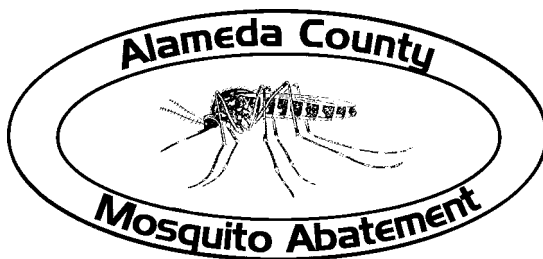


Alameda County Mosquito Abatement District



70 Years of Service to the Public

**Biennial Report
1997/98 - 1998/99**



BOARD OF TRUSTEES

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**Alameda County
Mosquito Abatement District**

John R. Rusmisl
District Manager
23187 Connecticut Street
Hayward, California 94545
(510) 783-7744
Fax (510) 783-3903

January 12, 2000

The Board of Trustees of the
Alameda County Mosquito Abatement District

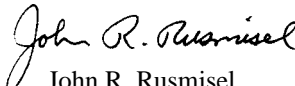
Dear Trustees:

The employees of the Alameda County Mosquito Abatement District present to you the Districts Biennial Report covering fiscal years 1997/98 and 1998/99 as well as the operational data for 1998 and 1999. Operational data from the previous Biennial Report is included for comparison.

During the last two years a number of important events have transpired. The District completed soil remediation projects at two former depots in Pleasanton and Union City. The number of imported malaria cases, which had been increasing dramatically in recent years, declined significantly. Weather variations caused by El Nino and La Nina conditions did not result in higher populations of mosquitoes but did considerably alter the usual emergence dates. The use of chloramines to disinfect domestic water supplies necessitated many repeat visits to residential fishponds before the public recognized the need to neutralize the water prior to adding mosquitofish.

Due to the booming real estate market in Alameda County, the District received an increase in ad valorem taxes that allowed a 15 per cent reduction in the special tax rate for fiscal year 1999/2000. The District continues to be committed to providing cost-effective, environmentally sensitive mosquito control to the residents of Alameda County. As we enter the new millennium and celebrate our seventieth anniversary, the employees of the District look forward to continuing to provide quality service to the public.

Respectfully submitted,


John R. Rusmisl
District Manager

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GOVERNING BOARD

The Alameda County Board of Supervisors and each of the elected councils of the 13 cities within the District appoint one trustee to represent its constituency on the governing board of the Alameda County Mosquito Abatement District. The Board of Trustees consists of individuals dedicated to community service and willing to accrue the knowledge required to effectively govern a mosquito abatement district. The current board members possess a variety of skills and expertise in business, government, civil engineering, electrical engineering, general contracting, automotive mechanics, agriculture, genetics, medicine, medical entomology, environmental law, environmental health, scientific research, physics, law enforcement, fire science, public health and sanitary engineering.

The diversity of knowledge possessed by the trustees provides a broad, conceptual framework within which Board decision-making occurs. In these ever changing times in local government, the knowledge base provided by the trustees is an invaluable resource.

The trustees serve two-year terms without compensation, but they do receive allowances for expenses incurred in attending business meetings of the Board. The regular Board meetings are held on the second Wednesday of each month at the District's administrative offices, 23187 Connecticut Street, Hayward at 5:00 p.m. and the meetings are open to the public.

Trustees for the years 1997-1999

Trustee	Representing	Years of Service to the District (1999)
James N. Doggett	Livermore	24
T. David Edwards	Alameda	14
Stuart M. Flashman	Oakland	7
Paul T. Garcia	Hayward	16
Earl Whitaker	County-at-large	3
John D. Hughes	Fremont	18
Jim Golden	Emeryville	5
Steve Martin	Union City	12
Denny McLeod	Piedmont	14
Harvey I. Scudder	Dublin	18
William M. Spinola	Newark	20
Edwin J. Suchman	San Leandro	18
John P. Vizzolini*	Pleasanton	34
Jan O. Washburn	Berkeley	7
Richard Whitsel**	Pleasanton	1

