

Final Technical Report

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**FINAL REPORT
EVALUATION OF SEDIMENT, WATER AND FISH TISSUE FOR
CONTAMINANT LEVELS IN THE SALTON SEA AND ITS TWO PRIMARY
TRIBUTARIES, THE ALAMO RIVER AND NEW RIVER FROM 2001-2012
REGION 7**

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EXECUTIVE SUMMARY

The Salton Sea is of vital importance as a stopover for migrant avifauna along the Pacific flyway. More than 380 species of birds (four are endangered) rely on the Salton Sea as essential habitat. The Sea receives drainage primarily from two rivers in the South: The New River and The Alamo River. Each river traverses geographical areas impacted by urban and agricultural land use wastes. Historical evidence indicates contamination of media and fish from the waterways by metals, legacy pesticides and other contaminants. In order to characterize temporal and spatial trends in contaminant profiles and relative impacts to biota from these locations, databases vetted through the California Surface Water Ambient Monitoring Program (SWAMP) were mined for contaminant occurrence in water, sediments and fish tissues collected from locations that had multiple monitoring events from 2001-2012 in the Alamo River, New River and the Salton Sea. Compounds consistently exceeding media-specific thresholds for potential adverse effects were targeted for temporal and spatial trend analyses. Sediments and water samples from 2011 and 2012 were also evaluated for toxicity.

In summary, persistent legacy organic and inorganic contaminants are still prevalent in fish and sediments of the Salton Sea and its two main tributaries. The New River appears to have higher levels of contamination than the Alamo, particularly at the International Border, but inputs are unclear as both inorganic and organic contaminant concentrations tend to be higher at the International Boundary and at the Outlet sites for the Salton Sea compared to sites along each river. Bioassessment indices conducted in 2003 are consistent with poor condition for the outlets of each river. In addition to persistent contaminants such as ΣDDT, ΣPAHs, current use pesticides such as pyrethroids (cypermethrin) and the organophosphate, chlorpyrifos are associated with the toxicity of sediments and water collected from the rivers. The source of toxicity to Salton Sea water remains unclear although sediment concentrations of Selenium have increased dramatically since 2007. In water and sediments, metals consistently above sediment and water criteria thresholds included Selenium and Copper with occasional exceedances by Chromium, Silver and Mercury. At the New River Boundary site, concentrations of nine metals exceeded sediment criteria from 2002-2010. In the Salton Sea, only Selenium consistently exceeded criteria from 2002-2011. With respect to organic contaminants in sediments from 2002-2011, several DDT isomers and degradates exceeded sediment thresholds in both river outlets and the Salton Sea. Concentrations of DDTs and Selenium within the sediments are consistent with fish tissue contaminants. Fish tissues exceeded ΣDDT criteria at 25 of 31 sampling events from 2004 to 2012. For Selenium 25/32 sites exceeded tissue residue thresholds for piscivorous wildlife. Thus, these two groups of contaminants continue to be cause for concern particularly for avian species due to trophic exposure.

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ACRONYMS AND ABBREVIATIONS

ALC	=aquatic life criteria
BMI	=benthic macroinvertebrate index
DDE	= dichlorodiphenyl dichloroethane
DDT	=dichlorodiphenyl trichloroethane
DNQ	=do not quantify
EPT	= Ephemeroptera, Plecoptera, and Trichoptera
IBI	=index of biotic integrity
LEL	=lowest effect level
MQO	=measurement quality objectives
ng/g dw	=nanogram/gram dry weight
ng/g ww	=nanogram/gram wet weight
ng/L	=nanogram/Liter
OC	=organic carbon
o'p DDT	=ortho, para DDT
PAH	=polycyclic aromatic hydrocarbon
PCB	=polychlorinated biphenyl
PBDE	=polybrominated diphenyl ether
QAPrPs	=Quality Assurance Program Plan
SPoT	= Streams Pollution and Trends Program
SWAMP	= California Surface Water Ambient Monitoring Program
TEC	=Threshold Effects Concentration
TEL	=Threshold Effects Level
TU	=Toxic Unit
VoCs	=Volatile Organic Compounds
USEPA	=United States Environmental Protection Agency
USGS	=United States Geological Survey
Σ DDT	=Total DDT isomers
Σ PAHs	=Total PAH
Σ PCBs	=Total PCB isomers

1.0 INTRODUCTION

The Salton Sea was created in 1905 when an accidental breach of a canal temporarily diverted Colorado River water into a natural depression below sea level. The Sea is of vital importance as a stopover for migrant avifauna along the Pacific flyway. More than 380 species of birds (four are endangered) rely on the Salton Sea as essential habitat, and birdwatchers contribute greatly to the local economy with up to 4 million birds being present on a typical winter day (Jehl, 1996). The Sea receives drainage primarily from two rivers in the South: The New River and The Alamo River. Originating in Baja California and running through the city of Mexicali for 25 km, into the United States, the New River traverses the city of Calexico, California through significant agricultural areas for 100 km and eventually terminates in the Salton Sea (Figure 1). The New River's flow is composed of waste from agricultural and chemical runoff from the farm industry irrigation in the U.S. (18.4%) and Mexico (51.2%), sewage from Mexicali (29%), and manufacturing plants operating in Mexico (1.4%). The river has been referred to as the most severely polluted river of its size within the United States (RWQCB 1998). The Alamo River flows west and north from the Mexicali Valley (Baja California) across the Imperial Valley (California) and after 84 km drains into the Salton Sea.

Historically receiving significant agrichemical input throughout the past several decades, the rivers that flow into the Sea contain numerous pesticides, fertilizer, and industrial wastes (Setmire et al, 1993). Several studies have demonstrated the occurrence of various inorganic and organic contaminants in the Salton Sea (Riedel et al. 2002; Sapozhnikova et al. 2004; LeBlanc et al. 2006), but few have explored temporal trends between occurrence and biological impacts at specific sites.

2.0 OBJECTIVES

In an attempt to better understand the temporal and spatial distribution of contaminants in the Salton Sea drainage system, Surface Water Ambient Monitoring Program (SWAMP) databases from the California Water Resources Control Board were evaluated at sites that had the greatest temporal data set for contaminants (typically 2002-2012). Occurrences of metals, pesticides and industrial contaminants (VoCs; PCBs, PBDEs, PAHs) in water, sediments and fish tissues were condensed and tabulated to evaluate temporal and spatial trends. SWAMP data was selected because of the significant quality control and quality assurance components for the data quality. All data cited in this report are publically available and can be found at (<http://www.ceden.us/>). To evaluate potential ecological risks due to the contaminants, concentrations of contaminants from 2002-2012 were compared to literature based or USEPA criteria (if available) for each media (Table 1). In addition, limited toxicity (for 2011 and 2012 only) and bioassessment indices (2003 and 2006) were also included to provide limited “triad” data for site assessments.

3.0 SITE SELECTION

Sites for comparison were based on previous California Surface Water Ambient Monitoring Program (SWAMP) studies conducted through the California Water

Resources Control Board (Figure 1 and Appendix A). Sites with more than 3 years of monitoring data were selected primarily from drainage (Alamo and New Rivers) and mid-lake areas of the Salton Sea to compare sediment concentrations of contaminants to those in fish tissue. Appendix B shows an overview of the sites, years, and analyses for specific matrices.

4.0 METHODS

4.1 CHEMICAL ANALYSIS

Contaminants Selected for Analysis

For sediments and water samples, a total of 229 semivolatile organic compounds and 12 trace metals were selected for analysis (Appendix C). The semivolatile organic compounds included 32 organochlorine pesticides (including Chlordanes (5 isomers), DDTs (7 metabolites); Endosulfans (3 isomers), Endrins (3 isomers), HCHs (3 isomers), Heptaclors (2 isomers), 19 organophosphate/carbamate insecticides, 54 PCB congeners, 25 PAHs, 24 PBDE congeners, 14 triazine herbicides, and 9 pyrethroids (2 permethrin cis/trans diasteriomers). In addition, 3 Aroclor PCB mixtures were also calculated along with 48 volatile organic compounds. ΣPAHs, ΣPCBs, and ΣDDTs were summations of measured compounds. DNQs were not counted as exceedances.

For fish tissues, species are provided in Appendix D and type (fillet vs. whole body) are provided in Appendix E. Data were collected through the Regional Water Board 7 Monitoring Program (RMB7), the SWAMP Streams Pollution and Trends Program (SPoT) and California Monitoring and Assessment Program, and the SWAMP Bioaccumulation in Sport fish in Lakes Program.

Sampling of all water, sediment and tissues were conducted according to the Surface Water Ambient Monitoring Program coordinated through the State Water Board of California. Chemical analyses were primarily performed at the Department of Fish and Game Water Pollution Chemistry Laboratory, the California State University of Long Beach Institute for Integrated Research in Materials, Environments and Society (IIRMES), or the Department of Fish and Game Marine Pollution Studies Laboratory. Analytical chemistry was evaluated primarily using Standard USEPA methods (Appendix C). Quality Assurance was monitored using three different Quality Assurance documents depending on the time the samples were collected. Sediment and water collections prior to 2008 followed the SWAMP Quality Assurance Management Plan v.1 12/22/02. Sediment and water sampled collected after 2008 followed SWAMP Quality Assurance Program Plan v1.0 09/01/08 (SWAMP 2008). Tissue collections followed the procedures and Measurement Quality objectives in Screening Study of Bioaccumulation in California Rivers Quality Assurance Program Plan (Bonnema 2011).

All sediment and water data were verified according to the corresponding SWAMP Quality Assurance Program Plans (QAPrPs). All sediment and water data contained in this report met or deviated from the MQO contained in the QAPrP however these results presented were deemed usable for the intended purposes of the study. Tissue data were

validated to the criteria defined in the Bioaccumulation QAPrP. All tissue data presented were deemed usable for the intended purposes of this study.

4.2 BIOLOGICAL ANALYSES

4.2.1 Benthic Macroinvertebrate Index (BMI)

Bioassessment is utilized in California as a tool for freshwater resource assessment (Rehn 2008). All projects sampled BMIs with kick net protocols. To facilitate data comparability, BMI taxa lists from the various projects were standardized at “Level I” taxonomic effort as defined by the Southwestern Association of Freshwater Invertebrate Taxonomists:

(http://swamp.mpsl.mlml.calstate.edu/wp-content/uploads/2009/04/swamp_sop_bioassessment_collection_020107.pdf).

Five hundred count samples were standardized using randomized subsampling without replacement. Samples with < 300 organisms were omitted from analyses. An IBI score was calculated for each site by summing constituent metric scores and adjusting the index to a 100-point scale. Five final metrics were scored for inclusion in the IBI: collector richness (number of taxa that are collector feeders), predator richness (number of taxa that are predators), percent EPT taxa (percent of taxa that are mayflies, stoneflies, or caddisflies), and Shannon diversity (a composite measure of taxonomic richness and evenness of abundance).

Samples were taken in May of 2003 at the Alamo River Outlet and the New River Outlet (see Figure 1 and Appendix A for coordinates). An additional site was included at the Salton Sea Drain (33.446111, -115.848333) at the mouth of Salt Creek, where three replicate samples were collected. Fig Drain on the New River was also evaluated in May of 2006.

4.2.2 Water and Sediment Toxicity Testing

Water and sediment samples were collected in May and October, 2011 and 2012. Samples were stored on ice in the dark prior to delivery to either the Aquatic Toxicology Laboratory at University of California Davis or the Marine Pollution Studies Laboratory at Granite Canyon, CA. All tests were initiated within the holding times specified in the Quality Assurance Project Plan for these tests. For 2011, samples were taken from the Alamo River Outlet, Alamo River at Drop 10 (Central Drain), New River at the International Boundary, New River Outlet, Alamo River at the International Boundary, and three Salton Sea Mid-Lake locations (USGS2, 7, and 9). In 2012, samples were only collected from the Alamo River Outlet, New River at Boundary and New River Outlet sites (see Figure 1 and Appendix A for map and coordinates).

Toxicity tests with *Hyallella Azteca* were performed according to USEPA protocols (USEPA 2002). The control water consisted of drinking water (DS Waters of America) amended with dry salts to moderately hard specifications. For sediment tests, the 10-d

testing procedure for *Hyalella azteca* was used based on protocols described in the Quality Assurance Program Plan for the California Surface Water Ambient Monitoring Program (http://www.waterboards.ca.gov/water_issues/programs/swamp/).

For topsmelt (*Atherinops affinis*) tests, a larval toxicity test protocol used a 7-d static renewal exposure (USEPA 1995). A detailed description of the topsmelt protocol is given in Anderson et al. (1994). Test end points were survival for *Hyalella* water tests, survival and biomass for topsmelt tests, and survival and growth for *Hyalella* sediment tests.

5.0 RESULTS

5.1 Chemical Analysis

This section will evaluate occurrence primarily from sediment and fish tissue residue analyses and provide exceedance information for contaminants that have either sediment quality guidelines or other thresholds (LC50). Thresholds are provided in Table 1. Contaminants exceeding these thresholds are provided in Tables 2-9. Temporal trends were conducted for Selenium concentrations in sediments (Figure 2), pyrethroid/chlorpyrifos concentrations in sediments (Figure 3) and DDTs concentrations in sediments and fish (Figure 4). Spatial comparisons for river sites were conducted for water and fish tissue concentrations of Selenium (Figure 5) and fish tissue concentrations for DDTs (Figure 6) in 2012.

5.1.1 Water Evaluations

Chemical analyses of water samples were conducted on samples taken during Spring and Fall from 2011-2012 from the Alamo River, the New River and the Salton Sea (See Appendix B for overview).

5.1.1.1 Metals

Alamo River

Nearly all dissolved metals selected for analysis were detected in all water samples (Appendix F). Only Lead and Silver were not detected (Boundary; Barbara Worth Drain (BWD); Drop 10; Peach, Oleander Drains, and Outlet). At the International Boundary and Outlet, Copper (all samples) and Mercury (all but one) exceeded Aquatic Life Criteria (ALC) for freshwater and saltwater for both sampling dates in 2011 (Table 2). One of the samples at the Outlet in October 2011 had Nickel concentrations above the saltwater ALC. At the Alamo Drop 10 at Central Drain, Copper and Selenium exceeded ALC in 2012. Similarly the Barbara Worth, Central Drain and Oleander Drains all had Copper above freshwater criteria. Selenium exceeded freshwater ALC for Drop 10, Central, Oleander Drains but not saltwater criteria for all the Outlet samples for 2012.

New River

At the Boundary, Cadmium, Chromium Lead (October 2011), Copper (October 2011) Selenium and Silver were not detected. However, in 2011, Copper concentrations were above freshwater ALC at the Boundary in May, and Greeson, Fig and Rice Drain 3 in 2012. Mercury was over freshwater ALC in October of 2011 at the Boundary but none of the samples at the Outlet were above saltwater ALCs. All were greater than 0.5 ug/L. Selenium was above freshwater ALC at Rice 3 Drain, but not above saltwater ALC at the Outlet.

Salton Sea

Cadmium, Chromium, Lead and Silver were not detected. Although concentrations of Mercury (0.83-0.903) and Copper (0.87-1.69) were relatively high, neither exceeded saltwater ALCs (Table 1). Likewise, all other metals were below ALCs.

5.1.1.2 Organochlorine Pesticides

Alamo River

No organochlorines were detected in water at the International Boundary (Appendix G1). At Drop 10 Central drain, Dacthal was observed in all samples from 2011-2012. Maximum concentrations were 1.2 ug/L. opDDD (0.019 ug/L) was observed in 1/5 samples and ppDDE was measured in 3/5 samples with a max concentration of 0.013 ug/L over the 2 year period. Oxychlordane (0.476 ug/L) was also detected in one sample. At Barbara Worth Drain and Central Drain Dacthal and ppDDE were observed at 0.139 and 0.017 ug/L maximum concentrations, respectively. ppDDE was measured at the Oleander and Peach Drains at concentrations ranging from 0.006-0.009 ug/L. Dacthal was observed at 0.019 ug/L. At the Outlet, ppDDE 5/7 and Dacthal 6/7 were the most frequently detected for 2011-2012. The highest Dacthal concentration was 0.382 ug/L in October of 2011. One detection of aldrin, oxychlordane, and ppDDD was also observed in April of 2011. Dieldrin (0.003-0.005 ng/L) was also detected in 2/7 samples at the Outlet. None of these values exceeded ALC for fresh or saltwater (Table 1).

