Assessment Area in excess of the

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<sup>&</sup>lt;sup>14</sup> Sources of mosquitoes on residential, business, agricultural, range and other types of properties include removable sources such as containers that hold standing water.

<sup>&</sup>lt;sup>15</sup> If one were to compare two hypothetical properties with similar characteristics, the property with lower mosquito infestation and reduced risk of vector-borne disease will clearly be more desirable, marketable and usable.

proposed assessments for these properties. Therefore, the assessment engineer finds that the cumulative special benefits to property from the Services are reasonably equal to or greater than the proposed annual assessment amount per home and benefit unit.

### **GENERAL VS. SPECIAL BENEFIT**

Article XIIIC of the California Constitution requires any local agency proposing to increase or impose a benefit assessment to "separate the general benefits from the special benefits conferred on a parcel." The rationale for separating special and general benefits is to ensure that property owners subject to the benefit assessment are not paying for general benefits. The assessment can fund the special benefits to property in the Assessment Area but cannot fund any general benefits. Accordingly, a separate estimate of the special and general benefit is given in this section.

In other words:



There is no widely-accepted or statutory formula for general benefit from vector control services. General benefits are benefits from improvements or services that are not special in nature, are not "particular and distinct" and are not "over and above" benefits received by other properties. SVTA vs. SCCOSA provides some clarification by indicating that general benefits provide "an indirect, derivative advantage" and are not necessarily proximate to the improvements and services funded by the assessments.

The starting point for evaluating general and special benefits is the current, baseline level of service. The assessment will fund Services "over and above" this general, baseline level and the general benefits estimated in this section are over and above the baseline.

A formula to estimate the general benefit is listed below:

General Benefit = Benefit to Real Property Outside the Assessment District + Benefit to Real Property Inside the Assessment District that is Indirect and Derivative + Benefit to the Public at Large

Special benefit, on the other hand, is defined in the state constitution as "a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large." The SVTA v. SCCOSA decision indicates that a special benefit is conferred to a property if it "receives a direct advantage from the improvement (e.g., proximity to a park)." In this proposed assessment, the overwhelming proportion of the benefits conferred to property is special, as the advantages from the mosquito, vector and disease protection funded by the Assessments are directly received by the properties in the Assessment Area and are only minimally received by property outside of the Assessment Area or the public at large.

In this Report, the general benefit is conservatively estimated and described, and then budgeted so that it is funded by sources other than the assessment.

#### CALCULATING GENERAL BENEFIT

The proposed mosquito, vector and disease control services provide a degree of general benefit, in addition to the predominant special benefit. This section provides a conservative measure of the general benefits from the Assessments.

#### BENEFIT TO PROPERTY OUTSIDE THE ASSESSMENT AREA

Properties within the Assessment Area receive almost all of the special benefits from the Services because the Services funded by the Assessments will be solely used to reduce mosquito and vector populations and vector-borne diseases on property within the Assessment Area. However, properties adjacent to, but just outside of, the proposed boundaries may receive some benefit from the proposed Services in the form of reduced vector populations on property outside the Assessment Area. Since this benefit, whether it be special or general, is conferred to properties outside the Assessment Area boundaries,

it contributes to the overall general benefit calculation and will not be funded by the assessment.

A measure of this general benefit is the proportion of Services that would affect properties outside of the Assessment Area. Each year, the Program will provide some of its Services in areas near the boundaries of the Assessment Area. By abating mosquito and vector populations near the borders of the Assessment Area, the Services could provide benefits in the form of reduced mosquito and vector populations and reduced risk of disease transmission to properties outside the Assessment Area. If mosquitoes were not controlled inside the Assessment Area, more of them would fly from the Assessment Area to outside areas. Therefore control of vectors within the Assessment Area provides some benefit to properties outside the Assessment Area but within the normal travel range of vectors. Since mosquitoes are the predominant vector that would be controlled and mosquitoes most easily travel from their source hatch location to properties in the area, typical mosquito destination ranges will be used to measure the extent that the Services will create reduced vector populations on property outside the Assessment Area. This is a measure of the general benefits to property outside the Assessment Area because this is a benefit from the Services that is not specially conferred upon property in the Assessment Area.

