ATTACHMENT G – NOTICE OF INTENT

MAR 04 2016

WATER QUALITY ORDER NO. 2016-XXXX ~~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: Sacramento-Yolo Mosquito and Vector Control District			
B. Mailing Address: 8631 Bond Rd.			
C. City: Elk Grove	D. County: Sacramento	E. State: CA	F. Zip Code: 95624
G. Contact Person: Gary Goodman	H. Email address: gwgoodman@fightthebite.net	I. Title: Manager	J. Phone: 916-685-1022

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	

RECEIVED
MAR 04 2016
DIVISION OF WATER QUALITY

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: various - see Attachment A
Name of the conveyance system: Applications may be made to various conveyance systems within Sacramento and Yolo Counties

3. Directly to river, lake, creek, stream, bay, ocean, etc.
☒ Name of water body: various - see Attachment A - Applications historically have been made to high water marks of Consumnes, Sacramento or American Rivers and their tributaries.

* 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: X Vector Larvae X Adult Vector

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

see Attachment B

C. Period of Application: Start Date Jan. 1 End Date Dec. 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 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. See Attachment C

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: GARY GOODMAN

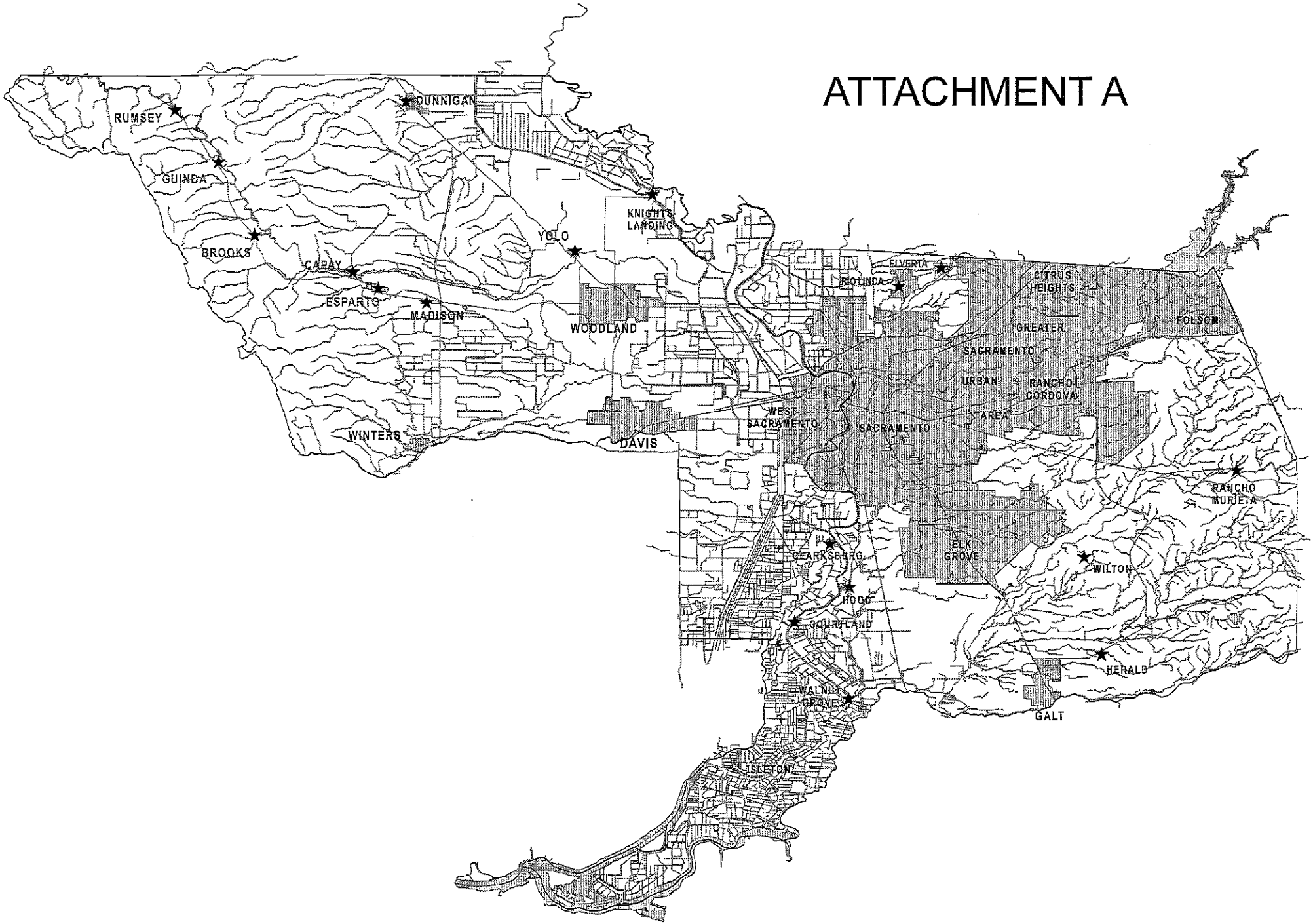
B. Signature: _____ **Date:** 03/01/16

C. Title: GENERAL MANAGER

X. FOR STATE WATER BOARD USE ONLY

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

ATTACHMENT A



Attachment B
Sacramento-Yolo MVCD NOI
V. Pesticide Application Information
List of Active Ingredients that may be used under NPDES Permit.

Active Ingredient
Bacillus thuringienses var. israelensis
Bacillus sphaericus (Lysinibacillus sphaericus)
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Methoprene
Monomolecular Films
Naled
N-octyl Bicycloheptene Dicarboximide (MGK-264)
Petroleum Distillates
Permethrin
Piperonyl butoxide
Prallethrin
Pyrethrin
Resmethrin
Spinosad
Sumithrin
Temephos
Any "minimum risk category" pesticides that are FIFRA exempt and registered for use in California and used in a manner specified in 40 C.F.R. section 152.25.

NPDES Government Contact List Attachment C

City of Davis, City Manager	Dirk Brazil	cmoweb@cityofdavis.org
City of Woodland, City Manager	Paul Navazio	City Hall 300 First St., Woodland, CA 95695