New River

Organochlorine pesticides were not detected in the water at the International Boundary (Appendix G2). At the Fig Drain, Rice 3 Drain, and Greeson Drain, dacthal (4/6) and ppDDE (4/6) were detected. At the Outlet, oxychlordane (0.015 ug/L), aldrin (0.011 ug/L), Dacthal (1.4 ug/L max) and ppDDE (0.008 ug/L max) were observed. Dacthal was the most frequently detected (6/8). None of these values exceeded ALC for fresh or saltwater (Table 1).

Salton Sea

In the Salton Sea, organochlorine pesticides were not detected in collected water (Appendix G3).

5.1.1.3 Organophosphates and carbamates

Alamo River

For the Alamo River International Boundary, no pesticides were detected in 2011 or 2012 (Appendix G4). The most frequently detected pesticide throughout the Alamo River Drainage was chlorpyrifos with concentrations measured at the Drop 10 Central Drain (0.294 ug/L) the Central Drain (0.055 ug/L) and DNQ at the Peach Drain all in the Spring collections. The two concentrations above DNQ exceeded ALC for freshwater CMC (Drop 10) and CCC (Central) effects (Table 2). Other pesticides detected included diazinon (0.070 ug/L) and malathion (0.016 ug/L). With the exception of chlorpyrifos, all of these values were below ALC. At the Outlet 3/7 detections of chlorpyrifos were observed with one DNQ and a 0.058 ug/L max concentration. However, every measured sample exceeded LC50 values (0.040 ug/L) or ALC values for saltwater (0.0056 ug/L).

New River

At the International Boundary, the only measured pesticide was disulfoton (0.095 ug/L) in October 2011 (Appendix G5). In 2012, disulfoton values were 0.197 and 0.110 ug/L in May and October, respectively. At Greeson Drain in 2012, diazinon was 0.0011 ug/L. At the Outlet one fall sample detected chlorpyrifos 0.051 ug/L which exceeded LC50 values and chronic freshwater ALC (Table 2). Diazinon was also detected at 0.143 ug/L which was below the freshwater (0.170 ug/L) and saltwater (0.82 ug/L) ALC.

Salton Sea

None of the targeted pesticides were detected in water collected from the Salton Sea (Appendix G6).

5.1.1.4 Polybrominated diphenyl ethers (PBDEs) and Polychlorinated Biphenyls (PCBs)

Very few detections of PBDEs (Appendix G7) and no PCBs (data not shown) were observed in the Alamo and New Rivers as well as the Salton Sea (Appendix G8). Samples were only collected in May and October of 2011 from 3 locations on the Alamo River and two locations on the New River. Samples were only collected in May for the 3 Salton Sea locations. The most frequently detected was PBDE47 (5/7 with 3 DNQ for Alamo; 4/5 with one DNQ for New River) and PBDE99 (4/7 with two DNQ for Alamo; 4/5 with one DNQ for New River). PBDE99 was measured in the Alamo Outlet at 0.013 ug/L and at 0.009 ug/L in the New River. Both congeners were also observed in the Salton Sea at 0.004-0.005 ug/L concentrations. PBDE47 was detected all three locations with one DNQ and PBDE99 was detected at 2/3 locations. All detections were below a proposed threshold of 1 ug/L (Maruya et al. 2013).

5.1.1.5 Polyaromatic Hydrocarbons (PAHs)

As with the PBDEs and PCBs very few PAHs were observed in water collected from the Alamo or New Rivers as well as the Salton Sea (Data not shown). The most frequently detected compounds were fluoranthene, phenanthrene, pyrene and naphthalene all of which were in the ng/L concentration range.

5.1.1.6 Pyrethroid Insecticides and Triazine Herbicides

Sampling for these compounds was only conducted in 2011 (Appendix G9-11).

Alamo River

At the International Boundary during 2011, only λ -cyhalothrin (0.006 ug/L) and 2-hydroxyatrazine (0.007 ug/L) were observed in measurable concentrations in water (Appendix G9). The concentration for λ - cyhalothrin exceeded the UC-Davis ALC (0.001 and 0.0005 ug/L) (Table 2). At the Drop Station 10 site, atrazine (0.028 and 0.006 ug/L), desethyl-atrazine (0.014 ug/L), 2-hydroxyatrazine (0.008 ug/L) were the only compounds detected. They did not exceed threshold concentrations for atrazine. At the Outlet site, atrazine (0.077-0.091 ug/L), and esfenvalerate (0.004 ug/L) were the only compounds observed. Several DNQ detections were observed with prometon, prometryn and propazine.

New River

Only atrazine (0.008 ug/L) and desethyl-atrazine (0.017 ug/L) were observed at the International Boundary in 2011 (Appendix G10). At the Outlet, only λ -cyhalothrin (0.011 ug/L) exceeded water quality criteria in October (Table 2). Prometon, prometryn and propazine were detected but not quantifiable. Atrazine (0.012-0.404 ug/L), 2-hydroxy-atrazine (0.011-0.018 ug/L) and desethyl-atrazine (0.026-0.039 ug/L) were also observed at the Outlet.

Salton Sea

At the 3 Salton Sea sites sampled in 2011 (Appendix G11) atrazine (0.032-.034 ug/L), 2-hydroxy-atrazine (0.183-0.200 ug/L) and desethyl-atrazine (0.021 ug/L) were detected but below ALC. Ametryn was detected, but not quantified.

5.1.1.7 Volatile Organic Contaminants (VOCs)

Of 49 VOCs analyzed in 2011, only toluene (0.039 ug/L) was detected at the New River International Boundary in May 2011 (Appendix G12). No other compound was detected at the New River Outlet. The Alamo River and Salton Sea were not sampled.

5.1.2 Sediment evaluations

5.1.2.1 Metals

Alamo River

Only one annual sample from Spring and Fall (2011) was available for the International Boundary (Appendix H1) for the Alamo River and none of the metal concentrations exceeded consensus sediment criteria (MacDonald et al. 2000) (Table 3). Only Selenium was targeted at the Drop 10 Central Drain station and it was also below threshold concentrations.

At the Outlet station, concentrations of Chromium and Copper (mg/kg) exceeded criteria in 2006 (Table 3). No significant trends were observed temporally with any of the metal concentrations over time.

New River

From 2002-2006, and in 2010, Cadmium concentrations exceeded consensus thresholds (0.99 mg/kg) at the International Boundary with the highest concentration observed in October 2002 (2.31 mg/kg) (Table 3). With the exception of the single October sample in 2010, Cadmium concentrations had been declining since 2006 (Appendix H2). Similarly, Chromium concentrations were above thresholds from 2003-2006, but were in decline until October 2010. Samples in 2011 were once again below criteria. The highest concentration was October 2004. Copper and Lead concentrations exceeded thresholds continuously from 2002 until 2006 as well, but from 2009-2012 concentrations again were elevated above criteria. The highest Copper measurement was October 2004 (106 mg/kg). For Lead, the maximum concentration was taken in October 2010 (70.2 mg/kg). For Mercury, criteria were exceeded from 2002-2006 with the maximum concentration observed in May of 2005 (3.45 mg/kg). Concentrations again exceeded threshold from 2009-2011. Selenium exceeded sediment thresholds (2.0 mg/kg) in 2006 and 2010. Silver followed a similar pattern with the highest concentration observed in October 2010. Zinc concentrations exceeded sediment criteria (121 mg/kg) in at least one sample every year except for 2007-2008. At the Outlet location, Chromium exceeded criteria for 2002 and 2008 (Table 3). Copper concentrations were above thresholds for 2002.

Salton Sea

For USGS2, Arsenic (2002, 2010), Silver (2002) and Selenium (2002-2011) exceeded sediment quality criteria (Table 4 and Appendix H3). The highest concentrations of Selenium were observed in 2002 (11.9 mg/kg). However, concentrations in 2010 were very similar at 9.11 mg/kg indicating no temporal changes in concentrations (Figure 2). The USGS7 sample had exceedances for Selenium (2002-2010) and Silver (2002). The highest Selenium concentration was 15 mg/kg in 2010. Copper and Silver in 2002, Arsenic in 2004, and Selenium from 2002-2011 exceeded thresholds for USGS9. The

highest Selenium concentration was 14.2 mg/kg in 2011. No significant temporal trends were observed for metal concentrations in any Salton Sea site (Figure 2).

5.1.2.2 Organochlorine Pesticides

Alamo River

At the International Boundary in May 2011, 5 organochlorine pesticides were detected but only two were quantified: ppDDE (5.14 ng/g dw) and dieldrin (0.71 ng/g dw) (Appendix I1). The concentration of ppDDE exceeded consensus sediment criteria (3.16 for Σ DDE) (Table 5). In October 2011, only ppDDE was quantified (3.26 ng/g dw) and it again exceeded sediment thresholds. At the Outlet site, other organochlorine pesticides were also detected from 2002 until 2012. Chlordanes (*cis* 3/22 and *trans* 5/22) were detected with only 1 *cis* and 2 *trans* samples quantifiable. The samples from May of 2010 were above the consensus threshold for combined chlordanes (3.24 ng/g dw) (Table 5). There was an apparent increase in Chlordane concentration until 2010, but no other detections were observed after 2010. Dacthal was frequently detected (21/22) with 12 quantifiable concentrations with no observed temporal reduction in concentrations (Appendix I1). DDD concentrations were also frequently observed with opDDD 16/21 and ppDDD 18/23. Of the 16 detections of opDDD, 11 were DNQ and for ppDDD, 10 of the 18 detections were DNQ. Combined Σ DDD criteria were exceeded in 2002 and 2010. All values were DNQ in 2011 and below detection in 2012. For opDDE, 14/22 samples were detected with 13 of these being DNQ. Detection of ppDDE was 100% (20/20) with 1 being DNQ. All concentrations before 2012 exceeded consensus criteria for Σ DDE. There was no clear trend toward reduction over time, but ppDDE was only detected as DNQ in 2012. DDMU (9/22) detections increased temporally, but since 8 of the detections were DNQ, temporal conclusions are highly uncertain. For opDDT, 6/24 samples were detected, but all were DNQ. ppDDT was more frequently detected 11/24 but with 8 DNQ values. Only one sample exceeded DDT sediment threshold (May 2010). The only other frequently detected pesticide was dieldrin 22/24 which had 4 DNQs and 3 exceedances in 2006, 2008, and 2010. Dieldrin was not detected in 2012.

New River

From 2002-2011, *cis* chlordane was detected 14/19 with 3 DNQs and *trans* chlordane was detected 16/19 with 5 DNQ at the New River International Boundary (Appendix I2). When combined, 12 concentrations exceeded consensus standards (Table 5). *Cis* and *trans* chlordene (not to be confused with chlordane) was observed in 2003 and 2004, but only one value was quantifiable in 2003 (1.74 ng/g dw). Dacthal was frequently detected (9/20) with 4 DNQ. Chlordane concentrations remained constant during the 9 year period, but chlordane and Dacthal gradually decreased from 2004 and 2006, respectively. Σ DDD were detected in 18/19 (opDDD) and 18/20 (ppDDD) samples during the period with 7 and 2 DNQs, respectively. Concentrations were significantly lower in 2007 and 2011, but relatively unchanged throughout 2002-2011. Thirteen samples exceeded consensus sediment criteria for Σ DDD for 2002-2006; 2008-2010 (Table 5). For opDDE, 11/19 detections were observed with 10 DNQs and for ppDDE 18/19 detections occurred with 1 DNQ. When the isomers were combined Σ DDE concentrations exceeded thresholds (3.16 ng/g dw) for every sampling event (Table 5) from 2002-2011. DDMU

was detected 9/19 times with all samples being DNQ. For opDDT 7/19 detections were observed but all were DNQ, and 12/20 with 4 exceedances (2002, 2008, 2010-2011) and 9 DNQs were noted for ppDDT. With the exception of October 2002 (39 ng/g dw), no detections were observed until 2005 and no quantifiable concentrations were noted until 2009. Consequently, it would appear that DDT inputs increased from 2002 to 2011 at the International Boundary of the New River. Dieldrin was also frequently detected (15/19) with only 3 DNQs and 7 exceedances for 2005-2006; 2008-2010. No temporal trend was observed for Dieldrin. HCB 13/19 was also observed but concentrations were below detection and quantification since 2007. *Trans*-Nonachlor concentrations were also frequent 16/19 with 5 DNQ and no apparent temporal trend toward reduction. For *cis*-Nonachlor only 6/19 samples were detected, but all were DNQ. Only pp isomers of DDT, DDE and DDD along with Dacthal were targeted at Rice Drain #3, and none were detected.

In contrast, nearly all of the compounds observed at the International Boundary were observed at the Outlet to the Salton Sea, but in lower concentrations. *Cis* (3/24) and *trans* (6/25) chlordanes were observed with 2 and 4 DNQs, respectively from 2002-2012 at the Outlet. The last quantifiable concentration was observed in 2008 for *cis* and *trans* chlordane which when combined exceeded consensus criteria (Table 5). For dacthal, 18/25 samples were detected (12 DNQ) with no temporal trends in concentrations during the 10 year period. For ΣDDD, opDDD (13/24 with 11 DNQ) and ppDDD (15/25 with 11 DNQ) were frequently detected, but none exceeded sediment thresholds. Concentrations of opDDE (10/24 with 8 DNQ) were less frequently detected than at the International Boundary. ppDDE (25/25 with 2 DNQ) was still frequently detected and all 23 of these samples were above sediment thresholds for potential toxicity (Table 5). DDMU was detected 9/23 samples with 8 DNQ. opDDT was only detected 5/24 samples and 4 were DNQ and 5/24 (with 4 DNQ) samples possessed ppDDT with only one sample (October 2008) exceeding thresholds. Temporally, all DDTs again appeared to be higher or more consistently detected from 2007-2012. However, overall contamination was lower than the International Boundary. For Dieldrin 20/24 samples detected compound with 6 DNQ and 4 of the measured values exceeding sediment criteria (2008 and 2010) and overall concentrations increasing from 2004. Infrequent detections (all DNQ) of HCB and nonachlor were also observed with no temporal trends for occurrence.

Salton Sea

For the USGS2 site, 7/24 samples from 2002-2011 detected *trans* chlordane, but all of the samples were DNQ (Appendix I3). ΣDDD were only detected after 2009 with this sample (7.68 ng/g) exceeding sediment thresholds (Table 6). DNQ detections were noted for 2010 and 2011, but none prior to 2009. A similar temporal trend was observed of opDDE, which was not detected prior to 2008, but was detected in every subsequent sample. ppDDE was detected in every sample throughout the 9 year period (17/17) but had 2 DNQ. Of the 15 remaining samples for DDE, all exceeded consensus thresholds for ΣDDE for 2002-2011 (Table 6). DDMU had two quantifiable samples in 2002 and 2009, but was not detected between 2002 and 2009. Neither isomer of DDT was detected throughout the 9 year period and dieldrin was only quantifiable in 2009 and 2011 when it exceeded sediment criteria in 2/3 samples indicating temporal increases in loading to this site.

For USGS7, 2 DNQ *trans*-chlordane detections were observed in 2003 and 2006. opDDD and ppDDD were detected in 3/15 (3 DNQ) and 4/15 (2 DNQ, respectively. None of the samples exceeded sediment thresholds. opDDE was detected in 4/15 samples and 3 were DNQ. However, ppDDE was detected in 14 of 15 samples with 1 DNQ and all 14 samples exceeded sediment thresholds for 2002-2011 (Table 6). DDMU (6/15) was quantifiable in 2002 and 2009. Only one sample was DNQ for ppDDT in 2010, all other samples failed to detect either DDT isomer. For dieldrin, 5/15 samples detected analyte, but 3 were DNQ, the other two samples in 2009 and 2010 exceeded threshold criteria (1.9 ng/g dw).

