

APPENDIX J.

SURFACE WATER MONITORING DATA FOR CALIFORNIA

USGS NAWQA Surface Water Data

The USGS NAWQA (National Water-Quality Assessment Program) national database currently contains monitoring data of pesticides from 1992 through 2006 (USGS, 2007) [<http://water.usgs.gov/nawqa/>]. The USGS NAWQA California sampling locations, county, first and last sampling dates, and total number of samples analyzed are listed in Appendix J Table 1.

Appendix J. Table 1. USGS NAWQA Sampling Site Locations and Dates				
SAMPLING SITE LOCATION	County	First Sample	Last Sample	# samples
ARCADE C NR DEL PASO HEIGHTS CA	Sacramento	11/26/96	8/2/06	79
BEAR C A BERT CRANE RD NR MERCED CA	Merced	6/18/94	8/1/01	4
CAJON C BL LONE PINE C NR KEENBROOK CA	San Bernardino	8/14/00	8/14/00	1
CHINO C AB CENTRAL AVE NR LOS SERRANOS CA	San Bernardino	8/10/00	8/10/00	1
CHINO C DS OF PINE AVE AT PRADO DAM CA	San Bernardino	8/10/00	8/10/00	1
COLUSA BASIN DR A RD 99E NR KNIGHTS LANDING CA	Yolo	11/7/96	4/15/98	21
COSUMNES R A MICHIGAN BAR CA	Sacramento	10/12/01	3/28/04	13
CUCAMONGA C MAIN CHANNEL A CHINO AVE NR ONTARIO CA	San Bernardino	8/9/00	8/9/00	1
CUCAMONGA C NR MIRA LOMA CA	San Bernardino	4/1/99	8/16/00	2
CUCAMONGA C NR UPLAND CA	San Bernardino	8/8/00	8/8/00	1
CUCAMONGA C WW EFFLUENT A CHINO AVE NR ONTARIO CA	San Bernardino	8/9/00	8/9/00	1
DEL PUERTO C AT VINEYARD ROAD NR PATTERSON	Stanislaus	6/23/94	8/21/01	35
DRY C A CLAUS RD BRIDGE A MODESTO CA	Stanislaus	2/13/95	2/14/00	22
DRY C A GALLO BRIDGE BL HWY 132 A MODESTO CA	Stanislaus	2/13/95	2/14/00	14
DRY C A LEASK BRIDGE BL CASHMAN C NR WATERFORD CA	Stanislaus	2/14/95	2/14/95	1
FARABUINDO STORMDRAIN A CLAUS RD A MODESTO CA	Stanislaus	2/13/95	2/13/95	1
FEATHER R NR NICOLAUS	Sutter	1/30/00	2/14/01	10
HARDING DRAIN A CARPENTER RD NR PATTERSON CA	Stanislaus	4/22/92	8/2/01	37
HIGHLINE CN SPILL NR HILMAR CA	Merced	2/8/94	8/1/01	15
HOSPITAL C A RIVER RD NR PATTERSON CA	Stanislaus	6/23/94	8/2/01	3
INGRAM C A RIVER RD NR PATTERSON CA	Stanislaus	6/24/94	8/2/01	3
LITTLE CHINO C AB PIPELINE AVE NR LOS SERRANOS CA	San Bernardino	8/11/00	8/11/00	1
LIVINGSTON CN A LVNGSTN TRMNT PLANT NR LVNGSTN CA	Merced	2/8/94	8/1/01	15
LOS BANOS C A HWY 140 CA	Merced	6/20/01	8/1/01	2
MCHENRY STORMDRAIN A BODEM ST A MODESTO CA	Stanislaus	2/13/95	1/26/01	16