City of Sacramento, City Manager	John Shirey	JFShirey@cityofsacramento.org
City of Winters, City Manager	John Donlevy, Jr.	john.donlevy@cityofwinters.org
City of Folsom, City Manager	Evert Palmer	epalmer@folsom.ca.us
City of Galt	Jason Behrmann	jbehrmann@ci.galt.ca.us
City of Citrus Heights	Henry Tingle	citymanager@citrusheights.net
City of Rancho Cordova	Cyrus Abhar	cabhar@cityofranchocordova.org
City of Isleton	City Manager	PO Box 716 Isleton, CA 95641-0716
City of West Sacramento	Martin Tuttle	1110 W. Capitol Ave. 3rd floor, West Sacramento, CA 9569
City of Elk grove	Laura Gill	8401 Laguna Palms Way, Elk Grove, CA 95758
California Dept of Water Resources	Juan Mercado	jmercado@water.ca.gov
Cosumnes River Preserve (CRP)	Harry McQuillen	hmcquill@blm.gov
California Dept. of Fish and Wildlife Yolo Bypass Wildlife Area	Jeff Stoddard	Jeffrey.Stoddard@wildlife.ca.gov
California Dept. of Fish and Wildlife	Kari Lewis	Kari.Lewis@wildlife.ca.gov
California Dept. of Fish and Wildlife - CRP	Eric Kleinfelter	eric.kleinfelter@wildlife.ca.gov
USFWS, Stone Lakes National Wildlife Refuge	Bart McDermott	bart_mcdermott@fws.gov
Yolo County Flood Control and Water Consv District	Tim O'Halloran	tohalloran@ycfcwcd.org
Sacramento Yolo Flood Control Agency	Richard Johnson	johnsonr@saccounty.net
American River Flood Control District	Timothy Kerr	tkerr@arfcd.org
Cal Trans District 3	Jody Jones	703 B St. Marysville, CA 95901
United States Bureau of Reclamation - Delta	David Hyatt	dhyatt@usbr.gov
State of California Dept. of Parks and Recreation Gold Fields District	Jim Michaels	jmiche@parks.ca.gov
State of California Dept. of Parks and Recreation Capital District		Capitol District 101J St., Sacramento, CA 95815
Cosumnes Community Services District	Jeff Ramos	jefframos@yourcsd.com
United States Fish and Wildlife (USFWS)		USFWS 2800 Cottage Way, Rm W-2605 Sac, CA 95825
United States Department of Agriculture Natural Resources Conservation Service (NRCS)	Dean Kwasny	dean.kwasny@ca.usda.gov
Department of Pesticide Regulation	Liz Neese	lneese@cdpr.ca.gov
Dixon Resource Conservation District	John Currey	john-currey@dixonrcd.org
Florin Resource Conservation District	Mark Madison	MMadison@egwd.org
Yolo County Resource Conservation District	Heather Nichols	Nichols@yolorcd.org
Yolo County Board of Supervisors	Oscar Villegas	oscar.villegas@yolocounty.org
Yolo County Board of Supervisors	Don Saylor	don.saylor@yolocounty.org

