



ORANGE COUNTY WATER DISTRICT

Office Memorandum

Date: September 21, 2009
To: Mark Norton/SAWPA
From: Greg Woodside
Subject: Data for Emerging Constituents Workgroup

In response to a request made at the last Emerging Constituents Workgroup meeting, attached to this memorandum please find data collected by the Orange County Water District on the quality of Santa Ana River water at Imperial Highway.

In particular, data for 1,4-dioxane concentrations are included in a table for calendar years 2002 through 2008.

Additionally, a table referred to as Table 3-1 is also included, showing water quality data for July 1, 2007 to June 30, 2008. Table 3-1 is from an annual report prepared by the Orange County Water District titled "Fourth Annual Santa Ana River Water Quality Monitoring Report" dated October 27, 2008.

**Santa Ana River at Imperial Highway
Summary for 1,4-Dioxane (14DIOX) Results**

Sample Calendar Year*	Min RDL	Max RDL	Minimum	Maximum	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects
2002	1.0	1.0	ND	ND	ND	ND	ND	ug/L	11	11	0
2003	1.0	1.0	ND	ND	ND	ND	ND	ug/L	11	11	0
2004	1.0	1.0	ND	ND	ND	ND	ND	ug/L	12	12	0
2005	1.0	1.0	ND	ND	ND	ND	ND	ug/L	13	13	0
2006	1.0	1.0	ND	ND	ND	ND	ND	ug/L	16	16	0
2007	1.0	1.0	ND	1.5	ND	ND	0.275	ug/L	14	11	3
2008	1.0	1.0	ND	ND	ND	ND	ND	ug/L	14	14	0

* A Calendar year is from January to December

Table 3-1
Santa Ana River at Imperial Highway
Summary of Trace Organics
July 1, 2007 to June 30, 2008

Constituent Name	Min RDL	Max RDL	Reported Value									Standards			
			Min	Max	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects	Primary MCL	Secondary MCL	Notification Level (NL)	No. of MCL or NL Exceedances
VOLATILE ORGANIC COMPOUNDS															
1,1,1,2-Tetrachloroethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
1,1,1-Trichloroethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	200			0
1,1,2,2-Tetrachloroethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	1			0
1,1,2-Trichloroethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
1,1-Dichloroethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
1,1-Dichloroethene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	6			0
1,1-Dichloropropene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
1,2,3-Trichlorobenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
1,2,3-Trichloropropane	0.005	0.5	ND	ND	ND	ND	ND	ug/L	22	22	0			0.005	0
1,2,4-Trichlorobenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
1,2,4-Trimethylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			330	0
1,2-Dibromo-3-chloropropane	0.01	0.5	ND	ND	ND	ND	ND	ug/L	19	19	0	0.2			0
1,2-Dibromoethane	0.01	0.5	ND	ND	ND	ND	ND	ug/L	19	19	0	0.05			0
1,2-Dichlorobenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	600			0
1,2-Dichloroethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	0.5			0
1,2-Dichloropropane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
1,2-Diphenylhydrazine	0.5	0.5	ND	ND	ND			ug/L	3	3	0				NA
1,3,5-Trimethylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			330	0
1,3-Dichlorobenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			600	0
1,3-Dichloropropane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
1,4-Dichlorobenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
1,4-Dioxane	1.0	1.0	ND	1.2	ND	ND	ND	ug/L	14	12	2			3	0
2,2-Dichloropropane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
2-Chlorotoluene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			140	0
4-Chlorotoluene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			140	0
4-Isopropyltoluene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Benzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	1			0
bis (2-chloroethyl) ether	5.0	5.0	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Bromobenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Bromochloromethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Bromomethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Carbon tetrachloride	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	0.5			0
Chlorobenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	70			0
Chloroethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Chloromethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
cis-1,2-Dichloroethene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	6			0
cis-1,3-Dichloropropene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	0.5			0
Dibromomethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA

Table 3-1
Santa Ana River at Imperial Highway
Summary of Trace Organics
July 1, 2007 to June 30, 2008