Appendix J. Table 1. USGS NAWQA Sampling Site Locations and Dates				
SAMPLING SITE LOCATION	County	First Sample	Last Sample	# samples
MERCED R A RIVER ROAD BRIDGE NR NEWMAN CA	Merced	1/22/93	8/9/06	243
MERCED R BL MERCED FALLS DAM NR SNELL CA	Merced	6/18/94	6/18/94	1
MILL C NR SPLATTERS DUCK CLUB IN PRADO WETLANDS CA	San Bernardino	8/8/00	8/8/00	1
MUD SLOUGH NR GUSTINE CA	Merced	6/21/94	8/21/01	24
NEWMAN WASTEWAY A HWY 33 NR GUSTINE CA	Merced	6/22/94	8/1/01	12
NINTH ST STORMDRAIN A SEVENTH ST BR A MODESTO CA	Stanislaus	2/13/95	2/13/95	1
OAKDALE ID DRAINAGE A ELLENWOOD RD NR WATERFORD CA	Stanislaus	2/14/95	2/14/95	1
OLIVE AVE DR NR PATTERSON CA	Stanislaus	6/23/94	8/2/01	3
ORESTIMBA C NR NEWMAN CA	Stanislaus	2/17/93	2/18/93	2
ORESTIMBA CR AT RIVER RD NR CROWS LANDING CA	Stanislaus	4/15/92	8/9/06	277
SACRAMENTO R A COLUSA CA	Colusa	2/10/01	2/10/01	4
SACRAMENTO R A FREEPORT CA	Sacramento	11/15/96	9/19/06	112
SACRAMENTO SLOUGH NR KNIGHTS LANDING CA	Sutter	11/7/96	9/27/04	35
SALT SLOUGH A HWY 165 NR STEVINSON CA	Merced	1/20/93	8/21/01	49
SAN JOAQUIN R A PATTERSON BR NR PATTERSON CA	Stanislaus	6/9/94	8/21/01	47
SAN JOAQUIN R AT MAZE RD BRIDGE NR MODESTO CA	Stanislaus	4/11/01	8/21/01	20
SAN JOAQUIN R BL WSID PMP AB TUOL R NR WESTLEY CA	Stanislaus	6/9/94	8/2/01	7
SAN JOAQUIN R NR STEVINSON CA	Merced	6/20/94	8/21/01	62
SAN JOAQUIN R NR VERNALIS CA	San Joaquin	4/22/92	8/9/06	301
SAN TIMOTEO C NR EASTSIDE RANCH NR YUCAIPA CA	San Bernardino	8/16/00	8/16/00	1
SANTA ANA R A MWD CROSSING CA	Riverside	8/15/00	8/15/00	1
SANTA ANA R A RIVERSIDE RD NR RIVERSIDE CA	San Bernardino	8/16/00	8/16/00	1
SANTA ANA R A UPPER PH NR RUNNING SPRGS CA	San Bernardino	8/18/00	8/18/00	1
SANTA ANA R AB SPRD DIV BL IMPERIAL HWY NR ANAHEIM	Orange	12/10/98	4/19/01	42
SANTA ANA R BL PRADO DAM CA	Riverside	7/13/00	8/9/06	46
SANTA ANA R NR MENTONE CA	San Bernardino	2/20/01	9/13/01	8
SONOMA STORMDRAIN A SCENIC DRIVE A MODESTO CA	Stanislaus	2/13/95	2/13/95	1
SPANISH GRANT COMBINED DRAIN NR PATTERSON CA	Stanislaus	6/22/94	8/1/01	3
STANISLAUS R A CASWELL STATE PARK NR RIPON CA	Stanislaus	2/9/94	8/21/01	64
STANISLAUS R A RIPON CA	Stanislaus	12/27/93	6/23/94	22
STEVINSON LOWER LATERAL NR STEVINSON CA	Merced	2/8/94	2/8/94	2
SUNNYSLOPE CHANNEL A SANTA ANA RRP NR RUBIDOUX CA	San Bernardino	8/17/00	8/17/00	1
SUNNYSLOPE CHANNEL NR RUBIDOUX NC AT SANTA ANA RRP	San Bernardino	8/17/00	8/17/00	1
TRUCKEE R AT FARAD, CA	Nevada	5/10/94	8/8/94	4
TUOLUMNE R A CARPENTER RD BRIDGE A MODESTO CA	Stanislaus	2/13/95	3/12/95	16
TUOLUMNE R A MITCHELL RD BRIDGE A MODESTO CA	Stanislaus	2/13/95	3/11/95	5
TUOLUMNE R A MODESTO CA	Stanislaus	12/27/93	3/21/95	28

