1. **Annual Report**

a. Executive Summary

The County of El Dorado Vector Control operates in two distinct areas of the County. On the Eastern slope, in the Tahoe Basin portion of El Dorado County vector control, seasonal service is provided between April and October each year. Vector Control on the Western slope program is also operated seasonally on a complaint basis. Vector Control on the Eastern slope is located within the Lahontan Regional Water Quality Control Board District (RWQCB) (Region 6), and the Western slope is located within the Central Valley RWQCB (Region 5). The District operates under 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 (Water Quality Order No. 2011-0002-DWQ as amended by Water Quality Order No. 2012-0003-DWQ) since it became effective on November 1, 2011.

On the Eastern slope 852 larvicide treatment applications were conducted in 2012. The Western slope made 540 applications. There were no applications of adulticides in 2012 on either slope of the County. The District complied with the instructions on the labels of the pesticides and continued to follow the guidelines of its Pesticide Application Plan (PAP). The District conducted visual monitoring on 10% of applications made from January 1 until July 13, 2012. Visual monitoring was suspended on July 13 due to high West Nile virus activity throughout the state of California. Staff on the Eastern slope performed 85 visual monitoring applications of larvicide. No significant impacts to water quality were observed. The State Water Resources Control Board (SWRCB) notified the permit holders in a letter to Mosquito and Vector Control Association of California (MVCAC) dated July 13, 2012 that because the visual monitoring requirements were "interfering with the need for maximal efficient application to adequately protect human health from vector-borne diseases like West Nile Virus," that the visual monitoring was no longer required by individual Districts.

El Dorado County Vector Control is a member of the MVCAC Monitoring Coalition. The MVCAC Coalition completed the physical and chemical monitoring required by the Vector Control Permit that was issued by the SWRCB.

b. Summary of Monitoring Data

El Dorado County Vector Control began the year by complying with the visual monitoring requirements of the permit. (See Footnote 1 of Tables C-1 and C-2 in Amended Water Quality Control Order No. 2011-0002-DWQ, General Permit No. CAG990004.) These requirements entailed a significant amount of time to

perform visual monitoring and documentation at 10% of sites. Most critically, time spent revisiting previously observed sites caused delays in getting to new sites. Given the short lifecycle of the mosquito, this greatly exacerbated the task of looking for and treating mosquito breeding sites early in their lifecycle when treatment is more concentrated and effective. Recognizing the need of mosquito control districts to quickly find and treat mosquito breeding sites to prevent the spread of disease, such as West Nile virus, the SWRCB issued a letter to MVCAC dated July 13, 2012 that indicated the visual monitoring requirement would no longer be required of individual Districts.

Per the instructions in the letter, the MVCAC Coalition will provide information on the incidence of West Nile Virus and other similar public health threats in the their annual report.

Physical and chemical monitoring was conducted as part of the MVCAC Monitoring Coalition. All measurements made by Coalition volunteer districts or by URS, the consultant hired by MVCAC to coordinate and report physical and chemical monitoring, is contained within the MVCAC NPDES Annual Report.

c. BMP Identification
BMP's utilized by the EDC Vector Control are outlined in the Pesticide Application Plan (PAP). These include: source reduction, routine surveillance of breeding sites, use of biological and physical methods to control mosquitoes when appropriate, compliance with federal and state laws, training employees to prevent and respond to spills, storing pesticides in secure locations, calibration of pesticide use equipment, and maintaining certification of staff as State Certified Public Health Vector Control Technicians

d. BMP Modifications Addressing Violations
No violations of the General Permit by the District were observed.

e. Map of Applications
A map is provided showing the areas of treatment. (see attachment A).

f. Log of Applications made to Waters of the U.S.
See attachment entitled "Treatment History" which identifies amounts and names of pesticides used as well as site identification information. (Attachment B).

g. General Information on Applications.
See attachment entitled "Treatment History" which identifies information on surface area. Dosage, concentration, and quantity of pesticides used are derived from pesticide label information.

h. Visual Monitoring Data
This information is provided in Attachment C.

i. Monitoring Program, BMPs and PAP Recommendations
No recommendations are being proposed to improve the current BMP's, PAP, or monitoring plan. Any changes to the Coalition Monitoring Plan will be highlighted in the Coalition Monitoring Annual Report.

j. Pesticide Application Log
The pesticide application log information is found in Attachment B, entitled "Treatment History".

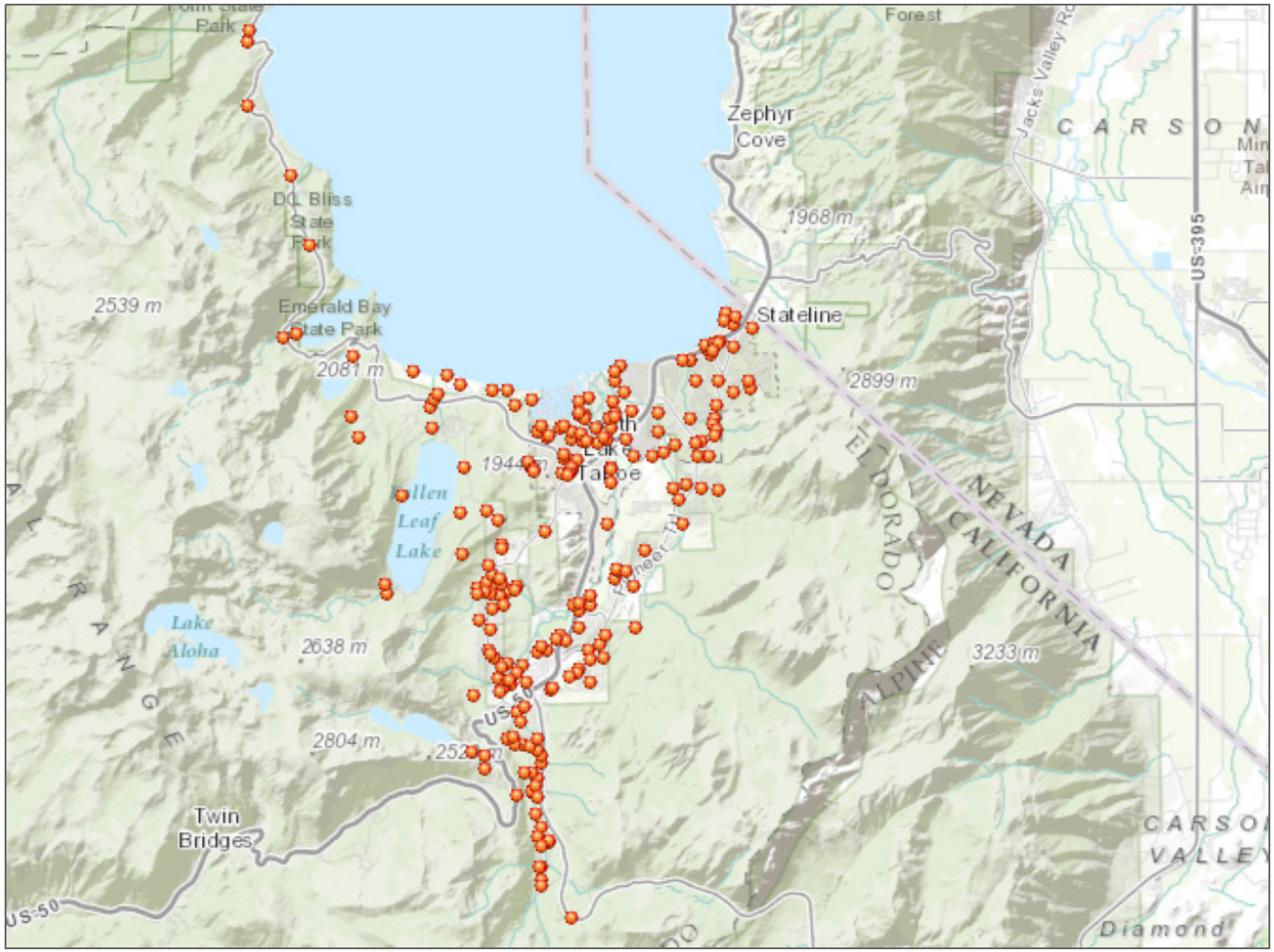
2. **Updated Monitoring Locations**
In 2012, a few new sources were found and added to the inventory for Eastern Slope. A few other sources having the same habitat classification were combined into one source to eliminate confusion.

3. **Self-Monitoring Reports**
The SWRCB and RWQCB (Districts 5 and 6) did not request submission of self-monitoring reports.

4. **Monitoring Reports**
The District is a member of the MVCAC Monitoring and Reporting Coalition. The MVCAC Coalition is responsible for the physical and chemical monitoring requirements of the Vector Control permit. A copy of their report is attached as Attachment D.

Vector Treatment Locations 2012

Treatment locations



NPS, Esri, DeLorme, NAVTEQ, USGS, USDA, EPA, TomTom, NGA

EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT
Vector Control District

PLACERVILLE OFFICE
2850 FAIRLANE CT. BLDG "C"
PLACERVILLE, CA 95667
530-621-5300
Fax# 530-642-1531

SOUTH LAKE TAHOE OFFICE
3368 Lake Tahoe Blvd. Ste. 303
South Lake Tahoe, CA 96150
530-573-3450
Fax# 530-542-3364

Treatment History

Record: VS0000115 TM/1 BEACH RD MEADOW FROM LAKE RD N. TO END
Site Description: MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/28/2012	0.25	OZ	GB1111	16.00	SQ-F
08/28/2012	1.00	EA	Altosid briq. 30 day	16.00	SQ-F

Record: VS0000116 MANZANITA AVE
Site Description: B.M.P,DITCHES,SNOW MELT
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/25/2012	1.00	EA	Altosid briq. XR	25.00	SQ-F
07/25/2012	2.50	OZ	Bti granular-VectoBac G	800.00	SQ-F

Record: VS0000117 MONTREAL AVE-CHONOKIS TO STLN-MARSH BEHIND COLONY
Site Description: MONTREAL AVE. FROM CHONOKIS TO STATELINE-MARSH BEHIND COLONY INN
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/30/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000123 EMBASSY SUITES/ L/T VAC RESORTS
Site Description: BMP/SNOW MELT/ DITCH/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/28/2012	1.75	OZ	GB1111	112.00	SQ-F
08/28/2012	7.00	EA	Altosid briq. 30 day	112.00	SQ-F
08/16/2012	1.00	OZ	Bti granular-VectoBac G	300.00	SQ-F

Record: VS0000124 OSGOOD AVE. FROM SKI RUN TO WILDWOOD
Site Description: BMP/MARSH/POOL/DITCH/SNOW MELT
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	

Treatment History

08/29/2012	1.25	OZ	GB1111	80.00	SQ-F
08/29/2012	5.00	EA	Altosid briq. 30 day	80.00	SQ-F
04/23/2012	3.50	OZ	Vectomax CG	1,200.00	SQ-F
05/07/2012	1.00	EA	Altosid briq. XR	80.00	SQ-F

Record: VS0000125 BLACKWOOD & PIONEER TO TAMARACK
Site Description: DRAINAGE BEHIND APT.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/06/2012	1.00	OZ	Bti granular-VectoBac G	250.00	SQFT

Record: VS0000127 FAIRWAY AVE. TO HWY 50
Site Description: SNOW MELT POOLS/POND/MARSH/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/09/2012	2.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
04/09/2012	2.00	EA	Altosid briq. 30 day	100.00	SQ-F
07/06/2012	1.00	OZ	Bti granular-VectoBac G	300.00	SQ-F

Record: VS0000128 GLENWOOD DRAINAGE TO MEADOWS
Site Description: SNOW DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/06/2012	1.00	EA	Altosid briq. 30 day	30.00	SQ-F
07/31/2012	0.50	OZ	GB1111	40.00	SQ-F

Record: VS0000129 BIJOU GOLF COURSE & MEADOW
Site Description: SNOW MELT POOLS/POND/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/06/2012	4.00	OZ	Bti granular-VectoBac G	1,400.00	SQ-F
08/22/2012	1.25	OZ	GB1111	120.00	SQ-F

Record: VS0000131 PIONEER FROM HERBERT TO AL TAHOE
Site Description: SNOW MELT POOLS/POND/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/31/2012	2.00	OZ	GB1111	100.00	SQ-F

Treatment History

07/31/2012	2.00	OZ	GB1111	100.00	SQ-F

Record: VS0000132 AL TAHOE WEST SIDE FORESTED AREA
Site Description: SNOW MELT POOLS/POND/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/09/2012	4.00	EA	Altosid briq. 30 day	100.00	SQ-F
05/15/2012	3.00	EA	Altosid briq. 30 day	250.00	SQ-F

Record: VS0000133 AL TAHOE EAST SIDE/PERIMETER OF VILLAGE
Site Description: SNOW MELT POOL/POND/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
09/05/2012	0.50	OZ	GB1111	35.00	SQ-F

Record: VS0000134 BLACK BART & STPUD PLANT
Site Description: DRAINAGE DITCH PONDS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/01/2012	0.50	OZ	GB1111	4.00	SQ-F
08/01/2012	0.25	OZ	Bti granular-VectoBac G	60.00	SQ-F
07/11/2012	1.00	OZ	GB1111	100.00	SQ-F
07/11/2012	5.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000135 HEAVENLY CREEK 2
Site Description: SNOW MELT POOL/POND/MARSH/MEADOW/BMP/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/02/2012	6.00	OZ	GB1111	450.00	SQ-F
05/15/2012	2.00	EA	Altosid briq. XR	150.00	SQ-F
04/25/2012	2.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000136 PIONEER TRAIL-AL TAHOE TO BLACK BART/ COLD CREEK
Site Description: SNOW MELT POOL/POND/MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/01/2012	1.50	OZ	GB1111	100.00	SQ-F

Treatment History

Record: VS0000137 TROUT CREEK/HWY 50 TO MARTIN/BRIDGE/EAST SIDE
Site Description: SNOW MELT POOL/POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/23/2012	0.13	OZ	Bti granular-VectoBac G	40.00	SQ-F
07/11/2012	0.25	OZ	Bti granular-VectoBac G	60.00	SQ-F
07/11/2012	0.50	OZ	GB1111	30.00	SQ-F
07/02/2012	1.00	OZ	GB1111	75.00	SQ-F
06/18/2012	0.25	OZ	Bti granular-VectoBac G	50.00	SQ-F
05/25/2012	5.00	EA	Altosid briq. XR	300.00	SQ-F
08/23/2012	0.50	OZ	GB1111	40.00	SQ-F

Record: VS0000138 TROUT CREEK (MARTIN TO BRIDGE-WEST SIDE)
Site Description: SNOW MELT POOL/POND/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/23/2012	0.25	OZ	GB1111	15.00	SQ-F
08/23/2012	0.25	OZ	Bti granular-VectoBac G	45.00	SQ-F
05/02/2012	12.00	EA	Altosid briq. XR	900.00	SQ-F

Record: VS0000139 COLD CREEK-PIONEER AROUND LAKE CRISTOPHER
Site Description: SNOW MELT POOL/POND/MARSH/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/27/2012	2.00	LB	Bti granular-VectoBac G	0.30	AC
08/02/2012	2.00	EA	Altosid briq. XR	150.00	SQ-F
07/26/2012	3.00	EA	Altosid briq. XR	80.00	SQ-F
07/26/2012	0.25	OZ	GB1111	20.00	SQ-F

Record: VS0000140 TROUT CREEK (GINGER'S MEADOW)
Site Description: SNOW MELT POOL/POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/27/2012	6.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
06/08/2012	0.25	OZ	GB1111	30.00	SQ-F
06/08/2012	1.00	EA	Altosid briq. 30 day	15.00	SQ-F
09/06/2012	8.00	OZ	Bti granular-VectoBac G	3,000.00	SQ-F

Treatment History

Record: VS0000141 CREEK TO TROUT CR, SOUTHERN SIDE OF PIONEER
Site Description: SNOW MELT POOL/POND/
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/27/2012	1.00	OZ	Bti granular-VectoBac G	400.00	SQ-F

Record: VS0000142 SUSQUEHANA TO JICARILLA TO PIONEER TR.
Site Description: SNOW MELT POOL/POND/ MARSH/MEADOW/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/18/2012	0.50	OZ	Bti granular-VectoBac G	200.00	SQ-F
05/18/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
05/01/2012	4.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
04/10/2012	1.00	EA	Altosid briq. 30 day	300.00	SQ-F

Record: VS0000143 HEKPA TO OLD DUMP
Site Description: SNOW MELT POOL/POND/MARSH/MEADOW/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/13/2012	0.25	OZ	Bti granular-VectoBac G	60.00	SQFT
07/24/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
07/24/2012	1.25	OZ	GB1111	115.00	SQ-F
07/24/2012	0.12	OZ	Bti granular-VectoBac G	30.00	SQ-F
08/24/2012	0.50	OZ	GB1111	40.00	SQ-F
09/21/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F

Record: VS0000144 WASHOAN (PIONEER TRL. TO ONNONTIOGA)
Site Description: SNOW MELT POOL/POOL/MARSH/MEADOW/BMP/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/13/2012	0.50	OZ	Bti granular-VectoBac G	200.00	SQ-F
07/16/2012	0.25	OZ	Bti granular-VectoBac G	40.00	SQ-F
06/14/2012	5.00	EA	Altosid briq. 30 day	400.00	SQ-F
04/10/2012	5.00	OZ	Bti granular-VectoBac G	2,500.00	SQ-F

Record: VS0000146 LILLY AVE, MEADOW ON WEST SIDE
Site Description: * POOL/MARSH/MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	

Treatment History

04/04/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
07/26/2012	2.50	LB	Bti granular-VectoBac G	0.50	AC
07/26/2012	4.00	LB	Vectomax CG	0.80	AC

Record: VS0000147 BARTON MEADOW W. OF ARGONAUT & BELLEVUE
Site Description: POOL/POND/MARSH/MEADOW/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/27/2012	7.00	LB	Bti granular-VectoBac G	1.40	AC
08/24/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0000148 ONNONTIOGA - WASHOAN TO NOTTAWAY
Site Description: SNOW MELT/POOL/POND/MARSH/MEADOW/BMP/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/10/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/16/2012	6.00	EA	Altosid briq. 30 day	400.00	SQ-F
07/05/2012	2.00	OZ	Bti granular-VectoBac G	600.00	SQ-F

Record: VS0000149 NOTTAWAY FROM WASHOAN TO END
Site Description: SNOW MELT/POOL/POND/MARSH/MEADOW/BMP/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/16/2012	0.25	OZ	GB1111	25.00	SQ-F

Record: VS0000150 BOREN FROM NOTTAWAY TO GLEN EAGLES
Site Description: SNOW MELT/POOL/POND/MARSH/MEADOW/BMP/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/16/2012	3.00	EA	Altosid briq. 30 day	300.00	SQ-F
08/10/2012	1.00	OZ	GB1111	100.00	SQ-F

Record: VS0000152 BEL AIRE CIR.PUMP HOUSE POOL AND ROAD DITCH.
Site Description: DITCH, POOL,SNOW MELT
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/24/2012	0.20	OZ	Bti granular-VectoBac G	40.00	SQ-F

Treatment History

09/27/2012	0.20	OZ	Bti granular-VectoBac G	40.00	SQ-F
06/29/2012	6.00	OZ	Bti granular-VectoBac G	600.00	SQ-F
05/14/2012	7.00	EA	Altosid briq. XR	700.00	SQ-F

Record: VS0000153 PLAYER COURT & PLAYER DR. AREA-EAST-BEHIND HOUSE
Site Description: SNOW/ MELT/POOL/POND/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/04/2012	1.10	LB	Bti granular-VectoBac G	4,400.00	SQ-F

Record: VS0000154 UPPER TRUCKEE RIVER EAST SIDE
Site Description: SNOW MELT POOL MARSH MEADOW POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/23/2012	10.00	OZ	Bti granular-VectoBac G	5,000.00	SQ-F
06/22/2012	0.50	OZ	GB1111	20.00	SQ-F
07/17/2012	3.00	OZ	Bti granular-VectoBac G	900.00	SQ-F
07/17/2012	0.50	OZ	GB1111	25.00	SQ-F

Record: VS0000155 UPPER TRUCKEE RIVER WEST SIDE
Site Description: SNOW MELT POOLS POND MARSH MEADOW B.M.P
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/17/2012	2.10	OZ	Bti granular-VectoBac G	750.00	SQ-F
06/22/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F
05/24/2012	1.00	LB	Bti granular-VectoBac G	0.25	AC
05/24/2012	5.00	EA	Altosid briq. 30 day	400.00	SQ-F

Record: VS0000156 AIRPORT RUNWAY
Site Description: B.M.P SNOW MELT DITCH POOL POND MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/20/2012	8.00	OZ	GB1111	600.00	SQ-F
08/22/2012	5.00	OZ	GB1111	300.00	SQ-F
08/22/2012	15.00	EA	Altosid briq. 30 day	300.00	SQ-F
08/22/2012	8.00	OZ	Bti granular-VectoBac G	2,800.00	SQ-F

Treatment History

Record: VS0000159 LEDBETTER'S MEADOW
Site Description: SNOW MELT POOLS POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/08/2012	2.50	OZ	Bti granular-VectoBac G	1,060.00	SQ-F

Record: VS0000160 LODI AVE BETWEEN WILLIAM & CHRIS DRAIN TO SIERRA
Site Description: SNOW MELT POOLS POND DITCHES MEADOW MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/18/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F

Record: VS0000161 ABACO AT ONEIDAS POOL @ DRAINAGE DITCH
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/20/2012	0.50	OZ	Vectomax CG	200.00	SQ-F
04/20/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F

Record: VS0000164 ZAPOTEC DR. DRAINAGE ALONG SO. SIDE TO WEST
Site Description: SNOWMELT POOLS MARSH MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/18/2012	0.50	OZ	Bti granular-VectoBac G	200.00	SQ-F
05/18/2012	4.00	EA	Altosid briq. 30 day	200.00	SQ-F

Record: VS0000165 END OF ZAPOTEC ALONG DRAIN TO SAXON CRK.
Site Description: SNOWMELT POOLS MARSH MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/04/2012	10.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
05/04/2012	2.00	EA	Altosid briq. XR	100.00	SQ-F
07/26/2012	1.00	OZ	Bti granular-VectoBac G	300.00	SQ-F

Record: VS0000166 ATROARI ST. BETWEEN ABACO @ MANDAN
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:	Treatment Area:

Treatment History

07/24/2012	1.00	OZ	Bti granular-VectoBac G	300.00	SQ-F
07/13/2012	2.00	OZ	Bti granular-VectoBac G	700.00	SQ-F
04/20/2012	7.00	EA	Altosid briq. XR	700.00	SQ-F

Record: VS0000167 MANDAN ST. @ERIE CIR. DRAIN DITCH BETWEEN
Site Description: SNOWMELT DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/03/2012	0.18	OZ	Bti granular-VectoBac G	100.00	SQ-F
07/24/2012	0.50	OZ	Bti granular-VectoBac G	200.00	SQ-F
07/06/2012	4.00	OZ	Bti granular-VectoBac G	1,200.00	SQ-F
08/08/2012	0.25	OZ	Bti granular-VectoBac G	75.00	SQ-F
08/24/2012	0.10	OZ	Bti granular-VectoBac G	25.00	SQ-F

Record: VS0000168 END OF OTTAWA CT./POOL ALSO ROAD DITCH - APACHE
Site Description: SNOW MELT POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/03/2012	1.00	OZ	Bti granular-VectoBac G	25.00	SQ-F

Record: VS0000169 CHIMNEY WAY - DRAINAGE DITCHES
Site Description: DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/29/2012	2.00	EA	Altosid briq. XR	200.00	SQFT

Record: VS0000174 MOHICAN DR.-RAVINE ON SOUTH SIDE
Site Description: SNOW MELT/POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/19/2012	4.00	EA	Altosid briq. XR	400.00	SQ-F

Record: VS0000175 HAIDA CIR. - DRAINAGE DITCH ON EAST SIDE
Site Description: SNOW MELT/DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

08/07/2012	0.25	OZ	GB1111	20.00	SQ-F

Treatment History

Record: VS0000176 Duck Pond Behind 1804 Apache to 1540 Zapotec Dr
Site Description: SNOW MELT/POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/07/2012	1.50	OZ	GB1111	120.00	SQ-F

Record: VS0000179 HWY 50 NEAR THUNDERBIRD DR. DRAIN DITCH
Site Description: SNOWMELT DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/29/2012	2.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000180 HWY 50 @ ELKS CLUB DR. TO THUNDERBIRD DR. POOLS
Site Description: SNOWMELT DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/03/2012	1.50	OZ	Bti granular-VectoBac G	200.00	SQ-F

Record: VS0000181 BOCA RATON DR. BY GALLO DR. MEADOW @DRAINAGE
Site Description: SNOWMELT DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/19/2012	20.00	EA	Altosid briq. 30 day	2,000.00	SQ-F

Record: VS0000185 USFS RD.12N01 TO FOUNTAIN PL.SAXON CRK. UPSTREAM
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/14/2012	3.00	OZ	GB1111	250.00	SQFT
06/14/2012	5.00	EA	Altosid briq. 30 day	150.00	SQFT
09/21/2012	0.25	OZ	GB1111	20.00	SQ-F

Record: VS0000187 SUT RD. ES. ECHO CRK. DRAINAGE
Site Description: SNOWMELT DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:	Treatment Area:

Treatment History

07/06/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F

Record: VS0000188 SUT RD. ES. FROM OLD RAINBOW BR. TO KATA CT.
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/19/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQFT
07/12/2012	6.00	EA	Altosid briq. 30 day	600.00	SQ-F
07/12/2012	5.60	OZ	Bti granular-VectoBac G	3,050.00	SQ-F
05/30/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC

Record: VS0000189 SUT RD. ES. FROM KATA CT.TO LOT 2287 RAILRD TRACK
Site Description: SNOWMELT POOLS MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/31/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC
07/16/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
08/03/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
06/19/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQFT
06/21/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQFT
08/24/2012	4.00	LB	Bti granular-VectoBac G	0.80	AC

Record: VS0000190 SUT RD. ES. FROM LOT 2887 TO EGRET WAY USFS
Site Description: SNOW MELT POOLS, MARSH, MEADOW TO RIVER, SINK HOLES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/12/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
07/12/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F
07/12/2012	5.60	OZ	Bti granular-VectoBac G	3,050.00	SQ-F
05/07/2012	2.00	LB	Vectomax CG	0.40	AC
05/01/2012	1.00	LB	Vectomax CG	0.20	AC

Record: VS0000191 EGRET WAY DRAINAGE TO UT RIVER
Site Description: SNOWMELT POOLS MARSH MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/07/2012	0.50	LB	Vectomax CG	0.10	AC
05/07/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F

Treatment History

07/24/2012	7.00	EA	Altosid briq. 30 day	700.00	SQ-F
07/24/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
09/21/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F

Record: VS0000192 EGRET WAY WEST SIDELOT 263
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
09/06/2012	0.50	LB	Bti granular-VectoBac G	4,320.00	SQ-F
08/20/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F

Record: VS0000193 OLD RIVER CHANNEL BETWEEN PANORAMA CT. WD CHUCK CT
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/20/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F

Record: VS0000194 SUT RD.EAST BETWEEN LOT 65 @ PORTAL RD
Site Description: SNOWMELT POOLS MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/20/2012	10.00	OZ	Bti granular-VectoBac G	5,400.00	SQ-F
09/14/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/20/2012	7.00	EA	Altosid briq. XR	700.00	SQ-F
07/20/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F

Record: VS0000195 EAST RIVER PARK DR. RIVER OVERFLOW @ISLAND
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/20/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F
07/20/2012	5.00	OZ	Bti granular-VectoBac G	2,700.00	SQ-F
07/06/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
07/06/2012	4.00	EA	Altosid briq. 30 day	400.00	SQ-F
05/08/2012	9.00	EA	Altosid briq. XR	900.00	SQ-F
05/08/2012	0.50	LB	Vectomax CG	0.10	AC
09/25/2012	1.50	OZ	Bti granular-VectoBac G	750.00	SQ-F
08/20/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Treatment History

Record: VS0000197 MORTON ST. ES. POOLS @DRAINAGES TO UT RIVER
Site Description: SNOWMELT POOLS, BEAVER PONDS, RIVER MARGIN
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/17/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
07/06/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F

Record: VS0000199 SUT RD. ES.FROM MORTON ST. TO BENWOOD CDK LT 53
Site Description: SNOWMELT POOLS MARSH MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/20/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQFT
07/24/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
07/13/2012	6.00	EA	Altosid briq. XR	600.00	SQ-F
07/13/2012	19.00	EA	Altosid briq. 30 day	1,900.00	SQ-F
07/13/2012	0.50	LB	Vectomax CG	0.10	AC
07/13/2012	0.75	LB	Bti granular-VectoBac G	0.15	AC
07/27/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/30/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
05/08/2012	5.00	LB	Vectomax CG	1.00	AC
05/03/2012	20.00	EA	Altosid briq. XR	2,000.00	SQ-F
05/03/2012	60.00	EA	Altosid briq. 30 day	6,000.00	SQ-F
08/16/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
08/10/2012	1.00	LB	Bti granular-VectoBac G	0.10	AC
09/25/2012	2.00	LB	Bti granular-VectoBac G	17,500.00	SQ-F
09/14/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
09/04/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
09/26/2012	8.00	LB	Bti granular-VectoBac G	1.60	AC

Record: VS0000200 SUT RD. ES. FROM BENWOOD CRK TO UTR BRIDGE
Site Description: SNOWMELT POOLS MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/31/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC
09/20/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
08/10/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC
08/15/2012	6.00	OZ	Bti granular-VectoBac G	3,240.00	SQFT
06/08/2012	0.50	LB	Bti granular-VectoBac G	1.00	AC
07/30/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Treatment History

07/11/2012	23.00	EA	Altosid briq. 30 day	2,300.00	SQ-F
07/11/2012	1.50	LB	Bti granular-VectoBac G	0.50	AC
07/24/2012	5.00	OZ	Bti granular-VectoBac G	2,700.00	SQ-F
07/24/2012	4.00	EA	Altosid briq. 30 day	400.00	SQ-F

Record: VS0000206 NAHANE ST. BOTH SIDES
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

07/06/2012	0.50	OZ	Bti granular-VectoBac G	240.00	SQ-F

Record: VS0000208 LAKE NAHANE INTO CELIO RANCH SO. PAST FENCE
Site Description: SNOWMELT POOLS MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/11/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F
05/09/2012	8.00	LB	Bti granular-VectoBac G	1.50	AC
05/03/2012	2.00	LB	Vectomax CG	0.40	AC
04/30/2012	3.00	LB	Vectomax CG	0.60	AC

Record: VS0000214 YOKUT ST. BOTH SIDES
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/11/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
05/29/2012	1.00	OZ	Vectomax CG	500.00	SQ-F
06/22/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQFT

Record: VS0000215 SUT RD. FROM NAHANE TO SO. END OF CELIO RANCH
Site Description: SNOW MELT POOLS MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/31/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC
05/08/2012	5.00	LB	Vectomax CG	1.00	AC

Record: VS0000216 SUT RD. WS. USFS TRACT FROM LOT 1 TO LOT 16
Site Description: SNOWMELT POOLS MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

06/01/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
06/11/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
05/09/2012	5.00	LB	Bti granular-VectoBac G	1.00	AC
06/22/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC
07/06/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000220 SUT RD. WS. FROM BENWOOD CRK LOT 53 TO TR BRIDGE
Site Description: SNOWMELT POOLS, MEADOW, RIVER CHANNELS
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

09/13/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
08/30/2012	2.50	LB	Bti granular-VectoBac G	0.50	AC

Record: VS0000221 UT RIVER ES FROM HWY 50 TO OLD RAINBOW BRIDGE
Site Description: SNOWMELT POOLS MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

09/21/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
08/28/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
06/29/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
07/16/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/13/2012	3.00	OZ	Vectomax CG	1,620.00	SQ-F
08/06/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC
07/25/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC

Record: VS0000222 UT RIVER ES. FROM OLD RAINBOW BRIDGE TO HAN ST
Site Description: SNOWMELT POOLS MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

07/25/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
08/03/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
07/13/2012	5.00	OZ	Vectomax CG	2,700.00	SQ-F
07/13/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
07/24/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/24/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
06/29/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
06/21/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQFT
05/29/2012	2.00	OZ	Vectomax CG	1,000.00	SQ-F

Treatment History

08/27/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
10/03/2012	0.25	OZ	Vectomax CG	125.00	SQ-F

Record: VS0000223 HAN ST. DRAINAGE @ OVERFLOW
Site Description: SNOWMELT POOLS MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/30/2012	20.00	EA	Altosid briq. XR	2,000.00	SQ-F
05/23/2012	1.50	LB	Vectomax CG	0.30	AC
05/23/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
05/24/2012	1.00	LB	Vectomax CG	0.20	AC
05/24/2012	0.50	OZ	Bti granular-VectoBac G	200.00	SQ-F
06/27/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F

Record: VS0000224 BLITZEN RD. FROM HAN ST. TO LOT 16 DRG. @ OVERFLOW
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

07/24/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
07/16/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
08/03/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
05/24/2012	0.50	LB	Vectomax CG	0.10	AC
05/24/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
08/27/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
09/07/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F

Record: VS0000225 BLITZEN RD SWAMP @ OLD RIV. CHANNEL LOT 16
Site Description: SNOWMELT POOLS SWAMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

09/24/2012	1.00	LB	Bti granular-VectoBac G	0.10	AC
05/24/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC
05/01/2012	6.00	LB	Vectomax CG	1.20	AC
08/01/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
07/20/2012	5.00	OZ	Bti granular-VectoBac G	2,700.00	SQ-F

Record: VS0000226 BLITZEN RD SWAMP BEHIND LOT 2321
Site Description: SNOWMELT SWAMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

07/16/2012	4.00	EA	Altosid briq. XR	400.00	SQ-F
07/16/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/24/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
08/02/2012	7.00	LB	Bti granular-VectoBac G	1.40	AC

Record: VS0000227 ELF LANE RIVER OVERFLOW -UTR 1/4 M S.
Site Description: SNOWMELT POOLS, RIVER MARGIN
Assigned To: EE0000084 - KAREN BENDER

Activity Date:		Treatment:		Treatment Area:	
05/01/2012	16.00	EA	Altosid briq. XR	1,600.00	SQ-F

Record: VS0000229 GRASS LAKE RD WEST SIDE
Site Description: SNOWMELT POOLS MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:		Treatment:		Treatment Area:	
05/02/2012	5.00	LB	Vectomax CG	1.00	AC
06/08/2012	6.00	EA	Altosid briq. XR	600.00	SQ-F
08/01/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/27/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/18/2012	15.00	EA	Altosid briq. 30 day	1,500.00	SQ-F
07/18/2012	6.00	OZ	Vectomax CG	3,240.00	SQ-F
06/20/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQFT
06/27/2012	11.00	EA	Altosid briq. XR	1,100.00	SQ-F
06/27/2012	12.00	EA	Altosid briq. 30 day	1,200.00	SQ-F
06/27/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
07/11/2012	2.50	LB	Bti granular-VectoBac G	0.50	AC
08/09/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC
09/04/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC

Record: VS0000230 GRASS LAKE RD EAST SIDE TO TANK
Site Description: SNOWMELT POOLS DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:		Treatment:		Treatment Area:	
09/04/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
08/09/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
07/27/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
06/08/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
05/02/2012	2.00	LB	Vectomax CG	0.40	AC

Treatment History

Record: VS0000233 BIG MEADOW CREEK TO UPPER TRUCKEE RD
Site Description: SNOWMELT POOLS MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/30/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/24/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/24/2012	3.00	EA	Altosid briq. 30 day	300.00	SQ-F
06/25/2012	0.60	LB	Bti granular-VectoBac G	0.12	AC
06/25/2012	11.00	EA	Altosid briq. 30 day	1,100.00	SQ-F
08/10/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC

Record: VS0000234 UT RIVER ES FROM SUT RD TO USFS TRACT
Site Description: SNOWMELT POOLS MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/03/2012	2.50	OZ	Bti granular-VectoBac G	1,350.00	SQ-F

Record: VS0000235 COOKHOUSE MEADOW HWY 89 NE SIDE AT COOKHOUSE RD
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/19/2012	1.00	OZ	GB1111	150.00	SQ-F
05/07/2012	3.00	LB	Bti granular-VectoBac G	0.50	AC
04/07/2012	3.00	LB	Bti granular-VectoBac G	0.50	AC
05/30/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
08/21/2012	8.00	OZ	Bti granular-VectoBac G	3,000.00	SQ-F

Record: VS0000237 ECHO LAKE RD.
Site Description: SNOWMELT POOLS DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/27/2012	2.00	OZ	GB1111	140.00	SQ-F
06/27/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F

Record: VS0000239 CHANNEL BEHIND BERKLEY CAMP BELOW ECHO LAKE RD
Site Description: SNOWMELT DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	

Treatment History

07/20/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
08/28/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000240 LOWER ECHO LAKE SOUTHEAST END
Site Description: SNOWMELT POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/19/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC

Record: VS0000242 ECHO SUMMIT& SOURCES WEST
Site Description: SNOWMELT POOLS, SEASONAL CREEKS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/26/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
08/08/2012	6.00	OZ	Bti granular-VectoBac G	3,240.00	SQ-F

Record: VS0000245 LT BLVD,SE SIDE,INDUSTRIAL-SAWMILL POND
Site Description: DITCHES,MARSH ,MEADOW,POOL SNOW MELT
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/30/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
05/25/2012	0.20	OZ	Bti granular-VectoBac G	110.00	SQ-F
04/20/2012	5.00	LB	Bti granular-VectoBac G	1.00	AC

Record: VS0000246 LT BLVD,NW SIDE, HIGH SCHOOL TO TAHOE MT.
Site Description: POND, DITCHES,MARSH,MEADOW,SNOW MELT POOL.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/14/2012	4.00	EA	Altosid briq. XR	400.00	SQ-F
06/14/2012	1.50	OZ	Bti granular-VectoBac G	810.00	SQFT
07/09/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F

Record: VS0000248 IRON MNT,CIR
Site Description: DITCHES,MARSH,MEADOW,SNOW MELT POOLS.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/27/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F

Treatment History

06/13/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQFT

Record: VS0000249 GRANITE MOUNTAIN CIR.
Site Description: DITCHES, SNOW MELT POOLS,MARSH,MEADOW.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/13/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
07/19/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
07/09/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F

Record: VS0000252 EL DORADO AVE FLOOD POOLS BEHIND HOUSES
Site Description: POOL, DITCH, MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/10/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
07/20/2012	4.00	LB	Bti granular-VectoBac G	0.80	AC
07/19/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F
04/04/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
08/06/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0000258 SPRINGWOOD DR. NEAR LAKEWOOD CRCL. BEHIND HOUSES
Site Description: * SNOW MELT, POOL MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/07/2012	3.00	OZ	Bti liquid-VectoBac 12 AS	8,600.00	SQ-F
04/18/2012	4.00	LB	Bti granular-VectoBac G	17,500.00	SQ-F
06/25/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F

Record: VS0000259 SPRINGWOOD MEADOW N TO POWER LINES-E 2 TROUTCREEK
Site Description: * SNOW MELT, MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/24/2012	5.00	OZ	Bti liquid-VectoBac 12 AS	16,250.00	SQ-F
05/07/2012	3.00	OZ	Bti liquid-VectoBac 12 AS	8,600.00	SQ-F
04/24/2012	1.00	OZ	Bti liquid-VectoBac 12 AS	2,730.00	SQ-F

Record: VS0000260 LAKEWOOD CRCL. TO HWY #50 TRUCKEE RIVER BRIDGE
Site Description: * POOL, MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Treatment History

Activity Date:			Treatment:	Treatment Area:	
05/07/2012	3.00	OZ	Bti liquid-VectoBac 12 AS	8,000.00	SQ-F
04/07/2012	3.00	OZ	Bti liquid-VectoBac 12 AS	8,000.00	SQ-F
07/06/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
07/19/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000261 END OF SUNSET DR. POOLS AND RIVER OVER FLOW
Site Description: POOL, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
07/26/2012	6.00	OZ	Bti granular-VectoBac G	3,000.00	SQ-F
07/06/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
05/07/2012	3.00	OZ	Bti liquid-VectoBac 12 AS	8,000.00	SQ-F
04/24/2012	1.50	OZ	Bti liquid-VectoBac 12 AS	4,100.00	SQ-F
04/24/2012	6.00	OZ	Bti liquid-VectoBac 12 AS	19,500.00	SQ-F
05/30/2012	3.00	OZ	Bti granular-VectoBac G	15,000.00	SQ-F
05/30/2012	4.00	EA	Altosid briq. 30 day	400.00	SQ-F
08/08/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F

Record: VS0000263 SKY MEADOWS TO TRUCKEE RIVER, POOLS AND OVER FLOWS
Site Description: * DITCH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/08/2012	9.00	OZ	Bti granular-VectoBac G	2,890.00	SQ-F
05/08/2012	2.00	EA	Altosid briq. XR	1,500.00	SQ-F

Record: VS0000264 SKY MEADOWS, BEAVER DAM AND POOLS(@END OF SKYMDWS)
Site Description: * SNOW MELT, POOL, POND, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/08/2012	3.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F
05/30/2012	2.00	OZ	Bti granular-VectoBac G	10,000.00	SQ-F
06/05/2012	3.00	LB	Bti granular-VectoBac G	1.00	AC
07/06/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F
06/29/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F
07/27/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/18/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F

Treatment History

07/16/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
08/08/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
08/21/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F

Record: VS0000265 CALIF AVE. - BEHIND HOUSES (DRAINAGE IN SKY MDWS)
Site Description: * SNOW MELT, POOL, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

07/18/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
06/29/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
06/19/2012	3.00	OZ	Vectomax CG	1,635.00	SQFT
06/19/2012	1.00	OZ	GB1111	68.00	SQFT
05/30/2012	2.00	OZ	Bti granular-VectoBac G	10,000.00	SQ-F

Record: VS0000266 MICHAEL DR. E.- TO TRUCKEE RIVER POOLS & OVER FLOW
Site Description: SNOW MELT, POOL, POND, MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/12/2012	1.00	OZ	Bti granular-VectoBac G	545.00	SQFT

Record: VS0000267 MICHAEL DR. AND TEXAS ST. SWAMP
Site Description: SNOW MELT, DITCH, SWAMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/28/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F

Record: VS0000268 DOVER ST BOTH SIDES HOLDING PONDS KEYS STORAGE FAC
Site Description: POOL, POND, MARSH, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/28/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F
05/09/2012	10.00	LB	Bti granular-VectoBac G	1.00	AC
05/09/2012	25.00	EA	Altosid briq. 30 day	1.00	AC
05/09/2012	8.00	OZ	Bti granular-VectoBac G	4,360.00	SQ-F

Record: VS0000269 KEYS BLVD. AND ALA WAI ROCK PONDS AROUND CONDOS
Site Description: DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

06/01/2012	1.50	OZ	Bti granular-VectoBac G	900.00	SQ-F

Record: VS0000270 KEYS BLVD BETWEEN DOVER AND VENICE DR. E.
Site Description: SNOW MELT, MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/10/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
06/28/2012	4.00	LB	Bti granular-VectoBac G	0.80	AC
07/10/2012	5.00	LB	Bti granular-VectoBac G	1.00	AC
07/24/2012	2.00	LB	Bti granular-VectoBac G	0.40	AC
08/08/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
08/08/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
08/21/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC

Record: VS0000277 TAHOE MOUTAIN RD& HIGHLAND POOL AND DRAINAGE.
Site Description: SNOW MELT POOLS ,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/15/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F

Record: VS0000280 LTB. TAHOE MT. TO ANGORA CRK DR.
Site Description: LOT SINK HOLES, DITCHES, SPRINGS, BMP'S, CATCH BASINS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/14/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQFT
07/10/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
07/10/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
05/30/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
05/14/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
09/05/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F

Record: VS0000281 MULE DEER CIRCLE BOTH SIDES OF RD.
Site Description: BURN AREA, SNOW MELT POOLS, DITCHES, BMP'S
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
09/05/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F

Treatment History

Record: VS0000282 UPPER ANGORA CREEK, S. MEADOW AND POOL
Site Description: SNOW MELT POOLS,DITCHES,MEADOW,MARSH.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/16/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
05/16/2012	2.00	LB	Vectomax CG	0.40	AC
05/16/2012	7.00	LB	Bti granular-VectoBac G	1.40	AC
06/28/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F

Record: VS0000284 LT BLVD,SW SIDE FROM MT RAINIER TO UPPER TRUCKEE R
Site Description: ROADSIDE DITCHES, FIRE BMP'S
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/27/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/08/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F

Record: VS0000285 MOUNT RAINIER DR.BOTH SIDES
Site Description: FIRE ZONE, SPRINGS, BMP'S, DITCHES, CATCH BASINS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
09/05/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F

Record: VS0000286 MOUNT SHASTA CIRCLE,BOTH SIDES
Site Description: SNOW MELT POOLS,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/08/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
10/01/2012	6.00	OZ	Vectomax CG	3,000.00	SQ-F
07/10/2012	20.00	EA	Altosid briq. 30 day	2,000.00	SQ-F
06/14/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQFT
06/26/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
05/31/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F

Record: VS0000289 UPPER TRUCKEE RD, NW FROM LT BLVD,TO MT RAINIER
Site Description: SNOW MELT POOLS, DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/27/2012	1.00	OZ	GB1111	70.00	SQ-F

Treatment History

06/27/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
07/17/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F

Record: VS0000291 UPPER TRUCKEE RD,W SIDE FROM GRIZZLY MT TO SENECA.
Site Description: SNOW MELT POOL, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/31/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000293 ANGORA CREEK DRAINAGE. ANGORA RIDGE TO RESIDENTS.
Site Description: MEADOW, CREEK, SNOW MELT POOLS, BURNT FOREST
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/05/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC
06/05/2012	4.00	EA	Altosid briq. XR	400.00	SQFT
06/20/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/09/2012	5.50	OZ	Bti granular-VectoBac G	2,970.00	SQ-F

Record: VS0000301 OSGOOD CREEK,NORTH SIDE BELOW POOEWIN ST.
Site Description: SNOW MELT POOLS, DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/21/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
06/21/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F
07/23/2012	6.50	OZ	Bti granular-VectoBac G	3,510.00	SQ-F

Record: VS0000302 OSGOOD CREEK, E SIDE FROM UPPER TRUCKEE RD,TO USFS
Site Description: SNOW MELT POOLS ,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/26/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F

Record: VS0000303 UPPER TRUCKEE RD,WS FROM WINTOON TO SAN BERNARDINO
Site Description: SNOW MELT POOLS,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/19/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
06/28/2012	1.50	OZ	Bti granular-VectoBac G	810.00	SQ-F

Treatment History

Record: VS0000305 UPPER TRUCKEE RD,W SIDE FROM OTOMITES TO HWY 50.
Site Description: SNOW MELT POOLS, DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/10/2012	7.00	EA	Altosid briq. XR	700.00	SQ-F
05/10/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC

Record: VS0000306 DRAINAGE BETWEEN UPPER TRUCKEE RD AND CHIAPA DR
Site Description: SNOW MELT POOLS. MARSH,DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/17/2012	0.50	LB	Vectomax CG	0.10	AC

Record: VS0000314 OSGOOD SWAMP, SWAMP & DRAINAGES
Site Description: SNOW MELT POOLS , MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/11/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC
05/11/2012	2.00	LB	Vectomax CG	0.40	AC
05/10/2012	5.00	EA	Altosid briq. XR	500.00	SQ-F
05/10/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
06/01/2012	2.00	LB	Bti granular-VectoBac G	0.20	AC
06/01/2012	4.00	EA	Altosid briq. XR	400.00	SQFT
06/01/2012	6.00	EA	Altosid briq. 30 day	600.00	SQFT
06/01/2012	20.00	EA	Altosid briq. XR	2,000.00	SQ-F
06/01/2012	3.50	LB	Bti granular-VectoBac G	0.70	AC
06/01/2012	0.50	LB	Vectomax CG	1.00	AC
06/15/2012	3.00	OZ	Bti granular-VectoBac G	1,650.00	SQFT
06/15/2012	3.00	OZ	GB1111	240.00	SQFT

Record: VS0000319 CHILICOTHE ST.BOTH SIDES
Site Description: SNOW MELT POOLS, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/25/2012	10.00	LB	Vectomax CG	2.00	AC

Treatment History

Record: VS0000321 ULMECA ST.BOTH SIDES
Site Description: SNOW MELT POOLS, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/20/2012	0.50	LB	Bti granular-VectoBac G	4,320.00	SQ-F
07/03/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F

Record: VS0000334 VENICE DR. E. INDUSTRIAL AREA TO HARBOR ON L. SIDE
Site Description: MARSH, MEADOW, DITCH,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/27/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
08/08/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
08/21/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
09/11/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000335 * VENICE DR. E- MARINA TO LAKE COMBO #0492
Site Description: DITCH, POOL, MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/10/2012	6.00	EA	Altosid briq. XR	3,000.00	SQ-F

Record: VS0000336 LASSEN DR. LAGOON CANAL TO BEAVER DAM AND POND
Site Description: DITCH, POOL, MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/17/2012	1.50	OZ	Bti granular-VectoBac G	750.00	SQ-F
07/13/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F
06/28/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
06/26/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
08/21/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F

Record: VS0000337 TUOLUMNE DR. DITCH BEHIND HOUSES OUT TO CREEK
Site Description: MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/05/2012	0.50	LB	Bti granular-VectoBac G	10,890.00	SQFT

Treatment History

Record: VS0000338 TAHOE ISLAND DR. TAHOE VALLEY SCHOOL POOLS N. SIDE
Site Description: MARSH, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/18/2012	1.00	OZ	GB1111	100.00	SQ-F

Record: VS0000339 TAHOE ISLAND DR - T/VISTA DR AROUND& MEADOW ON R
Site Description: DITCH, MEADOW, MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/06/2012	3.00	OZ	Bti granular-VectoBac G	1,635.00	SQFT
04/23/2012	2.50	LB	Bti granular-VectoBac G	21,000.00	SQ-F
06/18/2012	8.00	OZ	GB1111	600.00	SQFT
06/18/2012	3.00	OZ	Vectomax CG	1,635.00	SQ-F

Record: VS0000340 WYOMING ST WEST END MARSH-UP TO IDAHOE AND WA. ST.
Site Description: DITCH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/18/2012	5.00	OZ	Bti granular-VectoBac G	4,000.00	SQ-F
05/11/2012	4.00	OZ	Bti granular-VectoBac G	2,180.00	SQ-F

Record: VS0000347 TAHOE VISTA AND ROYAL DRAINAGE UP-T/VALLEY SCHOOL
Site Description: DITCH, MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/06/2012	3.00	OZ	Bti granular-VectoBac G	1,635.00	SQFT
04/23/2012	2.50	LB	Bti granular-VectoBac G	21,000.00	SQ-F

Record: VS0000348 TEXAS AVE. FILTRATION PLANT TO END OF TAHOE ISLAND
Site Description: * POOL, DITCH, MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/20/2012	21.00	EA	Altosid briq. XR	2,100.00	SQ-F
05/11/2012	0.75	GAL	GB1111	11,400.00	SQ-F

Record: VS0000349 TAHOE ISLAND DR. WEST OF 12TH MEADOW W. OF ANITA
Site Description: MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Treatment History

Activity Date:			Treatment:	Treatment Area:	
05/18/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F

Record: VS0000350 WEST TEXAS AVE. BOTH SIDES TO PUMP STATION
Site Description: DITCH, MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/10/2012	9.00	OZ	Bti granular-VectoBac G	6,500.00	SQ-F

Record: VS0000351 ELOISE AVE. 12TH ST. TO 15TH ST. DOG LEG TO VENICE
Site Description: MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
04/20/2012	20.00	OZ	Bti granular-VectoBac G	10,500.00	SQ-F
07/10/2012	5.00	LB	Bti granular-VectoBac G	1.00	AC
07/09/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
07/09/2012	1.00	OZ	Vectomax CG	500.00	SQ-F
07/19/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
07/19/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
08/24/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC

Record: VS0000352 15TH ST EAST SIDE - VENICE TO ELOISE WOODED AREA
Site Description: DITCH, POOL, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
07/09/2012	0.10	OZ	Bti granular-VectoBac G	50.00	SQ-F
04/20/2012	11.00	OZ	Bti granular-VectoBac G	5,000.00	SQ-F
04/20/2012	3.00	EA	Altosid briq. XR	300.00	SQ-F
04/27/2012	3.00	OZ	Vectomax CG	100.00	SQ-F
05/09/2012	11.00	OZ	Bti granular-VectoBac G	5,000.00	SQ-F
05/23/2012	0.40	OZ	Vectomax CG	24.00	SQ-F
05/31/2012	0.50	OZ	Bti granular-VectoBac G	200.00	SQ-F

Record: VS0000353 VENICE DR. W. SIDE- POPE MARSH AROUND TO POPE BEACH
Site Description: MEADOW, SWAMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	

Treatment History

04/23/2012	6.00	LB	Vectomax CG	50,400.00	SQ-F

Record: VS0000354 TATA LN. - P/OFFICE HWY#89 - LT BLVD. - GARDNER ST
Site Description: MARSH, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/05/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F
07/27/2012	11.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
09/13/2012	4.00	EA	Altosid briq. 30 day	400.00	SQ-F
08/20/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F

Record: VS0000355 CLEMENT BETWEEN & BEHIND HOUSES 933 to 899 CLEM
Site Description: DITCH, MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/27/2012	0.25	OZ	Bti granular-VectoBac G	125.00	SQ-F
07/17/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000356 TATA LN. DRAINAGE @ 973 TO S. SIDE OF GLORINE
Site Description: DITCH, POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/16/2012	0.10	OZ	Bti granular-VectoBac G	50.00	SQ-F
07/02/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
05/18/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
09/13/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000367 MDW X- N. OF HWY#89 BETWEEN STUPD PUMP STA & POPE
Site Description: POOL, POND, MARSH, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/21/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000368 POPE BEACH ROAD MARSH AND POOLS BOTH SIDES
Site Description: POOL, DITCH, MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/02/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F

Treatment History

06/05/2012	3.00	LB	Bti granular-VectoBac G	1.00	AC
06/19/2012	2.00	LB	Bti granular-VectoBac G	1.00	AC
06/27/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/16/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F

Record: VS0000370 JAMISON BEACH RD. MARSH ON SOUTH SIDE (CAMP RICH)
Site Description: POND, MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

07/18/2012	5.00	LB	Bti granular-VectoBac G	1.00	AC
06/15/2012	6.00	LB	Bti granular-VectoBac G	1.20	AC
06/15/2012	32.00	LB	Bti granular-VectoBac G	2.00	AC
06/15/2012	4.00	LB	Vectomax CG	32,670.00	SQFT
06/15/2012	10.00	LB	Bti granular-VectoBac G	2.00	AC
06/15/2012	18.00	LB	Bti granular-VectoBac G	3.60	AC
06/15/2012	10.00	LB	Bti granular-VectoBac G	3.00	AC
06/15/2012	4.00	LB	Vectomax CG	3.00	AC
06/15/2012	18.00	LB	Bti granular-VectoBac G	3.60	AC
06/15/2012	12.00	LB	Bti granular-VectoBac G	2.00	AC

Record: VS0000435 SAN BERNARDINO AVE,EAST OF U TRUCKEE RD
Site Description: SNOW MELT POOLS, DITCHES, CREEKS
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/20/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
06/05/2012	1.00	OZ	Bti granular-VectoBac G	550.00	SQFT
05/17/2012	1.00	LB	Vectomax CG	0.20	AC

Record: VS0000436 UT RIVER W. SHAWNEE DRAIN TO HWY 50
Site Description: SNOW MELT POOLS MEADOW,DITCH,
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/09/2012	5.00	LB	Vectomax CG	1.00	AC
05/09/2012	4.00	EA	Altosid briq. XR	400.00	SQ-F

Record: VS0000437 OAXACO ST,BOTH SIDES
Site Description: SNOW MELT POOLS ,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

07/03/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F

Record: VS0000443 GRIZZLY MTN. TO AMACKER RANCH FENCE
Site Description: SNOW MELT POOLS, DITCHES,MARSH,MEADOW.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/21/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
07/17/2012	3.00	EA	Altosid briq. 30 day	300.00	SQ-F
06/08/2012	2.00	EA	Altosid briq. 30 day	200.00	SQFT

Record: VS0000446 DIXIE MTN DR. BOTH SIDES
Site Description: SNOW MELT POOLS,DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/31/2012	9.00	EA	Altosid briq. 30 day	900.00	SQ-F
05/16/2012	1.00	LB	Vectomax CG	0.20	AC
05/16/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F
01/08/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F
01/08/2012	1.00	LB	Vectomax CG	0.20	ACRE

Record: VS0000447 MTN MEADOW DR. FROM UPPER TRUCKEE RD TO END
Site Description: SNOW MELT POOLS,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/31/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
05/31/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
06/21/2012	5.00	OZ	Bti granular-VectoBac G	2,700.00	SQ-F
07/10/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F

Record: VS0000449 VIEW CIR.BOTH SIDES.
Site Description: SNOW MELT POOLS ,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/26/2012	4.00	EA	Altosid briq. 30 day	400.00	SQ-F
05/31/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
05/15/2012	6.00	EA	Altosid briq. XR	600.00	SQ-F
05/15/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F

Treatment History

05/15/2012	0.50	LB	Vectomax CG	0.10	AC

Record: VS0000450 MTN. TROUT DR. AND CLEAR VIEW DR
Site Description: SNOW MELT ,POOLS ,DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/31/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
04/20/2012	2.00	LB	Bti granular-VectoBac G	1,100.00	SQ-F
09/24/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F
09/05/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F

Record: VS0000451 MEADOW AT END OF MT. TROUT DR. N OF ANGORA CREEK.
Site Description: SNOW MELT POOL ,POND ,MARSH,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/06/2012	4.80	OZ	Bti granular-VectoBac G	2,600.00	SQFT
06/06/2012	3.00	EA	Altosid briq. XR	300.00	SQFT
06/06/2012	1.00	EA	Altosid briq. 30 day	100.00	SQFT
05/15/2012	1.00	OZ	Vectomax CG	500.00	SQ-F
05/18/2012	10.00	LB	Bti granular-VectoBac G	2.00	AC

Record: VS0000452 ANGORA CREEK, BETWEEN LTB. AND VIEW CIR
Site Description: SNOW MELT POOLS ,DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/15/2012	1.50	LB	Vectomax CG	0.30	AC
05/15/2012	4.00	EA	Altosid briq. XR	400.00	SQ-F
05/31/2012	3.00	EA	Altosid briq. XR	300.00	SQ-F
05/31/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F
05/31/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
06/18/2012	0.80	OZ	Bti granular-VectoBac G	435.00	SQ-F
07/09/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F
07/09/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F
07/09/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/27/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
08/09/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC

Record: VS0000453 ANGORA CRK CIRCLE, CREEK, BMP'S
Site Description: SNOW MELT POOLS ,DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Treatment History

Activity Date:			Treatment:	Treatment Area:	
08/08/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/22/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
07/19/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F

Record: VS0000454 EAGLE LANE TO COYOTE RIDGE.
Site Description: SNOW MELT POOLS ,DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
06/14/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQFT

Record: VS0000455 AMACKER ENTRANCE TO LTB. NORTH TO LTB
Site Description: SNOW MELT POOLS ,DITCHES ,MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
06/22/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
07/09/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
06/07/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
06/07/2012	2.00	LB	Vectomax CG	0.40	AC
05/18/2012	41.00	EA	Altosid briq. 30 day	4,100.00	SQ-F
05/18/2012	21.00	EA	Altosid briq. XR	2,100.00	SQ-F
05/18/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC
05/21/2012	20.00	EA	Altosid briq. 30 day	2,000.00	SQ-F
05/21/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0000456 AMACKER RANCH SO. OF ANGORA CRK. WEST OF UT RD.
Site Description: SNOW MELT POOLS ,DITCHES, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
04/23/2012	2.00	LB	Vectomax CG	17,500.00	SQ-F
04/23/2012	10.00	EA	Altosid briq. XR	1,000.00	SQ-F
04/23/2012	20.00	EA	Altosid briq. 30 day	2,000.00	SQ-F

Record: VS0000457 UT RIVER WS FROM AMACKER REAR GATE TO SHAWNEE ST.
Site Description: SNOW MELT POOLS ,DITCHES ,MEADOW,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:	Treatment Area:

Treatment History

04/23/2012	1.00	OZ	Vectomax CG	500.00	SQ-F
06/28/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
06/21/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
07/16/2012	5.00	OZ	Bti granular-VectoBac G	2,700.00	SQ-F
07/16/2012	5.00	EA	Altosid briq. 30 day	500.00	SQ-F
07/25/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/28/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/29/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/07/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0000458 UT RIVER WEST SIDE FROM SHAWNEE TO HWY. 50
Site Description: SNOW MELT POOLS, DITCHES,MARSH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

08/23/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
09/07/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
07/25/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
08/06/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/18/2012	0.50	OZ	Bti granular-VectoBac G	0.10	AC
07/18/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
06/20/2012	1.50	OZ	Bti granular-VectoBac G	810.00	SQ-F
07/03/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
07/03/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
07/03/2012	8.00	EA	Altosid briq. XR	800.00	SQ-F
05/09/2012	8.00	LB	Bti granular-VectoBac G	1.50	AC
05/10/2012	3.00	LB	Bti granular-VectoBac G	0.60	AC
05/10/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
05/10/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F

Record: VS0000461 SAWMILL RD. NO. SIDE BETWEEN INCLINE RD. & HWY 50
Site Description: SNOW MELT POOL ,MARSH ,MEADOW ,DITCH,
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/20/2012	2.00	LB	Bti granular-VectoBac G	1,100.00	SQ-F

Record: VS0000464 LAKE TAHOE GOLF COURSE UT RIVER TO COUNTRY CLUB
Site Description: SNOW MELT POOLS ,POND MARSH ,MEADOW ,DITCH,
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

04/09/2012	10.00	EA	Altosid briq. XR	1,000.00	SQFT
04/10/2012	3.00	EA	Altosid briq. XR	3,000.00	SQ-F
04/23/2012	2.00		Vectomax CG	17,500.00	SQ-F
04/23/2012	20.00	EA	Altosid briq. 30 day	5,000.00	SQ-F
04/23/2012	30.00	EA	Altosid briq. XR	5,000.00	SQ-F
05/30/2012	18.00	EA	Altosid briq. XR	1,800.00	SQ-F
05/30/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
05/30/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
07/02/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
07/02/2012	7.00	EA	Altosid briq. XR	700.00	SQFT
06/18/2012	12.00	OZ	Bti granular-VectoBac G	6,528.00	SQ-F
07/18/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/18/2012	0.50	LB	Vectomax CG	0.10	AC
07/18/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
07/18/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
07/18/2012	5.00	EA	Altosid briq. XR	500.00	SQ-F
09/19/2012	4.00	OZ	Bti granular-VectoBac G	2,160.00	SQ-F
08/29/2012	6.00	OZ	Bti granular-VectoBac G	3,240.00	SQ-F
08/07/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC

Record: VS0000468 DRAINAGE DITCH WEST OF SAN DIEGO AND BAKERFIELD ST
Site Description: SNOW MELT POOLS, DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:
04/10/2012	20.00	EA	Altosid briq. 30 day	2,000.00	SQ-F

Record: VS0000469 NORTH CORNER OF SAN DIEGO AND BAKERFIELD ST.
Site Description: SNOW MELT POOLS ,DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:
04/10/2012	16.00	OZ	Vectomax CG	4,300.00	SQ-F
04/16/2012	10.00	LB	Bti granular-VectoBac G	2.00	AC
05/23/2012	10.00	OZ	GB1111	1,200.00	SQ-F

Record: VS0000472 DRAINAGE BETWEEN SAN BERNARDINO &ARROWHEAD
Site Description: SNOW MELT POOLS , DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:
05/23/2012	15.00	EA	Altosid briq. XR	1,500.00	SQ-F

Treatment History

07/23/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
07/05/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F

Record: VS0000475 DRAINAGE TO SANTA FE RD. &ARAPHOE ST TO GOLF CO.
Site Description: SNOW MELT POOLS ,MARSH ,MEADOW,DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/01/2012	5.00	OZ	Bti granular-VectoBac G	2,700.00	SQ-F
05/23/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
05/23/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC

Record: VS0000478 MEADOW,DRAINAGE BETWEEN SANTA FE & HWY 50
Site Description: SNOW MELT POOLS, MARSH ,MEADOW,DITCHES,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/23/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
06/11/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQFT
07/05/2012	1.00	OZ	Bti granular-VectoBac G	544.00	SQ-F
07/05/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
06/25/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/14/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F

Record: VS0000480 UT RIVER E SIDE FROM COUNTRY CLUB TO LOT 10.
Site Description: SNOW MELT POOLS, DRAINS, MARSH, MEADOW,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/07/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/05/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
07/25/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
07/18/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
07/18/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
04/10/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F

Record: VS0000481 UT RIVER E SIDE ACROSS LOT 10 TO TRPA.
Site Description: SNOW MELT POOL, MARSH, MEADOW,
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/22/2012	10.00	EA	Altosid briq. XR	1,000.00	SQ-F

Treatment History

05/22/2012	8.00	EA	Altosid briq. 30 day	800.00	SQ-F
05/22/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
05/22/2012	1.50	LB	Vectomax CG	0.30	AC
07/25/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
07/05/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F
08/07/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
08/29/2012	2.00	OZ	Bti granular-VectoBac G	1,080.00	SQ-F

Record: VS0000482 TRPA DRAINAGE AT WEST END AROUND BASEBALL FIELD.
Site Description: SNOW MELT POOLS, MARSH, MEADOW , DITCH.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/22/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
05/22/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F
05/22/2012	4.00	EA	Altosid briq. 30 day	400.00	SQ-F
04/10/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
04/20/2012	7.00	LB	Bti granular-VectoBac G	1.40	AC

Record: VS0000500 OSGOOD & WILDWOOD 1
Site Description: BMP.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/23/2012	3.00	EA	Altosid briq. 30 day	225.00	SQ-F
04/23/2012	4.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
04/04/2012	2.00	OZ	Bti granular-VectoBac G	1,200.00	SQ-F
04/04/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
06/29/2012	3.00	OZ	GB1111	250.00	SQ-F
08/28/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
08/28/2012	10.00	OZ	GB1111	1,000.00	SQ-F

Record: VS0000503 JUNE LOOP MARSH
Site Description: SNOW MELT POOLS , MARSH - BETWEEN SADDLE AND W2OODS AVE. 1468 POND IN BACK YARD
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/23/2012	2.00	EA	Altosid briq. 30 day	150.00	SQ-F

Record: VS0000505 SKI RUN & REGINA
Site Description: STORM DRAIN ,DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

04/23/2012	2.00	EA	Altosid briq. 30 day	100.00	SQ-F
07/02/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F
07/30/2012	0.25	OZ	GB1111	20.00	SQ-F
08/21/2012	0.25	OZ	GB1111	20.00	SQ-F

Record: VS0000510 CORNER PARK AVE. & LAKESHORE BLVD WELL CASING
Site Description: WELL CASING.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/25/2012	0.12	OZ	Bti granular-VectoBac G	25.00	SQ-F

Record: VS0000512 PINE AVE BMPS TO STATELINE AVE
Site Description: BMP DITCH ALONG EAST SIDE
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/25/2012	0.25	OZ	Bti granular-VectoBac G	30.00	SQ-F
08/17/2012	0.25	OZ	GB1111	25.00	SQ-F
09/26/2012	2.00	OZ	Bti granular-VectoBac G	400.00	SQ-F

Record: VS0000517 OSGOOD & WILDWOOD #2
Site Description: BMP.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/29/2012	2.00	OZ	Bti granular-VectoBac G	200.00	SQ-F
04/23/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F
04/04/2012	4.00	EA	Altosid briq. 30 day	400.00	SQ-F
05/31/2012	2.00	OZ	Bti granular-VectoBac G	800.00	SQ-F

Record: VS0000560 BODE & PIONEER BMP
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/30/2012	0.50	OZ	GB1111	300.00	SQ-F
07/30/2012	3.00	EA	Altosid briq. XR	300.00	SQ-F

Record: VS0000563 RALPH
Site Description: DITCH
Assigned To: EE0000084 - KAREN BENDER

Treatment History

Activity Date:			Treatment:	Treatment Area:	
07/31/2012	2.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
07/03/2012	2.00	OZ	Bti granular-VectoBac G	750.00	SQ-F
06/06/2012	2.00	OZ	Bti granular-VectoBac G	750.00	SQFT

Record: VS0000564 RALPH BMP
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
07/31/2012	1.50	OZ	GB1111	75.00	SQ-F

Record: VS0000565 MATHESON PUMP HOUSE
Site Description: DRAINAGE DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
08/01/2012	0.25	OZ	Bti granular-VectoBac G	60.00	SQ-F
10/05/2012	0.25	OZ	Bti granular-VectoBac G	60.00	SQ-F
09/05/2012	0.25	OZ	Bti granular-VectoBac G	60.00	SQ-F

Record: VS0000567 STEVENS #2 BEHIND #3841 TO PIONEER
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
09/05/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
10/05/2012	1.00	OZ	Bti granular-VectoBac G	400.00	SQ-F
07/19/2012	2.00	EA	Altosid briq. XR	150.00	SQ-F
07/05/2012	6.00	OZ	GB1111	600.00	SQ-F
07/05/2012	0.10	OZ	Bti granular-VectoBac G	50.00	SQ-F

Record: VS0000584 SAFEWAY PARKING LOT
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
08/01/2012	0.25	OZ	Bti granular-VectoBac G	40.00	SQ-F
06/06/2012	26.00	EA	Altosid briq. 30 day	2,600.00	SQFT

Treatment History

Record: VS0000587 COLD CREEK DRAINAGE TO BOTTOM OF HILL
Site Description: DRAINAGE DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/08/2012	1.00	OZ	Bti granular-VectoBac G	200.00	SQ-F

Record: VS0000588 PIONEER TRAIL BMP AT TROUT CREEK
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/08/2012	3.00	OZ	GB1111	300.00	SQ-F

Record: VS0000593 TAHOE PARADISE REC AREA LAKE BARON SO. END
Site Description: SNOW MELT, POOL, POND (STILL)
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/03/2012	10.00	LB	Vectomax CG	1.00	AC
06/22/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F

Record: VS0000594 UPPER TRUCKEE EAST SIDE FROM TRPA -HWY 50 BRIDGE
Site Description: SNOW MELT POOLS, DRAINS, RIVER SHRINKAGE
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/22/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/05/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F
07/05/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
08/06/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/25/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/18/2012	3.00	OZ	Bti granular-VectoBac G	1,620.00	SQ-F
05/02/2012	3.00	LB	Vectomax CG	0.60	AC
06/08/2012	1.50	LB	Bti granular-VectoBac G	0.30	AC
09/07/2012	1.00	OZ	Bti granular-VectoBac G	540.00	SQ-F

Record: VS0000600 SNOWDUMP SIGHT
Site Description: BMP DRAINAGE DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
09/25/2012	16.00	OZ	Bti granular-VectoBac G	4,000.00	SQ-F

Treatment History

Record: VS0000604 LEWIS & GLENWOOD
Site Description: SNOWMELT POOLS DRAINAGE
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/06/2012	0.05	OZ	Bti granular-VectoBac G	15.00	SQFT

Record: VS0000621 BARTON MEADOW @ LILLY AVE TO THE BEACH
Site Description: MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/19/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F
07/11/2012	10.00	LB	Bti granular-VectoBac G	1.00	AC
07/11/2012	20.00	LB	Bti granular-VectoBac G	4.00	AC
07/11/2012	7.00	LB	Bti granular-VectoBac G	1.50	AC

Record: VS0000623 E. ON TALLAC HISTORICAL PATH .4Mi S/SIDE - POOL
Site Description: POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/10/2012	14.00	EA	Altosid briq. XR	1,250.00	SQ-F

Record: VS0000626 MOTTOLE RD. SPRING CREEK TRACT MEADOW
Site Description: MEADOW MARCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/31/2012	4.50	OZ	GB1111	500.00	SQ-F
05/14/2012	0.33	GAL	GB1111	1,000.00	SQ-F

Record: VS0000627 POMO RD. SPRING CREEK TRACT POOLS
Site Description: POOLS, MARSH, MEADOW, DITCH, POOL PAST WATER TANKS AT TOP OF DIRT ROAD (BEYOND GATE)
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/14/2012	0.33	GAL	GB1111	1,000.00	SQ-F

Record: VS0000628 KIVA BEACH-PUMP STA & VISITOR'S CENTER ALONG PATH
Site Description: POOLS, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	

Treatment History

06/13/2012	0.50	OZ	GB1111	34.00	SQFT
06/12/2012	1.00	OZ	Bti granular-VectoBac G	545.00	SQFT

Record: VS0000630 USFS VISITOR CENTER MARSH/MDW & RIVER OVER FLOW
Site Description: * MARSH, MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
07/05/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC
07/25/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0000633 HWY #89 TAYLOR CREEK OVERFLOW BEHIND PUMP STATION
Site Description: * DITCH, MEADOW , MARSH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/24/2012	2.00	OZ	Bti granular-VectoBac G	16.00	SQ-F

Record: VS0000639 FALLEN LEAF RD. FREDRICK'S MEADOW
Site Description: MEADOW, MARSH, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/01/2012	3.00	OZ	Vectomax CG	1,575.00	SQ-F

Record: VS0000640 FALLEN LEAF RD 1/4MI PAST ANGORA RD LAKE TURN OFF
Site Description: POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/24/2012	0.10	OZ	GB1111	100.00	SQ-F

Record: VS0000645 STANFORD CAMP POOLS @ TOP BY WATER TREATMENT FAC
Site Description: POOLS. DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
06/08/2012	3.00	OZ	Bti granular-VectoBac G	1,750.00	SQ-F
05/01/2012	3.00	EA	Altosid briq. XR	2,000.00	SQ-F
07/19/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F

Treatment History

Record: VS0000646 LILLY LAKE RD. 1/2 MI TO LAKE FROM RAINBOW BRIDGE
Site Description: POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/24/2012	0.20	OZ	GB1111	1,000.00	SQ-F

Record: VS0000650 ANGORA RIDGE RD. MEADOW ON EAST SIDE (LEFT SIDE)
Site Description: * MEADOW, MARSH, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/21/2012	20.00	OZ	Bti granular-VectoBac G	5,040.00	SQ-F
04/22/2012	3.00	GAL	GB1111	2.50	AC
04/22/2012	12.00	LB	Bti granular-VectoBac G	2.50	AC

Record: VS0000651 ANGORA RIDGE RD-FROM MEADOW 1/2 MI TOWARD LOOKOUT
Site Description: DITCH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/21/2012	3.00	OZ	GB1111	1,500.00	SQ-F

Record: VS0000654 CATHEDRAL RD. 100 YRDS PAST SNOW PARK P-LOT ON R
Site Description: MEADOW, MARSH, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/03/2012	5.00	OZ	Vectomax CG	2,625.00	SQ-F
05/03/2012	2.00	EA	Altosid briq. 30 day	1,500.00	SQ-F

Record: VS0000656 CATHEDRAL RD. SNOW PARK EXIT 2ND MEADOW BOTH SIDES
Site Description: MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/24/2012	0.20	OZ	GB1111	100.00	SQ-F

Record: VS0000660 CATHEDRAL RD. TO OLD MILL THROUGH GREEN GATE
Site Description: MEADOW, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:	Treatment Area:

Treatment History

05/24/2012	2.00	EA	Altosid briq. XR	100.00	SQ-F

Record: VS0000670 BALDWIN BEACH MARSH AND POOLS ALONG BEACH
Site Description: MARSH, POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/30/2012	3.00	EA	Altosid briq. XR	300.00	SQ-F
07/25/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F

Record: VS0000673 CASCADE CREEK TRACT CASCADE LAKE SIDE
Site Description: DITCH, MEADOW
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/30/2012	6.00	OZ	Vectomax CG	3,100.00	SQ-F
04/30/2012	4.00	EA	Altosid briq. 30 day	3,100.00	SQ-F

Record: VS0000682 PANTHER LN. NEXT TO #696
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/18/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F
07/27/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
07/17/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
08/20/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
09/24/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000683 PANTHER LN. DRAINAGE ACROSS FROM #686 PANTHER
Site Description: DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
09/24/2012	3.00	EA	Altosid briq. 30 day	300.00	SQ-F
04/25/2012	5.00	OZ	Bti granular-VectoBac G	16,250.00	SQ-F

Record: VS0000684 GARDNER ST. & WENTWORTH LN. EMPTY LOT
Site Description: BMP, RET POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/18/2012	2.00	EA	Altosid briq. 30 day	200.00	SQ-F

Treatment History

07/17/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
07/27/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
06/29/2012	0.50	OZ	GB1111	50.00	SQ-F
06/29/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
09/24/2012	3.00	EA	Altosid briq. 30 day	300.00	SQ-F
08/30/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000686 GARDNER ST. - DRAINAGE DITCH NEXT TO & BEHIND #594
Site Description: BMP, DRAINAGE DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/25/2012	5.00	OZ	Bti granular-VectoBac G	16,250.00	SQ-F

Record: VS0000687 GARDNER ST. FOLLOW DITCH BEHIND 594 TO FALLEN TREE
Site Description: SNOW MELT POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/25/2012	5.00	OZ	Bti granular-VectoBac G	16,250.00	SQ-F

Record: VS0000690 GLORENE AVE. SWAMP NEXT TO ABANDONED HOUSE #928
Site Description: SWAMP, DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

07/27/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
07/16/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F

Record: VS0000694 HWY #89 (N SIDE) BMP ACROSS FROM 8TH ST- TO JAMES
Site Description: BMP, DRAINAGE DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/23/2012	10.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
05/23/2012	1.00	OZ	GB1111	1,000.00	SQ-F
08/24/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000695 JAMES AVE #823 DRAINAGE & BMP TO ELOISE
Site Description: DITCH, BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

08/24/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
09/19/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
05/23/2012	3.00	OZ	Vectomax CG	1,500.00	SQ-F
07/24/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F

Record: VS0000697 13TH ST & ELOISE RET POND 30YDS FROM DEAD END ON R
Site Description: RET POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/29/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
06/29/2012	0.50	OZ	GB1111	50.00	SQ-F
05/23/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
05/23/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F
04/20/2012	95.00	OZ	Vectomax CG	50,000.00	SQ-F
08/24/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000698 ELOISE & 5TH BY SIERRA PAC POWER CO. MEADOW
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

08/24/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0000701 MC DONALDS BMP/CATCH BASINS
Site Description: BMP DRAINAGE TOWARD
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

08/28/2012	1.75	OZ	GB1111	115.00	SQ-F
08/28/2012	6.00	EA	Altosid briq. 30 day	115.00	SQ-F
08/16/2012	1.00	OZ	GB1111	100.00	SQ-F
05/31/2012	2.00	OZ	Bti granular-VectoBac G	750.00	SQ-F

Record: VS0000702 FANTASY INN
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/31/2012	16.00	EA	Altosid briq. XR	1,700.00	SQ-F
08/28/2012	11.00	EA	Altosid briq. 30 day	1,000.00	SQ-F
08/28/2012	11.00	OZ	GB1111	1,000.00	SQ-F

Treatment History

Record: VS0000703 CHEVRON STATION
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/16/2012	1.00	OZ	Bti granular-VectoBac G	300.00	SQ-F
06/29/2012	2.00	OZ	GB1111	200.00	SQ-F

Record: VS0000704 1048 SKI RUN BLVD
Site Description: BMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/29/2012	5.00	OZ	Bti granular-VectoBac G	400.00	SQ-F
07/19/2012	2.00	OZ	Bti granular-VectoBac G	600.00	SQ-F

Record: VS0000708 ROGER & FIFTH ST. IN P-LOT
Site Description: * RET POND
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/27/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
06/29/2012	1.00	OZ	GB1111	100.00	SQ-F
06/29/2012	3.00	OZ	Bti granular-VectoBac G	1,500.00	SQ-F
07/02/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
06/22/2012	3.00	OZ	Bti granular-VectoBac G	1,635.00	SQFT
06/22/2012	1.00	OZ	GB1111	75.00	SQFT

Record: VS0000709 BEACHER BMP/catch basins
Site Description: BMP DRAINAGE TOWARD RIVER
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/07/2012	0.50	OZ	GB1111	30.00	SQ-F

Record: VS0000714 SPRINGWOOD DR. BEHIND HOUSES @ #2875
Site Description: MEADOW, RET PONDS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
04/24/2012	5.00	OZ	Bti liquid-VectoBac 12 AS	16,250.00	SQ-F
04/24/2012	1.50	OZ	Bti liquid-VectoBac 12 AS	4,100.00	SQ-F
05/07/2012	3.00	OZ	Bti liquid-VectoBac 12 AS	8,600.00	SQ-F

Treatment History

Record: VS0000715 TROUT CREEK WESTERN SIDES
Site Description: SNOWMELT POOLS MEADOWS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/01/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC
04/10/2012	0.50	OZ	Bti granular-VectoBac G	250.00	SQ-F
06/11/2012	0.25	OZ	Bti granular-VectoBac G	30.00	SQ-F
05/18/2012	0.50	OZ	Bti granular-VectoBac G	150.00	SQ-F
07/26/2012	0.25	OZ	Bti granular-VectoBac G	20.00	SQ-F
07/26/2012	0.25	OZ	GB1111	20.00	SQ-F

Record: VS0000717 COLUMBINE TRAIL
Site Description: TROUT CREEK POOLS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/10/2012	0.50	OZ	GB1111	40.00	SQ-F
05/21/2012	0.25	GAL	GB1111	1,000.00	SQ-F
04/10/2012	2.00	OZ	Vectomax CG	600.00	SQ-F

Record: VS0000723 DOVER & E. VENICE DR. DITCH @ END OF DOVER
Site Description: DRAINAGE DITCH
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/28/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
07/27/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
07/17/2012	1.50	OZ	Bti granular-VectoBac G	750.00	SQ-F
08/08/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
08/21/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
11/10/2012	15.00	EA	Altosid briq. XR	1,500.00	SQ-F

Record: VS0000729 GLORENE AVE N SIDE ACROSS FROM 928 TO HWY 89 & P/O
Site Description: DRAINAGE DITCH, SWAMP
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/20/2012	1.00	OZ	Bti granular-VectoBac G	500.00	SQ-F

Treatment History

Record: VS0000732 KICKAPOO ST.EAST OF UPPER TRUCKEE RD
Site Description: SNOW MELT POOLS DITCHES.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/02/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
06/05/2012	1.00	OZ	Bti granular-VectoBac G	550.00	SQFT

Record: VS0000738 DRAINAGE FROM FENCE TOWARD ASPEN SITE
Site Description: DRAINAGE DITCH FROM FENCED ARE ALONG WILLOWS TOWARD ASPEN
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/02/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F
04/16/2012	2.00	LB	Bti granular-VectoBac G	0.30	AC
04/16/2012	6.00	EA	Altosid briq. 30 day	600.00	SQ-F
07/20/2012	3.00	OZ	GB1111	275.00	SQ-F
07/20/2012	3.00	EA	Altosid briq. 30 day	275.00	SQ-F
09/27/2012	0.25	OZ	Bti granular-VectoBac G	60.00	SQ-F

Record: VS0000740 AIRPORT FENCE NORTH TOWARD LEDBETTERS FENCE
Site Description: POOLS AND DRAINAGE ALONG TREES AND WILLOWS
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/20/2012	0.50	OZ	GB1111	40.00	SQ-F
04/16/2012	11.00	LB	Bti granular-VectoBac G	2.00	AC
04/19/2012	19.00	EA	Altosid briq. XR	2,000.00	SQ-F
05/07/2012	12.00	LB	Bti granular-VectoBac G	1.50	AC
05/22/2012	2.00	OZ	Bti granular-VectoBac G	500.00	SQ-F
05/22/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F

Record: VS0000752 ZUNI ST. WS UT RD FOUND AND DRAINAGE
Site Description:
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/28/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQ-F
06/14/2012	0.50	OZ	Bti granular-VectoBac G	270.00	SQFT

Record: VS0000781 REGINA TO NEEDLE PEAK
Site Description: DITCH' MEADOW
Assigned To: EE0000084 - KAREN BENDER

Treatment History

Activity Date:			Treatment:	Treatment Area:	
06/06/2012	0.20	OZ	Bti granular-VectoBac G	75.00	SQFT

Record: VS0000987 LTGC EAST- SOURCES, HOLES 9-12, AND 18
Site Description: UPPER TRUCKEE RIVER MARGINS, SNOW MELT POOLS, AG DITCHES
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
04/09/2012	3.00	EA	Altosid briq. XR	300.00	SQ-F

Record: VS0000997 Tahoma 1st Ave and Fir Street.
Site Description: Ditch,snowmelt pools.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/30/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0000999 Tahoma. HWY 89 County line to Waters Edge South.
Site Description: Ditches, snow melt pools.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
05/04/2012	8.00	EA	Altosid briq. XR	800.00	SQ-F

Record: VS0001000 Tahoma. Norfolk Woods Lodge. 6941 HWY 89 at Pine St.
Site Description: Swimming pool. Abandoned.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
04/30/2012	5.00	EA	Altosid briq. XR	500.00	SQFT

Record: VS0001002 Tahoma.Swimming pool Tahoe Lake Cottages. 7030 Hwy 89.
Site Description: Swimming pool.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:			Treatment:	Treatment Area:	
04/30/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F

Record: VS0001007 C.S.P. Sugar Pine Point.
Site Description: Day use areas. Lake front pools.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:	Treatment Area:

Treatment History

06/21/2012	0.50	OZ	Bti granular-VectoBac G	150.00	SQ-F
07/18/2012	0.50	OZ	Bti granular-VectoBac G	150.00	SQ-F
08/16/2012	1.00	EA	Altosid briq. 30 day	20.00	SQ-F

Record: VS0001008 C.S.P. Vikingsholm. Eagle Creek Drainage at HWY 89.
Site Description:
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/20/2012	0.25	OZ	Bti granular-VectoBac G	30.00	SQ-F

Record: VS0001010 Meek's Bay Meadow.
Site Description: Flood plane marsh,swamp and pools.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/08/2012	10.00	LB	Bti granular-VectoBac G	1.70	AC

Record: VS0001011 Rubicon Bay areas.
Site Description: Draniages,pond,lake front pools
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/09/2012	4.00	EA	Altosid briq. XR	400.00	SQ-F
08/16/2012	9.00	EA	Altosid briq. 30 day	180.00	SQ-F
08/16/2012	4.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F

Record: VS0001012 Paraidse Flats.Two Ring RD.
Site Description: Meadow and dranage ditch along HWY 89. Catch basin on North Lane across from 8551. BMP/ catch basins West side
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/08/2012	6.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F

Record: VS0001014 Meeks Bay Stables. Across HWY 89 from fire station.
Site Description: Pools beside road. Creek and corrals.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/09/2012	4.00	OZ	Bti liquid-VectoBac 12 AS	1.00	AC
05/09/2012	2.00	LB	Bti granular-VectoBac G	1.00	AC

Treatment History

Record: VS0001017 C.S.P.General Creek both sides of HWY 89.
Site Description: Both sides of road. Ditches, snow melt pools.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/09/2012	4.00	OZ	Bti liquid-VectoBac 12 AS	0.50	AC
05/09/2012	1.00	LB	Bti granular-VectoBac G	0.50	AC
05/09/2012	1.00	EA	Altosid briq. 30 day	0.50	AC
06/21/2012	3.00	OZ	GB1111	200.00	SQ-F
06/21/2012	0.50	OZ	Bti granular-VectoBac G	100.00	SQ-F
07/18/2012	1.00	OZ	Bti granular-VectoBac G	300.00	SQ-F

Record: VS0001018 C.S.P. D.L. Bliss Ditches along HWY 89.
Site Description: Drainage and pools at HWY89
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/18/2012	2.00	OZ	GB1111	150.00	SQ-F
05/04/2012	8.00	EA	Altosid briq. XR	800.00	SQFT
08/16/2012	12.00	OZ	Bti granular-VectoBac G	3,000.00	SQ-F
08/16/2012	16.00	EA	Altosid briq. 30 day	320.00	SQ-F
10/18/2012	7.00	OZ	GB1111	500.00	SQ-F

Record: VS0001022 Tahoma. South end of 10th Ave. Catch basin.
Site Description: Ditches, snow melt pools. Catch basin.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/18/2012	0.25	OZ	GB1111	20.00	SQ-F
07/18/2012	1.00	EA	Altosid briq. 30 day	20.00	SQ-F

Record: VS0001027 Tahoma.End of Hilo Off Rubicon AVE.
Site Description: Ditches, Pools
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/18/2012	1.00	OZ	GB1111	50.00	SQ-F
07/18/2012	2.00	EA	Altosid briq. XR	50.00	SQ-F

Record: VS0001032 Tahoma.8th andOak Street.
Site Description: Drainage ditch.
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:	Treatment Area:

Treatment History

07/18/2012	2.00	EA	Altosid briq. 30 day	40.00	SQ-F

Record: VS0001033 Tahoma.7th Ave. At 7016 and 7021.
Site Description: Drainage ditches, pools.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/30/2012	1.00	EA	Altosid briq. XR	100.00	CBSD

Record: VS0001038 Tahoma.6th Ave and Elm. BMP holding pond South side.
Site Description: Holding pond,ditches
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/30/2012	10.00	EA	Altosid briq. XR	3,000.00	SQ-F

Record: VS0001043 Tahoma.4th and Hazle.
Site Description: Drainage and Culvert,pool.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

04/30/2012	2.00	LB	Bti granular-VectoBac G	0.25	ACRE

Record: VS0001048 HWY 89 SOUTH GRASS LAKE E. TO COUNTY LINE
Site Description: Cal trans culverts and catch basins, drainage areas
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

06/08/2012	0.50	LB	Bti granular-VectoBac G	0.10	AC

Record: VS0001063 JICARILLA AT 1993
Site Description: BOTH SIDES BEFORE 1993, CONNECTED BY DRAIN UNDER STREET.
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

05/01/2012	3.00	OZ	Bti granular-VectoBac G	1,200.00	SQ-F
07/05/2012	0.25	OZ	GB1111	25.00	SQ-F
07/05/2012	1.00	EA	Altosid briq. 30 day	25.00	SQ-F

Record: VS0001064 MEADOW AT SILVER TIP
Site Description: MEADOW BEHIND SILVER TIP & TRUCKEE ST. BEHIND GROCERY OUTLET
Assigned To: EE0000084 - KAREN BENDER

Activity Date: **Treatment:** **Treatment Area:**

Treatment History

05/02/2012	0.50	OZ	Bti granular-VectoBac G	200.00	SQ-F

Record: VS0001069 SAXON CREEK TO PIONEER
Site Description:
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/14/2012	1.00	OZ	GB1111	100.00	SQ-F
05/01/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0001070 SITKA & APACHE
Site Description: NORTH EAST CORNER, DRAINAGE POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/03/2012	5.00	EA	Altosid briq. XR	500.00	SQ-F

Record: VS0001071 902 SUNSET DRIVE
Site Description: PRIVATE SWIMMING POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/18/2012	4.00	EA	Altosid briq. 30 day	500.00	SQ-F

Record: VS0001072 STHS BMP - FOOTBALL FIELD
Site Description: HOLDING POND AT NORTH END OF END ZONE AT FOOTBALL FIELD
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/07/2012	2.00	OZ	GB1111	226.00	SQ-F
06/07/2012	2.00	OZ	Bti granular-VectoBac G	1,090.00	SQ-F
06/01/2012	1.00	EA	Altosid briq. XR	100.00	SQ-F
08/20/2012	2.00	OZ	Bti granular-VectoBac G	1,000.00	SQ-F

Record: VS0001073 TAHOE MTN RD - EAST SIDE @ FOREST MTN RD
Site Description: DRAINAGE DITCH FROM FOREST MTN ROAD TO IRON MTN ROAD
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
05/29/2012	7.00	EA	Altosid briq. XR	700.00	SQ-F
05/29/2012	1.00	OZ	Bti granular-VectoBac G	550.00	SQ-F
06/26/2012	0.20	OZ	Bti granular-VectoBac G	100.00	SQ-F

Treatment History

07/27/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Record: VS0001077 734 COLORADO COURT
Site Description: 2 FISH PONDS IN BACK YARD
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/12/2012	0.25	OZ	Bti granular-VectoBac G	136.25	SQFT
06/12/2012	2.00	EA	Altosid briq. XR	200.00	SQFT

Record: VS0001078 350 BEACH DRIVE
Site Description: ABANDONED FISH POND IN FRONT OF HOUSE
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/31/2012	0.10	OZ	Bti granular-VectoBac G	50.00	SQ-F
07/18/2012	0.10	OZ	Bti granular-VectoBac G	50.00	SQ-F
06/18/2012	0.20	OZ	Bti granular-VectoBac G	19.00	SQFT
08/21/2012	0.25	OZ	Bti granular-VectoBac G	100.00	SQ-F
09/11/2012	1.00	EA	Altosid briq. 30 day	100.00	SQ-F

Record: VS0001079 CEDAR LODGE
Site Description: SWIMMING POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/25/2012	6.00	OZ	GB1111	600.00	SQ-F
07/25/2012	4.00	OZ	GB1111	400.00	SQ-F
07/25/2012	7.00	EA	Altosid briq. 30 day	400.00	SQ-F

Record: VS0001080 ECONOMY INN
Site Description: SWIMMING POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/25/2012	3.00	OZ	GB1111	300.00	SQ-F
06/25/2012	3.00	EA	Altosid briq. XR	300.00	SQ-F

Record: VS0001081 CONVENTION CENTER PROJECT
Site Description: THE HOLE AT STATELINE
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	

Treatment History

06/25/2012	20.00	EA	Altosid briq. XR	1,800.00	SQ-F

Record: VS0001082 BEVERLY LODGE
Site Description: SWIMMING POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/25/2012	6.00	EA	Altosid briq. 30 day	500.00	SQ-F

Record: VS0001083 TAHOE CHALET INN
Site Description: SWIMMING POOL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/25/2012	2.00	EA	Altosid briq. XR	200.00	SQ-F

Record: VS0001085 PONCA STREET
Site Description: DRAINAGE DITCH AT 1633 PONCA
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
06/26/2012	6.00	EA	Altosid briq. XR	450.00	SQ-F

Record: VS0001086 TROUT CREEK @ PIONEER TRL
Site Description: PIONEER TRAIL TO OLD RAILWAY TRAIL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
07/13/2012	4.00	OZ	Bti granular-VectoBac G	1,650.00	SQ-F
08/27/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F
10/05/2012	4.00	OZ	Bti granular-VectoBac G	2,000.00	SQ-F

Record: VS0001088 COLD CREEK HATCHERY
Site Description: BELOW 2341 SIERRA HOUSE TRAIL
Assigned To: EE0000084 - KAREN BENDER

Activity Date:	Treatment:			Treatment Area:	
08/30/2012	3.00	EA	Altosid briq. 30 day	300.00	SQ-F
08/02/2012	3.00	OZ	GB1111	240.00	SQ-F
08/02/2012	0.25	OZ	Bti granular-VectoBac G	40.00	SQ-F

Record: VS0001089 2881 SOUTH UPPER TRUCKEE
Site Description: CHANNEL BEHIND HOUSE
Assigned To: EE0000084 - KAREN BENDER

Treatment History

Activity Date:	Treatment:			Treatment Area:	
08/06/2012	1.00	LB	Bti granular-VectoBac G	0.20	AC

Application Info						Monitoring Information				Weather Conditions		
Date of Application	Location	Type of Water Body	Description	Type of pesticide	Product Name	Time of monitoring	Monitoring Date	Time	Name(s) of personnel	Overhead Conditions	Weather conditions	Water Color
4/19/2012	VS174	Drainage ditch				Background	4/19/2012	3:00 PM	Sielsch	Sunny/clear		Clear
4/19/2012	VS174			Larvicide	Altosid XR	Event	4/19/2012	3:10 PM	Sielsch	Sunny/clear		Clear
4/19/2012	VS174					Post-event	7/13/2012	N/A	Sielsch	N/A		N/A
4/20/2012	VS348	Snow melt pools				Background	4/20/2012	10:25 AM	Sunzeri	Sunny/clear		Murky
4/20/2012	VS348			Larvicide	Altosid XR	Event	4/20/2012	10:35 AM	Sunzeri	Sunny/clear		Murky
4/20/2012	VS348					Post-event	7/13/2012	N/A	Sunzeri	N/A		N/A
4/20/2012	VS166	Drainage ditch				Background	4/20/2012	11:00 AM	Sielsch	Sunny/clear		Mild cloudy
4/20/2012	VS166			Larvicide	Altosid XR	Event	4/20/2012	11:10 AM	Sielsch	Sunny/clear		Mild cloudy
4/20/2012	VS166					Post-event	7/13/2012	N/A	Sielsch	N/A		N/A
4/20/2012	VS450	Ditch/overflow pond				Background	4/20/2012	1:30 PM	Youngs	Sunny/clear	65 F	Clear
4/20/2012	VS450			Larvicide	Vectobac G	Event	4/20/2012	2:00 PM	Youngs	Sunny/clear	65 F	Clear
4/20/2012	VS450					Post-event	4/23/2012	11:00 AM	Youngs	Partly cloudy	65 F	Clear
4/23/2012	VS456	River channel				Background	4/23/2012	10:30 AM	Youngs	Partly cloudy	65 F	Brown
4/23/2012	VS456			Larvicide	Vectomax CG	Event	4/23/2012	10:40 AM	Youngs	Partly cloudy	65 F	Brown
4/23/2012	VS456					Post-event	4/25/2012	11:00 AM	Youngs	Light rain		Brown
4/23/2012	VS124	Snow melt				Background	4/23/2012	11:45 AM	Sielsch	Sunny/clear		Brown
4/23/2012	VS124			Larvicide	Vectomax CG	Event	4/23/2012	12:10 PM	Sielsch	Sunny/clear		Brown
4/23/2012	VS124					Post-event	4/27/2012	1:00 PM	Sielsch	Sunny/clear		Brown
4/24/2012	VS339	Street ditch				Background	04/23/12	10:00 AM	Sunzeri	Sunny/clear		Murky
4/25/2012	VS339			Larvicide	Vectobac G	Event	04/23/12	10:10 AM	Sunzeri	Sunny/clear		Murky
4/26/2012	VS339					Post-event	06/22/12	9:00 AM	Sunzeri	Sunny/clear		Murky
4/24/2012	VS259	Marsh				Background	4/24/2012	9:00 AM	Sunzeri	Sunny/clear		Clear
4/24/2012	VS259			Larvicide	Vectobac 12 AS	Event	4/24/2012	9:15 AM	Sunzeri	Sunny/clear		Clear
4/24/2012	VS259					Post-event	5/1/2012	9:00 AM	Sunzeri	Sunny/clear		Clear
4/25/2012	VS686	Snow melt pools				Background	4/25/2012	2:30 PM	Sunzeri	Rain		Clear
4/25/2012	VS686			Larvicide	Vectobac G	Event	4/25/2012	2:45 PM	Sunzeri	Rain		Clear
4/25/2012	VS686					Post-event	5/2/2012	2:00 PM	Sunzeri	Sunny/clear		Clear
4/27/2012	VS352	Ditch				Background	4/27/2012	2:30 PM	Sunzeri	Sunny/clear		Clear
4/27/2012	VS352			Larvicide	Vectomax CG	Event	4/27/2012	2:45 PM	Sunzeri	Sunny/clear		Clear
4/27/2012	VS352					Post-event	5/31/2012	2:00 PM	Sunzeri	Sunny/clear		Clear
4/27/2012	VS139	Pond				Background	4/27/2012	10:50 AM	Vieyra	Sunny/clear		Brown
4/27/2012	VS139			Larvicide	Vectobac G	Event	4/27/2012	10:55 AM	Vieyra	Sunny/clear		Brown
4/27/2012	VS139					Post-event	5/1/2012	1:00 PM	Vieyra	Sunny/clear		Brown
4/30/2012	VS208	Pasture				Background	4/30/2012	11:00 AM	Youngs	Cloudy	60 F	Brown
4/30/2012	VS208			Larvicide	Vectomax CG	Event	4/30/2012	11:30 AM	Youngs	Cloudy	60 F	Brown
4/30/2012	VS208					Post-event	5/2/2012	10:00 AM	Youngs	Cloudy	65 F	Brown
4/30/2012	VS673	Meadow				Background	4/30/2012	10:00 AM	Sunzeri	Cloudy	65 F	Clear
4/30/2012	VS673			Larvicide	Vectomax CG	Event	4/30/2012	10:15 AM	Sunzeri	Cloudy	65 F	Clear
4/30/2012	VS673					Post-event	5/14/2012	10:45 AM	Sunzeri	Sunny/clear		Clear
5/1/2012	VS639	Meadow				Background	5/1/2012	12:00 PM	Sunzeri	Sunny/clear		Murky
5/1/2012	VS639			Larvicide	Vectomax CG	Event	5/1/2012	12:15 PM	Sunzeri	Sunny/clear		Murky
5/1/2012	VS639					Post-event	5/8/2012	1:00 PM	Sunzeri	Sunny/clear		Murky
5/1/2012	VS715	Snow melt pool				Background	5/1/2012	11:45 AM	Sielsch	Sunny/clear		Brown
5/1/2012	VS715			Larvicide	Vectobac G	Event	5/1/2012	11:55 AM	Sielsch	Sunny/clear		Brown
5/1/2012	VS715					Post-event	5/4/2012	9:40 AM	Sielsch	Sunny/clear		Brown
5/2/2012	VS368	Snow melt pool				Background	5/2/2012	12:45 PM	Sunzeri	Sunny/clear		Murky
5/2/2012	VS368			Larvicide	Vectobac G	Event	5/2/2012	1:00 PM	Sunzeri	Sunny/clear		Murky
5/2/2012	VS368					Post-event	6/5/2012	1:15 PM	Vieyra	Sunny/clear		Murky
5/3/2012	VS654	Marsh				Background	5/3/2012	9:30 AM	Sunzeri	Sunny/clear	Windy	Murky

