

**Glenn County Mosquito & Vector Control District
165 Co. Rd. G – Willows Airport
Willows, CA. 95988**

Phone: (530) 934-4025

E-mail gcmvcd@now2000.com

Fax: (530) 934-5971

March 1, 2016

RECEIVED

APR 05 2016

DIVISION OF WATER QUALITY

State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

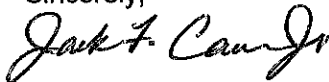
Ladies and Gentlemen:

Please find enclosed our Notice of Intent to comply with the Terms of Water Quality Order No. 2016-xxxxDWQ Statewide General NPDES Permit for Discharges of Residual Pesticides to Surface Waters of the United States for Vector Control General Permit No. CAGxxxxx. and our Pesticide Application Plan.

We have also included our permit fee of \$241.00.

Please feel free to call me if you have any questions at 530-934-4025

Sincerely,



Jack Cavier, Jr.
Manager

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APR 05 2016

DIVISION OF WATER QUALITY

ATTACHMENT E – NOTICE OF INTENT

WATER QUALITY ORDER 2016-XXXX-DWQ
GENERAL PERMIT CAG990004

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	<input checked="" type="checkbox"/> A. New Applicator	<input type="checkbox"/> B. Change of Information: WDID# _____
	<input type="checkbox"/> C. Change of ownership or responsibility: WDID# _____	

II. DISCHARGER INFORMATION

A. Name Glenn County Mosquito & Vector Control District			
B. Mailing Address 165 County Road G			
C. City Willows	D. County Glenn	E. State CA	F. Zip Code 95988
G. Contact Person Jack F. Cavier Jr.	H. Email address gcmvcd@now2000.com	I. Title Manager	J. Phone 530-934-4025

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)*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
Name of the conveyance system: _____

2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
Owner's name: See P.A.P. Maps of County of Glenn Control Area
Name of the conveyance system: _____

3. Directly to river, lake, creek, stream, bay, ocean, etc.
Name of water body: _____

* 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
See Attachments E & F

C. Period of Application: Start Date April 1 End Date December 31

D. Types of Adjuvants Added by the Discharger:

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 Pesticides Application Plan 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 Order, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Jack F. Cavier Jr.

B. Signature: *Jack F. Cavier Jr.*

Date: 2/24/2016

C. Title: District Manager

X. FOR STATE WATER BOARD USE ONLY

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

INSTRUCTIONS FOR COMPLETING THE NOTICE OF INTENT

**WATER QUALITY ORDER 2016-XXXX-DWQ
GENERAL PERMIT CAG990004**

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

These instructions are intended to help you, the Discharger, to complete the Notice of Intent (NOI) form for the Statewide General National Pollutant Discharge Elimination System (NPDES) permit. **Please type or print clearly when completing the NOI form.** For any field, if more space is needed, submit a supplemental letter with the NOI.

Send the completed and signed form along with the filing fee and supporting documentation to the State Water Resources Control Board (State Water Board).

Section I – Notice of Intent Status

Indicate whether this request is for the first time coverage under this Order or a change of information for the discharge already covered under this Order. For a change of information or ownership, please supply the eleven-digit Waste Discharge Identification (WDID) number for the discharge.

Section II – Discharger Information

- A. Enter the name of the Discharger.
- B. Enter the street number and street name where correspondence should be sent (P.O. Box is acceptable).
- C. Enter the city that applies to the mailing address given.
- D. Enter the county that applies to the mailing address given.
- E. Enter the state that applies to the mailing address given.
- F. Enter the zip code that applies to the mailing address given.
- G. Enter the name (first and last) of the contact person.
- H. Enter the email address of the contact person.
- I. Enter the contact person's title.
- J. Enter the daytime telephone number of the contact person.

Section III – Billing Address

Enter the information **only** if it is different from Section II above.

- A. Enter the name (first and last) of the person who will be responsible for the billing.
- B. Enter the street number and street name where the billing should be sent (P.O. Box is acceptable).
- C. Enter the city that applies to the billing address.
- D. Enter the county that applies to the billing address.

- E. Enter the state that applies to the billing address.
- F. Enter the zip code that applies to the billing address.
- G. Enter the email address of the person responsible for billing.
- H. Enter the title of the person responsible for billing.
- I. Enter the daytime telephone number of the person responsible for billing.

Section IV – Receiving Water Information

- A. Check all boxes that apply. At least one box must be checked.
 - 1. Check this box if the application area is a canal, ditch, or other constructed conveyance system owned and controlled by the Discharger. Print the name of the conveyance system.
 - 2. Check this box if the application area is a canal, ditch, or other constructed conveyance system owned and controlled by an entity other than the Discharger. Print the name of the owner and the name of the conveyance system..
 - 3. Check this box if the application area is to the river, lake, creek, stream, bay, ocean, etc. Print the name of the water body.
- B. List all Regional Water Board numbers where pesticide application is proposed. Regional Water Board boundaries are defined in section 13200 of the California Water Code. The boundaries can also be found on our website at http://www.waterboards.ca.gov/waterboards_map.shtml. The numbers with corresponding Regional Water Board names are given below:

Regional Water Board Numbers	Regional Water Board Names
1	North Coast
2	San Francisco Bay
3	Central Coast
4	Los Angeles
5	Central Valley (Includes Sacramento, Fresno, Redding Offices)
6	Lahontan (South Lake Tahoe, Victorville offices)
7	Colorado River Basin
8	Santa Ana
9	San Diego

Section V – Pesticide Application Information

- A. Check the appropriate target organism.
- B. List the name and active ingredients of each pesticide to be used.
- C. List the start and end date of proposed pesticide application event.
- D. List the name(s) and type(s) of adjuvants added by the Discharger.

Section VI – Pesticides Application Plan

The Discharger must prepare and complete a Pesticides Application Plan (PAP). The minimum contents of PAP are specified in the permit under item VIII.C of the Order. The Discharger must ensure that its applicator is familiar with the PAP contents before pesticide application.

If a PAP is not complete at the time of application, enter the date by which it will be completed.

Section VII – Notification

Have you notified potentially affected governmental agencies, as required under item VIII.B of the Order?

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

Section VIII – Fee

The amount of fee shall be based on section 2200(b)(6) of title 23, California Code of Regulations. Fee information can be found at <http://www.waterboards.ca.gov/resources/fees/-npdes>. Check the YES box if you have included payment of the fee. Check the NO box if you have not included this payment.