Appendix J. Table 1. USGS NAWQA Sampling Site Locations and Dates				
SAMPLING SITE LOCATION	County	First Sample	Last Sample	# samples
TUOLUMNE R A ROBERTS FERRY BR NR ROBERTS FERRY CA	Stanislaus	2/14/95	2/14/95	1
TUOLUMNE R A SHILOH RD BRIDGE NR GRAYSON CA	Stanislaus	2/9/94	8/21/01	69
TURLOCK ID CERES MAIN SPILL NR CERES CA	Stanislaus	2/14/95	2/14/95	1
TURLOCK ID HICKMAN SPILL NR HICKMAN CA	Stanislaus	2/14/95	2/14/95	1
UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE CALIF	El Dorado	5/10/94	8/8/94	4
WARM C AB ORANGE SHOW GROUNDS NR SAN BERNARDINO CA	San Bernardino	8/15/00	8/15/00	1
WARM C ABV E ST NR SAN BERNARDINO CA	San Bernardino	8/15/00	8/15/00	1
WARM C NR SAN BERNARDINO CA	San Bernardino	11/16/98	8/13/04	72
WEST FORK CARSON RIVER AT WOODFORDS, CA	Alpine	5/10/94	8/8/94	4
WEST SIDE STORMDRAIN A NEECE DRIVE A MODESTO CA	Stanislaus	2/13/95	2/13/95	1
WESTPORT DRAIN NR MODESTO CA	Stanislaus	6/23/94	8/2/01	3
YOLO BYPASS A I-80 NR W SACRAMENTO CA	Yolo	1/7/97	3/19/04	7
Total Number of Samples				1914

The presence of EPTC in surface water is demonstrated in data available from the USGS NAWQA program. The NAWQA database includes a “remark code” value for each reported concentration (measurement). Three remark codes are used 1) is the less than (<) which “a nondetect; 2); the letter E which indicates a quantifiable estimate which is generally less than the MRL (minimum reporting limit) but greater than the MDL (method detection limit) confirmed detection; and 3) is a dash (-) which means a quantifiable detection. The MDL for ETPC is defined as 0.02 µg/L by USGS (USGS, 1996). The MRL ranges from 0.4 to 0.002 µg/L with a median MRL concentration of 0.002 µg/L.

The USGS has collected 1941 surface water samples from 74 sites in California. Appendix J. Table 2 summarizes the sampling site location, county, number of samples, and the minimum and maximum concentrations at each sampling site in California. Of the 1914 surface water samples have been collected and analyzed for EPTC residues in California, 44,6 % of (853 samples out of 1914) had measurable EPTC concentrations with an E (n = 165) or dash (n = 688) in remark field. The EPTC concentrations ranged between 0.002 µg/L and 40 µg/L.

Appendix J. Table 2. USGS NAWQA Sampling Site Locations, County, number of samples with detections and minimum and maximum EPTC concentrations.				
Sampling Site Location	County	# Samples	Min (µg/L)	Max (µg/L)
Arcade C Nr Del Paso Heights Ca	Sacramento	9	0.00112	0.00252
Bear C A Bert Crane Rd Nr Merced CA	Merced	2	0.0028	40
Colusa Basin Dr A Rd 99e Nr Knights Landing CA	Yolo	12	0.00284	0.716

Appendix J. Table 2. USGS NAWQA Sampling Site Locations, County, number of samples with detections and minimum and maximum EPTC concentrations.

