

RECEIVED

AUG 29 2011

DIVISION OF WATER QUALITY

ATTACHMENT G – NOTICE OF INTENT

WATER QUALITY ORDER NO. 2011-0002-DWQ  
GENERAL PERMIT NO. CAG 990004

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES  
TO WATERS OF THE UNITED STATES  
FROM VECTOR CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item  A. New Applicator  B. Change of Information: WDID# \_\_\_\_\_  
 C. Change of ownership or responsibility: WDID# \_\_\_\_\_

II. DISCHARGER INFORMATION

A. Name Durham MAD			
B. Mailing Address PO Box 386			
C. City Durham	D. County Butte	E. State CA	F. Zip Code 95938
G. Contact Person Aaron Amatoroadmadastorm net.com	H. Email address	I. Title Manager	J. Phone 530 8228-3918

III. BILLING ADDRESS (Enter Information only if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Email address	H. Title	I. Phone	

**IV. RECEIVING WATER INFORMATION**

A. Biological and residual pesticides discharge to (check all that apply)\*:

- Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.  
 Name of the conveyance system: \_\_\_\_\_
- Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.  
 Owner's name: \_\_\_\_\_  
Name of the conveyance system: \_\_\_\_\_
- Directly to river, lake, creek, stream, bay, ocean, etc.  
 Name of water body: Butte Creek, Edgar Slough

\* A map showing the affected areas for items 1 to 3 above may be included.

B. Regional Water Quality Control Board(s) where application areas are located  
(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 5  
(List all regions where pesticide application is proposed.)

A map showing the locations of A1-A3 in each Regional Water Board shall be included.

**V. PESTICIDE APPLICATION INFORMATION**

A. Target Organisms:  Vector Larvae       Adult Vector

B. Pesticides Used: List name, active ingredients and, if known, degradation by-products

Altosid WSP - Methoprene	2724-448
All Pro Evolver 444 (Permethrin/PBO)	769-982
Kontrol 444 (Permethrin/PBO)	73748-4
Pyrenone 25-5 (Permethrin/PBO)	432-1050

C. Period of Application: Start Date March 1st      End Date Oct 31st

D. Types of Adjuvants Added by the Discharger: None

**VI. PESTICIDES APPLICATION PLAN**

A. Has a Pesticides Application Plan been prepared?\*

Yes       No

If not, when will it be prepared? \_\_\_\_\_

\* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

Yes       No

**VII. NOTIFICATION**

Have potentially affected governmental agencies been notified?

Yes  No

\* If yes, a copy of the notifications shall be attached to the NOI.

**VIII. FEE**

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

Yes  NO  NA

**IX. CERTIFICATION**

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Aaron Amator

B. Signature: *Aaron Amator*

Date: 8-9-11

C. Title: Manager

**X. FOR STATE WATER BOARD USE ONLY**

WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:

Durham MAD  
PO Box 386  
Durham, CA 95938

## **National Pollution Discharge Elimination System Pesticide Application Plan**

### Section 1: Description of Target Area

#### **A. Description of Target Area**

For a map of target area, please see attachment 1: Map of Durham MAD

#### General description of district boundaries

The Durham MAD encompasses 64 square miles in Butte County, California including the town of Durham, CA.

#### Description of district boundaries:

Northern boundary: An east /west line along the section boundary lines, 3 miles north of Pentz Road.

Southern boundary: An east / west line approximately ¼ mile south of Shippee Road.

Eastern boundary: A north / south line running along US Highway 99.

Western boundary: A north / south line running through Troxel Road.

No known water of the United States is treated directly by the Durham MAD. There is a potential for spray drift to reach waters of the United States during adulticide activity inside the District. The waters of the United States are within or on the periphery of the district:

Butte Creek  
Edgar Slough

The district does not access any property owned by a Federal, State, or local agency containing a water of the United States. Further the District does not ask or receive permission to work in any such area.

#### **B. Factors influencing pesticide applications**

(See Best Management Practices for Mosquito Control in California (CDPH - 2010))

#### **Larval Control Decision Process (Alternatives considered)**

##### **Best Management Practices**

Sites are surveyed prior to any action to determine if mosquito larvae are present or if it is likely that the site will produce mosquito larvae in the foreseeable future.