*Left Board

** Replaced John P. Vizzolini

DISTRICT PERSONNEL

Administration	Position	Years of Service
John R. Rusmisel	Manager	20
Vinay C. Davis	Administrative Assistant	13
Operations		
Dereje Alemayehu (Zone 2)	Mosquito Control Technician	.5
Joline Davison (zone6)	Mosquito Control Technician	5
William Hamersky (zone 8)	Vector Biologist	6
S. Lee Holt (zone 1)	Vector Biologist	5
Joseph W. Huston (zone 3 & 4)	Vector Biologist	7
Everett M. King, Jr.	Environmental Specialist	27
Bruce Kirkpatrick (Zone 5 & 7)	Mosquito Control Technician	1.5
Robert A. Knowles*	Equipment/Maintenance Specialist	28
Thomas J. McMahon (zone 9 & 10)	Vector Biologist	12
Sharon S. Mead	Systems Specialist	14
James M. Romeo (zone 2)**	Vector Biologist	30
Patrick S. Turney	Entomological Specialist	19
Gregory D. Wood	Mechanical Specialist	.2

* Retired December 1999

** Retired July 1999

Representation Activities

The District is one of about 50 agencies that conduct mosquito control in California. The District participates in the activities of the Mosquito and Vector Control Association of California (MVCAC), the Society of Vector Ecologists (SOVE) and the American Mosquito Control Association (AMCA) to promote coordination of our common activities and to increase our knowledge of mosquito control. The following is a list of District trustees and employees who have participated in regional, statewide or national activities:

John R. Rusmisel

Member American Mosquito Control Association (AMCA); Member Entomological Society of America (ESA); Member, Society of Vector Ecologists (SOVE); Member, California Special Districts Association (CSDA); Member San Francisco Bay Joint Venture Management Committee; Member Management Committee, Computer Committee, and Legislative Committee (MVCAC).

Harvey I. Scudder

President, Board of Directors, Mosquito and Vector Control Association of California (MVCAC); Member of the Africanized Honey Bee Committee, Entomology and Vertebrate Management Committee, Executive Committee, Disease Control Committee, and Historical Archives Committee.

Patrick S. Turney

Member MVCAC North Coast Region Continuing Education Committee; Member Bay Area Vector Borne Disease Group.

Everett M. King

Member MVCAC Historical Archives Committee, Represents District at the Hayward Area Shoreline Planning Agency (HASPA), as a member of the Technical Advisory Committee.

Sharon S. Mead

Bay Area Automated Mapping Association (BAAMA), Environmental Systems Research Institute (ESRI)

ACTIVITIES

Research:

The District provided support for studies on the effects of biorational pesticides on non-target organisms conducted by Sharon P. Lawler, Deborah A. Dritz and Truls Jensen at the University of California, Davis. The materials studied were Bti, GB1111 and Methoprene.

Special Training:

- Visual Basic Programing, Chabot College (Sharon Mead)
- Introduction to Arcview GIS, Sacramento (Sharon Mead, Patrick Turney)
- Purchased and began self study course for A+ certification, industry standard for computer technicians in trouble shooting and maintaining computers (Sharon Mead)
- Presenting Data and Information Class, Palo Alto (Sharon Mead)
- Urban Creek Restoration Training Conference, Concord, CA, (Everett King)

Visitors:

Ian Myles from Brisbane City Mosquito and Pest Services, Queensland, Australia visited the District.

Special Conferences:

- 1998 Mosquito and Vector Control Association of California Annual Conference, Fish Camp, CA, (John Rusmisl, Everett King, Sharon Mead, Harvey Scudder, William Hamersky)
- 1998 Entomological Society of America Annual Conference, Las Vegas, NV, (Jan Washburn)
- 1998 American Mosquito Control Association, Reno, NV; (Everett King, Paul Garcia)
- 1999 Mosquito and Vector Control Association of California Annual Conference, Anahiem, CA (John Rusmisl, Harvey Scudder)
- 1999 American Mosquito Control Association, St. Louis, MO; (John Rusmisl, Harvey Scudder)
- 1999 Entomological Society of America Annual Conference, Atlanta, GA, (Jan Washburn)
- 1999 5th Annual; California GIS Conference, Oakland (Sharon Mead)

California Environmental Quality Act (CEQA) Documentation

CEQA was enacted in 1970 to protect the environment. The District filed a statement of exemption in 1973 and had not done a thorough review of its program since that time. In 1999 we completed a mitigated negative declaration of our complete mosquito control program. The following is the Project Description for CEQA: The District's project is the on-going program started in 1930 to prevent new sources of mosquitoes from developing, control existing populations of mosquitoes, and abate their sources. The project enhances the quality of the environment by protecting public health and comfort, controlling mosquito populations throughout the district and reducing the interaction between humans and mosquitoes and the risk of mosquito-borne diseases.

