



ENGINEER'S REPORT

Placer Mosquito and Vector Control District

Expanded Services and Permanent Facility
Assessment

July 2022
Final Report

Engineer of Work:



4745 Mangels Boulevard
Fairfield, California 94534
707.430.4300
www.sci-cg.com

(This Page Intentionally Left Blank)

Placer Mosquito and Vector Control District

Governing Board

Sandra Amara	City of Auburn
Will Stockwin	City of Colfax
Peter Gilbert	City of Lincoln
Russ Kelley, President	Town of Loomis
Merry Holliday-Hanson, Ph.D.	Placer County
Jill Gayaldo	City of Rocklin
Ross Hutchings	City of Roseville

General Manager

Joel Buettner

District Legal Counsel

Richard Shanahan, Esq.

Engineer of Work

SCI Consulting Group

Table of Contents

<i>Governing Board</i>	<i>ii</i>
<i>General Manager</i>	<i>ii</i>
<i>District Legal Counsel</i>	<i>ii</i>
<i>Engineer of Work</i>	<i>ii</i>
Introduction	1
Continuation of East and West Assessments	3
Legislative Analysis	5
<i>Proposition 218</i>	<i>5</i>
<i>Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority</i>	<i>5</i>
<i>Dahms v. Downtown Pomona Property</i>	<i>6</i>
<i>Bonander v. Town of Tiburon</i>	<i>6</i>
<i>Beutz v. County of Riverside</i>	<i>6</i>
<i>Compliance with Current Law</i>	<i>7</i>
Annual Administration for 2022-23	7
General Description of the District and Services	8
Introduction	8
About the District	8
Summary of Services	8
Vectors and Vector-borne Diseases in the Service Area	9
Permanent Vector Control Facility and Laboratory	9
Expansion and Improvement of Vector Control Services	10
Assessment	12
Cost Estimate	14
Method of Assessment	16
Discussion of Benefit	16
Benefit Factors	17
Mosquito Control is a Special Benefit to Properties	18
<i>Reduced mosquito and vector populations on property and as a result, enhanced desirability, utility, usability and functionality of property in the assessment areas18</i>	
<i>Increased safety of property in the assessment areas</i>	<i>20</i>

<i>Reductions in the risk of new diseases and infections on property in the assessment areas</i>	21
<i>Protection of economic activity on property in the assessment areas</i>	22
<i>Protection of the assessment areas' agriculture, tourism, and business industries</i>	23
<i>Reduced risk of nuisance and liability on property in the assessment areas</i>	24
<i>Improved marketability of property</i>	25
Benefit Findings	25
General vs. Special Benefit	25
Calculating General Benefit	28
<i>Benefit to Property Outside the District</i>	28
<i>Benefit to Property Inside the District that is Indirect and Derivative</i>	30
<i>Benefit To The Public At Large</i>	31
<i>Summary of General Benefits</i>	31
Method of Assessment	32
Duration of Assessment	35
Zones of Benefit	35
CPI Adjustment Zones	37
<i>City of Lincoln Zone</i>	38
<i>East County and West County Zone</i>	38
Assessment Apportionment	39
Residential Properties	39
Commercial/Industrial Properties	41
Agricultural, Rangeland, and Cemetery Properties	42
Vacant Properties	43
Other Properties	43
Appeals and Interpretation	44
Duration of Assessment	44
Assessment Diagram	45
Assessment Roll	46

List of Tables

Table 1 – Summary Cost Estimate – FY 2022-23 Budget	12
Table 2 – Cost Estimate – FY 2022-23 Budget	14
Table 3 – Residential Assessment Factors	40
Table 4 – Commercial/Industrial Benefit Assessment Factors	42

Introduction

The Placer Mosquito and Vector Control District (“District”) is an independently funded public agency (separate from any city or the county) that controls and monitors mosquitoes and other vectors in Placer County.

In 2006, in response to growing community concern regarding level of vector control services, combined with the District staff’s professional concern over vector-borne public health issues in Placer County, the District began exploring ways to improve and expand its’ vector control services. The proposed improvements and expansion would require additional funding, and would include mosquito and vector control services, surveillance, disease prevention, abatement, and control of vectors within the service area. The improvements and expanded services would focus on vector control and disease prevention projects and programs such as, but are not limited to, source reduction, biological control, disease monitoring, public education, reporting, accountability, research and interagency cooperative activities.

Meanwhile, since the 1990’s, the District planned to establish a permanent, appropriately-sized facility for the District. The then-current, 2006 facility was inadequate for virtually all elements of comprehensive mosquito and vector control including: laboratory work, legally compliant chemical storage, vehicle maintenance and storage, and general district management and administration. The urgency was increased by the fact that the property that contained the temporary facility was owned by the City of Lincoln and was designated to be developed for other uses over the next several years. In other words, prior to 2007, the baseline level of services provided by the District included basic mosquito control from an inadequate facility and laboratory.

In late 2006, the District conducted a survey of property owners in Placer County to better understand the level of support for the proposed expanded services and permanent facility, as well as other community priorities. The surveys confirmed the anticipated community support and indicated that 66.4% of property owners supported the proposed expanded services and permanent facility, and were willing to contribute \$8.00 per year, per single family home.

Accordingly, in 2007, the District Board of Trustees directed the initiation of proceedings for a proposed special assessment for Expanded Services and Permanent Facility within its boundaries, including all of Placer County except for Sheridan (*The Board decided not include Sheridan in the assessment because, for historical reasons, Sheridan property owners contribute to the District as a portion of their ad-valorem property tax. The amount they contribute is higher on average than the sum of the existing tax/assessment contribution and the proposed new assessment placed on all other property owners in the County.*)

In the summer of 2007, the County conducted an assessment ballot proceeding pursuant to the requirements of Article XIID of the California Constitution ("The Taxpayer's Right to Vote on Taxes Act") and the Health and Safety Code. During this ballot proceeding, property owners in the proposed Service Area were provided with a notice and ballot for the proposed special assessment. A 45-day period was provided for balloting and a public hearing was conducted on June 25, 2007. After the public hearing, all ballots returned within the 45-day balloting period were tabulated.

It was determined by the tabulation that 64.74% of the weighted ballots returned were in support of the assessment. (A total of 40,542 valid ballots were returned - a 34% return rate.) Since the assessment ballots submitted in opposition to the proposed assessments did not exceed the assessment ballots submitted in favor of the assessments (with each ballot weighted by the proportional financial obligation of the property for which ballot was submitted), the District gained the authority to approve the levy of the assessments for fiscal year 2007-08 and future years. On July 16, 2007, the District Board of Trustees approved the assessment per Resolution 2007-10. The authority granted by the ballot proceeding includes an annual adjustment in the maximum authorized assessment rate equal to the annual change in the Consumer Price Index for the San Francisco Area, not to exceed 3%.

Following are some of the improvements and enhanced services funded by the assessment:

- Establishment of a permanent, full-service vector control facility and laboratory.
- Surveillance and testing of rodents and rodent-borne diseases such as plague and hantavirus.
- Surveillance and testing of ticks and tick-borne diseases such as relapsing fever and Lyme disease.
- Improved testing for mosquito and vector-borne diseases and disease control services.
- Rat control services through routine field inspections and community outreach.

