LOCAL AGENCY FORMATION COMMISSION OF NAPA COUNTY

NAPA COUNTY MOSQUITO ABATEMENT DISTRICT: MUNICIPAL SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATE

Final Report May 2010

Prepared by:

LAFCO of Napa County 1700 Second Street, Suite 268 Napa, California 94559 http://napa.lafco.ca.gov

Committed to serving the citizens and government agencies of its jurisdiction by encouraging the preservation of agricultural lands and open-space and coordinating the efficient delivery of municipal services.

Juliana Inman, Chair, City Member Bill Dodd, Vice-Chair, County Member Lewis Chilton, Commissioner, City Member Brian J. Kelly, Commissioner, Public Member Brad Wagenknecht, Commissioner, County Member Joan Bennett, Alternate Commissioner, City Member Mark Luce, Alternate Commissioner, County Member Gregory Rodeno, Alternate Commissioner, Public Member

Keene Simonds, Executive Officer Jacqueline Gong, Commission Counsel Brendon Freeman, Analyst Kathy Mabry, Commission Secretary



Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 2 of 31

This page has been left intentionally blank for photocopying

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 3 of 31

TABLE OF CONTENTS

| Sec | tion | Page |
|------|---|------|
| I. | INTRODUCTION | |
| 1. | A. Local Agency Formation Commissions | 5 |
| | B. Municipal Service Reviews | 5 |
| | C. Sphere of Influence Updates | 5 |
| | D. Napa County Mosquito Abatement District | 6 |
| | Di Rupa County Mosquito Montenient Distriction | 0 |
| II. | EXECUTIVE SUMMARY | |
| | A. Municipal Service Review | 9 |
| | Growth and Population Projections | 9 |
| | Present and Planned Capacity of Public Facilities | 10 |
| | Financial Ability of Agencies to Provide Service | 10 |
| | Status and Opportunities for Shared Facilities | 11 |
| | Accountability for Community Service Needs | 11 |
| | Relationship with Regional Growth Goals and Policies | 12 |
| | B. Sphere of Influence Update | 12 |
| | Present and Planned Land Uses | 12 |
| | Present and Probable Need for Public Facilities and Services | 12 |
| | Present Capacity and Adequacy of Public Facilities and Services | 12 |
| | Existence of Social or Economic Communities of Interest | 12 |
| ттт | AGENCY REVIEW | |
| 111. | | 1 5 |
| | A. Napa County Mosquito Abatement District | 15 |
| | 1.0 Overview | 15 |
| | 2.0 Formation and Development | 15 |
| | 3.0 Adopted Commission Boundaries | 17 |
| | 4.0 Population and Growth | 17 |
| | 4.1 Population Trends | 17 |
| | 4.2 Growth Trends | 18 |
| | 5.0 Organizational Structure | 18 |
| | 5.1 Governance | 18 |
| | 5.2 Staffing | 19 |
| | 6.0 Municipal Services | 20 |
| | 6.1 Overall Service Demands | 20 |
| | 6.2 Mosquito Services | 21 |
| | 6.3 Yellowjacket Services | 23 |
| | 6.4 Rodent Services | 23 |
| | 6.5 Tick Surveillance and Disease Testing Services | 24 |
| | 7.0 Financial | 24 |
| | 7.1 Assets, Liabilities, and Equity | 24 |
| | 7.2 Revenue and Expense Trends | 26 |
| | 7.3 Annual Budget | 26 |
| | 8.0 Regional Comparisons | 27 |

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 4 of 31

| IV. ENVIRONMENTAL REVIEW | 20 |
|--|------|
| A. Municipal Service Review | 29 |
| B. Sphere of Influence Update | 29 |
| V. SOURCES | 31 |
| APPENDICES | No. |
| Chart of Pesticide Use Over Last Five Years | А |
| Government Code Section 56430 | В |
| Commission Policy on Municipal Service Reviews | С |
| Comment Letter on Draft Report from NCMAD | D |
| FIGURES | Page |
| Map of Napa County Mosquito Abatement District | 7 |
| Map of Service Zones | 19 |
| | |

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 5 of 31

I. INTRODUCTION

A. Local Agency Formation Commissions

Local Agency Formation Commissions (LAFCOs) are political subdivisions of the State of California and are responsible for administering a section of Government Code known as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. LAFCOs are located in all 58 counties in California and delegated regulatory and planning responsibilities to coordinate the logical formation and development of local governmental agencies and their services while protecting agricultural and open space resources.

B. Municipal Service Reviews

As part of the aforementioned Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, LAFCOs are now required to prepare municipal service reviews in conjunction with updating each local agency's sphere of influence ("sphere") every five years as needed. The legislative intent of municipal service reviews is to inform LAFCOs with regard to the availability and sufficiency of governmental services provided within their respective jurisdictions prior to making sphere determinations. Municipal service reviews vary in scope and can focus on a particular agency, service, or geographic region. Municipal service reviews may also lead LAFCO to take other actions under its authority, such as initiating a reorganization involving two or more special districts. All municipal service reviews, however, must include written statements making determinations with respect to the following six factors pursuant to Government Code (G.C.) Section 56340.

- 1. Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies.
- 2. Growth and population projections for the affected area.
- 3. Financial ability of agencies to provide services.
- 4. Status of, and opportunities for, shared facilities.
- 5. Accountability for community service needs, including governmental structure and operational efficiencies.
- 6. Any other matter related to effective or efficient service delivery, as required by commission policy.

C. Sphere of Influence Updates

As mentioned, a central planning responsibility for LAFCO is the determination of a sphere for each city and special district under its jurisdiction.¹ LAFCO establishes, amends, and

"Sphere" means a plan for the probable physical boundary and service area of a local agency, as determined by LAFCO.

updates spheres to designate the territory it believes represents the appropriate and probable future service area and jurisdictional boundary of the affected agency. All jurisdictional

¹ LAFCOs have been required to determine spheres for cities and special districts within its jurisdiction since 1972.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 6 of 31

changes, such as annexations and detachments, as well as outside service extensions, must be consistent with the spheres of the affected local agencies with limited exceptions.²

There are several important and distinct policy considerations underlying sphere determinations. For example, inclusion within a multi-purpose agency's sphere, such as a city or community services district, generally indicates an expectation by LAFCO the territory should be developed for urban uses. Inclusion of territory within a limited-purpose agency's sphere, such as a hospital or mosquito abatement district, in contrast may be intended to support both urban and non-urban uses. In addition, inclusion within a sphere does not provide any guarantees the territory will be annexed. Jurisdictional changes must be considered on their own merits with particular attention focused on assessing whether the timing of the proposed action is appropriate. Sphere determinations may also lead LAFCO to take other actions under its authority. This may include initiating the consolidation or dissolution of cities and special districts.

In making a sphere determination, LAFCO must prepare written statements addressing four specific planning factors listed under G.C. Section 56425. These factors range from evaluating current and future land uses to the existence of pertinent communities of interest. The intent in preparing the written statements is to capture the legislative intent of the sphere determination with regard to coordinating the sensible development of each local agency consistent with the anticipated needs of the affected community. The four factors are outlined below.

- 1. The present and planned land uses in the area, including agricultural and open-space lands.
- 2. The present and probable need for public facilities and services in the area.
- 3. The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
- 4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

D. Napa County Mosquito Abatement District

This report represents LAFCO of Napa County's ("Commission") scheduled municipal service review and sphere update of the Napa County Mosquito Abatement District (NCMAD). The report succeeds the last municipal service review and sphere update prepared by the Commission on NCMAD completed in 2005. The report has been prepared in a manner consistent with the Commission's *Policy on Municipal Service Reviews* and is organized into two principal sections. The first section is an executive summary that includes determinations addressing the factors required for both the municipal service review and sphere update mandates. The second section provides a comprehensive review of NCMAD in terms of its formation and development, population and growth, organizational structure, municipal service provision, financial standing, and regional comparisons. Standard service indicators are incorporated into the review when appropriate to help contextualize and evaluate service levels.

² A prominent exception involves land owned and used by cities for municipal purposes that are non-contiguous to their incorporated boundary (Government Code Section 56742).