Yolo County Board of Supervisors	Matt Rexroad	matt@rexroad.com
Yolo County Board of Supervisors	Jim Provenza	jim.provenza@yolocounty.org
Yolo County Board of Supervisors	Duane Chamberlain	duane.chamberlain@yolocounty.org
Sacramento County Board of Supervisors	Phil Serna	supervisorserna@saccounty.net
Sacramento County Board of Supervisors	Patrick Kennedy	kennedy.supervisor@saccounty.net
Sacramento County Board of Supervisors	Susan Peters	susanpeters@saccounty.net
Sacramento County Board of Supervisors	Roberta MacGlashan	macglashanr@saccounty.net
Sacramento County Board of Supervisors	Don Nottoli	nottolid@saccounty.net
Sacramento Co. Agriculture Dept.	Juli Jensen	agcomm@saccounty.net
Yolo Co. Agriculture Dept	John Young	john.young@yolocounty.org
Omochumne-Hartnell Water District		7513 Sloughouse Rd. Elk Grove 95624
Clay Water District		2379 Lloyd Lane Sacramento, CA 95825-0260
Galt Irrigation District		P.O. Box 187 Herald, CA 95638-0187
Reclamation District 3	Dave Robinson	info@reclamationdistrict3.org
Reclamation District 317		deltabkm@citlink.net
Reclamation District 341		PO Box 875, Rio Vista, CA 94571
Reclamation District 349	F.C. Wheeler	District Office P.O. Box 368, Courtland, CA 95615
Reclamation District 369	Clarence Chu	P.O. Box 987 Walnut Grove, CA 95690
Reclamation District 407		P.O. Box 338, Walnut Grove, CA 95690
Reclamation District 551	Carel Van Loben Sels	C/O Delta Bkkpg P.O. Box 123, Walnut Grove, CA 95690
Reclamation District 554	Bruce Pisoni	P.O. Box 984, Walnut Grove, CA 95690
Reclamation District 556	Kevin Steward	P.O. Box 1046, Walnut Grove, CA 95690
Reclamation District 563	Victoria Hale	P.O. Box 470, Walnut Grove, CA 95690-0470
Reclamation District 765	Kathleen Markham	mrkhmfam@aol.com
Reclamation District 755	D.J. Elliot	11275 State Highway 160, Courtland, CA 95615
Reclamation District 785	William Mattos	w_mattosconst@yahoo.com
Reclamation District 787	M.Stripling	mstripling@afes.com
Reclamation District 813	Thomas Herzog	P.O. Box 557, Courtland, CA 95615
Reclamation District 827	Daniel Ramos	PO Box 781, West Sacramento, CA 95691
Reclamation District 900	Ken Ruzich	wsrd@pacbell.net
Reclamation District 999	Bob Webber	38563 Netherlands Rd, Clarksburg, CA 95612-5003
Reclamation District 1000	Paul Devereux	pdevereux@rd1000.org
Reclamation District 1002	Lana Mirko, Pierson-Lambert Vineyards, LLC.	962 Lambert Road, Courtland, CA 95615
Reclamation District 1600	Kent Long	c/o Law Office,429 First Street, Woodland, CA 95695
Reclamation District 1601	Rick Carter	2360 West Twitchell Island Rd, Rio Vista, CA 94571
Reclamation District 2035	Regina Cherovsky	45332 County Road 25, Woodland, CA 95776
Reclamation District 2067	Victoria Hale	P.O. Box 338, Walnut Grove, CA 95690