The mosquito destination potential outside the Program is based on studies of mosquito dispersion concentrations. Mosquitoes can travel up to 2 miles, on average, so this destination range is used. Based on studies of mosquito destinations, relative to parcels in the Program, average concentration of vectors from the Program on properties within 2 miles of the Assessment Area is calculated to be 7.0%. This relative vector population reduction factor within the destination range is combined with the number of parcels outside the Assessment Area and within the destination range to measure this general benefit and is calculated as follows:

ASSUMPTIONS:

MOSQUITOES MAY FLY UP TO 2 MILES FROM THEIR BREEDING SOURCE. 17,339 PARCELS WITHIN 2 MILES OF, BUT OUTSIDE OF THE COUNTY, MAY RECEIVE SOME MOSQUITO AND DISEASE PROTECTION BENEFIT 7 % PORTION OF RELATIVE BENEFIT THAT IS RECEIVED 124.367 PARCELS IN THE COUNTY

CALCULATIONS

TOTAL BENEFIT = 17,339 PARCELS \* 7% = 1214 PARCELS EQUIVALENTS

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#### PERCENTAGE OF OVERALL PARCEL EQUIVALENTS = 1214 / 124,367 = 0.98 %

Although it can be argued that such services near the Assessment Area's boundaries are offset by similar mosquito abatement services provided outside of Assessment Area's boundaries, we use the more conservative approach of finding that 1.0% of the Services may be of some general benefit.

### BENEFIT TO PROPERTY INSIDE THE DISTRICT THAT IS INDIRECT AND DERIVATIVE

The "indirect and derivative" benefit to property within the Assessment Area is particularly difficult to calculate. A solid argument can be presented that all benefit within the Assessment Area is special, because the mosquito, vector and disease control services in the Assessment Area would provide protection that is clearly "over and above" and "particular and distinct" when compared with the lower level of services under current conditions. Further the properties are within the proposed Assessment Area boundaries and a link between individual properties and mosquito and disease control benefits can be clearly established.

Nevertheless, the SVTA vs. SCCOSA decision indicates there may be general benefit "conferred on real property located *in the district* or to the public at large." A measure of the general benefits to property within the Assessment Area is the percentage of land area within the Assessment Area that is publicly owned and used for regional purposes such as major roads, rail lines and other regional facilities because such properties used for regional purposes could provide indirect benefits to the public at large. Approximately 0.28% of the land area in the Assessment area is used for such regional purposes, so this is a measure of the general benefits to property within the Assessment area.

#### BENEFIT TO THE PUBLIC AT LARGE

The general benefit to the public at large can be estimated by the proportion of its Services that would affect those who are not residents, employees, customers, guests of property in the Assessment Area, or property owners in the Assessment Area. SCI conservatively estimates that less than 2.5% of the people who enter the Assessment Area are effectively transient and are not tied to property in the Assessment Area, but may benefit to some degree from the Services.

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Using a sum of these three measures of general benefit, we find that approximately 3.76% of the benefits conferred by the proposed Mosquito and Disease Control Assessment may be general in nature and should be funded by sources other than the assessment.

GENERAL BENEFIT =

0.98% (OUTSIDE THE DISTRICT)

- + 0.28% (INSIDE THE DISTRICT INDIRECT AND DERIVATIVE)
- + 2.50% (PUBLIC AT LARGE)

Although this analysis supports the findings that 3.8% of the assessment may provide general benefit only, this number is increased by the Assessment Engineer to 5% to more conservatively ensure that no assessment revenue is used to support general benefit.

The proposed Mosquito, Vector and Disease Control Assessment total budget for mosquito and vector abatement, disease control, and capital improvement is \$687,749. Of this total budget amount, the existing Program will contribute at least \$34,387 or 5% of the total budget from sources other than the Mosquito, Vector and Disease Control Assessment. This contribution offsets any general benefits from the Mosquito, Vector and Disease Control Assessment Services.

## **ZONES OF BENEFIT**

Services that will be funded by the Mosquito, Vector and Disease Control Assessment will be provided in all areas within the Program boundaries. Since the Services will be provided throughout the County and will result in reduced vector populations and the other special benefits for property in the County, the boundaries of the Assessment Area have been drawn to match the boundaries of the County. Moreover, within the Assessment Area, certain areas will receive different levels of special benefits. These areas, which are named "Zones of Benefit", are described as follows.