Figure One Napa County Mosquito Abatement District Lake County Yolo County Calistoga St. Helena Yountville Ta Nap Sonoma County Solano County American Canyon 4 Not to Scale Noumder 18, 2009 Prepared by BF Lake Legend Yolo Caliro p Napa County Mosquito Ab atement District Jurisdictional Bound ary Sonoma Napa County Mosquito Ab atement District Sphere of Influence **LAFCO of Napa County** 1700 Second Street, Suite 268 Napa, California 94559 http://rapa.lafco.ca.gov Solano TS Canyon

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 8 of 31

This page has been left intentionally blank for photocopying

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 9 of 31

II. EXECUTIVE SUMMARY

A. Municipal Service Review

The municipal service review indicates NCMAD has generally established adequate administrative, service, and financial capacities to provide an appropriate level of vector control services within its existing jurisdictional boundary, Napa County. These capacities appear relatively sufficient to continue to provide effective services based on anticipated demands in the timeframe of this review. No pertinent concerns have been identified relative to NCMAD's ability to continue to provide services for which it has been formed. Statements addressing the factors prescribed for consideration ranging from infrastructure needs and deficiencies to relationships with growth management policies follow. These statements are based on information collected, analyzed, and presented in the agency review provided on pages 13 to 25 in this report.

Growth and population projections for the affected area.

- NCMAD has experienced more than a one-tenth increase in its resident population over the last 10 years from an estimated 121,913 to 137,571. It is reasonable to assume the rate of population growth will decrease by more than one-half over the next 10 years due primarily to the residual effects of the national economic downturn and its impacts on housing. This assumption is consistent with projections issued by the Association of Bay Area Governments and suggests NCMAD's resident population will reach 144,600 by 2020.
- Nearly one-half of the increase to NCMAD's resident population over the last 10 years is attributed to the development of the City of American Canyon. This disproportional amount of new growth in southeast county necessitates NCMAD continue to be proactive in abating mosquitoes due to the diminishing interface between urban and wetland uses in the southeast county region.
- California Department of Finance projects Napa County will continue to experience significant demographic changes as groups identified as non-whites become the majority by 2020. These changes present challenges for NCMAD as it will need to adapt and expand its services to bridge more social and cultural barriers to help ensure its effectiveness in preventing and controlling vectors and their diseases.
- California Department of Conservation reports NCMAD is experiencing a steady rate of urbanization as evident by the 12.3% increase in urban land uses over the last 10 years in Napa County. Continued urbanization will increase service demands by necessitating NCMAD focus more on labor intensive control activities, such as physical and biological, in response to prevalent citizenry concerns regarding chemical impacts on the environment.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 10 of 31

Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies.

- NCMAD has established an adequate level of vector control services to limit the nuisance effects of mosquitoes, yellowjackets, rodents, and ticks consistent with constituent preferences as evident by a recently approved special assessment.
- There has been a concerted effort made by NCMAD to proactively provide vector control services through self-initiated field work. These efforts have contributed to a one-fourth decline in service calls over the last five years and provide NCMAD with additional capacity to redirect resources to address new and urgent demands as needed.
- NCMAD's service demands are guided by a variety of seasonal, environmental, and land use factors. NCMAD should prepare and regularly update a written review of its service activities to help effectively and economically guide its available resources to reflect the continuous changes in these external factors. This document would also serve as a valuable resource to the county's six land use authorities in understanding vector-related trends in relationship to overseeing growth and development within their respective jurisdictions.
- There is currently a four-fold increase in home mortgage default notices within Napa County compared to 2006 and the start of the national economic downturn. The increase in default notices and probable rise in unmaintained properties may create a new type of service demand on NCMAD in controlling vector breeding grounds within urban residential areas.
- NCMAD's resources generally lie within the median range of adjacent public vector control providers as measured by staffing, revenues, and expenses, which suggests the District's service levels are comparable to regional standards.

Financial ability of agencies to provide services.

- NCMAD has increased its unrestricted fund balance by nearly two-thirds over the last five years from approximately \$1.47 to \$2.39 million. The unrestricted fund balance provides NCMAD over 20 months of cash to cover operating expenses as well as financial resources to respond to urgent public health or safety threats.
- The dynamic nature of vector control services underlies and supports NCMAD's management decision to maintain a relatively high unrestricted fund balance rather than invest in fixed capital assets.
- NCMAD has established a healthy capital structure as measured by its low debt-toequity ratio, which is less than one percent.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 11 of 31

- NCMAD has generally maintained positive cash flow since it began collecting its special assessment in 2003-2004. The cash flow margin is trending negatively as the rate of actual expenditures is surpassing the rate of actual revenues in terms of percentage change by two-to-one. It appears this trend, however, is an anomaly and the result of one-time expenses over the last few years associated with NCMAD's new facilities and pre-funding its other post-employment benefit costs.
- NCMAD benefits from a relatively stable source of funding given 90% of all revenues are drawn from property tax and special assessment proceeds.

Status and opportunities for shared facilities.

- NCMAD works closely with a variety of federal, state, and local agencies in the development, operation, and delivery of its vector control services. This includes resource-sharing arrangements with the Marin-Sonoma and Solano Mosquito Abatement Districts. These efforts help economize staffing resources and coordinate the implementation of effective vector control services in the region.
- NCMAD has established formal agreements with the Cities of American Canyon, Calistoga, St. Helena, and Yountville along with the Napa Sanitation District to provide regular vector control services within their respective incorporated jurisdictions. NCMAD should consider expanding the scope of these agreements to include arrangements with the remaining local water and sewer special districts to help increase protection for unincorporated residential communities.

Accountability for community service needs, including governmental structure and operational efficiencies.

- NCMAD is governed by a responsive and dedicated board and staff. These characteristics enhance accountability and cultivate positive working relationships with members of the public and other local agencies.
- NCMAD has measurably increased its organizational capacity over the last 10 years by doubling staff along with relocating and expanding its service facilities. The investment in additional resources reflects and supports management's commitment to proactively control vectors and vector-borne diseases in Napa County.
- Vector control services provided by NCMAD are currently limited to mosquitoes, yellowjackets, rodents, and ticks. All other services authorized under NCMAD's principal act are deemed latent and would require Commission approval to activate under Government Code Section 56824.12. Divesture of any current services would also require Commission approval.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 12 of 31

- NCMAD occasionally provides vector control services within adjacent outside lands through informal resource-sharing arrangements with the Marin-Sonoma and Solano Mosquito Abatement Districts. It appears NCMAD provides these services as comparable substitutes for services already provided by the two adjacent agencies and therefore does not require Commission approval under Government Code Section 56133. Approval is only required if services are provided beyond existing levels of the affected agencies.
- It may be appropriate to amend NCMAD's sphere to expand into Solano and Sonoma counties if the District's vector control services within these adjacent lands evolve from an occasional to a regular activity.
- NCMAD's board meetings are conducted monthly with minimal to no participation from the public. The lack of public participation reflects a degree of disengagement between NCMAD and its constituents and impedes feedback on new or changing vector control needs. NCMAD should increase its constituent engagement by expanding the scope and value of its website to include meeting notices, agendas, minutes, and other pertinent documents underlying its activities.

Relationship with regional growth goals and policies.

• NCMAD serves an important role in supporting growth management in Napa County by providing public health and safety protection against mosquitoes, yellowjackets, rodents, and ticks. This importance is accentuated given local land use policies generally orient residential and viticultural uses along common vector breeding grounds, namely the Napa River and its tributaries. Accordingly, it is imperative NCMAD continue to ensure its resources are sufficient to carry out its duties in an effective and timely manner.

B. Sphere of Influence Update

No changes to NCMAD's sphere appear warranted. This affirmation confirms the current sphere designation demarks NCMAD's appropriate service boundary consistent with its available and planned capacities. This determination is supported by the following statements.

• Present and planned land uses in the area, including agricultural and openspace lands.

The present and planned land uses within the sphere are outlined in the general plans prepared by the six land use authorities whose jurisdictions overlap NCMAD's jurisdictional boundary. The exercise of NCMAD's vector control services relating to mosquitoes, yellowjackets, rodents, and ticks support the urban and non-urban development contemplated in these general plans. Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 13 of 31

• Present and probable need for public facilities and services in the area.

NCMAD's provision of vector control services relating to mosquitoes, yellowjackets, rodents, and ticks in the sphere is an integral component in supporting present and future growth management in Napa County.

• Present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

The Commission has confirmed through the municipal service review process NCMAD has established adequate and effective vector control services relating to mosquitoes, yellowjackets, rodents, and ticks within the sphere.