Reclamation District 2093	Erik Vink	1107 Ninth Street, Suite 1050, Sacramento, CA 95814
Reclamation District 2110	Brent Tadman	P.O. Box 408, Walnut Grove, CA 95690
Reclamation District 2111	George C. Wilson	P.O. Box 248, Walnut Grove, CA 95690
Reclamation District 2120	Meegan Nagy	Meegan.G.Nagy@usace.army.mil
Brannan-Andrus LM Dist	Debbi Phulps	P.O. Box 338, Walnut Grove, CA
RD 150	Warren Bogle	warren@boglewinery.com
RD 537	Kyle Lang	langorchardsllc@aol.com
RD 307	Peter Dwyer Jr.	rd307@rcip.com
RD 730	Robert Nakken	429 First Street, Woodland CA 95695
RD 108	Lewis Blair	P.O. Box 50, Grimes CA 95950
RD 2068	Mike Hardesty	adminrd2068@cal.net

SACRAMENTO-YOLO
MOSQUITO
& VECTOR
CONTROL
DISTRICT

MAILING ADDRESS
SACRAMENTO COUNTY
8631 BOND ROAD
ELK GROVE, CA 95624

YOLO COUNTY
1234 FORTNA AVENUE
WOODLAND, CA 95695

1.800.429.1022
FIGHTtheBITE.net

January 20th, 2016

Dear Agency,

The Sacramento-Yolo Mosquito and Vector Control District (District) may be making larvicide and or adulticide applications to waters of the US under your jurisdiction for mosquito reduction purposes. Applications will be posted and can be viewed on our website at www.FIGHTtheBITE.net. The District is required to notify all Government Agencies that may be affected by these applications under the requirements of the Statewide National Pollutant Discharge Elimination System (NPDES) Permit for Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications.

Please contact Gary Goodman at 800-429-1022 if you have additional questions.

Sincerely,

Gary Goodman
Manager
Sacramento-Yolo MVCD

January 20th, 2016

Notice of Intent to Apply Public Health Pesticides for Vector Control Purposes to Surface Waters and Waters of the U.S. Within Sacramento and Yolo Counties.

- The Sacramento-Yolo Mosquito & Vector Control District intends to make public health pesticide applications to, over and adjacent to constructed conveyances, surface waters and other waters of the U.S owned and controlled by an entity other than the District for vector control purposes per the requirements of the General NPDES Permit for Biological and Residual Pesticide Discharges for Vector Control Applications.

- The NPDES Permit requirements for listing of the Public Health Pesticides anticipated to be used were modified from the previous permit, to the new permit which will be issued in 2016. The newer requirements specify that any pesticide product can be used that contain approved active ingredients, provided all pesticide label restrictions and instructions are followed. In addition, pesticides which fall under the "minimum risk" category can be used. The minimum risk pesticides have been exempted from FIFRA requirements. The following tables list the active ingredients approved for the FIFRA regulated pesticides.

Active Ingredients for larval mosquito control:

Bacillus thuringiensis subsp. *israelensis (Bti)*
Bacillus sphaericus (Bs)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Temephos

Active Ingredients for adult mosquito control:

Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
N-octyl bicycloheptene dicarboximide (MGK-264)
Piperonyl butoxide (PBO)
Permethrin
Prallethrin
Pyrethrin
Resmethrin
Sumithrin

- The purpose of the use of larvicide and adulticide pesticides containing these active ingredients is for the control of larval and adult mosquitoes to minimize the threat of mosquito-borne diseases and biting annoyances.

- The general time period for the application of the pesticides is January through December, 2016. Locations of expected use will be constructed conveyances, surface waters and other waters of the U.S. located within Sacramento and Yolo Counties.

- There are no known water use restrictions or precautions during treatment.

- Interested persons may contact the District at 1-800-429-1022 for additional information.

Gary Goodman, Manager
Sacramento-Yolo MVCD
8631 Bond Road
Elk Grove, CA 95624
www.fightthebite.net

Sacramento-Yolo Mosquito & Vector Control District (District) Pesticide Application Plan (PAP):

1. **Description of ALL target areas, if different from the water body of the target area, in to which larvicides 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;**

   Please see Agency Boundary Map. Typical and historically treated sites will include most if not all water bodies in the Yolo Bypass, areas of high water marks along the Cosumnes, Sacramento and American River corridors, intermittent creeks, and other associated waterways and surface waters that could be affected by the Districts applications.