A similar pattern for organochlorine pesticides was observed at USGS9 where DDD (4/15; 5/15), DDE (4/15; 14/15), DDMU (9/15) and dieldrin 9/15) had the highest frequencies of detection. Four of the DDD, all of the DDE, and 4 of the dieldrin samples exceeded thresholds with some of the highest concentrations (113 ng/g dw ppDDE in 2003) observed in all sediment samples.

5.1.2.3 Pyrethroid Insecticides and Triazine herbicides

As discussed above, toxicity of a given contaminant in sediments can be estimated based upon comparisons to sediment quality guidelines (Table 1). However, not all measured contaminants have guidelines, and some only have literature-based LC50 values. Pyrethroid insecticides are in the latter category. Using LC50s derived by Amweg et al. (2005) and normalized to organic carbon (OC), toxicity of sediment concentrations was estimated (Table 7). Triazine herbicides do not have sediment criteria and, thus, were not investigated for sediment toxicity.

Alamo River

For the Alamo River at the International Boundary, only two samples were collected; one in May and October of 2011 and pyrethroids were not detected in these samples (Appendix J1).

At the Drop 10 Central Drain site, only one sample from October 2011 was obtained and none of the detected compounds exceeded sediment thresholds as individual compounds. However, if the concentrations were additively combined and a Toxicity Unit (TU) evaluation carried out, significant sediment toxicity would be predicted. TU is calculated by dividing the concentration of the chemical in the matrix by the LC50 of the chemical. When multiple chemicals occur in a matrix and have the same mode of action (for pyrethroids this would be neurotoxicity), the TUs may be added to obtain an overall estimate.

For the Alamo River Outlet, a much greater sample set was available to assess temporal trends since annual sampling in Spring and Fall was conducted from 2003, and then from 2005-2012. Esfenvalerate was the most frequently detected 8/15 (1 DNQ) and the maximum concentration was 4.85 ng/g dw observed in October of 2012 and discussed below as a possible contributor to sediment toxicity in *H. azteca*. Overall concentrations have increased nearly 5 fold since 2008 (Figure 3). Bifenthrin was detected in 6/15

samples and had a maximum concentration of 5.12 ng/g dw in April of 2009. Because of lower Total Organic Carbon values (0.018%), normalized concentrations for this sample were 2844 ng/g Organic Carbon (OC) and nearly 6-fold higher than LC50 values normalized to OC (Table 7). Since 2009, concentrations have declined more than 5 fold to 0.884 ng/g dw in 2012 (Figure 3). All other detections (cyfluthrin, λ - cyhalothrin, cypermethrin) were either all DNQ or below thresholds for toxicity. Most of the DNQs were in Fall samples of 2011.

New River

At the International boundary, sediment samples were collected from 2003-2011 most commonly in Spring and Fall (Appendix J2). The most frequently detected pyrethroid was cypermethrin (9/14) with a maximum concentration of 182.9 ng/g dw in May of 2004 which was the first year it was targeted for analysis. This value normalized for OC (8165 ng/g OC) exceeds the published LC50 (1008 ng/g OC) more than 8-fold. Concentrations have generally decreased over time (Figure 3), but the last October 2011 sample (112 ng/g dw) was again 14 fold higher than the LC50 threshold for cypermethrin. However it should be noted that OC measurements were not made with this sample and an assumed concentration of 1.0% was utilized. Nearly all pyrethroids were detected in October 2011. The second most frequently detected pyrethroid was Bifenthrin (8/15). Concentrations have generally diminished over time with the highest concentration detected in 2005 (21.8 ng/g dw). Samples in May 2004 (513 ng/g OC) and September 2005 (960 ng/g OC) were at or exceeded LC50 values (520 ng/g OC) when normalized for organic carbon. The highest concentration of any pyrethroid was cyfluthrin which was 993 ng/g dw (43,744 ng/g OC) in October of 2005. This concentration exceeded the LC50 43 fold. Cyfluthrin was not detected again until October of 2011 where its concentrations were below thresholds. Λ - cyhalothrin (4/15), had one exceedance in April of 2009 (8.59 ng/g dw) which was likely due to low organic carbon content (0.113). Its normalized value of 7601 ng/g OC exceeded the LC50 (450 ng/g OC) 16.8 fold. Concentrations in 2011 were approximately half of those observed in 2005 and 2009. Deltamethrin (2/8) and esfenvalerate (3/15) were infrequently detected with no apparent change in concentration temporally. Permethrin, as combined enantiomers (cis + trans), prior to 2008 was detected 3/5 times. From 2007-2011, it was only detected once in 2009. However, the October 2011 sample had concentrations twice that observed in 2004. None of these concentrations exceeded toxicity thresholds (Table 7). When evaluating all pyrethroids, only two compounds were detected from 2006-2008 (cypermethrin and fenpropathrin) and the later was a DNQ and the only time it had been detected in the 10 year study. Reasons for the gap in detection are unclear.

Although significant detections occurred at the International Boundary of the New River, no detections were observed at the Rice Drain #3 site. However, at the Outlet to the Salton Sea, more frequent detections were again observed with most compounds. Bifenthrin was the most frequently detected (9/18) with a maximum concentration of 2.02 ng/g dw in October of 2010. Esfenvalerate was the second most frequently detected pyrethroid (8/17) with maximum concentrations (12.6 ng/g dw) observed in October 2010. Using TU, Cypermethrin (6/16) would be predicted to have the most toxicity with a value of 1.1 TU (411/380 ng/g OC) in October of 2010. Λ -cyhalothrin (6/18), *cis* permethrin (4/12) and *trans*-permethrin were also detected, but did not have

concentrations exceeding LC50s when normalized for organic carbon. Pyrethroids likely contributed to sediment toxicity of *H. azteca* in October of 2012 (see below), and when grouped together exceeded thresholds in October of 2010 as well. Interestingly, none of the concentrations exceeded thresholds for 2011, nor for any other sampling event prior to 2003.

Overall, pyrethroid contamination has been significant at the international boundary since 2004. While the frequency of detections was somewhat lower during 2007-2010, concentrations exceeded sediment criteria and toxicity was observed in 2011. At the Outlet sites, concentrations have steadily increased since 2003 (Figure 3), with limited detections until 2009 and sediment criteria exceedances in 2010-2012 (Table 7).

Salton Sea

For the Salton Sea, only esfenvalerate (2.47 ng/g dw) was detected in a single sampling event (October 2009) for the USGS2 site (Appendix J3). No other sample from any of the Salton Sea locations had quantifiable concentrations. One DNQ was observed for bifenthrin in October 2007 at USGS9. Although only one compound was detected, its organic carbon normalized concentration (8233 ng/g OC) exceeded the published LC50 (1540 ng/g OC) (Table 7). Consequently, there does not appear to be any temporal or spatial trend for pyrethroids in the Salton Sea.

5.1.2.4 Organophosphates and carbamates

Alamo River

For the Alamo River, none of the targeted analytes were detected at the International Boundary or the Drop 10 Central Drain sites in 2011 (Appendix K1). Prior to 2011, chlorpyrifos was detected in concentrations (50,000 and 2958 ng/g OC) exceeding carbon normalized LC50 values (1770 ng/g OC)(Amweg and Weston 2007) in April of 2003 and October of 2004 at the Outlet (Table 8) and may be responsible for the low IBI score in May 2003 (Table 10). Since 2004, chlorpyrifos was only detected in May of 2006 and October of 2011 as DNQ values at the Outlet site indicating significant temporal reductions in sediment concentrations for chlorpyrifos. No other organophosphate or carbamate was observed in the Alamo River during this period.

New River

In contrast to the Alamo River, concentrations of chlorpyrifos were frequently detected at the International Boundary for the New River (12/20) (Appendix K2) and continually exceeded organic carbon normalized LC50 values in October of 2002 (1931 ng/g OC), April of 2003 (3044 ng/g OC), November of 2003 (5367 ng/g OC), May of 2004 (3143 ng/g OC), October of 2004 (5409 ng/g OC), October of 2005 (7533 ng/g OC) May of 2006 (4317 ng/g OC) and the highest concentration of 13,008 ng/g OC in April of 2009 (Table 8). The concentrations in 2003 may be responsible for the diminished IBI scores discussed below (Table 10). Chlorpyrifos was not detected in sediments in 2010 or 2011. No compounds were observed at the Rice Drain #3 site. Although not as temporally

consistent nor of the same magnitude as the Boundary, chlorpyrifos was observed in concentrations exceeding LC50s at the Outlet site in October of 2004 (1900 ng/g OC) and October of 2005 (2848 ng/g OC) (Table 8). Its last detection was in October of 2008. The overall frequency of detection at the Outlet was 8/25. The only other organophosphate detected on the New River, was diazinon at the Boundary site and it was below threshold concentrations.

Salton Sea

No targeted analytes were detected at any of the Salton Sea locations (Appendix K3).

5.1.2.5 Polycyclic aromatic hydrocarbons (PAHs)

Alamo River

While frequently detected in sediments, Σ PAHs did not exceed consensus thresholds (1610 ng/g dw) (MacDonald et al. 2000) (Appendix L1). Temporal trends at the Outlet indicated a spike in overall concentration in May 2010, but generally concentrations were consistent in all other sampling periods at the Outlet. The individual compound(s) with the highest concentration (32 ng/g dw) was the composite alkylated fluorenes in May 2010 at the Outlet.

New River

Significantly greater frequency and magnitude of detection was observed at the New River International Boundary where concentrations exceeded Σ PAH thresholds (1610 ng/g) from 2002 to 2006 (Appendix L2 and Table 8). Measured concentration diminished in 2007 and 2008, but increased in April and October of 2009 to just below thresholds. Thresholds were again exceeded in October 2010 and 2011, but not in May likely due to a smaller number of targeted PAHs for those months. Comparing the Boundary concentrations to the Outlet, while again frequently detected in 2002-2012, Σ PAH concentrations did not exceed any threshold and detections were reduced temporally. The highest individual PAHs were generally the alkylated derivatives of the PAHs from the Boundary location. For example, C-2 Phenanthrene/Anthracene (1078 ng/g dw) and C-2 Naphthalenes (666 ng/g dw) were highest in October 2004. Two individual compounds that exceeded threshold criteria were Crysene in October of 2004 (650 ng/g dw) and dibenzo (a,h,)anthracene (131 ng/g dw) in October of 2010 (Table 8). Both were from the International Boundary site.

Salton Sea

For the main body of the Salton Sea, two classes of PAH dominated the entire mixture; 2,6 dimethylnaphthalene and C-2 alkylated naphthalenes making up to 80% of the total mixture of PAHs (Appendix L3). Concentrations were generally higher in the Northern reaches indicating potential loading from the Northern tributaries. None of the sediment values exceeded consensus thresholds for any single compound or Σ PAH.

5.1.2.6 Polychlorinated Biphenyls (PCBs)

Alamo River

Σ PCB concentrations in the sediments were generally very low from the International Boundary to the Outlet without exceeding consensus criteria (59.8 ng/g dw) (Appendix M1). Most detections were DNQ at the Boundary for 2011. For the Outlet, 22 detections were observed and the highest concentration was 5.42 ng/g dw of PCB180 in May of 2010. Concentrations have diminished temporally with no congeners detected in 2011 or 2012.

New River

Several sediments collected along the New River exceeded criteria for Σ PCB (Appendix M2 and Table 8). The most contaminated sites were at the International Boundary in 2004 and 2005. Values also exceed thresholds in 2010 (Table 8). The highest individual congener was PCB138 (20 ng/g dw) in April of 2003 (Appendix M2). As with the Alamo River, concentrations have declined temporally with no detections in May 2010 and primarily DNQs for 2011. Spatially, concentrations were even less at the New River Outlet with no single congener greater than 1 ng/g dw.

Salton Sea

As with the tributaries, PCB concentrations were below thresholds with the exception of USGS9 in May of 2004 where a single congener (PCB151) making up 98% of the 3 total congeners (PCB110 and PCB52) having a concentration of 77.7 ng/g dw exceeded criteria (Appendix M3 and Table 8). Since this value was only observed in this single sample, it may likely be spurious. No other sample from the other two locations exceeded 2.01 ng/g dw.

5.1.2.7 Polybrominated Diphenyl Ethers (PBDEs)

Limited sampling was conducted for PBDEs only in 2011 and 2012 (Appendix N1-N2). Detections were not observed on any Alamo River site. On the New River Boundary, 123 ng/g total PBDEs were detected with PBDE47 (30.6 ng/g dw) and PBDE99 (39.6 ng/g dw) making up more than half of the total of the 15 congeners detected. None of the samples exceeded a 3 ng/g dw proposed by Lam et al. (2010). Five congeners were detected at the Outlet of the New River, but concentrations were all less than 1.6 ng/g dw. None of the Salton Sea sites were sampled.

5.1.3 Fish Tissue Evaluations

Alamo River

Tissue data from fish was not available at the International Boundary, but samples at Barbara Worth Drain (BWD) were available for May 2012 (Appendix E1-9). Whole organism mosquitofish were collected and analyzed. Only ΣDDT and Selenium exceeded tissue based residue criteria (Appendix E1 and E9, respectively and Table 9). Criteria for ΣDDT ranged from 14 ng/g dw for the protection of wildlife consumers of aquatic biota (Environment Canada 1997) and 600 ng/g for fish health (Beckvar et al. 2005). For selenium, a threshold of 1 ug/g ww (assuming 75% moisture) was used for protection of piscivorous wildlife (Hinck et al. 2005). At the Drop 10 site, fillets of Common carp exceeded tissue criteria for selenium with concentrations averaging 2 ug/g ww, but ΣDDT (~200 ng/g ww) only exceeded the Environmental Canada threshold of 14 ng/g. Fillets of Common carp from the Central Drain in May of 2012 had much lower ΣDDT with exceedance of the 14 ng/g threshold. Selenium was also above criteria. Mosquitofish collected in October at the same site had 18 fold higher ΣPCB and more than 5 fold higher ΣDDT concentrations (Appendix E5), but Selenium concentrations were barely above threshold (1.07 ug/g ww). At the Peach Drain whole mosquitofish had significantly greater concentrations of ΣDDT in the Spring with 928 ng/g ww and Selenium concentrations ~1.6 ug/g for Spring and Fall. At the Oleander Drain Common carp fillets collected only in the Spring exceeded Selenium criteria and ΣDDT criteria for Environment Canada, but no other residue exceeded thresholds. In the Fall whole mosquitofish only exceeded ΣDDT thresholds.

At the Outlet, temporal samples were available for 2004, 2011 and 2012 (Appendix E1). In 2004 channel catfish and tilapia fillets both exceeded ΣDDT thresholds (Table 9), but only the tilapia (2 ug/g ww) exceeded the Selenium standard (Table 9). Flathead catfish fillets were also analyzed but had significantly lower concentrations of both ΣDDT and Selenium. Both species of catfish also possessed measurable chlordanes in fillets (Appendix E4). Body burden thresholds are not available for chlordanes as it is typically rapidly degraded within biota. Temporal trends could not be evaluated as chlordanes was only targeted in 2004. Channel catfish fillets collected in February 2011 had significantly higher concentrations of ΣDDT (~1 ug/g) than those in 2004 (Figure 4). Again, flathead catfish had approximately half as much residues. In May and October of 2012, Common carp were collected and fillets had nearly 17 times less ΣDDT than Channel catfish, but higher Selenium than that observed in Channel catfish in 2004. Common carp fillets from October of that same year, then had approximately 4 fold higher ΣDDT. All ΣDDT concentrations exceed tissue thresholds. Selenium concentrations of 1.6 in Spring and 2.2 in the fall also exceeded tissue criteria (Table 9). When comparing the same species of fish from 2004 and 2011, ΣDDT residues (dominated by ppDDE) increased demonstrating potential temporal increases (Figure 4). No overall trend was observed with Selenium (Figure 5). With only two years of data it is difficult to determine what the actual trends are for ΣDDT. Spatially, ΣDDT occurs in similar concentrations in fish throughout the Alamo River. Likewise, no significant changes occurred in other persistent organochlorine contaminants. ΣPCBs and Chlordanes also did not change in the drainage over time.