• The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

The social and economic well-being of all lands within the sphere is dependent on NCMAD's effective control mosquitoes, yellowjackets, rodents, and ticks.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 14 of 31

This page has been left intentionally blank for photocopying

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 15 of 31

III. AGENCY REVIEW

A. Napa County Mosquito Abatement District

1.0 Overview

NCMAD was formed in 1925 and is the longest tenured special district operating in Napa County. NCMAD provides a range of municipal services relating to vector control involving mosquitoes, yellowjackets, rodents, and ticks. NCMAD is headquartered in the City of American Canyon and has a jurisdictional boundary encompassing all unincorporated and incorporated territory in Napa County. The estimated resident service population is 137,571. NCMAD is currently staffed by nine full-time employees with a total operating budget of \$2.0 million and an unreserved fund balance of \$2.4 million.³

2.0 Formation and Development

NCMAD was formed in 1925 to provide mosquito control services throughout Napa County. Formation proceedings were prompted in the early 1920s by the emergence of mosquitoes in the southern portions of the county, an area characterized by numerous wetlands and salt marshes. Two local organizations, Carneros Farm Center and Las Amigas Farm Bureau, combined efforts to address the threat of mosquito-borne diseases by galvanizing support for the formation of a mosquito abatement district. The formation had been recently permitted by the California Legislature with the passage of the Mosquito Abatement District Act of 1915. This law was enacted by legislators to facilitate the formation of public agencies capable of providing long-term protection against vector-borne diseases, such as malaria and encephalitis, and other pest related nuisances.⁴ Following resolutions supporting formation adopted by the three cities (Calistoga, Napa, and St. Helena), the County Board of Supervisors adopted a resolution establishing NCMAD on July 14, 1925.

In 1926, NCMAD conducted the first comprehensive mosquito survey of Napa County. The survey preceded the implementation of physical control measures as part of a coordinated mosquito management program. Standard control measures utilized by NCMAD over the next several decades included building dykes and levees along with ditching and plowing cracked ground in the southeast region. NCMAD also began to augment its activities to include chemical and biological controls, such as applying oils and pesticides as well as stocking local ponds with mosquitofish.⁵

By the 1960s, advances in chemical engineering along with cost-savings prompted NCMAD to begin relying less on physical control measures in favor of emphasizing pesticides to control larval, pupal, and adult mosquitoes. In particular, this included the increasing reliance on

³ This results in a per capita operating cost of \$14.63.

⁴ California Health and Safety Code defines "vector" as any animal capable of transmitting a human disease or 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)).

⁵ These labor-intensive activities were conducted with assistance from local inmates who were used frequently by NCMAD as a supplemental work force. This practice, however, was discontinued in the 1950s due to increased public concern over the use of inmate labor.

dichlorodiphenyltrichloroethane, or DDT.⁶ By the 1970s, however, new federal and state regulations, along with increased public concern regarding the use of chemicals on the environment, prompted a significant change in NCMAD activities. Most notably, in order to minimize its use of pesticides, NCMAD began to emphasize the control of larvae rather than pupal and adult mosquitoes. This change resulted in a renewed emphasis on mosquito prevention through physical and biological control measures as well as community education.

A seminal moment for NCMAD occurred in 1978 with the passage of Proposition 13. This ballot initiative amended the California Constitution to restrict the ad valorem tax on property to no more than one percent of the full cash value.⁷ The restriction prohibited NCMAD from continuing its annual practice of adjusting its property tax rate as needed to cover costs. The resulting reduction in property tax proceeds coupled with increasing costs contributed to a persistent structural budget imbalance. Consequently, NCMAD became dependent on County loans to help cover annual deficits through the early 1990s.

In the late 1990s, NCMAD took a series of steps to solidify its fiscal solvency and improve its mosquito management program. This included developing a service program with local landowners to help recover the costs of servicing lands with reoccurring mosquito problems. NCMAD also benefited from a review and update to its principal act codified under California Health and Safety Code. This process clarified and strengthened NCMAD's ability to recover costs from negligent landowners with reoccurring mosquito problems. Measures to advance NCMAD's mosquito management program included the hiring of a new manager and issuing an in-depth evaluation of its control services as part of its *Integrated Mosquito Management Program (1999)*. The evaluation, which included a review of potential environmental impacts, formalized NCMAD's mosquito control services into six coordinated activities. These activities include 1) surveillance, 2) physical control, 3) vegetation management, 4) biological control, 5) chemical control, and 6) community education.

In 2003, to enhance service levels, NCMAD asked Napa County landowners to approve an annual parcel assessment to expand its mosquito control services and establish new vector control services relating to yellowjackets, rodents, and ticks.⁸ An underlying motivation to establishing the parcel assessment was to help prepare for the anticipated arrival of the West Nile Virus in Napa County. The assessment was conducted by mail-in ballot and

| | Timeline of Events |
|-------|--|
| 1925 | NCMAD formed |
| 1926 | first mosquito survey completed |
| 1930s | focus on physical control methods |
| 1960s | focus on chemical control methods |
| 1970s | focus on biological control methods |
| 1978 | loss of funding due to Proposition 13 |
| 1980s | dependent on County subsidies |
| 2003 | special assessment approved |
| 2004 | yellowjacket, rodent, and tick services est. |

was approved by over two-thirds of the responding landowners. Specific improvements supported by the special assessment included the construction of a new administration building outfitted with a laboratory and adjoining corporation yard in American Canyon. Proceeds from the special assessment were also used to hire one scientist and three additional certified vector control staff, allowing NCMAD to perform its own laboratory analyses and increase control and surveillance activities. Surveillance and control services for yellowjackets, rodents, and ticks were all implemented by the end of 2004.

⁶ DDT was banned by the United States Environmental Protection Agency in 1973.

⁷ Proposition 13 also established a requirement that all new special taxes require two-thirds voter approval.

⁸ In the 2008-2009 fiscal year, the annual assessment for a single-family residence was \$16.50.

3.0 Adopted Commission Boundaries

NCMAD's jurisdictional boundary is 791.4 square miles or 506,517 acres in size and includes all unincorporated and incorporated lands within Napa County. There are a total of 49,804 assessor parcels within NCMAD with a combined assessed value of \$27.8 billion. A review of the database maintained by the County Assessor's Office indicates 42,588 of these assessor parcels have been developed and assigned situs addresses.⁹ The jurisdictional boundary is conterminous with NCMAD's sphere of influence, which was adopted by the Commission in 1984 and updated with no changes in 2005. Although eligible to expand into other counties, there have been no changes to NCMAD's jurisdictional boundary since formation.

| Category | Jurisdictional Boundary | Sphere of Influence | |
|---------------|-------------------------|---------------------|--|
| Total Acres | 506,517 | 506,517 | |
| Total Parcels | 49,804 | 49,804 | |

4.0 Population and Growth

4.1 Population Trends

NCMAD's current resident population is estimated at 137,571 based on demographic information published by the California Department of Finance for Napa County. The resident population overall has risen by 12.8% over the last 10 years, equaling a 1.3% annual increase. This increase comparatively ranks second in terms of percentage change among all nine Bay Area counties during the period. Napa County's resident population is marked by two distinct periods within the last decade as the annual increase averaged 1.6% between 2000 and 2003 before tapering to 1.0% between 2004 and 2009 due to changes in the local housing market. Close to one-half of all resident population growth during the last decade occurred in American Canyon.¹⁰ The following table summarizes past and current resident population projections.

Past and Current Resident Population Projections (Department of Finance)

| Category | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | Change |
|------------|---------|---------|---------|---------|---------|---------|--------|
| Population | 121,913 | 125,975 | 129,792 | 132,280 | 134,559 | 137,571 | 12.8% |

It is reasonable to assume resident population trends in Napa County will experience a moderate to significant decrease over the next 10 years. This expected decrease is attributed to the slowdown in residential growth in American Canyon and the residual effects of the national economic downturn. This assumption is consistent with recent demographic estimates prepared by the Association of Bay Area Governments, which projects Napa County's annual population will increase by 0.4% annually through 2020 as summarized below.

⁹ The assessor parcels that have been developed and assigned situs addresses in NCMAD represent 85.5% of the total land acres within the District.