The majority of the properties in the Assessment Area will receive equal levels of Services and therefore equal levels of special benefits. The areas that will receive the equal and full level of Services were carefully drawn to be within Zone A. Relative to Zone A, there are

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<sup>=3.76% (</sup>TOTAL GENERAL BENEFIT)

two areas in the far eastern area of the County that are remote and sparsely populated that will receive a reduced level of Services:

- Zone B has been defined as the area south of Gillis Canyon Road and east of Shell Creek Road continuing east of Carrisa Highway until Red Hill Road continuing east of Pozo Road until Avenales Ranch Road to the southern boundary of the County.
- Zone C has been defined as the south eastern tip of the County directly south of Zone B to the south eastern boundary of the County.

These two areas are more remotely located and sparsely populated and receive a reduced level of Services and corresponding benefits relative to other parcels in the Program. These areas are hereinafter referred to as Zone of Benefit B or Zone B and Zone of Benefit C or Zone C and are depicted on the Assessment Diagram included with this Report. All other parcels within the District boundaries are within Zone of Benefit A or Zone A.

The Zones of Benefit are shown below.



The boundaries of the Zones of Benefit have been carefully drawn. Zone of Benefit A includes the properties in San Luis Obispo County that would receive the full level of Services and the full level of special benefits to property. Such parcels are in areas with a material population of people, pets and livestock on the property. The current and future

population of property is a conduit of benefit to property because people, pets and livestock are ultimately affected by mosquitoes, vectors, and vector-borne diseases. The special benefit factors of desirability, utility, usability, livability and marketability are ultimately determined by the population and usage potential of property.

Zone of Benefit B and C contains the properties in the far southern and eastern portions of the County that receive a reduced level of Services and corresponding benefits relative to other parcels in the Program because these properties are generally in more remote, inaccessible areas and they support less population. In other words, the boundaries of the three Zones of Benefit within the Assessment Area have been narrowly and specifically drawn to include properties that will specially benefit from the proposed mosquito and vector control services at three different levels.

Using Program estimates for the amount of Services provided to these parcels located in Zone of Benefit B (Zone B) relative to the level of Services in Zone of Benefit A (Zone A), we find that parcels in Zone B receive approximately 49% of the average level of Services and benefits provided to other parcels in the Program (Zone A). Therefore, parcels in Zone B receive 49% of the assessment rate per benefit unit.

Parcels in Zone of Benefit C (Zone C) relative to the level of Services in Zone A, we find that parcels in Zone C receive approximately 46% of the average level of Services and benefits provided to other parcels in the Program (Zone A). Therefore, parcels in Zone B receive 46% of the assessment rate per benefit unit.

The SVTA vs. SCCOSA decision indicates:

In a well-drawn district — limited to only parcels receiving special benefits from the improvement — every parcel within that district receives a shared special benefit. Under section 2, subdivision (i), these benefits can be construed as being general benefits since they are not "particular and distinct" and are not "over and above" the benefits received by other properties "located in the district."

We do not believe that the voters intended to invalidate an assessment district that is narrowly drawn to include only properties directly benefitting from an improvement. Indeed, the ballot materials reflect otherwise. Thus, if an assessment district is narrowly drawn, the fact that a benefit is conferred throughout the district does not make it general rather than special. In that circumstance, the characterization of a benefit may depend on whether the parcel receives a direct advantage from the improvement (e.g., proximity to park) or

receives an indirect, derivative advantage resulting from the overall public benefits of the improvement (e.g., general enhancement of the district's property values).

In the proposed assessment, the advantage that each parcel receives from the proposed Services is direct, and the boundaries for each Zone of Benefit are narrowly drawn so each Zone includes parcels that receive the similar levels of benefit from the Services. Therefore, the even spread of assessment throughout each of the narrowly drawn Zones of Benefit within the Program is indeed consistent with the OSA decision.

#### METHOD OF ASSESSMENT

As previously discussed, the proposed assessments will fund enhanced, comprehensive, year-round mosquito and vector control, disease surveillance and control Services that will clearly confer special benefits to properties in the Assessment Area. These benefits can partially be measured by the property owners, guests, employees, tenants, pets and animals who will enjoy a more habitable, safer and more desirable place to live, work or visit. As noted, these benefits ultimately flow to the underlying property.

Therefore, the apportionment of benefit is partially based on people who potentially live on, work at, or otherwise use the property. This methodology of determining benefit to property through the extent of use by people is a commonly used method of apportionment of benefits from assessments.