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

   Decisions to use pesticides for control of mosquitoes include, but are not limited to, growth stage of mosquito, habitat that may affect efficacy of certain pesticides, inability to implement BMP (such as draining or management of water) in a timely fashion to prevent emergence, adult mosquito counts and/or virus activity that require widespread ultra low volume application, etc....
   Details of these factors can be found in the Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan; Appendices I and II
   http://www.fightthebite.net/download/Mosquito_Management_Plan.pdf

3. **Pesticide products or types expected to be used and if known, their degradation by-products, the method in which they are applied, and if applicable, the adjuvants and surfactants used;**

   The NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. from Vector Control Applications was amended to list the approved active ingredients rather than having specific products named. All pesticide label restrictions and instructions will be followed for pesticides which contain the active ingredients listed below. In addition, pesticides which fall under the "minimum risk" category may be used. The minimum risk pesticides have been exempted from FIFRA requirements. Products will be applied by truck, backpack, hand can and airplane.

Active Ingredients:

Bacillus thuringiensis subsp. *israelensis (Bti)*
Bacillus sphaericus (Bs) (Lysinibacillus sphaericus)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Temephos
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
N-octyl bicycloheptene dicarboximide (MGK-264)
Piperonyl butoxide (PBO)
Permethrin
Prallethrin
Pyrethrin
Resmethrin
Sumithrin
Any minimum risk category pesticides that are FIFRA exempt and registered for use in California and used in a manner specified in 40 C.F.R. section 152.25.

4. **Description of ALL the application areas and the target areas in the system that are being planned to be 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 the District's Mosquito Reduction Best Management Practices Document http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf. Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather and environmental conditions variations. However, typical sources treated by this District include: permanent/semi-permanent/seasonal wetlands, rice fields, irrigated crops and associated water conveyance systems, storm drains, river seepage and creeks within aerial ULV spray blocks.
Please see Agency Boundary Map and response to Question Number 1.

5. Other control methods used (alternatives) and their limitations;

With any mosquito or other vector source, the District's first goal is to look for ways to eliminate the source, or, if that is not possible, for ways to reduce the vector potential. The most commonly used methods and their limitations are included in the District's Mosquito Reduction Best Management Practices Document http://www.fightthebite.net/download/ecomanangement/SYMVCD_BMP_Manual.pdf. An example of an alternative is the District's use of *Gambusia affinis* in rice fields, wetlands, irrigation drains and neglected swimming pools on a yearly basis. The District's Ecological Management Department also identifies mosquito breeding sites throughout the District and works with property owners and land managers to incorporate District BMPs to reduce or eliminate mosquito breeding habitat. Sites where BMP's have been applied to include, but are not limited to, drains and ditches, rice field and wetland postponement of (re)-flooding, draining of duckclub habitat, vegetation management that provides water movement, discing, and legal abatement. These practices have been used in agricultural areas, wildlife areas (such as the Vic Fazio Wetlands) and other similar areas where appropriate and efficacious to control mosquitoes.

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

Material	***Pounds***	***Gallons***
Methoprene 20%		4
Methoprene 5%		5
Poly-w-hydroxy (agnique) Liquid		1
Poly-w-hydroxy (agnique) Granule	1	
Methoprene Pellets	875	
Methoprene Granule 7-day	169	
Spinosad liquid		12
Methoprene Briquets 120 day	1	
Methoprene Granule 21 day	26,814	
Spinosad granular 7-day	58	
Bti Granule	20,133	
5% Pyrethrin		1667
6% Pyrethrin		445
Petroleum Distillate		16
Spinosad 30 day Pellet	1379	
Spinosad Briquet	2	
Spinosad Granular 30 day	4175	
Naled		1761
Bti Liquid		494
Bti WDG	1	

Bs Granule	318	
Bti/Bs WSP	12	
Bti/Bs Granule	955	

The above totals represent estimated pesticides applications within the District boundaries to Waters of the U.S. for 2015. These amounts will change from year to year due to annual variability in required pesticide applications for mosquito control. This data is provided as an example of the products and amounts used in one year.