Constituent Name	Min RDL	Max RDL	Reported Value									Standards			
			Min	Max	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects	Primary MCL	Secondary MCL	Notification Level (NL)	No. of MCL or NL Exceedances
Dichlorodifluoromethane	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			1000	0
Diisopropyl ether	1.0	1.0	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Ethyl tert-butyl ether	1.0	1.0	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Ethylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	300			0
Isopropylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			770	0
m,p-Xylene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	1,750			0
Methyl Ethyl Ketone (MEK)	5.0	5.0	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
Methyl Isobutyl Ketone (MIBK)	5.0	5.0	ND	ND	ND	ND	ND	ug/L	15	15	0			120	0
Methyl tert-butyl ether	0.2	0.2	ND	ND	ND	ND	ND	ug/L	15	15	0	13	5		0
Methylene Chloride	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
n-Butylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			260	0
Propylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			260	0
sec-Butylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			260	0
Nitrobenzene	0.5	5.0	ND	ND	ND	ND	ND	ug/L	18	18	0				NA
Hexachlorobutadiene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
o-Xylene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	1,750			0
Styrene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	100			0
Tert-amyl methyl ether	1.0	1.0	ND	ND	ND	ND	ND	ug/L	15	15	0				NA
tert-butyl alcohol	2.0	2.0	ND	ND	ND	ND	ND	ug/L	15	15	0			12	0
tert-Butylbenzene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0			260	0
Tetrachloroethene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
Naphthalene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	19	19	0			17	0
Toluene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	150			0
Total 1,3-Dichloropropene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	0.5			0
Total Xylenes (m,p,&o)	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	1,750			0
trans-1,2 Dichloroethene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	10			0
trans-1,3-Dichloropropene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	0.5			0
Trichloroethene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	5			0
Trichlorofluoromethane (Freon 11)	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	150			0
Trichlorotrifluoroethane (Freon 113)	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	1,200			0
Vinyl chloride	0.5	0.5	ND	ND	ND	ND	ND	ug/L	15	15	0	0.5			0
Hormones															
17a-Estradiol	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
17a-Ethynylestradiol	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
17b-Estradiol	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
Progesterone	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
Diethylstilbestrol	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
Epitestosterone (cis-Testosterone)	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
Estriol	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA

Table 3-1
Santa Ana River at Imperial Highway
Summary of Trace Organics
July 1, 2007 to June 30, 2008

Constituent Name	Min RDL	Max RDL	Reported Value									Standards			
			Min	Max	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects	Primary MCL	Secondary MCL	Notification Level (NL)	No. of MCL or NL Exceedances
Estrone	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
Testosterone (trans-Testosterone)	10.0	10.0	ND	ND	ND	ND	ND	ng/L	6	6	0				NA
Phenols															
Phenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0			4,200	0
PhenylPhenol	1.0	1.0			ND			ug/L	1	1	0				NA
2,4,6-Trichlorophenol	0.5	1.0	ND	ND	ND	ND	ND	ug/L	7	7	0				NA
2,4-Dichlorophenol	0.5	1.0	ND	ND	ND	ND	ND	ug/L	6	6	0				NA
2,4-Dimethylphenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0			100	0
2,4-Dinitrophenol	5.0	5.0	ND	ND	ND			ug/L	3	3	0				NA
2,4-Dinitrotoluene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
2,6-Dinitrotoluene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
2-Chlorophenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
2-Methyl-4,6-Dinitrophenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
2-Methylphenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
2-Nitrophenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
4-Chloro-3-methylphenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
4-Nitrophenol	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
Bisphenol A	1.0	1.0			ND			ug/L	1	1	0				NA
Nonylphenol	1.0	1.0			ND			ug/L	1	1	0				NA
Nonylphenol diethoxylate	10.0	10.0			ND			ug/L	1	1	0				NA
Nonylphenol monoethoxylate	10.0	10.0			ND			ug/L	1	1	0				NA
Pentachlorophenol (PCP)	0.1	1.0	ND	ND	ND	ND	ND	ug/L	12	12	0	1			0
Tetrabromobisphenol A	1.0	1.0			ND			ug/L	1	1	0				NA
total - Nonylphenol ethoxylates	10.0	10.0			ND			ug/L	1	1	0				NA
Total Octylphenol	2.0	2.0			ND			ug/L	1	1	0				NA
PCBs															
PCB-1016	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	0.5			0
PCB-1221	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	0.5			0
PCB-1232	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	0.5			0
PCB-1242	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	0.5			0
PCB-1248	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	0.5			0
PCB-1254	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	0.5			0
PCB-1260	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	0.5			0
SOCs															
Isophorone	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
2,4,5-Trichlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
2-Chlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA

Table 3-1
Santa Ana River at Imperial Highway
Summary of Trace Organics
July 1, 2007 to June 30, 2008

Constituent Name	Min RDL	Max RDL	Reported Value									Standards				
			Min	Max	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects	Primary MCL	Secondary MCL	Notification Level (NL)	No. of MCL or NL Exceedances	
1-Naphthol	5.0	5.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
2,2',3,3',4,4',6-Heptachlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
2,2',3',4,6-Pentachlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
2,2',4,4',5,6'-Hexachlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
2,2',4,4'-Tetrachlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
2,3-Dichlorobiphenyl	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
bis (2-ethylhexyl) adipate	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0	400			0	
bis (2-ethylhexyl) phthalate	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0	4			0	
Butylbenzyl phthalate	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Diethyl phthalate	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Dimethyl phthalate	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Di-n-butylphthalate	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Di-n-octyl phthalate	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Hexachlorobenzene	0.1	0.5	ND	ND	ND	ND	ND	ug/L	8	8	0	1			0	
Hexachlorocyclopentadiene	0.1	0.5	ND	ND	ND	ND	ND	ug/L	8	8	0	50			0	
Other																
Caffeine	100	300	ND	ND	ND	ND	ND	ng/L	8	8	0				NA	
POLYCYCLIC AROMATIC HYDROCARBONS																
3-Hydroxycarbofuran	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Acenaphthene	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Acenaphthylene	0.1	1.0	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Anthracene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Benzo(a)anthracene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Benzo(a)pyrene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0	0.2			0	
Benzo(b)fluoranthene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Benzo(g,h,i)perylene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Benzo(k)fluoranthene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Chrysene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Dibenzo(a,h)anthracene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Fluoranthrene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA	
Fluorene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Indeno(1,2,3-cd)pyrene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Phenanthrene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Pyrene	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA	
Pesticides																
HCH-alpha(Alpha-BHC)	0.02	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0			0.015	0	

Table 3-1
Santa Ana River at Imperial Highway
Summary of Trace Organics
July 1, 2007 to June 30, 2008

Constituent Name	Min RDL	Max RDL	Reported Value									Standards			
			Min	Max	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects	Primary MCL	Secondary MCL	Notification Level (NL)	No. of MCL or NL Exceedances
HCH-beta(Beta-BHC)	0.02	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0			0.025	0
HCH-delta(Delta-BHC)	0.02	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Diflubenzuron	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
Endosulfan II	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Terbufos Sulfone	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Thidiazuron	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
4,4'-DDD	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
4,4'-DDE	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
4,4'-DDT	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Aldicarb	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Aldicarb sulfone	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Aldicarb sulfoxide	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Aldrin	0.03	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0			0.002	0
Baygon	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Captan	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Carbaryl	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Carbofuran	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0	18			0
Chlordane	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0	0.1			0
Chlordane-alpha	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Chlordane-gamma	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Chlorobenzilate	0.05	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Chloroneb	0.1	0.4	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Chloroprotham	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Chlorothalonil	0.1	5.0	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Chlorpyrifos	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Diazinon	0.1	0.5	ND	ND	ND	ND	ND	ug/L	7	7	0			6	0
Dichlorvos	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Dieldrin	0.02	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0			0.002	0
Dimethoate	0.1	5.0	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Disulfoton	0.5	0.5	ND	ND	ND			ug/L	3	3	0				NA
Endosulfan I	0.05	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Endosulfan sulfate	0.05	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Endrin	0.03	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0	2			0
Endrin Aldehyde	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Endrin Ketone	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Ethion	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Ethoprop	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Etridiazole (fungicide)	0.05	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Fenarimol (fungicide)	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA

Table 3-1
Santa Ana River at Imperial Highway
Summary of Trace Organics
July 1, 2007 to June 30, 2008