Moreover, assessments have a long history of use in California and are in large part based on the principle that any benefits from a service or improvement funded by assessments that is enjoyed by tenants and other non-property owners ultimately is conferred to the underlying property.<sup>16</sup>

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<sup>&</sup>lt;sup>16</sup> For example, in *Federal Construction Co. v. Ensign (1922) 59 Cal.App. 200 at 211*, the appellate court determined that a sewer system specially benefited property even though the direct benefit was to the people who used the sewers: "Practically every inhabitant of a city either is the owner of the land on which he resides or on which he pursues his vocation, or he is the tenant of the owner, or is the agent or servant of such owner or of such tenant. And since it is the inhabitants who make by far the greater use of a city's sewer system, it is to them, as lot owners or as tenants, or as the servants or agents of such lot owners or tenants, that the advantages of actual use will redound. But this advantage of use means that, in the final analysis, it is the lot owners themselves who will be especially benefited in a financial sense."

With regard to benefits and source locations, the assessment engineer determined that since mosquitoes and other vectors readily fly from their breeding locations to all properties in their flight range and since mosquitoes are actually attracted to properties occupied by people or animals, the benefits from mosquito and vector control extend beyond the source locations to all properties that would be a "destination" for mosquitoes and other vectors. In other words, the control and abatement of mosquito and vector populations ultimately confers benefits to all properties that are a destination of mosquitoes and vectors, rather than just those that are sources of mosquitoes.

Although some primary mosquito and vector sources may be located outside of residential areas, residential properties can and do generate their own, often significant, populations of mosquitoes and vector organisms. For example, storm water catch basins in residential areas are a common source of mosquitoes. Since the typical flight range for a female *Culex* mosquito is over ½ mile, most homes in the Assessment Area are within the flight zone of many catch basin/mosquito sources. Moreover, there are many other common residential sources of mosquitoes, such as miscellaneous backyard containers, neglected swimming pools, leaking water pipes and tree holes. Clearly, there is a potential for mosquito sources on virtually all types of property. More importantly, all properties in the Assessment Area are within the destination range of mosquitoes and most properties are actually within the destination range of multiple mosquito source locations.

Because the Services will be provided throughout the Assessment Area, mosquitoes can rapidly and readily fly from their breeding locations to other properties over a large area, and because there are current or potential breeding sources literally everywhere in the Assessment Area, the Assessment Engineer determined that all similar properties in the Assessment Area have generally equivalent mosquito "destination" potential and, therefore, receive equivalent levels of benefit within areas in a same Zone of Benefit.

In the process of determining the appropriate method of assessment, the Engineer considered various alternatives. For example, a fixed assessment amount per parcel for all residential improved property was considered but was determined to be inappropriate because agricultural lands, commercial property and other property also receive benefits from the assessments. Likewise, an assessment exclusively for agricultural land was considered but deemed inappropriate because other types of property, such as residential and commercial, also receive the special benefit factors described previously.

A fixed or flat assessment was deemed to be inappropriate because larger residential, commercial and industrial properties receive a higher degree of benefit than other similarly used properties that are significantly smaller. (For two properties used for commercial

purposes, there is clearly a higher benefit provided to a property that covers several acres in comparison to a smaller commercial property that is on a 0.25 acre site. The larger property generally has a larger coverage area and higher usage by employees, customers, tourists and guests that would benefit from reduced mosquito and vector populations, as well as the reduced threat from diseases carried by mosquitoes and other vectors. This benefit ultimately flows to the property.) Larger commercial, industrial and apartment parcels, therefore, receive an increased benefit from the assessments.

In conclusion, the assessment engineer determined that the appropriate method of assessment apportionment should be based on the type and use of property, the relative size of the property, its relative population and usage potential, and its destination potential for mosquitoes. This method is further described below.

#### **ASSESSMENT APPORTIONMENT**

The special benefits derived from the Mosquito, Vector and Disease Control Assessment are conferred on property and are not based on a specific property owner's occupancy of property or the property owner's demographic status, such as age or number of dependents. The opportunity to use and enjoy property within the Assessment Area without the excessive nuisance, diminished "livability" or the potential health hazards brought by mosquitoes, vectors and the diseases they carry is a special benefit to properties in the Assessment Area. This benefit can be in part measured by the number of people who potentially live on, work at, visit or otherwise use the property, because people ultimately determine the value of the benefits by choosing to live, work and/or recreate in the area, and by choosing to purchase property in the area.<sup>17</sup>