Sampling Site Location	County	# Samples	Min (µg/L)	Max (µg/L)
Del Puerto C At Vineyard Road Nr Patterson	Stanislaus	29	0.00131	0.474
Dry C A Claus Rd Bridge A Modesto CA	Stanislaus	10	0.00187	0.00231
Dry C A Gallo Bridge Bl Hwy 132 A Modesto CA	Stanislaus	8	0.00219	0.012
Farabuindo Stormdrain A Claus Rd A Modesto CA	Stanislaus	1	0.006	0.006
Harding Drain A Carpenter Rd Nr Patterson CA	Stanislaus	30	0.00322	0.67
Highline Cn Spill Nr Hilmar CA	Merced	3	0.00102	0.006
Hospital C A River Rd Nr Patterson CA	Stanislaus	3	0.01	0.66
Ingram C A River Rd Nr Patterson CA	Stanislaus	3	0.0081	0.14
Livingston Cn A Lvngstn Trmnt Plant Nr Lvngstn CA	Merced	4	0.0014	0.0258
Los Banos C A Hwy 140 CA	Merced	2	0.035	0.257
Mchenry Stormdrain A Bodem St A Modesto CA	Stanislaus	5	0.015	0.027
MERCED R A RIVER ROAD BRIDGE NR NEWMAN CA	Merced	65	0.00125	1.40
Mud Slough Nr Gustine CA	Merced	24	0.0022	4.73
Newman Wasteway A Hwy 33 Nr Gustine CA	Merced	6	0.00202	0.18
Oakdale Id Drainage A Ellenwood Rd Nr Waterford CA	Stanislaus	1	0.015	0.015
Olive Ave Dr Nr Patterson CA	Stanislaus	3	0.0218	0.51
Orestimba Cr At River Rd Nr Crows Landing CA	Stanislaus	183	0.00132	1.09
Sacramento R A Freeport CA	Sacramento	11	0.00127	0.0221
Sacramento Slough Nr Knights Landing CA	Sutter	6	0.0019	0.00448
Salt Slough A Hwy 165 Nr Stevinson CA	Merced	46	0.0065	2.24
San Joaquin R A Patterson Br Nr Patterson CA	Stanislaus	43	0.0034	0.24
San Joaquin R At Maze Rd Bridge Nr Modesto CA	Stanislaus	20	0.0038	0.0565
San Joaquin R Bl Wsid Pmp Ab Tuol R Nr Westley CA	Stanislaus	7	0.0105	0.15
San Joaquin R Nr Stevinson CA	Merced	58	0.00224	0.156
San Joaquin R Nr Vernalis CA	San Joaquin	228	0.000703	0.45
Santa Ana R A Mwd Crossing CA	Riverside	1	0.0079	0.0079
Sonoma Stormdrain A Scenic Drive A Modesto CA	Stanislaus	1	0.013	0.013
Spanish Grant Combined Drain Nr Patterson CA	Stanislaus	3	0.0472	0.14
Stanislaus R A Caswell State Park Nr Ripon CA	Stanislaus	2	0.0033	0.0382
Stanislaus R A Ripon CA	Stanislaus	1	0.003	0.003
Tuolumne R A Modesto CA	Stanislaus	1	0.02	0.02
Tuolumne R A Shiloh Rd Bridge Nr Grayson CA	Stanislaus	16	0.0015	0.0421
Warm C Nr San Bernardino CA	San Bernardino	1	0.0186	0.0186
West Side Stormdrain A Neece Drive A Modesto CA	Stanislaus	1	0.019	0.019
Westport Drain Nr Modesto CA	Stanislaus	3	0.0012	0.051
Yolo Bypass A I-80 Nr W Sacramento CA	Yolo	1	0.00252	0.00252
Number of samples with detections		853		40

Appendix J. Table 2. USGS NAWQA Sampling Site Locations, County, number of samples with detections and minimum and maximum EPTC concentrations.				
Sampling Site Location	County	# Samples	Min (µg/L)	Max (µg/L)
Number of Samples < MLD		1061		
Total Number of Samples		1914		
Maximum			0.0472	40
Minimum			0.000703	0.00231

The site with the highest reported EPTC concentration and maximum arithmetic average EPTC concentration are 40.0 and 10.0 µg/L, respectively, from a mixed use watershed in Merced, CA. The distribution of maximum and average EPTC concentrations are shown in (Appendix J. Table 3). The minimum reporting limit (MRL) ranges from 0.4 to 0.002 µg/L with a median MRL concentration of 0.002 µg/L. Average concentrations are expected to be conservative because concentrations with less than (<) remarks were considered to be equivalent to the minimum reporting limit (MRL). The 40 µg/L occurred during a June 1994 sampling event, prior to the available pesticide use data (CA PUR). Three more recent samples were less than the MRL.

Appendix J. Table 3. Distribution of EPTC (µg/L) from 74 surface water sampling sites in the USGS NAWQA data warehouse for California									
Data	N	Percentile							
		Max	98.6	95.8	90.4	80.8	71.2	61.6	49.3
All site maximums	1914	40	4.73	1.4	0.66	0.156	0.05	0.02	0.006
All site averages	1914	10.0	0.249	0.195	0.086	0.0231	0.015	0.004	0.0026

California Department of Pesticide Regulation (CPR) Data

The California Department of Pesticide Regulation (CDPR) Surface Water Database contains monitoring data of pesticides in California from 1990 to 2005 (CDPR, 2006). (<http://cdpr.ca.gov/docs/emon/surfwttr/surfcont.htm>)

These data summarizes the occurrence of EPTC in surface waters in the Sacramento Valley (SACVAL06), San Joaquin Valley (SJVAL06, SJVAL206), and other (OTHERFEB06) locations in the state from a variety of sources. The surface water monitoring data were evaluated for each monitoring site using descriptive statistics including number of samples, mean concentration, and maximum concentration. Detection frequencies of EPTC ranged from 5 to 50 % (Appendix J. Table 4).