The first option considered is elimination of the site through physical action (i.e. filling a tire rut with sand or draining an unused swimming pool).

The second BMP implemented as an alternative to pesticide use is biological control of mosquito larvae with mosquitofish (*Gambusia affinis*)

The next BMP alternative is larval control with pesticides, after all alternative actions have been considered. If a mosquito larval development source cannot be addressed through source elimination or mosquito fish, a least toxic option pesticide is considered (i.e. methoprene (Altosid)).

If mosquito pupae are present in a larval development site, control with the least toxic option (Altosid) must be rejected as an option and the site is treated with GB-1111 or BVA 2 oil.

### **Adult Control Decision Process (Alternatives considered)**

#### **Best Management Practices**

When considering adult mosquito control – the District always considers the option of not spraying, or spraying only a portion of the district. The District will only spray when conditions indicate it is a necessary, and will always spray the smallest area that will ensure an efficacious application.

Adult mosquito control is a last resort option that is utilized only in accordance with one or more of the following Best Management Practice criterion:

#### Surveillance (mosquito population)

- Mosquito trap data indicates a large population of adult mosquitoes
- Telephone calls to the district indicate a significant level of mosquito annoyance

#### Surveillance (mosquito species and disease risk)

- When species captured and / or the documented presence of mosquito vectored disease activity in the region (See California Mosquito-Borne Virus Surveillance and Response Plan) indicate there is an elevated risk of mosquito-vectored disease transmission to humans.

Once the District has determined that following Best Management Practices are implemented during planning and execution of the application:

- Determine the smallest area that can be sprayed to achieve an efficacious application

- Plan application to cover the area as efficiently as possible

- Implement the application only when weather conditions are appropriate and mosquito populations are active

### **C. Types of Pesticides Used and Application Methods**

All pesticides are applied in accordance with label directions. Zoecon Altosid Pellets EPA Registration #: 2724-448

Altosid (methoprene) pellets - used to prevent mosquito larvae from maturing and

emerging as adults from a known larval development source. Pellets are applied through a power backpack blower / spreader. Briquettes are applied singly by hand.

Mosquito larvicide GB-1111 EPA Registration #: 8329-72 BVA 2 Mosquito Larvicide Oil EPA Registration #: 70589-1

Surface Oils - These are physical control products applied when late instar mosquito larvae or mosquito pupae are present. A pressurized hand can is used to apply oil as needed.

#### Adulticides

Allpro Evoluer 4-4 UI V EPA Registration #: 769-982  
Active ingredients are permethrin and PBO

Adulticides are applied as an ultra-low volume aerosol spray through truck mounted Grizzly or London Fog brand ULV sprayers. Applications take place during the evening or early morning, beginning at sunset or ending at sunrise, during the time when the sun is below the horizon.

#### **D. Description of Anticipated Application Areas**

Products may be applied anywhere within district boundaries:

Larval control: Larval sources within the district include residential (i.e. pools, boats, animal troughs) and rural sources (i.e. natural ponds, irrigation ditches, rice fields, irrigated pastures).

Adult control: Adulticides may be applied anywhere within district boundaries.

#### **E. Other Best Management Practices Utilized by the District**

Public education is a mosquito control Best Management Practice continually employed by the District. Specific activities include working with local newspaper to print articles about mosquitoes, mosquito-borne diseases, and eliminating back-yard mosquito sources. District personnel also work directly with residents and business owners to eliminate problems like excess irrigation, clogged storm drains, unmaintained pools, and removal of miscellaneous containers that may hold water.

For a more comprehensive listing of all Best Management Practices considered, please see Best Management Practices for Mosquito Control in California. Pesticides use is always a last resort (as previously discussed), after physical and biological control have failed to adequately control the problem.

#### **F. Anticipated Pesticide Use**

This is only an estimate of use based on actual use during 2010, or estimated average use for products not used during 2010, Actual use may be greater or less than the estimate depending on weather, precipitation, and many other factors that cannot be anticipated.