In order to apportion the cost of the Services to property, each property in the Assessment Area is assigned a relative special benefit factor. This process involves determining the relative benefit received by each property in relation to a single family home, or, in other words, on the basis of Single Family Equivalents (SFE). This SFE methodology is commonly used to distribute assessments in proportion to estimated special benefit. For the purposes of this Engineer's Report, all properties are designated a SFE value, which is each property's relative benefit in relation to a "benchmark" parcel in the Assessment Area. The "benchmark" property is the single family detached dwelling on a parcel of less than

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<sup>&</sup>lt;sup>17</sup> It should be noted that the benefits conferred upon property are related to the average number of people who could potentially live on, work at or otherwise could use a property, not how the property is currently used by the present owner.

one acre. This benchmark parcel is assigned one Single Family Equivalent benefit unit or one SFE.

The calculation of the special benefit apportionment and relative benefit to properties in the Assessment Area from the Services is summarized in the following equation:

Special Benefit (per property)	=	Σ [ (Special Benefits) * Σ [ (Property Specific attributes such as use, property type, size, as well as
		vector-specific attributes such as destination potential and population potential)

### **RESIDENTIAL PROPERTIES**

Certain residential properties in the Assessment Area that contain a single residential dwelling unit and are on a lot of less than or equal to one acre are assigned one Single Family Equivalent or 1.0 SFE. Traditional houses, zero-lot line houses, and town homes are included in this category of single family residential property. Properties with more than one detached single family residence on one acre or less are assigned 1.0 SFE per single family home.

Single family residential properties in excess of one acre receive additional benefit relative to a single family home on up to one acre, because the larger parcels provide more area for mosquito sources and Program vector and disease control Services. Therefore, such larger parcels receive additional benefits relative to a single family home on less than one acre and are assigned 1.0 SFE for each residential unit and an additional rate of 0.0021 SFE per one-fourth acre of land area in excess of one acre. Mobile home parcels on a separate parcel and in excess of one acre also receive this additional acreage rate.

Other types of properties with residential units, such as agricultural properties, are assigned the residential SFE rates for the dwelling units on the property, and are assigned additional SFE benefit units for the agricultural-use land area on the property.

Properties with more than one residential unit (other than properties with more than one single family home as described above) are designated as multi-family residential properties. These properties, along with condominiums, benefit from the Services in proportion to the number of dwelling units that occupy each property, the average number

of people who reside in each property, and the average size of each property in relation to a single family home in the Assessment Area. This Report analyzed San Luis Obispo County population density factors from the 2000 US Census as well as average dwelling unit size for each property type. After determining the Population Density Factor and Square Footage Factor for each property type, an SFE rate is generated for each residential property structure, as indicated in Figure 2 below.

The SFE factor of 0.49 per dwelling unit for multi-family residential properties applies to such properties with two to four units (duplex, triplex, fourplex). Properties in excess of 5 units typically offer on-site management, monitoring and other control services that tend to offset some of the benefits provided by the Mosquito, Vector and Disease Control Assessment Area. Therefore the benefit for properties in excess of 5 units is determined to be 0.39 SFE per unit for the first 20 units and 0.10 SFE per each additional unit in excess of 20 dwelling units.

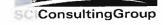
Type of Residential Property	Pop. Density Equivalent	SqFt Factor	Proposed Rate
Single Family Residential	1.00	1.00	1.00
Condominium	0.86	0.73	0.63
Duplex, Triplex, Fourplex	0.83	0.59	0.49
Multi-Family Residential (5+ Units)	0.72	0.54	0.39
Mobile Home on Separate Lot	0.74	0.48	0.36

#### FIGURE 2 – RESIDENTIAL ASSESSMENT FACTORS

Source: 2000 Census, San Luis Obispo County, and property dwelling size information from the San Luis Obispo County Assessor data and other sources.

#### **COMMERCIAL/INDUSTRIAL PROPERTIES**

Commercial and industrial properties are generally open and operated for more limited times, relative to residential properties. Therefore, the relative hours of operation can be used as a measure of benefits, since employee density also provides a measure of the relative benefit to property. Since commercial and industrial properties are typically open and occupied by employees approximately one-half the time of residential properties, it is reasonable to assume that commercial land uses receive one-half of the special benefit on a land area basis relative to single family residential property.



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The average size of a single family home with 1.0 SFE factor in the Assessment Area is 0.25 acres. Therefore, a commercial property with 0.25 acres receives one-half the relative benefit, or a 0.50 SFE factor.