Mosquito-borne Disease Monitoring

The District continued its program of placing monitor chicken flocks for the detection of encephalylitis. Results continue to show negative results, indicating that the virus is not present in the areas near the flocks. The number of reported marlaria cases arriving in the District declined from previous years.

Public information activities

Below is a summary of activites conducted by District personnel:

Summary of Public Information Activities 1995-1999		1995	1996	1997	1998	1999
	School Presentations	4	15	23	10	12
	Fairs and Shows	2	5	7	6	10
	Newspaper Contacts	7	8	7	10	9
	Television and Radio	5	6	5	1	1
	Miscellaneous Presentations	2	8	7	12	14

**OPERATIONAL DATA
1993-1999**

1993 1994 1995 1996 1997 1998 1999

Total Hours of District Effort

Physical control	410	251	255	772	487	449	121
Biorational control	1,716	1,970	2,353	2,252	2,276	2,155	2,294
Chemical control	787	752	786	801	642	756	850
Monitoring and surveillance	5,806	5,477	5,674	5,965	6,367	5,960	6,377
Public Relations	253	573	761	924	1,479	1,729	1,769
Equipment and facilities maintenance	2,111	2,602	2,781	3,030	2,285	2,401	2,676
Administration, training and safety	10,537	10,901	9,541	8,574	8,652	8,293	8,795

Physical Control Operations

Construction of ditches and drains (lineal feet)	0	2,500	0	70	4,100	10	0
Maintenance of ditches (lineal feet)	3,130	1,570	29,340	25,755	7,313	11,183	1,525
Maintenance of tidegates and culverts (units)	2	0	0	2	30	0	0

Biological Control Operations -

Fish Plants	710	698	1,279	1,286	1,394	1,605	1,382
Fish plants as service request	652	638	1,034	916	1,099	1,411	1,264
District-initiated fish plants	58	60	245	370	295	191	118

Chemical Control Operations - Chemical Usage

Golden Bear larvicidal oil (gallons)	3,618	3,580	3,176	3,742	1,746	1,673	2,049
Scourge (Resmethrin) (ounces)	0	0	0	28.4	3.4	45	36.5


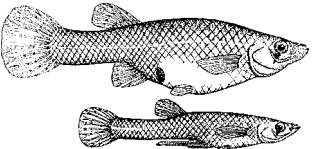
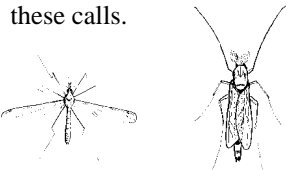
Biorational Larvicides

BTI liquid (gallons)	19,768	10,589	8,734	8,525	6,490	4,703	3,627
BTI granules (pounds)	6,694	7,200	3,067	4,686	4,228	4,551	2,204
Altosid® liquid (gallons)	13,586	13,791	10,814	20	0	-	-
Altosid® Liquid Concentrate (gallons)	0	0	0	8,323	6,490	4,025	3,704
Altosid® briquets (each)	994	1,553	3,929	5,663	6,343	7,661	9,974
Altosid® XR briquet (each)	171	56	219	435	741	766	773
Altosid® pellets (oz)	7	24	359	2,373	1,743	368	372