Section IX– Certification

- A. Print the name of the appropriate official. For a municipality, State, federal, or other public agency, this would be a principal executive officer, ranking elected official, or duly authorized representative. The principal executive officer of a federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of U.S. EPA).
- B. The person whose name is printed above must sign and date the NOI.
- C. Enter the title of the person signing the NOI.

Endangered Species Act

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 et seq.) or the Federal Endangered Species Act (16 U.S.C. sections 1531 et seq.). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Additional information on federally-listed threatened or endangered species and federally-designated critical habitat is available from the National Marine Fisheries Service

(www.nmfs.noaa.gov) for anadromous or marine species or the U.S. Fish and Wildlife Service
(www.fws.gov) for terrestrial or freshwater species.

Section 303(d) List

This Order does not authorize the discharge of biological and residual pesticides or their breakdown by-products to waters of the U.S. that are impaired by the same pesticide active ingredient. Impaired waters are those waters not meeting quality standards pursuant to section 303(d) of the CWA. California impaired waters, as approved by the State Water Board, are listed on

http://gispublic.waterboards.ca.gov/webmap/303d_2012/files/2012_USEPA_approv_303d_List_Final_20150807.xlsx

GLENN COUNTY MOSQUITO & VECTOR CONTROL DISTRICT

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Willows, CA 95988

Phone: 530-934-4025

Fax: 530-934-5971

E-Mail – gcmvcd@now2000.com

Pesticide Application Plan

The NPDES Permit requires a Pesticide Application Plan (PAP) that contains the following elements:

1. Description of all target areas, if different from the water body of the target area in to which larvacides and adulticides are being planned to be applied or may be applied to control Vectors. The description shall include adjacent areas, if different from the water body of the target areas;

The Glenn County Mosquito and Vector Control District's boundaries include 6.5 square miles in and around the City of Willows area and under a yearly MOU agreement with the County of Glenn to do surveillance and mosquito control on the valley floor of Glenn County (see map). The District may apply Public Health Pesticides for the control of immature mosquitoes to any site that holds water for more than 96 hours, and may apply adulticides to any location where adult mosquito populations meet treatment thresholds.

2. Discussion of the factors influencing the decision to select pesticide applications for mosquito control;

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

3. Pesticide products or types expected to be used and if known, their degradation byproducts, the method in which they are applied, and if applicable, the adjuvants and surfactants used; Please see Attachments E and F within NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. for Vector Control Applications. Products may be applied by hand, truck, backpack, hand can, helicopter, or airplane according to label directions.

4. Description of ALL the application areas* and the target areas in the system that are being planned to applied or may be applied. Provide a map showing these areas;

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

The typical sources treated by this district include:

Agricultural and Residential sources

- Irrigated pastures
- Irrigated Crops
- Rice Fields
- Riparian Areas
- Wetlands
- Roadside Ditches
- Abandoned Swimming Pools/Spas
- Seasonal Ponds and Low Areas
- Ornamental Ponds and Other Water Features
- Pastures
- Sumps and Drains
- Catch Basins
- Gutters
- Detention Basins/Retention Basins
- Potentially any aquatic site that has water
For 96 hours or more

5. Other control methods used (alternatives) and their Limitations:

With any source of mosquitoes or other vectors, the District first goal is to look for ways to eliminate the source, or if that is not possible, for ways to reduce the potential for vectors. The most commonly used methods and their limitations are included in the Best Management Practices for California. Specific methods used by the District include stocking mosquito fish (*Gambusia affinis*) educating residents that mosquitoes develop in standing water and encouraging them to remove sources of standing water on their property, and working with property owners to find long term water management strategies that meet their needs while minimizing the need for public health pesticide applications.

6. How much product is needed and how this amount was determined:

The need to apply product is determined by surveillance. Actual use varies annually depending on the mosquito activity. The pesticide amounts below were taken from the Glenn County Mosquito and Vector Control District 2015 PUR as an estimate of pesticide use in 2015. Other public health pesticide in addition to those listed below may be used as part of the District best management practices

<u>Pesticide</u>	<u>EPA#</u>	<u>Glenn County MVCD</u>	<u>Valley-wide District</u>
<u>Pyrethrin 5-25</u>			
<u>MGK- Pyrocide</u>	<u>#1021-1199</u>	25.77 gals.	124.92 gals.
<u>Clarke's - Anvil 10-10</u>	<u>#1021-1688-8329</u>	93.52 gals.	393.17 gals.
<u>Cheminova- FyFanon</u>	<u>#67760-34</u>	18.79 gals.	94.58 gals.
<u>Bayer- Permanone RTU 4-8</u>	<u>#432-1277</u>	97.82 gals.	41.59 gals.
<u>Wellmark Zoecon- Altosid XR</u>	<u>#2724-421</u>	2.8 lbs.	28.96 lbs.
<u>Valent BioSciences- VectroBac G</u>	<u>#73049-10</u>	8.5 lbs.	743.23 lbs.
<u>Summit BTI Briquests</u>	<u>#6218-47</u>		9.16 oz.
<u>Clarke's Golden Bear 1111</u>	<u>#8329-72</u>		12.83 gals.

The District records all applications and submits monthly Pesticide Use Reports (PUR) to the Glenn County Agricultural Commissioner and the California Department of Pesticide Regulation.

7. Representative monitoring Location*; See MVCAC Coalition Monitoring plan.

8.. Evaluation of available BMPs to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts; Please see the best Management Practices for Mosquito Control in California

9.. Description of the BMPs to be implemented. The BMPs shall include at a minimum:

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

A. Measures to prevent pesticide spill;

All pesticide applicators receive annual spill prevention and response training. District employees ensure daily That application equipment is in proper working order. Spill mitigation devices are placed in all vehicles and pesticide storage areas.

B. Measures to ensure that only a minimum and consistent amount is used;

Application equipment is calibrated at least annually as required by the Department of Pesticide Regulations (DPR) And the terms of the cooperative agreement with the California Department of Public Health (CDPH).

C. a plan to educate Coalition's or Discharger's staff and pesticide applicators on any potential adverse effects to waters of the U.S. from the pesticide application;

This will be included in our pesticide applicators annual pesticide application and safety training, continuing education programs, and /or regional NPDES permit training programs.