¹⁰ Between 1999 and 2009, American Canyon's resident population increased from 9,558 to 16,503, representing 44% of the total population rise in Napa County.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 18 of 31

| Future Resident Population Projections (Association of Bay Area Governments, <i>Projections and Priorities 2009</i>) | | | | | | | | |
|---|----------|-----------|---------|---------|---------|---------|--------|--|
| Category | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 | Change | |
| Population | 138, 800 | 139,913 1 | 141,034 | 142,165 | 143,304 | 144,600 | 4.2% | |

4.2 Growth Trends

Data cataloged by the California Department of Conservation (DC) illustrates NCMAD is experiencing a steady rate of urbanization within its jurisdictional boundary. The most recent report issued by DC identifies exactly one-half of the county comprises agricultural land uses. This amount represents a 1.8% reduction in agricultural uses compared to 10 years earlier. Urban land uses have comparatively increased over this period by 12.3%. Additionally, these land use patterns have accelerated over the last few years as reflected in the following table.

| | | Agric | ultural Land | | L | Urban Land |
|------|---------|----------|--------------|--------|----------|------------|
| Year | Acres | % Change | % of Total | Acres | % Change | % of Total |
| 1996 | 260,911 | (0.01) | 51.58 | 20,318 | 0.52 | 4.02 |
| 1998 | 260,047 | (0.33) | 51.41 | 20,599 | 1.38 | 4.07 |
| 2000 | 259,697 | (0.13) | 51.34 | 21,110 | 2.48 | 4.17 |
| 2002 | 259,397 | (0.12) | 51.28 | 21,394 | 1.35 | 4.23 |
| 2004 | 259,237 | (0.06) | 51.25 | 22,244 | 3.97 | 4.40 |
| 2006 | 256,326 | (1.12) | 50.67 | 22,816 | 2.57 | 4.51 |

Land Use Trends

(California Department of Conservation)

5.0 Organizational Structure

5.1 Governance

NCMAD was originally organized under the Mosquito Abatement District Act of 1915 (Health and Safety Code Sections 2000 to 2093). The principal act was amended in 2002 and is now referred to as the Mosquito Abatement and Vector Control District Law. The specific intent of the principal act is to facilitate and empower special districts with sufficient authority to conduct effective programs for the surveillance, prevention, abatement, and control of mosquitoes and other vectors. The State Controller's Office reports there are currently 46 mosquito abatement and vector control districts in California.

NCMAD's governing body is comprised of an appointed six-member board of trustees. One trustee is appointed from the County of Napa and each of the Cities of American Canyon, Calistoga, Napa, St. Helena, and Yountville. Trustees must be registered voters within the appointing authority's jurisdiction. Terms are two to four years at the appointing authority's discretion. Trustees are statutorily directed to exercise their independent judgment on behalf of the interests of the residents, landowners, and the public and not solely the interests of the appointing authority. Elections are based on a registered-voter system.

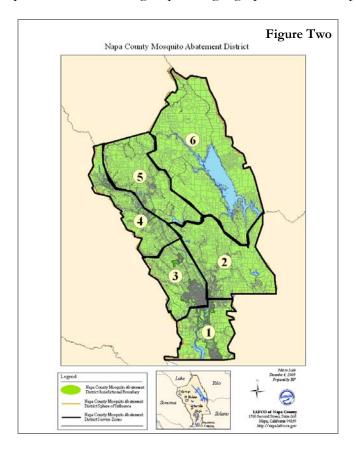
Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 19 of 31

NCMAD meetings are generally conducted on the second Wednesday of each month. Meetings are held at NCMAD's administrative office located in American Canyon. A review of agency records for the 2008-2009 fiscal year identifies NCMAD held 11 meetings. Specific powers authorized under NCMAD's principal act include:

- Conduct surveillance programs and other appropriate studies of vectors and vectorborne diseases (Health and Safety Code Section 2040-a)
- Take any and all necessary or proper actions to prevent the occurrence of vectors and vector-borne diseases (Health and Safety Code Section 2040-b)
- Take any and all necessary or proper actions to abate or control vectors and vectorborne diseases (Health and Safety Code Section 2040-c)
- Take any and all actions necessary for, or incidental to, the powers granted above (Health and Safety Code Section 2040-d)

5.2 Staffing

NCMAD's Board of Trustees appoints an at-will general manager to administer the daily activities of the agency. The general manager currently oversees a staff of eight full-time employees. This includes an office assistant, entomologist, and six field technicians. Each field technician is responsible for servicing a specific geographic zone as depicted below.



Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 20 of 31

6.0 Municipal Services

NCMAD's municipal services are provided directly through a range of surveillance, education, and control measures. Services are categorized into four distinct programs involving 1) mosquitoes, 2) yellowjackets, 3) rodents, and 4) tick surveillance.

6.1 Overall Service Demands

NCMAD performs regular field activities relating to all four programs within each of its six service zones. NCMAD also responds to service calls as needed. A review of service calls over the last five years reflects a permeating decline in constituent demands across all four programs with total calls decreasing from 1,587 to 1,139, or 28%. The decline is largely attributed to a readjustment from the initial public awareness and concern regarding the West Nile Virus, which contributed to a peak call demand in 2005-2006.

| Program | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | Average |
|---------------|-----------|-----------|-----------|-----------|-----------|---------|
| Mosquitoes | 1,252 | 1,873 | 857 | 988 | 978 | 1,189.6 |
| Yellowjackets | 311 | 153 | 147 | 258 | 145 | 202.8 |
| Rodents | 39 | 27 | 29 | 16 | 6 | 23.4 |
| Ticks | 1 | 0 | 0 | 0 | 0 | 0.2 |
| Other | 19 | 13 | 12 | 16 | 10 | 14 |
| Total | 1,622 | 2,066 | 1,045 | 1,278 | 1,139 | 1,430 |

Service Calls by Program

Zone Four encompasses most of the Napa Valley north of Rutherford and generates the most service calls on average at nearly 500 annually, which is nearly one-fourth more than any other zone. Service calls within Zone Six represent the largest percentage increase by more than doubling over the last five fiscal years and are largely attributed to an increased awareness and demand within Circle Oaks and Capell Valley Mobile Home Park communities. The following table summarizes service calls within each zone over the last five fiscal years.

| Zone | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | Average |
|-------|-----------|-----------|-----------|-----------|-----------|---------|
| One | 104 | 70 | 40 | 28 | 76 | 64 |
| Two | 593 | 482 | 267 | 365 | 287 | 399 |
| Three | 300 | 309 | 170 | 215 | 194 | 238 |
| Four | 438 | 830 | 438 | 426 | 329 | 492 |
| Five | 134 | 216 | 63 | 128 | 127 | 134 |
| Six | 53 | 159 | 67 | 116 | 126 | 104 |
| Total | 1,622 | 2,066 | 1,045 | 1,278 | 1,139 | 1,430 |

Service Calls by Zone

An expanded review of all four NCMAD service programs in terms of organization, capacities, and demands follows.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 21 of 31

6.2 Mosquito Services

NCMAD's mosquito services were established in 1925 and account for its largest allocation of resources. The underlying objective of these services is to prevent the emergence of adult mosquitoes while minimizing impacts to the environment by emphasizing long-term, non-chemical forms of control. Current services are guided by a 1999 policy document outlining six integrated programs aimed at controlling mosquitoes and their vector-borne diseases while minimizing environmental impacts. These six integrated programs are systematically tiered and include surveillance, community education, physical control, vegetation management, biological control, and chemical control. A brief summary of these six programs follows.

Surveillance

Surveillance serves as NCMAD's initial and continual measure to monitor and control mosquitoes and their vector-borne diseases. Surveillance is facilitated through trapping systems, field investigations, direct visual inspection, and the use of sentinel chickens.¹¹ The information generated from surveillance helps NCMAD evaluate the type and number of mosquitoes within a targeted area as well as identifying the presence of vector-borne diseases. Surveillance is also used to help measure the effectiveness of any given control activity undertaken by NCMAD. Blood samples collected by NCMAD from sentinel chickens are analyzed in consultation with the University of California at Davis Arbovirus Research Laboratory.

Community Education

NCMAD pursues a variety of outreach efforts to raise public awareness regarding methods to prevent and reduce local mosquito populations along with their disease potential. This includes posting educational information on NCMAD's website, distributing brochures, publishing notices in local newspapers, and making presentations to schools, home associations, and service clubs. NCMAD also utilizes local newspapers and radio stations to communicate regular service announcements between March and October.

Physical Control

Physical control serves as NCMAD's primary means to manage mosquito habitat by modifying land to remove natural and man-made breeding grounds. This includes building dykes and levees along with ditching and plowing cracked ground. These actions help to eliminate stagnant water sources by improving water circulation and drainage of low-lying areas and local waterways. The Department of Health Services is responsible for reviewing all proposed work plans by NCMAD prior to implementation to ensure conformance with environmental regulations.¹²

¹¹ NCMAD presently maintains three sentinel chicken stations located throughout Napa County. Each station consists of ten chickens. The chickens, which are immune to most vector-borne diseases, are routinely tested for exposure to Western Equine Encephalitis, Saint Louis Encephalitis, and West Nile Virus.