- Respond to resident requests concerning mosquitoes, insects, rodents, and other vectors.
- Expansion of professional staff to conduct in-house applied research to respond to the unique demands of Placer County.

This report defines a benefit assessment, which provides funding for vector and disease control services throughout the District, as well as related costs for equipment, capital improvements and services, and facilities necessary and incidental to vector and disease control programs.

Continuation of East and West Assessments

In each subsequent year for which the assessments are continued, the District must direct the preparation of an Engineer's Report, budgets and proposed assessments for the upcoming fiscal year. This Report was prepared pursuant to the direction of the District adopted by resolution 2022-03 on March 22, 2022.

The District proposes to impose the assessment again for 2022-23 and proposes a CPI adjustment of 3.00% to the assessment rate for fiscal year 2022-23. A public hearing will be held on July 18, 2022. If the District approves this Engineer's Report and the proposed assessments on July 18, 2022, the assessments will be submitted to the County Auditor/Controller for inclusion on the property tax rolls for Fiscal Year 2022-23.

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(m)).

The District 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.*

(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 XIID of the California Constitution to finance vector control projects and programs.*

Legislative Analysis

Proposition 218

These assessments were 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 XIII C and XIII D 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.

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 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 the drafters of Proposition 218 and the voters who approved it 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. This ruling is the most significant court case in further legally clarifying the substantive assessment requirements of Proposition 218. Several of the most important elements of the ruling included further emphasis that:

- Benefit assessments are for special benefits to property, not general benefits¹
- The services and/or improvements funded by assessments must be clearly defined
- 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 assessment are consistent with the Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority decision.

Dahms v. Downtown Pomona Property

On June 8, 2009, the 4th Court of Appeal amended its original opinion upholding a benefit assessment for property in the downtown area of the City of Pomona. On July 22, 2009, the California Supreme Court denied review. On this date, Dahms became good law and binding precedent for assessments. In Dahms the Court upheld an assessment that was 100% special benefit (i.e. 0% general benefit) on the rationale that the services and improvements funded by the assessments were directly provided to property in the assessment district. The Court also upheld discounts and exemptions from the assessment for certain properties.

Bonander v. Town of Tiburon

On December 31, 2009, the 1st District Court of Appeal overturned a benefit assessment approved by property owners to pay for placing overhead utility lines underground in an area of the Town of Tiburon. The Court invalidated the assessments on the grounds that the assessments had been apportioned to assessed property based in part on relative costs within sub-areas of the assessment district instead of proportional special benefits.

Beutz v. County of Riverside

On May 26, 2010, the 4th District Court of Appeal issued a decision on the Steven Beutz v. County of Riverside ("Beutz") appeal. This decision overturned an assessment for park maintenance in Wildomar, California, primarily because the general benefits associated with improvements and services were not explicitly calculated, quantified and separated from the special benefits.

¹ Article XIII D, § 2, subdivision (d) of the California Constitution states defines "district" as "an area determined by an agency to contain all parcels which will receive a special benefit from the proposed public improvement or property-related service."

Compliance with Current Law

This Engineer's Report is consistent with the requirements of Article XIIC and XIID of the California Constitution and with the *SVTA* decision because the Services to be funded are clearly defined; the Services are available to and will be directly provided to all benefiting property in the Assessment District; and the Services provide a direct advantage to property in the Assessment District that would not be received in absence of the Assessments.

This Engineer's Report is consistent with *Dahms* because, similar to the Downtown Pomona assessment validated in *Dahms*, the Services will be directly provided to property in the Assessment District. Moreover, while *Dahms* could be used as the basis for a finding of 0% general benefits, this Engineer's Report establishes a more conservative measure of general benefits.

The Engineer's Report is consistent with *Bonander* because the Assessments have been apportioned based on the overall cost of the Services and proportional special benefit to each property. Finally, the Assessments are consistent with *Beutz* because the general benefits have been explicitly calculated and quantified and excluded from the Assessments.

Annual Administration for 2022-23

This Engineer's Report ("Report") was prepared by SCI Consulting Group ("SCI") to establish the estimated costs for a permanent facility, vector control, disease surveillance and related services 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 District's service area based on the estimated special benefit each parcel receives from the services funded by the benefit assessment.

General Description of the District and Services

Introduction

Following are the Services, and corresponding level of service, for the Expanded Services and Permanent Facility Assessment. As previously noted, prior to 2007 the District provided basic mosquito control services throughout Placer County, and these services were provided from an inadequate facility and laboratory. The services described in this Engineer's Report are over and above the previous (prior to 2007) basic-level baseline level of service. The formula below describes the relationship between the final level of service, the existing baseline level of service, and the enhanced level of service to be funded by the assessment.

$$\text{Final Level of Service} = \text{Baseline Level of Service} + \text{Enhanced Level of Service}$$

In this case, the baseline level of service was basic control, and the final level of service is precisely the enhanced level of service funded by the assessment.

About the District

The Placer Mosquito and Vector Control District currently is responsible for mosquito and vector control services throughout Placer County.

Summary of Services

The assessment provides funding for the expansion and improvements of mosquito and vector control services, surveillance, disease prevention, abatement, and control of vectors within the service area. Such vector control and disease prevention projects and programs include, but are not limited to, source reduction, biological control, disease monitoring, public education, reporting, accountability, research and interagency cooperative activities.

This assessment also is used to fund the capital costs, maintenance, and operation expenses of a permanent operational vector control facility including laboratory and shop, as well as financing costs for the facility improvements and other capital improvements.

Vectors and Vector-borne Diseases in the Service Area

The assessment is used for the following:

1. Development of a Permanent Vector Control Facility and Laboratory (“The Improvements”)
2. Expansion and Improvement of Vector Control Services (“The Services”)

Permanent Vector Control Facility and Laboratory

In 2008, the District purchased a new facility located at 2021 Opportunity Drive, in Roseville, CA. Revenue generated from this assessment has been used to finance this purchase. This facility is fully occupied by the District as it completes the final tenant improvements. The new facility substantially satisfies the guidelines listed below which were established when this assessment was created.

However, when the original Engineer’s Report for this assessment was composed, the District was located in temporary facilities on the outskirts of the City of Lincoln. This temporary facility was comprised of a double-wide pre-manufactured office, a temporary storage building for pesticides and parking for district vehicles and equipment. Since the formation of the District in the late 1990s, the District had planned to establish a permanent, appropriately-sized facility. However, the District had expended most its resources over the previous several years (prior to 2006) to the considerable public health effort to confront West Nile virus, as well as respond to the rapid urbanization of Placer County. This assessment was designed to provide funding for the financing of the permanent facility.

The District had established the following guidelines for the permanent facility:

- Centrally located within the District boundaries to provide for efficient travel to various regions of Placer County.
- Adequate workspace for its present full-time staff, with room to expand as Placer County’s population increases.
- Multipurpose room for District Board meetings, other public meetings, and staff training.
- Adequate, secure storage facilities for traps, equipment, and vehicles including pickups, Argos, boats, and quad-runner ATVs.
- Laboratory to provide adequate facilities for insect and vector identification and specimen storage.