- d. **description of specific BMPs for each application mode, e.g. aerial, truck, hand, etc.;**
The Glenn County Mosquito and Vector Control District calibrates truck-mounted and handheld larvaciding equipment each year to meet application specifications. Supervisors review application records daily to ensure appropriate amounts of material are being used. Ultra-low volume (ULV) application is calibrated for output and droplet size to meet label requirements. If Aerial larvaciding is necessary the Aerial larvaciding equipment will be calibrated by the contractor. If Aerial adulticide is necessary the Aerial adulticide equipment will be calibrated regularly and droplet size will be monitored by the District to ensure droplets meet label requirements. Airplanes used in urban ULV applications and the primary airplane used for rural ULV application will be equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place product in the intended area. If a secondary airplane is used in rural ULV applications it will also be equipped with an advanced guidance system.
- e. **descriptions of specific BMPs for each pesticide product used; and**
Please see the Best Management Practices for Mosquito Control in California for general pesticide application BMPs, and the current approved pesticide labels for application BMPs for specific products.
- f. **descriptions of specific BMPs for each type of environmental setting (agricultural, urban, and wetland);**
Please see the Best Management Practices for Mosquito Control in California.

10. Identify the Problem

Prior to first pesticide application covered under this General Permit that will result in a discharge of biological and residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Discharger must do the following for each vector management area:

- a. **If applicable, establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies;**

The Glenn County Mosquito and Vector Control District's staff, only apply pesticides to sources of mosquitoes that represent imminent threats to public health or quality of life. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.

- b. **Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;**
Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.
- c. **Identify known breeding areas for source reduction, larval control program, and habitat management;**
Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, 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 Best Management Practices for Mosquito Control in California.

- d. **Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.**
This is included in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan that the district uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results and uses these data to guide mosquito control activities.

11. Examination of Alternatives. Dischargers shall continue to examine alternatives to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:

- a. **Evaluating the following management options, in which the impact to water quality, impact to non-target organisms, vector resistance, feasibility, and cost effectiveness should be considered:**
- No action
 - Prevention
 - Mechanical or Physical methods
 - Cultural methods
 - Biological control agents
 - Pesticides

If there are no alternatives to pesticides, dischargers shall use the least amount of pesticide necessary to effectively control the target pest.

The Glenn County Mosquito and Vector Control District uses the principles and practices of integrated vector management (IVM) as described on pages 26 and 27 of Best Management Practices for Mosquito Control in California. As stated in item # 10 above, locations where vectors may exist are assessed, and the potential for using alternatives to pesticides is determined on a case-by-case basis. Commonly considered alternatives include: 1) Eliminate artificial sources of standing water; 2) Ensure temporary sources of surface water drain within four days (96 hours) to prevent adult mosquitoes from developing; 3) Control plant growth in ponds, ditches, and shallow wetlands; 4) Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes; 5) Use appropriate biological control methods that are available. Additional alternatives to using pesticides for managing mosquitoes are listed on pages 4-19 of the Best Management Practices for Mosquito Control in California. Implementing preferred alternatives depends on a variety of factors including availability of agency resources, cooperation with stakeholders, coordination with other regulatory agencies, and the efficacy of the alternative. If a pesticide-free alternative does not sufficiently reduce the risk to public health, pesticides are considered, beginning with the least amount necessary to effectively control the target vector.

- b. **Applying pesticides only when vectors are present at a level that will constitute a nuisance.**

The Glenn County Mosquito and Vector Control District follows an existing integrated vector management (IVM) program which includes practices described in the California Mosquito-borne Virus Surveillance and Response Plan and Best Management Practices for Mosquito Control in California.

A "nuisance" is specifically defined in California Health and Safety Code (HSC) §2002(j). This definition allows vector control agencies to address situations where even a low level of vectors may pose a substantial threat to public health. In practice, the definition of a "nuisance" is generally only part of a decision to apply pesticides to areas covered under this permit. As summarized in the California Mosquito-borne Virus Surveillance and

Response Plan, the overall risk to the public when vectors and/or vector-borne disease are present is used to select an available and appropriate material, rate, and application method to address that risk in the context of our IVM program. .

12. Correct Use of Pesticides

Coalition's or Discharger's use of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the right spraying techniques and equipment, taking account of weather conditions and the need to protect the environment.

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

13. A website where public notices, required in Section V111.B, may be found.

<http://www.countyofglenn.net> under Public Health Department / Fogging schedule

References:

Best Management Practices for Mosquito Control in California, 2010. Available by download from the California Department of Public Health-Vector-Borne Disease Section at

<http://www.westnile.ca.gov/resources.php> under the heading Mosquito Control and Repellent Information. Copies may be also requested by calling the California Department of Public Health-Vector-Borne Disease Section at (916) 552-9730 or the Glenn County Mosquito and Vector Control District at (530) 934-4025.

California Mosquito-borne Virus Surveillance and Response Plan, 2010. [Note: this document is updated annually by CDPH]. Available by download from the California Department of Public Health-Vector-Borne Disease Section at <http://www.westnile.ca.gov/resources.php> under the heading Response Plans and Guidelines. Copies may be also requested by calling the California Department of Public Health-Vector-Borne Disease Section at (916) 552-9730 or the Glenn County Mosquito and Vector Control District at (530) 934-4025.

MVCAC NPDES Coalition Monitoring Plan, [In development at the time of this draft]