SERVICE REQUESTS OF ALL TYPES 1973-1999

Year	Total Service Requests	Mosquito Service Requests	Fish Requests	Miscellaneous insects	No Insects Evident
1973	2,671	571	576	1,320	188
1974	1,461	486	414	325	167
1975	1,348	470	487	154	230
1976	1,320	433	467	186	222
1977	1,120	450	367	90	208
1978	2,382	1,118	465	497	257
1979	1,196	550	359	87	194
1980	1,640	835	438	56	309
1981	1,372	684	327	43	328
1982	1,778	1,004	387	141	246
1983	1,269	368	414	165	322
1984	791	264	266	39	222
1985	821	330	241	30	220
1986	1,043	462	288	62	231
1987	917	446	286	34	151
1988	779	341	314	36	88
1989	1,023	552	348	20	103
1990	786	348	328	26	84
1991	756	288	339	24	105
1992	1,640	777	622	42	199
1993	1,356	491	638	72	155
1994	1,018	285	619	33	81
1995	1,903	474	1,034	123	272
1996	1,642	426	916	129	106
1997	1,502	338	947	105	112
1998	1,699	347	1,033	103	216
1999	1,351	269	929	32	121
Totals 73-99	36,641	13,519	14,649	3,974	5,137

Description of Service Requests

<p>Mosquito Service Requests:</p> <p>Mosquito Service Requests are those requests found to have been caused by adult or larval mosquitoes. The caller provides a specimen or the technician finds mosquitoes present in the area.</p> 	<p>Fish Requests:</p> <p>Fish Requests are requests to have fish planted in any type of container.</p> 	<p>Miscellaneous Insects:</p> <p>Miscellaneous insect service requests are caused by insects other than mosquitoes. Aquatic midges, crane flies, and gnats are the most common insects encountered on these calls.</p> 	<p>No Insects Evident:</p> <p>No insects evident service requests are calls where there is no specimen or indication of a specific insect causing the problem. Some of these calls are informational calls relating to source prevention.</p> <p style="text-align: center;">? ? ? ? ?</p>
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District Service Request Response Goal

It is the goal of District personnel to respond to service requests within 24 hours or the next working day whenever possible.

**SUMMARY OF SERVICE REQUEST DATA FOR
CALENDAR YEARS 1993-1999**

The below table is expressed in percentage of of the listed insects found on mosquito, miscellaneous insect, and no insects found service requests.

	1993	1994	1995	1996	1997	1998	1999
Mosquitoes							
<i>Aedes dorsalis</i> - Salt marsh mosquito	1	1	3	0	3	0	4
<i>Aedes sierrensis</i> - Tree hole mosquito	7	10	4	7	1	4	5
<i>Aedes squamiger</i> - Winter salt marsh mosquito	3	2	1	1	0	0	1
<i>Aedes washinoi</i> - Woodland pool mosquito	1	1	0	1	0	0	0
<i>Anopheles freeborni</i> - Malaria mosquito	1	1	0	0	0	0	0
<i>Culex pipiens</i> - House mosquito	15	25	15	17	29	17	24
<i>Culex tarsalis</i> - Encephalitis mosquito	3	3	6	4	2	4	5
<i>Culiseta incidens</i> - Fish pond mosquito	19	22	18	19	16	23	22
<i>Culiseta inornata</i> - Winter marsh mosquito	4	4	8	5	2	3	2
Percentage caused by mosquitoes	<u>54</u>	<u>69</u>	<u>54</u>	<u>54</u>	<u>53</u>	<u>51</u>	<u>63</u>
Other insects							
Aquatic midges	2	3	6	7	7	9	4
Leptoconops	0	0	1	0	0	0	0
Winter crane flies	0	0	1	5	2	1	1
Crane Boëflies	2	2	2	4	3	3	1
Dixid midges	0	0	1	0	1	0	0
House flies	0	1	0	0	0	0	0
May flies	0	1	0	1	1	0	0
Minute gnats	0	1	0	0	0	0	0
Percentage caused by other insects	<u>4</u>	<u>8</u>	<u>11</u>	<u>17</u>	<u>14</u>	<u>13</u>	<u>6</u>
Percentage where no insects were found	<u>40</u>	<u>25</u>	<u>33</u>	<u>28</u>	<u>31</u>	<u>32</u>	<u>29</u>