<u>Adulticide</u>	<u>Estimated Use 2011</u>
Kontrol 4-4	200 gallons
Pyrenone 25-5 Public Health Spray	30 gallons
Prentox Perm-X UL 4-4	100 gallons

<u>Larvicide</u>	<u>Estimated Use 2011</u>
Altosid pellets	10 pounds
Mosquito Larvicide GB-1111	2 gallons

### **G. Monitoring Locations**

Please see MVCAC coalition monitoring plan.

### **H. Evaluation of BMPs**

Please see the Best Management Practices for Mosquito Control in California.

### **I. Description of BMPs to be Implemented**

Please see the Best Management Practices for Mosquito Control in California

## **Section 2**

### **D. Best Management Practices (BMPs)**

The District's BMPs are described in the Best Management Practices for Mosquito Control in California and the California Mosquito-Born Virus Surveillance and Response Plan

#### **Subsection 1:**

##### **a. Thresholds**

Larval: Presence of larvae is sufficient to warrant control measure

Adult:

Citizen mosquito annoyance calls

Landing rate counts

Pesticide application to control adult and larval mosquitoes is also dependent on mosquito species, proximity to population centers, and disease activity.

##### **b. Species specific management plan**

Genera: *Annopheles* and *Culiseta*: Winter to early spring mosquitoes Altosid briquettes are used beginning in February

Adult spraying may be necessary depending on population

*Culex* and floodwater *Aedes*: Summer and fall mosquitoes

Physical control, biological control, larviciding, and adult control as needed

c. Known larval development sites

Any sites that hold water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred method, and whenever possible the District works with property owners to implement long-term solutions to reduce or eliminate the need for continued applications as described in the Best Management Practices for Mosquito Control in California.

d. Analyze existing surveillance data to identify new sources

This is included in the Best Management Practices for Mosquito Control Practices in California and the California Mosquito-Borne Virus Surveillance and Response Plan that the District uses. The District collects adult mosquito surveillance data and dead bird reports to guide mosquito control activities.

**Subsection 2**

a. This describes the District's existing mosquito management program, as well as the practices described in the Best Management Practices for Mosquito Control in California that are used by this agency.

**Subsection 3**

a. Application error and spill reporting

b. Staff pesticide application and spill training

This is an existing practice of the District, and is required to comply with Department of Pesticide Regulation's (DPR) requirements and the terms of our Cooperative Agreement with the California Department of Public Health. All pesticide applicators receive annual safety and spill training in addition to their regular continuing education.

**Section E**

The Discharger shall maintain a log for each pesticide application. The application log shall contain, at a minimum, the following information, when practical, for larvicide or adulticide applications:

1. Date of application;
2. Location of the application and target areas (e.g., address, crossroads, or map coordinates);
3. Name of applicator;
4. The names of the water bodies treated if known or named (i.e., canal, creek, lake, etc.);
5. Application details, such as when the application started and stopped, pesticide application rate and concentration, water flow rate of the target area, surface water area, volume of water treated, pesticide(s) and adjuvants used by the Discharger, and volume or mass of each component discharged;

This is an existing practice of the District as required to comply with DPR regulations and our CDPH Cooperative Agreement requirements.