GENERAL NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL
PESTICIDE DISCHARGES FROM VECTOR CONTROL APPLICATIONS

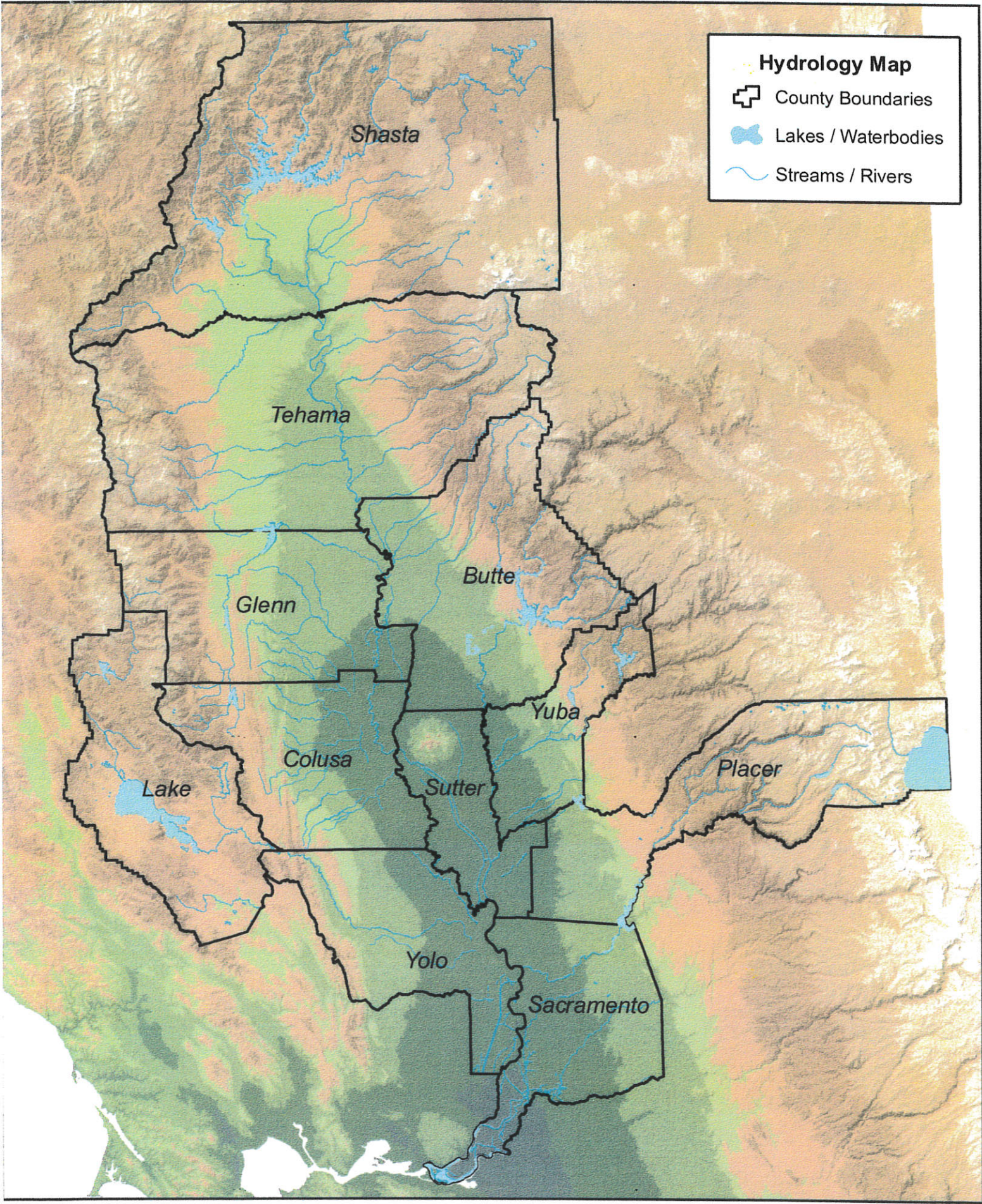
ATTACHMENT E - LIST OF PERMITTED ADULTICIDE PRODUCTS

	Product Name	Registration Number
	Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7395	1021-1570
	Evergreen Crop Protection EC 60-6	1021-1770
	Pyrenone Crop Spray	432-1033
	Prentox Pyronyl Crop Spray	655-489
	Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7396	1021-1569
	Aquahalt Water-Based Adulticide	1021-1803
	Pyroicide Mosquito Adulticide 7453	1021-1803
	Pyrenone 25-5 Public Health Insecticide	432-1050
	Prentox Pyronyl Oil Concentrate #525	655-471
	Prentox Pyronyl Oil Concentrate or 3810A	655-501
	Permanone 31-66	432-1250
	Kontrol 30-30 Concentrate	73748-5
	Aqualuer 20-20	769-985
	Aqua-Reslin	432-796
	Aqua-Kontrol Concentrate	73748-1
	Kontrol 4-4	73748-4
	Biomist 4+12 ULV	8329-34
	Permanone RTU 4%	432-1277
	Prentox Perm-X UL 4-4	655-898
	Allpro Evoluer 4-4 ULV	769-982
	Biomist 4+4	8329-35
	Kontrol 2-2	73748-3
	Scourge Insecticide with Resmethrin/Piperonyl Butoxide 18%+54% MF Formula II	432-667
	Scourge Insecticide with Resmethrin/Piperonyl Butoxide 4%+12% MF Formula II	432-716
	Anvil 10+10 ULV	1021-1688
	AquaANVIL Water-based Adulticide	1021-1807
	Duet Dual-Action Adulticide	1021-1795
	Anvil 2+2 ULV	1021-1687
	Zenivex E20	2724-791
	Trumpet EC Insecticide	5481-481
	Fyfanon ULV Mosquito	67760-34