5/3/2012	VS654		Larvicide	Vectomax CG	Event	5/3/2012	9:45 AM	Sunzeri	Sunny/clear	Windy	Murky
5/3/2012	VS654				Post-event	5/10/2012	2:30 PM	Sunzeri	Sunny/clear		Murky
5/3/2012	VS180	Snow melt pool			Background	5/3/2012	10:00 AM	Sielsch	Partly cloudy		Clear
5/3/2012	VS180		Larvicide	Vectobac G	Event	5/3/2012	10:05 AM	Sielsch	Partly cloudy		Clear
5/3/2012	VS180				Post-event	5/8/2012	4:00 PM	Sielsch	Sunny/clear		Dry
5/3/2012	VS593	Lake Baron			Background	5/3/2012	1:00 PM	Youngs	Partly cloudy		Brown
5/3/2012	VS593		Larvicide	Vectomax CG	Event	5/3/2012	1:30 PM	Youngs	Partly cloudy		Brown
5/3/2012	VS593				Post-event	5/7/2012	1:00 PM	Youngs	Sunny/clear		Brown
5/7/2012	VS235	Snow melt ponds			Background	5/7/2012	11:15 AM	Vieyra	Sunny/clear		Brown
5/7/2012	VS235		Larvicide	Vectobac G	Event	5/7/2012	11:30 AM	Vieyra	Sunny/clear		Brown
5/7/2012	VS235				Post-event	5/11/2012	3:15 PM	Vieyra	Sunny/clear		Brown
5/7/2012	VS190	River channel			Background	5/7/2012	11:00 AM	Youngs	Sunny/clear	60 F	Brown
5/7/2012	VS190		Larvicide	Vectomax CG	Event	5/7/2012	11:30 AM	Youngs	Sunny/clear	60 F	Brown
5/7/2012	VS190				Post-event	5/9/2012	11:00 AM	Youngs	Sunny/clear	70 F	Brown
5/7/2012	VS259	Marsh			Background	5/7/2012	10:00 AM	Sunzeri	Sunny/clear		Murky
5/7/2012	VS259		Larvicide	Vectobac 12 AS	Event	5/7/2012	10:15 AM	Sunzeri	Sunny/clear		Murky
5/7/2012	VS259				Post-event	5/14/2012	4:00 PM	Sunzeri	Partly cloudy		Murky
5/8/2012	VS263	Meadow			Background	5/8/2012	1:30 PM	Sunzeri	Sunny/clear		Brown
5/8/2012	VS263		Larvicide	Vectobac G	Event	5/8/2012	1:45 PM	Sunzeri	Sunny/clear		Brown
5/8/2012	VS263				Post-event	5/30/2012	10:00 AM	Sunzeri	Sunny/clear		Brown
5/9/2012	VS268	Marsh			Background	5/9/2012	9:00 AM	Sunzeri	Sunny/clear		Brown
5/9/2012	VS268		Larvicide	Vectobac G	Event	5/9/2012	9:15 AM	Sunzeri	Sunny/clear		Brown
5/9/2012	VS268				Post-event	5/31/2012	10:00 AM	Sunzeri	Sunny/clear		Brown
5/10/2012	VS305	Catch basin			Background	5/10/2012	11:00 AM	Tekulve	Sunny/clear		Brown
5/10/2012	VS305		Larvicide	Altosid XR	Event	5/10/2012	11:15 AM	Tekulve	Sunny/clear		Brown
5/10/2012	VS305				Post-event	7/13/2012	N/A	Tekulve	N/A		N/A
5/10/2012	VS350	Pump station			Background	5/10/2012	1:00 PM	Tekulve	Sunny/clear		Clear
5/10/2012	VS350		Larvicide	Vectobac G	Event	5/10/2012	1:15 PM	Tekulve	Sunny/clear		Clear
5/10/2012	VS350				Post-event	5/30/2012	9:00 AM	Tekulve	Sunny/clear		Clear
5/11/2012	VS340	Marsh			Background	5/11/2012	11:00 AM	Sunzeri	Sunny/clear		Brown
5/11/2012	VS340		Larvicide	Vectobac G	Event	5/11/2012	11:15 AM	Sunzeri	Sunny/clear		Brown
5/11/2012	VS340				Post-event	5/14/2012	2:00 PM	Sunzeri	Sunny/clear		Brown
5/11/2012	VS348	Marsh			Background	5/11/2012	10:00 AM	Sunzeri	Sunny/clear		Brown
5/11/2012	VS348		Larvicide	Golden Bear 1111	Event	5/11/2012	10:15 AM	Sunzeri	Sunny/clear		Brown
5/11/2012	VS348				Post-event	5/31/2012	3:00 PM	Sunzeri	Sunny/clear		Brown
5/14/2012	VS280	Ditch pond			Background	5/14/2012	2:30 PM	Youngs	Partly cloudy		Brown
5/14/2012	VS280		Larvicide	Vectobac G	Event	5/14/2012	2:45 PM	Youngs	Partly cloudy		Brown
5/14/2012	VS280				Post-event	5/16/2012	2:00 PM	Youngs	Sunny/clear		Brown
5/17/2012	VS435	Grassy swamp			Background	5/17/2012	11:30 AM	Tekulve	Partly cloudy	65 F, windy	Brown
5/17/2012	VS435		Larvicide	Vectomax CG	Event	5/17/2012	11:45 AM	Tekulve	Partly cloudy	65 F, windy	Brown
5/17/2012	VS435				Post-event	6/5/2012	11:00 AM	Tekulve	Sunny/clear		Brown
5/18/2012	VS715	Snow melt pool			Background	5/18/2012	9:50 AM	Sielsch	Sunny/clear		Clear
5/18/2012	VS715		Larvicide	Vectobac G	Event	5/18/2012	10:00 AM	Sielsch	Sunny/clear		Clear
5/18/2012	VS715				Post-event	5/21/2012	11:45 AM	Sielsch	Cloudy		Clear
5/18/2012	VS349	Catch basins			Background	5/18/2012	10:00 AM	Sunzeri	Sunny/clear	Windy	Clear
5/18/2012	VS349		Larvicide	Altosid 30 day	Event	5/18/2012	10:10 AM	Sunzeri	Sunny/clear	Windy	Clear
5/18/2012	VS349				Post-event	6/18/2012	10:00 AM	Sunzeri	Sunny/clear		Clear
5/21/2012	VS650	Marsh			Background	5/21/2012	2:00 PM	Sunzeri	Cloudy		Brown
5/21/2012	VS650		Larvicide	Vectobac G	Event	5/21/2012	2:15 PM	Sunzeri	Cloudy		Brown
5/21/2012	VS650				Post-event	5/31/2012	10:00 AM	Sunzeri	Sunny/clear		Brown
5/21/2012	VS717	Marsh			Background	5/21/2012	11:15 AM	Sielsch	Cloudy		Clear
5/21/2012	VS717		Larvicide	Golden Bear 1111	Event	5/21/2012	11:15 AM	Sielsch	Cloudy		Clear
5/21/2012	VS717				Post-event	5/25/2012	12:00 PM	Sielsch	Cloudy		Clear

5/22/2012	VS650	Marsh			Background	5/22/2012	9:30 AM	Sunzeri	Sunny/clear		Clear
5/22/2012	VS650		Larvicide	Vect G & GB1111	Event	5/22/2012	9:45 AM	Sunzeri	Sunny/clear		Clear
5/22/2012	VS650				Post-event	5/31/2012	10:00 AM	Sunzeri	Sunny/clear		Clear
5/23/2012	VS352	Swamp			Background	5/23/2012	10:00 AM	Sunzeri	Sunny/clear		Green
5/23/2012	VS352		Larvicide	Vectomax CG	Event	5/23/2012	10:15 AM	Sunzeri	Sunny/clear		Green
5/23/2012	VS352				Post-event	5/31/2012	10:00 AM	Sunzeri	Sunny/clear		Green
5/23/2012	VS223	Old River Channel			Background	5/23/2012	1:00 PM	Youngs	Sunny/clear	65 F	Brown
5/23/2012	VS223		Larvicide	Vectomax CG	Event	5/23/2012	1:15 PM	Youngs	Sunny/clear	65 F	Brown
5/23/2012	VS223				Post-event	5/25/2012	11:00 AM	Youngs	Cloudy	Light snow	Brown
5/23/2012	VS478	Creek drainage			Background	5/23/2012	10:15 AM	Tekulve	Sunny/clear	65 F	Brown
5/23/2012	VS478		Larvicide	Altosid 30 day	Event	5/23/2012	10:30 AM	Tekulve	Sunny/clear	65 F	Brown
5/23/2012	VS478				Post-event	6/25/2012	8:45 AM	Tekulve	Sunny/clear		Brown
5/24/2012	VS225	Old River Channel			Background	5/24/2012	2:00 PM	Youngs	Sunny/clear	Windy	Brown
5/24/2012	VS225		Larvicide	Vectobac G	Event	5/25/2012	2:15 PM	Youngs	Sunny/clear	Windy	Brown
5/24/2012	VS225				Post-event	5/29/2012	3:30 PM	Youngs	Sunny/clear	70 F	Brown
5/29/2012	VS214	Ditch			Background	5/29/2012	11:55 AM	Youngs	Sunny/clear	65 F	Clear
5/29/2012	VS214		Larvicide	Vectomax CG	Event	5/29/2012	2:00 PM	Youngs	Sunny/clear	65 F	Clear
5/29/2012	VS214				Post-event	5/31/2012	2:00 PM	Youngs	Sunny/clear	75 F	Clear
5/24/2012	VS640	Snow melt pools			Background	5/24/2012	9:45 AM	Sunzeri	Sunny/clear		Clear
5/24/2012	VS640		Larvicide	Golden Bear 1111	Event	5/24/2012	9:55 AM	Sunzeri	Sunny/clear		Clear
5/24/2012	VS640				Post-event	5/31/2012	3:00 PM	Sunzeri	Sunny/clear		Clear
5/29/2012	VS179	Drainage ditch			Background	5/29/2012	11:00 AM	Sielsch	Sunny/clear		Brown
5/29/2012	VS179		Larvicide	Altosid 30 day	Event	5/29/2012	11;00 AM	Sielsch	Sunny/clear		Brown
5/29/2012	VS179				Post-event	7/2/2012	10:00 AM	Sielsch	Sunny/clear		Dry
5/31/2012	VS352	Meadow			Background	5/31/2012	10:00 AM	Sunzeri	Sunny/clear		Brown
5/31/2012	VS352		Larvicide	Vectobac G	Event	5/31/2012	10:15 AM	Sunzeri	Sunny/clear		Brown
5/31/2012	VS352				Post-event	6/3/2012	3:00 PM	Sunzeri	Sunny/clear		Brown
5/31/2012	VS447	Drainage ditch			Background	5/31/2012	10:40 AM	Tekulve	Sunny/clear	70 F	Brown/Orange
5/31/2012	VS447		Larvicide	Vectobac G	Event	5/31/2012	10:50 AM	Tekulve	Sunny/clear	70 F	Brown/Orange
5/31/2012	VS447				Post-event	6/8/2012	10:00 AM	Tekulve	Sunny/clear	45 F	Brown/Orange
5/31/2012	VS701	Catch basin			Background	5/31/2012	11:15 AM	Crenshaw	Sunny/clear		Clear
5/31/2012	VS701		Larvicide	Vectobac G	Event	5/31/2012	11:30 AM	Crenshaw	Sunny/clear		Clear
5/31/2012	VS701				Post-event	6/4/2012	11:15 AM	Crenshaw	Sunny/clear		Clear
6/5/2012	VS337	Marsh			Background	6/5/2012	12:15 PM	Sunzeri	Sunny/clear		Murky
6/5/2012	VS337		Larvicide	Vectobac G	Event	6/5/2012	12:30 PM	Sunzeri	Sunny/clear		Murky
6/5/2012	VS337				Post-event	6/21/2012	3:00 PM	Sunzeri	Sunny/clear		Murky
6/6/2012	VS584	Catch basin			Background	6/6/2012	10:40 AM	Crenshaw	Sunny/clear		Brown
6/6/2012	VS584		Larvicide	Altosid 30 day	Event	6/6/2012	10:50 AM	Crenshaw	Sunny/clear	Cool	Brown
6/6/2012	VS584				Post-event	7/9/2012	4:00 PM	Crenshaw	Sunny/clear		Dry
6/7/2012	VS1072	Ponds			Background	6/7/2012	3:00 PM	Sunzeri	Sunny/clear		Brown
6/7/2012	VS1072		Larvicide	Golden Bear 1111	Event	6/7/2012	3:15 PM	Sunzeri	Sunny/clear		Brown
6/7/2012	VS1072				Post-event	6/13/2012	3:00 PM	Sunzeri	Sunny/clear		Brown
6/8/2012	VS587	BMP catch basin			Background	6/8/2012	1:50 PM	Sielsch	Sunny/clear	Warm,Windy	Brown
6/8/2012	VS587		Larvicide	Vectobac G	Event	6/8/2012	2:05 PM	Sielsch	Sunny/clear	Warm,Windy	Brown
6/8/2012	VS587				Post-event	6/14/2012	9:30 AM	Sielsch	Sunny/clear	Cool	Brown
6/8/2012	VS200	Old River Channel			Background	6/8/2012	10:30 AM	Youngs	Sunny/clear	65 F, windy	Brown
6/8/2012	VS200		Larvicide	Vectobac G	Event	6/8/2012	10:45 AM	Youngs	Sunny/clear	65 F, windy	Brown
6/8/2012	VS200				Post-event	6/11/2012	1:30 PM	Youngs	Sunny/clear	70 F	Brown
6/8/2012	VS645	Snow melt pools			Background	6/8/2012	9:30 AM	Sunzeri	Sunny/clear		Brown
6/8/2012	VS645		Larvicide	Vectobac G	Event	6/8/2012	9:45 AM	Sunzeri	Sunny/clear		Brown
6/8/2012	VS645				Post-event	6/15/2012	10:30 AM	Sunzeri	Sunny/clear		Brown
6/12/2012	VS734	Fish pond			Background	6/12/2012	9:20 AM	Sunzeri	Sunny/clear		Clear
6/12/2012	VS734		Larvicide	Altosid XR	Event	6/12/2012	9:40 AM	Sunzeri	Sunny/clear		Clear

6/12/2012	VS734				Post-event	7/13/2012	9:00 AM	Sunzeri	N/A		N/A
6/13/2012	VS249	Drainage ditch			Background	6/13/2012	3:00 PM	Tekulve	Sunny/clear	75 F	Brown
6/13/2012	VS249		Larvicide	Vectobac G	Event	6/13/2012	3:15 PM	Tekulve	Sunny/clear	75 F	Brown
6/13/2012	VS249				Post-event	6/18/2012	9:45 AM	Tekulve	Sunny/clear	75 F, windy	Brown
6/13/2012	VS144	Drainage ditch			Background	6/14/2012	3:15 PM	Sielsch	Partly cloudy	Warm	Light Brown
6/13/2012	VS144		Larvicide	Altosid 30 day	Event	6/14/2012	3:30 PM	Sielsch	Partly cloudy		Light Brown
6/13/2012	VS144				Post-event	7/13/2012	N/A	N/A	N/A		N/A
6/14/2012	VS277	Old River channel			Background	6/15/2012	1:30 PM	Youngs	Sunny/clear	75 F	Brown
6/14/2012	VS277		Larvicide	Vectobac G	Event	6/15/2012	1:45 PM	Youngs	Sunny/clear	75 F	Brown
6/14/2012	VS277				Post-event	6/18/2012	11:00 AM	Youngs	Sunny/clear	70 F	Brown
6/18/2012	VS1078	Home fish pond			Background	6/18/2012	3:00 PM	Sunzeri	Sunny/clear	Windy	Clear
6/18/2012	VS1078		Larvicide	Vectobac G	Event	6/18/2012	3:15 PM	Sunzeri	Sunny/clear	Windy	Clear
6/18/2012	VS1078				Post-event	6/25/2012	9:00 AM	Vieyra	Sunny/clear		Clear
6/19/2012	VS368	Marsh			Background	6/19/2012	12:00 PM	Sunzeri	Sunny/clear		Brown
6/19/2012	VS368		Larvicide	Vectobac G	Event	6/19/2012	12:15 PM	Sunzeri	Sunny/clear		Brown
6/19/2012	VS368				Post-event	6/29/2012	10:00 AM	Youngs	Sunny/clear	60 F	Brown
6/19/2012	VS166	Pond			Background	6/19/2012	11:40 AM	Crenshaw	Sunny/clear		Brown
6/19/2012	VS166		Larvicide	Vectobac G	Event	6/19/2012	11:45 AM	Crenshaw	Sunny/clear		Brown
6/19/2012	VS166				Post-event	6/22/2012	11:25 AM	Crenshaw	Sunny/clear	Cool, windy	Brown
6/20/2012	VS229	Old river channel			Background	6/20/2012	2:30 PM	Youngs	Sunny/clear	75 F, windy	Brown
6/20/2012	VS229		Larvicide	Vectobac G	Event	6/20/2012	2:45 PM	Youngs	Sunny/clear	75 F, windy	Brown
6/20/2012	VS229				Post-event	6/22/2012	11:30 PM	Youngs	Sunny/clear	65 F	Brown
6/20/2012	VS321	Drainage ditch			Background	6/20/2012	11:00 AM	Tekulve	Sunny/clear	78 F	Brownish
6/20/2012	VS321		Larvicide	Vectobac G	Event	6/20/2012	11:15 AM	Tekulve	Sunny/clear	78 F	Brownish
6/21/2012	VS321				Post-event	6/26/2012	11:15 AM	Tekulve	Sunny/clear	65 F	Brownish
6/21/2012	VS189	Pond, ditch			Background	6/21/2012	11:00 AM	Youngs	Sunny/clear	75 F, windy	Brown
6/21/2012	VS189		Larvicide	Vectobac G	Event	6/21/2012	11:15 AM	Youngs	Sunny/clear	75 F, windy	Brown
6/21/2012	VS189				Post-event	6/25/2012	11:15 AM	Youngs	Sunny/clear	60 F	Brown
6/22/2012	VS214	Ditch			Background	6/22/2012	11:00 AM	Youngs	Sunny/clear	65 F	Brown
6/22/2012	VS214		Larvicide	Vectobac G	Event	6/22/2012	11:15 AM	Youngs	Sunny/clear	60 F	Brown
6/22/2012	VS214				Post-event	6/25/2012	11:00 AM	Youngs	Sunny/clear	60 F	Dry
6/22/2012	VS708	Retention pond			Background	6/22/2012	11:00 AM	Sunzeri	Sunny/clear		Marshy
6/22/2012	VS708		Larvicide	Golden Bear 1111	Event	6/22/2012	11:15 AM	Sunzeri	Sunny/clear		Marshy
6/22/2012	VS708				Post-event	6/29/2012	1:30 PM	Youngs	Sunny/clear		Lt. Brown
6/25/2012	VS258	Old river channel			Background	6/25/2012	3:00 PM	Youngs	Sunny/clear	60 F	Brown
6/25/2012	VS258		Larvicide	Vectobac G	Event	6/25/2012	3:15 PM	Youngs	Sunny/clear	60 F	Brown
6/27/2012	VS258				Post-event	6/27/2012	11:00 AM	Youngs	Sunny/clear	70 F	Brown
6/25/2012	VS336	Lagoon			Background	6/26/2012	11:00 AM	Youngs	Sunny/clear	65 F	Green
6/26/2012	VS336		Larvicide	Vectobac G	Event	6/26/2012	11:15 AM	Youngs	Sunny/clear	65 F	Green
6/26/2012	VS336				Post-event	6/28/2012	11:30 AM	Youngs	Sunny/clear	75 F, windy	Green
6/26/2012	VS449	Creek drainage			Background	6/26/2012	1:30 PM	Tekulve	Sunny/clear	68 F	Blackish
6/26/2012	VS449		Larvicide	Altosid 30 day	Event	6/26/2012	1:45 PM	Tekulve	Sunny/clear	68 F	Blackish
6/26/2012	VS449				Post-event	7/5/2012	9:30 AM	Tekulve	Sunny/clear	65 F	Blackish
6/28/2012	VS268	Drainage ditch			Background	6/28/2012	10:20 AM	Youngs	Sunny/clear	75 F	Brown
6/28/2012	VS268		Larvicide	Vectobad G	Event	6/28/2012	10:30 AM	Youngs	Sunny/clear	75 F	Brown
6/28/2012	VS268				Post-event	7/2/2012	9:30 AM	Youngs	Sunny/clear	70 F	Brown
6/29/2012	VS152	Drainage ditch			Background	6/29/2012	9:30 AM	Crenshaw	Sunny/clear	Warm	Clear
6/29/2012	VS152		Larvicide	Vectobac G	Event	6/29/2012	9:40 AM	Crenshaw	Sunny/clear	Warm	Clear
6/29/2012	VS152				Post-event	7/3/2012	11:40 AM	Crenshaw	Sunny/clear	Warm	Clear
6/29/2012	VS264	Catch basin			Background	6/29/2012	1:50 PM	Youngs	Sunny/clear	Warm	Brown
6/29/2012	VS264		Larvicide	Vectobac G	Event	6/29/2012	2:00 PM	Youngs	Sunny/clear	Warm	Brown
6/29/2012	VS264				Post-event	7/6/2012	9:30 AM	Youngs	Sunny/clear	Warm	Brown
7/2/2012	VS137	Pool next to creek			Background	7/2/2012	9:20 AM	Crenshaw	Sunny/clear		

7/2/2012	VS137		Larvicide	Golden Bear 1111	Event	7/2/2012	9:30 AM	Crenshaw	Sunny/clear		
7/2/2012	VS137				Post-event	7/6/2012	2:00 PM	Crenshaw	Sunny/clear		
7/2/2012	VS356	Ditch			Background	7/2/2012	9:30 AM	Youngs	Sunny/clear	65 F	Brown
7/2/2012	VS356		Larvicide	Vectobac G	Event	7/2/2012	9:45 AM	Youngs	Sunny/clear	65 F	Brown
7/2/2012	VS356				Post-event	7/5/2012	11:30 AM	Youngs	Sunny/clear	70 F	Brown
7/5/2012	VS148	Drainage culvert			Background	7/5/2012	1:40 PM	Sielsch	Sunny/clear	Warm	Clear
7/5/2012	VS148		Larvicide	Vectobac G	Event	7/5/2012	1:50 PM	Sielsch	Sunny/clear	Warm	Clear
7/5/2012	VS148				Post-event	7/9/2012	1:25 PM	Sielsch	Sunny/clear	Warm	Clear
7/5/2012	VS594	River			Background	7/5/2012	11:00 AM	Tekulve	Sunny/clear	70 F	Brownish
7/5/2012	VS594		Larvicide	Vectobac G	Event	7/5/2012	11:15 AM	Tekulve	Sunny/clear	70 F	Brownish
7/5/2012	VS594				Post-event	7/10/2012	8:30 AM	Tekulve	Sunny/clear	70 F	Brownish
7/6/2012	VS129	Drainage ditch			Background	7/6/2012	3:00 PM	Sielsch	Sunny/clear		Cloudy
7/6/2012	VS129		Larvicide	Vectobac G	Event	7/6/2012	3:20 PM	Sielsch	Sunny/clear		Cloudy
7/6/2012	VS129				Post-event	7/10/2012	2:00 PM	Sielsch	Sunny/clear		Cloudy
7/6/2012	VS261	Snow melt pool			Background	7/6/2012	3:00 PM	Youngs	Sunny/clear	80 F	Brown
7/6/2012	VS261		Larvicide	Vectobac G	Event	7/6/2012	3:15 PM	Youngs	Sunny/clear	80 F	Brown
7/6/2012	VS261				Post-event	7/9/2012	3:30 PM	Youngs	Sunny/clear	85 F	Brown
7/9/2012	VS352	Marsh overflow pond			Background	7/9/2012	11:00 AM	Youngs	Sunny/clear	75 F	Colorless
7/9/2012	VS352		Larvicide	Vectobac G	Event	7/9/2012	11:15 AM	Youngs	Sunny/clear	75 F	Colorless
7/11/2012	VS352				Post-event	7/11/2012	11:00 AM	Youngs	Sunny/clear	80 F	Colorless
7/9/2012	VS249	Drainage ditch			Background	7/9/2012	11:00 AM	Tekulve	Sunny/clear	80 F	Brown
7/9/2012	VS249		Larvicide	Vectobac G	Event	7/9/2012	11:15 AM	Tekulve	Sunny/clear	80 F	Brown
7/9/2012	VS249				Post-event	7/13/2012	N/A	N/A	N/A	N/A	N/A
7/10/2012	VS270	Ditch, marsh			Background	7/10/2012	11:00 AM	Youngs	Sunny/clear	75 F	Brown
7/10/2012	VS270		Larvicide	Vectobac G	Event	7/10/2012	11:30 AM	Youngs	Sunny/clear	75 F	Brown
7/10/2012	VS270				Post-event	7/13/2012	1:00 PM	Youngs	Sunny/clear	80 F	Brown
7/10/2012	VS286	Drainage ditch			Background	7/10/2012	2:00 PM	Tekulve	Sunny/clear	80 F	Brown
7/10/2012	VS286		Larvicide	Altosid 30 day	Event	7/10/2012	2:15 PM	Tekulve	Sunny/clear	80 F	Brown
7/10/2012	VS286				Post-event	7/13/2012	N/A	N/A	N/A	N/A	N/A
7/11/2012	VS621	Marsh			Background	7/11/2012	9:00 AM	Youngs	Sunny/clear	65 F	Colorless
7/11/2012	VS621		Larvicide	Vectobac G	Event	7/11/2012	9:30 AM	Youngs	Sunny/clear	65 F	Colorless
7/11/2012	VS621				Post-event	7/13/2012	N/A	N/A	N/A	N/A	N/A
7/13/2012	VS336	Lagoon			Background	7/13/2012	11:00 AM	Youngs	Sunny/clear	80 F	Colorless
7/13/2012	VS336		Larvicide	Vectobac G	Event	7/13/2012	11:30 AM	Youngs	Sunny/clear	80 F	Colorless
7/13/2012	VS336				Post-event	7/13/2012	N/A	N/A	N/A	N/A	N/A

Visual Observation						
Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions; Other Notes
Clear	Not Observed	None	Observed	None	None	
Clear	Not Observed	None	Observed	None	None	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Murky	Observed	Observed	Not Observed	None	Observed	
Murky	Observed	Observed	Not Observed	None	Observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Mild cloudy	Observed	Observed	Observed	Observed	Not observed	
Mild cloudy	Observed	Observed	Observed	Observed	Not observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Clear	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Observed	
Murky	Not Observed	Not observed	Observed	Not observed	Not observed	Grass & willow slash
Murky	Not Observed	Not observed	Observed	Not observed	Not observed	Grass & willow slash
Murky	Not Observed	Not observed	Observed	Not observed	Not observed	Grass & willow slash
Murky	Observed	Observed	Observed	Observed	Not observed	
Murky	Observed	Observed	Observed	Observed	Not observed	
Murky	Observed	Observed	Observed	Observed	Not observed	
Murky	Observed	Observed	Not Observed	Not observed	Observed	
Murky	Observed	Observed	Not Observed	Not observed	Observed	
Murky	Observed	Observed	Not Observed	Not observed	Not observed	
Clear	Not observed	Observed	Not Observed	Not observed	Not observed	
Clear	Not observed	Observed	Not Observed	Not observed	Not observed	
Clear	Not Observed	Observed	Not Observed	Not observed	Not observed	
Clear	Not Observed	Not observed	Not Observed	Not observed	Not observed	
Clear	Not Observed	Not observed	Not Observed	Not observed	Not observed	
Clear	Not Observed	Not observed	Not Observed	Not observed	Not observed	
Clear	Not Observed	Not observed	Not Observed	Not observed	Not observed	
Clear	Not Observed	Not observed	Not Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Cloudy	Not observed	Not observed	Observed	Not observed	Observed	
Cloudy	Not observed	Not observed	Observed	Not observed	Observed	
Cloudy	Not observed	Not observed	Observed	Not observed	Observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Swampy	Observed	Not observed	Not Observed	Observed	Not observed	
Swampy	Observed	Not observed	Not Observed	Observed	Not observed	
Swampy	Observed	Not observed	Not Observed	Observed	Not observed	
Murky	Observed	Observed	Observed	Observed	Not observed	
Murky	Observed	Observed	Observed	Observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Not Observed	Not observed	Observed	
Murky	Observed	Observed	Not Observed	Not observed	Observed	
Murky	Observed	Observed	Not Observed	Not observed	Observed	
Murky	Observed	Not observed	Not Observed	Not observed	Not observed	

Murky	Observed	Not observed	Not Observed	Not observed	Not observed	
Mur	Observed	Not observed	Not Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Dry	Not observed	Not observed	Not observed	Not observed	Not observed	Source dried up
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Not observed	Observed	Observed	Not observed	
Murky	Observed	Not observed	Observed	Observed	Not observed	
Murky	Observed	Not observed	Observed	Observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Marshy	Observed	Observed	Not Observed	Observed	Observed	
Marshy	Observed	Observed	Not Observed	Observed	Observed	
Marshy	Observed	Observed	Not Observed	Observed	Observed	
Murky slime	Observed	Observed	Not observed	Observed	Observed	
Murky slime	Observed	Observed	Not observed	Observed	Observed	
Murky slime	Observed	Observed	Not observed	Observed	Observed	
Clear	Observed	Not observed	Not observed	Not observed	Not observed	
Clear	Observed	Not observed	Not observed	Not observed	Not observed	
Clear	Observed	Not observed	Not observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Observed	Observed	
Clear	Observed	Observed	Observed	Observed	Observed	
Clear	Observed	Observed	Observed	Observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Not observed	Not observed	Observed	
Murky	Observed	Observed	Not observed	Not observed	Observed	
Murky	Observed	Observed	Not observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Not observed	Not observed	Not observed	

Clear	Not observed	Observed	Not observed	Observed	Observed	
Clear	Not observed	Observed	Not observed	Observed	Observed	
Clear	Observed	Observed	Not observed	Not observed	Observed	
Murky	Observed	Observed	Not observed	Observed	Observed	
Murky	Observed	Observed	Not observed	Observed	Observed	
Murky	Observed	Observed	Not observed	Observed	Observed	
Murky	Not observed	Observed	Observed	Not observed	Not observed	
Murky	Not observed	Observed	Observed	Not observed	Not observed	
Murky	Not observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Observed	
Clear	Not observed	Observed	Observed	Not observed	Not observed	
Clear	Not observed	Observed	Observed	Not observed	Not observed	
Clear	Not observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Slight murky	Observed	Observed	Not observed	Not observed	Observed	
Slight murky	Observed	Observed	Not observed	Not observed	Observed	Algae plumes
Dry	Not observed	Not observed	Not observed	Not observed	Not observed	Source dried up
Murky	Not observed	Observed	Not observed	Observed	Observed	
Murky	Not observed	Observed	Not observed	Observed	Observed	
Murky	Not observed	Observed	Not observed	Observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Observed	Observed	
Murky	Observed	Observed	Observed	Observed	Observed	
Murky	Observed	Observed	Observed	Observed	Observed	
Murky	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Not observed	Not observed	Not observed	
Dry	Not observed	Not observed	Not observed	Not observed	Not observed	Source dried up
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Not Observed	Not observed	Not observed	
Clear	Observed	Observed	Not Observed	Not observed	Not observed	
Clear	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	

N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Clear	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Observed	
Clear	Observed	Observed	Observed	Not observed	Observed	
Murky	Not observed	Observed	Not observed	Not observed	Observed	
Murky	Not observed	Observed	Not observed	Not observed	Observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Murky	Not observed	Not observed	Observed	Not observed	Not observed	
Murky	Not observed	Not observed	Observed	Not observed	Not observed	
Murky	Not observed	Not observed	Observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Clear	Not observed	Not observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
	Observed	Observed	Not observed	Not observed	Not observed	
	Observed	Observed	Not observed	Not observed	Not observed	
	Observed	Observed	Observed	Not observed	Not observed	
Foamy	Observed	Observed	Observed	Not observed	Not observed	
Foamy	Observed	Observed	Observed	Not observed	Not observed	
Foamy	Observed	Observed	Observed	Not observed	Not observed	
	Observed	Observed	Observed	Not observed	Not observed	
	Observed	Observed	Observed	Not observed	Not observed	
	Observed	Observed	Observed	Not observed	Not observed	
Murky	Not observed	Observed	Observed	Not observed	Observed	
Murky	Not observed	Observed	Observed	Not observed	Observed	
	Observed	Observed	Observed	Not observed	Not observed	
	Observed	Observed	Observed	Not observed	Not observed	
Dry	Dry	Dry	Dry	Dry	Dry	Source dried up
Marshy	Observed	Not observed	Not observed	Not observed	Observed	
Marshy	Observed	Not observed	Not observed	Not observed	Observed	
Marshy	Observed	Not observed	Not observed	Not observed	Observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Not observed	Not observed	Observed	Not observed	Observed	
Murky	Not observed	Not observed	Observed	Not observed	Observed	
Murky	Not observed	Not observed	Observed	Not observed	Observed	
	Observed	Observed	Observed	Not observed	Observed	
	Observed	Observed	Observed	Not observed	Observed	
	Observed	Observed	Observed	Not observed	Observed	
Cloudy	Observed	Not observed	Observed	Not observed	Observed	
Cloudy	Observed	Not observed	Observed	Not observed	Observed	
Cloudy	Observed	Not observed	Observed	Not observed	Observed	
Clear	Not observed	Observed	Not observed	Not observed	Observed	
Clear	Not observed	Observed	Not observed	Not observed	Observed	
Clear	Not observed	Observed	Not observed	Not observed	Observed	
Clear	Observed	Observed	Not observed	Not observed	Not observed	
Clear	Observed	Observed	Not observed	Not observed	Not observed	
Clear	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Not observed	Not observed	Not observed	

Murky	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Not observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Murky	Observed	Observed	Observed	Not observed	Not observed	
Clear	Not observed	Observed	Not observed	Not observed	Not observed	
Clear	Not observed	Observed	Not observed	Not observed	Not observed	
Clear	Not observed	Observed	Not observed	Not observed	Not observed	
Brownish	Observed	Observed	Observed	Not observed	Observed	
Brownish	Observed	Observed	Observed	Not observed	Observed	
Brownish	Observed	Observed	Observed	Not observed	Observed	
Murky	Observed	Observed	Not Observed	Not observed	Not observed	
Murky	Observed	Observed	Not Observed	Not observed	Not observed	
Murky	Observed	Observed	Not Observed	Not observed	Not observed	
Cloudy	Observed	Observed	Observed	Not observed	Not observed	
Cloudy	Observed	Observed	Observed	Not observed	Not observed	
Cloudy	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
Brownish	Observed	Observed	Observed	Not observed	Not observed	
Brownish	Observed	Observed	Observed	Not observed	Not observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Opaque	Observed	Not observed	Observed	Not observed	Not observed	
Opaque	Observed	Not observed	Observed	Not observed	Not observed	
Opaque	Observed	Not observed	Observed	Not observed	Not observed	
Brownish	Observed	Observed	Observed	Not observed	Not observed	
Brownish	Observed	Observed	Observed	Not observed	Not observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12
Clear	Observed	Observed	Observed	Not observed	Not observed	
Clear	Observed	Observed	Observed	Not observed	Not observed	
N/A	N/A	N/A	N/A	N/A	N/A	Monitoring suspended 7/13/12

MVCAC NPDES Permit Coalition 2011/2012 Annual Report NPDES Vector Control Permit (Order No. 2012-0003-DWQ)

Prepared by

Mosquito and Vector Control Association of California NPDES Permit Coalition

February 22, 2013

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Appendices

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

µg/L	micrograms per liter
BMPs	Best Management Practices
CDPH	California Department of Public Health
DDT	dichlorodiphenyltrichloroethane
DO	dissolved oxygen
EC	electrical conductivity
EPA	United States Environmental Protection Agency
IPM	integrated pest management
MAD	Mosquito Abatement District
MDL	method detection limit
MRP	Monitoring and Reporting Program
MVCAC	Mosquito and Vector Control Association of California
MVCD	Mosquito and Vector Control District
NPDES	National Pollutant Discharge Elimination System
NTU	nephelometric turbidity units
PAL	Pesticide Application Log
PAP	Pesticide Application Plan
PBO	piperonyl butoxide
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent differences
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
ULV	ultra-low volume
VCD	Vector Control District
WNv	West Nile virus
WOTUS	Waters of the United States

On November 1, 2011 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 (Water Quality Order No. 2011-0002-DWQ as amended by Water Quality Order No. 2012-0003-DWQ) became effective. Under this general permit, entities involved in the application of vector control pesticides that results in a discharge of biological and residual pesticides to waters of the United States are required to comply with the permit's Monitoring and Reporting Program (MRP). The permit encourages dischargers to form monitoring coalitions with others doing similar applications in similar environmental settings. The Mosquito Vector Control Association of California (MVCAC) NPDES Permit Coalition (Coalition) consists of 64 member districts and agencies. In 2011 and 2012, the Coalition implemented its Monitoring Plan (dated September 12, 2011) and Quality Assurance Project Plan (dated September 12, 2011) which were developed to comply with the MRP from the Vector Control Permit.

During 2011 and 2012 the Coalition conducted chemical monitoring at 61 locations during 19 adulticide application events and performed the necessary visual, physical, and chemical testing reportable under the Vector Control Permit. The Coalition also coordinated physical monitoring for 136 larvicide application events in 2012. MVCAC member agencies were in full compliance with the monitoring requirements of the Vector Control Permit for mosquito larvicides and adulticides. However, during 2012, exceedances of Receiving Water Limitations or Receiving Water Monitoring Triggers were identified following five application events:

- One "event" sample with a malathion concentration of 0.11 µg/L collected approximately 24 hours after a May 25, 2012 malathion (Fyfanon – EPA Reg. No. 67760-34) application by the San Joaquin County Mosquito and Vector Control District exceeded the receiving water limit of 0.1 µg/L by 0.01 µg/L.
- The Instantaneous Maximum Monitoring Trigger of 0.014 µg/L for piperonyl butoxide (PBO) in PBO/pyrethrin mixtures was exceeded in three "event" samples collected after a five-day application of PBO/pyrethrin (Pyrenone 25-5 Public Health Insecticide– EPA Reg. No. 432-1050) by Coachella Valley Mosquito and Vector Control District from June 26 to June 30, 2012. Two of the "background" samples collected prior to the application already exceeded the trigger.
- The Instantaneous Maximum Monitoring Trigger of 0.0019 µg/L for etofenprox was exceeded in one "event" sample collected after an application of Zenivex (RF2146 RTU – EPA Reg. No. 2724-807) on September 26, 2012 by the Greater Los Angeles County Vector Control District.
- The Instantaneous Maximum Monitoring Trigger of 0.014 µg/L for PBO in PBO/pyrethrin mixtures was exceeded in three "event" samples collected after an October 3, 2012 application of PBO/pyrethrin (EverGreen 6-60 – EPA Reg. No. 1021-1770) by Merced County Mosquito Abatement District. One "background" sample collected prior to the application already exceeded the trigger.
- The Instantaneous Maximum Monitoring Trigger of 0.014 µg/L for PBO in PBO/pyrethrin mixtures was exceeded in one "event" sample collected after a November 14, 2012 application of PBO/pyrethrin (Pyrocide 7396 – EPA Reg. No.1021 1569) by Butte County Mosquito and Vector Control District.

These exceedances were reported to the State Water Resources Control Board (SWRCB) and appropriate Regional Water Quality Control Board. Investigations of these exceedances were conducted as required by the five day written report. No adverse effects were witnessed as a result of these exceedances of Receiving Water Limitations and Receiving Water Monitoring Triggers.

Improvements to individual district pesticide application plans (PAPs) and their associated best management practices (BMPs) will be determined by individual member districts during their annual reporting as required by the Vector Control Permit.

This is the 2011 and 2012 Annual Report for the Mosquito Vector Control Association of California (MVCAC) National Pollutant Discharge Elimination System (NPDES) Permit Coalition (Coalition) as required under the Statewide NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications (Water Quality Order No. 2011-0002-DWQ as amended by Water Quality Order No. 2012-0003-DWQ; Vector Control Permit). The Coalition is responsible for coordinating all physical measurements and conducting all chemical monitoring required under the Vector Control Permit Monitoring and Reporting Program (Attachment C of Permit; MRP) for its members. This Annual Report presents the chemical monitoring data as well as the visual observations and physical measurements made during associated site visits. This Annual Report also includes physical measurement data and associated visual observations for larvicide applications required by the Vector Control Permit. This Annual Report includes data collected in 2011 and 2012.

Member districts of the Coalition will submit individual annual reports in compliance with the Vector Control Permit. Individual annual reports will focus on comprehensive pesticide applications logs (PALs) for all larvicide and adulticide applications to Waters of the United States (WOTUS). Member District annual reports will also address recommendations to improve their respective Pesticide Application Plans (PAPs) and best management practices (BMPs).

Members of the MVCAC NPDES Permit Coalition are listed in Table 1.

Table 1. Members of the MVCAC NPDES Permit Coalition

Alameda County MAD	Merced County MAD
Alameda County VCSD	Napa County MAD
Burney Basin MAD	Nevada County Community Development Agency
Butte County MVCD	Northern Salinas Valley MAD
City of Alturas	Northwest MVCD
City of Blythe	Orange County VCD
City of Long Beach	Oroville MAD
City of Moorpark	Owens Valley MAD
City of Pasadena	Pine Grove MAD
City of San Francisco	Placer MVCD
Coachella Valley MVCD	Riverside County Vector Control Program
Colusa MAD	Sacramento - Yolo MVCD
Compton Creek MAD	Saddle Creek Community Services District
Consolidated MAD	San Benito County Agricultural Commission
Contra Costa MVCD	San Bernardino County
Delta VCD	San Diego County Department of Environmental Health - Vector Control Program
Durham MAD	San Gabriel Valley MVCD
East Side MAD	San Joaquin County MVCD

El Dorado County Environmental Management	San Mateo County MVCD
Fresno MVCD	Santa Barbara County, Mosquito and Vector Management District of
Fresno Westside MAD	Santa Clara County VCD
Glenn County MVCD	Santa Cruz County MVCD
Greater Los Angeles County VCD	Shasta MVCD
Imperial County Vector Control	Solano County MAD
June Lake Public Utility District	South Fork MAD
Kern MVCD	Sutter-Yuba MVCD
Kings MAD	Tehama County MVCD
Lake County VCD	Tulare County MAD
Los Angeles County West VCD	Turlock MAD
Madera County MVCD	Ventura County Environmental Health Division
Mammoth Lakes MAD	West Side MVCD
Marin/Sonoma MVCD	West Valley MVCD

Notes:
MAD = Mosquito Abatement District
MVCD = Mosquito and Vector Control District
VCD = Vector Control District

Vector Control Permit compliance sampling for 2011 and 2012 was conducted alongside a pilot ecotoxicology study (Pilot Study) performed by Granite Canyon Laboratory of University of California, Davis, under contract to the State Water Resources Control Board (SWRCB). The purpose of the Pilot Study is to assess whether toxicity sampling and testing should be added as a requirement under the Vector Control Permit. Results of the Pilot Study will be reported separately by Granite Canyon Laboratory.

The organization of this Annual Report follows the reporting requirements described in Attachment C, Section IV.B of the Vector Control Permit. Section 2 includes a summary of the physical measurements and chemical monitoring data and recommendations to improve the MRP. Section 3 describes typical BMPs implemented by MVCAC member districts. Section 4 includes tables listing the monitoring results and Pesticide Application Logs for applications where chemical monitoring was conducted. Section 5 includes maps showing the location of each application/target area and chemical monitoring stations.

2.1 SUMMARY OF MONITORING DATA

Reported monitoring data follows the monitoring and reporting requirements for mosquito larvicide and adulticide applications as described in the Provisions (Section IX) and MRP (Attachment C) of the Vector Control Permit.

In 2011 and 2012, the MVCAC NPDES Permit Coalition coordinated physical measurements and conducted chemical monitoring. Samples and measurements taken for the purpose of monitoring were representative of the monitored activity. They characterize aerial and truck applications, and cover a broad geographic range. Visual observations include descriptions of the monitoring area, appearance of the waterway, and weather conditions. Physical measurements collected in the field include temperature, pH, electric conductivity (EC), and dissolved oxygen (DO). Turbidity was measured in the field or at a laboratory. Chemical monitoring includes the adulticide active ingredients listed in the Vector Control Permit. Temephos, the only larvicide for which chemical monitoring is required, was not applied in 2011 or 2012. Concentrations of pyrethrins, permethrin, sumithrin, prallethrin, etofenprox, PBO, naled, and malathion were analyzed and reported by the California Department of Fish and Wildlife Water Pollution Control Laboratory (Gold River, California) in 2011 and Caltest Analytical Laboratory (Napa, California) in 2012.

Monitoring was conducted in accordance with the MVCAC Monitoring Plan (dated September 11, 2011) and Quality Assurance Project Plan (QAPP) (dated September 12, 2011), which were developed in accordance with the Vector Control Permit MRP. The MVCAC Monitoring Plan describes in detail the monitoring requirements and the Coalition's approach to monitoring. The QAPP outlines the procedures that the Coalition uses to ensure that samples, data, and reports meet project quality objectives, including sample collection methodologies, and field and laboratory quality assurance/quality control measures.

2.1.1 Chemical Monitoring

During 2011 and 2012, the Coalition contracted with URS Corporation (URS) to conduct chemical monitoring towards meeting the permit requirements. Chemical monitoring was conducted at 61 locations during 19 adulticide application events. The 2011 sampling preceded the November 1, 2011 effective date of the Vector Control Permit. However, SWRCB staff agreed that monitoring conducted in 2011 could apply towards the permit requirements of six samples for each active ingredient in each environmental setting. The active ingredients sampled in 2011 and 2012 include: pyrethrin, piperonyl butoxide (PBO) in PBO/pyrethrin mixture, permethrin, sumithrim, etofenprox, naled, and malathion. PBO was sampled with every pyrethroid application. Table 2 illustrates the Coalition's progress towards meeting the chemical monitoring requirements of the Vector Control Permit MRP.

Table 2. MVCAC NPDES Permit Coalition Completed Chemical Monitoring 2011 and 2012

Active Ingredient	Agricultural		Urban		Wetland	
	Required	Completed	Required	Completed	Required	Completed
Pyrethrin	6	**6**	6	**6**	6	**6**
PBO/Pyrethrin	6	**6**	6	**6**	6	**6**
Permethrin	6	**6**	6	**6**	6	1
Resmethrin	6	0	6	0	6	0
PBO/Resmethrin	6	0	6	0	6	0
Sumithrin	6	**6**	6	**6**	6	**6**
Prallethrin	6	0	6	1	6	0
Etofenprox	6	0	6	1	6	0
PBO	6	**12**	6	**13**	6	**7**
Naled	6	1	6	**6**	6	2
Malathion	6	1	6	0	6	1
MGK-264	6	0	6	0	6	0
Temephos	6	0	6	0	6	0

Monitoring events involve coordination between many parties (e.g., member district making the application, MVCAC NPDES Permit Coalition, URS, URS subcontractor (Michael L. Johnson, LLC), field crew members, analytical laboratory, Pilot Study team). Because decisions to apply adulticides are often made less than 24-hours before the application, it is not always feasible to sample a given application event. A typical monitoring event involves the following steps:

- The MVCAC NPDES Permit Coalition distributes a list of chemical monitoring needs to member districts.
- A member district with a planned application that meets monitoring needs contacts the MVCAC NPDES Permit Coalition with timing and location information.
- The MVCAC NDPES Permit Coalition contacts URS to confirm availability of trained field staff within the given timeframe.
- URS, field crew staff, Pilot Study team, and the member district making application coordinate to develop sampling details (i.e., timing for "background" and "event" samples, representativeness of sampling station(s), access details, logistics, etc.). In most cases, more than one hydrologically-isolated station is targeted for each application.
- The laboratory is informed of sampling plans to confirm ability to receive, process, and analyze samples within hold times. This is especially critical if samples will be collected on a Friday and/or weekend.

- The field crew meets with the member district for a reconnaissance visit in the field to confirm decisions about sample station(s) locations.
- The "background" sample is collected within 24-hours prior to the application. The "event" sample is collected within 24-hours after the application. Sample collection methods follow those described in the Monitoring Plan.
- In most cases, an additional sample is collected between 8 and 12 hours after the application for the Pilot Study.

Chemical monitoring laboratory results, including the associated visual observations and physical measurements, are listed in Tables 4 and 5. Pesticide application information (i.e., PALs) for each monitored event is provided in Table 6. Maps for each monitored event showing the target application area and sample station(s) are included in Figures 2 through 18. Figure 1 illustrates the overall geographic distribution of all samples collected in 2011 and 2012.

In 2012, the following exceedances of Receiving Water Limitations and/or Receiving Water Monitoring Triggers were identified upon review of laboratory results associated with five application events. These exceedances were reported to the SWRCB and appropriate Regional Water Quality Control Board (RWQCB).

- One "event" sample (with a reported malathion concentration of 0.11 µg/L) collected approximately 24 hours after a May 25, 2012 malathion (Fyfanon – EPA Reg. No. 67760-34) application (Event 2012-2) by the San Joaquin County MVCD exceeded the Receiving Water Limit of 0.1 µg/L by 0.01 µg/L. Preliminary results of the Pilot Study show no water toxicity associated with this application event.
- The Instantaneous Maximum Monitoring Trigger of 0.014 µg/L for PBO in PBO/pyrethrin mixtures was exceeded in hree "event" samples collected after a five-day application of PBO/pyrethrin (Pyrenone 25-5 Public Health Insecticide– EPA Reg. No. 432-1050) by Coachella Valley MVCD from June 26 to June 30, 2012 (Event 2012-5). Two of the "background" samples collected prior to the application already exceeded the trigger. PBO concentrations were well below the PBO-only Instantaneous Maximum Monitoring Trigger of 49 µg/L, pyrethrin concentrations were below the MDL of 0.05 µg/L, and preliminary results of the Pilot Study show no water toxicity associated with this application event.
- The Instantaneous Maximum Monitoring Trigger of 0.0019 µg/L for etofenprox was exceeded in one "event" sample collected after an application of Zenivex (RF2146 RTU – EPA Reg. No. 2724-807) on September 26, 2012 by the Greater Los Angeles County Vector Control District. Preliminary results of the Pilot Study suggest that etofenprox did not contribute to toxicity associated with the "event" sample.
- The Instantaneous Maximum Monitoring Trigger of 0.014 µg/L for PBO in PBO/pyrethrin mixtures was exceeded in three "event" samples collected after an October 3, 2012 application of PBO/pyrethrin (EverGreen 6-60 – EPA Reg. No. 1021-1770) by Merced County MAD (Event 2012-13). One "background" sample collected prior to the application already exceeded the trigger. PBO concentrations were below the PBO-only Instantaneous Maximum Monitoring Trigger of 49 µg/L, pyrethrin concentrations were below the MDL of 0.05 µg/L, and preliminary results of the Pilot Study show no water toxicity associated with this application event.

- The Instantaneous Maximum Monitoring Trigger of 0.014 µg/L for PBO in PBO/pyrethrin mixtures was exceeded in one "event" sample collected after a November 14, 2012 application of PBO/pyrethrin (Pyrocide 7396 – EPA Reg. No.1021 1569) by Butte County MVCD (Event 2012-14). PBO concentrations were below the PBO-only Instantaneous Maximum Monitoring Trigger of 49 µg/L and pyrethrin concentrations were below the MDL of 0.05 µg/L. This application event was not included in the Pilot Study.

Investigations of these exceedances were conducted as required by the Five-Day Written report. Member districts confirmed that PAPs and product label requirements were followed. No adverse effects were witnessed as a result of these exceedances of Receiving Water Limitations and Receiving Water Monitoring Triggers.

The standard turnaround time for laboratory results is three weeks. Therefore, exceedances of Receiving Water Limitations and Receiving Water Monitoring Triggers cannot be identified until well after the application event is complete. For this reason, the MVCAC NPDES Permit Coalition recommends that the permit requirement to provide a Twenty-Four Hour Report for exceedances (Section IX.C.3.a) be removed and that reporting of these findings be limited to the Five-Day Written Report. The information is duplicative and immediate reporting does not provide additional protection of WOTUS.

2.1.2 Physical Measurements for Larvicides

Physical measurements (temperature, pH, EC, DO, and turbidity) for larvicide applications were coordinated by the Coalition. The MRP requires physical measurements for six application events for each larvicide active ingredient in each environmental setting (urban, agricultural, wetland). Measurements must be made within 24-hours prior to application (background), within 24-hours after the application (event), and within 1-week after project completion (post-event). A list of all the larvicide active ingredients and each environmental setting for which physical measurements are required by the Vector Control Permit was distributed to member districts and representatives from a wide geographic range were sought to meet the requirements. MVCAC purchased several multi-probe (YSI 556) and turbidity (La Motte 2020) meters which they made available to volunteer districts. The Coalition contracted with URS to prepare a How-To Manual and to conduct a webinar on use of the equipment and reporting requirements. Table 3 lists which districts collected physical measurements for each active ingredient in 2012. Some of the representing districts completed their physical measurements in early-2013. Physical measurements and associated visual observations are included in this Annual Report as Appendix A.