¹² NCMAD work plans are also reviewed for environmental conformance by the U.S. Fish and Wildlife Service, California Department of Fish and Game, Army Corp. of Engineers, State Water Quality Control Board, San Francisco Regional Water Quality Control Board, Central Valley Regional Water Quality Control Board, San Francisco Bay Conservation and Development Commission, and several local environmental organizations.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 22 of 31

Vegetation Management

NCMAD occasionally supplements its physical control activities with a vegetation management program to improve surveillance and reduce mosquito populations. In addition to vegetation removal, this program involves applying herbicides within terminal water bodies, such as wastewater ponds, to impede growth and improve water circulation. Common herbicides used by NCMAD include Round Up, Rodeo, and Karmex DF.

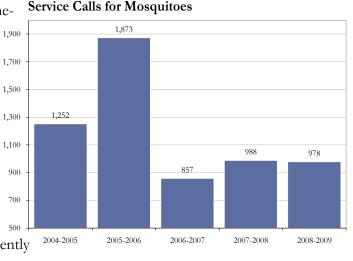
Biological Control

Biological control is used by NCMAD as a long-term strategy to manage mosquito larvae and prevent adult emergence. The primary biological control method involves stocking ponds, reservoirs, and other stagnant water sources with mosquitofish. Mosquitofish provide long-term control of larvae to permanent water bodies based on their reproductive capabilities. Another commonly used biological control involves the application of *Bacillus Sphaericus*, which is an aquatic bacterium used to terminate mosquito larvae.

Chemical Control

Chemical control is a short-term strategy used by NCMAD to manage both larvae and adult mosquitoes by applying pesticides either by hand, machine, or aircraft. The most common chemical controls used by NCMAD include two larvicides known as Golden Bear 1111 and Methoprene. These pesticides are applied using various forms of distribution and are effective against all mosquito species. Pyrethrin is the only adulticide used by NCMAD. This pesticide is used to control the Western Treehole Mosquito and is distributed using a truck mounted ultra-low volume mist machine during the early morning hours when winds are minimal. Pesticides are not used unless NCMAD determines other control measures would be ineffective in mitigating the mosquito population. Primary deterrents associated with the use of pesticides include cost, low residual effects, and environmental considerations. Appendix A summarizes pesticide uses by NCMAD over the last five years in terms of number of applications and quantities.

NCMAD has experienced nearly a onefourth decline in service calls for mosquitoes over the last five years. Peak service call demands for mosquitoes during this period occurred in 2005-2006 and totaled 1,873. This amount is approximately one-half more than the number of calls received in 2008-2009 and attributed to greater public awareness aided by NCMAD's recently approved special assessment and media coverage involving the West Nile Virus.¹³ Service calls relating to mosquitoes currently represent 87% of total calls received.



¹³ Since testing began in 2002, there have been two positive human test results for West Nile Virus in Napa County. The positive test results occurred independently in 2006 and 2007; no deaths occurred. Overall, there have been 2,968 positive human test results for West Nile Virus in California, which have resulted in a mortality rate of 3.1% (93 deaths).

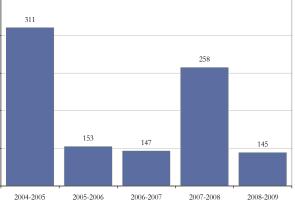
Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 23 of 31

6.3 Yellowjacket Services

NCMAD's yellowjacket services were established in 2003 and represent its second largest allocation of resources. It consists of two coordinated activities aimed at containing and managing yellowjackets in Napa County: community education and chemical control. Community education is facilitated through preparation and distribution of informational literature, public speaking events, and responding to constituent inquiries. As needed, NCMAD provides chemical control of yellowjackets by applying pesticides to known nest sites.¹⁴ Appendix A summarizes pesticide uses by NCMAD over the last five years in terms of number of applications and quantities.

NCMAD has experienced nearly a one-350 half decline in service calls for vellowjackets over the last five years. 300 Peak service call demands for vellowjackets during this period occurred in 2004-2005 and totaled 311, which is approximately twice the number of service calls received in 2008-2009. The decline 200 in service demands from the peak total is generally attributed to improved control ¹⁵⁰ measures implemented by NCMAD. Service calls relating to yellowjackets 100 currently represent 13% of total calls received.

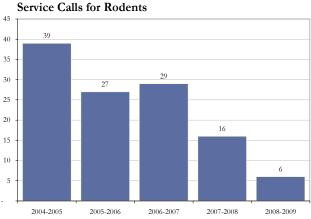




6.4 Rodent Services

NCMAD's rodent services were established in 2003 and account for its third largest allocation of resources. It consists of two coordinated activities: community education and field trappings. Community education is facilitated through preparation and distribution of informational literature, public speaking events, and responding to constituent inquiries. Field trappings are achieved through bait stations, which are placed at the request of the landowner. Rodents are also occasionally tested for rodent-borne diseases as part of a regional plague surveillance program, which is coordinated by DHS. This includes testing for Hantavirus and Arenavirus.

NCMAD has experienced nearly a fourfifths decline in service calls for rodents ³⁵ over the last five years. Peak service call demands for rodents occurred in 2004-2005 totaling 39. This amount is approximately six times the number of service calls received in 2008-2009. Service calls relating to rodents currently represent less than 1% ¹⁰ of total calls received. ⁵



¹⁴ NCMAD reports the following yellowjackets are commonly found in Napa County: Aerial; Bald-Faced Hornet; Black Jacket; California; Common; Forest; German; Prairie; and Western. Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 24 of 31

6.5 Tick Surveillance and Disease Testing Services

NCMAD's tick surveillance and disease testing services were established in 2003 and account for its smallest allocation of resources. It consists of two coordinated activities relating to ticks and their disease potential in Napa County: surveillance and community education. Surveillance is achieved through trapping systems and field investigations. Ticks collected by NCMAD are tested for Rocky Mountain Spotted Fever and Lyme Disease. These efforts are complemented by NCMAD's community education activities. These include answering constituent inquiries, public speaking events, informational brochures, and posting information on NCMAD's website. Due to the nature of the program, service calls for tick surveillance and disease testing have been minimal. Only one service call has been recorded since the program was established.

7.0 Financial

7.1 Assets, Liabilities, and Equity

NCMAD contracts with a private consulting firm to prepare an annual report following the end of each fiscal year summarizing the agency's overall financial standing. The most recent report was prepared for the 2008-2009 fiscal year and includes audited financial statements identifying NCMAD's assets, liabilities, and equity as of June 30, 2009. These audited financial statements provide quantitative measurements in assessing NCMAD's short and long-term fiscal health and are summarized below.

Assets

NCMAD's assets at the end of the fiscal year totaled \$4.71 million. Assets classified as current, with the expectation they could be liquidated into currency within a year, represented slightly more than one-half of the total amount with the majority tied to cash investments.¹⁵ Assets classified as non-current represented the remaining amount with the largest portion associated with NCMAD's administrative and workshop buildings at 15 Melvin Road in American Canyon.¹⁶

| Category | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| Current Assets | 1.53 | 2.12 | 2.90 | 2.24 | 2.60 |
| Non-Current Assets | 1.58 | 1.65 | 1.62 | 1.94 | 2.11 |
| Total Assets | \$3.11 | \$3.77 | \$4.52 | \$4.19 | \$4.71 |

Amounts in millions

¹⁵ Current assets totaled \$2.60 million and include cash investments (\$2.34 million), accounts receivable (\$0.09 million), and inventory supplies (\$0.16 million).

¹⁶ Non-current assets totaled \$2.11 million and include buildings (\$2.15 million), vehicles (\$0.33 million), and equipment (\$0.20 million) minus accumulated depreciation (\$0.59 million) plus land (\$0.01 million).