New River

At the Boundary in 2012, fillets of Common carp had relatively high concentrations of ΣPCBs (22 and 11 ng/g ww) (Appendix E5), but low ΣDDT that were just above the 14 ng/g Canadian criteria value (Appendix E2 and Table 9). Tilapia fillets from the Greeson Drain did not have ΣDDT exceeding any criteria with concentrations less than 14 ng/g ww. Selenium was just at the 1 ug/g ww threshold (Appendix E9). At the Fig Drain, again ΣDDT residues were less than 5.3 ng/g in tilapia fillets but selenium were > 1 ug/g in Spring and Fall. Common carp fillets from the Rice 3 Drain had ΣDDT residues of 22 ng/g ww from the lone sampling event in October and were thus just above the 14 ng/g threshold. Selenium was also above the 1 ug/g criteria (Table 9).

At the New River Outlet, temporal comparisons could be made between 2004, 2011 and 2012 (Figure 5). Although below body burden thresholds, ΣPCBs were the highest measured values in Channel catfish fillets collected in 2004 and 2011 with max concentrations being up to 49 ng/g ww (Appendix E6). ΣDDT residues were all above the 14 ng/g threshold and just below the 600 ng/g criteria (Figure 4, Appendix E2 and Table 9). Selenium was only measured in the November 2004 sample and was not above threshold (Appendix E9 and Table 9). In 2012, Common carp fillets were analyzed and had higher ΣDDT concentrations (132 ng/g ww) in May relative to October (30 ng/g) (Appendix E2). In contrast, ΣPCBs were nearly 10 fold higher in fall (Appendix E6). Selenium concentrations were lower in Fall 2012 but still above tissue criteria (Table 9). Although ΣPCB and ΣDDT concentrations were present in fish from the Boundary and at the Outlet, limited detections occurred in the tributary sites between the two locations. Temporal evaluations indicated ΣDDT concentrations increased from 2004 to 2011 (Figure 4).

Salton Sea

Only one sampling event for tissue was evaluated in October of 2007. Tilapia fillets had limited ΣDDT and PCBs (Appendix E3 and Appendix E7), although all samples exceeded Selenium criteria (Appendix E9).

5.2 Biological Analyses

5.2.1 Bioassessment

Comparing the 3 sites in 2003, which evaluated drainage areas to the Salton Sea, the Alamo River Outlet had the lowest IBI of 1 even though it had the highest percentage of EPT taxa (Table 10). The New River Outlet had an IBI of 4, with no EPT taxa although the Shannon Index was relatively similar to the Alamo River Outlet. Indices at the Salton Sea Drain at the Salt Creek Mouth indicated relatively higher quality with IBI scores of 14, but a lower Shannon Index and EPT score. When Fig Drain was evaluated in May of 2006, it also had a higher IBI of 9 even though the Shannon Index was similar to the Alamo River Outlet. Although it was not possible to compare the sites to a reference site, a typical reference location would have a hypothetical IBI ranging from 70-100 (Rehn et al. 2008). Consequently, based on IBI rankings the 4 sites evaluated would be considered to be relatively impaired. As discussed above, the diminished IBI was consistent with both

the Alamo and New River Outlets having the highest concentrations of contaminants particularly in sediments for 2003.

5.2.2 Water and Sediment Toxicity

In October 2011, water only exposures to *Hyalella azteca* at the Alamo River Outlet caused 100% mortality (Table 11). The toxicity of sediment samples from this site (73% survival) was just above the threshold considered by SWAMP of significant toxicity (70% survival). In contrast to October, the toxicity of sediment samples of May 2011 was significantly higher XXX. Toxicity was also noted in sediments from Alamo River at the Drop 10 location.

Sediment toxicity was also observed in samples from the New River at the International Boundary and water column toxicity was observed at the Outlet for Oct 2011. (Table 11).

Other sites exhibiting toxicity were located within the Salton Sea. Water from all three locations (USGS2, USGS7, and USGS9) in May of 2011 caused significant toxicity as well as diminished growth to topsmelt (*Atherinops affinis*). Two of the three sediment samples also showed reduced survival in *H azteca* ($70 \pm 24\%$; $53 \pm 23\%$).

For October 2012, Water from the Alamo River and New River Outlet sites had diminished survival ($60 \pm 11\%$; $66 \pm 22\%$).

6.0 DISCUSSION

Previous studies in the Salton Sea have demonstrated contamination of fish and sediments from organic and inorganic compounds/elements (Reidel et al. 2002; Sapozhnikova et al. 2004). In order to better understand spatial and temporal relationships, data from the SWAMP was mined for chemical analyses in sediments, water and fish tissues from not only the Salton Sea, but also two tributaries: The Alamo and New Rivers.

Overall, Tissue concentrations of contaminants from fish collected from the mouth (outlet) of each River and upstream areas were similar to those previously reported. Concentrations of PCBs in fish muscle collected during and prior to 2001 ranged from 11-85 ng/g ww in fish from either river mouths or nearshore (Riedel et al. 2002; Sapozhnikova et al. 2004). Evaluating data from river mouths in this study, values ranged from 1.5-49 ng/g ww in fish collected from 2004, 2011-2012. All values exceed tissue based criteria of 0.1 ng/g ww (Table 1). Interestingly, only one composite sample from the Salton Sea failed to have detected values in 2007. Given the concentrations found in fish from the river mouths, it would appear that this measurement may be an anomaly and continued monitoring for PCBs in fish from the Salton Sea is necessary to determine whether fish tissue concentrations follow sediment concentrations which have not been detected in the Salton Sea since 2007-2008.

Concentrations of DDTs were also similar to previous studies. Values in the Salton Sea as well as the Alamo and New River Outlets ranged from 10-239 ng/g ww in previous studies (Riedel et al. 2002; Sapozhinikova et al. 2004) compared to those of Outlet values of 2012 (30-132 ng/g ww) (Figure 6). Interestingly, although sediment concentrations of DDTs have not varied temporally (Figure 4A) and fish concentration are relatively higher in the Alamo River, normalizing the concentrations in fish tissues to lipid has indicated that concentrations from the Alamo River have declined, whereas tissue values in the New River have trended toward an increase when fish tissue was normalized for limit (Figure 4B). This may be due to species differences between the rivers or differences in lipid content between species. Additional studies allowing better statistical comparisons would be fruitful. Since tissue concentrations have not varied since 2001, criteria for the protection of fish-predators are still being exceeded. Comparing concentrations in 2012, exceedances were observed throughout the entire River from the International Boundary (New River) to Barbara Worth Drain (Alamo River). Thus, continued monitoring for these legacy compounds is recommended.

Selenium values have also remained somewhat constant in fish. Concentrations in 2007 in fish all exceeded tissue-based criteria for the Salton Sea and most of the riverine sites in 2012 (Table 9). Concentrations in fish in 2001 were 1.9- 2.8 mg/kg ww and in 2012 values ranged between 2.24 to 3.52 mg/kg ww. Since fish are the primarily dietary source for the multiple bird species that frequent the Salton Sea, and sediment and water concentrations do not appear to be changing in the rivers (Figure 2 and Figure 5) and may actually be increasing in the Salton Sea (Figure 2), a better understanding of Selenium loading to the Salton Sea is needed.

Although most tissue based studies indicated continued bioaccumulation of legacy contaminants. Temporal studies of sediments indicated a significant change in pesticide loading to the waterways (Figure 3). Since 2005, concentrations of the organophosphate insecticide, chlorpyrifos have been declining, but concentrations of pyrethroid insecticides have increased in the Alamo and New Rivers. Chlorpyrifos was banned for urban use in 1999 and largely replaced by pyrethroids in California (Spurlock and Lee 2008). Each compound has significant toxicity to benthic invertebrates (Ankley and Collyard 1995; Amweg et al. 2006). Monitoring pyrethroids can be difficult as detection limits may actually exceed toxicity thresholds (Amweg et al. 2006). Consequently, continued monitoring and toxicity assessment should be implemented to properly monitor.

In 2011 and 2012, toxicity assessments were conducted on a subset of the sites where chemical monitoring data had been collected. No toxicity was observed at the Boundary site of the Alamo River. However, reductions in *H. azteca* survival was noted in sediments further downstream at Drop 10 (Table 11). For metal evaluations on those collections, only selenium concentrations were measured, and none exceeded criteria (Table 3). However, several pyrethroid insecticides were detected including bifenthrin, λ-cyhalothrin, and esfenvalerate (Appendix J1). Unfortunately, organic carbon content was not reported in this sample, so comparisons to other studies is difficult. However, if one assumes a 1.0% total organic carbon value, the concentrations for bifenthrin (267 ng/g OC) were approximately half those of published LC50s (520 ng/g OC) (Amweg et al. 2006) or 0.51 Toxicity Units (TUs). For λ-cyhalothrin, the estimated value would be 123 ng/g OC (again less than 450 ng/g OC). The sediment LC50 for esfenvalerate was

1540 ng/g OC, so the estimated value at this site (879 ng/g OC) would again be less than half the LC50 value. If all TU values are additively considered (1.35 TUs), then the potential for toxicity is very likely in this location.

In October 2011, water only exposures to *Hyalella azteca* at the Alamo River Outlet caused 100% mortality (Table 11). Evaluation of dissolved metal concentrations and organic contaminants indicated exceedances of water quality criteria for Copper (Table 2). One other compound that may also be providing some influence in this sample is the pyrethroid insecticide esfenvalerate, which was measured at 4 ng/L (Appendix G9). The 96 hr LC50 value for esfenvalerate in *H. azteca* was reported as 8 ng/L (Fojut et al., 2012). Although the measured value is less than the 96 hr concentration, the duration of exposure was 10 days rather than 4 days (96 hr). Consequently, esfenvalerate could have contributed to the effect observed in the sampled water.

In contrast to October, the toxicity of sediment samples of May 2011 at the Alamo River Outlet was significant. While metals did not exceed sediment criteria, several organic contributors were above criteria values and included dieldrin, and ppDDE (Table 5). Another potential contributor was likely the pyrethroid λ-cyhalothrin which was detected at 1.6 ng/g dw (83.3 ng/g OC) (Appendix J1). The 10 d LC50 values for *H. azteca* were estimated to be 450 ng/g OC (Amweg et al. 2005). While the sediment samples were less than the LC50 threshold, differences in sediment structure (i.e. % fines) may contribute to the differences as well. The Alamo River Outlet sample was 70.8 % silt/clay, which would lead to greater toxicity (Amweg et al. 2006).

Sediment toxicity was also observed in samples from the New River at the International Boundary for Oct 2011. Copper, Lead, Mercury, Silver and Zinc all exceed sediment criteria (Table 5). Cypermethrin concentrations (5333 ng/g OC) were 14 times higher (14 Toxic Units) than published LC50 values for *H. azteca* in sediments (Amweg et al. 2006). Other pyrethroids were also detected again just below published LC50 values (Table 9b). Bifenthrin (352 ng/g OC); cyfluthrin (104 ng/g OC); λ- cyhalothrin (176 ng/g OC); esfenvalerate (171 ng/g OC); deltamethrin (230 ng/g OC) and permethrin (4762 ng/g OC) were all below threshold, but when added together using toxicity units and excluding cypermethrin, a 1.58 toxic unit value was observed. In addition to pyrethroids, ΣDDTs (although these were primarily DNQ values), chlordanes and ΣPAHs all exceeded sediment threshold criteria (Tables 5-7).

Continuing down the New River to the Outlet of the Salton Sea, significant toxicity was observed in the water column in October (Table 11). The only dissolved metal concentration that exceeded criteria was copper (Table 2). The only organic contaminant that exceeded a threshold was λ-cyhalothrin (0.011 ug/L), which was higher than the 0.008 ug/L LC50 (Fojut et al. 2012). PBDE 99 and PBDE 153 were detected at 0.009 and 0.005 ug/L (Table 6L), which were below previously proposed thresholds (1 ug/L for PBDE99) (Maruya et al. 2013).

Other sites exhibiting toxicity were located within the Salton Sea. Water from all three locations (USGS2, USGS7, and USGS9) in May of 2011 caused significant toxicity as well as diminished growth to topsmelt (*Atherinops affinis*). Two of the three sediment

samples also showed reduced survival in *H. azteca* ($70 \pm 24\%$; $53 \pm 23\%$). No detected compounds in the water column were above ALC (Table 1). Sediment samples from the USGS2 site had historical Selenium values (2002-2011) and Arsenic (2002 only) samples that exceeded consensus thresholds (Table 4). Sediment ppDDE and dieldrin concentrations also exceeded sediment thresholds at USGS2 (Table 5). Tilapia fillets from USGS7 had limited DDE contamination, but had somewhat elevated selenium concentrations (2.24-3.52). Consequently, the potential cause for the topsmelt toxicity is unclear and may be due to non-targeted contaminants or other water quality stressors.

For October 2012, only 3 samples were evaluated for *H. azteca* toxicity. Water from the Alamo River Outlet site had diminished survival ($60 \pm 11\%$). Unfortunately, only metals, organochlorine and organophosphate pesticides were targeted for analyses. Copper, and Mercury were at or exceeded Aquatic Life Criteria thresholds (Table 2). Of the pesticides evaluated only chlorpyrifos was detected at 0.049 ug/L (Appendix G4) which exceeds the LC50 (0.040 ug/L) published by Ankley and Collyard (1995) as well as ALCs (Table 1). Tilapia and Channel catfish sampled from this area in 2004 had measurable concentrations of chlorpyrifos in fillets (Appendix E4) suggesting continued exposure in the water column to chlorpyrifos.

At the New River Outlet, significant water and sediment toxicity to *H. azteca* was observed in October of 2012 (Table 11). Chlorpyrifos and diazinon were detected at 0.051 and 0.143 ug/L, respectively (Appendix G5). As noted above, this concentration exceeds the LC50 for *H. azteca* (Table 8). The concentration for diazinon did not exceed USEPA Aquatic Life Criteria concentrations for fresh (0.170 ug/L) or saltwater (0.820 ug/L) (USEPA, 2005). PAHs, pyrethroids or triazine pesticides were not targeted for water analyses, so it is unclear what contribution they may have.

When evaluating the sediments several pyrethroid insecticides were detected with λ -cyhalothrin exceeding sediment LC50s (Table 7). Using a toxic unit estimate of additive toxicity, 2.53 TU were observed from pyrethroids in sediment. In addition to pyrethroids, historical evaluations of the sediment from the New River Outlet indicate persistent contamination with chlorpyrifos (Figure 3), Σ DDTs (Appendix I2), and somewhat lower concentrations of PAHs (Appendix K2). It is unclear why most chemical measurements in 2012 were below detection.

7.0 CONCLUSIONS AND RECOMMENDATIONS

In summary, persistent organic contaminants and Selenium are still prevalent in fish and sediments of the Salton Sea and its two main tributaries. The New River appears to have higher levels of overall contamination than the Alamo, but inputs are unclear as both inorganic and organic contaminant concentrations tend to be higher at the International Boundary and at the Outlet sites for the Salton Sea compared to sites along each river. Bioassessment indices conducted in 2003 are consistent with poor condition for the outlets of each river. In addition to persistent contaminants such as Σ DDT, Σ PAHs, current use pesticides such as pyrethroids (cypermethrin) and the organophosphate, chlorpyrifos also appear to be contributing to the toxicity of sediments and water collected from the rivers. The source of toxicity to Salton Sea water remains unclear. In

water and sediments, metals consistently above criteria thresholds included Selenium, and Copper with occasional exceedances by Chromium and Silver. Given the recurrent exceedances by Copper, a Biotic Ligand Model approach should be implemented since water quality likely varies from freshwater to saltwater throughout the drainage. Mercury exceeded sediment criteria primarily at the New River Boundary sites along with other organic contaminants such as PAHs. Relatively few compounds accumulated to levels exceeding thresholds in fish. Fish tissues exceeded ΣDDT criteria at 25 of 31 sampling events from 2004 to 2012. For Selenium 25/32 sites exceeded tissue residue thresholds for piscivorous wildlife. Thus, these two groups of contaminants continue to be cause for concern particularly for avian species. Other compounds that deserved further monitoring are the pyrethroid insecticides, which likely contribute to toxicity observed in sediments and water during 2011 and 2012. In addition to toxicity and chemical measurement, additional bioassessment determinations are needed to utilize “triad” based tools to evaluate the potential impacts of contaminants on the Salton Sea drainage area. Lastly, loading sources and remediation strategies for some contaminants, particularly Selenium, are warranted given the importance of the area to avian species.