Table 3. MVCAC NPDES Permit Coalition Physical Measurements by Location, 2012

Product Name	Registration Number	Environmental Setting		
		Rural/Ag	Urban	Wetland
Bacillus sphaericus		**Volunteer District**		
Vectolex CG Biological Larvicide	73049-20	San Joaquin (6)	Greater LA (6)	San Mateo (6)
Vectolex WDG Biological Larvicide	73049-57			
Vectolex WSP Biological Larvicide	73049-20			
Spheratax SPH (50 G) WSP	84268-2			
Spheratax SPH (50 G)	84268-2			

Table 3. MVCAC NPDES Permit Coalition Physical Measurements by Location, 2012

Product Name	Registration Number	Environmental Setting		
		Rural/Ag	Urban	Wetland
Bacillus thuringiensis				
Vectobac Technical Powder	73049-13	Placer (6)	Greater LA (6)	Butte County (6)
Vectobac-12 AS	73049-38			
Aquabac 200G	62637-3			
Teknar HP-D	3049-404			
Vectobac-G Biological Mosquito Larvicide Granules	73049-10			
Aquabac xt	62637-1			
Bacillus sphaericus* and *Bacillus thurigensis				
Vectomax CG Biological Larvicide	3049-429	Lake County (6)	San Joaquin (2) San Diego (4)	San Joaquin (2) San Diego (4)
Vectomax WSP Biological Larvicide	3049-429			
Vectomax G Biological Larvicide/Granules	3949-429			
FourStar Briquets	83362-3			
FourStar SBG	85685-1			
Methoprene				
Zoecon Altosid Pellets	2724-448	Shasta (6)	Greater LA (6)	Napa County (6)
Zoecon Altosid Pellets	2724-375			
Zoecon Altosid Liquid Larvicide Mosquito Growth Regulator	2724-392			
Zoecon Altosid XR Entended 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			
Petroleum Distillates				
Mosquito Larvicide GB-1111	8329-72	San Joaquin (6)	Greater LA (6)	Sac-Yolo (6)
BVA 2 Mosquito Larvicide Oil	70589-1			
BVA Spray 13	55206-2			
Monomolecular Films				
Agnique MMF Mosquito Larvicide & Pupicide	53263-28	Sac-Yolo (3) Owens Valley (3)	Coachella (6)	Coachella (6)
Agnique MMF G	53263-30			
Spinosads				
Natular 2EC	8329-82	Coachella (6)	Greater LA (6)	Sac-Yolo (6)
Natular G	8329-80			
Natular XRG	8329-83			
Natular XRT	8329-84			

Each volunteer district prepared a monitoring database of physical measurements and associated visual observations for larvicide applications using the SWRCB-provided monitoring log sheet. The databases were submitted to the Coalition and URS for compilation and presentation in this Annual Report (see Appendix A). Appendix A modifies the SWRCB format by removing the "method" columns because all districts used the same type of field meters. Some EC and DO data were also updated to correct for differences in units for the purposes of conformity (i.e., siemens per meter versus microsiemens per centimeter).

The MRP does not require assessment of visual observations or physical measurement data. However, a preliminary review of the results suggests that (with one exception) there are no differences between background, event, and post-event samples that could not be explained by diurnal factors or subjective observations by different field personnel. The single exception is observations of "light" water surface oils reported by Owens Valley Mosquito Abatement Program in event samples following application of monomolecular films in an agricultural setting. There is nothing to demonstrate that results of the physical monitoring differ from the normal variability that would occur at sites with no applications. Moreover, many of the application and monitoring sites are in areas with public access and are therefore subject to impacts beyond the control of MVCAC member districts. This is particularly true of sites in urban settings. Based on these findings, there is no environmental or public benefit from continuing to collect physical measurements for larvicide applications and the MVCAC NPDES Permit Coalition recommends removing the requirement to collect physical measurements for larvicide applications from the Vector Control Permit.

2.2 DATA VALIDATION

Laboratory data were evaluated for quality assurance and quality control (QA/QC) in accordance with project QAPP guidelines. These data were reviewed for the QA/QC elements of precision, accuracy, and contamination.

The QA/QC parameters reviewed during data evaluation include the following:

- Holding Times – Holding times were checked to see if they were in excess of EPA guidelines. Holding times were calculated using analysis date, preparation date, and/or test date in relation to sampling date.
- Method Blanks – Blank analyses were reviewed for evidence of potential contamination.
- Laboratory Control Samples – Recoveries and relative percent differences were reviewed as a check for analytical accuracy and precision.
- Matrix Spikes – Spike and spike duplicate recoveries and relative percent differences were reviewed as a check for analytical precision and accuracy.
- Sample Surrogate Spikes – Spike recoveries were reviewed as a check for accuracy.

URS reviewed data reported by Caltest from 2012 monitoring events. Laboratory reports from 2011 were reviewed by Granite Canyon Laboratory using similar QA/QC methods.

Samples collected for the MVCAC program were evaluated for organophosphorus pesticides (EPA Method 614), pyrethrins and pyrethroids (EPA Method 625M). This QA/QC evaluation focused on results for active ingredients of applied pesticides only.

Overall the data quality was acceptable. Only one "background" sample for PBO in a PBO/pyrethrin mixture was rejected due to serious deficiencies in meeting quality control criteria. Other sample results were qualified as indicated in Table 4. Detailed findings and results of the data validation are available upon request.

Field duplicates were analyzed and relative percent differences (RPDs) are calculated to evaluate precision. The following criteria were used for validation of field duplicate results. Where both the sample and duplicate values are greater than 5 times the reporting limit (RL), acceptable

sampling and analytical precision is indicated by an RPD for the duplicate pair of less than or equal to 20 percent for water samples. Where one or both analytes of the duplicate pair are less than 5 times the RL, satisfactory precision is indicated if the field duplicate results agree within the higher RL for water samples. Three field duplicates were collected in 2012. Results were either the same as the original sample or within acceptable limits. Results are reported in Table 4 as medians of the two concentrations according to Reporting Protocols in the MRP.

Three field blanks were collected in 2012. All field blanks had non-detect pesticide concentrations.

2.3 WEST NILE VIRUS ACTIVITY

West Nile virus (WNv) is a mosquito-borne disease that is common in Africa, west Asia, the Middle East, and more recently, North America. Human infection with WNv may result in serious illness. It first appeared in California in 2002, yet within two years, in 2004, WNv activity was observed in all 58 counties.

ArboNET is the Center for Disease Control's internet-based passive surveillance system for arboviral diseases (including West Nile virus) in the United States. Data are uploaded to ArboNET on a weekly basis by state and local health departments. In 2012 a total of 451 human cases of WNv were reported to ArboNET. Based on Center for Disease Control studies, there were probably an estimated additional 14,000 cases that were not diagnosed or reported.

2.4 RECOMMENDATIONS

In this initial experimental period of compliance with the new Vector Control Permit, the MVCAC NPDES Permit Coalition was formed to gather data to better understand how the activities of MVCAC members and their application of pesticides affects the important goals of water quality.

As is explained in Section 3.1, MVCAC member agencies employ integrated pest management (IPM) and thus use of adulticides to control adult mosquitos is the method of control of last resort, when it becomes necessary, such as in the event of a disease outbreak (documented presence of infectious virus in active host-seeking adult mosquitoes), or lack of access to larval sources leading to the emergence of large numbers of adult mosquitoes.

First and foremost, MVCAC promotes education to prevent the formation of mosquito habitat. To that end, MVCAC encourages all public agencies to incorporate the California Department of Public Health (CDPH) BMPs in all their planning and permitting documents and requirements. In educating all landowners about the simple, low-cost steps they can take to not create mosquito habitat in the first place, MVCAC can do more to prevent disease and the use of adulticides than any other action it can take. This step alone has the greatest potential to reduce the need for adulticides.

While MVCAC presses for introduction of these education and information tools throughout the state, its second level of protection is the employment of physical and biological control as tools to reduce the potential for mosquito breeding sites to form. Such steps include the introduction of predacious organisms such as mosquito fish to control the mosquito populations in their aquatic stage. The third and fourth steps in the IPM process are chemical control of mosquitoes

using larvicides and adulticides. It is these latter two steps that we have undertaken to monitor pursuant to the terms of the new Vector Control Permit.

The larval control applications implemented by mosquito control districts were required to have visual and physical monitoring only (aside from temephos) due to the recognition that these products are highly specific to mosquito larvae and are widely accepted as excellent BMPs. The initial concern regarding mosquito control products was the products used for adulticiding, as these products are designed to target mosquitoes in the air and not enter the waterways. The nature of applications of adulticides is to treat over a specific area and drift the material through the zone, killing mosquitoes when they come in contact with the product. It is understood that some of the material, if treated over waterways, could through the force of gravity come in contact with the water. The Vector Control Permit was designed to determine, if any, the impact that these applications would have on water quality.

There are currently twelve adulticide active ingredients in use, two are organophosphate insecticides (naled and malathion) which are used in rotation with a choice of ten pyrethrins or pyrethroids combinations to avoid the development of resistance. Of the 12, seven are used for over 95% percent of the applications. As a result, those seven are the ones for which the most data has been collected in this report. As it has been for the past two years, it is unlikely that the permit's data collection requirements can be met for the remaining five adulticide active ingredients since they see rare and infrequent application. Thus, in this critically important public health need to prevent spread of diseases carried by mosquitos, there are precious few tools available to mosquito control. The adulticide market is so restrictive that MVCAC member agencies have only two classes of products available, pyrethroids and organophosphates.

The active ingredients currently in the twelve products used for control of adult mosquitoes have been deliberately selected for lack of persistence and minimal effects on non-target organisms when applied at label rates for ultra-low volume (ULV) mosquito control.

For that reason, pyrethroids and pyrethrins now constitute the majority of commercial household insecticides. They are usually degraded by sunlight and the atmosphere in one or two days, and do not significantly affect groundwater quality. Their unusually fast biodegradation make them among the best in class for the environment.

While, it may seem desirable to use them to the exclusion of organophosphates, naled and malathion, there is a risk that exclusive reliance on pyrethrins and pyrethroids could result in resistance. Should resistance occur, the use of organophosphates could increase dramatically. Currently, organophosphates constitute approximately 7% of all adulticide applications, with pyrethrins and pyrethroids constituting the majority remainder 93% (from California Department of Pesticide Regulation database).

The risk of resistance is very real, and a serious concern. Up until the 1950s, bedbugs were almost eradicated through the use of dichlorodiphenyltrichloroethane (DDT). After the use of DDT for this purpose was banned, pyrethroids became more commonly used against bedbugs. As of 2010 nearly all populations of bedbugs have evolved nerve cells impervious to pyrethroids, and pyrethroids are no longer effective in combatting bedbug infestations

While pyrethrins are produced from the chrysanthemum flower, pyrethroids are an organic compound similar to the natural pyrethrins produced by the flowers of pyrethrums (*Chrysanthemum cinerariaefolium* and *C. coccineum*). The pyrethroids represented a major

advancement in the chemistry that would synthesize the analog of the natural version found in pyrethrum. Its insecticidal activity has relatively low mammalian toxicity and an unusually fast biodegradation. They both rapidly knock down flying insects but have negligible persistence — which is good for the environment.

The different versions and combinations of pyrethrins and pyrethroids may all have slightly different chemical configurations; however, they all act in the same manner to knock down flying adult mosquitoes. The EPA registration requirements for each are consistent and nearly identical. The voluminous studies relied upon by EPA in granting registration for the different versions found the impacts of these products in water are consistent as well. The physical and monitoring data contained in this report demonstrate that EPA's registration studies are indeed borne out, and these products do not significantly impact water quality.

Taking a "trust but verify" approach, the SWRCB determined that an abundance of caution should be incorporated in the early years of this new NPDES permit. To that end, the permit contained requirements to test "background" and "event" samples from 18 application events for each active ingredient in the different pyrethrins and pyrethroids (pyrethrin, PBO with pyrethrin, permethrin, resmethrin, PBO with resmethrin, sumithrin, prallethrin, etofenprox, PBO, and MGK 264) - a total of ten products in this class for 180 application events and 360 total samples. The Coalition sampled 87 of the required 180 application events in 2011 and 2012 with the majority of those being five products (pyrethrin, PBO with pyrethrin, sumithrin, permethrin, and PBO). The other five products (resmethrin, PBO with resmethrin, prallethrin, etofenprox, and MGK 264) are rarely used and it is unlikely that sufficient uses will be performed to complete the testing in the future.

The data collected on these products showed similar results with only 8 of 51 (16%) samples analyzing pyrethrin, permethrin, sumithrin, or etofenprox even detecting the active ingredient. PBO was analyzed in 100 total samples, more than the permit requirement of 72 samples because it was applied with all pyrethroids. PBO was detected above the very low method detection limit of 0.005 µg/L in 63 (63%) of those samples. The Coalition, based on the nature and application of similar products, would expect these percentages to be similar to those not tested.

Naled and malathion are the other class of pesticides used for mosquito control, organophosphates. There were 11 of 36 application events sampled for this class. Of the 22 "background" and "event" samples only 2 were above detection limits. The Coalition expects that if more testing were to occur, the results would be similar to those already collected.

The physical and chemical monitoring results contained in this report indicate that the active ingredient being sampled is rarely present in the waterway. While there have been some events for which preliminary results of the Pilot Study showed water toxicity (mostly in naled applications), the presence of the material in the waterway is of extremely short duration. Thus, there does not seem to be any significant long term impact to the beneficial uses of the waters.

For all the above reasons, further chemical testing is not likely to result in identification of any new information or any environmentally beneficial improvements to water quality.

3.1 BMPS CURRENTLY IN USE

Member districts of MVCAC implement the BMPs provided in their respective PAPs in meeting the requirements of the Vector Control Permit. MVCAC member agencies follow an integrated pest management (IPM) approach that strives to efficaciously use pesticides and minimize their impact on the environment while protecting public health. Each member agency determines what is appropriate in their district, and follows response plans that use surveillance tools to determine the extent of the problem and guide treatment decisions, with an emphasis on source reduction and control of mosquitoes in their immature stages. The least toxic materials available for control of the larval stages, focusing on bacterial larvicides, growth regulators and surface films are used rather than organophosphates or pyrethroids. Control of adult mosquitoes may become necessary under some circumstances, such as in the event of a disease outbreak (documented presence of infectious virus in active host-seeking adult mosquitoes), or lack of access to larval sources leading to the emergence of large numbers of biting adult mosquitoes. Organophosphate insecticides (naled and malathion) are used in rotation with pyrethrins or pyrethroids to avoid the development of resistance. The active ingredients currently used for control of adult mosquitoes have been deliberately selected for lack of persistence and minimal effects on non-target organisms when applied at label rates for ultra-low volume (ULV) mosquito control. All BMPs included in the product labels are followed and include such measures as restrictions in certain land uses and weather (i.e., wind speed) parameters. Additional information about specific BMPs by region can be found in member agency's PAPs.

3.2 BMP MODIFICATIONS

Modifications to BMPs are handled by individual member districts on a district-by-district basis. Any modifications to BMPs can be found in respective member districts annual reports prepared as required by the Vector Control Permit.

4.1 ADULTICIDE MONITORING RESULTS

For the purposes of presentation, adulticide monitoring results are presented in two tables. Table 4 lists the chemical monitoring data and Table 5 lists the associated visual observations and physical measurements. Reporting protocols described in the Vector Control Permit MRP are followed. Additional details about the applications are provided in Table 6 (Pesticide Application Logs for Chemical Monitoring Events 2011 and 2012). Each application event that was monitored was given an "Event ID" which is listed in all tables and allows for simple referencing between tables and figures.

4.2 LARVICIDE MONITORING RESULTS

Physical measurements and associated visual observations for larvicide applications are included in Appendix A. An electronic copy of the excel file used to create the pdf in this report can be provided upon request.

Table 4. MVCAC NPDES Permit Coalition Chemical Monitoring Data 2011 and 2012

Event ID	Application Date	Active Ingredient	MVCAC Member District	Map	Station ID[1]	Station Name	Latitude	Longitude	Sample Collector[2]	Sample Date	Sample Time	Pyrethrin	PBO/pyrethrin	Permethrin	Resmethrin	PBO/resmethrin	Sumithrin	Prallethrin	Etofenprox	PBO	Naled	Malathion	MGK-264	Temephos
						Receiving Water Monitoring Trigger or Receiving Water Limitation (malathion)						*0.14*	*0.014*	*0.03*	*0.028*	*0.13*	*0.0025*	*0.39*	*0.0019*	*49*	*0.014*	*0.1*	*16.9*	*8*
												(ug/L)	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*
2011-1	7/28/2011	naled	San Joaquin	Figure 2	SHK_W	Shin Kee Wetlands	38.10521	-121.41904	GCL	7/28/2011	16:15										<0.002			
2011-1	7/28/2011	naled	San Joaquin	Figure 2	SHK_W	Shin Kee Wetlands	38.10521	-121.41904	MLJ	7/29/2011	18:20										<0.002			
2011-1	7/28/2011	naled	San Joaquin	Figure 2	WSL_A	White Slough	38.08735	-121.40138	GCL	7/28/2011	16:35										<0.002			
2011-1	7/28/2011	naled	San Joaquin	Figure 2	WSL_A	White Slough	38.08735	-121.40138	MLJ	7/29/2011	18:00										<0.002			
2011-2	7/28/2011	sumithrin	Sac-Yolo	Figure 3	ELV_A	Elverta Canal	38.71441	-121.5214	GCL	7/28/2011	18:40						<0.002			0.0328				
2011-2	7/28/2011	sumithrin	Sac-Yolo	Figure 3	ELV_A	Elverta Canal	38.71441	-121.5214	MLJ	7/29/2011	16:30						<0.002			0.0998				
2011-2	7/28/2011	sumithrin	Sac-Yolo	Figure 4	NBC_W	Natomas Basin Conservancy	38.72953	-121.50694	GCL	7/28/2011	18:10						<0.002			0.0102				
2011-2	7/28/2011	sumithrin	Sac-Yolo	Figure 4	NBC_W	Natomas Basin Conservancy	38.72953	-121.50694	MLJ	7/29/2011	16:10						<0.002			0.1520				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	ELV_A	Elverta Canal	38.71441	-121.5214	GCL	8/9/2011	16:40						<0.002			0.0038				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	ELV_A	Elverta Canal	38.71441	-121.5214	MLJ	8/10/2011	16:20						no data			no data				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	NBC_W	Natomas Basin Conservancy	38.72953	-121.50694	GCL	8/9/2011	16:00						<0.002			0.0110				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	NBC_W	Natomas Basin Conservancy	38.72953	-121.50694	MLJ	8/10/2011	16:00						<0.002			0.1330				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	YBW_W	Yolo Basin Wildlife Area Wetland	38.55113	-121.62769	GCL	8/9/2011	19:00						<0.002			0.0148				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	YBW_W	Yolo Basin Wildlife Area Wetland	38.55113	-121.62769	MLJ	8/10/2011	17:00						**0.0043**			0.286				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	YBW_A	Yolo Basin Wildlife Area Ag Drain	38.55234	-121.62917	GCL	8/9/2011	18:30						<0.002			0.0042				
2011-3	8/9/2011	sumithrin	Sac-Yolo	Figure 4	YBW_A	Yolo Basin Wildlife Area Ag Drain	38.55234	-121.62917	MLJ	8/10/2011	17:10						<0.002			0.0784				
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	UHC_U	Union House Creek	38.4635	-121.447239	GCL	8/23/2011	16:00	<0.001	<0.002											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	UHC_U	Union House Creek	38.4635	-121.447239	MLJ	8/25/2011	16:00	0.0010	**5.20**											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	SBC_U	Strawberry Creek	38.4489	-121.3848	GCL	8/23/2011	16:40	<0.001	<0.002											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	SBC_U	Strawberry Creek	38.4489	-121.3848	MLJ	8/25/2011	16:30	0.0040	**2.29**											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	LGC_U	Laguna Creek at Jack Hill Park	38.417	-121.358	GCL	8/23/2011	17:20	<0.001	<0.002											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	LGC_U	Laguna Creek at Jack Hill Park	38.417	-121.358	MLJ	8/25/2011	17:00	<0.001	0.0250											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	CDL_U	Camden Lake	38.42396	-121.375095	GCL	8/23/2011	18:15	<0.001	<0.002											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	CDL_U	Camden Lake	38.42396	-121.375095	MLJ	8/25/2011	17:30	<0.001	**0.660**											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	EGC_U	Elk Grove Creek	38.42832	-121.408097	GCL	8/23/2011	18:55	<0.001	<0.002											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	EGC_U	Elk Grove Creek	38.42832	-121.408097	MLJ	8/25/2011	18:00	<0.001	**3.13**											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	LGL_U	Laguna Lake at Ayr Drive	38.41493	-121.431512	GCL	8/23/2011	19:30	<0.001	<0.002											
2011-4	8/23/2011	pyrethrin/PBO	Sac-Yolo	Figure 5	LGL_U	Laguna Lake at Ayr Drive	38.41493	-121.431512	MLJ	8/25/2011	18:40	<0.001	**1.24**											
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6a	ELV_A	Elverta Canal	38.71441	-121.5214	GCL	9/29/2011	16:40						<0.002			0.0050				
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6a	ELV_A	Elverta Canal	38.71441	-121.5214	MLJ	9/30/2011	16:10						<0.002			0.0110				
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6a	NBC_W	Natomas Basin Conservancy	38.72953	-121.50694	GCL	9/29/2011	16:00						<0.002			0.0030				
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6a	NBC_W	Natomas Basin Conservancy	38.72953	-121.50694	MLJ	9/30/2011	15:50						<0.002			0.0140				
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6b	YBW_A	Yolo Basin Wildlife Area Ag Drain	38.55234	-121.62917	GCL	9/29/2011	17:40						<0.002			<0.001				
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6b	YBW_A	Yolo Basin Wildlife Area Ag Drain	38.55234	-121.62917	MLJ	9/30/2011	17:10						<0.002			0.0030				
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6b	YBW_W2	Yolo Basin Wildlife Area Wetland #2	38.55077	-121.62625	GCL	9/29/2011	18:15						<0.002			<0.001				
2011-5	9/29/2011	sumithrin	Sac-Yolo	Figure 6b	YBW_W2	Yolo Basin Wildlife Area Wetland #2	38.55077	-121.62625	MLJ	9/30/2011	17:00						<0.002			0.0020				
2012-1	5/16/2012	sumithrin	San Joaquin	Figure 7	PIG_W	Pig Lake	38.15284	-121.28674	GCL	5/16/2012	17:00						<0.002			0.01				
2012-1	5/16/2012	sumithrin	San Joaquin	Figure 7	PIG_W	Pig Lake	38.15284	-121.28674	MLJ	5/17/2012	15:50						<0.002			0.2				
2012-1	5/16/2012	sumithrin	San Joaquin	Figure 7	LOD_U	Lodi Lake	38.14852	-121.29692	GCL	5/16/2012	17:30						<0.002			<0.005				
2012-1	5/16/2012	sumithrin	San Joaquin	Figure 7	LOD_U	Lodi Lake	38.14852	-121.29692	MLJ	5/17/2012	16:10						<0.002			0.03				
2012-1	5/16/2012	sumithrin	San Joaquin	Figure 7	COW_A	Cow pasture pond	38.15529	-121.28364	GCL	5/16/2012	16:10						<0.002			<0.005				
2012-1	5/16/2012	sumithrin	San Joaquin	Figure 7	COW_A	Cow pasture pond	38.15529	-121.28364	MLJ	5/17/2012	16:40						<0.002			0.05				
2012-2	5/25/2012	malathion	San Joaquin	Figure 8	ETD_A[4]	Empire Tract Drain	38.06016	-121.49755	GCL	5/24/2012	16:30											<0.005		
2012-2	5/25/2012	malathion	San Joaquin	Figure 8	ETD_A	Empire Tract Drain	38.06016	-121.49755	MLJ	5/26/2012	5:50											**0.11**		
2012-2	5/25/2012	malathion	San Joaquin	Figure 8	EMP_W	Empire Tract Drain	38.06506	-121.48705	GCL	5/24/2012	17:00											<0.005		
2012-2	5/25/2012	malathion	San Joaquin	Figure 8	EMP_W	Empire Tract Drain	38.06506	-121.48705	MLJ	5/26/2012	5:20											0.09		
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	LGC_U	Laguna Creek at Jack Hill Park	38.417	-121.358	GCL	6/11/2012	18:45						<0.002			DNQ (Est. Conc. 0.009)				
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	LGC_U	Laguna Creek at Jack Hill Park	38.417	-121.358	MLJ	6/12/2012	19:15						<0.002			DNQ (Est. Conc. 0.04)				
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	CDL_U	Camden Lake	38.42396	-121.375095	GCL	6/11/2012	19:45						<0.002			DNQ (Est. Conc. 0.006)				
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	CDL_U	Camden Lake	38.42396	-121.375095	GCL	6/12/2012	20:00						<0.002			0.04				
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	ECP_U	Elder Creek @ Cedar Point	38.48194	-121.344948	GCL	6/11/2012	17:15						<0.002 UJ			0.04 J				
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	ECP_U	Elder Creek @ Cedar Point	38.48194	-121.344948	GCL	6/12/2012	17:45						<0.002 UJ			0.2 J				
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	UHH_U	Union House @ Halbrite Way	38.47433	-121.399392	GCL	6/11/2012	16:15						<0.002			<0.005				
2012-3	6/11/2012	sumithrin	Sac-Yolo	Figure 9	UHH_U[5]	Union House @ Halbrite Way	38.47433	-121.399392	GCL	6/12/2012	16:45						<0.002			0.09 J				
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	LGC_U	Laguna Creek at Jack Hill Park	38.417	-121.358	GCL	6/12/2012	19:15										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	LGC_U	Laguna Creek at Jack Hill Park	38.417	-121.358	MLJ	6/13/2012	17:30										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	CDL_U	Camden Lake	38.42396	-121.375095	GCL	6/12/2012	20:00										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	CDL_U	Camden Lake	38.42396	-121.375095	MLJ	6/13/2012	17:50										<0.005			

Table 4. MVCAC NPDES Permit Coalition Chemical Monitoring Data 2011 and 2012

Event ID	Application Date	Active Ingredient	MVCAC Member District	Map	Station ID[1]	Station Name	Latitude	Longitude	Sample Collector[2]	Sample Date	Sample Time	Pyrethrin	PBO/pyrethrin	Permethrin	Resmethrin	PBO/resmethrin	Sumithrin	Prallethrin	Etofenprox	PBO	Naled	Malathion	MGK-264	Temephos
						Receiving Water Monitoring Trigger or Receiving Water Limitation (malathion)						*0.14*	*0.014*	*0.03*	*0.028*	*0.13*	*0.0025*	*0.39*	*0.0019*	*49*	*0.014*	*0.1*	*16.9*	*8*
												(ug/L)	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	ECP_U	Elder Creek @ Cedar Point	38.48194	-121.344948	GCL	6/12/2012	17:45										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	ECP_U	Elder Creek @ Cedar Point	38.48194	-121.344948	MLJ	6/13/2012	16:10										<0.005			
2012-4	41072.0	naled	Sac-Yolo	Figure 10	UHH_U [5]	Union House @ Halbrite Way	38.5	-121.4	GCL	6/12/2012	16:45										<0.005			
2012-4	41072.0	naled	Sac-Yolo	Figure 10	UHH_U	Union House @ Halbrite Way	38.5	-121.4	MLJ	6/13/2012	16:40										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	SBC_U	Strawberry Creek	38.4489	-121.3848	GCL	6/12/2012	15:45										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	SBC_U	Strawberry Creek	38.4489	-121.3848	MLJ	6/13/2012	17:00										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	WAE_W	Wetland along Excelsior Rd	38.48692	-121.29752	GCL	6/12/2012	18:25										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	WAE_W	Wetland along Excelsior Rd	38.48692	-121.29752	MLJ	6/13/2012	15:50										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	EGK_U	Elk Grove Creek near Kiawah Ct.	38.41485	-121.39857	GCL	6/12/2012	20:30										<0.005			
2012-4	6/12/2012	naled	Sac-Yolo	Figure 10	EGK_U	Elk Grove Creek near Kiawah Ct.	38.41485	-121.39857	MLJ	6/13/2012	18:20										<0.005			
2012-5	6/26/2012[3]	pyrethrin/PBO	Coachella Valley	Figure 11	NSH_W	North Shore Fish Pond	33.54056	-116.068223	URS	6/26/2012	12:25	<0.05	<0.005											
2012-5	6/26/2012[3]	pyrethrin/PBO	Coachella Valley	Figure 11	NSH_W	North Shore Fish Pond	33.54056	-116.068223	URS	7/1/2012	14:17	<0.05	**0.02**											
2012-5	6/26/2012[3]	pyrethrin/PBO	Coachella Valley	Figure 11	DMB_W	Dos Hombres Fish Pond	33.55369	-116.071357	URS	6/26/2012	14:05	<0.05	**0.04 J**											
2012-5	6/26/2012[3]	pyrethrin/PBO	Coachella Valley	Figure 11	DMB_W	Dos Hombres Fish Pond	33.55369	-116.071357	URS	7/1/2012	15:04	<0.05	**0.07 J**											
2012-5	6/26/2012[3]	pyrethrin/PBO	Coachella Valley	Figure 11	SUN_W	Sunset Duck Pond	33.54461	-116.078102	URS	6/26/2012	15:30	<0.05	**0.06 J**											
2012-5	6/26/2012[3]	pyrethrin/PBO	Coachella Valley	Figure 11	SUN_W	Sunset Duck Pond	33.54461	-116.078102	URS	7/1/2012	15:36	<0.05	**DNQ (Est. Conc. 0.04)**											
2012-6	7/18/2012	sumithrin/prallethrin	Greater LA	Figure 12	HAR_U [4]	Harbor Lake	33.78237	-118.293117	URS	7/17/2012	17:50						<0.002	<0.005		0.02 J				
2012-6	7/18/2012	sumithrin/prallethrin	Greater LA	Figure 12	HAR_U	Harbor Lake	33.78237	-118.293117	URS	7/18/2012	18:06						<0.002	<0.005		0.04 J				
2012-7	7/23/2012[3]	permethrin	Coachella Valley	Figure 13a	DMB_W	Dos Hombres Fish Pond	33.55369	-116.071357	URS	7/23/2012	15:00			<0.005						0.06				
2012-7	7/23/2012[3]	permethrin	Coachella Valley	Figure 13a	DMB_W	Dos Hombres Fish Pond	33.55369	-116.071357	URS	7/28/2012	15:53			<0.005						0.02 J				
2012-7	7/23/2012[3]	permethrin	Coachella Valley	Figure 13b	76A_A	76th Avenue	33.49878	-116.09555	URS	7/23/2012	16:30			<0.005						DNQ (Est. Conc. 0.006)				
2012-7	7/23/2012[3]	permethrin	Coachella Valley	Figure 13b	76A_A	76th Avenue	33.49878	-116.09555	URS	7/28/2012	16:29			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14a	TCV_A	Toomes Creek @ Tehama Vina	39.97964	-122.06913	GCL	8/1/2012	14:44			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14a	TCV_A [5]	Toomes Creek @ Tehama Vina	39.97964	-122.06913	MLJ	8/2/2012	17:30			<0.005						0.03				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14a	MCS_A	Mills Creek at Shasta Blvd	40.04615	-122.09555	GCL	8/1/2012	15:46			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14a	MCS_A	Mills Creek at Shasta Blvd	40.04615	-122.09555	MLJ	8/2/2012	16:50			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14c	DYC_A	Dye Creek at Shasta Blvd	40.08837	-122.0912	GCL	8/1/2012	16:24			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14c	DYC_A	Dye Creek at Shasta Blvd	40.08837	-122.0912	MLJ	8/2/2012	16:30			<0.005						DNQ (Est. Conc. 0.007)				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14b	ACG_A	Antelope Creek at Cone Grove	40.16717	-122.1359	GCL	8/1/2012	17:32			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14b	ACG_A	Antelope Creek at Cone Grove	40.16717	-122.1359	MLJ	8/2/2012	16:10			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14b	CGS_A	Cone Grove Slough	40.16983	-122.14729	GCL	8/1/2012	18:16			<0.005						<0.005				
2012-8	8/1/2012	permethrin	Tehama County	Figure 14b	CGS_A	Cone Grove Slough	40.16983	-122.14729	MLJ	8/2/2012	15:40			<0.005						<0.005				
2012-9	9/13/2012	permethrin	Sutter/Yuba	Figure 15b	PLU_U	Plumas Lake	39.00609	-121.552919	GCL	9/13/2012	15:30			<0.005						<0.005				
2012-9	9/13/2012	permethrin	Sutter/Yuba	Figure 15b	PLU_U [6]	Plumas Lake	39.00609	-121.552919	MLJ	9/14/2012	16:30			0.025						0.2				
2012-9	9/13/2012	permethrin	Sutter/Yuba	Figure 15a	GSU_U	Gilsizer Slough	39.11259	-121.63643	GCL	9/13/2012	17:20			<0.005						<0.005				
2012-9	9/13/2012	permethrin	Sutter/Yuba	Figure 15a	GSU_U	Gilsizer Slough	39.11259	-121.63643	MLJ	9/14/2012	16:00			<0.005						<0.005				
2012-10	9/20/2012	permethrin	Sutter/Yuba	Figure 15b	PLU_U	Plumas Lake	39.00609	-121.552919	GCL	9/20/2012	18:15			<0.005						<0.005				
2012-10	9/20/2012	permethrin	Sutter/Yuba	Figure 15b	PLU_U	Plumas Lake	39.00609	-121.552919	MLJ	9/21/2012	17:20			0.02						0.1				
2012-10	9/20/2012	permethrin	Sutter/Yuba	Figure 15a	GSU_U	Gilsizer Slough	39.11259	-121.63643	GCL	9/20/2012	15:15			<0.005						<0.005				
2012-10	9/20/2012	permethrin	Sutter/Yuba	Figure 15a	GSU_U	Gilsizer Slough	39.11259	-121.63643	MLJ	9/21/2012	15:40			<0.005						DNQ (Est. Conc. 0.005)				
2012-10	9/20/2012	permethrin	Sutter/Yuba	Figure 16	TBU_U	Tierra Buena	39.1461	-121.671794	GCL	9/20/2012	16:45			<0.025						<0.025				
2012-10	9/20/2012	permethrin	Sutter/Yuba	Figure 16	TBU_U	Tierra Buena	39.1461	-121.671794	MLJ	9/21/2012	16:20			<0.025						<0.025				
2012-11	9/26/2012	etofenprox	Greater LA	Figure 17	HAR_U	Harbor Lake	33.78237	-118.293117	URS	9/25/2012	14:05								<0.0016 UJ	<0.01				
2012-11	9/26/2012	etofenprox	Greater LA	Figure 17	HAR_U	Harbor Lake	33.78237	-118.293117	URS	9/26/2012	19:10							**DNQ (Est. Conc. 0.02)**		0.025				
2012-12	9/27/2012	permethrin	Sutter/Yuba	Figure 15a	GSU_U	Gilsizer Slough	39.11259	-121.63643	MLJ	9/27/2012	15:50			<0.005						<0.005				
2012-12	9/27/2012	permethrin	Sutter/Yuba	Figure 15a	GSU_U	Gilsizer Slough	39.11259	-121.63643	MLJ	9/28/2012	15:50			<0.005						<0.005				
2012-13	10/3/2012	pyrethrin	Merced County	Figure 18	NG1_W	North Grasslands 1	37.05064	-120.78338	GCL	10/2/2012	16:35	<0.05	**0.1 J**											
2012-13	10/3/2012	pyrethrin	Merced County	Figure 18	NG1_W	North Grasslands 1	37.05064	-120.78338	GCL	10/3/2012	16:40	<0.05	**0.2 J**											
2012-13	10/3/2012	pyrethrin	Merced County	Figure 18	NG2_W	North Grasslands 2	37.04212	-120.77708	GCL	10/2/2012	16:00	<0.05	<0.005 R											
2012-13	10/3/2012	pyrethrin	Merced County	Figure 18	NG2_W	North Grasslands 2	37.04212	-120.77708	GCL	10/3/2012	16:10	<0.05	**0.2 J**											
2012-13	10/3/2012	pyrethrin	Merced County	Figure 18	NG3_W	North Grasslands 3	37.03594	-120.77988	GCL	10/2/2012	15:10	<0.05	0.01 J											
2012-13	10/3/2012	pyrethrin	Merced County	Figure 18	NG3_W	North Grasslands 3	37.03594	-120.77988	GCL	10/3/2012	15:50	<0.05	**0.2 J**											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	UNL_A	Unnamed Drain	39.3990	-121.7390	MLJ	11/14/2012	8:35	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	UNL_A	Unnamed Drain	39.3990	-121.7390	MLJ	11/15/2012	7:20	<0.05	**0.1**											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	UN2_A	Unnamed Drain #2	39.3990	-121.7540	MLJ	11/14/2012	8:25	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	UN2_A	Unnamed Drain #2	39.3990	-121.7540	MLJ	11/15/2012	7:30	<0.05	<0.005											

Table 4. MVCAC NPDES Permit Coalition Chemical Monitoring Data 2011 and 2012

Event ID	Application Date	Active Ingredient	MVCAC Member District	Map	Station ID[1]	Station Name	Latitude	Longitude	Sample Collector[2]	Sample Date	Sample Time	Pyrethrin	PBO/pyrethrin	Permethrin	Resmethrin	PBO/resmethrin	Sumithrin	Prallethrin	Etofenprox	PBO	Naled	Malathion	MGK-264	Temephos
						Receiving Water Monitoring Trigger or Receiving Water Limitation (malathion)						*0.14*	*0.014*	*0.03*	*0.028*	*0.13*	*0.0025*	*0.39*	*0.0019*	*49*	*0.014*	*0.1*	*16.9*	*8*
												(ug/L)	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*	*(ug/L)*
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	UN3_A	Unnamed Drain #3	39.3990	-121.7650	MLJ	11/14/2012	8:00	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	UN3_A	Unnamed Drain #3	39.3990	-121.7650	MLJ	11/15/2012	7:50	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	BLD_A	Belding Lateral	39.4000	-121.7260	MLJ	11/14/2012	8:45	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	BLD_A	Belding Lateral	39.4000	-121.7260	MLJ	11/15/2012	7:05	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	MDC_A	Main Drain Canal	39.3990	-121.7560	MLJ	11/14/2012	8:15	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	MDC_A	Main Drain Canal	39.3990	-121.7560	MLJ	11/15/2012	7:40	<0.05	DNQ (Est. Conc. 0.007)											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	ASH_A	Ashley Lateral	39.3850	-121.7820	MLJ	11/14/2012	7:50	<0.05	<0.005											
2012-14	11/14/2012	pyrethrin	Butte County	Figure 19	ASH_A	Ashley Lateral	39.3850	-121.7820	MLJ	11/15/2012	8:05	<0.05	<0.005											

Notes:
1. The last character of the station ID indicates whether the station is in an agricultural (A), urban (U), or wetland (W) environmental setting.
2. Samples were collected by staff from Granite Canyon Laboratory (GCL), Michael L. Johnson, LLC (MLJ), or URS.
3. Both Coachella Valley application events were 5-day events in which the adulticide was sprayed every day for 5 days and the "event" sample was collected within 24 hours after the 5th day.
4. Field duplicate was collected on this date at this location. Duplicate results were the same as those shown on this table.
5. Field blank sample was collected on this date at this location. Results were non-detect.
6. Field duplicate collected on this date at this location. Results shown are averages (permethrin 0.03, 0.02 DNQ; PBO 0.2, 0.2)

All 2011 analytical results were reported by California Department of Fish and Game. All 2012 analytical results were reported by Caltest. Caltest laboratory reports are available upon request.

Data Qualifiers include the following:

DNQ = Detected, but Not Quantified - The sample result was reported between the method detection limit and the reporting limit.

"UJ" – Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate (in most cases due to low surrogate recoveries) and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

"J" – Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

"R" – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. In this case, the surrogate recovery was below 10%.

nd = no data

Analytical results in **bold** exceed the Receiving Water Monitoring Trigger or Receiving Water Limitation.

Table 5. MVCAC NPDES Permit Coalition Visual Observations and Physical Measurements Associated with Chemical Monitoring 2011 and 2012

						Weather Conditions				Visual Observations								Physical Measurements				
Event ID	Active Ingredient	MVCAC Member District	Station ID[1]	Sample Date	Sample Time	Overhead Conditions	Precip.	Wind	Air Temp.	Water Color	Water Clarity	Water Surface Oils	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Potential Nuisance Conditions		Water Temp	ED	DO	pH	Turbidity
																		(F)	*(umhos/cm)*	*(mg/L)*	*(units)*	*(NTU)*
2011-1	naled	San Joaquin	SHK_W	7/28/2011	16:15	Clear/sunny	None	nd	nd	Brown	Murky	None	nd	nd	nd	nd		80.168	244	9.24	8.38	nd
2011-1	naled	San Joaquin	SHK_W	7/29/2011	18:20	Clear/sunny	None	Gusty	Warm/mild	Brown	Cloudy	None	nd	nd	nd	nd		79.9	249	9.92	8.82	nd
2011-1	naled	San Joaquin	WSL_A	7/28/2011	16:35	Clear/sunny	None	nd	nd	Green	Cloudy	None	nd	nd	nd	nd		80.7	223	8.9	8.03	nd
2011-1	naled	San Joaquin	WSL_A	7/29/2011	18:00	Clear/sunny	None	Gusty	Warm/mild	Green	Cloudy	None	nd	nd	nd	nd		79.3	156	8.84	6.88	nd
2011-2	sumithrin	Sac-Yolo	ELV_A	7/28/2011	18:40	Clear/sunny	None	nd	nd	Brown	Murky	None	nd	nd	nd	nd		82.2	534	6.52	7.66	nd
2011-2	sumithrin	Sac-Yolo	ELV_A	7/29/2011	16:30	Clear/sunny	None	Calm	Hot	Brown	Murky	None	nd	nd	nd	nd		82.0	555	7.43	7.40	nd
2011-2	sumithrin	Sac-Yolo	NBC_W	7/28/2011	18:10	Clear/sunny	None	nd	nd	Brown	Cloudy	None	nd	nd	nd	nd		94.8	569	8.14	7.89	nd
2011-2	sumithrin	Sac-Yolo	NBC_W	7/29/2011	16:10	Clear/sunny	None	Calm	Hot	Brown	Murky	None	nd	nd	nd	nd		102.9	572	8.38	8.19	nd
2011-3	sumithrin	Sac-Yolo	ELV_A	8/9/2011	16:40	Clear/sunny	None	nd	nd	Brown	Cloudy	None	nd	nd	nd	nd		79.2	552	9.62	6.90	nd
2011-3	sumithrin	Sac-Yolo	ELV_A	8/10/2011	16:20	Clear/sunny	None	Calm	Hot	Yellow/Brown	Murky	None	nd	nd	nd	nd		79.5	547	9.01	7.41	nd
2011-3	sumithrin	Sac-Yolo	NBC_W	8/9/2011	16:00	Clear/sunny	Foggy	nd	nd	Brown	Murky	None	nd	nd	nd	nd		101.9	573	15.66	7.44	nd
2011-3	sumithrin	Sac-Yolo	NBC_W	8/10/2011	16:00	Clear/sunny	None	Calm	Hot	Brown	Murky	None	nd	nd	nd	foam		85.4	580	5.29	7.73	nd
2011-3	sumithrin	Sac-Yolo	YBW_W	8/9/2011	19:00	Clear/sunny	None	nd	nd	Yellow	Cloudy	None	nd	nd	nd	nd		76.9	1620	8.14	7.47	nd
2011-3	sumithrin	Sac-Yolo	YBW_W	8/10/2011	17:00	Clear/sunny	None	Calm	Hot	Yellow/Brown	Clear	None	nd	nd	nd	nd		74.1	1596	10.58	8.33	nd
2011-3	sumithrin	Sac-Yolo	YBW_A	8/9/2011	18:30	Clear/sunny	None	nd	nd	Brown	Cloudy	None	nd	nd	nd	nd		77.3	1210	7.01	6.99	nd
2011-3	sumithrin	Sac-Yolo	YBW_A	8/10/2011	17:10	Clear/sunny	None	Calm	Hot	Brown	Murky	None	nd	nd	nd	nd		73.0	1201	4.08	7.46	nd
2011-4	pyrethrin/PBO	Sac-Yolo	UHC_U	8/23/2011	16:00	Clear/sunny	None	nd	nd	Colorless	Clear	None	nd	nd	nd	nd		94.8	229	15.56	7.71	nd
2011-4	pyrethrin/PBO	Sac-Yolo	UHC_U	8/25/2011	16:00	Clear/sunny	None	Light breeze	Warm/mild	Yellow/Brown	Clear	None	nd	nd	nd	nd		94.5	227	7.33	8.77	nd
2011-4	pyrethrin/PBO	Sac-Yolo	SBC_U	8/23/2011	16:40	Clear/sunny	None	nd	nd	Colorless	Cloudy	None	nd	nd	nd	nd		78.3	289	5.15	5.35	nd
2011-4	pyrethrin/PBO	Sac-Yolo	SBC_U	8/25/2011	16:30	Clear/sunny	None	Light breeze	Hot	Brown	Murky	None	nd	nd	nd	nd		75.7	295	5.48	7.19	nd
2011-4	pyrethrin/PBO	Sac-Yolo	LGC_U	8/23/2011	17:20	Clear/sunny	None	nd	nd	Brown	Clear	None	nd	nd	nd	nd		78.2	286	11.11	6.48	nd
2011-4	pyrethrin/PBO	Sac-Yolo	LGC_U	8/25/2011	17:00	Clear/sunny	None	Light breeze	Hot	Brown	Clear	None	nd	nd	nd	nd		74.3	290	7.61	7.45	nd
2011-4	pyrethrin/PBO	Sac-Yolo	CDL_U	8/23/2011	18:15	Clear/sunny	None	nd	nd	Green	Clear	None	nd	nd	nd	nd		76.1	266	6.14	6.4	nd
2011-4	pyrethrin/PBO	Sac-Yolo	CDL_U	8/25/2011	17:30	Clear/sunny	None	Light breeze	Hot	Green/Yellow	Clear	None	nd	nd	nd	nd		73.9	260	5.04	7.30	nd
2011-4	pyrethrin/PBO	Sac-Yolo	EGC_U	8/23/2011	18:55	Clear/sunny	None	nd	nd	Colorless	Clear	None	nd	nd	nd	nd		83.8	300	7.84	6.26	nd
2011-4	pyrethrin/PBO	Sac-Yolo	EGC_U	8/25/2011	18:00	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	None	nd	nd	nd	nd		85.1	218	2.62	7.12	nd
2011-4	pyrethrin/PBO	Sac-Yolo	LGL_U	8/23/2011	19:30	Clear/sunny	None	nd	nd	Colorless	Clear	None	nd	nd	nd	nd		83.6	260	9.53	8.26	nd
2011-4	pyrethrin/PBO	Sac-Yolo	LGL_U	8/25/2011	18:40	Clear/sunny	None	Light breeze	Warm/mild	Yellow	Clear	None	nd	nd	nd	nd		84.0	264	9.30	9.57	nd
2011-5	sumithrin	Sac-Yolo	ELV_A	9/29/2011	16:40	Partly cloudy	None	nd	nd	Brown	Murky	None	nd	nd	nd	nd		71.8	423	13	5.2	nd
2011-5	sumithrin	Sac-Yolo	ELV_A	9/30/2011	16:10	Clear/sunny	None	Gusty	Warm/mild	Brown	Murky	None	nd	nd	nd	nd		70.9	395	6.88	7.54	nd
2011-5	sumithrin	Sac-Yolo	NBC_W	9/29/2011	16:00	Partly cloudy	None	nd	nd	Green	Murky	None	nd	nd	nd	nd		83.9	612	15.66	7.44	nd
2011-5	sumithrin	Sac-Yolo	NBC_W	9/30/2011	15:50	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	None	nd	nd	nd	nd		75.4	585	4.67	7.73	nd
2011-5	sumithrin	Sac-Yolo	YBW_A	9/29/2011	17:40	Partly cloudy	None	nd	nd	Brown	Cloudy	None	nd	nd	nd	nd		70.5	1107	9.71	6.52	nd
2011-5	sumithrin	Sac-Yolo	YBW_A	9/30/2011	17:10	Clear/sunny	None	Gusty	Warm/mild	Brown	Cloudy	None	nd	nd	nd	nd		70.3	1160	8.58	8.04	nd
2011-5	sumithrin	Sac-Yolo	YBW_W2	9/29/2011	18:15	Partly cloudy	None	nd	nd	Colorless	Cloudy	None	nd	nd	nd	nd		78.2	1299	9.21	6.02	nd
2011-5	sumithrin	Sac-Yolo	YBW_W2	9/30/2011	17:00	Clear/sunny	None	Gusty	Warm/mild	Colorless	Clear	None	nd	nd	nd	nd		74.3	1252	3.55	7.81	nd
2012-1	sumithrin	San Joaquin	PIG_W	5/16/2012	17:00	Clear/sunny	None	Light breeze	Hot	Brown	Murky	None	N	N	N	none noted		76.0	103	2.83	6.84	nd
2012-1	sumithrin	San Joaquin	PIG_W	5/17/2012	15:50	Hazy	None	Light breeze	Warm/mild	Brown	Murky	None	Y	N	Y	none noted		69.3	76.7	1.62	7.20	16.5
2012-1	sumithrin	San Joaquin	LOD_U	5/16/2012	17:30	Clear/sunny	None	Light breeze	Hot	Brown	Clear	None	N	N	N	none noted		76.8	46	9.76	7.82	nd
2012-1	sumithrin	San Joaquin	LOD_U	5/17/2012	16:10	Partly cloudy	None	Light breeze	Warm/mild	Yellow/Brown	Clear	None	N	Y	Y	none noted		72.5	43.3	7.48	7.37	3.25
2012-1	sumithrin	San Joaquin	COW_A	5/16/2012	16:10	Clear/sunny	None	Light breeze	Hot	Brown	Murky	None	N	N	N	none noted		86.1	182	8.32	8.84	nd
2012-1	sumithrin	San Joaquin	COW_A	5/17/2012	16:40	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	None	Y	Y	Y	none noted		81.0	167.6	15.53	10.19	80.7
2012-2	malathion	San Joaquin	ETD_A	5/24/2012	16:30	Clear/sunny	None	Gusty	nd	Brown	Murky	None	N	N	N	none noted		73.31	1093	10.7	7.75	10
2012-2	malathion	San Joaquin	ETD_A	5/26/2012	5:50	Partly cloudy	None	Light breeze	Cool	Brown	Cloudy	None	N	Y	Y	none noted		62.1	1362	4.94	7.85	14.0
2012-2	malathion	San Joaquin	EMP_W	5/24/2012	17:00	Clear/sunny	None	Gusty	nd	Brown	Murky	None	N	N	N	none noted		81.0	792	8.45	7.58	13
2012-2	malathion	San Joaquin	EMP_W	5/26/2012	5:20	Clear/sunny	None	Light breeze	Cool	Brown	Cloudy	None	N	N	N	none noted		59.2	898	2.95	7.80	19.4
2012-3	sumithrin	Sac-Yolo	LGC_U	6/11/2012	18:45	Clear/sunny	None	Light breeze	Hot	Brown	Murky	None	N	N	Y	none noted		79.8	274	6.24	7.04	nd
2012-3	sumithrin	Sac-Yolo	LGC_U	6/12/2012	19:15	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	N	N	N	none noted		80.3	277	6.98	6.87	nd
2012-3	sumithrin	Sac-Yolo	CDL_U	6/11/2012	19:45	Clear/sunny	None	Calm	Warm/mild	Green/Brown	Murky	None	Y	N	Y	none noted		78.5	206	7.47	7.41	nd
2012-3	sumithrin	Sac-Yolo	CDL_U	6/12/2012	20:00	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	Y	N	N	none noted		76.5	209	8.27	7.01	nd

Table 5. MVCAC NPDES Permit Coalition Visual Observations and Physical Measurements Associated with Chemical Monitoring 2011 and 2012