The SFE values for various commercial and industrial land uses are further defined by using average employee densities because the special benefit factors described previously are also related to the average number of people who work at commercial/industrial properties.

To determine employee density factors, this Report utilizes the findings from the San Diego County Association of Governments Traffic Generators Study (the "SANDAG Study") because these findings were approved by the State Legislature which determined the SANDAG Study to be a good representation of the average number of employees per acre of land area for commercial and industrial properties. As determined by the SANDAG Study, the average number of employees per acre for commercial and industrial property is 24. As presented in Figure 3, the SFE factors for other types of businesses are determined relative to their typical employee density in relation to the average of 24 employees per acre of commercial property.

Commercial and industrial properties in excess of 5 acres generally involve uses that are more land intensive relative to building areas and number of employees (lower coverage ratios). As a result, the benefit factors for commercial and industrial property land area in excess of 5 acres is determined to be the SFE rate per 1/4 acre for the first 5 acres and the relevant SFE rate per each additional acre over 5 acres. Institutional properties that are used for residential, commercial or industrial purposes are also assessed at the appropriate residential, commercial or industrial rate.

Self storage and golf course property benefit factors are similarly based on average usage densities. Figure 3 below lists the benefit assessment factors for such business properties.

## AGRICULTURAL, DRY RANGELAND, CEMETERY AND GOLF COURSE PROPERTIES

Utilizing research and agricultural employment reports from UC Davis and the California Employment Development Department and other sources, this Report calculated an average usage density of 0.05 people per acre for agriculture property, 0.01 for rangelands and timber, 1.2 for cemeteries and 3.0 for golf courses. Since these properties typically are a source of mosquitoes and/or are typically closest to other sources of mosquitoes and other vectors, it is reasonable to determine that the benefit to these properties is twice the

usage density ratio of commercial and industrial properties. The SFE factors per 0.25 acres of land area, after adjustment for the usage density, are shown in Figure 3 below.

Type of Commercial/Industrial Land Use	Average Usage Per Acre <sup>1</sup>	SFE Units per Fraction Acre <sup>2</sup>	SFE Units per Acre After 5
Commercial	24	0.500	0.50
Office	68	1.420	1.42
Shopping Center	24	0.500	0.50
Industrial	24	0.500	0.50
Self Storage or Parking Lot	1	0.021	
Wineries	12	0.250	
Golf Course	3.0	0.063	
Cemeteries	1.20	0.050	
Agriculture/Vineyard	0.050	0.0021	
Timber/Dry Rangelands	0.010	0.00042	

FIGURE 3 - COMME	RCIAL/INDUSTRIAL	BENEFIT ASSESSMI	ENT FACTORS
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1. Source: San Diego Association of Governments Traffic Generators Study, University of California, Davis and other studies and sources.

The SFE factors for commercial and industrial parcels indicated above are applied to each fourth acre
of land area or portion thereof. (Therefore, the minimum assessment for any assessable parcel in
these categories is the SFE Units listed herein.)

#### **VACANT PROPERTIES**

The benefit to vacant properties is determined to be proportional to the corresponding benefits for similar type developed properties. However, vacant properties are assessed at a lower rate due to the lack of active benefits, as measured by use by residents, employees, customers and guests. A measure of the benefits accruing to the underlying land is the average value of land in relation to improvements for developed property. An analysis of the assessed valuation data from San Luis Obispo County found that 70% of the assessed value of improved properties is classified as land value. Since vacant properties have very low to zero population/use densities until they are developed, a 50% benefit discount is applied to the valuation factor of 0.70 to account for the current low use density and potential for harm or nuisance to the property owner, residents, employees, customers and guests. The combination of these measures results in a 0.35 factor. It is reasonable to assume, therefore, that approximately 35% of the benefits are related to the underlying land and 65% are related to the day-to-day use of the property. Using this ratio, the SFE factor for vacant parcels is 0.35 per parcel.

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### **OTHER PROPERTIES**

Article XIIID stipulates that publicly owned properties must be assessed unless those properties are reasonably determined to receive no special benefit from the assessment.

All properties that are specially benefited are assessed. Publicly owned property that is used for purposes similar to private residential, commercial, industrial, agricultural or institutional uses is benefited and assessed at the same rate as such privately owned property.

Miscellaneous, small and other parcels such as roads, right-of-way parcels, and common areas typically do not generate significant numbers of employees, residents, customers or guests and have limited economic value. These miscellaneous parcels receive minimal benefit from the Services and are assessed an SFE benefit factor of 0.