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Figure 1. Map of Sampling Locations on the Salton Sea, New and Alamo Rivers.

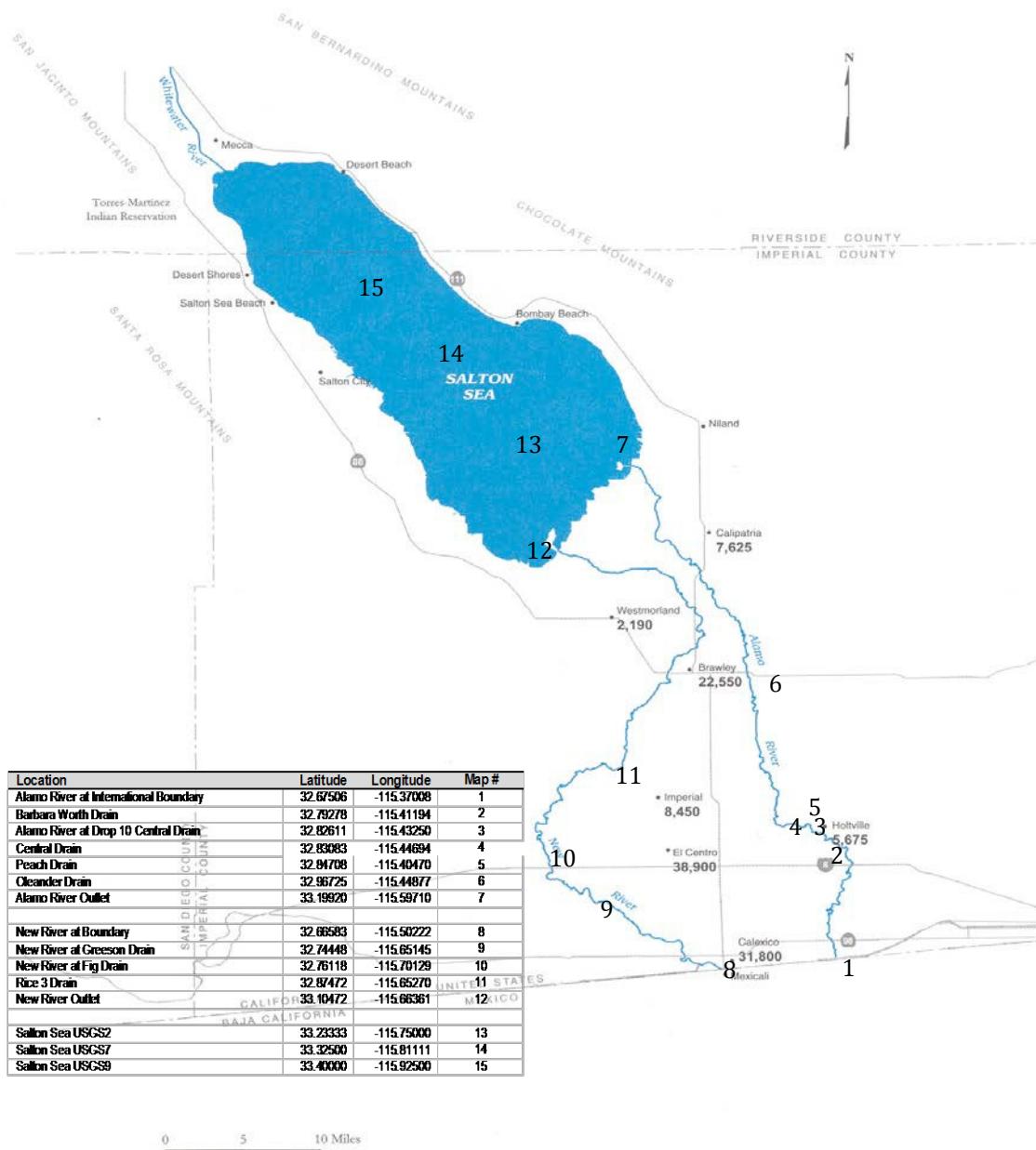


Figure 2. Temporal comparisons of Selenium in sediments in sediments from Salton Sea, Alamo River Outlet, and New River Outlet (and Boundary) sites from 2002-2011.

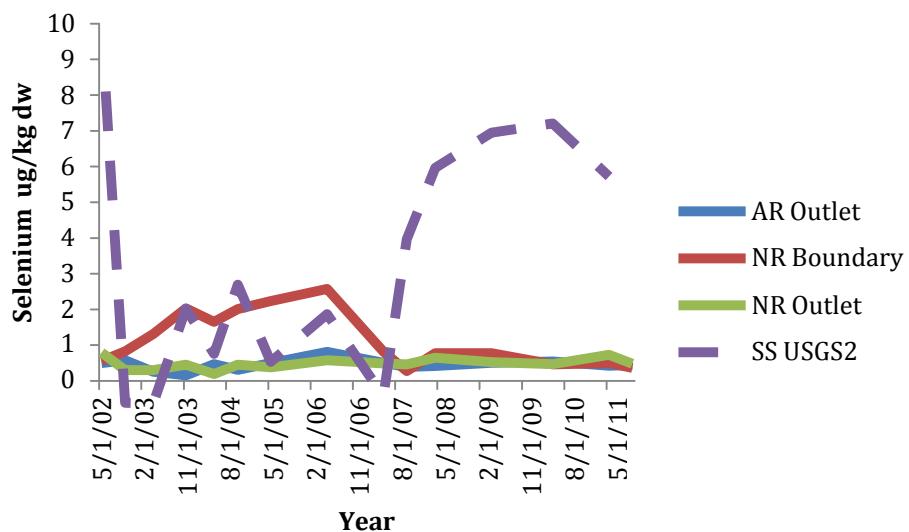


Figure 3. Comparisons of sediment concentrations of pyrethroids and chlorpyrifos from the Alamo River Outlet (A) and New River Outlet (B) from 2002-2012.

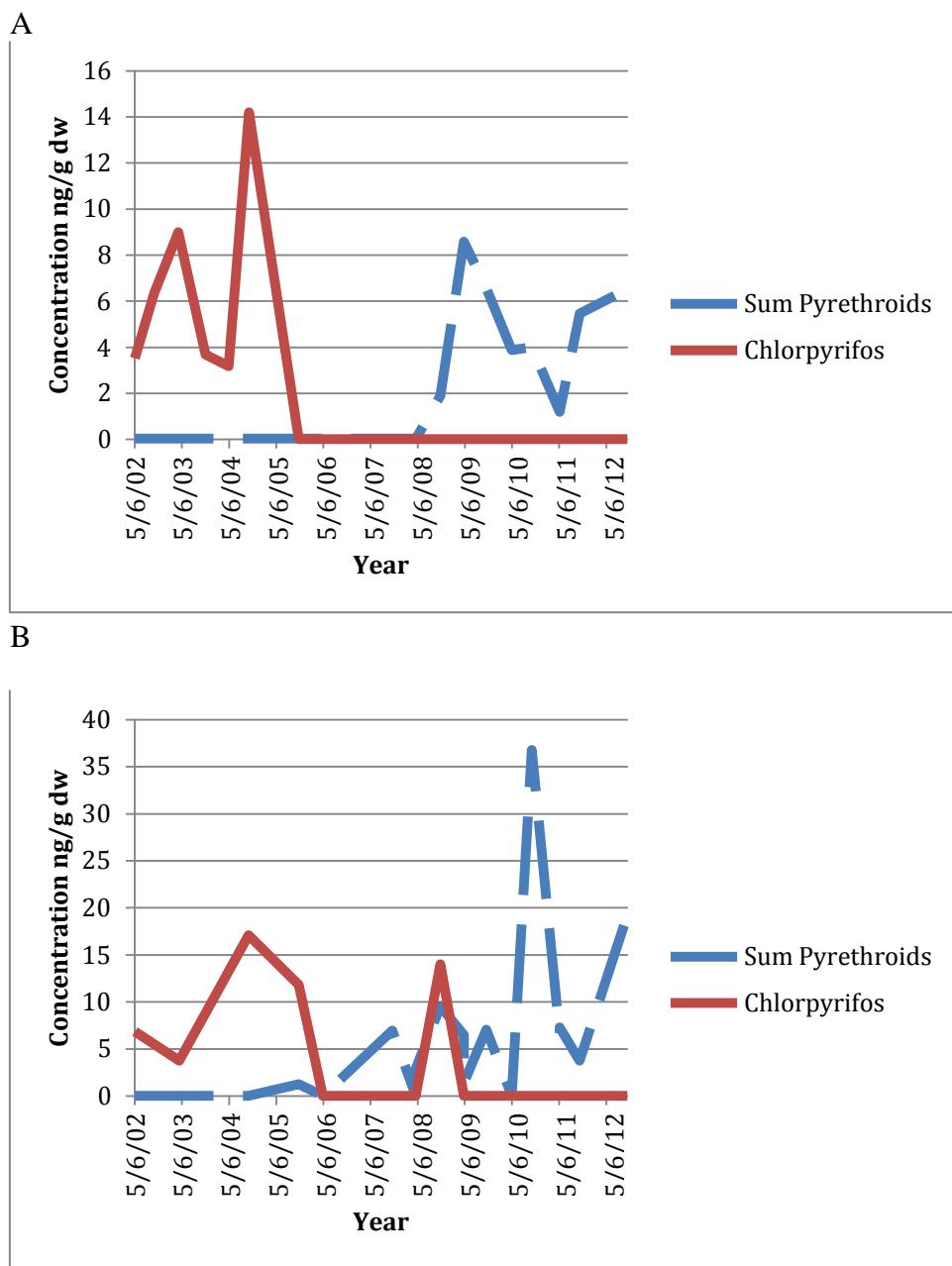
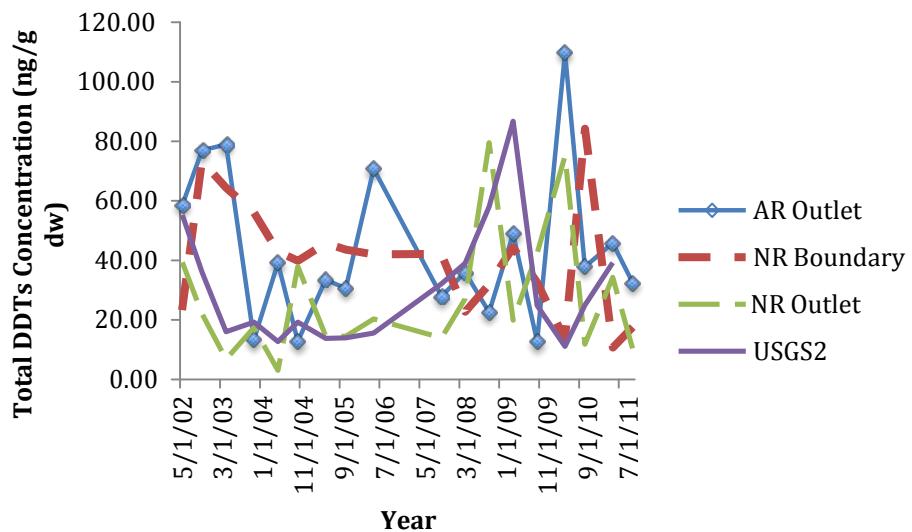


Figure 4. Temporal comparisons of total DDTs in sediments from Salton Sea, Alamo River Outlet, and New River Outlet (and Boundary) sites from 2002-2011 (A). Temporal values (2004, 2011-2012) of Total DDTs in tissues of fish from the Alamo and New River Outlets (B).

A.



B.

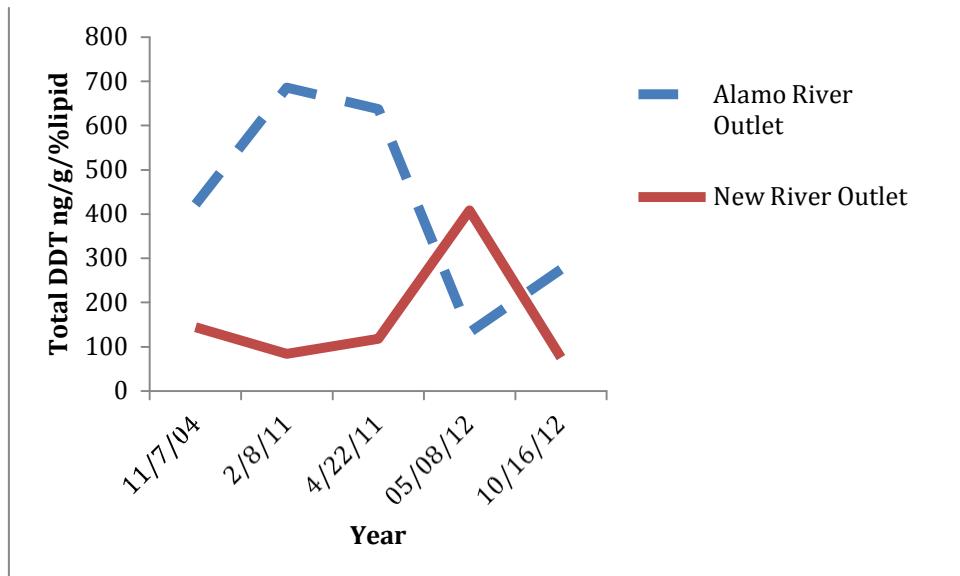


Figure 5. Fish Tissue and Water Concentrations of Selenium for the Alamo River (A) and the New River (B) for October 2012. Solid line represents Tissue based criteria; dotted line represents Aquatic Life Criteria (Table 1).