- Laboratory to include biosafety and chemical safety enclosures to permit legal, safe handling and more efficient specimen processing, including potentially infectious materials, that may include arboviruses (West Nile virus, Western equine encephalitis virus, St. Louis encephalitis virus), rodent-borne diseases (hantaviruses, arenaviruses), tick-borne diseases (Lyme disease, other borellias, anaplasmosis, babesiosis, Rocky Mountain Spotted Fever, relapsing fever, and other rickettsial diseases), and other vector-borne diseases that exist within the District (dog heartworm, malaria, plague, murine typhus), and other new or emerging vector-borne diseases.
- Laboratory to include an insectary for the maintenance of mosquito colonies and potentially other arthropods, that will be used for testing for pesticide resistance, evaluating new and existing pesticide formulations and products, and to provide specimens for the educational and public outreach programs.
- Safe, legal storage of materials, including pesticides and laboratory chemicals.
- Facility to maintain and rear mosquito fish to improve their availability to the public throughout the year. “

As previously stated, the new 2021 Opportunity Drive facility substantially satisfies the guidelines listed above, which were established when this assessment was created.

Expansion and Improvement of Vector Control Services

Prior to the implementation of this assessment, the District provided comprehensive mosquito control services and only provided services pertaining to other vectors on a “case-by-case” basis. This assessment allows the District to provide comprehensive vector control services including:

- Early detection of public health threats through comprehensive vector and disease surveillance.
- Elimination and/or control of key vectors to protect public health and to diminish the nuisance and harm caused by insects and rodents.
- Appropriate, timely response to customer requests concerning the prevention and control of vectors and the diseases they can transmit.
- Provision of public outreach to and education of property owners and residents concerning vectors and vector diseases.

The following is an outline of the services and programs that are funded by this assessment:

- Request for property service investigations for vectors.

- Provide information and on-site property inspections to identify roof rat activity, attractants, and harborage, and recommend specific control strategies.
- Provide public education programs for property owner and resident peridomestic rodent (Roof Rat) control strategies.
- Yellowjacket control education program for public areas.
- Respond to filth fly complaints.
- Initiate abatement proceedings when appropriate.
- Enhanced vector-borne disease surveillance and control.
- Enhanced education, outreach, and information for property owners and residents about vectors, vector-borne diseases, vector control, and personal protective strategies.
- Identification of and information about arthropods (insects, spiders, ticks, etc.) and vectors for property owners and residents.
- Response to new and emerging vectors and vector-borne diseases.
- Routine sampling of ticks collected from popular recreational trails, parks, and other locations frequented by property owners and residents, and testing for tick-borne diseases including Lyme disease, other borellias, anaplasmosis, babesiosis, Rocky Mountain spotted fever, relapsing fever, and other rickettsial diseases.
- Technological improvements and in-house applied research specific to the needs of vector control and surveillance in Placer County.
- Monitoring of other new and emerging potential vectors such as ticks, mites, and fleas (only vectors found outside of structures are be monitored and/or controlled).

Assessment

WHEREAS, the Placer Mosquito and Vector Control District Board of Trustees contracted with the undersigned Engineer of Work to prepare and file a report presenting an estimate of costs of the Improvements and Services, a diagram for the benefit assessment service area, an assessment of the estimated costs of the Improvements and Services, and the special benefit conferred thereby upon all assessable parcels within the service area,

NOW, THEREFORE, the undersigned, by virtue of the power vested in me under Article XIID of the California Constitution, the Government Code and the Health and Safety Code and the order of the Placer Mosquito and Vector Control District Board of Trustees, hereby make the following determination of an assessment to cover the portion of the estimated cost of the Improvements and Services, and the costs and expenses incidental thereto to be paid by the Expanded Services and Permanent Facility Assessment.

The amount to be paid for the Improvements and Services and the expenses incidental thereto, to be paid by the Placer Mosquito and Vector Control District for fiscal year 2022-23 is generally as follows:

Table 1 – Summary Cost Estimate – FY 2022-23 Budget

Vector & Disease Control Services	\$1,524,006
Fixed Asset & Capital Equipment	\$590,000
Incidentals	\$39,172
TOTAL BUDGET	\$2,153,178
Less:	
Other Revenue	(\$105,750)
Net Amount To Assessments	\$2,047,428

An Assessment Diagram is hereto attached and made a part hereof showing the exterior boundaries of said Assessment Service Area. The distinctive number of each parcel or lot of land in the said Assessment Service Area 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 the Improvements and Services, including the costs and expenses incidental thereto, upon the parcels and lots of land within said Expanded Service and Permanent Facility Assessment, in accordance with the special benefits to be received by each parcel or lot, from the Improvements and 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 Service Area in proportion to the special benefits to be received by said parcels or lots of land, from the Improvements and Services.

The assessment is subject to an annual adjustment tied to the Consumer Price Index for the San Francisco Bay Area as of December of each succeeding year (the CPI), with a maximum annual adjustment not to exceed 3.00%. The annual increase in CPI for fiscal year 2022-23, based on the yearly CPI change from December, 2021 is 4.24%. An adjustment is proposed for 2022-23 of 3.00%. (This will result in 1.68% “banked” CPI and is the maximum allowable CPI increase for this year consistent with the 3.00% maximum annual growth requirement) The rate, adjusted by 3.00% for 2022-23 is \$11.74 per Single Family Equivalent.

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 Placer for the fiscal year 2022-23. 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 Placer.

I hereby place opposite the Assessor Parcel Number for each parcel or lot within the Assessment Roll, the amount of the assessment for the fiscal year 2022-23 for each parcel or lot of land within the said Expanded Services and Permanent Facility Assessment Service Area.

July 18, 2022



By _____
John W. Bliss, License No. C052091
Engineer of Work

Cost Estimate

Table 2 – Cost Estimate – FY 2022-23 Budget

Placer Mosquito and Vector Control District EXPANDED SERVICES AND PERMANENT FACILITY ASSESSMENT				<i>Total Budget</i>
Costs				
Expanded Vector Control and Disease Prevention Operations				\$1,524,006
Permanent Facility				\$590,000
Subtotal of Base Costs				\$2,114,006
Less:				
Contributions from other Sources ¹				(\$105,750)
Subtotal Costs of Expanded Services and Permanent Facility				\$2,008,256
Plus:				
Incidental Costs ²				
Allowance for Uncollectable Assessments				\$2,500
County Collection, Levy Administration, and Other Incidentals				\$36,672
Subtotal of Incidental Costs				\$39,172
Total Mosquito, Vector & Disease Control Services and Incidentals⁶ (Net Amount to be Assessed)				\$2,047,428
Budget Allocation to Property				
		Total SFE Units ³	Assessment per SFE ⁴	Total Assessment ⁵
Service Area		142,850	\$11.74	\$1,677,059
Service Area - City of Lincoln		20,500	\$17.86	\$366,130
Service Area - Zone B		387	\$10.96	\$4,239
				\$2,047,428

Notes:

1. Contribution from other sources to cover the costs of any general benefits and special benefits not funded by the assessments.
2. Incidental Costs includes allowance for uncollectible assessments from assessments on public agency parcels, County collection charges and assessment administration costs.
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.
6. 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.