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 25 of 31

Liabilities

NCMAD's liabilities at the end of the fiscal year totaled \$0.21 million. Current liabilities representing obligations owed within a year accounted for over four-fifths of the total amount and tied primarily to accounts payable.¹⁷ Non-current liabilities accounted for the remaining one-fifth of the total amount and entirely tied to compensated absences.¹⁸

| Category | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 |
|-------------------------|-----------|-----------|-----------|-----------|-----------|
| Current Liabilities | 0.03 | 0.03 | 0.02 | 0.14 | 0.17 |
| Non-Current Liabilities | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 |
| Total Liabilities | \$0.05 | \$0.05 | \$0.04 | \$0.17 | \$0.21 |

Amounts in millions

Equity

NCMAD's equity at the end of the fiscal year totaled \$4.50 million. This amount represents the difference between NCMAD's total assets and total liabilities and includes \$2.39 million in unrestricted funds that can be used for any purposes. NCMAD relies on its unrestricted funds to cover operating expenses through the first two quarters of the fiscal year when it receives its first installment of property tax proceeds in December.

| Category | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| Invested in Capital Assets | 1.59 | 1.65 | 1.62 | 1.95 | 2.11 |
| Unrestricted Funds | 1.47 | 2.07 | 2.86 | 2.08 | 2.39 |
| Total Equity | \$3.06 | \$3.72 | \$4.48 | \$4.03 | \$4.50 |

Amounts in millions

NCMAD's financial statements for 2008-2009 reflect the District experienced a positive change in its fiscal standing as its overall equity, or fund balance, increased by 12% from \$4.03 to \$4.50 million. Markedly, NCMAD has been able to increase its

| 2008-2009 Financial Statements | | | | |
|--------------------------------|-----------------|--|--|--|
| Assets | \$4.712 million | | | |
| Liabilities | \$0.208 million | | | |
| Equity | \$4.504 million | | | |

unrestricted portion of its fund balance by nearly two-thirds over the last five completed fiscal years from \$1.47 to \$2.39 million.

Calculations performed assessing NCMAD's liquidity, capital, and solvency indicate the District is in strong financial health. Liquidity remains high as NCMAD finished the fiscal year with current assets 15 times greater than its current liabilities along with 616 days cash sufficient to cover operating expenses.¹⁹ NCMAD also finished with minimal debt relative to its equity. This indicates a strong capital structure as measured by NCMAD having less than one one-hundredth of long-term debt relative to its net assets.²⁰ NCMAD's bottom line was also positive as revenues exceeded expenses by nearly one-fourth. This increase in the fund balance reflects NCMAD's surplus in revenues over expenses during the fiscal year, which totaled \$0.47 million.²¹

¹⁷ Current liabilities totaled \$0.17 million and include accounts payable (\$0.13 million) and accrued payroll (\$0.04 million).

¹⁸ Non-current liabilities totaled \$0.04 million.

¹⁹ NCMAD's current ratio was 15.2:1.

²⁰ NCMAD's debt-to-net-assets ratio was 0.8%.

²¹ NCMAD's total margin was 23.2%.

7.2 Revenue and Expense Trends

A review of NCMAD's actual revenues and expenses identifies the District has generally maintained positive cash flow over the last six completed fiscal years, which extends to include the first year in which the special assessment was levied. Underlying the positive cash flow is the sizeable increase in ad valorem property tax proceeds that have risen by 55% or \$0.357 million. The cash flow margin, however, is trending negatively given actual total revenues as measured by percentage change are being surpassed by actual total expenses by two-to-one. Key increases in actual expense include salaries and benefits at 44% or \$0.31 million and services and supplies at 56% or \$0.15 million. The following table summarizes total actual revenues and expenses between 2003-2004 and 2008-2009.

| Fiscal Year | Actual Revenues | Actual Expenses | Difference |
|-------------|-----------------|-----------------|-------------|
| 2003-2004 | \$1,821,575 | \$1,481,065 | \$340,510 |
| 2004-2005 | \$2,442,931 | \$2,037,668 | \$405,263 |
| 2005-2006 | \$1,867,282 | \$1,324,796 | \$542,486 |
| 2006-2007 | \$1,829,771 | \$1,154,967 | \$674,804 |
| 2007-2008 | \$1,962,682 | \$2,757,343 | (\$794,661) |
| 2008-2009 | \$1,988,958 | \$1,793,485 | \$195,473 |
| Change (%) | 9.2 | 21.1 | |

* NCMAD's revenues and expenses between 2003-2004 and 2005-2006 reflect funds received and expended from the Napa River Flood Protection Project ("Measure A") to relocate the District from Napa to American Canyon. Additionally, NCMAD incurred a shortfall in 2007-2008 due to paying a significant portion of its full other post employment benefit (OPEB) totaling \$1.0 million.

7.3 Annual Budget

NCMAD's adopted budget for the 2009-2010 fiscal year
totals \$2.02 million. This amount represents NCMAD's
total approved expenses or appropriations for the fiscal
year within its two governmental fund accounts and
reflects an approximate 11.9% increase from the prior year budget.22**2009-2010 Adopted Budget**Total Expenses:\$2.02 millionTotal Revenues:\$1.88 millionDifference:(\$0.14 million)conservatively total revenues for the fiscal year will fall short of expenses by \$0.14 million and
total \$1.88 million. Revenues overall are expected to slightly decrease by 1.1% from the prior
year due to the decline in property tax values. An expanded review of adopted expenses and
revenues for the fiscal year follows.

General Operations Fund

NCMAD's General Operations Fund supports basic mosquito abatement services. Approved expenses are estimated at \$1.09 million with apportionments dedicated to salaries and benefits (53%), services and supplies (32%), equipment (9%), and contingencies (6%). Estimated revenues are projected at \$0.98 million with proceeds expected to be supported through property taxes (94%), service charges (3%), and investments (3%). No end of year shortfall is expected based on NCMAD's practice to adjust costs during the fiscal year to correspond with available revenues.

²² NCMAD's governmental fund accounts are divided between general operations and a special assessment.

Special Assessment Fund

NCMAD's Special Assessment Fund accounts for the receipt and expense of monies earmarked to provide an elevated level of mosquito abatement services along with yellowjacket and rodent control, as well as tick surveillance and disease testing. Approved expenses are estimated at \$0.93 million and apportioned between salaries and benefits (55%), services and supplies (32%), contingencies (6%), buildings and improvements (5%), and equipment (2%). Estimated revenues are projected at \$0.90 million with proceeds expected to be drawn from the special assessment (94%), service charges (5%), and investments (1%).²³ No end of year shortfall is expected based on NCMAD's practice to adjust costs during the fiscal year to correspond with available revenues.

8.0 Regional Comparisons

NCMAD is surrounded by four adjacent mosquito abatement districts serving Lake, Solano, Sonoma, and Yolo counties. A brief review of these adjacent districts indicates NCMAD's resources generally lie within the regional median range based on staffing, revenues, and expenses relative to population and area served. These indicators are summarized below and suggest NCMAD's service levels are comparable to regional standards with respect to providing vector control services.

| District | Staffing Per 1,000 Residents | Staffing Per 1,000 Acres | Revenues Per 1,000 Residents | Expenses Per 1,000 Residents |
|---------------------|---------------------------------|-----------------------------|---------------------------------|---------------------------------|
| Lake County MAD | 0.125 | 0.009 | \$28,112.28 | \$25,036.99 |
| Marin-Sonoma MAD | 0.047 | 0.021 | \$9,786.41 | \$9,946.47 |
| Napa County MAD | 0.065 | 0.018 | \$13,665.67 | \$14,683.33 |
| Sacramento-Yolo MAD | 0.033 | 0.042 | \$7,859.49 | \$6,906.90 |
| Solano County MAD | 0.021 | 0.016 | \$3,628.93 | \$8,897.72 |

²³ The current annual special assessment is \$16.50 per calculated single-family equivalent (SFE) unit and is levied against all parcels in Napa County. All single-family residential units are assigned at 1.0 SFE, while condominiums, multi-family residential units, and mobile homes are factored at 0.74, 0.34, and 0.20 SFE, respectively. The majority of commercial and industrial properties are assigned a factor of 0.50 SFE. Wineries are assigned at 0.25 SFE and agricultural and open space uses are assigned at 0.002 SFE. The special assessment is reviewed annually and NCMAD is authorized to increase the levy by up to 3.0% based on the San Francisco Bay Area Consumer Price Index.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 28 of 31

This page has been left intentionally blank for photocopying

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 29 of 31

IV. ENVIRONMENTAL REVIEW

A. Municipal Service Review

The municipal service review on NCMAD is a project under the California Environmental Quality Act (CEQA) given it may reasonably result in a future indirect physical change to the environment. The municipal service review is categorically exempt from further environmental review under Code of Regulations Section 15306. This exemption applies to basic data collection, research, and resource evaluation activities, which do not result in any serious or major disturbance to any environmental resource. This exemption applies to the municipal service review on NCMAD given it is strictly for information gathering purposes that may lead to an action which LAFCO has not approved, adopted, or funded.