						Weather Conditions				Visual Observations							Physical Measurements				
Event ID	Active Ingredient	MVCAC Member District	Station ID[1]	Sample Date	Sample Time	Overhead Conditions	Precip.	Wind	Air Temp.	Water Color	Water Clarity	Water Surface Oils	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Potential Nuisance Conditions	Water Temp	ED	DO	pH	Turbidity
																	(F)	*(umhos/cm)*	*(mg/L)*	*(units)*	*(NTU)*
2012-3	sumithrin	Sac-Yolo	ECP_U	6/11/2012	17:15	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	N	N	N	none noted	90.5	183	17.21	8.5	nd
2012-3	sumithrin	Sac-Yolo	ECP_U	6/12/2012	17:45	Clear/sunny	None	Calm	Hot	Green/Brown	Murky	None	N	N	N	none noted	90.2	202	20.3	8.76	nd
2012-3	sumithrin	Sac-Yolo	UHH_U	6/11/2012	16:15	Clear/sunny	None	Calm	Hot	Green/Brown	Clear	None	N	N	Y	none noted	76.4	2	8.09	7.36	nd
2012-3	sumithrin	Sac-Yolo	UHH_U	6/12/2012	16:45	Clear/sunny	None	Calm	Cool	Green/Brown	Clear	None	N	N	Y	none noted	77.306	5	8.44	6.65	nd
2012-4	naled	Sac-Yolo	LGC_U	6/12/2012	19:15	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	N	N	N	none noted	80.3	277	6.98	6.87	nd
2012-4	naled	Sac-Yolo	LGC_U	6/13/2012	17:30	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	None	Y	N	N	none noted	81.3	280	5.37	7.5	3.93
2012-4	naled	Sac-Yolo	CDL_U	6/12/2012	20:00	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	Y	N	N	none noted	76.5	209	8.27	7.01	nd
2012-4	naled	Sac-Yolo	CDL_U	6/13/2012	17:50	Clear/sunny	None	Light breeze	Hot	Green/Brown	Clear	None	Y	N	N	none noted	76.3	208.6	7.69	8.10	1.87
2012-4	naled	Sac-Yolo	ECP_U	6/12/2012	17:45	Clear/sunny	None	Calm	Hot	Green/Brown	Murky	None	N	N	N	none noted	90.2	202	20.3	8.76	nd
2012-4	naled	Sac-Yolo	ECP_U	6/13/2012	16:10	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	N	N	N	none noted	89.4	90.3	12.61	9.87	31.2
2012-4	naled	Sac-Yolo	UHH_U	6/12/2012	16:45	Clear/sunny	None	Calm	Cool	Green/Brown	Clear	None	N	N	Y	none noted	77.306	5	8.44	6.65	nd
2012-4	naled	Sac-Yolo	UHH_U	6/13/2012	16:40	Clear/sunny	None	Light breeze	Hot	Green/Brown	Clear	None	N	N	N	Trash	76.3	245.7	7.12	7.87	3.29
2012-4	naled	Sac-Yolo	SBC_U	6/12/2012	15:45	Clear/sunny	None	Calm	Hot	Green/Brown	Cloudy	None	N	N	N	none noted	74.4	326	6.12	6.49	nd
2012-4	naled	Sac-Yolo	SBC_U	6/13/2012	17:00	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	Slick	N	N	N	none noted	75.0	303.9	5.40	7.52	13.5
2012-4	naled	Sac-Yolo	WAE_W	6/12/2012	18:25	Clear/sunny	None	Light breeze	Hot	Yellow	Murky	None	Y	N	Y	none noted	83.8	385	6.05	6.7	nd
2012-4	naled	Sac-Yolo	WAE_W	6/13/2012	15:50	Clear/sunny	None	Light breeze	Hot	Green	Clear	None	N	N	N	none noted	81.5	298.7	5.70	7.58	44.5
2012-4	naled	Sac-Yolo	EGK_U	6/12/2012	20:30	Clear/sunny	None	Light breeze	Cool	Brown	Murky	None	N	N	N	none noted	81.1	88	7.74	6.74	nd
2012-4	naled	Sac-Yolo	EGK_U	6/13/2012	18:20	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	N	N	N	none noted	91.0	167.7	7.5	7.63	220
2012-5	pyrethrin/PBO	Coachella Valley	NSH_W	6/26/2012	12:25	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	Y	N	Y	Slimes	79.8	7427	7.93	8.13	154
2012-5	pyrethrin/PBO	Coachella Valley	NSH_W	7/1/2012	14:17	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	Y	N	N	none noted	82.2	1994	7.62	8.90	186
2012-5	pyrethrin/PBO	Coachella Valley	DMB_W	6/26/2012	14:05	Clear/sunny	None	Light breeze	Hot	Green/Brown	Cloudy	None	Y	N	Y	Slimes	89.1	149885	4.20	8.36	29.8
2012-5	pyrethrin/PBO	Coachella Valley	DMB_W	7/1/2012	15:04	Clear/sunny	None	Light breeze	Hot	Green/Brown	Murky	None	Y	N	N	none noted	91.7	3845	6.55	8.51	28.0
2012-5	pyrethrin/PBO	Coachella Valley	SUN_W	6/26/2012	15:30	Clear/sunny	None	Light breeze	Hot	Green/Brown	Clear	None	Y	N	Y	slimes, organic debris at bottom	86.2	310.613	1.87	7.94	5.05
2012-5	pyrethrin/PBO	Coachella Valley	SUN_W	7/1/2012	15:36	Clear/sunny	None	Light breeze	Hot	Green	Clear	None	Y	Y	Y	Slimes	86.9	7794	7.84	7.94	7.23
2012-6	sumithrin/prallethrin	Greater LA	HAR_U	7/17/2012	17:50	Clear/sunny	None	Gusty	Warm/mild	Yellow/Brown	Murky	Films	Y	N	Y	Slimes or objectionable growths	79.52	723	3.83	7.70	6.77
2012-6	sumithrin/prallethrin	Greater LA	HAR_U	7/18/2012	18:06	Partly cloudy	None	Light breeze	Warm/mild	Yellow/Brown	Murky	Slick/Films	Y	N	Y	Slimes or objectionable growths	77.7	737	4.22	7.12	8.04
2012-7	permethrin	Coachella Valley	DMB_W	7/23/2012	15:00	Clear/sunny	None	Light breeze	Hot	Green/Brown	Cloudy	None	Y	N	Y	Limited floating matter	93.6	3530	0.98	8.85	11.35
2012-7	permethrin	Coachella Valley	DMB_W	7/28/2012	15:53	Clear/sunny	None	Light breeze	Hot	Green/Brown	Cloudy	None	Y	N	Y	Limited floating matter	91.3	2008	12.04	9.06	18.3
2012-7	permethrin	Coachella Valley	76A_A	7/23/2012	16:30	Clear/sunny	None	Light breeze	Hot	Brown	Clear	None	N	Y	Y	Trash	94.9	7829	0.98	8.24	2.40
2012-7	permethrin	Coachella Valley	76A_A	7/28/2012	16:29	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	None	N	Y	Y	none noted	87.3	1846	15.85	8.53	11.2
2012-8	permethrin	Tehama County	TCV_A	8/1/2012	14:44	Clear/sunny	None	Calm	Hot	Yellow	Cloudy	None	N	N	N	none noted	89.0	130.8	3.29	6.00	nd
2012-8	permethrin	Tehama County	TCV_A	8/2/2012	17:30	Clear/sunny	None	Light breeze	Hot	Brown	Clear	None	N	Y	Y	none noted	88.7	193.6	7.71	7.76	0.64
2012-8	permethrin	Tehama County	MCS_A	8/1/2012	15:46	Clear/sunny	None	Calm	Hot	Colorless	Clear	None	N	N	N	none noted	86.9	139600	4.29	6.08	nd
2012-8	permethrin	Tehama County	MCS_A	8/2/2012	16:50	Clear/sunny	None	Light breeze	Hot	Brown	Clear	None	N	N	Y	none noted	86.9	193.6	8.24	8.64	0.76
2012-8	permethrin	Tehama County	DYC_A	8/1/2012	16:24	Clear/sunny	None	Light breeze	Hot	Green	Cloudy	None	N	N	N	none noted	86.0	148.9	4.95	5.95	nd
2012-8	permethrin	Tehama County	DYC_A	8/2/2012	16:30	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	None	N	N	Y	none noted	84.7	215.0	6.86	7.48	0.78
2012-8	permethrin	Tehama County	ACG_A	8/1/2012	17:32	Clear/sunny	None	Calm	Hot	Yellow	Clear	None	N	N	N	none noted	84.0	118.4	3.80	5.60	nd
2012-8	permethrin	Tehama County	ACG_A	8/2/2012	16:10	Clear/sunny	None	Calm	Hot	Brown	Clear	None	N	N	Y	none noted	85.3	176.9	8.61	7.96	1.54
2012-8	permethrin	Tehama County	CGS_A	8/1/2012	18:16	Clear/sunny	None	Calm	Hot	Brown	Clear	None	N	N	N	none noted	74.4	125100	3.56	5.44	nd
2012-8	permethrin	Tehama County	CGS_A	8/2/2012	15:40	Clear/sunny	None	Calm	Hot	Colorless	Clear	None	N	N	N	none noted	75.4	184.2	11.85	8.01	0.78
2012-9	permethrin	Sutter/Yuba	PLU_U	9/13/2012	15:30	Clear/sunny	None	Calm	Hot	Colorless	Clear	None	N	N	N	none noted	70.2	530	3.03	5.54	nd
2012-9	permethrin	Sutter/Yuba	PLU_U	9/14/2012	16:30	Clear/sunny	None	Calm	Hot	Green	Clear	Sheen	Y	N	Y	none noted	69.8	501.3	2.92	7.39	3.75
2012-9	permethrin	Sutter/Yuba	GSU_U	9/13/2012	17:20	Clear/sunny	None	Calm	Hot	Colorless	Clear	None	N	N	N	none noted	72.4	846	13.79	5.93	nd
2012-9	permethrin	Sutter/Yuba	GSU_U	9/14/2012	16:00	Partly cloudy	None	Calm	Hot	Colorless	Clear	Sheen	N	Y	Y	Objectionable growths	73.4	616	13.70	8.52	0.75
2012-10	permethrin	Sutter/Yuba	PLU_U	9/20/2012	18:15	Clear/sunny	None	Calm	Cool	Brown	Cloudy	None	Y	N	Y	duckweed	68.9	444	1.19	6.28	nd
2012-10	permethrin	Sutter/Yuba	PLU_U	9/21/2012	17:20	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Films	Y	N	Y	none noted	67.6	443.3	1.86	7.5	4.56
2012-10	permethrin	Sutter/Yuba	GSU_U	9/20/2012	15:15	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Sheen	Y	N	N	none noted	72.2	854	12.51	7.43	nd
2012-10	permethrin	Sutter/Yuba	GSU_U	9/21/2012	15:40	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Sheen	Y	N	Y	Objectionable growths	73.2	789	12.3	8.02	0.96
2012-10	permethrin	Sutter/Yuba	TBU_U	9/20/2012	16:45	Clear/sunny	None	Calm	Hot	Brown	Cloudy	None	N	Y	N	sediment	72.8	580	4.49	6.92	nd

Table 5. MVCAC NPDES Permit Coalition Visual Observations and Physical Measurements Associated with Chemical Monitoring 2011 and 2012

						Weather Conditions				Visual Observations							Physical Measurements				
Event ID	Active Ingredient	MVCAC Member District	Station ID[1]	Sample Date	Sample Time	Overhead Conditions	Precip.	Wind	Air Temp.	Water Color	Water Clarity	Water Surface Oils	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Potential Nuisance Conditions	Water Temp	ED	DO	pH	Turbidity
																	(F)	*(umhos/cm)*	*(mg/L)*	*(units)*	*(NTU)*
2012-10	permethrin	Sutter/Yuba	TBU_U	9/21/2012	16:20	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Sheen	N	N	Y	Objectionable growths	87.8	470	13.88	8.93	7.96
2012-11	etofenprox	Greater LA	HAR_U	9/25/2012	14:05	Clear/sunny	None	Light breeze	Warm/mild	Green	Murky	Films	Y	N	Y	Slimes or objectionable growths	79.3	1075	4.90	7.27	7.66
2012-11	etofenprox	Greater LA	HAR_U	9/26/2012	19:10	Clear/sunny	None	Light breeze	Cool	Green	Murky	Films	Y	N	Y	Slimes or objectionable growths	72.9	886	7.42	7.75	13.8
2012-12	permethrin	Sutter/Yuba	GSU_U	9/27/2012	15:50	Clear/sunny	None	Calm	Hot	Colorless	Clear	Sheen	N	Y	Y	Slimes or objectionable growths	73.8	731	14.11	8.45	2.24
2012-12	permethrin	Sutter/Yuba	GSU_U	9/28/2012	15:50	Clear/sunny	None	Calm	Hot	Green	Clear	None	Y	N	Y	Fungi, Slimes	74.7	773	15.56	8.58	1.26
2012-13	pyrethrin	Merced County	NG1_W	10/2/2012	16:35	Clear/sunny	None	Light breeze	Hot	Green	Murky	None	Y	N	N	none noted	87.6	959	3.66	6.07	nd
2012-13	pyrethrin	Merced County	NG1_W	10/3/2012	8:40	Clear/sunny	None	Calm	Hot	Green	Murky	Films	Y	N	N	none noted	70.7	932	2.37	6.87	nd
2012-13	pyrethrin	Merced County	NG2_W	10/2/2012	16:00	Clear/sunny	None	Calm	Hot	Green	Murky	None	Y	N	N	none noted	82.2	920	18.71	6.24	nd
2012-13	pyrethrin	Merced County	NG2_W	10/3/2012	8:25	Clear/sunny	None	Calm	Warm/mild	Green	Murky	None	Y	N	N	none noted	71.6	922	4.47	7.6	nd
2012-13	pyrethrin	Merced County	NG3_W	10/2/2012	15:10	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	Films	N	N	N	plant matter	85.5	990	12.48	6.87	nd
2012-13	pyrethrin	Merced County	NG3_W	10/3/2012	7:50	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Films	N	N	N	plant matter	69.7	1005	1.6	7.19	nd
2012-14	pyrethrin	Butte County	UNL_A	11/14/2012	8:35	Partly cloudy	None	Calm	Cool	Colorless	Clear	None	N	N	N	none noted	47.1	78.1	11.21	7.48	11.7
2012-14	pyrethrin	Butte County	UNL_A	11/15/2012	7:20	Partly cloudy	None	Calm	Cool	Yellow/Brown	Cloudy	None	N	N	N	none noted	47.5	77.3	9.87	6.91	16.2
2012-14	pyrethrin	Butte County	UN2_A	11/14/2012	8:25	Partly cloudy	None	Calm	Cool	Green/Brown	Murky	Slick	Y	N	N	Slimes	50.4	82.9	9.26	7.43	7.21
2012-14	pyrethrin	Butte County	UN2_A	11/15/2012	7:30	Partly cloudy	None	Calm	Cool	Green/Brown	Murky	None	N	N	N	Slimes	50.4	81.5	9.1	7.08	5.98
2012-14	pyrethrin	Butte County	UN3_A	11/14/2012	8:00	Partly cloudy	None	Calm	Cool	Brown	Cloudy	None	N	N	N	none noted	49.6	230	5.86	7.26	20.6
2012-14	pyrethrin	Butte County	UN3_A	11/15/2012	7:50	Partly cloudy	None	Calm	Cool	Brown	Murky	Films	N	N	N	none noted	49.6	251	5.53	6.83	20.5
2012-14	pyrethrin	Butte County	BLD_A	11/14/2012	8:45	Partly cloudy	None	Calm	Cool	Green/Yellow	Cloudy	None	N	N	N	none noted	52.7	82	10.91	7.67	2.67
2012-14	pyrethrin	Butte County	BLD_A	11/15/2012	7:05	Partly cloudy	None	Calm	Cool	Green/Yellow	Cloudy	None	N	N	N	none noted	53.1	81.1	9.61	7.03	3.07
2012-14	pyrethrin	Butte County	MDC_A	11/14/2012	8:15	Partly cloudy	None	Calm	Cool	Brown	Cloudy	None	N	N	N	none noted	52.0	115	8.44	7.38	5.02
2012-14	pyrethrin	Butte County	MDC_A	11/15/2012	7:40	Partly cloudy	None	Calm	Cool	Brown	Cloudy	None	N	N	N	none noted	52.5	128.3	7.41	6.95	4.44
2012-14	pyrethrin	Butte County	ASH_A	11/14/2012	7:50	Partly cloudy	None	Calm	Cool	Brown	Cloudy	None	N	N	N	none noted	52.2	81.8	10.3	7.69	4.7
2012-14	pyrethrin	Butte County	ASH_A	11/15/2012	8:05	Partly cloudy	None	Calm	Cool	Green/Brown	Murky	None	N	N	N	none noted	52.52	81.3	10.34	7.29	4.66

Notes:
1. The last character of the station ID indicates whether the station is in an agricultural (A), urban (U), or wetland (W) environmental setting.
2. Samples were collected by staff from Granite Canyon Laboratory (GCL), Michael L. Johnson, LLC (MLJ), or URS.
3. Both Coachella Valley application events were 5-day events in which the adulticide was sprayed every day for 5 days and the "event" sample was collected within 24 hours after the 5th day.

nd = no data

Table 6. Pesticide Application Logs for Chemical Monitoring Events 2011 and 2012

Event ID	Application Date	Active Ingredient / Adjuvant	Product	EPA Reg. #	Application Area Location	Name of Applicator	Names of Water Body Treated	Start Time	Stop Time	Application Rate / Concentration / Dosage Amount	Amount of Pesticide Used (oz)	Area Applied (acres)
2011-1	7/28/2011	naled	Trumpet EC	5481-481	Figure 2	San Joaquin	Shin Kee Wetlands/White Slough (Sacramento San Joaquin Delta)					
2011-2	7/28/2011	sumithrin	ANVIL 10+10 ULV	8329-62	Figure 3	Sac-Yolo	Elverta Canal/ Colusa Basin Drain to Eye["I"] street bridge / Yolo Bypass	20:15		060 oz/acre	2291.2	3825
2011-3	8/9/2011	sumithrin	ANVIL 10+10 ULV	8329-62	Figure 4	Sac-Yolo	Elverta Canal/ Colusa Basin Drain to Eye["I"] street bridge	20:15		0.60 oz/acre	2521.6	4200
2011-4	8/23/2011	pyrethrin/PBO	Evergreen 60-6	1021-1770	Figure 5	Sac-Yolo	Union House Creek/ Strawberry Creek/ Laguna Creek/ Camden Lake/ Elk Grove Creek/ Laguna Lake (Sacramento San Joaquin Delta)	20:00		0.62 oz/acre	13184	21265
2011-5	9/29/2011	sumithrin	ANVIL 10+10 ULV	8329-62	Figure 6a, 6b	Sac-Yolo	Elverta Canal/ Colusa Basin Drain to Eye["I"] street bridge / Yolo Bypass	21:00		0.53 oz/acre	307.2	582
2012-1	5/16/2012	sumithrin	Anvil 10+10	8329-62	Figure 7	Sac-Yolo	Pig Lake/ Lodi Lake/ Cow Pasture Pond/ agriculture runoff (Mokelumne River/ San Joaquin Delta)					
2012-2	5/25/2012	malathion	FYFANON ULV MOSQUITO	67760-34	Figure 8	San Joaquin	Empire Tract Drain (Sacramento San Joaquin Delta)	5:15		0.67 oz/acre	703.5	1050
2012-3	6/11/2012	sumithrin	ANVIL 10+10 ULV	8329-62	Figure 9	Sac-Yolo	Laguna Creek/ Camden Lake, Elder Creek (Sacramento San Joaquin Delta)	20:30		0.62 oz/acre	20480	33032
2012-4	6/12/2012	naled	Dibrom Concentrate	5481-480	Figure 10	Sac-Yolo	Laguna Creek/ Camden Lake/ Elder Creek (Sacramento San Joaquin Delta)	20:30		0.75 oz/acre	24448	32597
2012-5	6/26/2012 6/27/2012 6/28/2012 6/29/2012 6/30/2012	pyrethrin/PBO	PYRENONE 25-5 M.A.G. CONCENTRATE	432-1050	Figure 11	Coachella Valley	Duck club ponds adjacent to the Whitewater River	19:58 19:49 19:45 19:48 19:48	21:01 21:04 21:10 20:49 20:52	5oz/min @ 5mph	234 200 216 215 214	214.5 229.1 221.8 218.2 218.2
2012-6	7/18/2012	sumithrin / prallethrin	Duet	1021-1795-8329	Figure 12	Greater LA	Harbor Lake	3:00	5:00	0.95 oz/acre	246.5	260.5
2012-7	7/23/2012 7/24/2012 7/25/2012 7/26/2012 7/27/2012	permethrin	AQUA-PERMANONE (AQ	432-796	Figure 13a, 13b	Coachella Valley	Duck club ponds adjacent to the Whitewater River	19:55 19:54 20:10 19:44 19:48	20:54 20:57 21:24 21:05 20:53	5oz/min 1:1 mix @ 10mph	91 85 99 22 96	152.7 185.5 192.7 58.2 210.9
2012-8	8/1/2012	permethrin	KONTROL 4-4	73748-4	Figure 14a, 14b, 14c	Tehama County	Toomes Creek/ Mill Creek/ Dye Creek/ Antelope Slough/ Antelope Creek (Sacramento River)	20:17 20:20 19:40	20:55 21:05 20:00	6oz/min @10mph	313.6 344 29.44	321.8 332 10.4
2012-9	9/13/2012	permethrin	Biomist 4+4	8329-35	Figure 15a, 15b	Sutter/Yuba	Gilsizer Slough/ Bear River (Feather River)	21:45 19:30	22:30 20:37	8oz/min @10mph 12oz/min @ 15mph	360 804	275 619
2012-10	9/20/2012	permethrin	Biomist 4+4	8329-35	Figure 15a, 15b, 15c	Sutter/Yuba	Gilsizer Slough/ Plunas Lake/ Bear River/ Live Oak Slough (Feather River)	21:00 19:15 19:22	21:45 20:50 20:47	8oz/min @10mph 12oz/min @ 15mph 1.30 oz/acre	360 1140 1020	275 877 785
2012-11	9/26/2012	etofenprox	RF2146 RTU (Zenivex)	2724-807	Figure 16	Greater LA	Harbor Lake	3:00	5:00	1.50 oz/acre	364	242
2012-12	9/27/2012	permethrin	Biomist 4+4	8329-35	Figure 15a	Sutter/Yuba	Gilsizer Slough (Feather River)	21:00	21:45	8oz/min @10mph	360	275
2012-13	10/3/2012	pyrethrin	EverGreen 6-60	1021-1770	Figure 17	Merced County	South Grasslands Wetland (Mud Slough)	19:00 19:08 19:25 19:35	19:05 19:17 19:34 19:50	1.56 oz/acre	186 279 326 465	291 436 509 727
2012-14	11/14/2012	pyrethrin	Pyrocide 7396	1021-1569	Figure 18	Butte County	Unnamed Drain #1/ Unnamed Drain #2/ Unnamed Drain #3/ Belding Lateral/ Main Drain Canal/ Ashley Lateral (Sacramento River)	10:00		5 oz/min @10 mph	122.88	160

Figure 1. Statewide Chemical Monitoring Locations, MVCAC NPDES Permit Coalition, 2011 and 2012

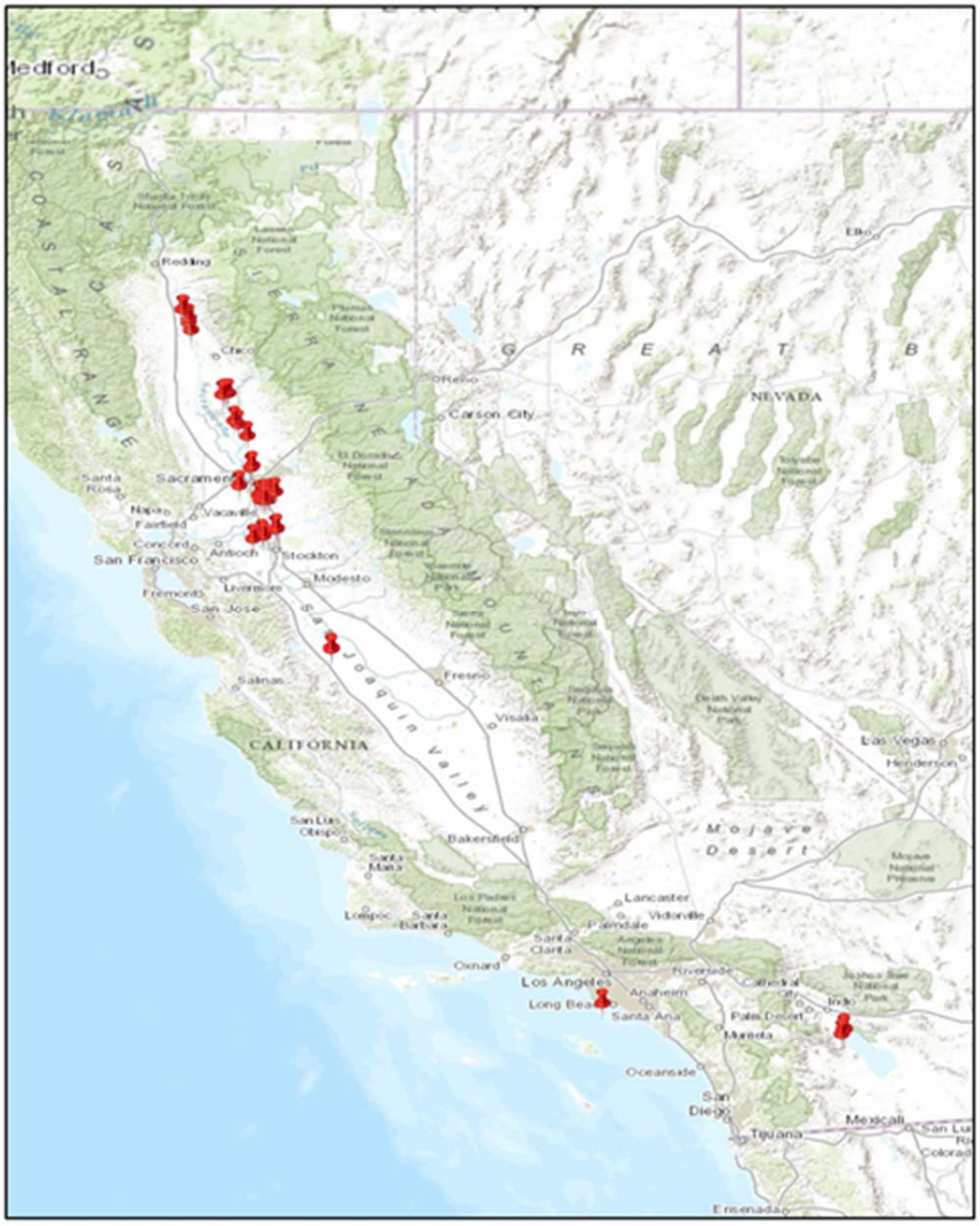


Figure 2. MVCAC Monitoring Event 2011-1 Naled Aerial Application 07/28/11 San Joaquin MVCD

Figure 3. MVCAC Monitoring Event 2011-2 Sumithrin Aerial Application 07/28/11 Sac-Yolo MVCD

Figure 4. MVCAC Monitoring Event 2011-3 Sumithrin Aerial Application 08/09/11 Sac-Yolo MVCD

Figure 5. MVCAC Monitoring Event 2011-4 Pyrethrin / PBO Aerial Application08/23/11 Sac-Yolo MVCD

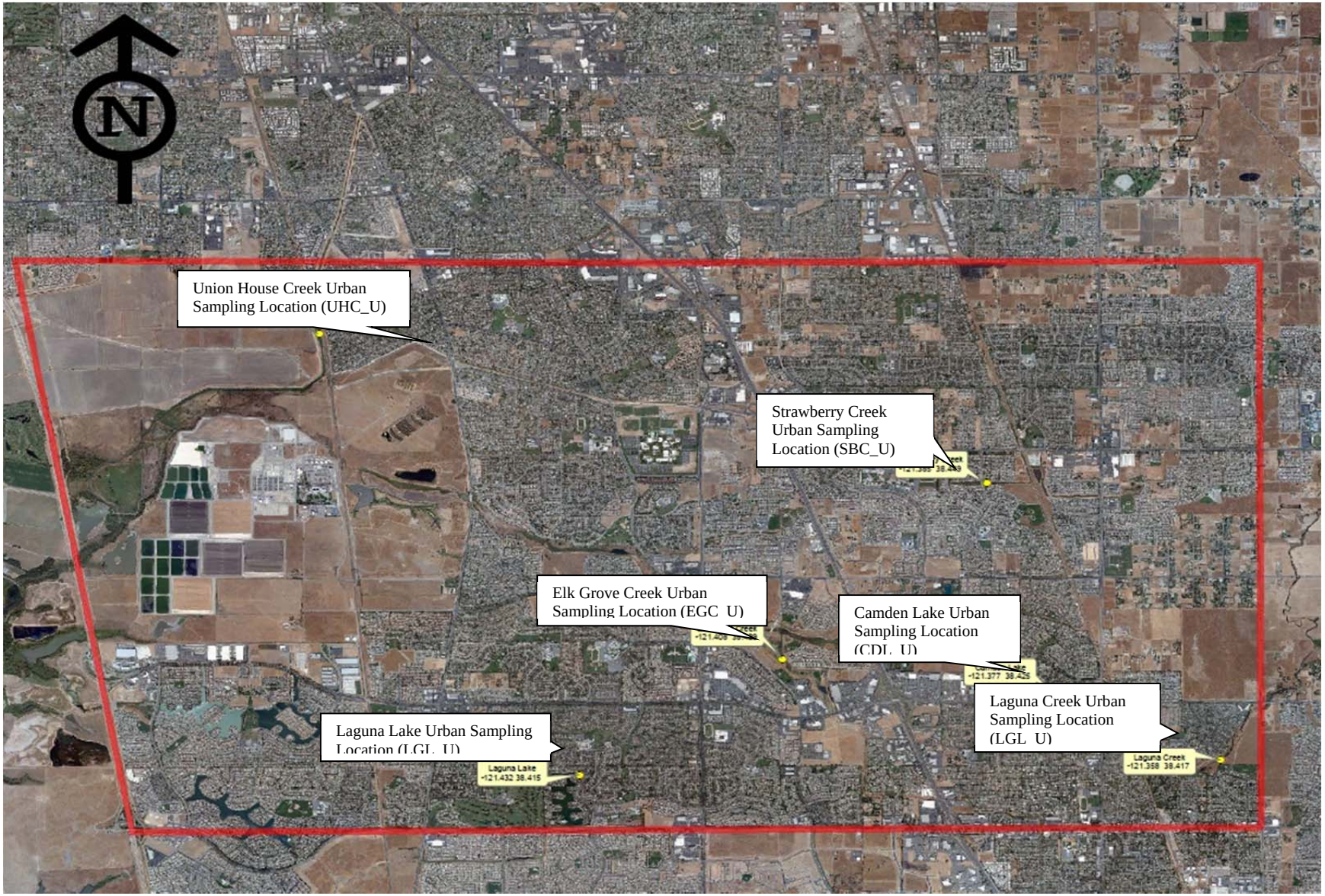


Figure 6a. MVCAC Monitoring Event 2011-5 Sumithrin Aerial Application 09/29/11 Sac-Yolo MVCD

Figure 6b. MVCAC Monitoring Event 2011-5 Sumithrin Aerial Application 09/29/11 Sac-Yolo MVCD

Figure 7. MVCAC Monitoring Event 2012-1 Sumithrin Truck Mounted Application 05/16/12 San Joaquin MVCD

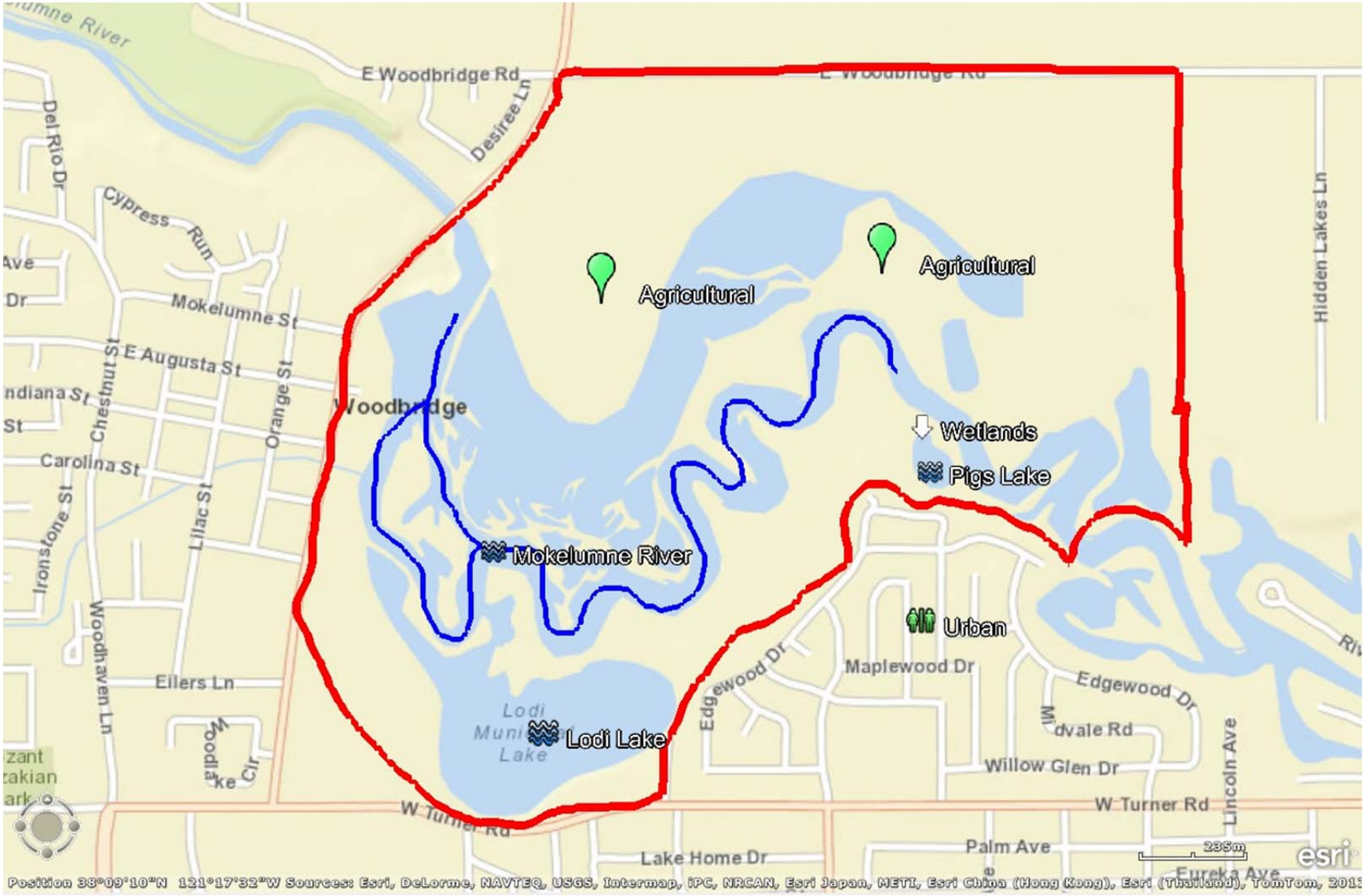


Figure 8. MVCAC Monitoring Event 2012-2 Malathion Truck Mounted Application 05/25/12 San Joaquin MVCD

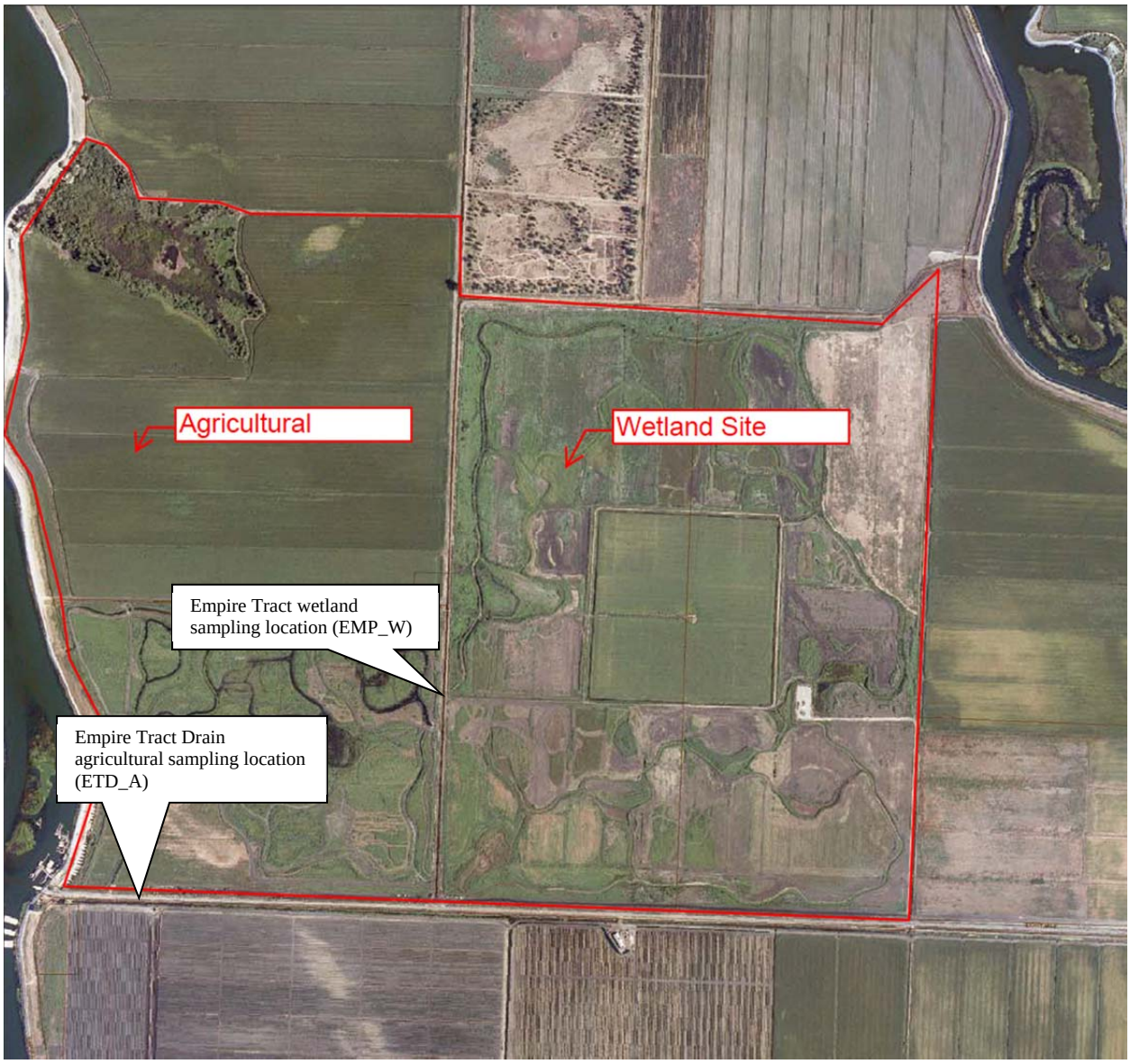
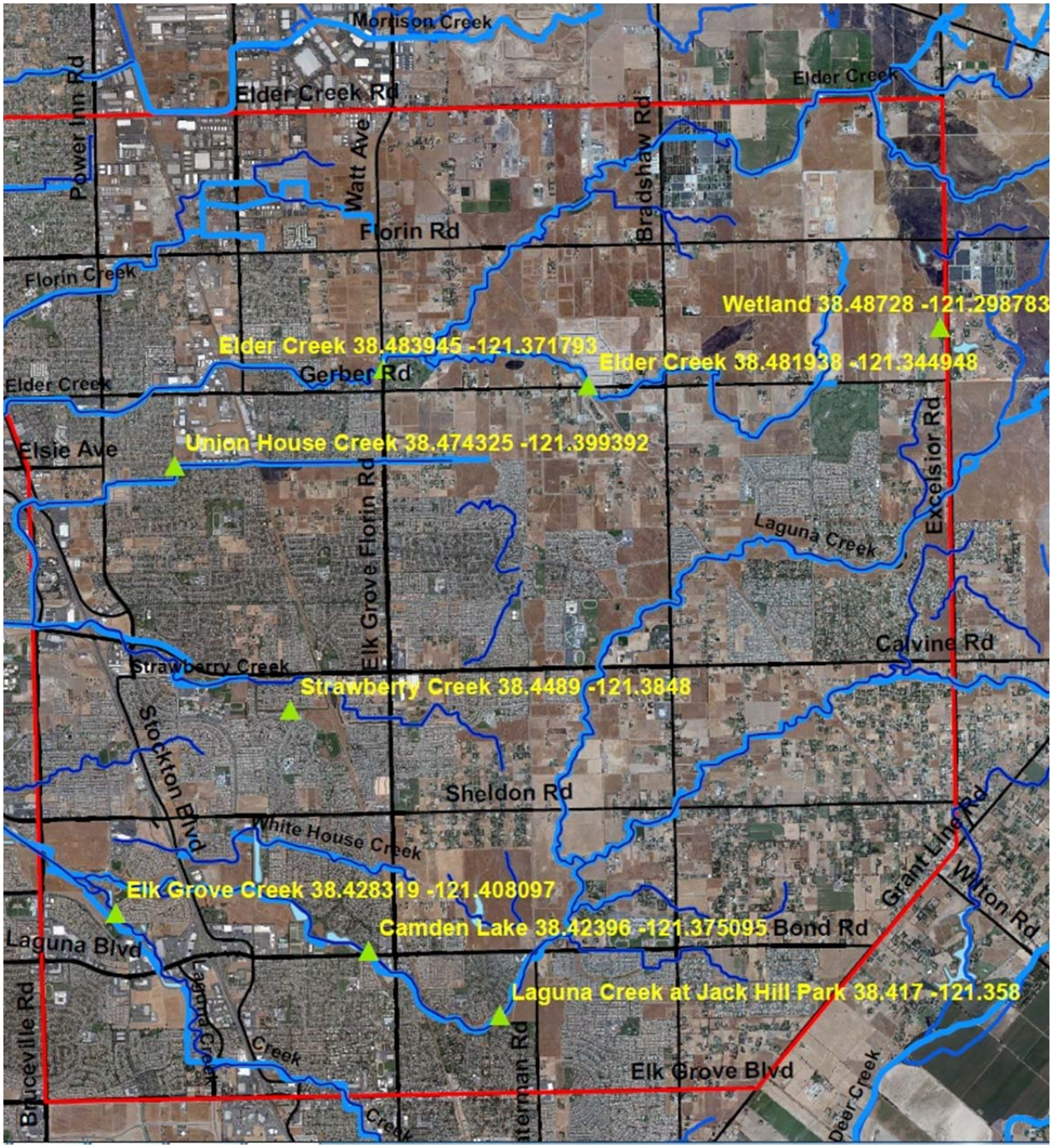
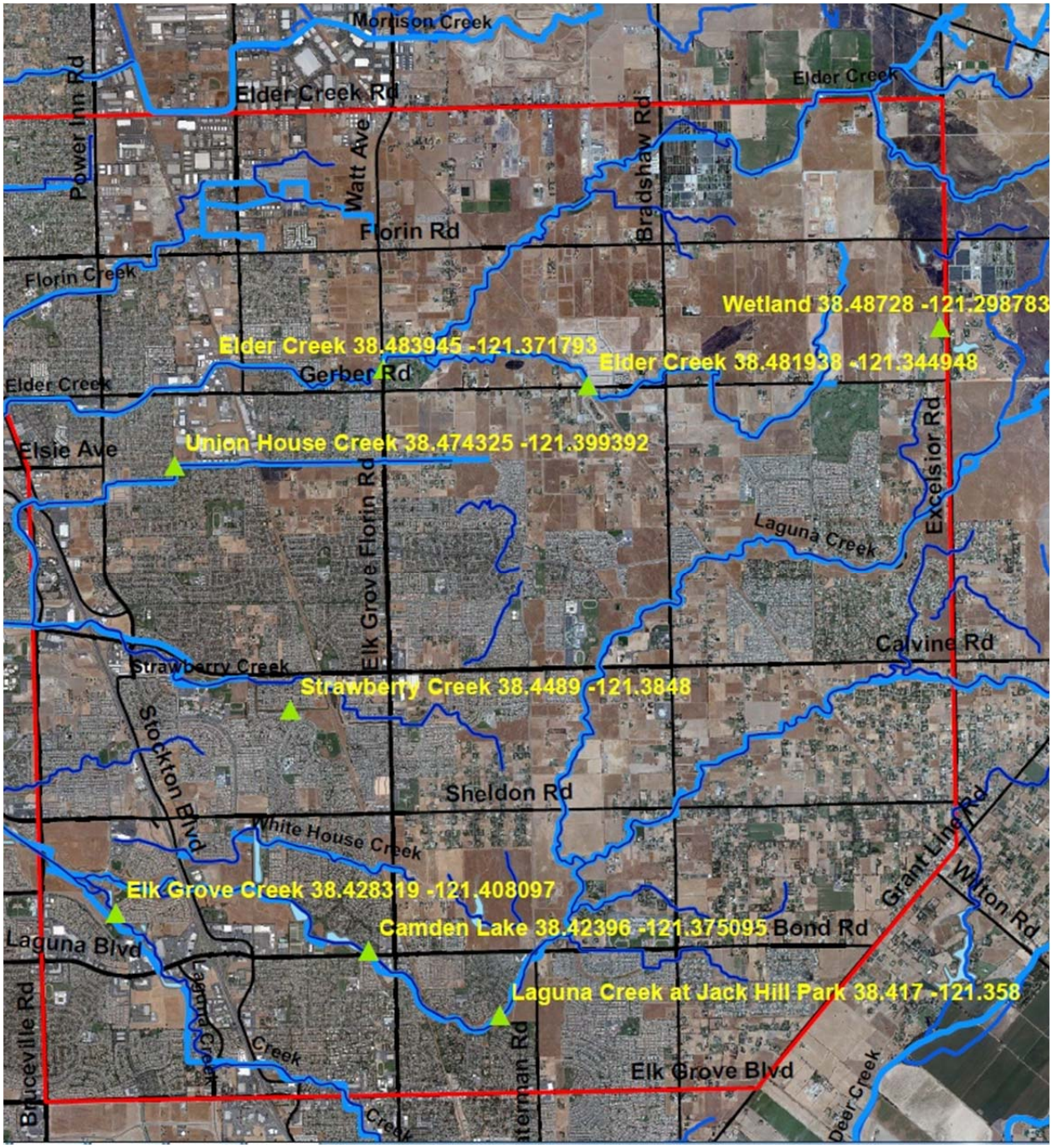


Figure 9. MVCAC Monitoring Event 2012-3 Sumithrin Aerial Application 06/11/12 Sac-Yolo MVCD



Note: Sumithrin sampling for 06/11/12 Application date conducted only at Laguna Creek at Jack Hill Park (LGC Urban), Camden Lake (CDL Urban), Elder Creek at Cedar Point (ECP Urban), and Union House Creek (UHH Urban).

Figure 10. MVCAC Monitoring Event 2012-4 Naled Aerial Application 06/12/12 Sac-Yolo MVCD



Note: Naled sampling for 06/12/12 Application date conducted only at Laguna Creek at Jack Hill Park (LGC Urban), Camden Lake (CDL Urban), Elder Creek at Cedar Point (ECP Urban), Union House Creek (UHH Urban), Strawberry Creek (SBC Urban), Wetland along Excelsior Rd (WAE Wetland), and Elk Grove Creek (EGK Urban).