Method of Assessment

This section of the Report includes an explanation of the benefits derived from the Improvements and Services provided by the District, and the methodology used to apportion the total assessment to properties within the Expanded Services and Permanent Facility Assessment Service Area.

The Expanded Services and Permanent Facility Assessment Service Area consists of the Assessor Parcels in Placer County, except for Sheridan, as defined within the area of the boundary diagram included within this Engineer's Report (see the Assessment Roll for a list of all the parcels included in the Expanded Services and Permanent Facility Assessment Service Area).

The method used for apportioning the assessment is based upon the proportional special benefits derived by the properties in the assessment Service Area over and above general benefits conferred on real property or to the public at large. The apportionment of special benefit is a multi-step process:

1. Identification of total benefit to the properties derived from the Services
2. Calculation of the proportion of these benefits that are special vs. general
3. Determination of the relative special benefit within different areas within the assessment areas
4. Determination of the relative special benefit per property type and property characteristic
5. Calculation of the specific assessment for each individual parcel based upon special vs. general benefit; location, property type and property characteristics

Discussion of Benefit

In summary, the assessments can only be levied based on the special benefit to property. This special benefit is received by property over and above any general benefits from the Services. 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 benefit received by property within the Service Area as a result of the improvements or services provided by a local agency. That special benefit is determined in relation to the total cost to that local entity of providing the service and/or improvements.

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

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

The Legislature 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 provides that a district may levy special assessments consistent with the requirements of Article XIID 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 218.²

Therefore the State Legislature unanimously found that vector control services are a valuable and important public service that can be funded by benefit assessments.

The Improvements (expanded and improved administration, as well as the permanent vector control facility and laboratory) is essential to provide competent and efficient services. Consequently, in analyzing the special benefits provided by the Services, the Improvements are an essential and integral part of the Services, while the benefit analysis below focuses on the Services, it also includes the Improvements.

Benefit Factors

The below benefit factors, when applied to property in the assessment areas, confer special benefits to property and ultimately improve the safety, utility, functionality and usability of property in the assessment areas. These are special benefits to property in the assessment areas 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.

² Senate Bill 1588, Mosquito Abatement and Vector Control District Law, Legislative bill analysis

Mosquito Control is a Special Benefit to Properties

As described below, this Engineer's Report concludes that mosquito control is a special benefit that provides direct advantages to property in the assessment areas. For example, the assessment provides for 1) surveillance throughout the assessment areas to measure and track the levels and sources of mosquitoes impacting property in the area and the people who live and work on the property, 2) mosquito and mosquito source control, treatment and abatement throughout the assessment areas such that all property in the area benefits from a comparable reduction of mosquito levels, 3) monitoring throughout the assessment areas to evaluate the effectiveness of District treatment and control and to ensure that all properties are receiving the equivalent level of mosquito reduction benefits, and 4) properties in the assessment areas are eligible for service requests which result in District staff directly visiting, inspecting and treating property. Moreover, the Services funded by the assessments reduce the level of mosquitoes and vectors arriving at and negatively impacting properties within the assessment area.

In order to allocate the assessments, the Engineer identified the types of special benefit arising from the Services and that are provided to property within the assessment areas. These types of special benefit are as follows:

Reduced mosquito and vector populations on property and as a result, enhanced desirability, utility, usability and functionality of property in the assessment areas

The assessments provide new and enhanced services for the control and abatement of nuisance and disease-carrying mosquitoes. These Services materially reduce the number of vectors on properties throughout the assessment areas. The lower mosquito and vector populations on property in the assessment areas is a direct advantage to property that serves 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 directly benefit from reduced mosquito and vector populations and properties with lower vector populations are more usable, functional and desirable.

Excessive mosquitoes and other vectors in the area 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.³ 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 areas.

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.”⁴

Mosquitoes and other vectors emerge from sources throughout the assessment areas, and with an average flight range of two miles, mosquitoes from known sources can reach all properties in the assessment areas. These sources include standing water in rural areas, such as marshes, pools, wetlands, ponds, drainage ditches, drainage systems, tree holes and other removable sources such as old tires and containers. The sources of mosquitoes also include numerous locations throughout the urban areas in the Assessment District. These sources include underground drainage systems, containers, unattended swimming pools, leaks in water pipes, tree holes, flower cups in cemeteries, over-watered landscaping and lawns and many other sources. By controlling mosquitoes at known and new sources, the Services materially reduce mosquito populations on property throughout the Assessment District.

The research efforts of countless medical entomologists have deepened our understanding of the role of mosquitoes in transmitting pathogens that cause human diseases. If there is a lesson in the history of mosquito control, it is that there are no “magic bullets”. Protecting the public from pathogen bearing and

³ 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.

⁴ Assembly Concurrent Resolution 52, chaptered April 1, 2003

*nuisance mosquitoes depends on research to improve mosquito control and an abiding respect for the environment.*⁵

A recently increasing source of mosquitoes is unattended swimming pools:

*“Anthropogenic landscape change historically has facilitated outbreaks of pathogens amplified by peridomestic vectors such as Culex pipiens complex mosquitoes and associated commensals such as house sparrows. The recent widespread downturn in the housing market and increase in adjustable rate mortgages have combined to force a dramatic increase in home foreclosures and abandoned homes and produced urban landscapes dotted with an expanded number of new mosquito habitats. These new larval habitats may have contributed to the unexpected early season increase in WNV cases in Bakersfield during 2007 and subsequently have enabled invasion of urban areas by the highly competent rural vector Culex tarsalis. These factors can increase the spectrum of competent avian hosts, the efficiency of enzootic amplification, and the risk for urban epidemics.”*⁶

The services include monitoring and treatment of neglected pools throughout the assessment area.

Increased safety of property in the assessment areas

The assessments result in new year-round proactive Services to control and abate mosquitoes and other vectors that otherwise would occupy properties throughout the assessment areas. Mosquitoes and other vectors are transmitters of diseases, so the reduction of mosquito populations makes property in the assessment areas 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 in the assessment areas safer, which is a distinct special benefit to property in the assessment areas.⁷ This is not a general benefit to property in the assessment areas or the public at large because the Services are tangible mosquito and disease control services that are provided directly to the properties in the assessment areas and the Services are over and above what otherwise would be provided by the District or any other agency.

⁵ Patterson, Gordon M. (2016 Dec). Looking Backward, Looking Forward: The Long, Torturous Struggle with Mosquitoes, California. Insects.; 7(4): 56.).

⁶ Riesen William K. (2008). Delinquent Mortgages, Neglected Swimming Pools, and West Nile Virus, California. Emerging Infectious Diseases. Vol. 14(11).

⁷ 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 areas.

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.”⁸

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

“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 in the assessment areas

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.