#### **DURATION OF ASSESSMENT**

It is proposed that the Assessment be levied for fiscal year 2009-10 and every year thereafter, so long as mosquitoes and vectors remain in existence and the San Luis Obispo County Vector Control Program requires funding from the Assessment for its Services. As noted previously, if the Assessment and the duration of the Assessment are approved by property owners in an assessment ballot proceeding, the Assessment can be levied annually after the San Luis Obispo County Board of Supervisors approves an annually updated Engineer's Report, budget for the Assessment, Services to be provided, and other specifics of the Assessment. In addition, the Board of Supervisors must hold an annual public hearing to continue the Assessment.

### **APPEALS AND INTERPRETATION**

Any property owner who feels that the assessment levied on the subject property is in error as a result of incorrect information being used to apply the foregoing method of assessment, may file a written appeal with the Program Manager of the San Luis Obispo County Vector Control Program or his or her designee. Any such appeal is limited to correction of an assessment during the then current fiscal year or, if before July 1, the upcoming fiscal year. Upon the filing of any such appeal, the Program Manager or his or her designee will promptly review the appeal and any information provided by the property owner. If the Program Manager or his or her designee finds that the assessment should be modified, the appropriate changes shall be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with San Luis Obispo County for collection, the Program Manager or his or her designee is authorized to refund to the property owner the amount of any approved reduction. Any dispute over the decision of the Program Manager, or his or her designee, shall be referred to the San Luis Obispo County Board of Supervisors. The decision of the County Board of Supervisors shall be final.

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## ASSESSMENT

WHEREAS, the San Luis Obispo County Board of Supervisors contracted with the undersigned Engineer of Work to prepare and file a report presenting an estimate of costs of Services, a diagram for the benefit assessment district, an assessment of the estimated costs of Services, and the special and general benefits conferred thereby upon all assessable parcels within the San Luis Obispo County Vector Control Program – Mosquito, Vector and Disease Control Assessment;

**NOW, THEREFORE,** the undersigned, by virtue of the power vested in me under Article XIIID of the California Constitution, the Government Code and the Health and Safety Code and the order of the San Luis Obispo County Board of Supervisors, hereby make the following determination of an assessment to cover the portion of the estimated cost of said Services, and the costs and expenses incidental thereto to be paid by the Mosquito, Vector and Disease Control Assessment.

The amount to be paid for said Services and the expenses incidental thereto, to be paid by the San Luis Obispo County Vector Control Program for fiscal year 2009-10 is generally as follows:

Mosquito, Vector and Disease Control Services Fixed Asset & Capital Equipment Contributions to Reserve/Contingency Incidentals TOTAL BUDGET	\$609,749 \$78,000 \$36,085 \$415,500 \$1,139,334
Less: Other Revenue	\$34,387
Net Amount To Assessments	\$1,104,946

## FIGURE 4 - SUMMARY COST ESTIMATE - FY 2009-10 BUDGET

An Assessment Diagram is hereto attached and made a part hereof showing the exterior boundaries of said Assessment District. The distinctive number of each parcel or lot of land

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in the said Assessment District is its Assessor Parcel Number appearing on the Assessment Roll.

I do hereby determine and apportion said net amount of the cost and expenses of said Services, including the costs and expenses incidental thereto, upon the parcels and lots of land within said Mosquito, Vector and Disease Control Assessment, in accordance with the special benefits to be received by each parcel or lot, from the Services, and more particularly set forth in the Cost Estimate hereto attached and by reference made a part hereof.

Said assessment determination is made upon the parcels or lots of land within said Assessment Area in proportion to the special benefits to be received by said parcels or lots of land, from said Services.

The assessment is subject to an annual adjustment tied to the Consumer Price Index-U for the Los Angeles Area as of December of each succeeding year (the "CPI"), with a maximum annual adjustment not to exceed 3% and a minimum annual adjustment of not less than 0%. Any change in the CPI in excess of 3% shall be cumulatively reserved as the "Unused CPI" and shall be used to increase the maximum authorized assessment rate in years in which the CPI is less than 3%. The maximum authorized assessment rate is equal to the maximum assessment rate in the first fiscal year the assessment was levied adjusted annually by the minimum of 1) 3% or 2) the change in the CPI plus any Unused CPI as described above.