Appendix J. Table 4. Summary Statistics for EPTC from California Surface Water Ambient Monitoring Program				
Data File	N	Detection Frequency (%)	Range of Detections (µg/L)	Range for LOQ (µg/L)
SACVAL06	784	5.22	0 ¹ -0.716	-1* to 0.1
SJVAL06	634	49.68	0-1.09	-1 to -0.05
SJVAL206	862	32.02	0-4.73	-1* to 0.129
OTHERFEB06	289	19.72	0-23	-1* to 0.1

1-Zero represents concentration ≤ the LOQ.

*Negative concentrations (-1 µg/L) were reported in several datasets. There is no explanation for the negative LOQs in the data.

The maximum EPTC concentration 23 µg/L occurred at the Alamo River at Outlet (Appendix J. Table 5). The highest average EPTC concentration was 4.68 µg/L in the Alamo River at Outlet. The highest concentrations and the highest average concentration by study site and data set are summarized in Appendix 5, Table 5. Average concentrations are expected to be conservative because concentrations with less than (<) remarks were considered to be equivalent to the minimum reporting limit (MRL).

Appendix J. Table 5. Monitoring Site Summary Statistics for EPTC from California Surface Water Ambient Monitoring Program.			
Data File	Statistic	Concentration (µg/L)	Site Description
SACVAL06	Peak Concentration	0.7160	Colusa Basin Drain above Knights Landing
	Average Concentration	0.101	Sacramento River near Hamilton City
SJVAL06	Peak Concentration	1.09	Orestimba Creek at River Road (trib. to SJR)
	Average Concentration	0.25	Hospital C at River Rd Nr Patterson California_USGS NAWQA site Average
SJVAL206	Peak Concentration	4.73	Mud Slough (trib. to SJR)
	Average Concentration	0.282	
OTHERFEB06	Peak Concentration	23	Alamo River at Outlet
	Average Concentration	4.68	

The counties, number of samples, detection rate, sampling period, and range of detections for the water bodies with EPTC detections are summarized in Appendix J. Table 6. Mean concentrations are also shown for those samples when there was more than a minimal range of in the concentrations.

Appendix J. Table 6. California Water Bodies Sites with Detections of EPTC reported in California Department of Pesticide Regulations Surface Water Data Base as of February 2006.