“Dengue fever is among the most widespread vector-borne infectious diseases. The primary vector of dengue is the Aedes aegypti mosquito. Ae. aegypti is prevalent in the tropics and sub-tropics and is closely associated with human habitats outside its native range of Africa. While long established in the southeastern United States of America where dengue is reemerging, breeding populations have never been reported from California until the summer of 2013.”⁹

“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.”¹⁰

⁸ Assembly Concurrent Resolution 52, chaptered April 1, 2003

⁹ Gloria-Soria A, Brown JE, Kramer V, Hardstone Yoshimizu M, Powell JR (2014) Origin of the Dengue Fever Mosquito, *Aedes aegypti*, in California. *PLoS Negl Trop Dis* 8(7): e3029. doi:10.1371/journal.pntd.0003029

¹⁰ Rose, Robert. (2001). Pesticides and Public Health: Integrated Methods of Mosquito Management. *Emerging Infectious Diseases*. Vol. 7(1); 17-23.

“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.”¹¹ (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 assessments help prevent, on a year-round basis, the presence of vector-borne diseases on property in the assessment areas. This is another tangible and direct special benefit to property in the assessment areas that would not be received in the absence of the assessments.

Protection of economic activity on property in the assessment areas

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 assessments help to prevent the likelihood of such outbreaks in the assessment areas.

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 areas.

The economic impact of diseases is well documented. According to a study prepared for the Centers for Disease Control and Prevention, economic losses due to 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.

¹¹ Center for Disease Control. (2004). West Nile Virus Activity --- United States, November 9--16, 2004. Morbidity and Mortality Weekly Report. 53(45); 1071-1072.

These data indicate a substantial short-term cost of the WNV disease epidemic in Louisiana.¹²

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 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.¹³

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

Protection of the assessment areas' agriculture, tourism, and business industries

The agriculture, tourism and business industries in the assessment areas benefit from reduced levels of harmful or nuisance mosquitoes and other vectors. Conversely, any outbreaks of emerging vector-borne 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.

The report noted that the impacts on countries that have tourist-based economies such as Belize and other countries in the Caribbean would be particularly strong. More than 80% of the anticipated total losses, which could reach \$9 billion in the Caribbean, are the direct result of reduced revenues from international tourism.

¹⁴

¹² 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>

¹³ Utz, J. Todd, Apperson, Charles S., McCormack, 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

¹⁴ Duman-Scheel, Molly, et al., (2018) Mosquito control practices and perceptions: An analysis of economic stakeholders during the Zika epidemic in Belize, Central America: 2002, PLoS One. 13(7): e0201075.

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.”¹⁵

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 mosquitoes¹⁶

The assessments serve to protect the businesses and industries in the assessment areas. This is a direct advantage and special benefit to property in the assessment areas.

Reduced risk of nuisance and liability on property in the assessment areas

In addition to health related factors, uncontrolled mosquito and vector populations create a nuisance for residents, employees, customers, tourists, farm workers and guests in the assessment areas. Properties in the assessment areas benefit from the reduced nuisance factor that are 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 areas 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 in the assessment areas can also contain significant sources.¹⁷ 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.

¹⁵ 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/cnabs/nahms/equine/wnv2002_CO_NB.pdf

¹⁶ Jennings, Allen. (2001). USDA Letter to EPA on Fenthion IRED. United States Department of Agriculture, Office of Pest Management Policy. March 8, 2001.

¹⁷ Sources of mosquitoes on residential, business, agricultural, range and other types of properties include removable sources such as containers that hold standing water.

The Services provided by the District reduce the mosquito and vector related nuisance and health liability to properties in the assessment areas. The reduction of that risk of liability constitutes a special benefit to property in the assessment areas 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 Services specially benefit properties in the assessment areas by making them more useable, livable and functional. The Services also make properties in the assessment areas more desirable, and more desirable properties also benefit from improved marketability. This is another tangible special benefit to certain property in the assessment areas which will not be enjoyed in absence of the Services.¹⁸

Benefit Findings

In summary, the direct special benefits described in this Report ultimately enhance the economic values of all benefiting real properties in excess of the assessments for these properties. Therefore, the assessment engineer finds that the cumulative benefits to property from the Services are reasonably equal or greater than the assessment of only \$11.74 per single family equivalent.

General vs. Special Benefit

Article XIID 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:

¹⁸ 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.

Total Benefit	=	General Benefit	+	Special Benefit
--------------------------	----------	----------------------------	----------	----------------------------

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. General benefits are conferred to properties located “in the district,¹⁹” but outside the narrowly-drawn Assessment District and to “the public at large.” Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority 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.

¹⁹ Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority explains as follows:

Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority observes that Proposition 218’s definition of “special benefit” presents a paradox when considered with its definition of “district.” Section 2, subdivision (i) defines a “special benefit” 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.” (Art. XIII D, § 2, subd. (i), italics added.) Section 2, subdivision (d) defines “district” as “an area determined by an agency to contain all parcels which will receive a special benefit from a proposed public improvement or property-related service.” (Art. XIII D, § 2, subd. (d), italics added.) 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 benefiting 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 the 2009 Dahms case, the court upheld an assessment that was 100% special benefit on the rationale that the services funded by the assessments were directly provided to property in the assessment district. Similar to the assessments in Pomona that were validated by Dahms, the Assessments described in this Engineer’s Report fund mosquito, vector and disease control services directly provided to property in the assessment area. Moreover, as noted in this Report, the Services directly reduce mosquito and vector populations on all property in the assessment area. Therefore, Dahms establishes a basis for minimal or zero general benefits from the Assessments. However, in this report, the general benefit is more conservatively estimated and described, and then budgeted so that it is funded by sources other than the assessment.

A formula to estimate the general benefit is listed below:

General Benefit	=	Benefit to real property outside of improvement district	+	Benefit to real property inside of improvement district	+	Benefit to 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 Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority 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 these assessments, the overwhelming proportion of the benefits conferred to property is special, since the services and related improvements funded by the Assessments are directly received by the properties in the Assessment District and are only minimally received by property outside the Assessment District or the public at large.²⁰ Arguably, all of the Services funded by the assessment therefore are special benefit because the Services particularly and distinctly benefit and protect the assessment areas over and above the baseline benefits and service which were previously zero.

²⁰ The assessment funds both Services and the related improvements described above. The Improvements are essential in order to enable the District to perform the Services. Therefore, in this section, the discussion about the services includes the related benefits from the improvements.

Nevertheless, arguably some of the Services benefit the public at large and properties outside the assessment areas. 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

Benefit to Property Outside the District

Properties within the Assessment District receive almost all of the special benefits from the Services because the Services funded by the assessments are provided directly to protect property within the Assessment Districts from mosquitoes and vector-borne diseases. However, properties adjacent to, but just outside of, the assessment areas boundaries may receive some benefit from the Services in the form of reduced mosquito populations on property outside the assessment areas. Since this benefit, is conferred to properties outside the district 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 areas. Each year, the District provides some of its Services in areas near the boundaries of the assessment areas. By abating mosquito populations near the borders of the assessment areas, the Services could provide benefits in the form of reduced mosquito populations and reduced risk of disease transmission to properties just outside the assessment areas. If mosquitoes were not controlled inside the assessment areas, more of them would fly from the assessment areas. Therefore control of mosquitoes within the assessment areas provides some benefit to properties outside the assessment areas but within the normal flight range of mosquitoes, in the form of reduced mosquito populations and reduced vector-borne disease transmission. This is a measure of the general benefits to property outside the assessment areas because this is a benefit from the Services that is not specially conferred upon property in the assessment area.