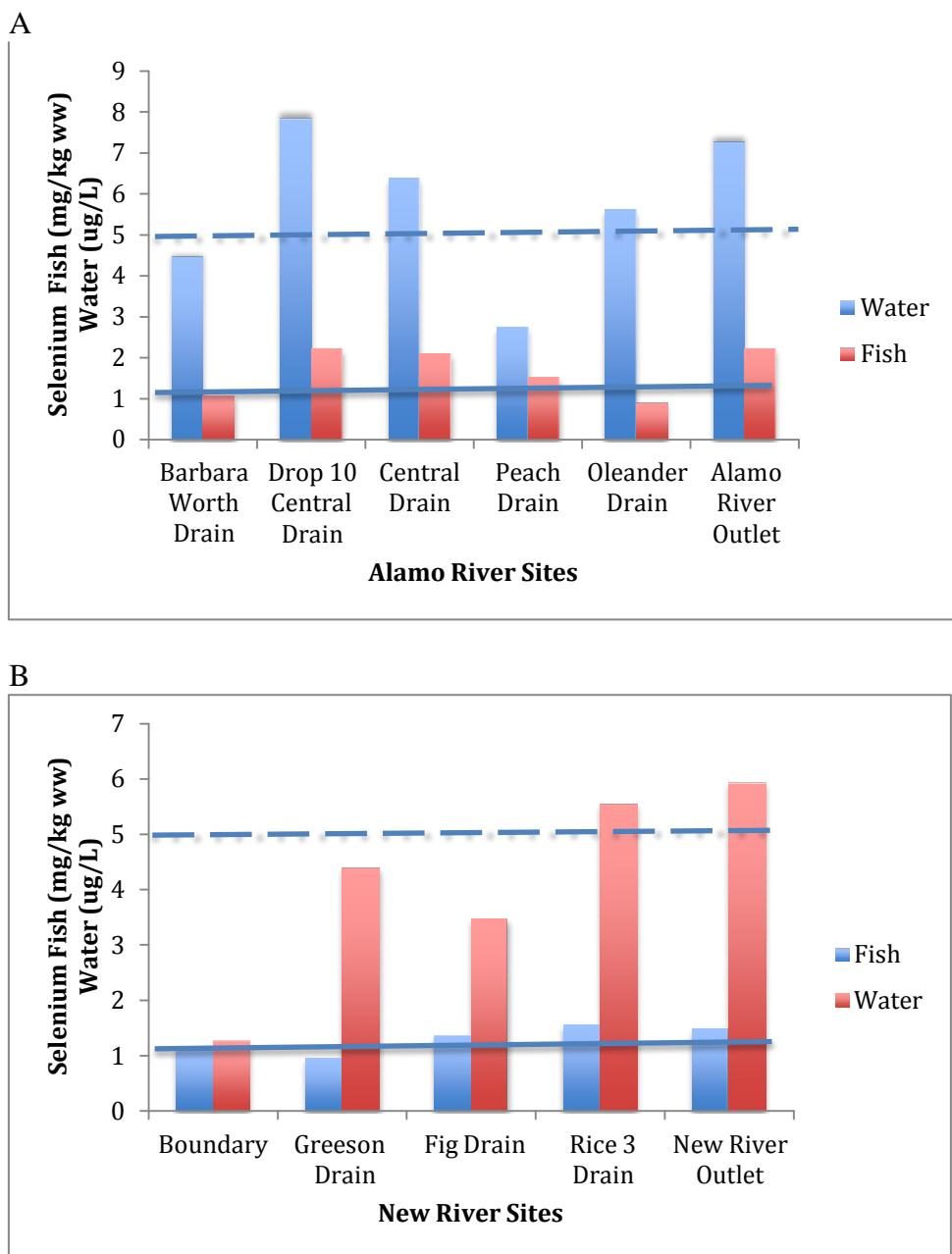


Figure 6. Fish Tissue Concentrations of Total DDTs for the Alamo River (A) and the New River (B) for May and October 2012. Solid line represents Tissue based criteria for predators; dotted line represents fish health criteria (Table 1).

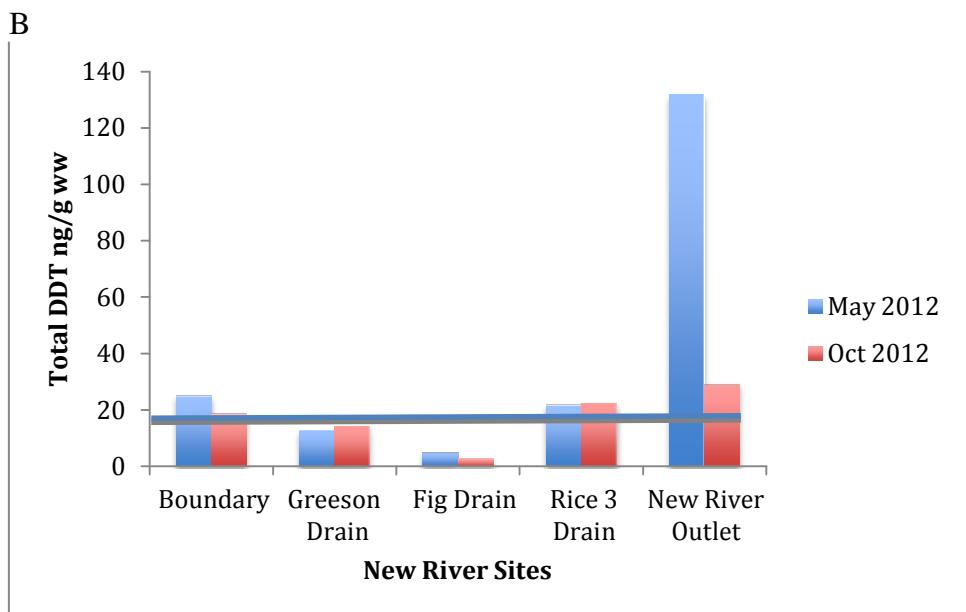
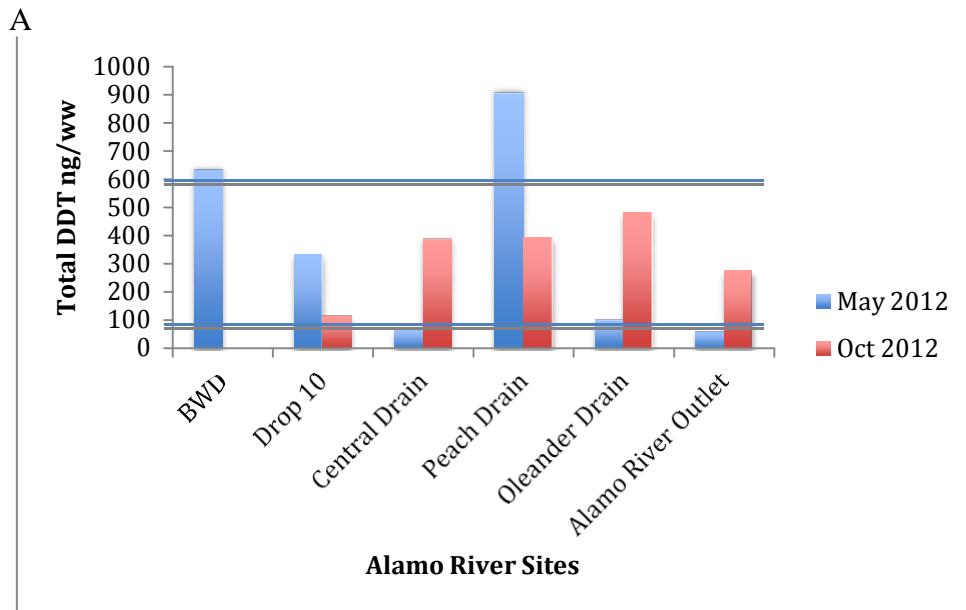


Table 1. Aquatic and sediment criteria used for chemical residue comparisons. CMC= Criteria Maximum Concentration; CCC=Criterion Continuous Concentration.

Threshold values for dissolved metals ($\mu\text{g/L}$).

Constituent	Freshwater		Saltwater		Reference
	CMC	CCC	CMC	CCC	
Al	750	87			USEPA 2014
As	340	150	69	36	USEPA 2014
Cd	2	0.25	40	8.8	USEPA 2014
Cu	Biotic Ligand Model	1.3	60188	1.9	USEPA 2003b
Fe		1000			USEPA 2014
Pb	65	2.5	210	8.1	USEPA 2014
Hg	1.4	0.77	1.8	0.94	USEPA 2014
Ni	470	52	74	8.2	USEPA 2014
Se		5	290	71	USEPA 2014
Ag	3.2		1.9		USEPA 2014
Zn	120	120	90	81	USEPA 2014

Threshold values for dissolved organic contaminants ($\mu\text{g/L}$).

Constituent	Freshwater		Saltwater		Reference
	CMC	CCC	CMC	CCC	
Aldrin	3		1.3		USEPA 2014
Atrazine	1511	10	760	17	USEPA 2003a
Chlordane	2.4	0.0043	0.09	0.004	USEPA 2014
Chlorpyrifos	0.083	0.041	0.011	0.0056	USEPA 2014
λ -cyhalothrin	0.001	0.0005			Fojut et al. 2012
ppDDT	1.1	0.001	0.13	0.001	USEPA 2014
Demeton		0.1		0.1	USEPA 2014
Diazinon	0.17	0.17	0.82	0.82	USEPA 2014
Endosulfan	0.22	0.056	0.034	0.0087	USEPA 2014
Endrin	0.086	0.036	0.037	0.0023	USEPA 2014
Lindane	0.95		0.16		USEPA 2014
Heptachlor	0.52	0.0038	0.053	0.0036	USEPA 2014
Malathion		0.1		0.1	USEPA 2014
Methoxychlor		0.03		0.03	USEPA 2014
Mirex		0.001		0.001	USEPA 2014
Parathion	0.065	0.013			USEPA 2014
PCBs		0.014		0.03	USEPA 2014
Toxaphene	0.73	0.0002	0.21	0.0002	USEPA 2014

Consensus Threshold values for sediment contaminants.

Constituent	Threshold Effect Concentration*	Reference
Metals (mg/kg dw)		
As	9.79	MacDonald et al. 2000
Cd	0.99	
Cr	43.4	
Cu	31.6	
Pb	35.8	
Mn	1100 (LEL)	WDNR, 2003
Hg	0.18	
Ni	22.7	
Se	2	Lemly 2002
Ag	1	USEPA 1996
Zn	121	
PAHs(ng/g dw)		MacDonald et al. 2000
Anthracene	57.2	
Fluorene	77.4	
Naphthalene	176	
Phenanthrene	204	
Benzo(a)anthracene	108	
Benzo(a)pyrene	150	
Chrysene	166	
Dibenz(a,h)anthracene	33	
Fluoranthene	423	
Pyrene	195	
ΣPAHs	1610	
ΣPCBs (ng/g dw)	59.8	
Organochlorine pesticides (ng/g dw)		MacDonald et al. 2000
Chlordane	3.24	
Dieldrin	1.90	
ΣDDD	4.88	
ΣDDE	3.16	
ΣDDT	5.28	
Endrin	2.22	
Heptachlor epoxide	2.47	
Lindane	2.37	
Pyrethroids (ng/g OC)		Amweg et al. 2006
Bifenthrin	520 LC50	
Cyfluthrin	1080 LC50	
Cypermethrin	380 LC50	

Deltamethrin	790 LC50	
Esfenvalerate	1540 LC50	
λ -cyhalothrin	450 LC50	
permethrin	10790 LC50	
Organophosphates (ng/g OC) Chlorpyrifos	1770 LC50	Amweg and Weston 2007

Tissue residue thresholds for fish collected in Salton Sea drainage.

Constituent	Threshold	Reference
Σ PCBs	0.1 ng/g	Jarvinen and Ankley 1999
Σ DDTs	14 ng/g Predator Threshold 600 ng/g Fish health	Environment Canada 1997 Beckvar et al. 2005
Selenium	1 mg/kg ww	Hinch et al. 2005

Table 2. Contaminants that exceeded aquatic life criteria in the Alamo and New Rivers in 2011 and 2012.

Alamo River Constituent	Year	Site	Min (ug/L)	Max (ug/L)	Frequency of Detection	Frequency of Exceedance
Cu	2011	Boundary	2.1	4.27	2/2	1/2
	2012	BWD	2.83	2.83	1/1	1/1
		Drop 10	3.12	3.12	1/1	1/1
		Central	3.13	3.13	1/1	1/1
		Peach	4.1	4.1	1/1	1/1
		Oleander	3.82	3.82	1/1	1/1
		Outlet	3.94	6.77	3/3	3/3
Se	2012	Drop 10	8.07	8.07	1/1	1/1
		Central	6.38	6.38	1/1	1/1
		Oleander	5.61	5.61	1/1	1/1
Chlorpyrifos	2012	Drop 10	0.043	0.294	2/2	2/2
		Central	BDL	0.055	1/2	1/2
		Outlet	0.049	0.058	2/2	2/2
λ -cyhalothrin	2011	Boundary	BDL	0.006	1/2	1/2
New River Cu	2011	Boundary	BDL	4.64	1/2	1/2
		Outlet	4.73	6.88	3/3	3/3
	2012	Greeson	2.14	2.14	1/1	1/1
		Fig	1.77	1.77	1/1	1/1
		Rice 3	3.17	3.17	1/1	1/1
Chlorpyrifos	2012	Outlet	0.033(DNQ)	0.058	3/3	1/3
λ -cyhalothrin	2011	Outlet	BDL	0.011	1/3	1/3

Table 3. Metal concentrations (ng/g dw) in sediments of the Alamo and New Rivers that exceed sediment criteria. DNQ (below level of quantification).

Constituent Alamo River Outlet	Year	Min	Max	Frequency of Detection	Frequency of Exceedance
Cu	2006	31.6	31.6	1/1	1/1
Cr	2006	46.1	46.1	1/1	1/1
New River Boundary					
Cd	2002	0.77	2.31	2/2	1/2
	2004	1.23	1.24	2/2	2/2
	2005	1.02	1.08	2/2	2/2
	2006	1.07	1.07	1/1	1/1
	2010	0.29	1.21	3/3	1/3
Cr	2003	39.4	71.8	2/2	1/2
	2004	50.8	83.9	2/2	2/2
	2005	52.6	53.4	2/2	2/2
	2006	54.7	54.7	1/1	1/1
	2010	27.7	49.7	3/3	1/3
Cu	2002	30.7	37.7	2/2	1/2
	2003	59.9	84.1	2/2	2/2
	2004	64.8	106	2/2	2/2
	2005	53.9	77.7	2/2	2/2
	2006	77	77	1/1	1/1
	2009	36.7	39.5	3/3	3/3
	2010	18.1	93.9	3/3	1/3
	2011	35.5	49.3	2/2	2/2
	2012	18.5	32.2	2/2	1/2
Pb	2003	41.4	47.2	2/2	2/2
	2004	51	55.5	2/2	2/2
	2005	40.7	53.3	2/2	2/2
	2006	36.3	36.3	1/1	1/1
	2009	35	47.8	3/3	3/3
	2010	18.2	70.2	3/3	1/3
	2011	29.2	52	2/2	1/2
	2012	26.6	50.7	2/2	1/2
Hg	2002	0.138	0.217	2/2	2/2
	2003	0.386	0.458	2/2	2/2
	2004	0.238	0.857	2/2	2/2
	2005	0.32	0.742	2/2	2/2
	2006	0.522	0.522	1/1	1/1
	2009	0.008(DNQ)	0.154	3/3	1/3
	2010	0.049	1.09	3/3	1/3
	2011	0.098	0.536	2/2	1/2
Ni	2003	25.5	28.3	2/2	2/2
	2004	24.1	30.6	2/2	2/2
	2005	21.8	37.3	2/2	1/2
	2006	30.6	30.6	1/1	1/1
	2010	13.1	32.2	3/3	1/3
Se	2003	1.31	2.03	2/2	1/2
	2004	1.65	2.01	2/2	1/2
	2005	1.26	2.24	2/2	1/2

	2006	2.58	2.58	1/1	1/1
	2010	0.386	2.14	2/2	1/2
Ag	2002	1.44	1.95	2/2	2/2
	2003	2.64	4.6	2/2	2/2
	2004	4.13	4.34	2/2	2/2
	2005	2.17	5.37	2/2	2/2
	2006	3.77	3.77	1/1	1/1
	2009	2.07	2.46	3/3	3/3
	2010	0.65	8.17	3/3	1/3
	2011	0.79	1.16	2/2	1/2
	2012	0.2	1.36	2/2	1/2
Zn	2002	105	193	2/2	1/2
	2003	184	632	2/2	2/2
	2004	299	721	2/2	2/2
	2005	245	351	2/2	2/2
	2006	332	332	1/1	1/1
	2009	119	175	3/3	2/3
	2010	69.3	428	3/3	1/3
	2011	93.7	189	2/2	1/2
	2012	69.3	122	2/2	1/2
New River Outlet					
Cr	2002	7.64	55	3/3	1/3
	2008	38	44	3/3	1/3
Cu	2002	29.4	43.4	2/2	1/2

Table 4. Metal concentrations (ng/g dw) in sediments of Salton Sea that exceed sediment criteria.