7. **Representative monitoring locations* and the justification for selecting these locations;**

Please see the MVCAC NPDES 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:**

The District's Ecological Management Department reviews post BMP implementation source pesticide application data to determine efficacy and compliance of BMP treatment. Examples that have resulted in the reduction of pesticide applications is the delay in fall flooding for duck club habitat, delay in flooding for rice field stubble breakdown, beaver dam management and discing and vegetation management on the Yolo Bypass refuge. Delays in fall habitat flooding have allowed the District to utilize single brood larvicide applications in place of higher concentrated residual larvicide applications on numerous wetlands located within the District. Discing and vegetation management performed on a sample field on the Yolo Bypass Wildlife area showed a 7 times reduction of immature mosquitoes on vegetation removal plots as compared to heavily vegetated control plots within the same field. Post beaver dam management project evaluations on two urban creeks have shown 89% and 100% reduction in larviciding acres between 2008 and 2010.

For a detailed explanation of other BMP's used by the District, please see the District's Mosquito Reduction Best Management Practices Document http://www.fightthebite.net/download/ecomanangement/SYMVCD_BMP_Manual.pdf.

9. Description of the BMPs to be implemented. The BMP's shall include, at the minimum:

a. measures to prevent pesticide spill;

District staff monitors application equipment on a daily basis to ensure it remains in proper working order. Spill mitigation devices are placed in all spray vehicles and pesticide storage areas to respond to spills. Employees are trained on spill prevention and response annually.

b. measures to ensure that only a minimum and consistent amount is used;

Spray equipment is calibrated each year and is a part of the MOU with CDPH. However, the pesticide label and associated registration by USEPA and CDPR are the authority of how much product can be legally applied to control the target

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

Applicators are required to complete pesticide training on an annual basis. Records are kept of these training sessions for review by the local agricultural commissioner and/or CDPH. Employees certified by the CDPH must perform at least 20 hours of Continuing Education units to maintain their certification.

d. descriptions of specific BMPs for each spray mode, e.g. aerial spray, truck spray, hand spray, etc.;

The District will calibrate truck and hand larviciding equipment each year to meet application specifications. Supervisors review spray records daily to ensure appropriate amounts of material are being used. ULV equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. Aerial adulticide equipment is calibrated at a minimum of once per year and as needed based on efficacy results and total amount of product used per event. Droplet sizes are monitored by the District to ensure droplets meet label requirements. Airplanes used in ULV applications are equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place product in the intended spray area.

e. descriptions of specific BMPs for each pesticide product used;

Please see District's Mosquito Reduction Best Management Practices Document
http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

f. descriptions of specific BMPs for each type of environmental setting (agriculture, urban, and wetlands).

Please see District's Mosquito Reduction Best Management Practices Document
http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

10. Identification of 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 U.S., 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:

The District's BMPs are described in a flow chart that can be found in the in Districts Mosquito Reduction Best Management Practices Document and the District's Mosquito and Mosquito- Borne Disease Management Plan.; Appendices I and II
http://www.fightthebite.net/download/Mosquito_Management_Plan.pdf AND
http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

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

Please see Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan; Appendices I and II

b. Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;

Please see Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan; Appendices I and II

c. Identify known breeding areas for source reduction, larval control program, and habitat management: and

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 the District's Mosquito Reduction Best Management Practices Document.

d. Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.

This information is located in the Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan, Appendices I and II. The District utilizes mosquito surveillance traps on a weekly basis to obtain appropriate mosquito abundance and disease activity data to guide control decisions.

11. Examination of Alternatives. Dischargers shall continue to examine alternatives to pesticide use in order 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.

Implementing preferred alternatives depends on a variety of factors including availability of agency resources, cooperation with stakeholders, coordination with other regulatory agencies, and the anticipated 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

This is described in the District's existing integrated vector management (IVM) program, as well as the practices described in our Mosquito and Mosquito-Borne Disease Management Plan and Mosquito Reduction Best Management Practices Document.
http://www.fightthebite.net/download/Mosquito_Management_Plan.pdf

http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

In addition, the District may utilize legal abatement authority to mitigate mosquito production.

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 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. Website for Public Notice

www.fightthebite.net

References:

Mosquito and Mosquito-Borne Disease Management Plan. 2005. Sacramento-Yolo Mosquito and Vector Control District. Download from http://www.fightthebite.net/mosquito-management-plan/

Mosquito Reduction Best Management Practices. Available from Sacramento-Yolo Mosquito & Vector Control District, by download from http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf or calling 800-429-1022

MVCAC NPDES Coalition Monitoring Plan.