Site Name	County	# Samples	Detection Rate (%)	Sampling Dates (mn/yr)	Detected Concentrations Range; Mean
San Joaquin Valley Counties SJVAL06 – data file					
Del Puerto Creek at Vineyard Ave. (trib to San Joaquin River)	Stanislaus	35	74	06/94; 01/00-08/01	0.005 – 0.47; 0.079
Dry Creek at Claus Rd, Modesto	Stanislaus	22	9	01/95-03/95; 01/00-02/00	.013-0.023; 0.018
Dry Creek at Gallo Rd near Modesto	Stanislaus	14	36	02/95-03/95; 01/00-02/00	0.007-0.012; 0.0099
Farabuindo Stormdrain, Modesto	Stanislaus	1	100	2/95	0.006
Harding Drain at Carpenter Rd Nr Patterson California_USGS NAWQA site	Stanislaus	35	49	05/92-01/93 09/99-02/00	0.004-0.67; 0.093
Hospital C at River Rd Nr Patterson California_USGS NAWQA site	Stanislaus	3	100	06/94; 06/01-08/01	0.01-0.66; 0.249
Ingram C at River Rd Nr Patterson Ca (near HISLPA)_USGS NAWQA site	Stanislaus	3	100	06/94; 06/01-08/01	0.008-0.14; 0.088
McHenry stormdrain at Bodem St, Modesto	Stanislaus	16	31	02/95; 01/01	0.015-0.027; 0.021
Oakdale Irr Dist at Ellenwood Rd nr Waterford	Stanislaus	1	100	02/95	0.015
Olive Ave Dr Nr Patterson California_USGS NAWQA site	Stanislaus	3	100	06/94; 06/01-08/01	0.02-0.51; 0.195
Orestimba Creek at River Road (trib. to SJR)	Stanislaus	228	57	04/92-08/03	0.002-1.09; 0.095
San Joaquin R at Patterson Br Nr Patterson California_USGS NAWQA site	Stanislaus	27	85	06/94-07/94; 01/01/08/01	0.004-0.24; 0.026
San Joaquin R Bl WSID Pmp Ab Tuol R Nr Westley California_USGS NAWQA site	Stanislaus	7	100	06/94; 06/01-08/01	0.01-0.15; 0.062
San Joaquin River at Crows Landing	Stanislaus	23	91	05/01-08/01	0.005-0.171; 0.035
San Joaquin River at Laird Park	Stanislaus	20	100	05/01-08/01	0.003-0.117; 0.025
San Joaquin River at Maze Blvd.	Stanislaus	20	100	04/01-08/01	0.004-0.057; 0.015
Sonoma stormdrain at Scenic Dr, Modesto	Stanislaus	1	100	02/95	0.013
Spanish Grant Drain (trib. to SJR)	Stanislaus	3	100	06/94; 06/01-08/01	0.05-0.14; 0.086
Tuolumne River at Modesto	Stanislaus	28	4	01/94-03/95	0.02
Tuolumne River at Shiloh	Stanislaus	68	15	02/00-08/01	0.003-0.042; 0.01
Turlock Irr Dist Hickman Spillway	Stanislaus	1	0	02/95	0
Westport Drain Nr Modesto	Stanislaus	3	67	06/95;	0.02-0.051; 0.027

Appendix J. Table 6. California Water Bodies Sites with Detections of EPTC reported in California Department of Pesticide Regulations Surface Water Data Base as of February 2006.

Site Name	County	# Samples	Detection Rate (%)	Sampling Dates (mn/yr)	Detected Concentrations Range; Mean
California_USGS NAWQA site				06/01- 08/01	
Westside stormdrain at Neece Dr, Modesto	Stanislaus	1	100	02/95	0.019
Total Detections (>LOQ)		304			LOQ-
Total Samples		634			
SJVAL206 data file					
Bear C at Bert Crane Rd Nr Merced California_USGS NAWQA site	Merced	4	25	06/94; 02/00; 06/01; 08/01	0.0028
Livingston Spillway (trib. to SJR)	Merced	13	8	6/94; 01/00; 02/00; 06/01; 08/01	0.0258
Los Banos C at Hwy 140 California_USGS NAWQA site	Merced	2	100	06/01; 08/01	0.035-0.257; 0.146
Merced River at River Road Bridge near Newman	Merced	201	18	01/93-12/93; 06/94; 02/97-09/03	0.002 - 1.4; 0.009
Mud Slough (trib. to SJR)	Merced	20	100	04/01 -08/01	0.002 – 4.73; 0.282
Mud Slough Nr Gustine California_USGS NAWQA site	San Joaquin	4	100	09/99; 06/01; 08/01; 08/01	0.0031 – 0.05; 0.019
Newman Wasteway at Hwy 33 Nr Gustine California_USGS NAWQA site	San Joaquin	12	25	06/94; 01/00; 02/00; 06/01; 08/01	0.0114 – 0.18; 0.022
Salt Slough (trib. to SJR) at Highway 165	San Joaquin	49	94	01/93 – 11/93; 04/01 – 08/01	0.006 - 2.24; 0.181
San Joaquin River near Stevinson	San Joaquin	62	84	06/94; 01/00-02/00; 01/01 – 08/01	0.0044 – 0.156; 0.020
San Joaquin River near Vernalis	San Joaquin	461	23	01/93 – 09/03	0.0023 – 0.674; 0.018
Stanislaus River at Caswell State Park	San Joaquin	20	10	04/01-08/01	0.003 – 0.038; 0.002
Total Detections (>LOQ)		273			
Total Samples		862			
Sacramento Valley Counties SACVAL06 data file					
Sacramento River near Hamilton City	Butte	18	5.6	01/01 – 09/01	0.12
Arcade C Nr Del Paso Heights California_USGS NAWQA site Sacramento County	Colusa	27	7.4	01/01 – 09/03	0.0023 – 0.0093
Arcade Creek at Norwood	Colusa	48	4.2	11/96 – 05/02	0.0062 – 0.0135
Sacramento River at Freeport	Colusa	79	5.1	11/96 – 09/03	0.0022 – 0.0221
Butte Slough at Lower Pass Road	Sutter	9	44.4	01/94 – 02/94	0.007 – 0.023
Obanion Outfall at DWR PP on Obanion Roadt	Sutter	1	100	02/95	0.005