Constituent Salton Sea USGS2	Year	Min	Max	Frequency of Detection	Frequency of Exceedance
As	2002	5.14	12.6	3/3	1/3
	2010	14.1	14.1	1/1	1/1
Se	2002	1.04	11.9	3/3	1/3
	2003	1.27	3.92	2/2	1/2
	2004	2.66	4.59	2/2	2/2
	2005	0.352	2.43	2/2	1/2
	2006	3.58	3.77	2/2	2/2
	2007	1.47	5.86	2/2	1/2
	2008	7.86	7.86	1/1	1/1
	2009	6.36	8.85	2/2	2/2
	2010	9.11	9.11	1/1	1/1
	2011	7.62	7.62	1/1	1/1
Ag	2002	0.261	1.06	3/3	1/3
Salton Sea USGS7					
Se	2002	4.74	8.95	2/2	2/2
	2003	3.49	4.47	2/2	2/2
	2004	2.65	4.09	2/2	2/2
	2005	0.314	3.46	2/2	1/2
	2006	5.14	5.14	1/1	1/1
	2007	2.73	4.6	2/2	2/2
	2008	7.37	7.37	1/1	1/1
	2009	4.92	8.28	2/2	2/2
	2010	15	15	1/1	1/1
	2011	7.87	7.87	1/1	1/1
Ag	2002	0.518	1.46	2/2	2/2
Salton Sea USGS9					
As	2004	6.07	12.3	1/2	1/2
Cu	2002	44.7	44.7	1/1	1/1
Se	2002	5.21	11.9	4/4	4/4
	2003	4.07	12.2	2/2	2/2
	2004	6.58	6.65	2/2	2/2
	2005	4.63	7.434	2/2	2/2
	2006	7.34	7.34	1/1	1/1
	2007	5.54	9.24	2/2	2/2
	2008	7.21	7.21	1/1	1/1
	2009	4.69	10.2	2/2	2/2
	2010	12.4	12.4	1/1	1/1
	2011	14.2	14.2	1/1	1/1
Ag	2002	1.01	1.01	1/1	1/1

Table 5. Organochlorine pesticide concentrations (ng/g dw) in sediments of the Alamo and New Rivers that exceed sediment criteria. Values represent combined isomers unless one isomer was DNQ (below quantification). *represents value where DNQ exceeds criteria. BDL= Below Detection (for value see Appendices I1-I2).

Constituent Alamo River Boundary	Year	Min	Max	Frequency of Detection	Frequency of Exceedance
Σ DDE	2011	3.26	5.14	2/2	2/2
Alamo River Outlet					
Chlordanes (cis + trans)	2010	BDL	19.7	1/2	1/2
Σ DDD	2002	5.79	6.01	2/2	2/2
	2010	DNQ	20.1	2/2	1/2
Σ DDE	2002	58.6	71	3/3	3/3
	2003	13.3	75.4	3/3	3/3
	2004	12.8	37.3	2/2	2/2
	2005	29	35.2	3/3	3/3
	2006	68.2	68.2	1/1	1/1
	2007	28	28	1/1	1/1
	2008	19.1	36	1/1	1/1
	2009	12.8	43	2/2	2/2
	2010	37.8	67	2/2	2/2
	2011	27.1	45.8	3/3	3/3
Σ DDT	2010	DNQ	22.6	2/2	1/2
Dieldrin	2006	2.1	2.1	1/1	1/1
	2008	1.02	2.07	2/2	1/2
	2010	1.08	4.91	2/2	2/2
New River Boundary					
Chlordanes (cis + trans)	2002	BDL	6.10	2/2	1/2
	2004	2 x DNQ = 5.7*	12.4	2/2	1/2
	2005	2.89 + (DNQ 1.84)*	9.86	2/2	1/2
	2006	11.5	11.5	1/1	1/1
	2008	6.49	6.49	1/1	1/1
	2009	1.74 + (DNQ 1.33)	6.51	3/3	2/3
	2010	BDL	13.4	1/3	1/3
	2011	2 X DNQ = 2.27	4.21	1/2	1/2
Σ DDD	2002	7.33 + (DNQ 5.34)*	14.8	2/2	2/2
	2003	BDL	15 + (DNQ 2.68)	2/3	2/3
	2004	8.68	15.9	2/2	2/2
	2005	11.8	14.9	2/2	2/2
	2006	14.2	14.2	1/1	1/1
	2008	5.0 + (DNQ 1.2)*	5.0+(DNQ 1.2)*	1/1	1/1
	2009	9.19	12.7	3/3	3/3
	2010	2 X DNQ = 1.39	22.6	2/3	1/3
Σ DDE	2002	15.9	19.4	2/2	2/2
	2003	BDL	39.5+(DNQ 2.6)*	2/3	2/3
	2004	27.0+(DNQ 1.4)*	31.2	2/2	2/2
	2005	28.7+(DNQ 2.3)*	34	2/2	2/2

	2006	28.0+(DNQ 5.9)*	28.0+(DNQ 5.9)*	1/1	1/1
	2007	4.4	4.4	1/1	1/1
	2008	17.8+(DNQ 0.7)*	17.8+(DNQ 0.7)*	1/1	1/1
	2009	14.2+(DNQ 0.3)*	27.6	3/3	3/3
	2010	13.5	50.6+(DNQ 3.3)*	2/2	2/2
	2011	8.61+(DNQ 0.5)*	13.5+(DNQ 0.9)*	2/2	2/2
ΣDDT	2002	BDL	39.2	1/2	1/2
	2008	2 X DNQ = 6.40*	2 X DNQ = 6.40*	1/1	0/1
	2010	BDL	11.1+(DNQ 1.4)*	1/2	1/2
	2011	2 X DNQ = 3.80	2 X DNQ = 5.70*	2/2	1/2
Dieldrin	2005	2.21	2.24	2/2	2/2
	2006	4.14	4.14	1/1	1/1
	2008	3.73	3.73	1/1	1/1
	2009	0.93	2.94	3/3	1/3
	2010	BDL	3.2	1/3	1/3
New River Outlet					
Chlordane (cis+trans)	2008	2.96	3.84	2/2	1/2
ΣDDE	2002	DNQ (2.09)	39.4	3/3	2/3
	2003	6.8	17.9	3/3	3/3
	2004	3.04	36	2/2	1/2
	2005	14.5	14.7	3/3	3/3
	2006	20.3	20.3	1/1	1/1
	2007	14	14	1/1	1/1
	2008	25.3+(DNQ 0.6)*	69.2	3/3	3/3
	2009	17.6+(DNQ 0.4)*	36.2+(DNQ 1.0)*	3/3	3/3
	2010	11.8+(DNQ 0.5)*	75.0+(DNQ 2.2)*	2/2	2/2
	2011	9.99	34.3+(DNQ 1.1)*	3/3	3/3
ΣDDT	2008	DNQ (1.96)	4.43	3/3	1/3
Dieldrin	2008	1.72	3.56	3/3	2/3
	2010	1.05	2.02	2/2	1/2

Table 6. Organochlorine pesticide concentrations (ng/g dw) in sediments of the Salton Sea that exceed sediment criteria. Values represent combined isomers unless one isomer was DNQ (below quantification). *represents value where DNQ exceeds criteria. BDL= Below Detection (for value see Appendix I3).

Constituent Salton Sea USGS2	Year	Min	Max	Frequency of Detection	Frequency of Exceedance
ΣDDD	2009	BDL	7.68	1/2	1/2
ΣDDE	2002	DNQ (1.68)	46	3/3	1/3
	2003	16	19.3	2/2	2/2
	2004	12.7	19.3	2/2	2/2
	2005	BDL	13.8	1/2	1/2
	2006	15.6	16	2/2	2/2
	2007	32.1	32.1	1/1	1/1
	2008	39.0 + (DNQ 1.2)*	39.0+(DNQ 1.2)*	1/1	1/1
	2009	24.0 + (DNQ 0.8)*	65.7	2/2	2/2
	2010	11.1+(DNQ 0.5)*	11.1+(DNQ 0.5)*	1/1	1/1
	2011	39.2+(DNQ 1.5)*	39.2+(DNQ 1.5)*	1/1	1/1
Dieldrin	2009	BDL	2.8	1/2	1/2
	2011	2.4	2.4	1/1	1/1
Salton Sea USGS7					
ΣDDE	2002	14	57.7	2/2	2/2
	2003	15.3	38.6	2/2	2/2
	2004	10.1	17.3	2/2	2/2
	2005	BDL	9.35	1/2	1/2
	2006	19.7	19.7	1/1	1/1
	2007	17.6	17.6	1/1	1/1
	2008	60.5+(DNQ 2.0)*	60.5+(DNQ 2.0)*	1/1	1/1
	2009	18.8	62.7	3/3	3/3
	2010	17.8+(DNQ 1.0)*	17.8+(DNQ 1.0)*	1/1	1/1
	2011	36.8+(DNQ 1.5)*	36.8+(DNQ 1.5)*	1/1	1/1
Dieldrin	2009	DNQ(1.6)	2.02	1/2	1/2
Salton Sea USGS9					
ΣDDD	2002	BDL	5.17	1/2	1/2
	2003	BDL	15.0+(DNQ 4.9)*	1/2	1/2
	2009	BDL	19.3	1/2	1/2
	2010	7.17	7.17	1/1	1/1
	2011	5.84+(DNQ 3.1)*	5.84+(DNQ 3.1)*	1/1	1/1
ΣDDE	2002	BDL	66.9	1/2	1/2
	2003	16.5	113+(DNQ 6.2)*	2/2	2/2
	2004	37.1	83.4	2/2	1/2
	2005	15.5	66.5+(DNQ 2.8)*	2/2	2/2
	2006	18.6	18.6	1/1	1/1
	2007	23.2	23.2	1/1	1/1
	2008	40.5	40.5	1/1	1/1
	2009	17.4	109	2/2	2/2
	2010	26.4+(DNQ 1.6)*	26.4+(DNQ 1.6)*	1/1	1/1
	2011	63.1+(DNQ 4.2)*	63.1+(DNQ 4.2)*	1/1	1/1

Dieldrin	2003	BDL	DNQ (3.47)*	1/2	0/2
	2004	BDL	3.51	1/2	1/2
	2007	3.42	3.42	1/1	1/1
	2008	4.69	4.69	1/1	1/1
	2009	BDL	5.04	1/2	1/2
	2011	2.84	2.84	1/1	1/1

Table 7. Pyrethroid insecticide concentrations [ng/g dw (ng/OC)] in sediments of the Salton Sea as well as the Alamo and New Rivers that exceed sediment criteria. BDL= Below Detection (for value see Appendices J1-3).

Constituent Alamo River Outlet	Year	Organic Carbon %	Min	Max	Frequency of Detection	Frequency of Exceedance
Bifenthrin	2009	0.018	BDL	512 (2844)	1/2	1/2
New River Boundary						
Cypermethrin	2004	2.24	183 (8165)	183 (8165)	1/1	1/1
	2011	1.0*	8.83 (88.3)	112 (1120)	2/2	1/2
Bifenthrin	2005	2.27	21.8 (960)	21.8 (960)	3/3	3/3
Cyfluthrin	2005	2.27	993 (43744)	993 (43744)	2/2	2/2
λ -cyhalothrin	2009	0.113	BDL	8.59 (7601)	1/3	1/3
New River Outlet						
Cypermethrin	2010	2.06	BDL	8.48 (411)	1/2	1/2
Salton Sea USGS2						
Esfenvalerate	2009	0.03	BDL	2.47 (8233)	1/2	1/2

Table 8. Organophosphate [ng/g dw (ng/OC)], Polyaromatic Hydrocarbon (ng/g dw), and Polychlorinated Biphenyl (ng/g dw) concentrations in sediments of the Salton Sea as well as the Alamo and New Rivers that exceed sediment criteria. BDL= Below Detection (for value see Appendices K1-M3).

Constituent	Year	Organic Carbon %	Min	Max	Frequency of Detection	Frequency of Exceedance
Alamo River Outlet						
Chlorpyrifos	2003	0.018	3.15 (17500)	9.0 (50000)	2/2	2/2
	2004	0.48	3.18 (6.63)	14.2 (2958)	2/2	1/2
New River Boundary						
Chlorpyrifos	2002	4.52	14.7(325)	87.3(1931)	2/2	1/2
	2003	1.83 -9.8	526 (53.7)	55.7 (3044)	3/3	2/3
	2004	2.24-6.73	70.4 (3143)	364 (5409)	2/2	2/2
	2005	5.73-2.27	90.9 (1586)	171 (7533)	2/2	1/2
	2006	5.86	253 (4317)	253 (4317)	1/1	1/1
	2009	0.113	BDL	14.7 (13008)	1/3	1/3
ΣPAH	2002		1531	4772	2/2	1/2
	2003		2513	5661	2/2	2/2
	2004		1631	8580	2/2	2/2
	2005		4084	6849	2/2	2/2
	2006		6272	6272	1/1	1/1
	2010		36.29	14086	2/2	1/2
	2011		59.50	2144	2/2	1/2
Chrysene	2004		42.6	650	2/2	1/2
Dibenzo(a,h)anthracene	2010		BDL	131	1/2	1/2
ΣPCB	2003		82.8	222	2/2	2/2
	2005		53.7	109	2/2	1/2
	2010		BDL	75.3	1/2	1/2
New River Outlet						
Chlorpyrifos	2004	0.9	BDL	17.1 (1900)	1/2	1/2
	2005	0.41-0.49	BDL	11.8 (2408)	2/3	1/3
Salton Sea USGS9						
ΣPCB	2010		BDL	79.2	1/2	1/2

Table 9. Contaminants in tissues of fish that exceed residue criteria from the Salton Sea as well as the Alamo and New Rivers.

Alamo River	Year	Site	Min	Max	Frequency of Exceedance
ΣDDTs*	2012	BWD	651	651	1/1
		Drop 10	118	335	2/2
		Central	64	397	2/2
		Peach	392	929	2/2
		Oleander	106	483	2/2
	2004	Outlet	116	546	3/3
	2011	Outlet	657	1001	2/2
	2012	Outlet	63	275	2/2
Se	2012	BWD	1.07	2.4	2/2
		Drop 10	1.98	2.22	2/2
		Central	1.84	2.11	2/2
		Peach	1.52	1.81	2/2
		Oleander	0.93	3	1/2
	2004	Outlet	0.714	4.57	1/3
	2012	Outlet	1.62	2.23	2/2
New River					
ΣDDTs*	2012	Boundary	19.0	25.3	2/2
		Greeson	12.8	14.0	1/2
		Rice 3	22.3	22.3	1/1
	2004	Outlet	195	195	1/1
	2011	Outlet	543	549	2/2
	2012	Outlet	29.5	132	2/2
Se	2012	Boundary	0.91	1.13	1/2
		Greeson	0.95	1.0	1/2
		Fig	1.37	1.56	2/2
		Outlet	1.48	2.14	2/2
Salton Sea					
Se	2007	n/a	2.24	3.52	5/5

**Table 10. Bioassessment metrics for Salton Sea tributaries for 2003.
Not in Appendix A (33.446111, -115.848333)**

Station Name	Sample Date	EPT Index (%)	Evenness	Shannon Diversity	IBI Score
Alamo River Outlet	5/15/03	29	0.39	0.82	1
New River Outlet	5/17/03	0	0.41	0.79	4
Salton Sea Drain*	5/14/03	4	0.5	1.04	14
New River at Fig Drain	5/11/06	2	0.51	1.23	9

Table 11. Toxicity metrics for water and sediments sampled in 2011 and 2012 from the Salton Sea, the Alamo and New Rivers. Blank spaces indicate samples that were not evaluated.