Figure 11. MVCAC Monitoring Event 2012-5 Pyrethrin / PBO Truck Mounted Application 06/26/12 Coachella Valley MVCD

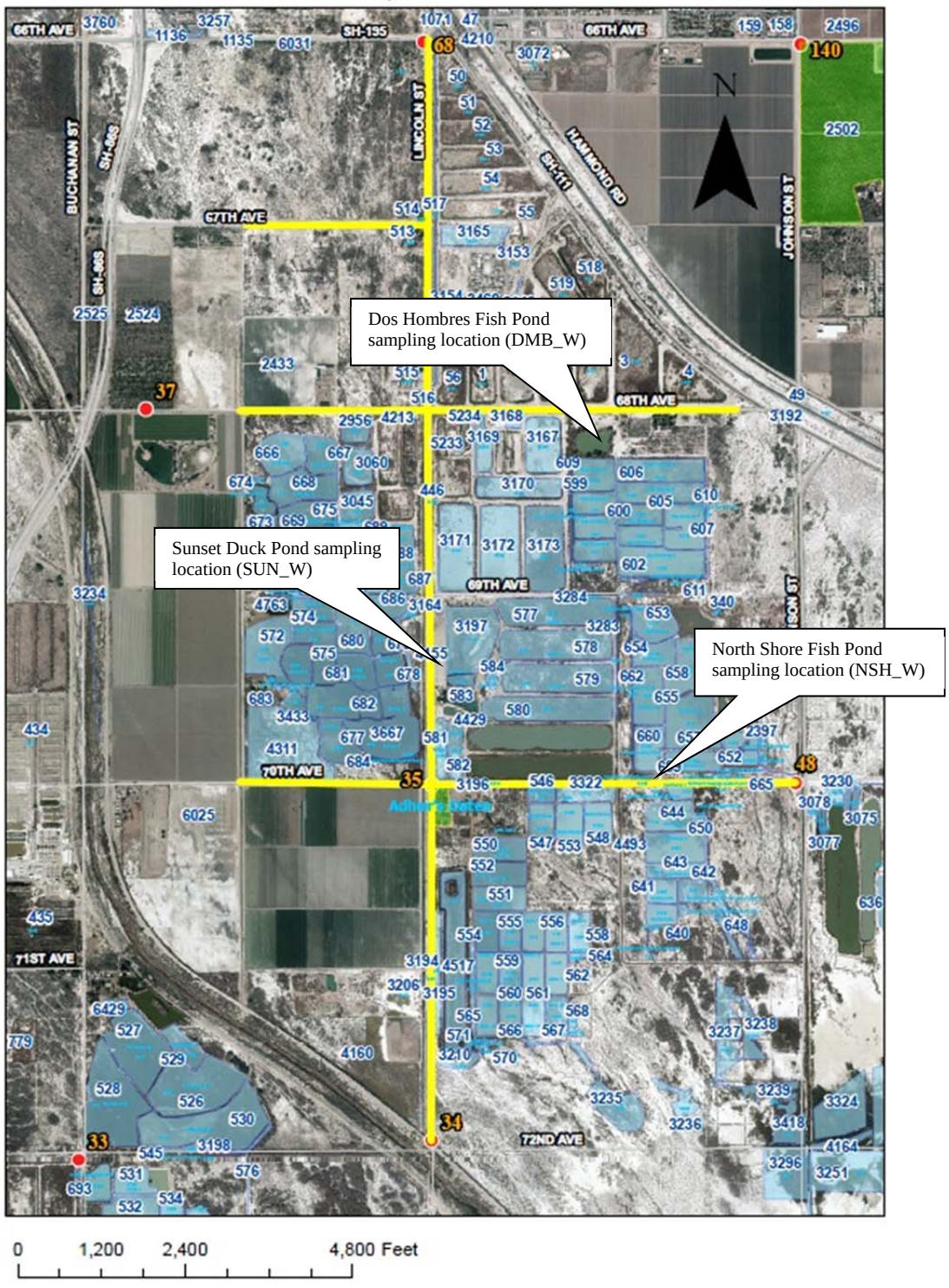


Figure 12. MVCAC Monitoring Event 2012-6 Sumithrin and Prallethrin Truck Mounted Application 07/18/12 Greater Los Angeles County VCD

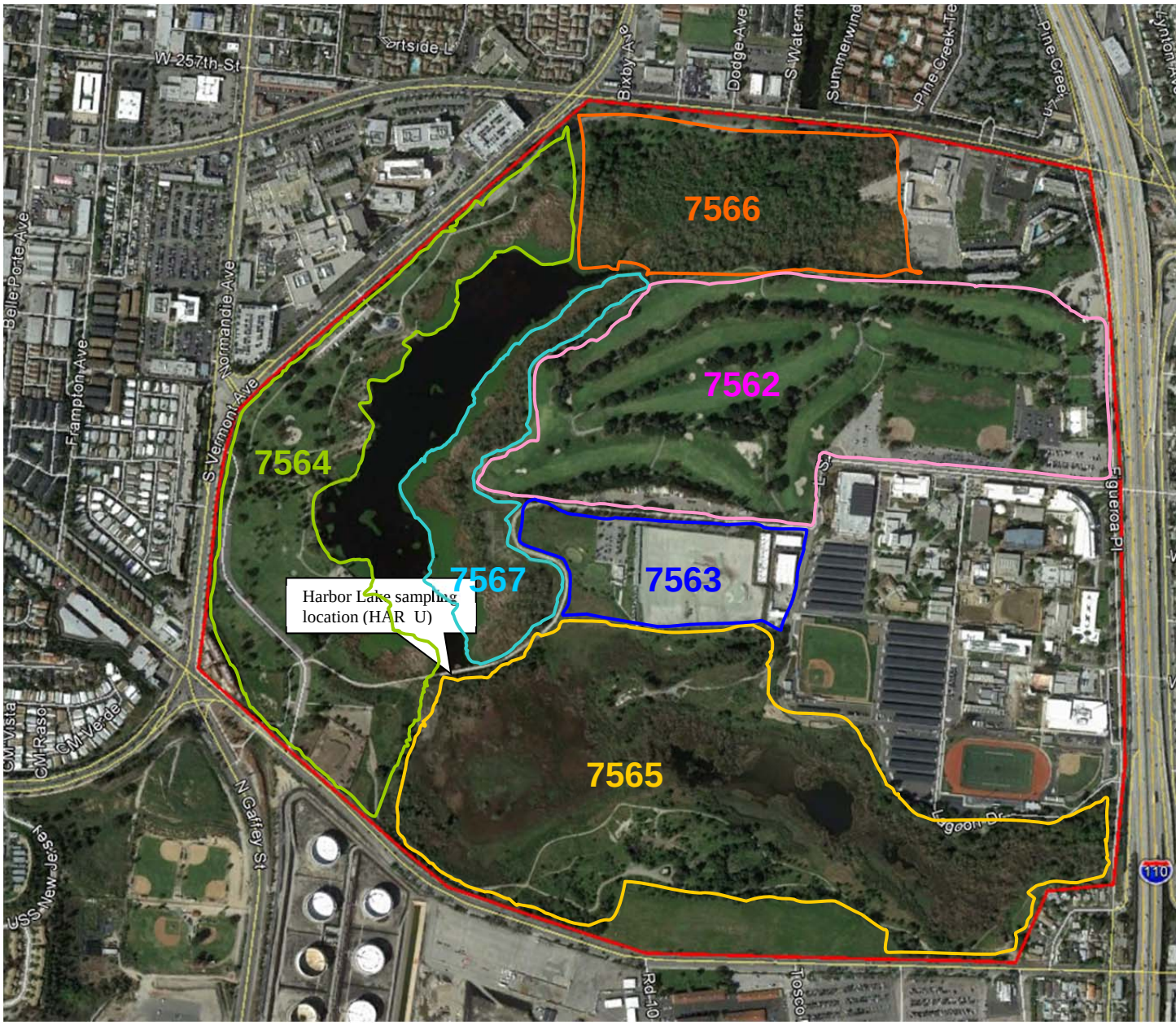


Figure 13a. MVCAC Monitoring Event 2012-7 Permethrin Truck Mounted Application 07/23/12 Coachella Valley MVCD

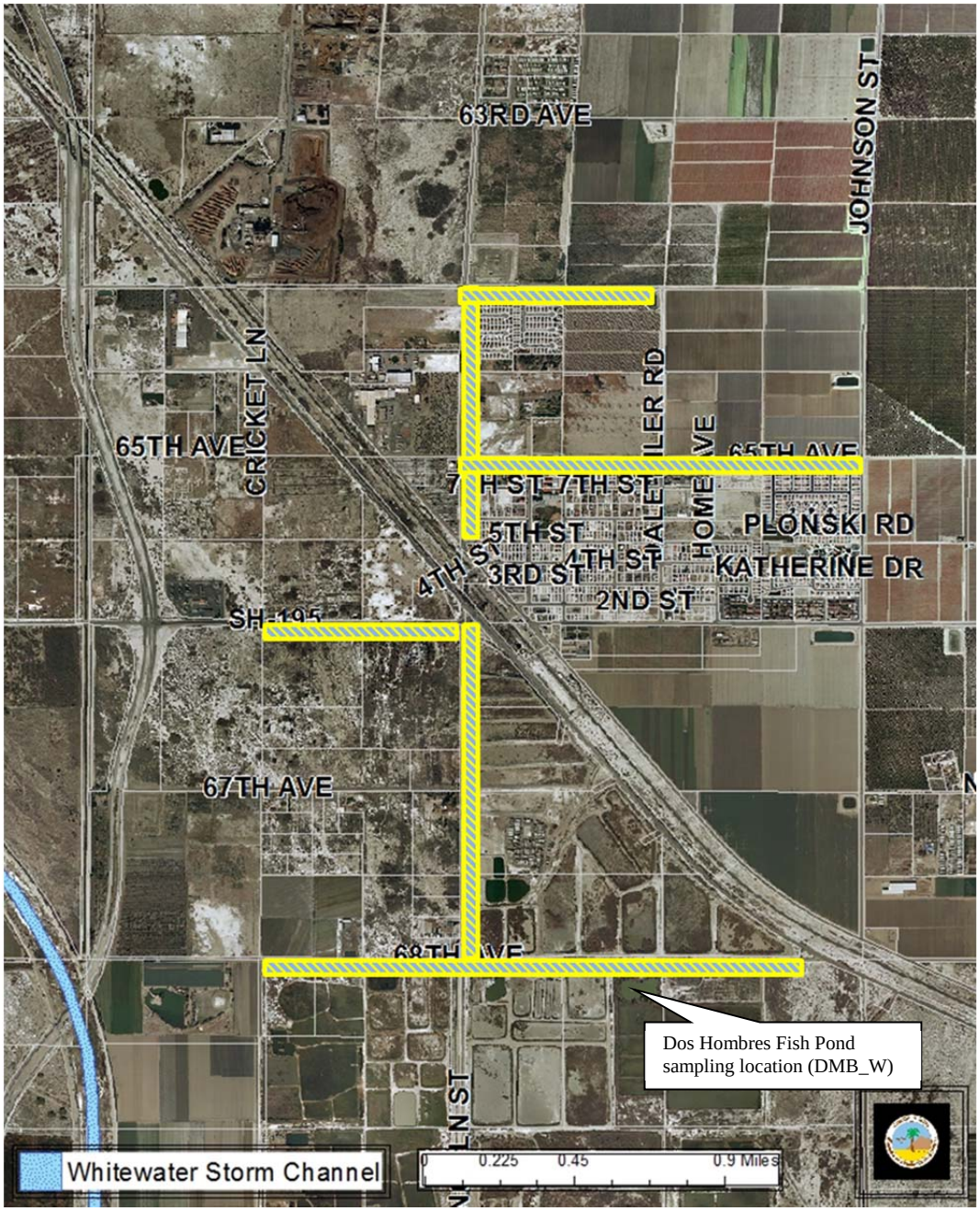


Figure 13b. MVCAC Monitoring Event 2012-7 Permethrin Truck Mounted Application 07/23/12 Cochella Valley MVCD

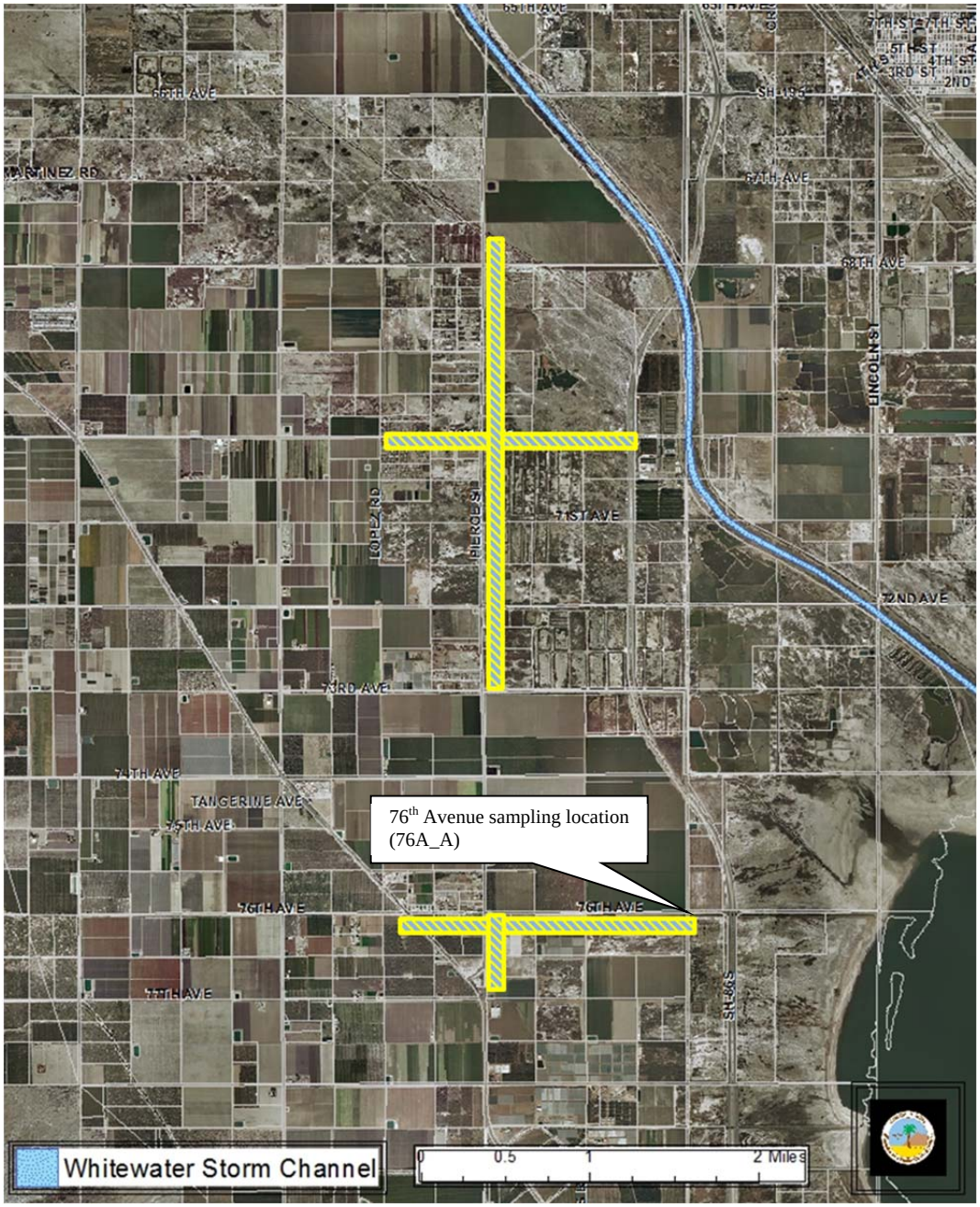


Figure 14a. MVCAC Monitoring Event 2012-8 Permethrin Truck Mounted Application 08/01/12 Tehama County MVCD

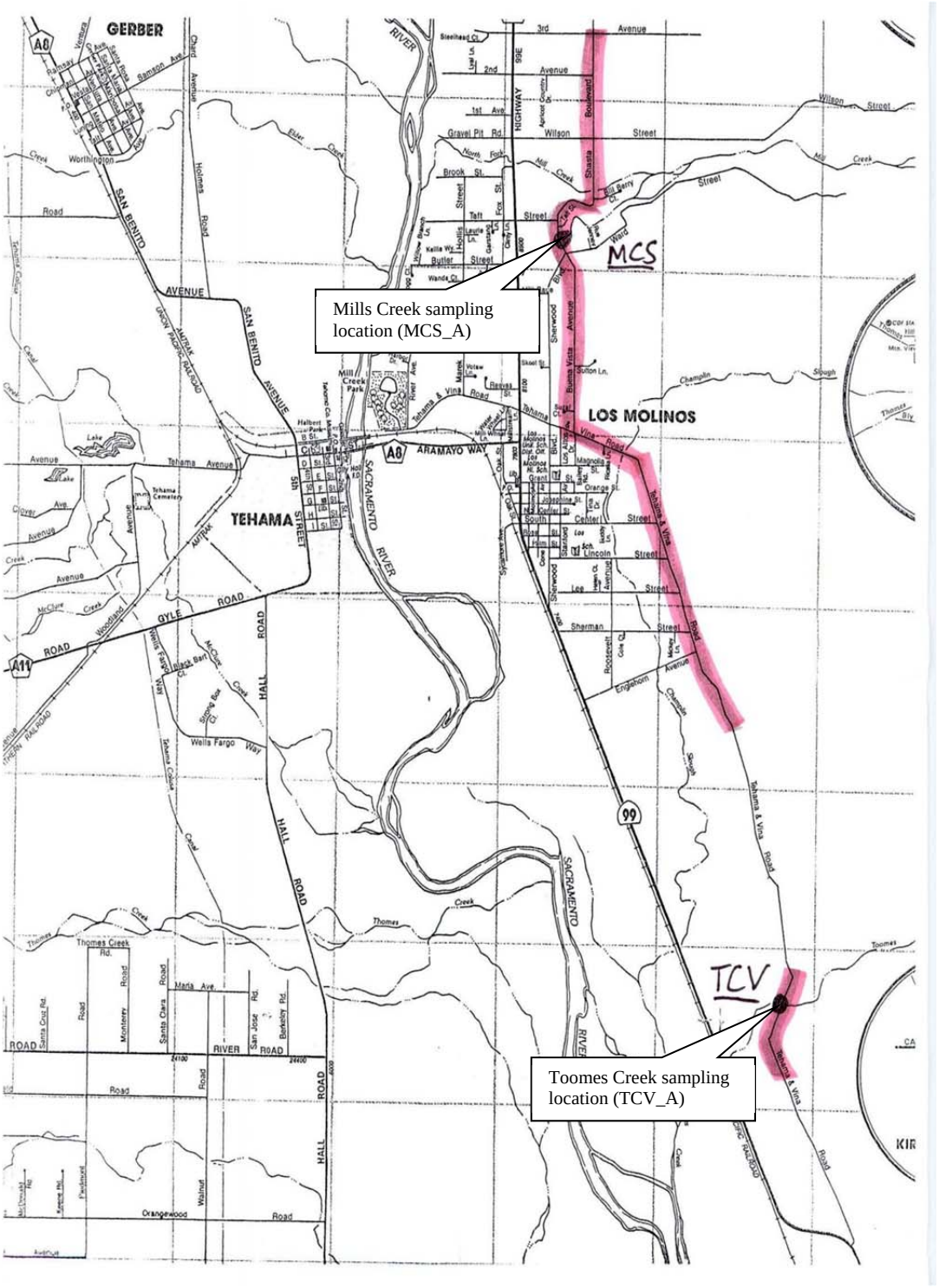


Figure 14b. MVCAC Monitoring Event 2012-8 Permethrin Truck Mounted Application 08/01/12 Tehama County MVCD

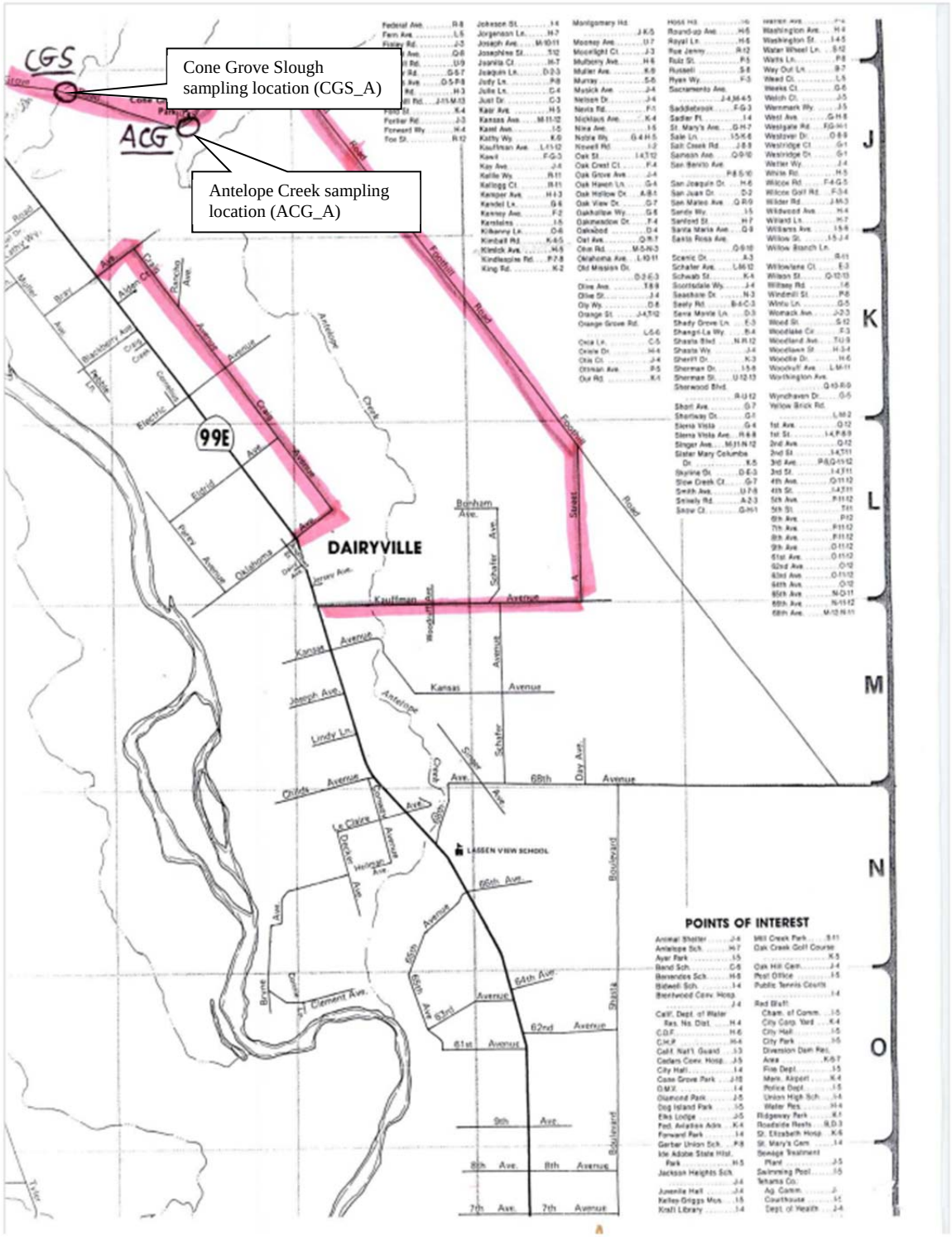


Figure 14c. MVCAC Monitoring Event 2012-8 Permethrin Truck Mounted Application 08/01/12 Tehama County MVCD

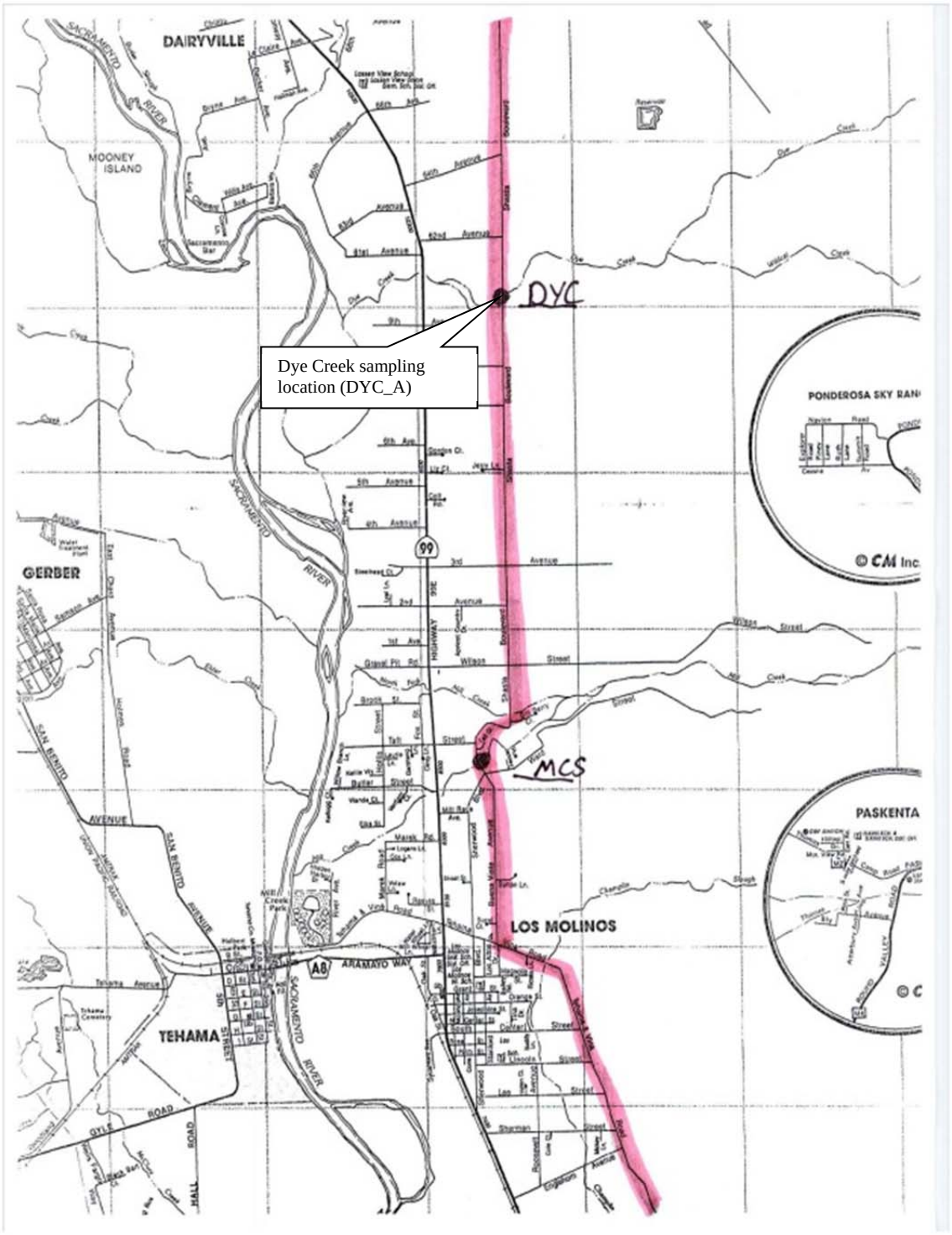


Figure 15a. MVCAC Monitoring Events 2012-9, 2012-10, and 2012-12 Permethrin Truck Mounted Application 09/13/12, 09/20/12, and 09/27/12 Sutter/Yuba MVCD

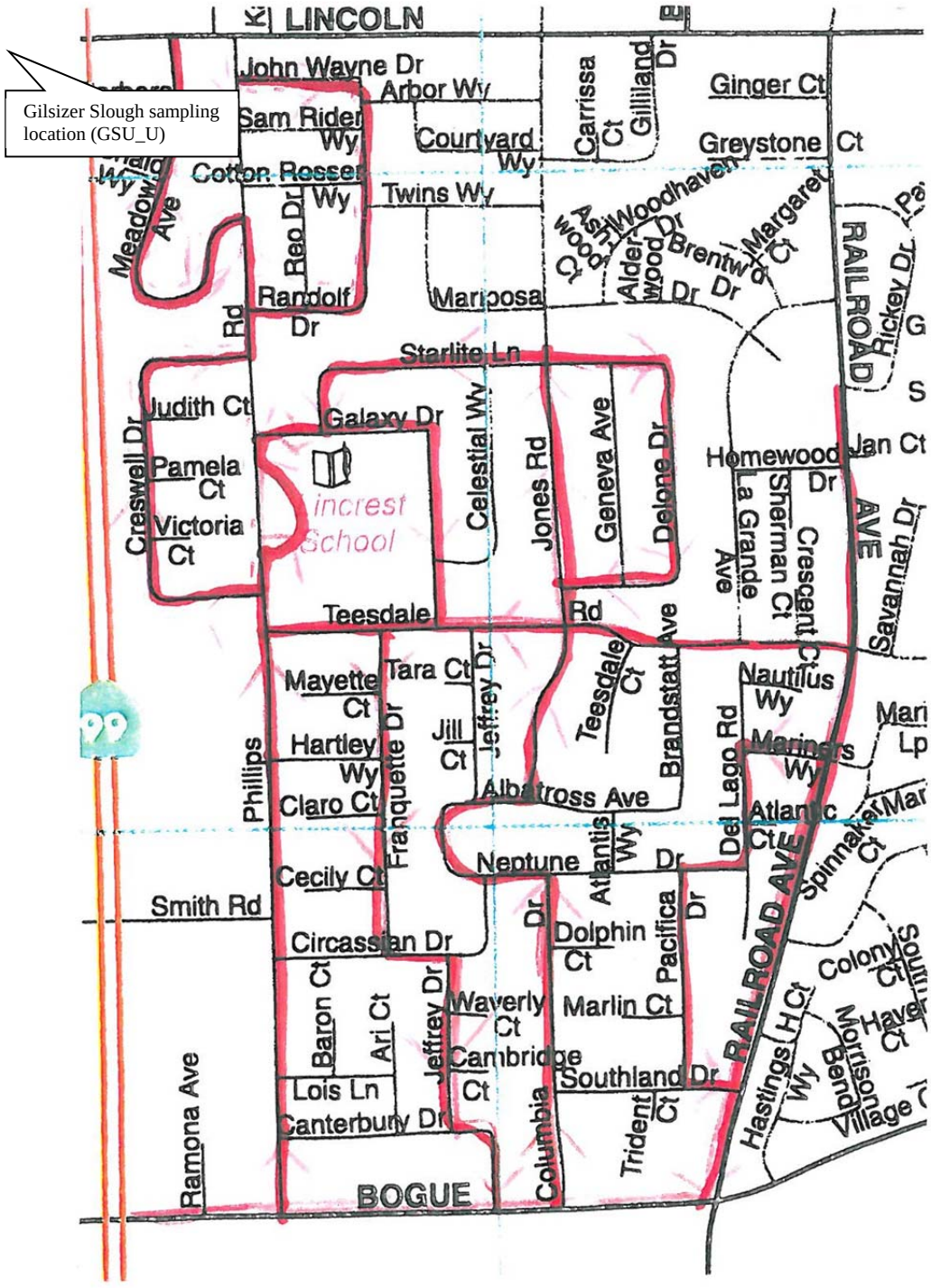


Figure 15b. MVCAC Monitoring Events 2012-9 and 2012-10 Permethrin Truck Mounted Application 09/13/12 and 09/20/12 Sutter/Yuba MVCD

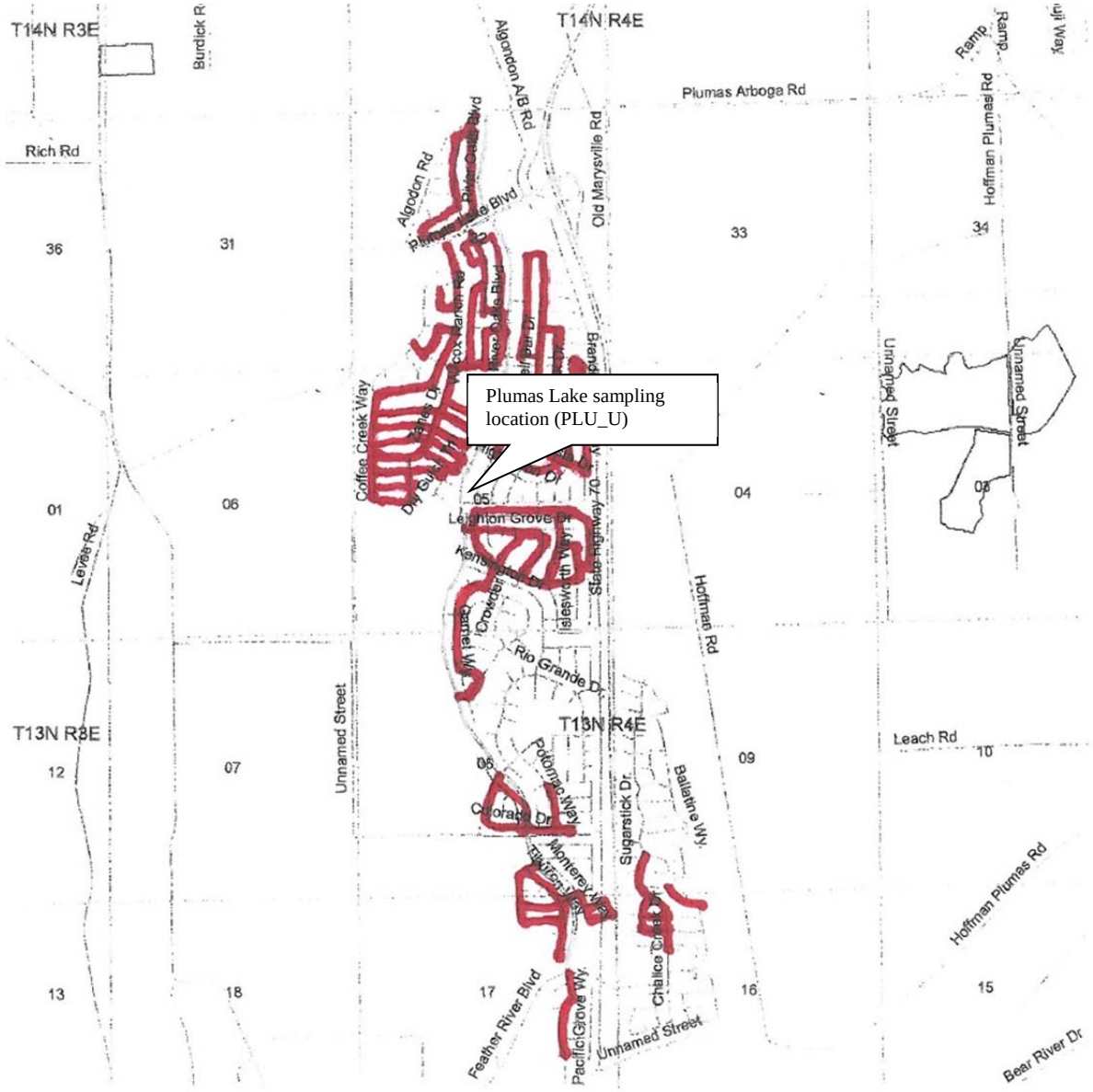


Figure 15c. MVCAC Monitoring Event 2012-10 Permethrin Truck Mounted Application 09/20/12 Sutter/Yuba MVCD

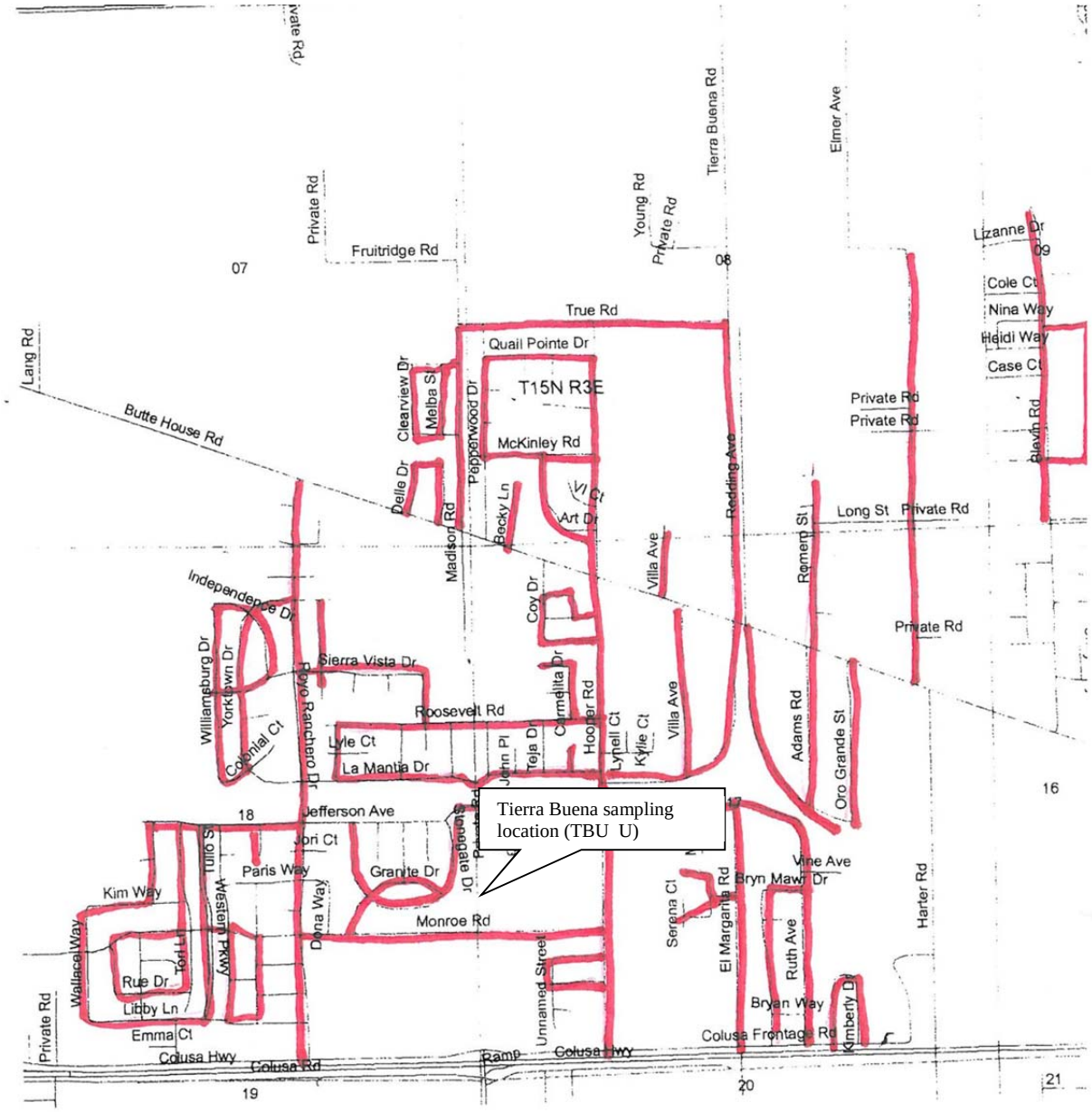


Figure 16. MVCAC Monitoring Event 2012-11 Etofenprox Truck Mounted Application 09/26/12 Greater LA County VCD

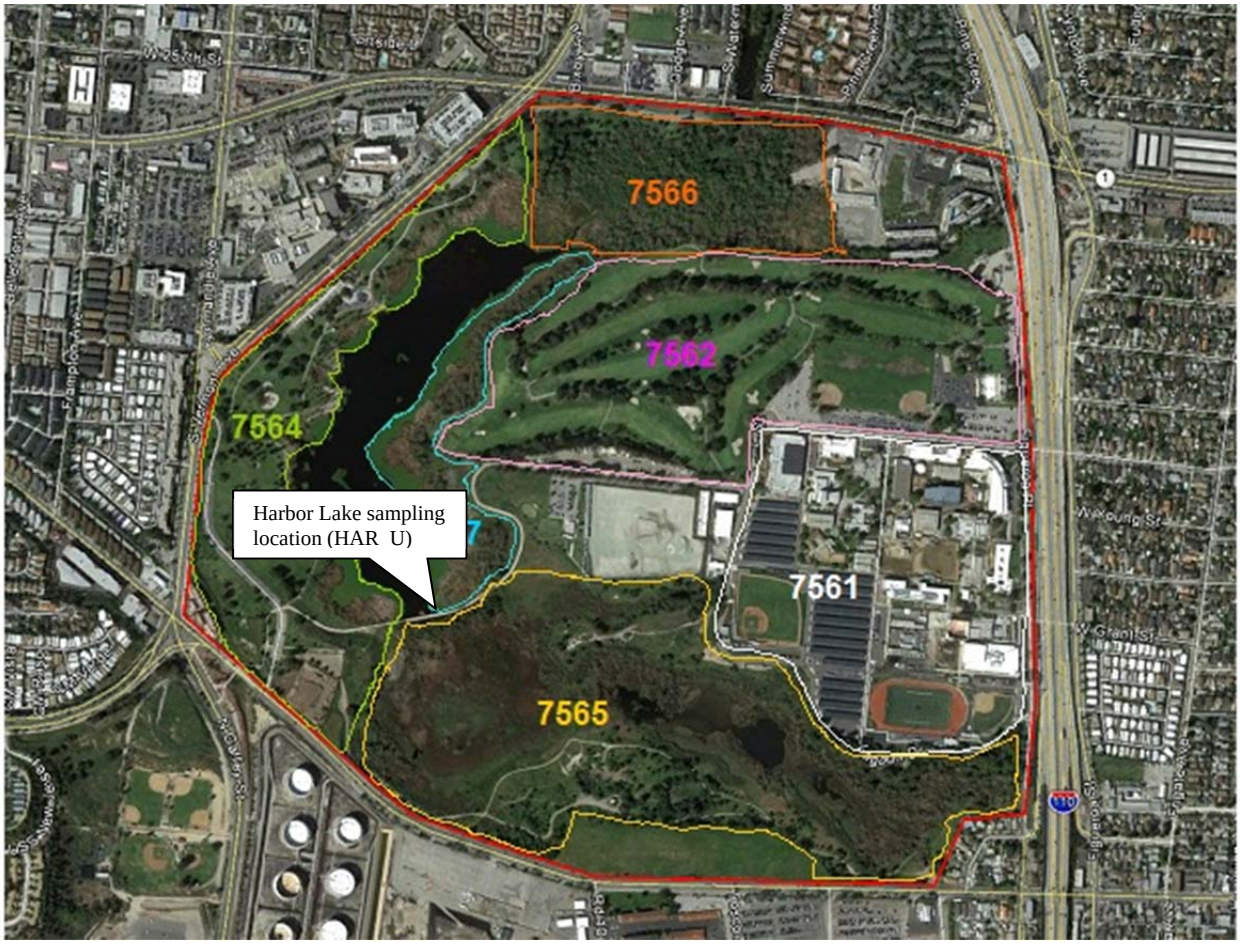


Figure 17. MVCAC Monitoring Event 2012-13 Pyrethrin Aerial Application 10/03/12 Merced County MAD

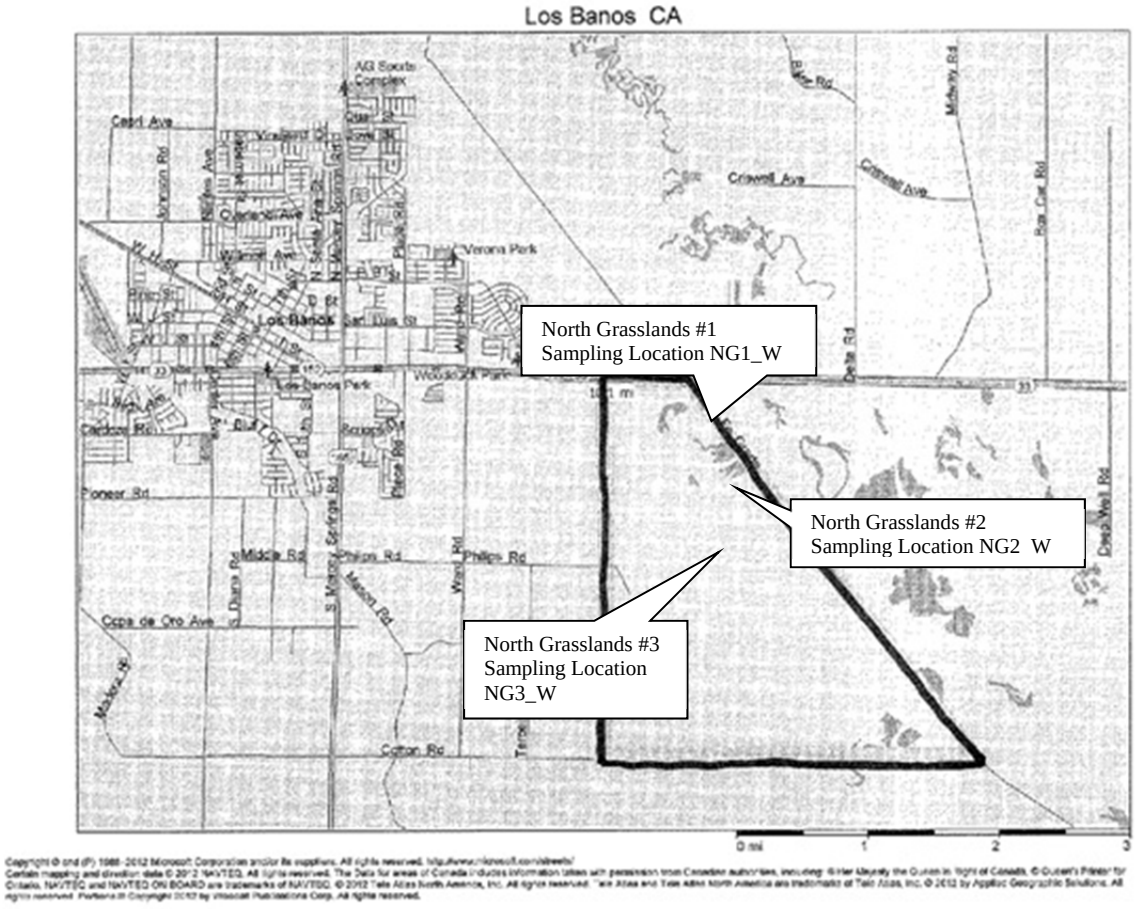
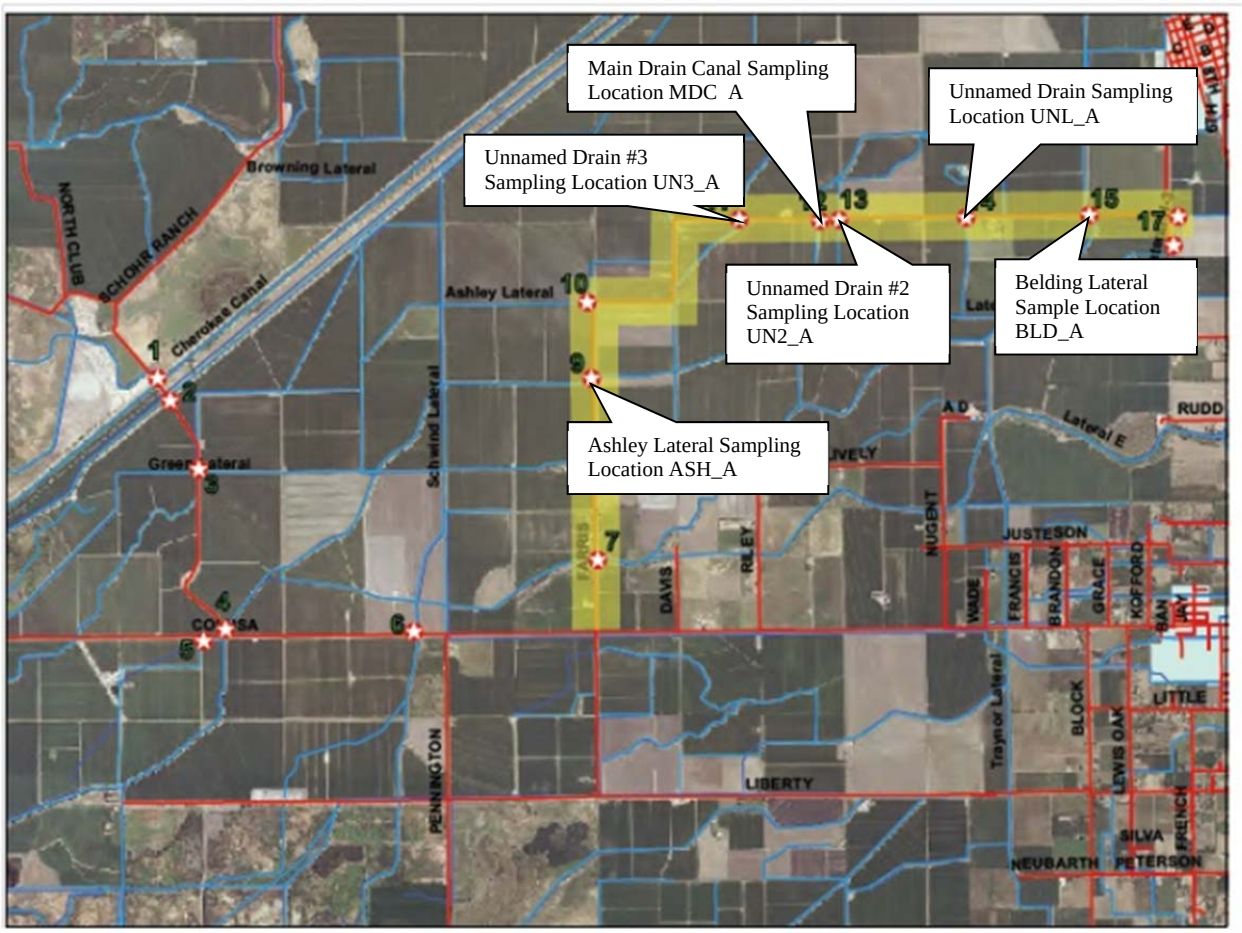


Figure 18. MVCAC Monitoring Event 2012-14 Pyrethrin Truck Mounted Application Butte County 11/14/12 MVCD



Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Bacillus sphaericus - Agriculture - San Joaquin County Mosquito Vector Control District (SJCMVCD)										
06/18/2012	Morgan Bennett	12-1S9E20-014	Avena Drain	Channel	37 49' 49.481"N -	Larvicide	Vectolex WDG	Background	06/18/2012	2:15 PM	Dave Smith
06/18/2012	Morgan Bennett	12-1S9E20-014	Avena Drain	Channel	37 49' 49.481"N -	Larvicide	Vectolex WDG	Event	06/19/2012	11:40 AM	Dave Smith
06/18/2012	Morgan Bennett	12-1S9E20-014	Avena Drain	Channel	37 49' 49.481"N -	Larvicide	Vectolex WDG	Post-Event	06/25/2012	11:36 PM	Dave Smith
06/28/2012	Emily Pope	15-3S6E12-501-01	Durham Ferry Drain Di	Channel	37 41'37.81"N -12	Larvicide	Vectolex WDG	Background	06/28/2012	2:10 PM	Dave Smith
06/28/2012	Emily Pope	15-3S6E12-501-01	Durham Ferry Drain Di	Channel	37 41'37.81"N -12	Larvicide	Vectolex WDG	Event	06/29/2012	1:03 PM	Dave Smith
06/28/2012	Emily Pope	15-3S6E12-501-01	Durham Ferry Drain Di	Channel	37 41'37.81"N -12	Larvicide	Vectolex WDG	Post-Event	07/05/2012	1:10 PM	Dave Smith
10/19/2012	John Fritz	12-1S9E36-027-01	Irrigation Pipe	Channel	37 48'55.553"N -1	Larvicide	Vectolex WDG	Background	10/19/2012	9:30 AM	Dave Smith
10/19/2012	John Fritz	12-1S9E36-027-01	Irrigation Pipe	Channel	37 48'55.553"N -1	Larvicide	Vectolex WDG	Event	10/19/2012	9:40 AM	Dave Smith
10/19/2012	John Fritz	12-1S9E36-027-01	Irrigation Pipe	Channel	37 48'55.553"N -1	Larvicide	Vectolex WDG	Post-Event	10/26/2012	10:55 AM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'52.385"N -1	Larvicide	Vectolex WDG	Background	11/02/2012	9:10 AM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'52.385"N -1	Larvicide	Vectolex WDG	Event	11/02/2012	9:25 AM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'52.385"N -1	Larvicide	Vectolex WDG	Post-Event	11/13/2012	12:52 PM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'54.845"N -1	Larvicide	Vectolex WDG	Background	11/02/2012	9:50 AM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'54.845"N -1	Larvicide	Vectolex WDG	Event	11/02/2012	10:00 AM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'54.845"N -1	Larvicide	Vectolex WDG	Post-Event	11/13/2012	1:08 PM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'56.423"N -1	Larvicide	Vectolex WDG	Background	11/02/2012	10:15 AM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'56.423"N -1	Larvicide	Vectolex WDG	Event	11/02/2012	10:35 AM	Dave Smith
11/02/2012	John Fritz	15-2S6E07-011	Tom Paine Slough	Channel	37 45'56.423"N -1	Larvicide	Vectolex WDG	Post-Event	11/13/2012	1:25 PM	Dave Smith
	Bacillus sphaericus - Urban - Greater Los Angeles County Vector Control District (GLACVCD)										
08/16/12	Steve Newton	3625	Bull Creek	Channel		Larvicide	Vectolex CG	Background	8/16/2012	12:00 PM	P.O'Connor, S. Vetro
08/16/12	Steve Newton	3625	Bull Creek	Channel		Larvicide	Vectolex CG	Event	8/16/2012	2:15 PM	P.O'Connor, S. Vetro
08/16/12	Steve Newton	3625	Bull Creek	Channel		Larvicide	Vectolex CG	Post-Event	8/16/2012	11:33 AM	P.O'Connor, R. Gallar
08/29/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Background	08/29/2012	11:35 AM	R. Gallant, S. Vetrone
08/29/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Event	08/30/2012	9:55 AM	R. Gallant, S. Vetrone
08/29/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Post-Event	09/12/2012	12:45 PM	P. O'Connor, S. Vetro
9/13/12	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Background	09/12/2012	12:45 PM	P. O'Connor, S. Vetro
9/13/12	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Event	09/13/2012	10:10 AM	P. O'Connor, S. Vetro
9/13/12	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Post-Event	09/27/2012	11:45 AM	S. Vetrone
9/27/12	Steve Newton	3625	Bull Creek @ Victory	Channel		Larvicide	VectoLex CG	Background	9/27/2012	11:44 AM	S. Vetrone
9/27/12	Steve Newton	3625	Bull Creek @ Victory	Channel		Larvicide	VectoLex CG	Event	9/28/2012	10:09 AM	S. Vetrone
9/27/12	Steve Newton	3625	Bull Creek @ Victory	Channel		Larvicide	VectoLex CG	Post-Event	10/11/2012	10:05 AM	P. O'Connor
10/11/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Background	10/11/2012	10:05 AM	P. O'Connor
10/11/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Event	10/11/2012	12:30 PM	P. O'Connor
10/11/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Post-Event	10/24/2012	10:31 AM	S. Vetrone, R Gallant
10/25/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Background	10/24/2012	10:31 AM	S. Vetrone, R. Gallant
10/25/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Event	10/25/2012	11:10 AM	S. Vetrone, R. Gallant
10/25/2012	Steve Newton	3625	Bull Creek	Channel		Larvicide	VectoLex CG	Post-Event	10/07/2012	10:30 AM	R. Gallant, S. Kluh