B. Sphere of Influence Update

The sphere update on NCMAD is a project under CEQA given it may reasonably result in a future indirect physical change to the environment. The sphere update is exempt from further environmental review under Code of Regulations Section 15061. This exemption is referred to as the "general rule" and applies to projects in which it can be seen with certainty there is no possibility the action may have a significant effect on the environment. This exemption applies to the sphere update on NCMAD given it can be seen with certainty the confirmation of the existing sphere will not result in any physical changes to the environment.

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 30 of 31

This page has been left intentionally blank for photocopying

Napa County Mosquito Abatement District: Municipal Service Review and Sphere of Influence Update Page 31 of 31

IV. SOURCES

Agency Contacts

• Wesley Maffei, NCMAD Manager

Documents

- LAFCO of Napa County, "1984 Baseline Report Sphere of Influence Establishment," November 1984
- NCMAD, "The Integrated Mosquito Management Program," October 1999
- NCMAD, "Budget for Fiscal Year 2003-2004"
- NCMAD, "Budget for Fiscal Year 2004-2005"
- NCMAD, "Budget for Fiscal Year 2005-2006"
- NCMAD, "Budget for Fiscal Year 2006-2007"
- NCMAD, "Budget for Fiscal Year 2007-2008"
- NCMAD, "Budget for Fiscal Year 2008-2009"
- NCMAD, "Budget for Fiscal Year 2009-2010"
- NCMAD, "Management Report," June 2007 (R.J. Ricciardi, Inc.)
- NCMAD, "Management Report," June 2009 (R.J. Ricciardi, Inc.)
- NCMAD, "Engineer's Report," April 2008 (SCI Consulting Group)
- NCMAD, "Engineer's Report," May 2009 (SCI Consulting Group)
- NCMAD, "Basic Financial Statements," June 2006 (R.J. Ricciardi, Inc.)
- NCMAD, "Basic Financial Statements," June 2007 (R.J. Ricciardi, Inc.)
- NCMAD, "Basic Financial Statements," June 2008 (R.J. Ricciardi, Inc.)
- NCMAD, "Basic Financial Statements," June 2009 (R.J. Ricciardi, Inc.)
- California State Controller's Office Annual Reports, Fiscal Year 2004-2005 to 2008-2009
- Association of Bay Area Governments, "Projections and Priorities," 2009

Websites

- Napa County Mosquito Abatement District, <u>http://www.napamosquito.org/</u>
- Mosquito and Vector Control Association of California, <u>http://mvcac.org/</u>
- Association of Bay Area Governments, <u>http://www.abag.org/</u>
- California State Controller's Office, <u>http://sco.ca.gov/</u>
- California Department of Finance, <u>http://www.dof.ca.gov/</u>
- California Department of Conservation, <u>http://www.conservation.ca.gov/Index/Pages/Index.aspx</u>

| | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | | | |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|--|--|--|
| Total Number of Applications | | | | | | | | |
| Golden Bear 1111 | 593 | 531 | 415 | 420 | 354 | | | |
| Methoprene Liquid | 608 | 454 | 376 | 342 | 247 | | | |
| Methoprene Pellets | 38 | 139 | 183 | 190 | 314 | | | |
| Methoprene Briquets | 96 | 152 | 157 | 225 | 280 | | | |
| BTI Liquid | 569 | 389 | 333 | 318 | 239 | | | |
| Permethrin | 0 | 0 | 0 | 0 | 6 | | | |
| Pyrethrin | 219 | 265 | 130 | 184 | 135 | | | |
| Bacillus Sphaericus Granules | 0 | 6 | 9 | 36 | 124 | | | |
| Drione | 213 | 109 | 113 | 202 | 145 | | | |
| Allethrin | 29 | 22 | 13 | 17 | 6 | | | |
| Total Amounts (Active Ingredient) | | | | | | | | |
| Golden Bear 1111 | 1,367.06 | 948.07 | 503.85 | 299.25 | 274.71 | | | |
| (gallons) | | | | | | | | |
| Methoprene Liquid | 69.81 | 139.28 | 66.13 | 62.78 | 47.81 | | | |
| (gallons) | | | | | | | | |
| Methoprene Pellets | 71.12 | 279.87 | 225.32 | 181.47 | 1,056.7 | | | |
| (ounces) | | | | | | | | |
| Methoprene Briquets | 9.14 | 16.66 | 14.29 | 66.44 | 52.35 | | | |
| (ounces) | | | | | | | | |
| BTI Liquid (gallons) | 267.22 | 296.53 | 258.26 | 254.09 | 199.86 | | | |
| Permethrin (gallons) | 0 | 0 | 0 | 0 | 5.58 | | | |
| Pyrethrin (gallons) | 102.9 | 101.68 | 51.54 | 82 | 99.05 | | | |
| Bacillus Sphaericus Granules | 0 | 112 | 83 | 369.44 | 1,572.12 | | | |
| (ounces) | | | | | | | | |
| Drione (ounces) | 722 | 306.1 | 377.4 | 553.76 | 428.73 | | | |
| Allethrin (ounces) | 305.5 | 359 | 137 | 329.5 | 148 | | | |

California Government Code Section 56430

(a) In order to prepare and to update spheres of influence in accordance with Section 56425, the commission shall conduct a service review of the municipal services provided in the county or other appropriate area designated by the commission. The commission shall include in the area designated for service review the county, the region, the subregion, or any other geographic area as is appropriate for an analysis of the service or services to be reviewed, and shall prepare a written statement of its determinations with respect to each of the following:

- (1) Infrastructure needs or deficiencies.
- (2) Growth and population projections for the affected area.
- (3) Financing constraints and opportunities.
- (4) Cost avoidance opportunities.
- (5) Opportunities for rate restructuring.
- (6) Opportunities for shared facilities.

(7) Government structure options, including advantages and disadvantages of consolidation or reorganization of service providers.

- (8) Evaluation of management efficiencies.
- (9) Local accountability and governance.

(b) In conducting a service review, the commission shall comprehensively review all of the agencies that provide the identified service or services within the designated geographic area.

(c) The commission shall conduct a service review before, or in conjunction with, but no later than the time it is considering an action to establish a sphere of influence in accordance with Section 56425 or Section 56426.5 or to update a sphere of influence pursuant to Section 56425.

(d) Not later than July 1, 2001, the Office of Planning and Research, in consultation with commissions, the California Association of Local Agency Formation Commissions, and other local governments, shall prepare guidelines for the service reviews to be conducted by commissions pursuant to this section.



LOCAL AGENCY FORMATION COMMISSION OF NAPA COUNTY Policy on Municipal Service Reviews

Adopted: November 3, 2008

I. Background

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires the Commission to prepare municipal service reviews in conjunction with its mandate to review and update each local agency's sphere of influence every five years as necessary. The legislative intent of the municipal service review process is to inform the Commission with regard to the availability, capacity, and efficiency of governmental services provided within its jurisdiction prior to making sphere of influence determinations. Municipal service reviews must designate the geographic area in which the governmental service or services are under evaluation. Municipal service reviews must also include determinations addressing the governance factors prescribed under Government Code Section 56430 and any other matters relating to service provision as required by Commission policy.

II. Purpose

The purpose of these policies is to guide the Commission in conducting municipal service reviews. This includes establishing consistency with respect to the Commission's approach in the (a) scheduling, (b) preparation, and (c) adoption of municipal service reviews.

III. Objective

The objective of the Commission in conducting municipal service reviews is to proactively and comprehensively evaluate the level, range, and structure of governmental services necessary to support orderly growth and development in Napa County. Underlying this objective is to develop and expand the Commission's knowledge and understanding of the current and planned provision of local governmental services in relationship to the present and future needs of the community. The Commission will use the municipal service reviews not only to inform subsequent sphere of influence determinations but also to identify opportunities for greater coordination and cooperation between providers as well as possible government structure changes.

IV. Municipal Service Review Policies

A. Scheduling

Beginning in 2008, and every five years thereafter, the Commission will hold a public hearing to adopt a study schedule calendaring municipal service reviews over the next five year period. Public hearing notices will be circulated 21 days in advance to all local agencies as well as posted on the Commission website. The Commission will generally schedule municipal service reviews in conjunction with sphere of influence updates. The Commission, however, may schedule municipal service reviews independent of sphere of influence updates. The Commission may also amend the study schedule to add, modify, or eliminate calendared municipal service reviews to address changes in circumstances, priorities, and available resources.

In adopting a study schedule, the Commission will calendar three types of municipal service reviews. These three types of municipal service reviews are 1) service-specific, 2) region-specific, and 3) agency-specific and are summarized below.