GENERAL NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL
PESTICIDE DISCHARGES FROM VECTOR CONTROL APPLICATIONS

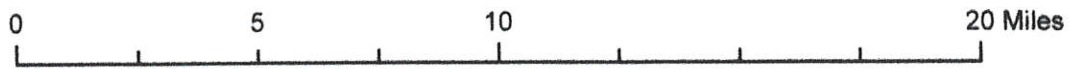
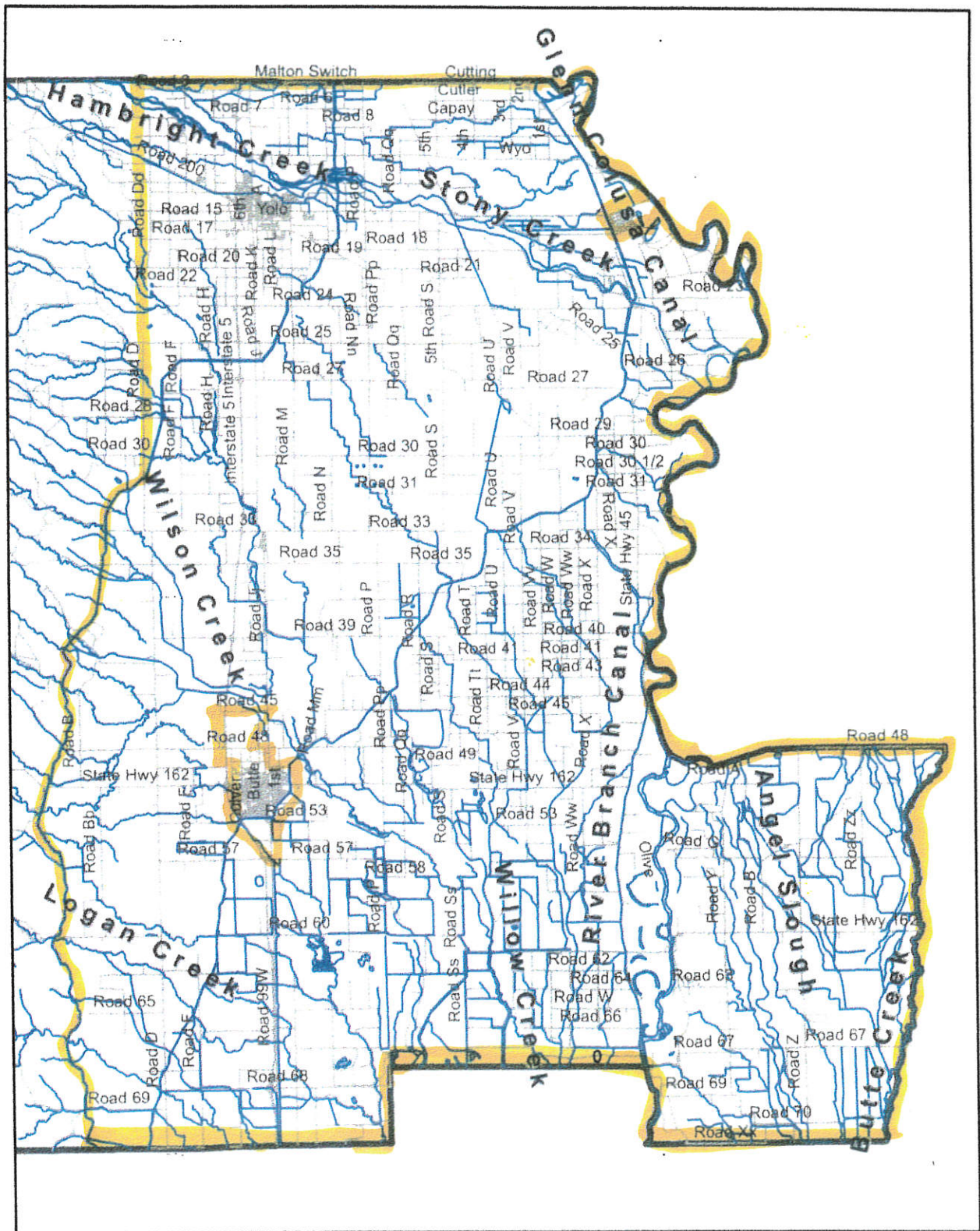
ATTACHMENT F - LIST OF PERMITTED LARVICIDE PRODUCTS

Product Name	Registration Number
Vectolex CG Biological Larvicide	73049-20
Vectolex WDG Biological Larvicide	73049-57
Vectolex WSP Biological Larvicide	73049-20
Vectobac Technical Powder	73049-13
Vectobac-12 AS	73049-38
Aquabac 200G	62637-3
Teknar HP-D	73049-404
Vectobac-G Biological Mosquito Larvicide Granules	73049-10
Vectomax CG Biological Larvicide	73049-429
Vectomax WSP Biological Larvicide	73049-429
Vectomax G Biological Larvicide/Granules	73949-429
Zoecon Altosid Pellets	2724-448
Zoecon Altosid Pellets	2724-375
Zoecon Altosid Liquid Larvicide Mosquito Growth Regulator	2724-392
Zoecon Altosid XR Extended Residual Briquets	2724-421
Zoecon Altosid Liquid Larvicide Concentrate	2724-446
Zoecon Altosid XR-G	2724-451
Zoecon Altosid SBG Single Brood Granule	2724-489
Mosquito Larvicide GB-1111	8329-72
BVA 2 Mosquito Larvicide Oil	70589-1
BVA Spray 13	55206-2
Agnique MMF Mosquito Larvicide & Pupicide	53263-28
Agnique MMF G	53263-30
Abate 2-BG	8329-71
5% Skeeter Abate	8329-70
Natular 2EC	8329-82
Natular G	8329-80
Natular XRG	8329-83
Natular XRT	8329-84
FourStar Briquets	83362-3
FourStar SBG	85685-1
Aquabac xt	62637-1
Spheratax SPH (50 G) WSP	84268-2
Spheratax SPH (50 G)	84268-2