The mosquito potential outside the assessment areas is based on studies of mosquito dispersion concentrations. Mosquitoes can travel up to two miles, on average, so this destination range is used. Based on studies of mosquito destinations, relative to parcels in the assessment areas, average concentration of mosquitoes from the assessment areas on properties within two miles of the assessment areas is calculated to be 6%.²¹ This relative vector population reduction factor within the destination range is combined with the number of parcels outside the assessment areas and within the destination range to measure this general benefit and is calculated as follows:

Criteria:

Mosquitoes may fly up to 2 miles from their breeding source.

42,960 parcels within 2 miles of, but outside of the District, may receive some mosquito and disease protection benefit

6% portion of relative benefit that is received

150,864 Parcels in the Assessment District

Calculations:

Total Benefit = 42,960 parcels * 6% = 2,578 parcels equivalents

Percentage of overall parcel equivalents = $2,578 / (2,578 + 150,864) = 1.7 \%$

Therefore, for the overall benefits provided by the Services to the assessment areas, it is determined that 1.7% of the benefits would be received by the parcels within two miles of the assessment areas boundaries.

²¹ Tietze, Noor S., Stephenson, Mike F., Sidhom, Nader T. and Binding, Paul L., "Mark-Recapture of *Culex erythrothorax* in Santa Cruz County, California", Journal of the American Mosquito Control Association, 19(2):134-138, 2003.

Benefit to Property *Inside* the District that is *Indirect and Derivative*

The “indirect and derivative” benefit to property within the Assessment Districts is particularly difficult to calculate. As explained above, all benefit within the Assessment Districts is special because the mosquito and disease control services in the assessment areas would provide direct service and protection that is clearly “over and above” and “particular and distinct” when compared with the lack of such protection under current conditions. Further the properties are within the Assessment District’s boundaries and this Engineer’s Report demonstrates the direct benefits received by individual properties from mosquito and disease control services.

In determining the Assessment Districts’ areas, the District has been careful to limit it to an area of parcels that directly receive the Services. All parcels directly benefit from the surveillance, monitoring and treatment that is provided on an equivalent basis throughout the assessment areas in order to maintain the same improved level of protection against mosquitoes and reduced mosquito populations throughout the area. The surveillance and monitoring sites are spread on a balanced basis throughout the area. Mosquito control and treatment would be provided as needed throughout the area based on the surveillance and monitoring results. The shared special benefit - reduced mosquito levels and reduced presence of vector-borne diseases - are received on an equivalent basis by all parcels in the assessment areas. Furthermore, all parcels in the Assessment District would directly benefit from the ability to request service from the District and to have a District field technician promptly respond directly to the parcel and address the owner’s or resident’s service need. The Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority decision indicates that the fact that a benefit is conferred throughout the assessment district area does not make the benefit general rather than special, so long as the assessment district is narrowly drawn and limited to the parcels directly receiving shared special benefits from the service. This concept is particularly applicable in situations involving a landowner-approved assessment-funded extension of a local government service to benefit lands previously not receiving that particular service. The District therefore concludes that, other than the small general benefit to properties outside the Assessment District (discussed above) and to the public at large (discussed below), all of the benefits of the Services to the parcels within the Assessment District are special benefits and it is not possible or appropriate to separate any general benefits from the benefits conferred on parcels in the assessment areas.

Benefit To The Public At Large

With the type and scope of Services provided to the assessment area, it is very difficult to calculate and quantify the scope of the general benefit conferred on the public at large. Because the Services directly serve and benefit all of the property in the assessment area, any general benefit conferred on the public at large would be small. Nevertheless, there would be some indirect general benefit to the public at large.

The public at large uses the public highways and other regional facilities, and when traveling in and through the assessment area they benefit from the Services. A fair and appropriate measure of the general benefit to the public at large therefore is the amount of highway and other regional facilities area within the assessment areas relative to the overall land area. An analysis of maps of the assessment area shows that approximately 1% of the land area in the assessment areas is covered by highways and other regional facilities. This 1% therefore is a fair and appropriate measure of the general benefit to the public at large within the assessment areas.

Summary of General Benefits

Using a sum of the measures of general benefit for the public at large and land outside the assessment area, we find that approximately 2.7% of the benefits conferred by the Mosquito and Disease Control Assessment may be general in nature and should be funded by sources other than the assessment.

General Benefit Calculation

1.7%	(Outside the Assessment District)
+ 0.0%	(Property within the Assessment District)
+ 1.0%	(Public at Large)
= 2.7%	(Total General Benefit)

Although this analysis supports the finding that 2.7% 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. This additional amount allocated to general benefit also covers general benefit to parcels in the assessment area if it is later determined that there is some general benefit conferred on those parcels.

The estimated cost of the Services is \$2,114,006. Of this total amount, the existing District must effectively contribute at least \$105,700, or over 5% (rounded up from 2.7%) of the total budget from sources other than these Mosquito Control and Disease Prevention assessments. This year's contribution of \$105,750 plus additional non-monetary contributions such as shared equipment and supplies exceed this requirement and offsets any general benefits from the Mosquito Control and Disease Prevention Assessment Services.

Method of Assessment

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

The special benefit conferred upon a specific parcel is derived as a sum function of the applicable special benefit type (such as improved safety (i.e. disease risk reduction) on a parcel for a mosquito assessment) and a parcel-specific attributes (such as the number of residents living on the parcel for a mosquito assessment) which supports that special benefit. Calculated special benefit increases accordingly with an increase in the product of special benefit type and supportive parcel-specific attribute.

The calculation of the special benefit per parcel is summarized in the following equation:

$$\text{Special Benefit}_{(\text{per parcel})} = \sum f(\text{Special Benefits, Property Specific Attributes}^1)_{(\text{per parcel})}$$

1. Such as use, property type, and size.

This process to apportion benefit 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 and is generally recognized as providing the basis for a fair and appropriate distribution of assessments. 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 single family home on an average sized residential parcel. The "benchmark" property is the single family detached dwelling which is one Single Family Equivalent or one SFE.

As previously discussed, the assessments fund comprehensive, year-round vector control and disease surveillance and control Services that clearly confer special benefits to the underlying properties in the Service Area. These benefits are initially realized by the property owners, guests, residents, employees, tenants, pets and animals who 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 largely 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.

Such an approach of apportioning assessments based on population factors is commonly used. 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.²²

With regard to benefits and source locations, the assessment engineer determined that since vectors may move from their breeding locations to all properties in their travel range and since many vectors are actually attracted to properties occupied by people or animals, the benefits from vector control extend beyond the source locations to all properties that would be a “destination” for vectors. In other words, the control and abatement of vector populations ultimately confers benefits to all properties that are a destination of vectors, rather than just those that are source habitats of vectors.