Figures are rounded to whole numbers and may not add up to exactly 100%

FINANCIAL REPORT

	June 30, 1998	June 30, 1999
Revenues:		
Tax revenues		
Special tax	654,310	663,939
Property taxes:		
Current secured	615,434	667,390
Current unsecured	67,353	71,203
Prior secured	1,847	1,186
Prior unsecured	(221)	2,675
Supplemental	16,673	25,340
Total Tax Revenues	\$1,355,396	\$1,431,733
Aid From Government Agencies:		
AB8 augmentation		
Homeowner's property tax relief	14,714	14,850
State, Federal and other		
Other Revenues:		
Interest	85,682	91,174
Sale of equipment	8,532	10,000
Sale of Land	-	170,000
Charges for current services	710	
Insurance refund	35,670	15,741
Insurance reimbursements		521,050
Other	7,806	5,522
Total Other Revenues:	138,400	813,487
Total Revenues:	\$1,508,510	2,260,070
Expenditures:		
Salaries and Employee Benefits:		
Salaries and wages	673,712	722,044
Contribution to employee retirement plan	134,841	148,548
Contribution to health and welfare plans	141,463	148,171
Total Salaries and Employee Benefits:	\$950,016	1,018,763
Services and Supplies:		
Clothing and personal supplies	1,019	4,732
Household and janitorial	4,603	4,581
Laundry	4,427	5,062
Office	4,978	4,865
Medical, Dental and laboratory supplies	195	971
Small tools and instruments	403	707
Maintenance:		
Structures, improvements and grounds	2,222	2,906
Equipment	13,737	28,813
Utilities	7,729	6,515
Communication	7,114	7,482
Membership dues and subscriptions	9,886	9,711
Transportation and travel	22,523	25,275
Community Education	4,578	365

Special District - abatement supplies	37,108	25,982
Professional and specialized services	32,089	23,351
Insurance	22,400	21,372
Other insurance and surety bonds	25,842	25,102
Equipment rental	3,087	2,660
Union City Project	201,782	36,399
Total Services and Supplies:	405,722	236,851
Expenditures Before Capital Additions	1,355,738	1,255,614
Revenues (Over) Under Expenditures Before Capital Additions	152,772	1,004,456
Capital Additions:		
Equipment	42,515	19,698
Structures and improvements	3,600	2,716
Total Capital Additions	46,115	22,414
Revenues (Over) Under Expenditures After Capital Additions	106,657	982,042
Fund Balance, Beginning of Year	1,420,570	1,527,227
Fund Balances - End of Year	\$1,527,227	\$2,509,269

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT
COMBINED BALANCE SHEET
 JUNE 30, 1998 and 1999

(Memorandum Only)	Governmental Fund Type General		Account Group General Fixed Assets		Totals	
	1998	1999	1998	1999	1998	1999
Assets:						
Pooled cash and investments	627,651	767,828			627,651	767,828
Deposit - Vector Control Joint Power Agency	980,570	1,795,302			980,570	1,795,302
Interest receivable	12,574	11,121			12,574	11,121
Property taxes receivable	485	421			485	421
Fixed Assets:						
Land	-	-	262,402	61,406	262,402	61,406
Structures and improvements	-	-	988,271	990,987	988,271	990,987
Equipment	-	--	728,521	720,073	728,521	720,073
Total Assets:	\$1,621,280	\$2,574,672	\$1,979,194	\$1,772,466	\$3,600,474	\$4,347,138
Liabilities, Fund Equity and Other Credits:						
Liabilities:						
Accrued vacation expense	54,253	60,700			54,253	60,700
Accounts payable	39,800	4,703			39,800	4,703
Total Liabilities:	\$94,053	\$65,403			\$94,053	\$65,403
Fund equity and other Credits:						
Investment in general fixed assets			1,979,194	1,772,466	1,979,194	1,772,466
Fund Balance						
Unreserved:						
Designated	1,527,227	2,509,269			1,527,227	2,509,269
Total Fund Equity:	\$1,527,227	\$2,509,269	\$1,979,194	\$1,772,466	\$3,506,421	\$4,281,735
TOTAL LIABILITIES AND FUND EQUITY:	\$1,621,280	\$2,574,672	\$1,979,194	\$1,772,466	\$3,600,474	\$4,347,138