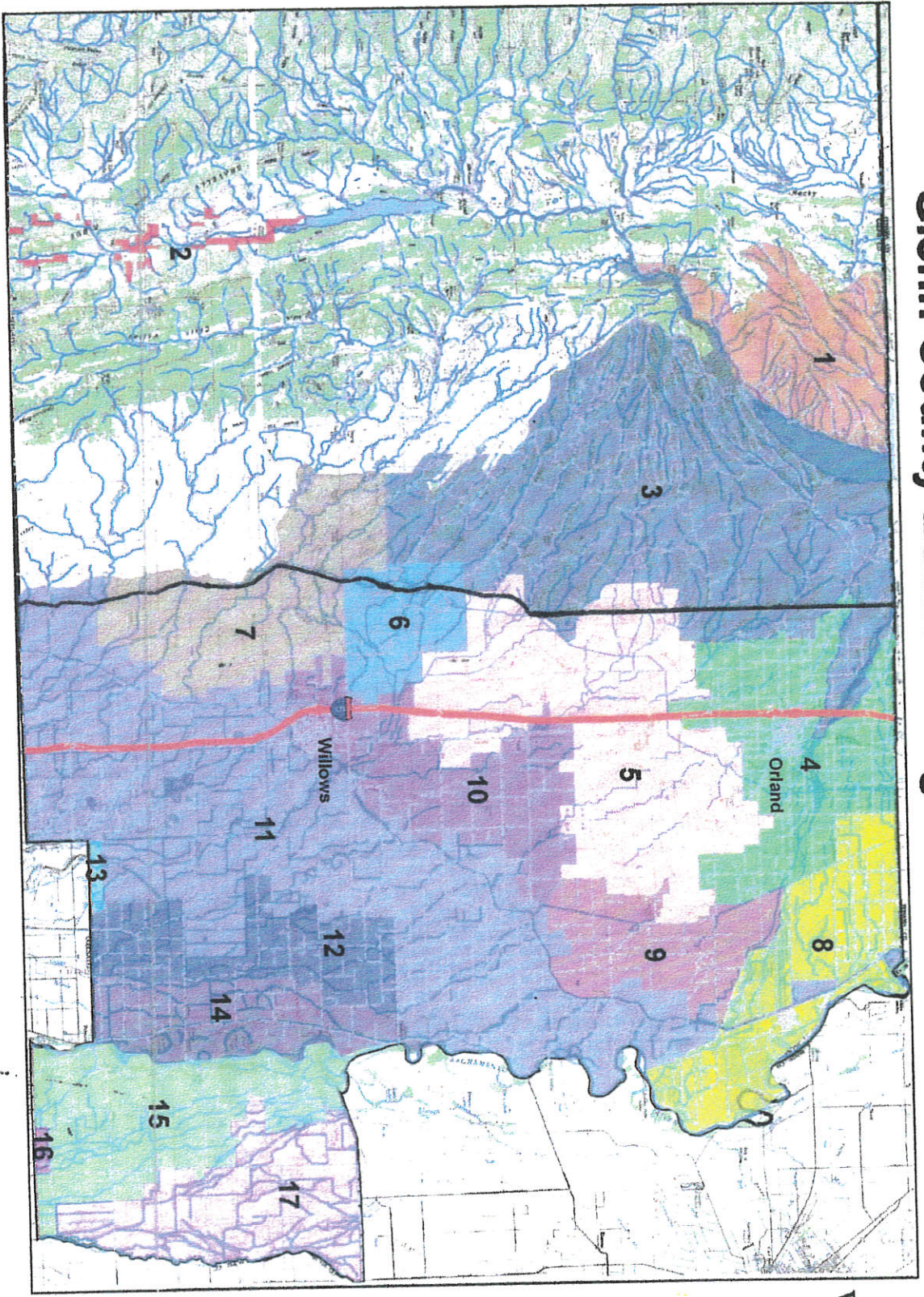
Hydrology Map

- County Boundaries
- Lakes / Waterbodies
- Streams / Rivers



Hydrology of Glenn County

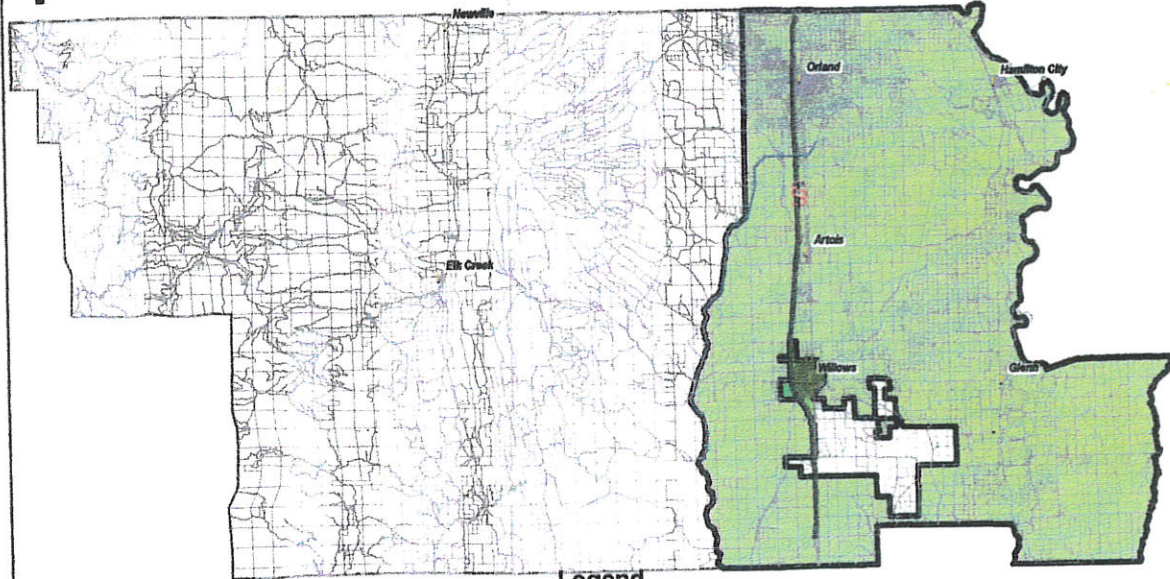
Glenn County Basin Management Sub-Areas








SUB-AREAS:

- | | | | |
|--|---|---|----------------------------------|
| 1. West Corning Basin Private Pumpers | 5. Orland-Arois Water District | 10. Board of Supervisors District Three Private Pumpers | 15. Reclamation District 2106 |
| 2. Stony Creek Water District | 6. Glide Water District | 11. Glenn-Colusa Irrigation District | 16. Reclamation District 1004 |
| 3. West Colusa Basin Private Pumpers | 7. Kanawha Water District | 12. Provident Irrigation District | 17. Western Canal Water District |
| 4. Orland Unit Water Users Association | 8. East Corning Basin Private Pumpers | 13. Willow Creek Mutual Water Company | |
| | 9. Board of Supervisors District Five Private Pumpers | 14. Princeton-Codora-Glenn Irrigation District | |





Legend

-  Tehama-Colusa Canal
-  Streets and Roads
-  ~~County of Glenn~~
-  Service Area
-  County of Glenn

Note:
 REFERENCE IS HEREBY MADE TO THE MAPS AND DEEDS OF RECORD IN THE OFFICE OF THE ASSESSOR OF THE COUNTY OF GLENN FOR A DETAILED DESCRIPTION OF THE LINES AND DIMENSIONS OF ANY PARCELS SHOWN HEREIN. THOSE MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH PARCELS. EACH PARCEL IS IDENTIFIED IN SAID MAPS BY ITS DISTINCTIVE ASSESSOR'S PARCEL NUMBER.

823 Consulting Group
 2142 Douglas Blvd
 Fairfield, CA 94534

FILED IN THE OFFICE OF THE PROGRAM MANAGER OF THE GLENN COUNTY VALLEY-WIDE MOSQUITO ABATEMENT PROGRAM OF THE GLENN COUNTY HEALTH SERVICES AGENCY, COUNTY OF GLENN, CALIFORNIA, THIS ____ DAY OF ____, 2008.

CLERK OF THE BOARD OF SUPERVISORS

RECORDED IN THE OFFICE OF THE GLENN COUNTY VALLEY-WIDE MOSQUITO ABATEMENT PROGRAM OF THE GLENN COUNTY HEALTH SERVICES AGENCY, COUNTY OF GLENN, CALIFORNIA, THIS ____ DAY OF ____, 2008.