Appendix J. Table 6. California Water Bodies Sites with Detections of EPTC reported in California Department of Pesticide Regulations Surface Water Data Base as of February 2006.

Site Name	County	# Samples	Detection Rate (%)	Sampling Dates (mn/yr)	Detected Concentrations Range; Mean
Sacramento Outfall at DWR PP on Sacramento Road	Sutter	7	85.7	01/94 – 02/94	0.005 – 0.013
Sacramento Slough near Karnak	Sutter	7	71.4	01/94	0.007 – 0.01
Wadsworth Canal at Franklin Rd	Sutter	5	20.0	02/94	0.008
Colusa Basin Drain above Knights Landing	Yolo	47	21.3	01/94 – 05/02	0.0059 – 0.716; 0.021
Sacramento Slough	Yolo	44	11.4	12/96; 04/01 -09/03	0.0023 – 0.0045
Total Detections (>LOQ)		292			
Total Samples		784			
All Other Counties OTHERFEB06 (data file)					
Alamo River at Albright Road (Nectarine Drain Area)	Imperial	5	20.0	09/93 -12/93	6.7
Alamo River at Garst	Imperial	10	100.0	08/96 – 03/97	0.0446 – 13.0; 4.42
Alamo River at Holtville	Imperial	5	20.0	10/93 – 02/94	0.4
Alamo River at Outlet	Imperial	5	20.0	10/93 – 12/93	23.0
Alamo River at Worthington Road	Imperial	4	25	10/93 – 02/94	0.30
Alamo River downstream of Rose Drain	Imperial	4	25	09/93 – 12/93	0.50
In Salton Sea at mouth of Alamo River, approx. 0.14 mile offshore	Imperial	7	100.0	08/96 – 03/97	0.0388 – 12.4; 3.74
Lat/long approx. In Salton Sea at mouth of Alamo R. ca. 0.14 mi. offshore Count	Imperial	13	100	08/96 – 04/97	0.042 – 13.8; 3.91
Lat/long approx. In Salton Sea at mouth of Alamo R. ca. 0.25 mi. offshore	Imperial	22	100	08/96 – 03/97	0.0244 – 8.0; 1.79
Total Detections (> LOQ)		75			
Total Samples		289			

The maximum and mean distributions of EPTC concentrations by sampling sites are summarized in Appendix J. Table 7. Percentiles are based upon the number of samples.

Appendix J. Table 7. Distribution of EPTC concentrations (µg/L) by Sampling Sites from California Surface Water Ambient Monitoring Program										
Data	Percentile									
SACVAL06	N	Max	96.1	92.3	84.6	80.7	69.2	61.5	<61.5	
Maximum	784	0.716	0.12	0.023	0.014	0.013	0.008	0.0045	0.0	
Minimum		0.021	0.007	0.00666	0.0059	0.005	0.00041	0.00038	0.0	
	Percentile									
SJVAL06	N	Max	95.2	90.4	80.9	71.4	57.1	52.3	38.0	9.5
Maximum	315	1.09	0.67	0.66	0.47	0.17	0.14	0.117	0.042	0.013
Minimum		0.249	0.195	0.095	0.088	0.079	0.027	0.026	0.02	0.01
	Percentile									
SJVAL206	N		91.6	83.3	75.0	66.6	50.0	41.6	25.0	16.6
Maximum	862	4.73	2.24	1.4	0.674	0.257	0.156	0.05	0.026	0.0028
Minimum		0.28	0.18	0.15	0.022	0.021	0.018	0.009	0.002	0.0007
	Percentile									
OTHERFEB06	N	Max	97.8	95.6	91.3	86.9	82.6	70	60	50
Maximum	289	23	13.8	13	8.0	0.5	0.3	0	0	0
Minimum		4.6	4.42	3.91	1.77	0.125	0.075	0	0	0

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