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Bacillus sphaericus - Agriculture - San Joaquin County Mosquito Vector Control District (SJCMVCD)																
06/18/2012	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Observed	Not Observ	none	Not Observed	None	69.28	4496	0.09	6.98	80.7
06/18/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Not Observ	none	Not Observed	None	68.97	3507	0.13	7.00	92.3
06/18/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Not Observ	none	Observed	animal was	62.67	6195	0.81	7.40	2876 AU
06/28/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Not Observ	none	Not Observed	None	63.61	324	3.06	6.98	11.65
06/28/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	none	Not Observed	None	65.03	329	2.75	6.98	13.7
06/28/2012	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Not Observ	Not Observ	none	Not Observed	animal was	89.05	412	4.78	7.44	2055 AU
10/19/2012	Overcast	Foggy	Light breeze	Cool	Colorless	Clear	Observed	Observed	Not Observ	none	Not Observed	None	64.78	177	8.11	7.23	2.90
10/19/2012	Overcast	Foggy	Light breeze	Cool	Colorless	Clear	Observed	Observed	Not Observ	none	Not Observed	None	64.72	176	7.84	7.10	5.24
10/19/2012	Clear/sunny	None	Light breeze	Cool	Clolorless	Cloudy	Observed	Observed	Not Observ	none	Not Observed	None	56.88	362	9.70	7.40	3.94
11/02/2012	Clear/sunny	None	Light breeze	Cool	Brown	Cloudy	Observed	Observed	Not Observ	none	Not Observed	None	56.6	2214	7.44	6.95	24.9
11/02/2012	Clear/sunny	None	Light breeze	Cool	Brown	Cloudy	Observed	Observed	Not Observ	none	Not Observed	None	56.74	2214	7.21	7.31	28.7
11/02/2012	Clear/sunny	None	Light breeze	Cool	Brown	Cloudy	Observed	Observed	Not Observ	none	Not Observed	None	55.0	2265	7.82	7.11	20.9
11/02/2012	Clear/sunny	None	Light breeze	Cool	Brown	Clear	Observed	Observed	Not Observ	none	Not Observed	None	54.19	2183	6.17	7.64	17.5
11/02/2012	Clear/sunny	None	Light breeze	Cool	Brown	Clear	Observed	Observed	Not Observ	none	Not Observed	None	54.25	2191	7.23	7.59	23.5
11/02/2012	Clear/sunny	None	Calm	Cool	Brown	Clear	Observed	Observed	Not Observ	none	Not Observed	None	45.81	2074	6.66	7.35	96.6
11/02/2012	Clear/sunny	None	Light breeze	Cool	Brown	Clear	Observed	Observed	Not Observ	none	Not Observed	None	55.29	2069	5.80	7.50	14.9
11/02/2012	Clear/sunny	None	Light breeze	Cool	Brown	Clear	Observed	Observed	Not Observ	none	Not Observed	None	55.44	2058	6.77	7.41	12.8
11/02/2012	Clear/sunny	None	Calm	Cool	Brown	Clear	Observed	Observed	Not Observ	none	Not Observed	None	47.69	142	7.73	7.23	149
	Bacillus sphaericus - Urban - Greater Los Angeles County Vector Control District (GLACVCD)																
08/16/12	Partly cloudy	None	Calm	Hot	Green	Murky	Observed	Observed	Observed	Sheen	Not Observed	Considerab	83.8	872	7.9	8.7	1.37
08/16/12	Partly cloudy	None	Light breeze	Hot	Green	Murky	Observed	Observed	Observed	Sheen	Not Observed	Foamy wate	93.2	857	5.98	9.6	2.74
08/16/12	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Observed	Observed	Films	Observed	Trash and d	84.2	795	8.27	8.87	2.84
08/29/2012	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Observed	Observed	Films	Observed	Trash & deb	84.2	795	8.27	8.87	2.84
08/29/2012	Clear/sunny	None	Light breeze	Hot	Green	Murky	Observed	Observed	Observed		Observed	trash & deb	77	709	6.71	8.45	2.9
08/29/2012	Clear/sunny	None	Light breeze	Hot	Brown	Clear	Observed	Observed	Observed		Observed	Trash & deb	84.7	776	2.39	9.08	1.14
9/13/12	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Observed	Films	Observed	None	84.7	776	2.39	9.08	1.14
9/13/12	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Observed	Films	Observed	None	71.9	741	7	8.22	1.46
9/13/12	Clear/sunny	None	Calm	Hot	Green	Cloudy	Observed	Observed	Observed	Films	Observed	None	79.7	612	9.21	8.96	2.21
9/27/12	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Observed	Observed	Films	Observed	None	79.7	612	9.21	8.96	2.21
9/27/12	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Observed	Observed	Films	Observed	None	68.7	564	7.48	8.52	2.61
9/27/12	Partly cloudy	None	Light breeze	Cool	Brown	Murky	Observed	Observed	Observed	Films	Observed	Trash and f	61.5	590	9.92	8.76	2.57
10/11/2012	Partly cloudy	None	Light breeze	Cool	Brown	Murky	Observed	Observed	Observed	Films	Observed	Trash and d	61.55	590	9.92	8.76	2.57
10/11/2012	Partly cloudy	Intermittent sl	Light breeze	Cool	Brown	Murky	Observed	Observed	Observed	Films	Observed	Trash and d	71.4	665	9.09	9.13	14.24
10/11/2012	Clear/sunny	None	Gusty	Cool	Brown	Murky	Observed	Observed	Observed		Observed	trash	56.8	735	10.67	8.45	1.95
10/25/2012	Clear/sunny	None	Gusty	Cool	Brown	Murky	Observed	Observed	Observed		Observed	trash	56.8	735	10.67	8.45	1.95
10/25/2012	Clear/sunny	None	Gusty	Cool	Brown	Clear	Observed	Observed	Observed		Observed	trash	57.4	816	10.2	8.45	1.73
10/25/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Not Observ	Not Observ		Not Observed	None	62.6	996	10.49	8.79	2.52

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Bacillus sphaericus - Wetland - San Mateo County Mosquito and Vector Control District (SMCMVCD)										
03/29/12	Stephanie Busam	Millbrae Overpass, SW, Millbra	Multiple	Open waterway		Larvicide	Vectolex	Pre	3/29/12	15:45	Stephanie Busam
03/29/12	Stephanie Busam	Millbrae Overpass, SW, Millbra	Multiple	Open waterway		Larvicide	Vectolex	Event	3/29/12	15:53	Stephanie Busam
03/29/12	Stephanie Busam	Millbrae Overpass, SW, Millbra	Multiple	Open waterway		Larvicide	Vectolex	Post	4/17/12	15:07	Stephanie Busam
03/29/12	Stephanie Busam	Millbrae Overpass, NW, Millbra	Ditch	Channel		Larvicide	Vectolex	Pre	3/29/12	15:11	Stephanie Busam
03/29/12	Stephanie Busam	Millbrae Overpass, NW, Millbra	Ditch	Channel		Larvicide	Vectolex	Event	3/29/12	3:36	Stephanie Busam
03/29/12	Stephanie Busam	Millbrae Overpass, NW, Millbra	Ditch	Channel		Larvicide	Vectolex	Post	4/17/12	15:04	Stephanie Busam
07/10/12	Jim O'Brien	Sharp Park Golf Course Helico	Fresh H2O Marsh	Pond		Larvicide	Vectolex	Pre	7/9/12	9:11	Jim O'Brien
07/10/12	Jim O'Brien	Sharp Park Golf Course Helico	Fresh H2O Marsh	Pond		Larvicide	Vectolex	Event	7/10/12	1:13	Jim O'Brien
07/10/12	Jim O'Brien	Sharp Park Golf Course Helico	Fresh H2O Marsh	Pond		Larvicide	Vectolex	Post	7/30/12	9:30	Jim O'Brien
07/31/12	Jim O'Brien	Sharp Park Golf Course Helico	Fresh H2O Marsh	Pond		Larvicide	Vectolex	Pre	7/30/12	9:25	Jim O'Brien
07/31/12	Jim O'Brien	Sharp Park Golf Course Helico	Fresh H2O Marsh	Pond		Larvicide	Vectolex	Event	7/31/12	3:07	Jim O'Brien
07/31/12	Jim O'Brien	Sharp Park Golf Course Helico	Fresh H2O Marsh	Pond		Larvicide	Vectolex	Post	8/17/12	8:59	Jim O'Brien
09/10/12	Ben Rusmisel	SFO/Mills Field Helicopter, San	Fresh H2O Marsh	Channel		Larvicide	Vectolex	Pre	9/10/12	3:20	Ben Rusmisel
09/10/12	Ben Rusmisel	SFO/Mills Field Helicopter, San	Fresh H2O Marsh	Channel		Larvicide	Vectolex	Event	9/11/12	2:35	Ben Rusmisel
09/10/12	Ben Rusmisel	SFO/Mills Field Helicopter, San	Fresh H2O Marsh	Channel		Larvicide	Vectolex	Post	10/15/12	3:00	Ben Rusmisel
11/26/12	Casey Stevenson	University Ave, E Palo Alto	Imp H2O	Open waterway		Larvicide	Vectolex	Pre	11/26/12	9:24	Casey Stevenson
11/26/12	Casey Stevenson	University Ave, E Palo Alto	Imp H2O	Open waterway		Larvicide	Vectolex	Event	12/26/12	9:40	Casey Stevenson
11/26/12	Casey Stevenson	University Ave, E Palo Alto	Imp H2O	Open waterway		Larvicide	Vectolex	Post	12/17/12	9:55	Casey Stevenson
	Bacillus thurigensis - Agriculture - Placer Mosquito Vector Control District (PMVCD)										
07/24/12	Dibble Inc.	"Davis Ranch off Catlett Rd., Sl	Kings Slough	slough	shallow <7", cattai	Bti	Vectobac 12AS 8oz/acre	background	07/23/2012	1:00 PM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Davis Ranch off Catlett Rd., Sl	Kings Slough	slough	shallow <7", cattai	Bti	Vectobac 12AS 8oz/acre	event	07/24/2012	11:00 AM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Davis Ranch off Catlett Rd., Sl	Kings Slough	slough	shallow <7", cattai	Bti	Vectobac 12AS 8oz/acre	post event	07/30/2012	11:00 AM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Lincoln Ranch Pond off of Brev	unnamed pond	pond	~ 5 acres, >6 feet	Bti	Vectobac 12AS 8oz/acre	background	07/23/2012	2:00 PM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Lincoln Ranch Pond off of Brev	unnamed pond	pond	~ 5 acres, >6 feet	Bti	Vectobac 12AS 8oz/acre	event	07/24/2012	11:40 AM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Lincoln Ranch Pond off of Brev	unnamed pond	pond	~ 5 acres, >6 feet	Bti	Vectobac 12AS 8oz/acre	post event	07/30/2012	11:30 AM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Auburn Ravine at Lincoln Ranc	Auburn Ravine	creek	~30 feet wide, flow	Bti	Vectobac 12AS 8oz/acre	background	07/23/2012	2:20 PM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Auburn Ravine at Lincoln Ranc	Auburn Ravine	creek	~30 feet wide, flow	Bti	Vectobac 12AS 8oz/acre	event	07/24/2012	12:20 PM	Mary Sorensen, Kelly
07/24/12	Dibble Inc.	"Auburn Ravine at Lincoln Ranc	Auburn Ravine	creek	~30 feet wide, flow	Bti	Vectobac 12AS 8oz/acre	post event	07/30/2012	12:00 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"N of Nicolaus Rd, W of Dowd I	unnamed slough	slough	~ 15 feet wide, tull	Bti	Vectobac 12AS 8oz/acre	background	07/24/2012	1:00 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"N of Nicolaus Rd, W of Dowd I	unnamed slough	slough	~ 15 feet wide, tull	Bti	Vectobac 12AS 8oz/acre	event	07/25/2012	12:45 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"N of Nicolaus Rd, W of Dowd I	unnamed slough	slough	~ 15 feet wide, tull	Bti	Vectobac 12AS 8oz/acre	post event	07/30/2012	12:40 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"Scillachi's ranch"	Coon Creek	creek	offshoot from mair	Bti	Vectobac 12AS 8oz/acre	background	07/24/2012	1:20 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"Scillachi's ranch"	Coon Creek	creek	offshoot from mair	Bti	Vectobac 12AS 8oz/acre	event	07/25/2012	1:30 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"Scillachi's ranch"	Coon Creek	creek	offshoot from mair	Bti	Vectobac 12AS 8oz/acre	post event	07/30/2012	1:00 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"east of Bunkham Slough"	unnamed slough	slough	~30 feet wide	Bti	Vectobac 12AS 8oz/acre	background	07/24/2012	2:00 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"east of Bunkham Slough"	unnamed slough	slough	~30 feet wide	Bti	Vectobac 12AS 8oz/acre	event	07/25/2012	1:45 PM	Mary Sorensen, Kelly
07/25/12	Dibble Inc.	"east of Bunkham Slough"	unnamed slough	slough	~30 feet wide	Bti	Vectobac 12AS 8oz/acre	post event	07/30/2012	1:30 PM	Mary Sorensen, Kelly

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Bacillus sphaericus - Wetland - San Mateo County Mosquito and Vector Control District (SMCMVCD)																
03/29/12	Overcast	None	Light breeze	Warm/mild	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		69.5	2232	2.12	7.4	4.55
03/29/12	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		69.86	2298	2.99	7.2	13.6
03/29/12	Clear/sunny	None	Gusty	Warm/mild	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		96.13	5798	4.14	7.78	29.2
03/29/12	Overcast	None	Light breeze	Warm/mild	Green	Murky	TRUE	FALSE	TRUE		FALSE	algae on to	64.22	2757	2.29	7.5	3.1
03/29/12	Overcast	None	Light breeze	Warm/mild	Green	Murky	TRUE	FALSE	TRUE		FALSE	algae	65.03	27787	2.12	7.1	11.4
03/29/12	Clear/sunny	None	Gusty	Warm/mild	Green	Murky	TRUE	FALSE	TRUE		FALSE	algae	90.85	1632	4.15	7.6	7.17
07/10/12	Overcast	None	Light breeze	Cool	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		57.23	10080	1.61	7.56	0.53
07/10/12	Overcast	None	Light breeze	Cool	Colorless	Clear	FALSE	FALSE	FALSE		FALSE		57.06	10047	1.75	7.23	7.89
07/10/12	Overcast	None	Calm	Cool	Colorless	Clear	FALSE	FALSE	FALSE		FALSE		57.85	10380	1.65	7.34	27
07/31/12	Partly cloudy	None	Calm	Cool	Colorless	Clear	FALSE	FALSE	TRUE	other	FALSE		57.85	10387	1.63	7.34	27
07/31/12	Overcast	None	Light breeze	Cool	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		58.53	10562	1.6	7.25	0.92
07/31/12	Overcast	None	Calm	Cool	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		59.31	10862	1.57	7.56	25.5
09/10/12	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	FALSE	TRUE	FALSE		FALSE		59.98	7880	1.4	7.73	5.37
09/10/12	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	FALSE	TRUE	FALSE		FALSE		58.54	6792	1.52	7.77	8.68
09/10/12	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	FALSE	TRUE	FALSE		FALSE		60.63	7841	1.42	8	1.88
11/26/12	Clear/sunny	None	Light breeze	Cool	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		55.66	2334	1.54	7.47	28.9
11/26/12	Clear/sunny	None	Light breeze	Cool	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		55.66	2345	1.51	7.35	46.9
11/26/12	Overcast	None	Calm	Cool	Colorless	Clear	FALSE	FALSE	TRUE		FALSE		52.96	1448	1.82	7.05	14.9
	Bacillus thurigensis - Agriculture - Placer Mosquito Vector Control District (PMVCD)																
07/24/12	sunny, clear	none	gusty	hot	yellow/brown	cloudy	yes	yes	no	no	no	cattails	73.9	288	2.27	6.9	5.97
07/24/12	sunny, clear	none	gusty	warm	yellow/brown	cloudy	yes	yes	no	no	no	cattails	67.24	250	1.93	6.95	35.2
07/24/12	sunny, clear	none	light breeze	hot	yellow/brown	clear	no	yes	no	no	no	cattails	68.25	349	2.21	6.88	5.52
07/24/12	sunny, clear	none	light breeze	hot	blue	cloudy	no	yes	yes	no	no	no	83.26	431	12.2	8.96	3.39
07/24/12	sunny, clear	none	light breeze	warm	blue	cloudy	no	yes	yes	no	no	no	81.07	430	10.4	8.88	3.68
07/24/12	sunny, clear	none	calm	hot	blue	cloudy	no	yes	yes	no	no	no	81.18	423	11.3	8.8	5.04
07/24/12	sunny, clear	none	light breeze	not	yellow/brown	cloudy	no	yes	yes	no	no	no	76.14	79	9.36	8.1	3.27
07/24/12	sunny, clear	none	calm	not	yellow/brown	cloudy	no	yes	yes	no	no	no	71.85	81	8.91	7.75	4.94
07/24/12	sunny, clear	none	light breeze	hot	yellow/brown	cloudy	no	yes	yes	no	no	no	73.9	80	10.1	7.71	5.16
07/25/12	sunny, clear	none	calm	hot	brown	murky	yes	yes	no	no	no	tulles	73.27	306	0.823	6.93	103.2
07/25/12	sunny, clear	none	light breeze	hot	brown	murky	yes	yes	no	no	no	tulles	72.64	300	1.54	7	87.4
07/25/12	sunny, clear	none	light breeze	hot	brown	murky	yes	yes	no	no	no	tulles	71.85	331	2.24	6.93	45.6
07/25/12	sunny, clear	none	light breeze	hot	greenish yell	murky	no	yes	yes	no	no	no	83.3	407	17.1	8.92	68.2
07/25/12	sunny, clear	none	light breeze	hot	greenish yell	murky	no	yes	yes	no	no	no	88.34	546	16.1	8.98	86.2
07/25/12	sunny, clear	none	light breeze	hot	greenish yell	murky	no	yes	yes	no	no	no	86.83	297	13.7	8.73	60.4
07/25/12	sunny, clear	none	light breeze	hot	brown	cloudy	yes	yes	yes	no	algae	water primr	78.21	373	6.32	7.31	4.65
07/25/12	sunny, clear	none	calm	hot	brown	cloudy	yes	yes	yes	no	algae	water primr	79.61	348	3.95	7.2	3.93
07/25/12	sunny, clear	none	light breeze	hot	brown	cloudy	yes	yes	yes	no	algae	water primr	80.83	188	5.32	7.16	3.17

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Bacillus thurigensis - Urban - Greater Los Angeles County Vector Control District (GLACVCD)										
08/15/2012	Frank Ochoa	5653	Los Angeles River	Channel		Larvicide	Vectobac12AS	Background	08/15/2012	8:30 AM	S. Kluh, R. Gallant, P.
08/15/2012	Frank Ochoa	5653	Los Angeles River	Channel		Larvicide	Vectobac12AS	Event	08/15/2012	10:00 AM	S. Kluh, R. Gallant, P.
08/15/2012	Frank Ochoa	5653	Los Angeles River	Channel		Larvicide	Vectobac12AS	Post-Event	08/16/2012	12:40 PM	P. O'Connor, S. Vetro
08/29/2012	Frank Ochoa	5639	Los Angeles River	Channel		Larvicide	Vectobac 12AS	Background	08/29/2012	9:50 AM	P. O'Connor, R. Galla
08/29/2012	Frank Ochoa	5639	Los Angeles River	Channel		Larvicide	Vectobac 12AS	Event	08/29/2012	12:09 AM	P. O'Connnor, R. Gall
08/29/2012	Frank Ochoa	5639	Los Angeles River	Channel		Larvicide	Vectobac 12AS	Post-Event	8/29/2012	9:00 AM	R. Gallant, S. Vetrone
09/12/12	Jeremy Uhlenkott	5639	Los Angeles River	Channel		Larvicide	Vectobac 12AS	Background	09/12/2012	9:30 AM	P. O'Connor, S. Vetro
09/12/12	Jeremy Uhlenkott	5639	Los Angeles River	Channel		Larvicide	Vectobac 12AS	Event	09/12/2012	11:45 AM	P. O'Connor, S. Vetro
09/12/12	Jeremy Uhlenkott	5639	Los Angeles River	Channel		Larvicide	Vectobac 12AS	Post-Event	09/13/2012	10:35 AM	P. O'Connor, S. Vetro
09/27/12	Frank Ochoa	5639	Los Angeles River @ S	Channel		Larvicide	VectoBac 12AS	Background	09/27/2012	10:30 AM	S. Vetrone
09/27/12	Frank Ochoa	5639	Los Angeles River @ S	Channel		Larvicide	VectoBac 12AS	Event	09/27/2012	11:27 AM	S. Vetrone
09/27/12	Frank Ochoa	5639	Los Angeles River @ S	Channel		Larvicide	VectoBac 12AS	Post-Event	09/28/2012	9:43 AM	S. Vetrone
10/10/2012	Frank Ochoa	5639	LA River above Sepulv	Channel		Larvicide	VectoBac 12AS	Background	10/10/2012	9:35 AM	S. Vetrone
10/10/2012	Frank Ochoa	5639	LA River above Sepulv	Channel		Larvicide	VectoBac 12AS	Event	10/10/2012	9:57 AM	S. Vetrone
10/10/2012	Frank Ochoa	5639	LA River above Sepulv	Channel		Larvicide	VectoBac 12AS	Post-Event	10/11/2012	10:50 AM	P. O'Connor
10/24/2012	Frank Ochoa	5639	Los Angeles River	Channel		Larvicide	VectoBac 12AS	Background	10/24/2012	9:35 AM	S. Vetrone, R.Gallant
10/24/2012	Frank Ochoa	5639	Los Angeles River	Channel		Larvicide	VectoBac 12AS	Event	10/24/2012	10:13 AM	S. Vetrone, R Gallant
10/24/2012	Frank Ochoa	5639	Los Angeles River	Channel		Larvicide	VectoBac 12AS	Post-Event	10/25/2012	10:37 AM	S. Vetrone, R Gallant
	Bacillus thurigensis - Wetland - Butte County Mosquito Vector Control District (BCMVCD)										
09/20/2012	Del Boyd	39.19623/121.34950	Duck club / wetland	Open waterway		Larvicide	Vectobac G	Background	09/20/12	12:00 PM	Bill Kunde
09/20/2012	Del Boyd	39.19623/121.34950	Duck club / wetland	Open waterway		Larvicide	Vectobac G	Event	9/20/2012	6:40 PM	Bill Kunde
09/20/2012	Del Boyd	39.19623/121.34950	Duck club / wetland	Open waterway		Larvicide	Vectobac G	Post-Event	9/24/2012	1:45 PM	Bill Kunde
09/20/2012	Del Boyd	39.27984/121.53240	Howard Slough	Open waterway		Larvicide	Vectobac G	Background	09/20/12	3:00 PM	Bill Kunde
09/20/2012	Del Boyd	39.27984/121.53240	Howard Slough	Open waterway		Larvicide	Vectobac G	Event	9/20/2012	4:47 PM	Bill Kunde
09/20/2012	Del Boyd	39.27984/121.53240	Howard Slough	Open waterway		Larvicide	Vectobac G	Post-Event	9/24/2012	3:00PM	Bill Kunde
09/20/2012	Del Boyd	39.23665/121.51610	Little Dry Creek Wetlar	Open waterway		Larvicide	Vectobac G	Background	09/20/12	3:40 PM	Bill Kunde
09/20/2012	Del Boyd	39.23665/121.51610	Little Dry Creek Wetlar	Open waterway		Larvicide	Vectobac G	Event	9/20/2012	5:46PM	Bill Kunde
09/20/2012	Del Boyd	39.23665/121.51610	Little Dry Creek Wetlar	Open waterway		Larvicide	Vectobac G	Post-Event	9/24/2012	4:05 PM	Bill Kunde
09/20/2012	Del Boyd	39.23426/121.53174	Little Dry Creek Wetlar	Open waterway		Larvicide	Vectobac G	Background	09/20/2012	4:10 PM	Bill Kunde
09/20/2012	Del Boyd	39.23426/121.53174	Little Dry Creek Wetlar	Open waterway		Larvicide	Vectobac G	Event	09/20/2012	5:22 PM	Bill Kunde
09/20/2012	Del Boyd	39.23426/121.53174	Little Dry Creek Wetlar	Open waterway		Larvicide	Vectobac G	Post-Event	09/24/2012	3:41 PM	Bill Kunde
09/24/2012	Del Boyd	39.19744/121.34103	Wetland/duck club	Open waterway		Larvicide	Vectobac G	Background	09/24/2012	12:00 PM	Bill Kunde
09/24/2012	Del Boyd	39.19744/121.34103	Wetland/duck club	Open waterway		Larvicide	Vectobac G	Event	09/24/2012	1:00 PM	Bill Kunde
09/24/2012	Del Boyd	39.19744/121.34103	Wetland/duck club	Open waterway		Larvicide	Vectobac G	Post-Event	09/27/2012	1:20 PM	Bill Kunde
09/24/2012	Del Boyd	39.19874/121.34066	Wetland/duck club	Open waterway		Larvicide	Vectobac G	Background	09/24/2012	11:25 AM	Bill Kunde
09/24/2012	Del Boyd	39.19874/121.34066	Wetland/duck club	Open waterway		Larvicide	Vectobac G	Event	09/24/2012	1:05 PM	Bill Kunde
09/24/2012	Del Boyd	39.19874/121.34066	Wetland/duck club	Open waterway		Larvicide	Vectobac G	Post-Event	09/27/2012	1:10 PM	Bill Kunde

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Bacillus thurigensis - Urban - Greater Los Angeles County Vector Control District (GLACVCD)																
08/15/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	None	82.2	1093	6.01	7.68	1.5
08/15/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	Kayakers w	84.2	1110	6.49	7.78	2.5
08/15/2012	Partly cloudy	None	Light breeze	Hot	Colorless	Clear	Observed	Observed	Observed		Observed	Kayakers w	86.2	1070	7.5	7.73	1.68
08/29/2012	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	Observed	Observed	Observed		Observed	Kayaker wa	82.04	1013	6.23	7.51	2.09
08/29/2012	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	Observed	Observed	Observed		Observed	Kayaker wa	84.56	1050	7.03	7.63	1.91
08/29/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	Kayakers w	80.42	9.83	5.11	7.49	1.59
09/12/12	Overcast	None	Light breeze	Cool	Green	Clear	Not Observed	Observed	Observed		Observed	Kayakers w	79.8	976	4.4	7.62	2.28
09/12/12	Clear/sunny	None	Light breeze	Warm/mild	Green	Clear	Not Observed	Observed	Observed		Observed	Kayakers u	83.5	1024	1.9	7.62	1.97
09/12/12	Clear/sunny	None	Calm	Hot	Green	Clear	Not Observed	Observed	Observed		Observed	None	82.4	996	5.3	7.59	2.37
09/27/12	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	None	77	908	8.49	7.69	2.05
09/27/12	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	None	77.9	916	9.81	7.71	2.09
09/27/12	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	None	76.6	912	5.81	7.66	2.2
10/10/2012	Partly cloudy	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed	Films	Observed	None	73	919	0.013	7.61	1.81
10/10/2012	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed	Films	Observed	None	73.6	926	0.1	7.65	1.97
10/10/2012	Partly cloudy	Drizzle	Light breeze	Cool	Green	Clear	Observed	Observed	Observed	Films	Observed	None	72.1	993	6.11	7.69	2.5
10/24/2012	Clear/sunny	None	Gusty	Cool	Green	Clear	Observed	Observed	Observed		Observed	None	70.3	1005	6.99	7.69	2.61
10/24/2012	Clear/sunny	None	Gusty	Cool	Green	Clear	Observed	Observed	Observed		Observed	None	70.5	949	7.35	7.78	2.53
10/24/2012	Clear/sunny	None	Gusty	Cool	Green	Clear	Observed	Observed	Observed		Observed	None	69.3	887	7.81	7.78	2.68
	Bacillus thurigensis - Wetland - Butte County Mosquito Vector Control District (BCMVCD)																
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	70.54	2936	25.7	7.28	1.94
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	73.45	2933	16.3	7.27	1.42
09/20/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	73.94	1699	17.2	7.29	2.2
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	86.52	934	12.6	7.13	5.68
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	85.42	971	21.8	7.03	5.81
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	82.87	466	122.4	7.84	4.27
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	83.39	812	50.1	7.22	2.69
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	79.99	662	41.2	7.23	2.58
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	80.73	355	48.9	7.28	2.96
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	74.48	973	12.6	7.11	3.58
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	76.24	964	11.9	7.15	3.39
09/20/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	76.32	462	15.5	7.06	6.02
09/24/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	73.04	1347	8.7	7.22	5.05
09/24/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	74.53	1282	8.7	7.23	4.37
09/24/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	78.75	1294	33.3	7.3	3.14
09/24/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	77.59	1212	18.6	7.14	11.6
09/24/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	80.8	1183	24.3	7.29	12.6
09/24/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed		Not Observed	None	82.06	1101	52.8	7.33	2.33

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Bacillus sphaericus/Bacillus thurigensis - Agriculture - Lake County Vector Control District (LCVCD)										
07/09/2012	Terry Sanderson	N 39° 8.855' W 122° 54.190'	Irwin's Rice	Open waterway		Larvicide	VectoMax CG	Background	07/08/2012	2:31 pm	Terry Sanderson
07/09/2012	Terry Sanderson	N 39° 8.855' W 122° 54.190'	Irwin's Rice	Open waterway		Larvicide	VectoMax CG	Event	07/09/2012	9:35 am	Terry Sanderson
07/09/2012	Terry Sanderson	N 39° 8.855' W 122° 54.190'	Irwin's Rice	Open waterway		Larvicide	VectoMax CG	Post-Event	08/05/2012	7:25 pm	Terry Sanderson
07/09/2012	Terry Sanderson	N 39° 8.026' W 122° 53.632'	Reclamation Rice	Open waterway		Larvicide	VectoMax CG	Background	07/08/2012	2:51 pm	Terry Sanderson
07/09/2012	Terry Sanderson	N 39° 8.026' W 122° 53.632'	Reclamation Rice	Open waterway		Larvicide	VectoMax CG	Event	07/09/2012	10:03 am	Terry Sanderson
07/09/2012	Terry Sanderson	N 39° 8.026' W 122° 53.632'	Reclamation Rice	Open waterway		Larvicide	VectoMax CG	Post-Event	08/05/2012	7:38 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 8.855' W 122° 54.190'	Irwin's Rice	Open waterway		Larvicide	VectoMax CG	Background	08/05/2012	7:25 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 8.855' W 122° 54.190'	Irwin's Rice	Open waterway		Larvicide	VectoMax CG	Event	08/06/2012	3:36 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 8.855' W 122° 54.190'	Irwin's Rice	Open waterway		Larvicide	VectoMax CG	Post-Event	09/06/2012	2:00 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 8.026' W 122° 53.632'	Reclamation Rice	Open waterway		Larvicide	VectoMax CG	Background	08/05/2012	7:38 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 8.026' W 122° 53.632'	Reclamation Rice	Open waterway		Larvicide	VectoMax CG	Event	08/06/2012	3:16 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 8.026' W 122° 53.632'	Reclamation Rice	Open waterway		Larvicide	VectoMax CG	Post-Event	09/06/2012	2:18 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 9.615' W 122° 56.202'	Tule Lake Rice	Open waterway		Larvicide	VectoMax CG	Background	08/05/2012	8:05 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 9.615' W 122° 56.202'	Tule Lake Rice	Open waterway		Larvicide	VectoMax CG	Event	08/06/2012	4:03 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 9.615' W 122° 56.202'	Tule Lake Rice	Open waterway		Larvicide	VectoMax CG	Post-Event	09/06/2012	2:35 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 10.088' W 122° 56.872'	Grahm Pond Rice	Open waterway		Larvicide	VectoMax CG	Background	08/05/2012	8:12 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 10.088' W 122° 56.872'	Grahm Pond Rice	Open waterway		Larvicide	VectoMax CG	Event	08/06/2012	4:18 pm	Terry Sanderson
08/06/2012	Terry Sanderson	N 39° 10.088' W 122° 56.872'	Grahm Pond Rice	Open waterway		Larvicide	VectoMax CG	Post-Event	09/06/2012	2:42 pm	Terry Sanderson
	Bacillus sphaericus/Bacillus thurigensis - Urban - San Joaquin County Mosquito Vector Control District (SJCMVCD)										
04/30/2012	Greg Edwards	8-2N6E17-500-01	Caran Creek/Five Mile	Channel	not flowing 38 00'	Larvicide	Vectomax CG	Background	04/30/2012	8:25 AM	Dave Smith
04/30/2012	Greg Edwards	8-2N6E17-500-01	Caran Creek/Five Mile	Channel	not flowing 38 00'	Larvicide	Vectomax CG	Event	05/01/2012	8:05 AM	Dave Smith
04/30/2012	Greg Edwards	8-2N6E17-500-01	Caran Creek/Five Mile	Channel	not flowing 38 00'	Larvicide	Vectomax CG	Post-Event	05/07/2012	11:40 AM	Dave Smith
04/30/2012	Chris Hiers	8-2N6E16-500-01	Caran Creek/Five Mile	Channel	not flowing 38 00'	Larvicide	Vectomax CG	Background	04/30/2012	9:02 AM	Dave Smith
04/30/2012	Chris Hiers	8-2N6E16-500-01	Caran Creek/Five Mile	Channel	not flowing 38 00'	Larvicide	Vectomax CG	Event	05/01/2012	8:27 AM	Dave Smith
04/30/2012	Chris Hiers	8-2N6E16-500-01	Caran Creek/Five Mile	Channel	not flowing 38 00'	Larvicide	Vectomax CG	Post-Event	05/07/2012	12:39 PM	Dave Smith
	Bacillus sphaericus/Bacillus thurigensis - Wetland - San Joaquin County Mosquito Vector Control District (SJCMVCD)										
05/01/2012	Alpine Helicopter	15-2S6E17-004-01	Tom Paine Slough	Channel	not flowing 37 45'	Larvicide	Vectomax CG	Background	05/01/2012	2:28 PM	Dave Smith
05/01/2012	Alpine Helicopter	15-2S6E17-004-01	Tom Paine Slough	Channel	not flowing 37 45'	Larvicide	Vectomax CG	Event	05/01/2012	11:13 AM	Dave Smith
05/01/2012	Alpine Helicopter	15-2S6E17-004-01	Tom Paine Slough	Channel	not flowing 37 45'	Larvicide	Vectomax CG	Post-Event	05/08/2012	8:28 AM	Dave Smith
05/01/2012	Alpine Helicopter	15-2S6E10-501-02	Weatherbee Lake	Channel	not flowing 37 46'	Larvicide	Vectomax CG	Background	04/30/2012	2:10 PM	Dave Smith
05/01/2012	Alpine Helicopter	15-2S6E10-501-02	Weatherbee Lake	Channel	not flowing 37 46'	Larvicide	Vectomax CG	Event	05/01/2012	2:10 PM	Dave Smith
05/01/2012	Alpine Helicopter	15-2S6E10-501-02	Weatherbee Lake	Channel	not flowing 37 46'	Larvicide	Vectomax CG	Post-Event	05/08/2012	9:00 AM	Dave Smith

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Bacillus sphaericus/Bacillus thurigensis - Agriculture - Lake County Vector Control District (LCVCD)																
07/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Green	Clear	Observed	Observed	Observed	Films	Not Observed	None	73.22	365	22.8	7.58	1.79
07/09/2012	Partly cloudy	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed	Films	Not Observed	None	66.18	359	22.8	7.22	1.72
07/09/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Not Observed	None	74.17	369	28.5	7	1.32
07/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Green	Clear	Observed	Observed	Observed		Not Observed	None	72.17	517	40.6	7.37	0.71
07/09/2012	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed		Not Observed	None	66.95	504	31.8	7.17	0.69
07/09/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	71.78	493	23.3	7.22	26.2
08/06/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Not Observed	None	74.17	369	28.5	7	1.32
08/06/2012	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	Observed	Observed	Observed		Not Observed	None	70.23	368	13.4	7.07	2.19
08/06/2012	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	64.32	1420	4.3	7.57	84.2
08/06/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	71.78	493	23.3	7.22	26.2
08/06/2012	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	71.33	480	45.1	7.24	6.2
08/06/2012	Clear/sunny	None	Calm	Hot	Dry		Not Observed	Not Observ	Not Observ		Not Observed	None					
08/06/2012	Clear/sunny	None	Calm	Warm/mild	Green	Cloudy	Observed	Observed	Observed	Films	Not Observed	None	72.01	442	23	7.04	8.99
08/06/2012	Clear/sunny	None	Light breeze	Hot	Green	Cloudy	Observed	Observed	Observed	Films	Not Observed	None	71.33	447	19.5	7	9.71
08/06/2012	Clear/sunny	None	Calm	Hot	Dry		Not Observed	Not Observ	Not Observ		Not Observed	None					
08/06/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Cloudy	Observed	Observed	Observed		Not Observed	None	69.93	796	26.8	6.97	3.73
08/06/2012	Clear/sunny	None	Gusty	Hot	Colorless	Cloudy	Observed	Observed	Observed		Not Observed	None	65.89	782	21.8	6.89	2.31
08/06/2012	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	Observed	Observed	Observed		Not Observed	None	75.61	1013	7.8	7.28	19.8
	Bacillus sphaericus/Bacillus thurigensis - Urban - San Joaquin County Mosquito Vector Control District (SJCMVCD)																
04/30/2012	Clear/sunny		Calm	Cool	Colorless	Clear	Observed	Observed	Observed		Not Observed	duckweed	63.21	126	0.10	6.00	3.52
04/30/2012	Clear/sunny		Calm	Cool	Colorless	Clear	Observed	Observed	Observed		Not Observed	duckweed	63.04	154	0.40	5.93	2.76
04/30/2012	Clear/sunny		Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Not Observed	duckweed	63.43	259	5.29	6.56	1.88
04/30/2012	Clear/sunny		Calm	Cool	Brown	Clear	Observed	Observed	Not Observ		Not Observed	duckweed	63.72	83	2.31	6.37	37.4
04/30/2012	Clear/sunny		Calm	Cool	Brown	Clear	Observed	Observed	Observed		Not Observed	duckweed	61.96	83	2.07	6.38	2.10
04/30/2012	Clear/sunny		Calm	Warm/mild	Brown	Clear	Observed	Observed	Observed		Observed	duckweed	65.35	101	1.84	6.45	15.2
	Bacillus sphaericus/Bacillus thurigensis - Wetland - San Joaquin County Mosquito Vector Control District (SJCMVCD)																
05/01/2012	Clear/sunny		Gusty	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Sheen	Observed	duckweed,	65.93	2688	3.41	7.29	20.6
05/01/2012	Clear/sunny		Gusty	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Sheen	Observed	duckweed,	63.20	2301	1.75	7.20	26.0
05/01/2012	Clear/sunny		Calm	Cool	Colorless	Clear	Observed	Observed	Observed		Observed	duckweed,	63.49	1690	0.71	7.18	7.39
05/01/2012	Clear/sunny		Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Sheen	Observed	dead cattail	70.33	569	0.49	6.82	8.53
05/01/2012	Clear/sunny		Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Sheen	Observed	dead cattail	60.62	545	1.25	6.89	13.9
05/01/2012	Clear/sunny		Calm	Warm/mild	Colorless	Cloudy	Observed	Observed	Observed	Films	Observed	dead cattail	61.81	592	2.04	6.73	32.1

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Methoprene - Agriculture - Shasta Mosquito Vector Control District (SMVCD)										
7/24/2012	Mike Alexander	40.403985, -122.215621	Cottonwood Creek	Channel		Larvicide	Methoprene	Background	7/24/2012	1400	Albright, Bastien, Ang
7/24/2012	Mike Alexander	40.403985, -122.215621	Cottonwood Creek	Channel		Larvicide	Methoprene	Event	7/24/2012	1420	Bastien, Angel-Adkins
7/24/2012	Mike Alexander	40.403985, -122.215621	Cottonwood Creek	Channel		Larvicide	Methoprene	Post-Event	8/27/2012	1047	Bastien, Angel-Adkins
7/25/2012	Mike Alexander	40.40072000, -122.25072200	Cottonwood Creek	Channel		Larvicide	Methoprene	Background	7/25/2012	1010	Bastien, Angel-Adkins
7/25/2012	Mike Alexander	40.40072000, -122.25072200	Cottonwood Creek	Channel		Larvicide	Methoprene	Event	7/25/2012	1045	Bastien, Angel-Adkins
7/25/2012	Mike Alexander	40.40072000, -122.25072200	Cottonwood Creek	Channel		Larvicide	Methoprene	Post-Event	8/27/2012	1020	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37801400, -122.30659500	Cottonwood Creek	Channel		Larvicide	Methoprene	Background	7/26/2012	1030	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37801400, -122.30659500	Cottonwood Creek	Channel		Larvicide	Methoprene	Event	7/26/2012	1050	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37801400, -122.30659500	Cottonwood Creek	Channel		Larvicide	Methoprene	Post-Event	9/4/2012	1050	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37676300, -122.30758200	Cottonwood Creek	Channel		Larvicide	Methoprene	Background	7/26/2012	1100	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37676300, -122.30758200	Cottonwood Creek	Channel		Larvicide	Methoprene	Event	7/26/2012	1110	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37676300, -122.30758200	Cottonwood Creek	Channel		Larvicide	Methoprene	Post-Event	9/4/2012	1030	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37851200, -122.30817800	Cottonwood Creek	Channel		Larvicide	Methoprene	Background	7/26/2012	1120	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37851200, -122.30817800	Cottonwood Creek	Channel		Larvicide	Methoprene	Event	7/26/2012	1130	Bastien, Angel-Adkins
7/26/2012	Corey Boyer	40.37851200, -122.30817800	Cottonwood Creek	Channel		Larvicide	Methoprene	Post-Event	9/4/2012	1020	Bastien, Angel-Adkins
8/15/2012	Tim Mickela	40.49415700, -122.3156600	Churn Creek	Channel		Larvicide	Methoprene	Background	8/15/2012	1120	Bastien, Angel-Adkins
8/15/2012	Tim Mickela	40.49415700, -122.3156600	Churn Creek	Channel		Larvicide	Methoprene	Event	8/15/2012	1130	Bastien, Angel-Adkins
8/15/2012	Tim Mickela	40.49415700, -122.3156600	Churn Creek	Channel		Larvicide	Methoprene	Post-Event	9/14/2012	1330	Bastien, Angel-Adkins
	Methoprene - Urban - Greater Los Angeles County Vector Control District (GLACVCD)										
9/20/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Background	9/20/2012	8:55 AM	S. Kluh
9/20/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Event	9/20/2012	9:10 AM	S. Kluh
9/20/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Post-Event	10/2/2012	8:15 AM	S. Kluh
10/2/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Background	10/2/2012	8:15 AM	S. Kluh
10/2/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Event	10/2/2012	11:30 AM	S. Kluh
10/2/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Post-Event	10/16/2012	8:05 AM	S. Kluh
10/16/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Background	10/16/2012	8:05 AM	S. Kluh
10/16/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Event	10/16/2012	8:30 AM	S. Kluh
10/16/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Post-Event	10/26/2012	9:55 AM	H.Morales, T. Posey
10/26/2012	D. Lopez	1770	Bixby Golf Course Pon	Pond		Larvicide	Altosid SBG	Background	10/26/2012	8:59 AM	H.Morales, T. Posey
10/26/2012	D. Lopez	1770	Bixby Golf Course Pon	Pond		Larvicide	Altosid SBG	Event	10/26/2012	9:10 AM	H.Morales, T. Posey
10/26/2012	D. Lopez	1770	Bixby Golf Course Pon	Pond		Larvicide	Altosid SBG	Post-Event	11/8/2012	8:55 AM	H.Morales, T. Posey
10/26/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Background	10/26/2012	9:55 AM	H.Morales, T. Posey
10/26/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Event	10/26/2012	10:03 AM	H.Morales, T. Posey
10/26/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Post-Event	11/8/2012	9:31 AM	H.Morales, T. Posey
11/8/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Background	11/8/2012	9:31 AM	H.Morales, T. Posey
11/8/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Event	11/8/2012	9:59 AM	H.Morales, T. Posey
11/8/2012	D. Lopez	1338	Bixby Marsh	Pond		Larvicide	Altosid SBG	Post-Event	11/21/2012	9:25 AM	H.Morales, T. Posey

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Methoprene - Agriculture - Shasta Mosquito Vector Control District (SMVCD)																
7/24/2012	Clear/sunny	None	Calm	Hot	Colorless	Murky	Observed	Observed	Observed		Not Observed	None	73.04	121	26	6.98	14.1
7/24/2012	Clear/sunny	None	Calm	Hot	Colorless	Murky	Observed	Observed	Observed	None	Not Observed	None	74.12	121	26.2	6.89	13.6
7/24/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Murky	Observed	Observed	Observed	None	Not Observed	None	59	130	81.9	7.43	3.47
7/25/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Murky	Observed	Observed	Observed	None	Not Observed	None	65.48	270	7.6	6.52	3.87
7/25/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Murky	Observed	Observed	Observed	None	Not Observed	None	65.12	290	4.4	6.54	3.17
7/25/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Murky	Observed	Observed	Observed	None	Not Observed	None	59.18	115	50.7	6.77	0.67
7/26/2012	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed	None	Observed	None	68.54	202	7.2	6.94	1.5
7/26/2012	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed	None	Observed	None	68.72	203	4.6	6.94	2.11
7/26/2012	Hazy	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed	None	Observed	None	71.96	189	4.7	7	2.06
7/26/2012	Clear/sunny	None	Calm	Cool	Colorless	Clear	Not Observed	Not Observ	Observed	Slick	Observed	None	75.92	225	143	6.83	1.94
7/26/2012	Clear/sunny	None	Calm	Cool	Colorless	Clear	Not Observed	Not Observ	Observed	Slick	Observed	None	75.74	224	117	6.78	1.8
7/26/2012	Hazy	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed	None	Not Observed	None	73.04	219	69.1	7.22	1.05
7/26/2012	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Not Observed	Not Observ	Observed	None	Not Observed	None	74.12	241	82.2	6.92	0.91
7/26/2012	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Not Observed	Not Observ	Observed	None	Not Observed	None	75.02	242	95.7	6.99	1.37
7/26/2012	Hazy	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed	None	Not Observed	None	58.820	154	56.5	7.34	1.32
8/15/2012	Clear/sunny	None	Calm	Hot	Green	Clear	Observed	Observed	Observed	None	Observed	None	58.28	113	85.4	7.64	8.1
8/15/2012	Clear/sunny	None	Calm	Hot	Green	Clear	Observed	Observed	Observed	None	Observed	None	58.28	111	81.8	7.42	4.2
8/15/2012	Clear/sunny	None	Calm	Hot	Green	Clear	Not Observed	Observed	Observed	None	Observed	None	71.78	116	92.6	6.6	0.75
	Methoprene - Urban - Greater Los Angeles County Vector Control District (GLACVCD)																
9/20/2012	Clear/sunny	None	Calm	Cool	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	72	1135.00	1.41	7.34	6.83
9/20/2012	Clear/sunny	None	Calm	Cool	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	71.6	1139.00	1.43	7.34	6.83
9/20/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	70.7	1213.00	2.51	7.28	1.99
10/2/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	70.7	1213.00	2.51	7.28	1.99
10/2/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	74,9	1529.00	2.15	7.56	0.84
10/2/2012	Overcast	Foggy	Calm	Warm/mild	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	68.2	1349.00	1.98	7.5	4.65
10/16/2012	Overcast	Foggy	Calm	Warm/mild	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	68.2	1349.00	1.98	7.5	4.65
10/16/2012	Overcast	Foggy	Calm	Warm/mild	Colorless	Clear	Observed	Not Observ	Observed		Not Observed	None	68.3	1351.00	1.95	7.46	4.98
10/16/2012	Clear/sunny	None	Gusty	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	66.5	1835.00	0.38	7.67	0.96
10/26/2012	Clear/sunny	None	Gusty	Warm/mild	Brown	Murky	Not Observed	Not Observ	Observed		Not Observed	None	66	841.00	0.31	7.1	2.49
10/26/2012	Clear/sunny	None	Gusty	Warm/mild	Brown	Murky	Not Observed	Not Observ	Observed		Not Observed	None	66.1	847.00	0.24	7.15	2.16
10/26/2012	Overcast	None	Calm	Cool	Brown	Murky	Not Observed	Not Observ	Observed	Slick	Not Observed	Duck weed	67.4	759.00	4.2	6.93	2.9
10/26/2012	Clear/sunny	None	Gusty	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	66.5	1835.00	0.38	7.67	0.96
10/26/2012	Clear/sunny	None	Gusty	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	66	1912.00	0.24	7.68	0.92
10/26/2012	Overcast	None	Calm	Cool	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	69	1157.00	2.01	7.55	13
11/8/2012	Overcast	None	Calm	Cool	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	69	1157.00	2.01	7.55	13
11/8/2012	Overcast	None	Calm	Cool	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	69	1152.00	2.45	7.61	13.2
11/8/2012	Overcast	None	Calm	Cool	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	68.1	1143.00	2.15	7.64	0.88

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Methoprene - Wetlands - Napa County Mosquito Abatement District (NCMAD)										
01/19/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh water pond @ B	Pond	wetlands	Larvicide	Altosid Pellets	Background	01/18/2012	9:42 am	Ann Donohue
01/19/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh water pond @ B	Pond	wetlands	Larvicide	Altosid Pellets	Event	01/19/2012	9:53 am	Ann Donohue
01/19/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh water pond @ B	Pond	wetlands	Larvicide	Altosid Pellets	Post-Event	02/17/12	1:10 pm	Ann Donohue
03/21/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh water pond @ B	Pond	wetlands	Larvicide	Altosid Pellets	Background	03/21/2012	10:00 am	Ann Donohue
03/21/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh water pond @ B	Pond	wetlands	Larvicide	Altosid Pellets	Event	03/21/2012	11:00 am	Ann Donohue
03/21/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh water pond @ B	Pond	wetlands	Larvicide	Altosid Pellets	Post-Event	04/11/12	11:15 am	Ann Donohue
04/11/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Background	04/11/2012	10:30 am	Ann Donohue
04/11/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Event	04/11/2012	12:00 pm	Ann Donohue
04/11/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Post-Event	05/02/2012	10:00 am	Ann Donohue
06/05/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Background	06/05/2012	10:00 am	Ann Donohue
06/05/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Event	06/05/2012	11:00 am	Ann Donohue
06/05/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Post-Event	06/26/2012	1:00 pm	Ann Donohue
07/26/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Background	07/26/2012	9:00 am	Ann Donohue
07/26/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Event	07/26/2012	3:00 pm	Ann Donohue
07/26/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Post-Event	08/17/2012	1:26 pm	Ann Donohue
10/19/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Background	10/19/2012	9:10 am	Ann Donohue
10/19/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Event	10/19/2012	11:03 pm	Ann Donohue
10/19/2012	Chris Azevedo	Buchli Station Rd, Napa	Fresh Water Pond @ E	Pond	Wetlands	Larvicide	Altosid Pellets	Post-Event	11/09/2012	11:59 am	Ann Donohue
	Petroleum Distillates - Agriculture - San Joaquin County Mosquito Vector Control District (SJCMVCD)										
04/10/2012	Fred Mortenson	2-4N6E12-013-01	Jahant Slough	Channel	not flowing 38 12'	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	04/10/2012	8:45 AM	Dave Smith
04/10/2012	Fred Mortenson	2-4N6E12-013-01	Jahant Slough	Channel	not flowing 38 12'	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	04/11/2012	8:32 AM	Dave Smith
04/10/2012	Fred Mortenson	2-4N6E12-013-01	Jahant Slough	Channel	not flowing 38 12'	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	04/17/2012	9:05 AM	Dave Smith
04/10/2012	Chris Hiers	1-4N7E13-011-05	Gill Creek	Channel	not flowing 38 11'	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	04/10/2012	10:10 AM	Dave Smith
04/10/2012	Chris Hiers	1-4N7E13-011-05	Gill Creek	Channel	not flowing 38 11'	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	04/11/2012	9:45 AM	Dave Smith
04/10/2012	Chris Hiers	1-4N7E13-011-05	Gill Creek	Channel	not flowing 38 11'	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	04/17/2012	10:00 AM	Dave Smith
04/12/2012	Morgan Bennett	12-1S9E20-014-03	Avena Drain	Channel	not flowing 37 49'	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	04/11/2012	1:37 PM	Dave Smith
04/12/2012	Morgan Bennett	12-1S9E20-014-03	Avena Drain	Channel	not flowing 37 49'	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	04/12/2012	10:22 AM	Dave Smith
04/12/2012	Morgan Bennett	12-1S9E20-014-03	Avena Drain	Channel	not flowing 37 49'	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	04/18/2012	10:55 AM	Dave Smith
04/24/2012	Scott Andres	10-1N7E08-003-01	Mormon Slough	Channel	Not Flowing 37 57	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	04/23/2012	1:50 PM	Dave Smith
04/24/2012	Scott Andres	10-1N7E08-003-01	Mormon Slough	Channel	Not Flowing 37 57	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	04/24/2012	1:40 PM	Scott Andres
04/24/2012	Scott Andres	10-1N7E08-003-01	Mormon Slough	Channel	Not Flowing 37 57	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	05/01/2012	2:02 PM	Scott Andres
05/07/2012	Steve Duke	11-1N8E-26	Little John Creek	Channel	not flowing 37 55'	Larvicide	BVA 2 Oil	Background	05/07/2012	2:33 PM	Dave Smith
05/07/2012	Steve Duke	11-1N8E-26	Little John Creek	Channel	not flowing 37 55'	Larvicide	BVA 2 Oil	Event	05/08/2012	11:50 AM	Dave Smith
05/07/2012	Steve Duke	11-1N8E-26	Little John Creek	Channel	not flowing 37 55'	Larvicide	BVA 2 Oil	Post-Event	05/14/2012	12:30 PM	Dave Smith
05/08/2012	Emily Pope	15-2S5E-29	City of Tracy Drain	Channel	not flowing 37 43'	Larvicide	BVA 2 Oil	Background	05/08/2012	1:30 PM	Dave Smith
05/08/2012	Emily Pope	15-2S5E-29	City of Tracy Drain	Channel	not flowing 37 43'	Larvicide	BVA 2 Oil	Event	05/09/2012	10:25 AM	Dave Smith
05/08/2012	Emily Pope	15-2S5E-29	City of Tracy Drain	Channel	not flowing 37 43'	Larvicide	BVA 2 Oil	Post-Event	05/15/2012	9:05 AM	Dave Smith