CLERK OF THE BOARD OF SUPERVISORS

AN ASSESSMENT WAS CONFIRMED AND LEVIED BY THE BOARD OF SUPERVISORS OF GLENN COUNTY, ON THE LOTS, PIECES AND PARCELS OF LAND, ON THIS ASSESSMENT DIAGRAM ON THE ____ DAY OF ____, 2008 FOR THE FISCAL YEAR 2008-09 AND SAID ASSESSMENT DIAGRAM AND THE ASSESSMENT ROLL FOR SAID FISCAL YEAR WERE FILED IN THE OFFICE OF THE COUNTY AUDITOR OF THE COUNTY OF GLENN ON THE ____ DAY OF ____, 2008. REFERENCE IS HEREBY MADE TO SAID RECORDED ASSESSMENT ROLL FOR THE EXACT AMOUNT OF EACH ASSESSMENT LEVIED AGAINST EACH PARCEL OF LAND.

CLERK OF THE BOARD OF SUPERVISORS

FILED THIS ____ DAY OF ____, 2008 AT THE HOUR OF ____ O'CLOCK ____ M. IN THE OFFICE OF THE COUNTY AUDITOR OF THE COUNTY OF GLENN, STATE OF CALIFORNIA, AT THE REQUEST OF THE BOARD OF SUPERVISORS OF GLENN COUNTY VALLEY-WIDE MOSQUITO ABATEMENT PROGRAM.

COUNTY AUDITOR, COUNTY OF GLENN

And Rice Pest Abatement District Boundary

**GLENN COUNTY
 VALLEY-WIDE MOSQUITO ABATEMENT DISTRICT
 ASSESSMENT DIAGRAM**

March 14, 2016

New Release:

The Glenn County Mosquito & Vector Control District Trained Technicians will be out looking for Mosquito breeding sites.

Under the State Water Resource Control Board NPDES permit, it is require that the Glenn County Mosquito Control District notify the public and other Governmental agencies within Glenn County before any treatments are made each year. Here are the Mosquito Control products that may be used in, over or/near waters of the US.

The products are all register with U.S. Environmental Protection Agency.

Adulticides: Bayer Pyrenone 25-5 #432-1050
MGK Pyrocide 25-5 #1021-1199
Clarke Anvil 10-10 #1021-1688-8329
Clarke Bio-Mist 4+12 #8329-34
Bayer Permanone 4+8 #432-1277
Clarke Duet #1021-1795-8329
Cheminova FyFanon 97% #67760-34

Our standard method of application for adult mosquitoes control is spraying the pesticides, using truck-mounted foggers and conducted by licensed and trained employees. Because of the fact that we rely upon light winds to distribute the spray successfully, we have to have a wind no more than 10 mph and temperature inversion of at least 1 degree, before we begin spraying each time. Our general hours for spraying are in the evening and early morning. A spray schedule will be posted on the Glenn County Health Services web site.

Larvicides: Valents Bio-Sciences Vectro-Bac G #73049-10
Zoecon Altosid XR #2724-421
Golden Bear 1111 #8929-IL-01
Summit BTI Briquets #6218-47

The District follows a Best Management Practices (BMP's), where we use a combination of methods to control mosquitoes. Our certified and trained technician will determine the most effective control method for each mosquito breeding source. Like draining the source if possible or placing mosquito fish to eat mosquito larva to eliminate mosquito breeding. If those control methods are not practical, then a larvacide may be applied to kill the immature mosquitoes larva.

Please report any NEGLECTED SWIMMING POOL to this Office, so a Technician can inspect the Pool or any other standing water for mosquito breeding at 934-4025. It only takes 5 days in warm weather for a mosquito to develop from an egg to adult mosquito.

The Glenn County Mosquito & Vector Control District still want the public to report any Dead Bird they find.

This diagram can help you locate the key breeding areas surrounding your home and family.

West Nile virus

Target the source.



Protect yourself and your family.

NPDES Pesticide Application Notification List

California Water Service (Willows)- 1070 W Wood Street # A1 Willows, Ca 95988 934-4735

Cal Trans - 939 N Humboldt Ave. Willows, Ca 95988 934-5149

City of Orland - 815 4th Street Orland, Ca 95963

City of Willows - 201 N Lassen Street Willows, Ca 95988

Glenn-Colusa Irrigation District - 344 E Laurel Street Willows, Ca 95988 934-8881
[mspooner@gcid.net](mailto:m Spooner@gcid.net)

Glide Water District - P.O. Box 1054 Willows, Ca 95988 934-5476

Kanawha Water District - P.O. Box 1054 Willows, Ca 95988 934-5476
kwd4alves@att.net

Orland-Artois Water District - P.O. Box 218 Orland, Ca 95963 934-4039
oawdsue@sbcglobal.net

Orland Unit Water Users Association - 828 8th Street Orland, Ca 95963 865-4126
rmasa@ouwua.net

Princeton-Codora-Glenn Irrigation District - 252 Commercial Street Princeton, Ca 95970

Provident Irrigation District - 258 S Butte Street Willows, Ca 95988 934-4801
lboyd52@aol.com

Reclamation District # 2047 - William Baber # 30 Fairview Circle Chico, Ca 95928

Reclamation District # 2106 - John Shouten P.O. Box 8 Butte City, Ca 95920

Reclamation District # 2147 (J Levee) - P.O. Box 758 Hamilton City, Ca 95951-0758

RPAD (Rice Lawyers, Inc.) Attn: Tim Kelleher - 545 Forbes Ave. Yuba City, Ca 95991

Sacramento Wildlife Refuge Complex Properties (Glenn County) -
752 County Road 99W Willows, Ca 95988 934-7774

South West Canal Water District - 1600 S Tehama Street Willows, Ca 95988 934-2052

SWRCB (Central Valley Region 5) - 11020 Sun Center Drive Suite 200 Rancho Cordova, Ca 95670
kkratzke@waterboards.ca.gov Redding r schnagl@waterboards.ca.gov Sacramento

SWRCB (State) - P.O. Box 100 Sacramento, Ca 95812-0100
Philip.Isorena@waterboards.ca.gov Gil.Vazquez@waterboards.ca.gov

Union Pacific (Cal Northern Rail Road) - 1801 Hanover Drive Suite D Davis, Ca 95616

Tehama-Colusa Irrigation District - P.O. Box 1025 Willows, Ca 95988 934-2125

Willow Creek Mutual Water District - 134 W Sycamore Street Willows, Ca 95988 934-2137

Addendum to

Pesticide Application Plan (PAP) for the NPDES Vector Control Permit Application of the Glenn County Mosquito and Vector Control District

The Following information is being provided in response to the three points raised by the SWRCB staff:

1. Description of target areas: surface waters and waters of the U.S. within the Boundary of the Glenn County Mosquito and Vector Control District and the County of Glenn Valley-wide Mosquito Control District, Ca. Map of Glenn County Valley floor is enclosed.