If property owners in the Assessment Area, in an assessment ballot proceeding, approve the initial fiscal year benefit assessment for special benefits to their property including the CPI adjustment schedule, the assessment may be levied annually and may be adjusted by up to the maximum annual CPI adjustment without any additional assessment ballot proceeding. In the event that in future years the assessments are levied at a rate less than the maximum authorized assessment rate, the assessment rate in a subsequent year may be increased up to the maximum authorized assessment rate without any additional assessment ballot proceeding.

Each parcel or lot of land is described in the Assessment Roll by reference to its parcel number as shown on the Assessor's Maps of the County of San Luis Obispo for the fiscal year 2009-10. For a more particular description of said property, reference is hereby made to the deeds and maps on file and of record in the office of the County Assessor of the County of San Luis Obispo.

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I hereby place opposite the Assessor Parcel Number for each parcel or lot within the Assessment Roll, the proposed amount of the assessment for the fiscal year 2009-10 for each parcel or lot of land within the said Mosquito, Vector and Disease Control Assessment Area.18

Dated: March 26, 2009

Engineer of Work

By \_\_\_\_\_

John W. Bliss, License No. C52091

<sup>18</sup> Each parcel has a uniquely calculated assessment based on the estimated level of special benefit to the property.

SAN LUIS OBISPO COUNTY VECTOR CONTROL PROGRAM MOSQUITO, VECTOR AND DISEASE CONTROL ASSESSMENT ENGINEER'S REPORT, FY 2009-10

ALC: NOT THE OWNER. SC:ConsultingGroup

## ASSESSMENT DIAGRAM

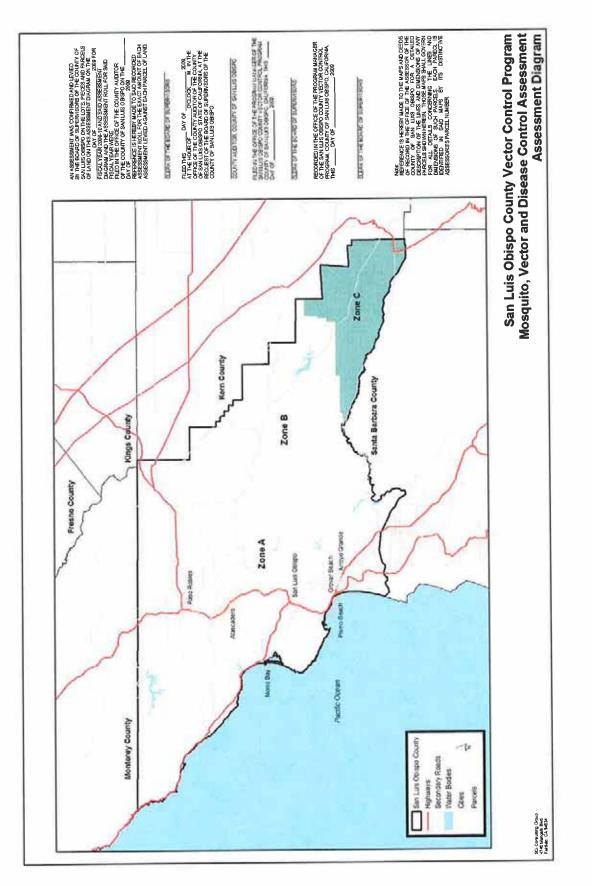
The proposed San Luis Obispo County Vector Control Program, Mosquito, Vector and Disease Control Assessment area includes all properties within the boundaries of the Assessment Area.

The boundaries of the Mosquito, Vector and Disease Control Assessment area are displayed on the following Assessment Diagram.

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San Luis Obispo County Vector Control Program Mosquito, Vector and Disease Control Assessment Engineer's Report, FY 2009-10

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# **ASSESSMENT ROLL**

Reference is hereby made to the Assessment Roll in and for said assessment proceedings on file in the office of the San Luis Obispo County Vector Control Program, as said Assessment Roll is too voluminous to be bound with this Report.

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Vector Control Benefit Assessment Examples		
Property Type	Annual <u>Assessment</u>	
Single Family Residence <1 acre	\$9.80	
Single Family Residence 5 acres	\$22.15	
Apartment Complex 100 units	\$162.60	
Office Property 1/2 acre	\$27.84	
Retail Store property 1/2 acre	\$9.80	
Open range land 1,000 acres	\$16.46	
Shopping Center 20 acres	\$392.00	
Agriculture Property 100 acres	\$8.23	
Vacant Lot	\$2.94	