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Methoprene - Wetlands - Napa County Mosquito Abatement District (NCMAD)																
01/19/2012	Overcast	None	Calm	Cool	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	44.6	3694	15.02	7.38	3.41
01/19/2012	Overcast	None	Calm	Cool	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	45.0	3473	9.69	7.5	1.74
01/19/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	62.2	5694	13.63	7.61	6.16
03/21/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	56.9	3093	12.88	7.00	10.25
03/21/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	62.1	3860	13.84	6.81	7.90
03/21/2012	Partly cloudy	None	Gusty	Cool	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	64.8	2337	8.97	7.68	1.67
04/11/2012	Partly cloudy	None	Gusty	Cool	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	64.8	2337	8.97	7.68	1.67
04/11/2012	Partly cloudy	None	Gusty	Cool	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	67.6	3036	7.74	7.22	3.67
04/11/2012	Clear/sunny	None	Light breeze	Cool	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	62.6	2452	7.67	7.79	0.47
06/05/2012	Partly cloudy	None	Gusty	Warm/mild	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	55.4	3223	3.24	7.04	0.51
06/05/2012	Partly cloudy	None	Gusty	Warm/mild	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	56.7	3231	4.31	7.09	0.49
06/05/2012	Partly cloudy	None	Gusty	Warm/mild	Green	Clear	Observed	Observed	Observed	none	Not Observed	None	62.1	4370	8.94	7.17	1.43
07/26/2012	Overcast	Foggy	Light breeze	Cool	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	59.5	2819	3.03	7.00	0.58
07/26/2012	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	65.5	3201	7.38	7.05	1.26
07/26/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	62.2	4909	4.6	6.8	2.18
10/19/2012	Overcast	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	58.6	3601	4.20	7.10	1.4
10/19/2012	Partly cloudy	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	60.1	3694	6.00	7.16	3.33
10/19/2012	Clear/sunny	None	Calm	Cool	Colorless	Clear	Observed	Observed	Observed	none	Not Observed	None	49.3	2954	5.53	7.25	0.67
	Petroleum Distillates - Agriculture - San Joaquin County Mosquito Vector Control District (SJCMVCD)																
04/10/2012	Overcast		Calm	Cool	Colorless	Clear	Observed	Observed	Observed		Not Observed	None	51.73	203	2.45	6.36	6.28
04/10/2012	Overcast	Drizzle	Calm	Cool	Colorless	Clear	Observed	Observed	Observed		Not Observed	None	52.69	208	2.44	6.52	39.6
04/10/2012	Clear/sunny		Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Not Observed	None	52.91	312	1.28	6.45	13.5
04/10/2012	Overcast		Calm	Cool	Brown	Clear	Observed	Observed	Not Observ		Not Observed	None	52.46	464	4.07	7.22	36.5
04/10/2012	Partly cloudy	None	Light breeze	Cool	Brown	Cloudy	Observed	Observed	Observed	Gloss	Not Observed	None	54.19	543	3.45	6.83	33.8
04/10/2012	Clear/sunny		Light breeze	Warm/mild	Brown	Clear	Observed	Observed	Observed	Films	Not Observed	None	52.81	652	1.55	6.77	39.9
04/12/2012	Partly cloudy		Light breeze	Cool	Brown	Murky	Observed	Observed	Observed		Not Observed	None	54.60	234	5.04	6.65	78.9
04/12/2012	Partly cloudy	Drizzle	Gusty	Cool	Brown	Murky	Observed	Observed	Observed	Sheen	Not Observed	None	51.02	374	7.08	5.88	65.2
04/12/2012	Clear/sunny		Calm	Warm/mild	Brown	Murky	Observed	Observed	Not Observ	Films	Observed	animal was	60.32	521	1.57	5.88	unreadable
04/24/2012	Clear/sunny		Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Observed		Observed	None	66.53	267	5.16	7.48	38.8
04/24/2012	Clear/sunny		Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Observed	Sheen	Observed	None	72.58	145	1.83	6.53	48.2
04/24/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Observed	Observed	Films	Observed	trash	70.47	72	4.16	6.75	43.5
05/07/2012	Clear/sunny		Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed		Observed	dead leaves	57.99	287	0.21	6.16	6.33
05/07/2012	Clear/sunny		Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Sheen	Observed	dead leaves	59.12	282	3.38	6.83	10.78
05/07/2012	Clear/sunny		Light breeze	Warm/mild	Green	Clear	Observed	Not Observ	Observed		Not Observed	None	65.4	64	5.42	6.54	4.18
05/08/2012	Clear/sunny		Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Not Observed	trash	64.4	396	4.21	6.82	1.81
05/08/2012	Clear/sunny		Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Sheen	Not Observed	trash	64.92	474	0.74	6.86	3.76
05/08/2012	Clear/sunny		Light breeze	Cool	Colorless	Clear	Observed	Observed	Observed	Sheen	Not Observed	None	60.15	332	3.80	6.84	3.99

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Petroleum Distillates - Urban - Greater Los Angeles County Vector Control District (GLACVCD)										
08/22/2012	Richardo Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Background	08/22/2012	9:16 AM	S. Vetrone, R. Gallant
08/22/2012	Richardo Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Event	08/22/2012	11:19 AM	S. Vetrone, R. Gallar
08/22/2012	Richardo Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Post-Event	08/23/2012	13:55 AM	P. O'Connor, S. Vetro
09/05/2012	Ricardo Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Background	09/05/2012	11:17 AM	R. Gallant, S. Vetrone
09/05/2012	Ricardo Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Event	09/05/2012	13:00 PM	R. Gallant, S. Vetrone
09/05/2012	Ricardo Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Post-Event	09/06/2012	8:19 AM	R. Gallant, S. Vetrone
9/12/12	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Background	09/12/2012	10:30 AM	P.O'Connor, S.Vetron
9/12/12	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Event	09/12/2012	12:50 AM	P.O'Connor, S. Vetro
9/12/12	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Post-Event	09/13/2012	9:30 AM	P.O'Connor, S.Vetron
9/27/12	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Background	09/27/2012	9:18 AM	S. Vetrone
9/27/12	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Event	09/27/2012	9:45 AM	S. Vetrone
9/27/12	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Post-Event	09/28/2012	9:00 AM	S. Vetrone
10/10/2012	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Background	10/10/2012	8:40 AM	S. Vetrone
10/10/2012	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Event	10/10/2012	9:05 AM	S. Vetrone
10/10/2012	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Post-Event	10/11/2012	11:15 AM	P. O'Connor
10/24/2012	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Background	10/24/2012	8:38 AM	S. Vetrone, R.Gallant
10/24/2012	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Event	10/24/2012	9:02 AM	S. Vetrone, R Gallant
10/24/2012	Ricky Gomez	3705	Pacoima Wash	Channel		Larvicide	Golden Bear 1111	Post-Event	10/25/2012	10:07 AM	S. Vetrone, R Gallant
	Petroleum Distillates - Wetland - Sacramento-Yolo Mosquito Vector Control District (SYMVCD)										
06/20/2012	John Fritz	38°16'11.24"N 121°26'21.26"W	Cosumnes River	Pond		Larvicide	BVA 2 Mosquito Larvicide Oil	Background	06/20/2012	10:10AM	John Fritz
06/20/2012	John Fritz	38°16'11.24"N 121°26'21.26"W	Cosumnes River	Pond		Larvicide	BVA 2 Mosquito Larvicide Oil	Event	06/20/2012	10:30AM	John Fritz
06/20/2012	John Fritz	38°16'11.24"N 121°26'21.26"W	Cosumnes River	Pond		Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	06/22/2012	10:15AM	John Fritz
06/22/2012	John Fritz	38°27'18.84"N 121°28'46.18"W	Wetland - Morrison Cre	Pond		Larvicide	BVA 2 Mosquito Larvicide Oil	Background	06/22/2012	11:00AM	John Fritz
06/22/2012	John Fritz	38°27'18.84"N 121°28'46.18"W	Wetland - Morrison Cre	Pond		Larvicide	BVA 2 Mosquito Larvicide Oil	Event	06/22/2012	11:40AM	John Fritz
06/22/2012	John Fritz	38°27'18.84"N 121°28'46.18"W	Wetland - Morrison Cre	Pond		Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	06/25/2012	11:10 AM	John Fritz
10/09/2012	Kevin Combo	38°16'23.99"N 121°26'23.62"W	Cosumnes River Wetla	Pond	2a	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	10/09/2012	11:16 AM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'23.99"N 121°26'23.62"W	Cosumnes River Wetla	Pond	2a	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	10/09/2012	11:59 AM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'23.99"N 121°26'23.62"W	Cosumnes River Wetla	Pond	2a	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	10/15/2012	11:40 AM	Marty Scholl
10/09/2012	Kevin Combo	38°16'23.45"N 121°26'28.51"W	Cosumnes River Wetla	Pond	3a	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	10/09/2012	11:26 AM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'23.45"N 121°26'28.51"W	Cosumnes River Wetla	Pond	3a	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	10/09/2012	12:09 PM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'23.45"N 121°26'28.51"W	Cosumnes River Wetla	Pond	3a	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	10/15/2012	11:46 AM	Marty Scholl
10/09/2012	Kevin Combo	38°16'16.91"N 121°26'28.36"W	Cosumnes River Wetla	Pond	4a	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	10/09/2012	11:32 AM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'16.91"N 121°26'28.36"W	Cosumnes River Wetla	Pond	4a	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	10/09/2012	12:14 PM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'16.91"N 121°26'28.36"W	Cosumnes River Wetla	Pond	4a	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	10/15/2012	11:59 AM	Marty Scholl
10/09/2012	Kevin Combo	38°16'12.24"N 121°26'29.04"W	Cosumnes River Wetla	Pond	5a	Larvicide	BVA 2 Mosquito Larvicide Oil	Background	10/09/2012	11:39 AM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'12.24"N 121°26'29.04"W	Cosumnes River Wetla	Pond	5a	Larvicide	BVA 2 Mosquito Larvicide Oil	Event	10/09/2012	11:39 AM	Kevin Combo, Marty S
10/09/2012	Kevin Combo	38°16'12.24"N 121°26'29.04"W	Cosumnes River Wetla	Pond	5a	Larvicide	BVA 2 Mosquito Larvicide Oil	Post-Event	10/15/2012	12:04 PM	Marty Scholl

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Petroleum Distillates - Urban - Greater Los Angeles County Vector Control District (GLACVCD)																
08/22/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Clear	Observed	Observed	Observed	Films	Observed	Trash and d	72.4	1082	4.62	7.94	1.36
08/22/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Clear	Observed	Observed	Observed	Films	Observed	Trash and d	85.3	1172	1.58	8.81	4.49
08/22/2012	Clear/sunny	None	Light breeze	Hot	Brown	Clear	Observed	Observed	Observed		Observed	Trash and d	89.9	1519	5.64	9.09	1.25
09/05/2012	Overcast	Drizzle	Calm	Cool	Green	Clear	Observed	Observed	Observed		Observed	Trash & deb	71.96	801	9.58	8.31	1.53
09/05/2012	Overcast	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed		Observed	trash & deb	76.1	867	11.45	8.89	1.76
09/05/2012	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed		Observed	Trash & deb	67.1	945	4.5	7.66	0.73
9/12/12	Clear/sunny	None	Light breeze	Cool	Green	Clear	Observed	Observed	Observed		Observed	Sepulveda	78.28	2440	3.82	8.31	0.67
9/12/12	Clear/sunny	None	Calm	Hot	Green	Clear	Observed	Observed	Observed		Observed	Trash and d	89.42	695	3.03	8.88	0.85
9/12/12	Clear/sunny	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed		Observed	Trash and D	69.7	1908	5.65	7.88	0.7
9/27/12	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	Trash and d	64	732	6.32	7.89	0.94
9/27/12	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	Trash and d	64.6	737	7.71	7.97	0.53
9/27/12	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed		Observed	Trash and d	66.7	733	4.91	8.18	1.11
10/10/2012	Clear/sunny	None	Calm	Cool	Green	Clear	Observed	Observed	Observed	Films	Observed	Trash and D	60.3	0.27	7.17	5.57	0.65
10/10/2012	Clear/sunny	None	Calm	Cool	Green	Clear	Observed	Observed	Observed	Films	Observed	Trash and d	59.9	704	0.2	7.74	0.5
10/10/2012	Partly cloudy	Drizzle	Light breeze	Cool	Green	Clear	Observed	Observed	Observed	Films	Observed	Trash and d	62.4	748	7.95	8.35	0.89
10/24/2012	Clear/sunny	None	Light breeze	Cool	Brown	Clear	Observed	Observed	Observed		Observed	Trash and d	55.9	497	4.05	7.77	0.77
10/24/2012	Clear/sunny	None	Gusty	Cool	Brown	Clear	Observed	Observed	Observed		Observed	Trash and d	55.8	498.6	4.43	7.77	0.59
10/24/2012	Clear/sunny	None	Gusty	Cool	Brown	Clear	Observed	Observed	Observed		Observed	trash	55.2	484.7	6.99	8.78	0.61
	Petroleum Distillates - Wetland - Sacramento-Yolo Mosquito Vector Control District (SYMVCD)																
06/20/2012	Clear/sunny	None	Light breeze	Hot	Green	Murky	Not Observed	Not Observ	Observed	None	Not Observed	None	77.03	292	7.52	8.59	21.2
06/20/2012	Clear/sunny	None	Light breeze	Hot	Green	Murky	Not Observed	Not Observ	Observed	None	Not Observed	None	76.3	289	7.70	8.66	19.6
06/20/2012	Partly cloudy	None	Gusty	Cool	Green	Murky	Not Observed	Not Observ	Observed	None	Not Observed	None	69.2	240	7.63	7.8	18.3
06/22/2012	Partly cloudy	None	Gusty	Warm/mild	Brown	Cloudy	Observed	Not Observ	Observed	None	Not Observed	None	70.0	262	5.69	7.24	28.6
06/22/2012	Clear/sunny	None	Gusty	Warm/mild	Brown	Murky	Observed	Not Observ	Observed	None	Not Observed	None	70.3	262	5.70	7.3	28.4
06/22/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Not Observ	Observed	None	Not Observed	None	73.4	280	5.10	7.12	65.3
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	72.01	183	11.82	7.04	4.35
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Not Observ	none	Not Observed	None	75.04	184	11.63	7.26	4.44
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed	None	Observed	None	74.49	180	11.51	6.61	14.6
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	67.17	223	12.62	7.24	7.33
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	Films	Not Observed	None	70.23	219	10.98	7.04	14.1
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed	None	Not Observed	None	69.82	156	11.07	7.11	11.62
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	68.92	20.8	14.84	7.73	6.53
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	72.33	204	16.20	7.39	15.7
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	71.99	151	15.19	7.64	8.19
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	66.86	219	8.99	7.39	5.97
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	none	Not Observed	None	69.96	219	10.20	6.95	8.52
10/09/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed	None	Not Observed	None	71.43	154	14.75	7.54	3.48

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Monomolecular Films - Agriculture - Sacramento-Yolo Mosquito Vector Control District (SYMVCD)										
11/07/2012	Kevin Combo	38°18'24.58"N 121°13'18.20"W	Tributary to Laguna Cr	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Background	11/07/2012	1:13PM	Marty Scholl
11/07/2012	Kevin Combo	38°18'24.58"N 121°13'18.20"W	Tributary to Laguna Cr	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Event	11/07/2012	1:34PM	Marty Scholl
11/07/2012	Kevin Combo	38°18'24.58"N 121°13'18.20"W	Tributary to Laguna Cr	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Post-Event	11/13/2012	10:30 AM	Kevin Combo
11/07/2012	Kevin Combo	38°18'09.04"N 121°15'32.00"W	Skunk Creek	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Background	11/07/2012	11:41 AM	Kevin Combo, Marty S
11/07/2012	Kevin Combo	38°18'09.04"N 121°15'32.00"W	Skunk Creek	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Event	11/07/2012	12:27PM	Marty Scholl
11/07/2012	Kevin Combo	38°18'09.04"N 121°15'32.00"W	Skunk Creek	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Post-Event	11/13/2012	9:40AM	Kevin Combo
11/07/2012	Kevin Combo	38°18'07.53"N 121°15'39.05"W	Skunk Creek	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Background	11/07/2012	11:50 AM	Kevin Combo, Marty S
11/07/2012	Kevin Combo	38°18'07.53"N 121°15'39.05"W	Skunk Creek	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Event	11/07/2012	12:34PM	Marty Scholl
11/07/2012	Kevin Combo	38°18'07.53"N 121°15'39.05"W	Skunk Creek	Open waterway	Agricultural Setting	Larvicide	Agnique MMF	Post-Event	11/13/2012	9:50AM	Kevin Combo
	Monomolecular Films - Agriculture - Owens Valley Mosquito Abatement Program										
12/11/12	Casey Freeman	36.322138, -118.019963	Cartago Soda Ponds	Spring water	spring water on ea	Larvicide	Agnique MMF	Background	12/11/12	10:45 AM	Casey Freeman
12/11/12	Casey Freeman	36.322138, -118.019963	Cartago Soda Ponds	Spring water	spring water on ea	Larvicide	Agnique MMF	Event	12/11/12	11:00 AM	Chris Wickham
12/11/12	Casey Freeman	36.322138, -118.019963	Cartago Soda Ponds	Spring water	spring water on ea	Larvicide	Agnique MMF	Post-Event	12/19/12	11:35 AM	Chris Wickham
12/11/12	Casey Freeman	36.574433, -118.013601	Lower Owens River	sub water from L	water from high wa	Larvicide	Agnique MMF	Background	12/11/12	11:35 AM	Casey Freeman
12/11/12	Casey Freeman	36.574433, -118.013601	Lower Owens River	sub water from L	water from high wa	Larvicide	Agnique MMF	Event	12/11/12	12:25 PM	Chris Wickham
12/11/12	Casey Freeman	36.574433, -118.013601	Lower Owens River	sub water from L	water from high wa	Larvicide	Agnique MMF	Post-Event	12/19/12	12:16 PM	Chris Wickham
12/11/12	Rob Miller	37.349117, -118.367634	Bishop Sewer	sewer pond runo	subwater	Larvicide	Agnique MMF	Background	12/11/12	2:35 PM	Rob Miller
12/11/12	Rob Miller	37.349117, -118.367634	Bishop Sewer	sewer pond runo	subwater	Larvicide	Agnique MMF	Event	12/11/12	3:00 PM	Chris Wickham
12/11/12	Rob Miller	37.349117, -118.367634	Bishop Sewer	sewer pond runo	subwater	Larvicide	Agnique MMF	Post-Event	12/19/12	2:08 PM	Rob Miller
	Monomolecular Films - Urban - Coachella Valley Mosquito Vector Control District (CVMVCD)										
08/29/2012	Fernando Fregoso	33.71916167, -116.30062944	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Background	08/29/2012	10:59	Fernando Fregoso an
08/29/2012	Fernando Fregoso	33.71916167, -116.30062944	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Event	08/29/2012	12:07	Fernando Fregoso an
08/29/2012	Fernando Fregoso	33.71916167, -116.30062944	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Post-Event	09/26/2012	10:01	Fernando Fregoso an
09/11/2012	Lee Ernst	33.7448003, -116.40753601	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Background	09/11/2012	10:30	Lee Ernst and Gabrie
09/11/2012	Lee Ernst	33.7448003, -116.40753601	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Event	09/11/2012	10:53	Lee Ernst and Gabrie
09/11/2012	Lee Ernst	33.7448003, -116.40753601	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Post-Event	10/10/2012	9:55	Lee Ernst and Gabrie
09/11/2012	Lee Ernst	33.74649387, -116.41143701	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Background	09/11/2012	9:25	Lee Ernst and Gabrie
09/11/2012	Lee Ernst	33.74649387, -116.41143701	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Event	09/11/2012	9:44	Lee Ernst and Gabrie
09/11/2012	Lee Ernst	33.74649387, -116.41143701	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Post-Event	10/10/2012	9:14	Lee Ernst and Gabrie
09/12/2012	Miguel Vargas	33.72180447, -116.25575372	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Background	09/12/2012	10:03	Miguel Vargas and Ga
09/12/2012	Miguel Vargas	33.72180447, -116.25575372	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Event	09/12-2012	10:29	Miguel Vargas and Ga
09/12/2012	Miguel Vargas	33.72180447, -116.25575372	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Post-Event	10/09/2012	11:25	Migeul Vargas and Ga
09/14/2012	Antonio Molina	33.63404503, -116.13306792	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Background	09/14/2012	9:40	Antonio Molina and G
09/14/2012	Antonio Molina	33.63404503, -116.13306792	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Event	09/12/2012	10:17	Antonio Molina and G
09/14/2012	Antonio Molina	33.63404503, -116.13306792	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Post-Event	10/12/2012	10:20	Antonio Molina and G
10/12/2012	Lee Ernst	33.75761676, -116.4293646	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Background	10/12/2012	11:01	Lee Ernst and Gabrie
10/12/2012	Lee Ernst	33.75761676, -116.4293646	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Event	10/12/2012	11:06	Lee Ernst and Gabrie
10/12/2012	Lee Ernst	33.75761676, -116.4293646	Residential channel	Channel		Larvicide	AE surfactant Agnique MMF	Post-Event	11/06/2012	9:37	Lee Ernst and Gabrie

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Monomolecular Films - Agriculture - Sacramento-Yolo Mosquito Vector Control District (SYMVCD)																
11/07/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed	Coatings	Not Observed	None	57.16	442	7.27	7.47	16.5
11/07/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed	Flecks	Not Observed	None	58.02	442	6.25	7.35	18.0
11/07/2012	Clear/sunny	None	Light breeze	Cool	Brown	Murky	Observed	Observed	Observed	None	Not Observed	None	56.08	1	10.78	7.30	18.8
11/07/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed	None	Not Observed	None	55.22	361	6.43	7.08	19.3
11/07/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Observed	Observed	Flecks	Not Observed	None	56.75	357	6.90	7.27	20.5
11/07/2012	Clear/sunny	None	Calm	Cool	Brown	Murky	Observed	Observed	Observed	None	Not Observed	None	44.85	287	8.69	7.64	16.4
11/07/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	None	Not Observed	None	53.56	366	6.51	6.80	4.25
11/07/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	None	Not Observed	None	54.82	372	2.28	6.97	6.32
11/07/2012	Clear/sunny	None	Calm	Cool	Colorless	Clear	Observed	Observed	Observed	None	Not Observed	None	45.82	295	12.50	7.67	2.18
	Monomolecular Films - Agriculture - Owens Valley Mosquito Abatement Program																
12/11/12	Clear	none	not noted	51 F	not noted	clear	minimal	high	not noted	none	minimal	birds	59.6	261	31.1	7.79	0.23
12/11/12	Clear	none	not noted	51 F	not noted	clear	minimal	high	not noted	light	minimal	birds	59.9	260	24.7	7.99	0.57
12/11/12	Clear	none	not noted	37 F	not noted	clear	minimal	high	not noted	none	minimal	birds	50.2	275	50.1	7.5	3.9
12/11/12	Clear	none	not noted	51 F	Dark Brown	Murky	med to high	high	not noted	none	minimal	cattle	57.4	19580	3.2	9.07	5.08
12/11/12	Clear	none	not noted	51 F	Dark Brown	Murky	med to high	high	not noted	light	minimal	cattle	40.5	20710	0.4	8.7	7.95
12/11/12	Clear	none	not noted	39 F	Dark Brown	Murky	med to high	high	not noted	none	minimal	cattle	44.3	16450	14.6	9.25	4.69
12/11/12	Clear	none	not noted	60 F	Colorless	Clear	few	many	not noted	none	none	cattle	58.96	3282	253.1	7.96	83.2
12/11/12	Clear	none	not noted	60 F	Colorless	Clear	few	many	not noted	light	none	cattle	55.4	3366	281.9	7.81	35.9
12/11/12	Clear	none	not noted	40 F	Colorless	Clear	few	many	not noted	none	none	cattle	42.2	1989	259	8.87	23
	Monomolecular Films - Urban - Coachella Valley Mosquito Vector Control District (CVMVCD)																
08/29/2012	Partly cloudy	None	Light breeze	Hot	Brown	Clear	Observed	Observed	Observed	none	Observed	None	91.6	1576	5.9	7.80	20.04
08/29/2012	Partly cloudy	None	Light breeze	Hot	Brown	Clear	Observed	Observed	Observed	none	Observed	None	96.6	1600	6.7	8.14	24.0
08/29/2012	Clear/sunny	None	Light breeze	Hot	Brown	Clear	Observed	Observed	Observed	none	Observed	None	77.8	2844	6.2	6.92	18.77
09/11/2012	Overcast	None	Light breeze	Warm/mild	Colorless	Cloudy	Observed	Observed	Observed	Coatings	Observed	None	81.9	1174	0.5	7.65	14.27
09/11/2012	Overcast	None	Light breeze	Warm/mild	Colorless	Cloudy	Observed	Observed	Observed	Coatings	Observed	None	81.9	1182	0.4	7.49	24.10
09/11/2012	Partly cloudy	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Flecks	Observed	None	71.6	1474	0.7	7.43	7.15
09/11/2012	Overcast	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Coatings	Observed	None	78.2	1289	0.2	7.09	13.52
09/11/2012	Overcast	None	Calm	Warm/mild	Colorless	Cloudy	Observed	Observed	Observed	Coatings	Observed	None	78.5	1290	0.4	7.26	13.53
09/11/2012	Partly cloudy	None	Calm	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Coatings	Observed	None	68.0	1109	0.8	7.13	11.76
09/12/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Flecks	Not Observed	None	80.3	1190	0.1	6.98	5.76
09/12/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Flecks	Not Observed	None	80.4	1187	0.2	7.10	10.12
09/12/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Cloudy	Observed	Observed	Observed	Flecks	Not Observed	None	72.3	1194	1.9	7.51	20.69
09/14/2012	Clear/sunny	None	Calm	Hot	Brown	Cloudy	Observed	Observed	Observed	none	Observed	None	82.4	39511	0.3	8.86	26.45
09/14/2012	Clear/sunny	None	Gusty	Hot	Brown	Cloudy	Observed	Observed	Observed	Films	Observed	None	82.2	40592	0.6	9.12	24.90
09/14/2012	Clear/sunny	None	Light breeze	Hot	Brown	Cloudy	Observed	Observed	Observed	none	Observed	None	66.1	28656	3.2	8.99	15.03
10/12/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Coatings	Observed	None	71.7	2075	4.1	8.71	10.67
10/12/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Coatings	Observed	None	73.2	3120	3.8	8.62	13.24
10/12/2012	Clear/sunny	None	Calm	Warm/mild	Green	Cloudy	Observed	Observed	Observed	Coatings	Observed	None	71.5	1760	0.5	7.16	10.40

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Monomolecular Films - Wetland - Coachella Valley Mosquito Vector Control District (CVMVCD)										
10/26/2012	Antonio Molina an	33.55332977, -116.07646026	Duck club pond	Pond		Larvicide	AE surfactant Agnique MMF	Background	10/26/2012	12:22	Jeff Rushing and Gab
10/26/2012	Antonio Molina an	33.55332977, -116.07646026	Duck club pond	Pond		Larvicide	AE surfactant Agnique MMF	Event	10/26/2012	12:41	Jeff Rushing and Gab
10/26/2012	Antonio Molina an	33.55332977, -116.07646026	Duck club pond	Pond		Larvicide	AE surfactant Agnique MMF	Post-Event	11/20/2012	11:17	Jeff Rushing and Gab
10/26/2012	Antonio Molina an	33.55331253, -116.07363097	Duck club pond	Pond		Larvicide	AE surfactant Agnique MMF	Background	10/26/2012	11:10	Jeff Rushing and Gab
10/26/2012	Antonio Molina an	33.55331253, -116.07363097	Duck club pond	Pond		Larvicide	AE surfactant Agnique MMF	Event	10/26/2012	12:12	Jeff Rushing and Gab
10/26/2012	Antonio Molina an	33.55331253, -116.07363097	Duck club pond	Pond		Larvicide	AE surfactant Agnique MMF	Post-Event	11/20/2012	10:38	Jeff Rushing and Gab
10/29/2012	Jeff Rushing	33.55312889, -116.06027132	Wetland channel	Channel		Larvicide	AE surfactant Agnique MMF	Background	10/29/2012	10:36	Jeff Rushing and Gab
10/29/2012	Jeff Rushing	33.55312889, -116.06027132	Wetland channel	Channel		Larvicide	AE surfactant Agnique MMF	Event	10/29/2012	11:00	Jeff Rushing and Gab
10/29/2012	Jeff Rushing	33.55312889, -116.06027132	Wetland channel	Channel		Larvicide	AE surfactant Agnique MMF	Post-Event	11/26/2012	10:39	Jeff Rushing and Gab
10/30/2012	Carlos Hernandez	3.55156746, -116.07479279	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Background	10/30/2012	12:23	Carlos Hernandez an
10/30/2012	Carlos Hernandez	3.55156746, -116.07479279	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Event	10/30/2012	12:42	Carlos Hernandez an
10/30/2012	Carlos Hernandez	3.55156746, -116.07479279	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Post-Event	11/27/2012	9:20	Carlos Hernandez an
10/30/2012	Carlos Hernandez	33.54921239, -116.07358705	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Background	10/30/2012	10:46	Carlos Hernandez an
10/30/2012	Carlos Hernandez	33.54921239, -116.07358705	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Event	10/30/2012	11:42	Carlos Hernandez an
10/30/2012	Carlos Hernandez	33.54921239, -116.07358705	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Post-Event	11/27/2012	10:12	Carlos Hernandez an
10/30/2012	Carlos Hernandez	33.54922977, -116.07570926	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Background	10/30/2012	11:47	Carlos Hernandez an
10/30/2012	Carlos Hernandez	33.54922977, -116.07570926	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Event	10/30/2012	11:57	Carlos Hernandez an
10/30/2012	Carlos Hernandez	33.54922977, -116.07570926	Duck pond	Pond		Larvicide	AE surfactant Agnique MMF	Post-Event	11/27/2012	10:35	Carlos Hernandez an
	Spinosads - Agriculture - Coachella Valley Mosquito Vector Control District (CVMVCD)										
06/27/2012	Ramon Gonzales	33.45779793, -116.0558908	Agriculture channel	Channel		Larvicide	Spinosad Natular G	Background	06/27/2012	10:09	Ramon Gonzales and
06/27/2012	Ramon Gonzales	33.45779793, -116.0558908	Agriculture channel	Channel		Larvicide	Spinosad Natular G	Event	06/27/2012	10:19	Ramon Gonzales and
06/27/2012	Ramon Gonzales	33.45779793, -116.0558908	Agriculture channel	Channel		Larvicide	Spinosad Natular G	Post-Event	07/11/2012	11:19	Ramon Gonzales and
08/15/2012	Ramon Gonzales	33.45779793, -116.0558908	Agriculture channel	Channel		Larvicide	Spinosad Natular G30	Background	08/15/2012	11:09	Ramon Gonzales and
08/15/2012	Ramon Gonzales	33.45779793, -116.0558908	Agriculture channel	Channel		Larvicide	Spinosad Natular G30	Event	08/15/2012	11:28	Ramon Gonzales and
08/15/2012	Ramon Gonzales	33.45779793, -116.0558908	Agriculture channel	Channel		Larvicide	Spinosad Natular G30	Post-Event	09/21/2012	10:36	Ramon Gonzales and
09/04/2012	Jeff Rushing	33.67079057, -116.1280758	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Background	09/04/2012	11:48	Jeff Rushing and Jen
09/04/2012	Jeff Rushing	33.67079057, -116.1280758	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Event	09/04/2012	12:21	Jeff Rushing and Jen
09/04/2012	Jeff Rushing	33.67079057, -116.1280758	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Post-Event	09/18/2012	9:55	Ramon Gonzales and
09/06/2012	Olde Avalos	33.44713391, -116.06646311	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Background	09/06/2012	12:15	Jennifer Henke
09/06/2012	Olde Avalos	33.44713391, -116.06646311	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Event	09/06/2012	12:33	Jennifer Henke
09/06/2012	Olde Avalos	33.44713391, -116.06646311	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Post-Event	09/20/2012	14:18	Gabriela Harvey
09/06/2012	Olde Avalos	33.45476539, -116.07075331	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Background	09/06/2012	11:20	Jennifer Henke
09/06/2012	Olde Avalos	33.45476539, -116.07075331	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Event	09/06/2012	11:39	Jennifer Henke
09/06/2012	Olde Avalos	33.45476539, -116.07075331	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Post-Event	09/20/2012	14:25	Gabriela Harvey
11/26/2012	Jeff Rushing	33.55135174, -116.05452798	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Background	11/26/2012	11:09	Jeff Rushing and Gab
11/26/2012	Jeff Rushing	33.55135174, -116.05452798	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Event	11/26/2012	11:37	Jeff Rushing and Gab
11/26/2012	Jeff Rushing	33.55135174, -116.05452798	Agriculture channel	Channel		Larvicide	Spinosad Natular 2EC	Post-Event	12/7/2012	9:59	Jeff Rushing and Gab

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Monomolecular Films - Wetland - Coachella Valley Mosquito Vector Control District (CVMVCD)																
10/26/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Cloudy	Observed	Not Observ	Observed	Flecks	Not Observed	None	64.4	7968	5.3	8.82	12.35
10/26/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Cloudy	Observed	Not Observ	Observed	Sheen	Not Observed	None	65.7	8309	5.4	8.65	17.39
10/26/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Cloudy	Observed	Observed	Not Observ	Flecks	Not Observed	None	62.7	10981	15.0	8.13	51
10/26/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Not Observ	Observed	Flecks	Not Observed	None	64.8	4168	4.7	9.29	83.0
10/26/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Murky	Observed	Not Observ	Observed	Sheen	Not Observed	None	70.3	4591	3.3	9.42	92.2
10/26/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Observed	Observed	Observed	Flecks	Not Observed	None	60.1	6648	10.4	9.10	808
10/29/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Not Observed	Observed	Observed	Flecks	Not Observed	None	64.1	18470	0.9	7.91	17.51
10/29/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Cloudy	Not Observed	Observed	Observed	Sheen	Not Observed	None	64.9	20826	0.9	8.13	24.77
10/29/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Sheen	Not Observed	None	60.0	18905	7.0	8.02	11.06
10/30/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	Flecks	Not Observed	None	65.6	6403	5.3	8.90	11.36
10/30/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	Flecks	Not Observed	None	65.0	6335	6.2	8.82	11.56
10/30/2012	Overcast	None	Calm	Cool	Green	Murky	Observed	Not Observ	Observed	Flecks	Not Observed	None	54.8	5127	6.5	8.36	16.46
10/30/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Not Observ	Observed	Flecks	Not Observed	None	61.2	6380	2.6	8.19	3358
10/30/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	Flecks	Not Observed	None	61.7	6661	1.6	8.46	24.08
10/30/2012	Overcast	None	Calm	Cool	Yellow	Clear	Observed	Observed	Observed	Flecks	Not Observed	None	55.3	7402	12.2	8.16	13.71
10/30/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Not Observ	Observed	Flecks	Not Observed	None	71.4	11368	7.4	9.08	1424
10/30/2012	Clear/sunny	None	Calm	Warm/mild	Brown	Murky	Observed	Not Observ	Observed	Sheen	Not Observed	None	73.1	12152	4.5	8.98	47
10/30/2012	Partly cloudy	None	Calm	Warm/mild	Green	Clear	Observed	Observed	Observed	Flecks	Not Observed	None	65.7	12853	12.7	8.86	24.02
	Spinosads - Agriculture - Coachella Valley Mosquito Vector Control District (CVMVCD)																
06/27/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	none	Observed	None	72.9	76286	6.4	7.72	3.32
06/27/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	none	Observed	None	73.3	74166	3.5	7.46	10.93
06/27/2012	Partly cloudy	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	Coatings	Observed	None	82.0	45017	1.20	7.06	23.5
08/15/2012	Partly cloudy	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	none	Observed	None	85.4	53174	2.3	7.28	55.7
08/15/2012	Partly cloudy	None	Calm	Hot	Brown	Murky	Observed	Not Observ	Observed	none	Observed	None	85.6	53904	1.8	7.44	43.56
08/15/2012	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Not Observ	Observed	none	Observed	None	76.4	21380	1.2	6.77	36.84
09/04/2012	Partly cloudy	None	Light breeze	Hot	Brown	Murky	Observed	Not Observ	Observed	Coatings	Observed	None	82.1	6053	0.3	7.69	17.23
09/04/2012	Partly cloudy	None	Light breeze	Hot	Brown	Murky	Observed	Not Observ	Observed	Coatings	Observed	None	81.7	6551	0.4	7.93	14.23
09/04/2012	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Not Observ	Observed	Coatings	Observed	None	74.5	2345	0.6	9.24	24.78
09/06/2012	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	80.5	7035	5.0	7.66	4.80
09/06/2012	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	Not Observed	Observed	Observed	none	Not Observed	None	80.3	3653	6.4	7.79	2.66
09/06/2012	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	Not Observed	Observed	Observed	Flecks	Not Observed	None	82.1	1275	6.7	8.20	2.22
09/06/2012	Clear/sunny	None	Calm	Hot	Colorless	Clear	Observed	Not Observ	Observed	Coatings	Observed	None	95	7167	7.5	7.87	31.99
09/06/2012	Clear/sunny	None	Calm	Hot	Colorless	Clear	Observed	Not Observ	Observed	Coatings	Observed	None	96.7	7266	7.3	8.31	22.80
09/06/2012	Clear/sunny	None	Light breeze	Hot	Colorless	Clear	Observed	Observed	Observed	Flecks	Observed	None	92.9	2943	10.8	7.99	2.66
11/26/2012	Clear/sunny	None	Gusty	Warm/mild	Yellow	Murky	Observed	Not Observ	Observed	Films	Not Observed	None	53.7	23380	2.6	8.39	5.64
11/26/2012	Clear/sunny	None	Light breeze	Warm/mild	Yellow	Murky	Observed	Not Observ	Observed	Films	Not Observed	None	54.0	23259	2.3	8.67	6.13
11/26/2012	Clear/sunny	None	Light breeze	Warm/mild	Yellow	Murky	Observed	Not Observ	Not Observ	Films	Not Observed	None	56.7	24238	2.9	8.36	5.71

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

Application Info								MONITORING Information			
Date of Application	Applicator	Location	Name of Water Body	Type of Water Body	Description	Type of pesticide	Product Name	Time of Monitoring	Monitoring Date	Time	Name(s) of personnel
	Spinosads - Urban - Greater Los Angeles County Vector Control District (GLACVCD)										
08/31/2012	T. Tran	837	Compton Creek	Open waterway		Larvicide	Natular 2EC	Background	8/31/2012	7:40 AM	S. Kluh
08/31/2012	T. Tran	837	Compton Creek	Open waterway		Larvicide	Natular 2EC	Event	8/31/2012	11:15 AM	S. Kluh
08/31/2012	T. Tran	837	Compton Creek	Open waterway		Larvicide	Natular 2EC	Post-Event	9/25/2012	7:45 AM	S. Kluh
10/9/2012	K. Pett	1175	Dry Creek	Channel		Larvicide	Natular 2EC	Background	10/9/2012	9:10 AM	S. Kluh
10/9/2012	K. Pett	1175	Dry Creek	Channel		Larvicide	Natular 2EC	Event	10/9/2012	10:30 AM	S. Kluh
10/09/2012	K. Pett	1175	Dry Creek	Channel		Larvicide	Natular 2EC	Post-Event	10/22/2012	9:45 AM	S. Kluh
10/9/2012	K. Pett	853	Pathfinder Channel	Channel		Larvicide	Natular 2EC	Background	10/9/2012	8:35 AM	S. Kluh
10/9/2012	K. Pett	853	Pathfinder Channel	Channel		Larvicide	Natular 2EC	Event	10/9/2012	9:45 AM	S. Kluh
10/09/2012	K. Pett	853	Pathfinder Channel	Channel		Larvicide	Natular 2EC	Post-Event	10/22/2012	9:10 AM	S. Kluh
10/17/2012	K. Pett	6982	Wilmington Connector	Channel		Larvicide	Natular 2EC	Background	10/17/2012	9:15 AM	S. Kluh
10/17/2012	K. Pett	6982	Wilmington Connector	Channel		Larvicide	Natular 2EC	Event	10/17/2012	13:35 PM	S. Kluh
10/17/2012	K. Pett	6982	Wilmington Connector	Channel		Larvicide	Natular 2EC	Post-Event	10/30/2012	10:22 AM	S. Kluh
10/22/2012	K. Pett	1175	Dry Creek	Channel		Larvicide	Natular 2EC	Background	10/22/2012	9:45 AM	S. Kluh
10/22/2012	K. Pett	1175	Dry Creek	Channel		Larvicide	Natular 2EC	Event	10/22/2012	10:45 AM	S. Kluh
10/22/2012	K. Pett	1175	Dry Creek	Channel		Larvicide	Natular 2EC	Post-Event	11/5/2012	9:40 AM	S. Kluh
10/22/2012	K. Pett	853	Pathfinder Channel	Channel		Larvicide	Natular 2EC	Background	10/22/2012	8:35 AM	S. Kluh
10/22/2012	K. Pett	853	Pathfinder Channel	Channel		Larvicide	Natular 2EC	Event	10/22/2012	9:45 AM	S. Kluh
10/22/2012	K. Pett	853	Pathfinder Channel	Channel		Larvicide	Natular 2EC	Post-Event	11/5/2012	9:15 AM	S. Kluh
	Spinosads - Wetlands - Sacramento-Yolo Mosquito Vector Control District (SYMVCD)										
10/022012	Dustin Burkhalter	38°16'17.15"N 121°26'21.85"W	Wetland - Cosumnes R	Pond	CRP 1	Larvicide	Natular 2 EC	Background	10/02/2012	12:31 PM	Dustin Burkhalter, Ma
10/022012	Dustin Burkhalter	38°16'17.15"N 121°26'21.85"W	Wetland - Cosumnes R	Pond	CRP 1	Larvicide	Natular 2 EC	Event	10/02/2012	1:34PM	Dustin Burkhalter, Ma
10/022012	Dustin Burkhalter	38°16'17.15"N 121°26'21.85"W	Wetland - Cosumnes R	Pond	CRP 1	Larvicide	Natular 2 EC	Post-Event	10/09/12	11:05 AM	Marty Scholl
10/022012	Dustin Burkhalter	38°16'23.99"N 121°26'23.62"W	Wetland - Cosumnes R	Pond	CRP 2	Larvicide	Natular 2 EC	Background	10/02/2012	12:40 PM	Dustin Burkhalter, Ma
10/022012	Dustin Burkhalter	38°16'23.99"N 121°26'23.62"W	Wetland - Cosumnes R	Pond	CRP 2	Larvicide	Natular 2 EC	Event	10/02/2012	1:41PM	Dustin Burkhalter, Ma
10/022012	Dustin Burkhalter	38°16'23.99"N 121°26'23.62"W	Wetland - Cosumnes R	Pond	CRP 2	Larvicide	Natular 2 EC	Post-Event	10/09/12	11:16 AM	Marty Scholl
10/02/2012	Steve Ramos	38°16'23.45"N 121°26'28.51"W	Wetland - Cosumnes R	Pond	CRP 3	Larvicide	Natular 2 EC	Background	10/02/2012	12:59 PM	Steve ramos, Marty S
10/02/2012	Steve Ramos	38°16'23.45"N 121°26'28.51"W	Wetland - Cosumnes R	Pond	CRP 3	Larvicide	Natular 2 EC	Event	10/02/2012	1:47 PM	Steve Ramos, Mary S
10/02/2012	Steve Ramos	38°16'23.45"N 121°26'28.51"W	Wetland - Cosumnes R	Pond	CRP 3	Larvicide	Natular 2 EC	Post-Event	10/09/12	11:26 AM	Marty Scholl
10/02/2012	Steve Ramos	38°16'16.91"N 121°26'28.36"W	Wetland - Cosumnes R	Pond	CRP 4	Larvicide	Natular 2 EC	Background	10/02/2012	1:05 PM	Steve Ramos, Marty S
10/02/2012	Steve Ramos	38°16'16.91"N 121°26'28.36"W	Wetland - Cosumnes R	Pond	CRP 4	Larvicide	Natular 2 EC	Event	10/02/2012	1:52 PM	Steve Ramos, Mary S
10/02/2012	Steve Ramos	38°16'16.91"N 121°26'28.36"W	Wetland - Cosumnes R	Pond	CRP 4	Larvicide	Natular 2 EC	Post-Event	10/09/12	11:32 AM	Marty Scholl
10/02/2012	Steve Ramos	38°16'12.24"N 121°26'29.04"W	Cosumnes River Wetla	Pond	CRP 5	Larvicide	Natular 2EC	Background	10/02/2012	1:10 PM	Steve Ramos, Marty S
10/02/2012	Steve Ramos	38°16'12.24"N 121°26'29.04"W	Cosumnes River Wetla	Pond	CRP 5	Larvicide	Natular 2EC	Event	10/02/2012	1:57 PM	Steve Ramos, Marty S
10/02/2012	Steve Ramos	38°16'12.24"N 121°26'29.04"W	Cosumnes River Wetla	Pond	CRP 5	Larvicide	Natular 2EC	Post-Event	10/09/2012	11:39 AM	Marty Scholl
10/02/2012	Steve Ramos	38°16'11.87"N 121°26'25.86"W	Cosumnes River Wetla	Pond	CRP 6	Larvicide	Natular 2EC	Background	10/02/2012	1:13 PM	Steve Ramos, Marty S
10/02/2012	Steve Ramos	38°16'11.87"N 121°26'25.86"W	Cosumnes River Wetla	Pond	CRP 6	Larvicide	Natular 2EC	Event	10/02/2012	2:06 PM	Steve Ramos, Marty S
10/02/2012	Steve Ramos	38°16'11.87"N 121°26'25.86"W	Cosumnes River Wetla	Pond	CRP 6	Larvicide	Natular 2EC	Post-Event	10/09/2012	11:47 AM	Marty Scholl

Appendix A. MVCAC NPDES Permit Coalition Physical Measurements for Larvicide Applications

	Weather Conditions				Visual Observations								Field Measurements				
Date of Application	Overhead Conditions	Precipitation	Wind	Air Temperature	Water Color	Water Clarity	Floating/Suspended Matter	Bottom Deposits	Aquatic Life	Water Surface Oils	Fungi,Slimes or objectionable growths	Potential Nuisance Conditions	Water Temperature	Electrical condutivity (EC)	Dissolved oxygen (DO)	pH	Turbidity
													(ºF)	*(µS/cm)*	*(mg/L)*	*(units)*	*(NTU)*
	Spinosads - Urban - Greater LA County Vector Control District																
08/31/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	73.8	1018	2.93	7.25	4.65
08/31/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	74.3	999	2.93	7.25	4.5
08/31/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	None	74.1	917	2.12	7.15	4.15
10/9/2012	Partly cloudy	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Foam	66	1842	5.93	8.23	1.55
10/9/2012	Partly cloudy	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Foam	68.8	2010	5.42	8.54	1.69
10/09/2012	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Foam	69.3	1562.00	14.41	8.92	0.75
10/9/2012	Partly cloudy	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Not Observed		Not Observed	None	66.9	1481.00	12.63	8.22	2.85
10/9/2012	Partly cloudy	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Not Observed		Not Observed	None	68.9	1379.00	11.41	8.46	2.39
10/09/2012	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Not Observed		Not Observed	None	64.5	1349.00	9.85	8.45	0.8
10/17/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Duck weed	67.6	1865.00	1.21	8.56	2.52
10/17/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Duck weed	68.5	1854.00	1.22	8.55	2.79
10/17/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Duck weed	65.2	1858.00	1.68	8.43	4.8
10/22/2012	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Foam	69.3	1562.00	14.41	8.92	0.75
10/22/2012	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Foam	69.8	1550.00	14.16	9.12	0.71
10/22/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Observed		Not Observed	Foam	67.2	1543.00	15.01	8.95	0.82
10/22/2012	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Not Observed		Not Observed	None	64.5	1349.00	9.85	8.45	0.8
10/22/2012	Partly cloudy	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Not Observed		Not Observed	None	67,0	1320.00	10.53	8.74	0.82
10/22/2012	Clear/sunny	None	Calm	Warm/mild	Colorless	Clear	Not Observed	Not Observ	Not Observed		Not Observed	None	65.2	1334.00	10.45	8.62	0.76
	Spinosads - Wetlands - Sacramento-Yolo Mosquito Vector Control District (SYMVCD)																
10/022012	Clear/sunny	None	Gusty	Hot	Brown	Murky	Observed	Observed	Observed	Films	Observed	None	79.25	251	7.96	6.83	43.2
10/022012	Clear/sunny	None	Light breeze	Hot	Brown	Murky	Observed	Observed	Not Observ	Films	Observed	None	82.85	256	8.72	7.16	35.9
10/022012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Observed	Observed	Observed	Films	Not Observed	None	68.01	270	7.86	6.97	12.0
10/022012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	Films	Not Observed	None	85.01	172	9.36	7.14	4.77
10/022012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	Films	Not Observed	None	87.13	16.9	7.46	6.97	11.46
10/022012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Clear	Not Observed	Observed	Observed		Not Observed	None	72.01	183	11.82	7.04	4.35
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	None	Observed	None	81.14	218	8.94	6.79	17.3
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	Films	Not Observed	None	81.32	216	10.14	6.79	13.9
10/02/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Clear	Not Observed	Observed	Observed		Observed	None	74.50	180	11.51	6.61	14.6
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	None	Observed	None	82.97	204	16.31	7.37	14.9
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	None	Not Observed	None	83.88	206	17.82	7.5	19.2
10/02/2012	Clear/sunny	None	Light breeze	Warm/mild	Brown	Clear	Not Observed	Observed	Observed		Not Observed	None	68.92	208	14.83	7.73	6.53
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	none	Observed	None	76.76	220	16.16	7.16	15.2
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ		Observed	None	79.38	219	16.61	7.15	15.6
10/02/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	66.86	219	8.99	7.39	5.97
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	Films	Observed	None	81.99	217	8.05	7.3	13.4
10/02/2012	Clear/sunny	None	Calm	Hot	Brown	Murky	Observed	Observed	Not Observ	Films	Observed	None	83.35	215	8.17	7.15	17.2
10/02/2012	Clear/sunny	None	Light breeze	Warm/mild	Colorless	Murky	Not Observed	Observed	Observed	None	Not Observed	None	66.78	197	6.71	7.35	6.49