Constituent Name	Min RDL	Max RDL	Reported Value									Standards			
			Min	Max	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects	Primary MCL	Secondary MCL	Notification Level (NL)	No. of MCL or NL Exceedances
Fonofos	0.5	0.5	ND	ND	ND			ug/L	3	3	0				NA
HCH-gamma (Lindane)	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0	0.2			0
Heptachlor	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0	0.01			0
Heptachlor epoxide	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0	0.01			0
Malathion	10.0	10.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Methiocarb	4.0	4.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Methomyl	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Methoxychlor	0.1	1.0	ND	ND	ND	ND	ND	ug/L	8	8	0	30			0
Methyl paraoxon	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
methyl-Parathion	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Mevinphos	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
MGK 264	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Oxamyl	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0	50			0
Parathion	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Permethrin-(total of cis/trans)	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Stirofos	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Terbufos	0.5	0.5	ND	ND	ND			ug/L	3	3	0				NA
Toxaphene Mixture	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0	3			0
trans-nonachlor	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Tricyclazole (fungicide)	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Tridemefon (fungicide)	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Trithion	0.01	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Herbicides															
Fluometuron	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
Linuron	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
Metolachlor	0.1	0.8	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Siduron	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
Propanil	1.0	1.0	ND	ND	ND			ug/L	3	3	0				NA
Dacthal Acid Metabolites	0.1	0.1	0.2	0.7	0.45	0.225	0.675	ug/L	4	0	4				NA
2,4,5-TP (Silvex)	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	50			0
2,4-D	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	70			0
Acetochlor	0.1	0.5	ND	ND	ND	ND	ND	ug/L	7	7	0				NA
Acifluorfen	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Alachlor	0.05	0.5	ND	ND	ND	ND	ND	ug/L	12	12	0	2			0
Ametryn	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Atrazine	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0	1			0
Bentazon	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0	18			0
Bromacil	0.1	0.5	ND	ND	ND	ND	ND	ug/L	8	8	0				NA

Table 3-1
Santa Ana River at Imperial Highway
Summary of Trace Organics
July 1, 2007 to June 30, 2008

Constituent Name	Min RDL	Max RDL	Reported Value									Standards			
			Min	Max	Median	25th Percentile	75th Percentile	Units	No. of Samples	No. of NDs	No. of Detects	Primary MCL	Secondary MCL	Notification Level (NL)	No. of MCL or NL Exceedances
Butachlor	0.1	0.4	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Butylate	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Cyanazine	0.5	0.5	ND	ND	ND			ug/L	3	3	0				NA
Cycloate	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Dalapon	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0	200			0
DCPA-Dacthal	0.05	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Dicamba	0.081	0.081	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Dinoseb	0.50	0.50	ND	ND	ND	ND	ND	ug/L	4	4	0	7			0
Diphenamid	0.10	0.10	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Diquat	4.00	4.00	ND	ND	ND	ND	ND	ug/L	4	4	0	20			0
Diuron	1.00	1.00	ND	ND	ND			ug/L	3	3	0				NA
Endothall	45	45	ND	ND	ND	ND	ND	ug/L	4	4	0	100			0
EPTC	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Fluoridone	2.0	2.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Glyphosate	25.0	25.0	ND	ND	ND	ND	ND	ug/L	4	4	0	700			0
Hexazinone	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Metribuzin	0.2	0.2	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Molinate	0.1	0.5	ND	ND	ND	ND	ND	ug/L	8	8	0	20			0
Napropamide	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Norflurazon	0.5	1.0	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Paraquat	4.0	4.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Pebulate	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Picloram	0.5	0.5	ND	ND	ND	ND	ND	ug/L	4	4	0	500			0
Prometon	0.1	0.5	ND	ND	ND	ND	ND	ug/L	7	7	0				NA
Prometryn	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Pronamide	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Propachlor	0.1	0.5	ND	ND	ND	ND	ND	ug/L	12	12	0			90	0
Propazine	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Simazine	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0	4			0
Simetryn	1.0	1.0	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Tebuthiuron	1.0	2.0	ND	ND	ND	ND	ND	ug/L	7	7	0				NA
Terbacil	0.1	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Terbutryn	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA
Thiobencarb	0.1	0.5	ND	ND	ND	ND	ND	ug/L	8	8	0	70	1		0
Trifluralin	0.05	0.1	ND	ND	ND	ND	ND	ug/L	8	8	0				NA
Vernolate	0.1	0.1	ND	ND	ND	ND	ND	ug/L	4	4	0				NA