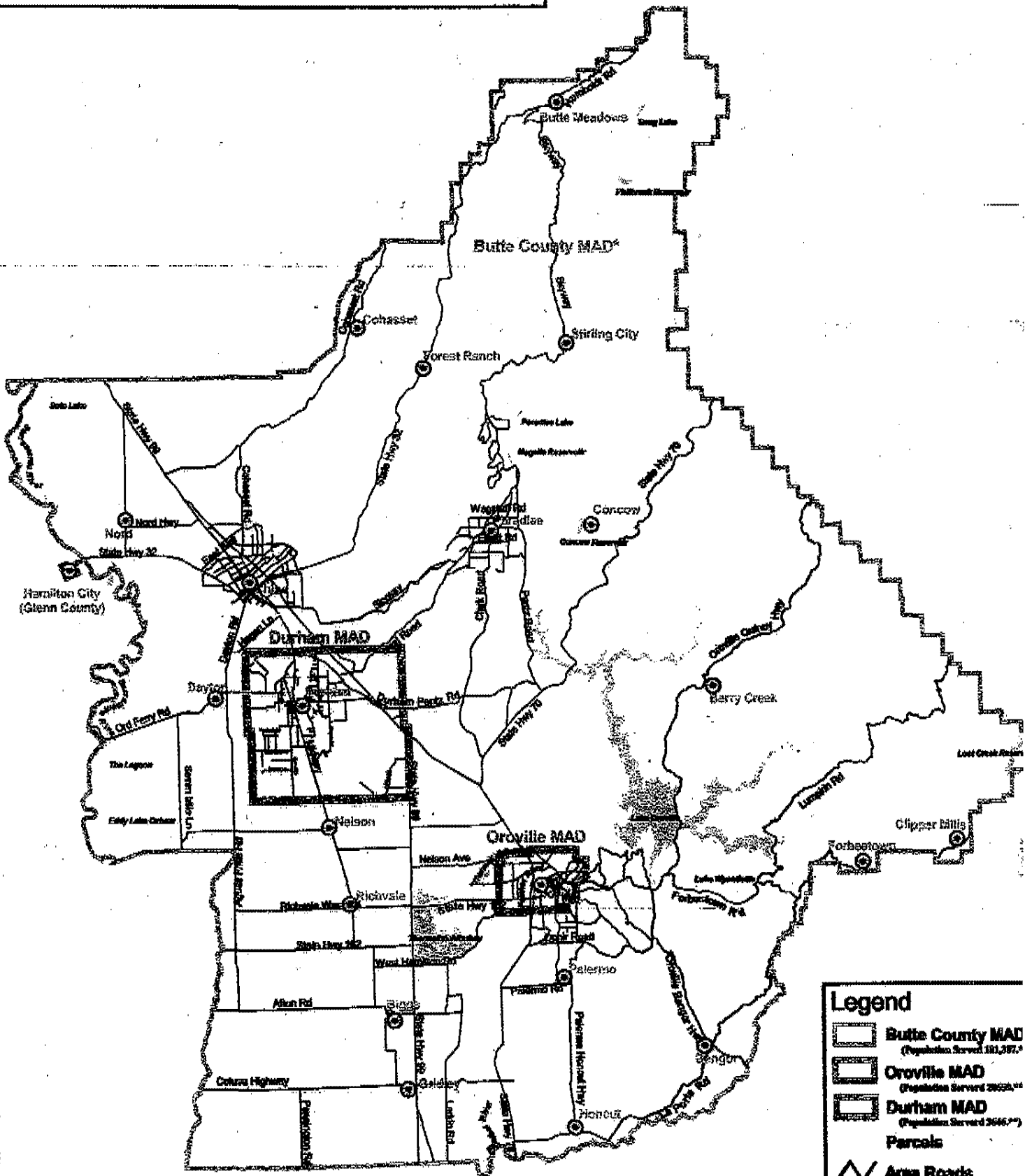
**References:**

Best Management Practices for Mosquito Control in California. 2010. Available from the California Department of Public Health-Vector-Borne Disease Section, (916) 552-9730 or by download from <http://www.westnile.ca.Qov/resources.php> under the heading Mosquito Control and Repellent Information.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. [Note: this document is updated annually by CDPH]. Available from the California Department of Public Health-Vector-Borne Disease Section, (916) 552-9730 or by download from <http://www.westnile.ca.Qov/resources.php> under the heading Mosquito Control and Repellent Information.

MVCAC NPDES Coalition Monitoring Plan.