²² 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.”

Although some primary vector habitats may be located outside of residential areas, residential properties can and do generate their own, often significant, populations of vector organisms. For example, broken sewer pipes in residential areas in the Service Area are a common source of rats. Since the rats may range over ½ mile, most homes in the Service Area are within the travel zone of rat habitats. Moreover, there are many other common residential potential breeding sources of vectors, such as miscellaneous areas under and around homes. Clearly, there is a potential for vector breeding habitats on virtually all property. More importantly, all properties in the Service Area are within the destination range of vectors and most properties are actually within the destination range of multiple vector breeding source locations.

Because vectors can rapidly and readily travel from their breeding locations to other properties over a large area and because there are current or potential breeding habitats literally everywhere in the Service Area, the assessment engineer determined that all similar properties have generally equivalent vector “destination” potential and, therefore, receive equivalent levels 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 vector populations, as well as the reduced threat from diseases carried by 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 should be based on the type and use of property, the relative size of the property and its relative population and usage potential. This method is further described below.

Duration of Assessment

The Assessment may be levied, beginning in fiscal year 2007-08, and every year thereafter, so long as vectors remain in existence and the Placer Mosquito and Vector Control District requires funding from the Assessment for its Services in the Service Area. 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 Placer Mosquito and Vector Control District Board of Trustees approves an annually updated Engineer's Report, budget for the Assessment, Services provided, and other specifics of the Assessment. In addition, the District Board must hold an annual public hearing to continue the Assessment.

Zones of Benefit

The boundaries of the assessment areas have been carefully drawn to include the properties in Placer County that would materially benefit from the Services. 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 and vector-borne diseases and the special benefit factors of desirability, utility, usability, livability and marketability are ultimately determined by the population and usage potential of property. The boundaries of the assessment areas have been narrowly drawn to include only properties that specially benefit from the mosquito control services.

The Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority 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 assessment, the advantage that each parcel receives from the mosquito control services is direct, and the boundaries are narrowly drawn to include only parcels that benefit from the assessment. Therefore, the even spread of assessment throughout the narrowly drawn district is indeed consistent with the Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority decision.

Within the assessment areas zones of benefit are not justified or needed because the Services are provided relatively evenly across the entire area and for all parcels within the assessment areas' boundaries, and the surveillance, monitoring and treatment are applied in such a manner as to attain a relatively even level of mosquito control throughout the area.

"In 2009, the District completed an analysis of service levels throughout the District boundaries. In particular, the District evaluated service levels in regards to its core services including surveillance, larviciding and service requests; and confirmed that service levels and benefits are essentially equivalent across all parcels (except as noted below and described as Zone B). Regarding service requests, the District will respond to any parcel located within the District, regardless of how remote, and provide mosquito control services appropriate to the situation. Larvicide applications generally are applied throughout the District. Mountainous areas suffer from significant levels of "snow melt mosquitoes" during the spring, which require substantial larvicide applications for adequate control. Other lower elevation areas suffer from other mosquito types primarily during the summer and early fall that likewise require substantial larvicide applications for adequate control.

However, the District's evaluation showed that some mountainous areas of the District located in rural south-central Placer County do not receive the same service level for District surveillance services. These areas are described as Zone B, and are indicated in the Assessment Diagram.

The District uses mosquito traps to collect and then quantify species, quantities, concentrations, viral loads, etc. of mosquitoes. The selection of the locations of these traps requires a multi-attribute evaluation, with trap locations changing seasonally and when high concentrations of mosquitoes are identified. The District places mosquito traps at 10 mile radii, primarily throughout the more populated areas of the County, as part of this routine adult trapping program. Zone B parcels largely fall outside of the 10 mile radii of these routine adult mosquito traps and they do not typically receive the same level of routine surveillance as compared to the areas outside Zone B.

The Zone B parcels therefore will be subject to a reduced assessment, commensurate with the different benefit level. (If in the future, the routine adult mosquito trapping service is extended into part or all of Zone B, the Zone B boundaries will be modified accordingly.)

The District analyzed its overall budget and determined that 6.61% of the budget is allocated to routine adult mosquito trapping. Therefore Zone B Parcels will be subjected to a 6.61% assessment reduction."

CPI Adjustment Zones

Due to historical differences in the existing revenue mechanisms, two "CPI Adjustment Zones" have been established. It should be emphasized that the level of service is not different between the two zones, but rather, the assessment rate may vary in order to establish equity in the overall (existing + expanded services and permanent facility) revenue collected per property. Descriptions and example calculations below illustrate how this zone structure results in equal total revenues corresponding to equal benefits.

City of Lincoln Zone

The existing Special Tax for vector control services within the City of Lincoln has a fixed rate (or “ceiling”) of \$15.00 per parcel per year, and does not include a mechanism to adjust for annual cost increases above the ceiling. Since the existing assessments in East and West County do include mechanisms for annual rate adjustments, it was anticipated that over time, the total assessments in these areas may surpass the sum of the special tax and this assessment in Lincoln. As a result, special language was included within the City of Lincoln Notices and Ballots during the assessment proceeding in 2007. This language was approved by City of Lincoln property owners and allows for the assessment rate for this assessment to be adjusted accordingly such that the overall revenue collected is consistent between Lincoln and the remainder of the District.

Therefore, annual rate increases within the City of Lincoln will be based upon the CPI increase as applied to the combination of the Lincoln Special Tax and this assessment. To be clear, this CPI adjustment will apply to assessment only, and will not affect the existing Lincoln Special Tax.

For 2022-23, the proposed assessment rate for the East and West County assessments is \$21.12, and exceeds the \$15.00 ceiling of the Lincoln Special Tax. See the sample calculations below:

East County and West County Zone

Annual rate adjustments for the East County and West County zones will be applied to the new assessment only. (The “East and West” assessments already contain annual CPI mechanisms.)

East County and West County Zone CPI

Example Calculation for 2022-23:

\$ 21.12	(East and West Assessment Rate)
+ \$ 11.74	(Expanded Services / Perm Facility Rate)
= \$32.86	(Combined Proposed Assessment)

City of Lincoln Zone CPI**Example Calculation for 2022-23:**

	\$32.86	(Combined Proposed Assessment)
-	\$15.00	(Less 2022-23 Lincoln Special Tax)
=	\$17.86	(2022-23 Expanded Services / Perm Facility rate)

These calculations confirm that the total revenue collected throughout the entire District is \$32.86 per SFE. (except for in Sheridan, which is funded by a different mechanism.) However, note that this total is comprised of \$15.00 from the Lincoln Special Tax plus \$17.86 from the Expanded Services/Permanent Facilities Assessment within the City of Lincoln and of \$21.12 from the East or West Assessment plus \$11.74 from the Expanded Services/Permanent Facilities Assessment within the East or West Assessment Districts.