In prior years, the District has either applied larvicides and adulticides directly over and/or near within the vicinity of the following water bodies and tributaries:

Sacramento River
Hambright Creek
Stony Creek
Walker Creek
Wilson Creek
Willows Creek
Logan Creek
Angel Slough
Howard Slough
Butte Creek
White Cabin Creek
French Creek
Hunter Creek
Campbell Slough
Little Butte Creek
Baker Slough
Sheep Corral Creek
Little Butte Creek

In prior years, the District has applied adulticides directly over and/or near the vicinity of canals, ditches, or other constructed conveyance facilities owned and controlled by:

Sacramento National Wildlife Refuge Complex Properties within Glenn County
Glenn-Colusa Irrigation District
Orland-Artois Irrigation District
Tehama-Colusa Irrigation District
Private Duck Clubs within Glenn County

Orland Water Users Association
Provident Irrigation District
Western Canal Water District
Glide Water District
Kanawha Water District
Willows Creek Mutual Water Company
East Corning Basin Private Pumpers
Princeton-Cordora-Glenn Irrigation District
Reclamation District 2106
Reclamation District 1004

Addendum to Glenn County Mosquito and Vector Control District's Notice of Intent (NOI)

2. Limitations of each agency in utilizing BMPs in their District. (funding feasibility, equipment, negotiations with landowners, etc.)

BMPs are not always followed or implemented due to several factors or limitations. Usually the factors and/or limitations are the costs and/or regulations.

Financial constraints on other cooperative public agencies is a significant limitation. Proper maintenance of storm water systems (e.g. pumping/vacuuming clogged storm drains/drain inlets, removal of emergent vegetation from retention/detention ponds, proper maintenance and design of waste water treatment facilities, etc.) is consistently overlooked or under funded.

The cost of equipment, employee time, treatment materials is a significant limitation. Mitigating large mosquito sources requires a significant investment in equipment and trained personnel for moving soil and vegetation, which is beyond the means of most property owners and this District. Most landowners are relatively cooperative, but they lack the resources for long-term source reduction (e.g. installation of new water conveyances, emergent vegetation control, and re-grading irrigated agricultural land to reduce mosquito habitat). The District is sometimes unable to access known or suspected mosquito sources due to impenetrable vegetation (which the District lacks the resources to remove) or uncooperatively residents/property owners (which interfere with the timely inspection/treatment of larval sources). Compliance with permits, monitoring requirements, and paperwork is requiring more employee time, which reduces the number of man-hours available for our employees to inspect mosquito sources and implement non-pesticide alternatives.

Legal restrictions and/or regulations to manipulate land, vegetation, or redesign is a significant limitation. Regulations and State and Federal laws prohibiting the necessary land improvements do to the presence of threatened or endangered species is a large limitation that does not allow for proper BMPs to be implemented. Additionally, cooperative working agreements between State, Federal, and private managed wetlands/rice land is a limitation (e.g. providing incentive programs to increase migratory waterfowl habitat).

Last of all, biological control such as mosquito fish may not be suitable in all mosquito breeding sources due to poor water quality, mosquito larvae densities, emergent vegetation, temporary source (dries up), source may have sensitive species, and/or source may drain into natural waterways.

Addendum to Glenn County Mosquito and Vector Control District's Notice of Intent (NOI)

8. Specific BMPs that the agency uses and give examples of where they have been implemented in the past instead of directly referencing the State BMP manual.

The Glenn County Mosquito and Vector Control District (District) is aware that adjusting land management practices and installing proper Best Management Practices (BMPs) can reduce mosquito populations thereby reducing mosquito control costs, reducing the amount of pesticides used in mosquito control applications, helping to protect the public's health, and contributing to the District's Integrated Vector Management (IVM) approach to mosquito and vector control.

IVM is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. The District's IVM program uses current, comprehensive information on the life cycles of pests and their interaction with the environment. This information is used to manage pest nuisance and public health threats by the most economical means, and with the least possible hazard to people, property, and the environment. The District's IVM includes vector surveillance, source reduction and/or elimination, best management practices, Public education, biological control, chemical control and monitoring.

The District has used many BMPs throughout its 49 year existence and are a critical component of the District's IVM program. BMPs for mosquito harboring sites (breeding sources) come in all shapes and sizes. Mosquito breeding sources may be as small as a bucket or as large as several hundred acres of agricultural used land or managed wetlands.

Examples of BMPs used to manage small mosquito breeding sources is to physically control or eliminate the source (e.g. turning over water buckets, washing out bird baths, unclogging boat drains, turning over flower pots, unclogging rain gutters, using pumps to pump water out of unused /abandoned items such as broken fountains and/or discarded chest freezers, etc.). For sources that are permanent or cannot be physically controlled, the District will assess if biological control measures will work such as planting mosquito fish (*Gambusia affinis*).

For larger mosquito breeding sources, the District works cooperatively with property owners and/or land managers to effect short and long term management strategies. Examples of BMPs used to manage medium to large mosquito breeding areas the District has used: changed irrigation practices of agricultural lands and managed wetlands, water conveyance system improvements, water conveyance system design, managed wetland design and maintenance, agricultural design and maintenance, repairs of water leaks, maintenance of un-maintained swimming pools, maintenance of storm water systems/structures, storm water design, aerators, etc..

Additionally, the District works cooperatively and meets at least annually with the United States Fish and Wildlife Services to review BMPs that may need to be implemented on state and/or federal lands. The District works with all county and city local governments to assess the best ways to reduce mosquito breeding habitat.

For a more detailed and extensive list of BMPs the District may use and/or suggest to property owners/land managers within Glenn County, please see the District's Best Management Practices & Monitoring Plan for Application of Biological & Residual Pesticides to Surface Waters of the U.S. manual.