# Mosquito Abatement Districts\*



**Legend**

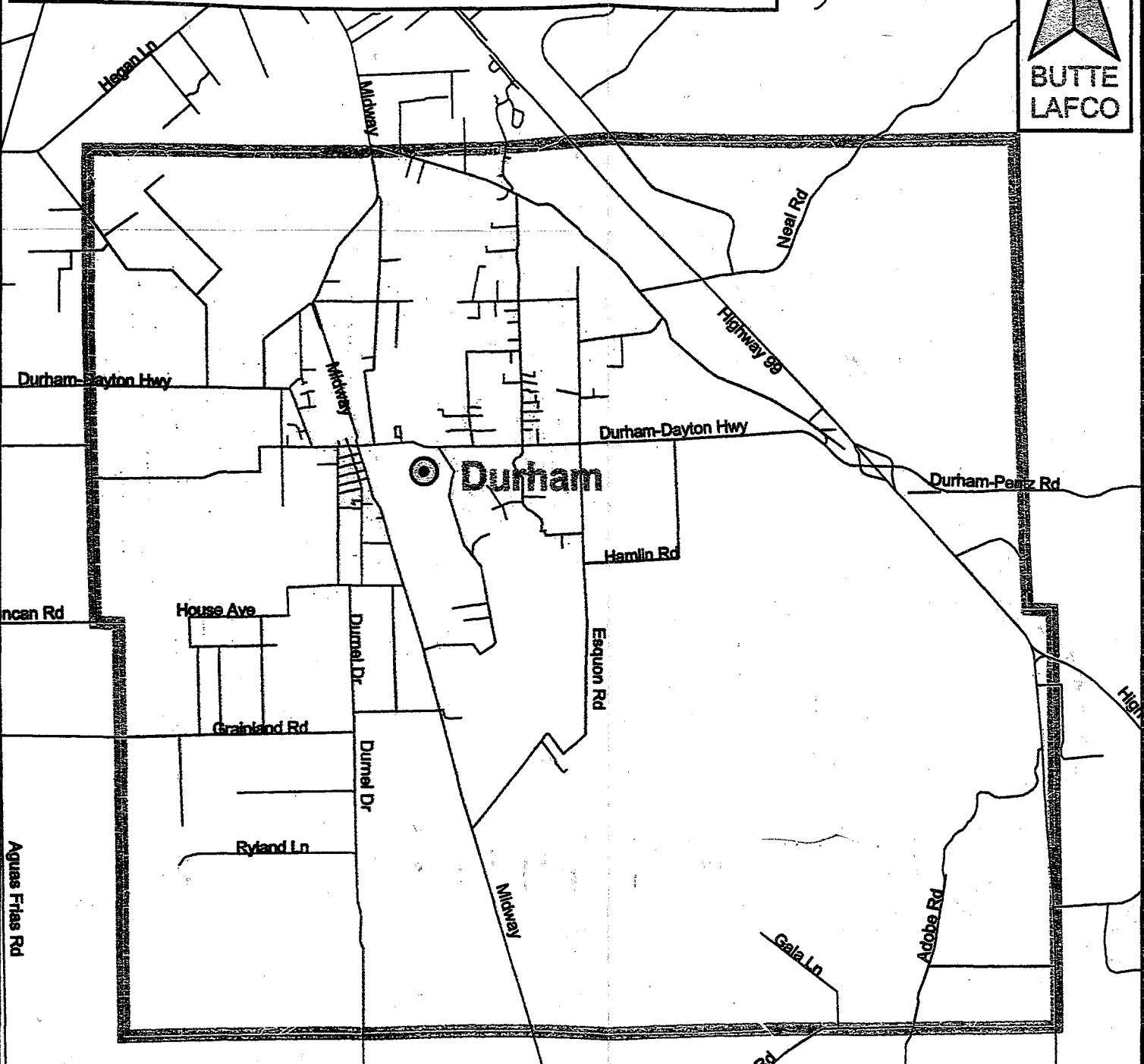
- Butte County MAD  
(Population Served 181,297)\*\*
- Oroville MAD  
(Population Served 26,000)\*\*
- Durham MAD  
(Population Served 26,667)\*\*
- Parcels
- Area Roads
- Butte County Line
- Butte County Lake

\*Butte County Mosquito Abatement District Includes Hamilton City Community Services District.

\*\*Mosquito Abatement District Population are estimates based on 2000 census.

# Durham Mosquito Abatement District.

Population Served 3,644.\*\*



Creation Date: 03/25/02  
Cartography By: William G. Burton  
Date Amended: 05/14/02  
Project Location: \projects\l.a.f.c.o.\_projects\lafc\_mosquito\lafc\_mosquito01.apr  
Data Source: Butte County Development Services, LAFCO, Glenn County Planning.