Assessment Apportionment

The special benefits derived from the 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. However, it is ultimately people who do or could use the property and who enjoy the special benefits described above. Therefore, the opportunity to use and enjoy the region within the Service Area without the excessive nuisance, diminished "livability" or the potential health hazards brought by vectors and the diseases they carry is a special benefit to properties in the Service Area. This benefit is related to 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.²³

Residential Properties

All improved residential properties that represent a single residential dwelling unit are assigned one Single Family Equivalent or 1.0 SFE. Traditional houses, zero-lot line houses, and town homes are included in this category.

²³ 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.

Single family residential properties in excess of one acre receive additional benefit relative to a single family home on less than one acre, because the larger parcels provide more area for vector breeding sources and the District's vector 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 the 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.

Properties with more than one residential unit 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 Service Area. This Report analyzed Placer 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 Table 3 below.

The SFE factor of 0.28 per dwelling unit for multifamily residential properties applies to such properties with 20 or fewer units. Properties in excess of 20 units typically offer on-site management, monitoring and other control services that tend to offset some of the benefits provided by the Vector Control District. Therefore the benefit for properties in excess of 20 units is determined to be 0.28 SFE per unit for the first 20 units and 0.10 SFE per each additional unit in excess of 20 dwelling units.

Table 3 – Residential Assessment Factors

	Total Population	Occupied Households	Persons per Household	Pop. Density Equivalent	SqFt Factor	Proposed Rate
Single Family Residential	201,288	72,138	2.79	1.00	1.00	1.00
Condominium	7,614	3,069	2.48	0.89	0.54	0.48
Duplex, Triplex, Fourplex	10,562	4,643	2.27	0.82	0.44	0.36
Multi-Family Residential (5+ Units)	17,234	9,105	1.89	0.68	0.42	0.28
Mobile Home on Separate Lot	8,607	4,319	1.99	0.71	0.33	0.23

Source: 2000 Census, Placer County, and property dwelling size information from the Placer 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.

The average size of a single family home with 1.0 SFE factor in the Service 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 Table 4, 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 fourth 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. Table 4 lists the benefit assessment factors for such business properties.

Agricultural, Rangeland, and Cemetery 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 and 1.2 for cemeteries. Since these properties typically are a source of vector habitat and breeding, and/or are typically closest to other habitat of 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 are shown in the following Table 4.

Table 4 – Commercial/Industrial Benefit Assessment Factors

Type of Commercial/Industrial Land Use	Average Usage Per Acre ¹	SFE Units per Fraction Acre ²	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	

1. Source: San Diego Association of Governments Traffic Generators Study, University of California, Davis and other studies and sources.
2. 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 Placer County found that 50% 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 69% benefit discount is applied to the valuation factor of 0.50 to account for the current low use density and potential for harm or nuisance to the property owner or his residents, employees, customers and guests. The combination of these measures results in a 0.16 factor. It is reasonable to assume, therefore, that approximately 16% of the benefits are related to the underlying land and 75% are related to the day-to-day use of the property. Using this ratio, the SFE factor for vacant parcels is 0.16 per parcel.

Other Properties

Article XIID 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 or institutional uses is benefited and assessed at the same rate as such privately owned property. Other public properties such as watershed parcels, parks, open space parcels are determined to, on average, receive similar benefits as a single family home. Therefore such parcels are assessed an SFE benefit factor of 1. 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.

Church parcels, institutional properties, and property used for educational purposes typically generate employees on a less consistent basis than other non-residential parcels. Many of these properties with higher population factors provide on-site management, monitoring and other control services that tend to offset some of the benefits provided by the District. Therefore, these parcels are determined to, on average, receive similar benefits as a single family home. Therefore such parcels are assessed an SFE benefit factor of 1.

Appeals and Interpretation

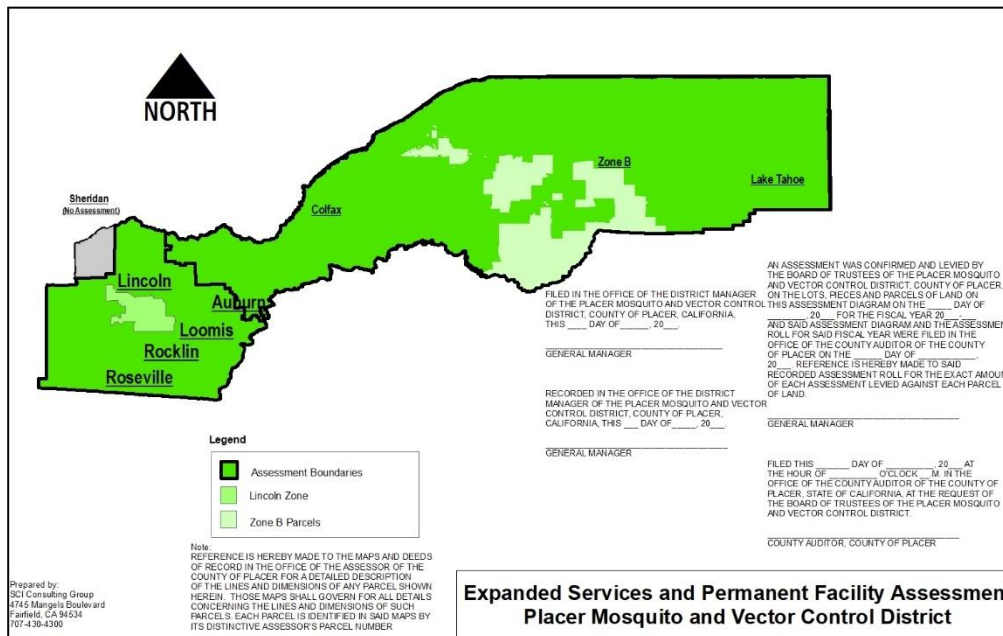
Any property owner who feels that the assessment levied on the subject property is in error as a result of incorrect information being used to apply the foregoing method of assessment, may file a written appeal with the General Manager of the Placer Mosquito and Vector Control District or his or her 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 General Manager or his or her designee will promptly review the appeal and any information provided by the property owner. If the General 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 Placer County for collection, the General 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 General Manager, or his or her designee, shall be referred to the District Board. The decision of the District Board shall be final.

Duration of Assessment

It is proposed that the assessments be continued for fiscal year 2022-23 and every year thereafter, so long as mosquitoes remain in existence and the Placer Mosquito and Vector Control District requires funding from the assessments for its Services in the assessment areas. 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 Placer Mosquito and Vector Control District Board of Trustees approves an annually updated Engineer's Report, budget for the Assessment, Services to be provided, and other specifics of the Assessment. In addition, the District Board of Trustees must hold an annual public hearing to continue the Assessment.

Assessment Diagram

The Placer Mosquito and Vector Control District, Expanded Services and Permanent Facility area includes all properties within the boundaries of the Service Area. The boundaries of the Vector and Disease Control assessment area are displayed on the following Assessment Diagram.



Assessment Roll

Reference is hereby made to the Assessment Roll in and for said assessment proceedings on file in the office of the Placer Mosquito and Vector Control District, as said Assessment Roll is too voluminous to be bound with this Report.