- A <u>service-specific</u> municipal service review will examine particular governmental services across multiple local agencies on a countywide basis.
- A <u>region-specific</u> municipal service review will examine the range of governmental services provided by local agencies within a particular area.
- An <u>agency-specific</u> municipal service review will examine the breadth of governmental services provided by a particular local agency.

B. Preparation

The Commission will encourage input among affected local agencies in designing the municipal service reviews to enhance the value of the process among stakeholders and capture unique local conditions and circumstances effecting service provision. This includes identifying appropriate performance measures as well as regional growth and service issues transcending political boundaries. The Commission will also seek input from the affected local agencies in determining final geographic area boundaries for the municipal service reviews. Factors the Commission may consider in determining final geographic area boundaries include, but are not limited to, spheres of influence, jurisdictional boundaries, urban growth boundaries, general plan designations, and topography.

The Commission will prepare the municipal service reviews but may contract with outside consultants to assist staff as needed. Data collection is an integral component of the municipal service review process and requires cooperation from local agencies. The Commission will strive to reduce the demands on local agencies in the data collection process by using existing information resources when available and adequate. All service related information compiled by local agencies will be independently reviewed and verified by the Commission.

Each municipal service review will generally be prepared in three distinct phases. The first phase will involve the preparation of an administrative report and will include a basic outline of service information collected and analyzed by staff. The administrative report will be made available to each affected local agency for their review and comment to identify any technical corrections. The second phase will involve the preparation of a draft report that will be presented to the Commission for discussion at a public meeting. The draft report will incorporate any technical corrections identified during the administrative review and include determinations. The draft report will be made available to the public for review and comment for a period of no less than 21 days. The third phase will involve the preparation of a final report and will address any new information or comments generated during the public review period and will be presented to the Commission as part of a public hearing.

As noted, each municipal service review will include one or more determinations addressing each of the following governance factors required under Government Code Section 56430 and by Commission policy:

- 1. Growth and population projections for the affected area. (\$56340(a)(1)).
- 2. Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies. (§56340(a)(2))
- 3. Financial ability of agencies to provide services. (§56340(a)(3))
- 4. The status of, and opportunities for, shared facilities. (\$56340(a)(4))
- 5. Accountability for community service needs, including governmental structure and operational efficiencies. (§56340(a)(5))
- 6. Relationship with regional growth goals and policies. (Commission)

C. Adoption

The Commission will complete each scheduled municipal service review by formally receiving a final report and adopting a resolution codifying its determinations as part of public hearing.



Napa County Mosquito Abatement District

P.O. Box 10053, American Canyon, CA 94503

Wesley A. Maffei Manager

5 April 2010

Mr. Brendon Freeman, Analyst LAFCO of Napa County 1700 Second Street, Suite 268 Napa, CA 94559

EIV 2010 LAFCO NAPA COUNTY

Tel: 707. 553. 9610

Fax: 707. 553. 9611

www.napamosquito.org

Subject: Written comments to Draft Napa County Mosquito Abatement District Municipal Service Review and Sphere of Influence Update.

Dear Mr. Freeman,

Thank you for forwarding copies of the Napa County Mosquito Abatement District Municipal Service Review and Sphere of Influence Update for review and comment by myself and our District Board of Trustees. Overall the District has found the update to be reasonably accurate and well done. I would like however to reiterate the following points for clarification as well as point out a couple of minor errors.

First, concerning the fifth bullet point on page 10, an additional note should be added here when comparing Napa MAD to other mosquito and vector control agencies. Specifically, there are many diverse factors to take into consideration which tend to be unique to each agency (e.g. microclimates, population density, ethnic/cultural diversity, constituent concerns, types and sizes of sensitive habitats and wetlands, amounts of wetlands restoration projects proposed or underway, diversity of sensitive or protected species, diversity of vector populations and habitats, and much more). Other than a gross overview of budgets, staffing, equipment used, training and the general practices concerning vector control and habitat management, each agency is quite unique.

Second, concerning the sixth bullet point on page 10, both verbally and in writing the District acknowledged that the unrestricted fund balance serves multiple purposes. Specifically, \$1.0 million of the unrestricted balance is the Districts dry period cash that it operates with from July 1st through December 31st of each fiscal year. This addresses the District's desire to not borrow funds to maintain operations during this part of the fiscal year. Thus there is currently a \$1.39 million undesignated reserve. This reserve does allow the District to respond to urgent public health threats as well as unexpected changes in mosquito and vector populations (e.g. West End

BOARD OF TRUSTEES

STEVEN ROSA Yountville President CHARLES CARBONE City of Napa Acting President CHARLES JOHNSON American Canyon Secretary ANN SHELBY VALENTINE Calistoga Acting Secretary

FRANK CABRAL County of Napa

RON SOMPLE St. Helena Land Club, Stanly Ranch and Napa River SWOA Summer Salt Marsh Mosquito treatments from July-August 2009 resulted in an additional cost of \$60,599.14 in materials only) The District is also preparing for what is projected to be substantial future costs associated with the escalation of wetlands enhancement and restoration projects (Cargill Salt Ponds, Napa River, American Canyon, Stanly Ranch, and numerous State Water Board storm water detention basin requirements with each and every development project over 1 acre in size) as well as compliance with increasing regulatory requirements (California Dept. of Fish and Game Stream Bed alteration permits, and NPDES permits for mosquito control by April 2011). These costs are expected to be quite substantial as the wetlands become more mature and the regulatory requirements continue to be further clarified by the regulatory agencies. Therefore, the District has already begun appropriate financial planning to address this pending issue.

Third, with respect to the second bullet point on page 11, Napa MAD does have a number of formal service agreements with local water and sanitary agencies (e.g. Napa Sanitation, City of American Canyon, Town of Yountville, City of St Helena, City of Calistoga, etc.).

Fourth, page 13, first paragraph, see comment number two above concerning the sixth bullet point on page 10. The dynamic nature of the District's work, coupled with the use of materials that are more costly, more labor intensive and have no residual effect necessitates that the District maintain sufficient cash on hand to effectively respond not only to urgent public health threats but also to maintain the District's current level of service into future years regardless of regulatory changes, population growth and wetlands enhancement projects.

Fifth, section 5.2, page 17 needs a minor correction. The General Manager oversees eight full-time staff.

Sixth, concerning the last line of the paragraph on surveillance (page 19), please note that chicken blood samples and mosquito pools are analyzed by the U.C. Davis Arbovirus Research Lab in cooperation with the California Department of Health Services. The District scientist collects the blood samples and mosquito pools and works with the Arbovirus research lab concerning the analysis. Also with respect to footnote 11, the District maintains three chicken flocks consisting of ten birds each.

Seventh, concerning the paragraph on community education (page 17), The District also runs informational adds from March through October in the Napa Register, American Canyon Eagle, Yountville Sun, St Helena Star, The Weekly Calistogan and the Calistoga Tribune. Furthermore the District also runs multiple weekly public service announcements Monday through Friday on both KVON and KVYN radio stations from March through October.

Eighth, concerning footnote 12 on page 17, District work plans are also closely reviewed by the State Water Quality Control Board, the San Francisco Regional Water Quality Control Board and the Central Valley Regional Water Quality Control Board.

Ninth, concerning the service call graphs and charts on pages 18 and 20-21, it is important to note that 2004 and 2005 were significant years for two reasons, First, during mid 2003 the District had just undergone a County-wide benefit assessment election which resulted in

significantly greater public awareness of the District and its services, including newly available services. The demand for Yellowjacket control and advice about rodents tapered off as the programs became more established and the District got a better handle on population levels and control of these organisms. Please also keep in mind that prevailing weather conditions play a big factor in the population levels of these organisms. Second, 2003 through 2005 saw a tremendous amount of media attention concerning West Nile Virus which resulted in heightened public concerns about mosquitoes and mosquito-borne disease.

Lastly, concerning the District's revenue and expense trends chart on page 24, please note that in 2003 through 2005 the District received funds from the Napa River Restoration project as settlement for the District being relocated and having to construct a replacement facility. These funds totaled almost \$1.0 million. The unusual expenditure for fiscal year 2007-2008 is a result of the District funding its GASB45 requirement (Other Post Employment Benefits) which came to approximately \$1.008 million. The District was aware of the pending GASB45 requirement and had begun accumulating sufficient reserves in an attempt to meet the funding requirement of this Federal mandate. Fiscal year 2007-2008 was the first and most significant payment towards prefunding this requirement.

We appreciate all the work that you and your staff have put into this report. Thank you for the opportunity to respond to your inquiries and this report.

Respectfully,

Wesley A. Maffer

Wesley A. Maffei Manager