Sites 2011	Date	Matrix	Species	Growth (mg/individual)	Survival %	Biomass (mg/individual)
Laboratory Control	Oct-11	Water	Hyalella azteca		92±4.5	
	Oct-11	Water	Hyalella azteca		100	
	Oct-11	Water	Hyalella azteca		90±17	
	Oct-11	Water	Hyalella azteca		100	
	May-11	Water	Hyalella azteca		100	
	May-11	Water	Hyalella azteca		100	
	May-11	Water	Hyalella azteca		96±5.5	
	May-11	Water	Atherinops affinis		80±14	1.32±0.558
	May-11	Water	Atherinops affinis		80+20	0.784+0.291
Laboratory Control	May-11	Sediment	Hyalella azteca	0.170±0.036	96±5.2	
	Nov-11	Sediment	Hyalella azteca	0.151±0.036	93±8.9	
	Oct-11	Sediment	Hyalella azteca	0.119±0.022	88±7.1	
	Oct-11	Sediment	Hyalella azteca	0.094±0.019	96±7.4	
	Oct-11	Sediment	Hyalella azteca	0.158±0.019	99±3.5	
Alamo River at International boundary	Oct-11	Water	Hyalella azteca		98±4.5	
	Oct-11	Sediment	Hyalella azteca	0.382±0.055	88±21	
	May-11	Water	Hyalella azteca		100±0	
	May-11	Sediment	Hyalella azteca	0.265±0.036	95±5.4	
Alamo River at Drop 10 Central Drain	Oct-11	Sediment	Hyalella azteca	0.258±0.18	19±18	
Alamo River Outlet	Oct-11	Water	Hyalella azteca		0	
	Oct-11	Sediment	Hyalella azteca	.0135± .458	73±2.1	
	May-11	Water	Hyalella azteca		92±13	
	May-11	Sediment	Hyalella azteca	0.152±0.105	59±20	

New River at Boundary	Oct-11	Water	Hualella azteca		98±4.5
	Oct-11	Sediment	Hualella azteca	0.152±0.080	21±18
	May-11	Water	Hualella azteca		100±0
	May-11	Sediment	Hualella azteca	0.116±0.029	78±23
New River Outlet	Oct-11	Water	Hualella azteca		16.4±16.9
	Oct-11	Sediment	Hualella azteca	0.173±0.043	86±9.9
	May-11	Water	Hualella azteca		98±4.5
	May-11	Sediment	Hualella azteca	0.143±.0515	80±17
Salton Sea USGS7	May-11	Water	Atherinops affinis	40±14	0.312±0.110
	May-11	Sediment	Hualella azteca	0.168±0.022	84±20
Salton Sea USGS9	May-11	Water	Atherinops affinis	16±22	0.148±0.206
	May-11	Sediment	Hualella azteca	0.140±0.059	70±25
Salton Sea USGS2	May-11	Water	Atherinops affinis	36±26	0.236±0.230
	May-11	Sediment	Hualella azteca	0.150±0.056	53±23

Sites 2012	Date	Matrix	Species	Growth (mg/individual)	Survival %	Biomass (mg/individual)
Laboratory Control	Oct-12	Water	Hualella azteca		93±5	
	Oct-12	Water	Hualella azteca		100	
	Oct-12	Water	Hualella azteca		98.3±3.73	
	Oct-12	Water	Hualella azteca		95.4±10.3	
	May-12	Water	Hualella azteca		100	
	May-12	Water	Hualella azteca		98±4.5	
	May-12	Water	Hualella azteca		100	
	May-12	Water	Hualella azteca		96±5.5	
Alamo River Outlet	Oct-12	Water	Hualella azteca		60.6±11.4	
Alamo River Outlet	Oct-12	Sediment	Hualella azteca	0.101±0.015	74±12	
Alamo River Outlet	May-12	Water	Hualella azteca		94±13	

New River at boundary	Oct-12	Water	Hyalella azteca	94±5.33
New River at boundary	May-12	Water	Hyalella azteca	93.8±5.7
New River Outlet	Oct-12	Water	Hyalella azteca	66±22
New River Outlet	Oct-12	Sediment	Hyalella azteca	0.111±.0389
New River Outlet	May-12	Water	Hyalella azteca	38.5±16.8
				86.5±15.0

9.0 APPENDICES

Appendix A. Sample site coordinates.

Sites where water, sediment or fish tissues were sampled.

Location	Latitude	Longitude	Map #
Alamo River at International Boundary	32.67506	-115.37008	1
Barbara Worth Drain	32.79278	-115.41194	2
Alamo River at Drop 10 Central Drain	32.82611	-115.43250	3
Central Drain	32.83083	-115.44694	4
Peach Drain	32.84708	-115.40470	5
Oleander Drain	32.96725	-115.44877	6
Alamo River Outlet	33.19920	-115.59710	7
New River at Boundary	32.66583	-115.50222	8
New River at Greeson Drain	32.74448	-115.65145	9
New River at Fig Drain	32.76118	-115.70129	10
Rice 3 Drain	32.87472	-115.65270	11
New River Outlet	33.10472	-115.66361	12
Salton Sea USGS2	33.23333	-115.75000	13
Salton Sea USGS7	33.32500	-115.81111	14
Salton Sea USGS9	33.40000	-115.92500	15

Appendix B. Summary of matrices, constituents, frequency, and locations sampled for the Salton Sea, Alamo and New Rivers.

Dates	Matrix	Constituents Analyzed	Frequency	Location
2011	Water Column	Toxicity	May October	Alamo River (IB; Drop 10; Outlet)
			May	New River (IB; Outlet) Salton Sea (USGS 2;7;9)
		Metals	May October April May Oct Feb April May	Alamo River (IB; Outlet) New River (IB; Outlet)
		Organochlorine Pesticides	Feb April May October Feb April May October October May	Salton Sea (USGS 2;7;9) Alamo River (IB) Drop 10 CD Outlet New River (IB; Outlet) Salton Sea (USGS 2;7;9)
		Organophosphate Carbamate Pesticides	April May Oct April Feb April May October Feb April May October May	Alamo River (IB) Drop 10 CD Outlet New River (IB; Outlet) Salton Sea (USGS 2;7;9)
		Pyrethroid and Triazine Pesticides	May October	Alamo River (IB; Drop 10; Outlet) New River (IB; Outlet) Salton Sea (USGS 2;7;9)
		Volatile Organic Compounds	May	New River (IB; Outlet) Alamo River (IB; Drop 10; Outlet) New River (IB; Outlet) Salton Sea (USGS 2;7;9)
		PBDEs	May October	New River (IB; Outlet) Alamo River (IB; Drop 10; Outlet) New River (IB; Outlet) Salton Sea (USGS 2;7;9)
			May October	

		Toxicity	May	Alamo River (Outlet)
2012		Metals	May October	New River (IB;Outlet) Alamo River (Outlet)
		Organochlorine Pesticides	October	New River (IB; Outlet) Alamo River (BWD; Drop 10; CD; PD; OD; Outlet)
		Organophosphate Carbamate Pesticides	May October	New River (GD; FD, Rice 3D, Outlet) Alamo River (BWD; Drop 10; CD; PD, OD; Outlet) New River (IB; GD; FD; Rice 3D; Outlet)
			May October	Alamo River (BWD; Drop 10, CD, PD, OD; Outlet) New River (IB; GD; FD; Rice 3D; Outlet)
2011	Sediment	Toxicity	May October	Alamo River (IB; Drop 10; Outlet)
<u>2011</u>		Metals	<u>May October</u>	New River (IB; Outlet) Salton Sea (USGS 2;7;9) Alamo River (<u>IB</u>)
2002-2012		Organochlorine, Pyrethroid and Triazines, Organophosphate and carbamate Pesticides; PAHs, PCBs	May October*	Drop 10 Outlet New River (IB; Outlet) Salton Sea (USGS 9;7;2)
<u>2002/2003</u>		Organochlorine Pyrethroid/Triazine	<u>Apr/May</u>	<u>New River (FD; RD)</u>
<u>2011</u>		PBDEs	October	Alamo River (IB; Outlet) New River (IB;Outlet)
2012		Toxicity	October	Alamo River (IB;

		PBDEs		Outlet) New River (Outlet)
2012	Fish Tissue	Organochlorine Pesticides PCBs; metals	May May October Nov Feb Apr May October May October	Alamo River (BWD) Drop 10; CD; PD; OD Outlet
2004			Nov	New River (IB; GD; FD; RD) Outlet
2011			Feb	
2012			May October	
<u>2007</u>		Organochlorine Pesticides PBDEs, PCBs	October	Salton Sea
			November	
2012		Organophosphates Carbamates	May	Alamo River (OD) Outlet
2004				New River (FD)
2012				
2003	Field Measure ments	Bioassessments	May	Alamo River (Outlet) New River (Outlet) Salton Sea New River (FD)
2006				

*Collection Months

2003 April Nov

2006 May

2007 October

2008-2009 April October

^aCollection Months

2003 April Nov

2006 May

2007 October

2008-2009 April October

2012 October

Appendix C. List of Analytes, Methods, Method Detection limits and Reporting limits.

1. Contaminants evaluated in water.

Analyte	Method	Laboratory	Min MDL	Max MDL	Min RL	Max RL
PCB 005; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 008; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 015; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 018; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 027; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 028; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 029; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 031; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 033; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 044; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 049; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 052; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 056; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 060; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 066; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 070; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 074; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 077; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 087; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 095; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 097; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 099; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 101; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 105; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 110; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 114; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002

PCB 118; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 126; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 128; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 137; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 138; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 141; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 149; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 151; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 153; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 156; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 157; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 158; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 170; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 174; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 177; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 180; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 183; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 187; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 189; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 194; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 195; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 200; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 201; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 203; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 206; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
PCB 209; Total; ug/L	EPA 8082M	DFG-WPCL	0.001	0.001	0.002	0.002
Aldrin; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Chlordane, cis-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Chlordane, trans-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002

Dacthal; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
DDD(o,p'); Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
DDD(p,p'); Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
DDE(o,p'); Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
DDE(p,p'); Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
DDMU(p,p'); Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
DDT(o,p'); Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
DDT(p,p'); Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
Dieldrin; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Endosulfan I; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Endosulfan II; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Endosulfan Sulfate; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Endrin Aldehyde; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
Endrin Ketone; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
Endrin; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
HCH, alpha-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
HCH, beta-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
HCH, gamma-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Heptachlor Epoxide; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Heptachlor; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Hexachlorobenzene; Total; ug/L	EPA 8081BM	DFG-WPCL	0.0005	0.0005	0.001	0.001
Methoxychlor; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Mirex; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Nonachlor, cis-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Nonachlor, trans-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Oxadiazon; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Oxychlordane; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Tedion; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Aspon; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050

Azinphos Ethyl; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Azinphos Methyl; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Sulprofos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Carbophenothion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Chlorfenvinphos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Chlorpyrifos Methyl; Total; ug/L	EPA 8141AM	DFG-WPCL	0.020	0.020	0.050	0.050
Chlorpyrifos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.005	0.005	0.020	0.020
Ciodrin; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Coumaphos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.040	0.040	0.050	0.050
Demeton-s; Total; ug/L	EPA 8141AM	DFG-WPCL	0.040	0.040	0.050	0.050
Diazinon; Total; ug/L	EPA 8141AM	DFG-WPCL	0.005	0.005	0.020	0.020
Dichlofenthion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Dichlorvos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Dicrotophos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Dimethoate; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Dioxathion ; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Disulfoton; Total; ug/L	EPA 8141AM	DFG-WPCL	0.010	0.010	0.050	0.050
Ethion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.020	0.020	0.050	0.050
Ethoprop; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Famphur ; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Fenchlorphos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Fenitrothion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Fensulfothion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Fenthion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Fonofos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.020	0.020	0.050	0.050
Leptophos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Malathion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Merphos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Methidathion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050

Mevinphos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Parathion, Ethyl; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Parathion, Methyl; Total; ug/L	EPA 8141AM	DFG-WPCL	0.010	0.010	0.050	0.050
Phorate; Total; ug/L	EPA 8141AM	DFG-WPCL	0.050	0.050	0.100	0.100
Phosmet; Total; ug/L	EPA 8141AM	DFG-WPCL	0.050	0.050	0.100	0.100
Phosphamidon; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Sulfotep; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Terbufos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Tetrachlorvinphos; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Thionazin; Total; ug/L	EPA 8141AM	DFG-WPCL	0.040	0.040	0.050	0.050
Tokuthion; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Trichlorfon; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Trichloronate; Total; ug/L	EPA 8141AM	DFG-WPCL	0.030	0.030	0.050	0.050
Selenate as Se; Dissolved; ug/L	BR SOP 0061	BR	0.080	0.080	0.250	0.250
Selenite as Se; Dissolved; ug/L	BR SOP 0061	BR	0.030	0.030	0.100	0.100
Aluminum; Dissolved; ug/L	EPA 1638M	MLML-TM	0.45	0.45	0.45	0.45
Aluminum; Dissolved; ug/L	EPA 1638M	MPSL-DFG	1.70	1.70	5.00	5.00
Arsenic; Dissolved; ug/L	EPA 1638M	MLML-TM	0.27	0.27	0.27	0.27
Arsenic; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.04	0.04	0.06	0.06
Arsenic; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.10	0.10	0.30	0.30
Cadmium; Dissolved; ug/L	EPA 1638M	MLML-TM	0.16	0.16	0.16	0.16
Cadmium; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.01	0.01	0.03	0.03
Cadmium; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.03	0.03	0.10	0.10
Chromium; Dissolved; ug/L	EPA 1638M	MLML-TM	0.21	0.21	0.21	0.21
Chromium; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.10	0.10	0.30	0.30
Chromium; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.29	0.29	1.00	1.00
Copper; Dissolved; ug/L	EPA 1638M	MLML-TM	0.16	0.16	0.16	0.16
Copper; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.04	0.04	0.10	0.10
Lead; Dissolved; ug/L	EPA 1638M	MLML-TM	0.16	0.16	0.16	0.16

Lead; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.015	0.015	0.030	0.030
Lead; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.21	0.21	0.50	0.50
Manganese; Dissolved; ug/L	EPA 1638M	MLML-TM	0.23	0.23	0.23	0.23
Manganese; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.03	0.03	0.05	0.05
Manganese; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	1.08	1.08	3.00	3.00
Mercury; Dissolved; ng/L	EPA 1631EM	MPSL-DFG	0.200	0.200	0.200	0.200
Nickel; Dissolved; ug/L	EPA 1638M	MLML-TM	0.11	0.11	0.11	0.11
Nickel; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.01	0.01	0.03	0.03
Nickel; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.12	0.12	0.40	0.40
Selenium; Dissolved; ug/L	EPA 1638M	MLML-TM	0.66	0.66	0.66	0.66
Selenium; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.60	0.60	1.00	1.00
Silver; Dissolved; ug/L	EPA 1638M	MLML-TM	0.02	0.02	0.02	0.02
Silver; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.02	0.02	0.04	0.04
Silver; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.08	0.08	0.20	0.20
Zinc; Dissolved; ug/L	EPA 1638M	MLML-TM	0.33	0.33	0.33	0.33
Zinc; Dissolved; ug/L	EPA 1638M	MPSL-DFG	0.50	0.50	0.70	0.70
Zinc; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	3.20	3.20	10.0	10.0
Bifenthrin; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Cyfluthrin, total; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.004	0.004
Cyhalothrin, Lambda, Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Cypermethrin, Total; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.004	0.004
Deltamethrin/Tralomethrin; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.004	0.004
Esfenvalerate/Fenvalate Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
Fenpropathrin; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.004	0.004
Permethrin, cis-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.003	0.003	0.005	0.005
Permethrin, trans-; Total; ug/L	EPA 8081BM	DFG-WPCL	0.003	0.003	0.005	0.005
Ametryn; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002		0.005
Atraton; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002		0.005
Atrazine; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005

Cyanazine; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Desethyl-Atrazine; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Desisopropyl-Atrazine; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Desmetryn; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Dipropetryn; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Hydroxyatrazine, 2-; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Prometon; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Prometryn; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Propazine; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Secbumeton; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Simazine; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Simetryn; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Terbutylazine; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Terbutryl; Total; ug/L	EPA 619M	DFG-WPCL	0.002	0.002	0.005	0.005
Trichlorobenzene, 1,2,4-; Total; ug/L	EPA 8260	DFG-WPCL	0.092	0.262	0.500	2.00
Bromobenzene; Total; ug/L	EPA 8260	DFG-WPCL	0.041	0.277	0.200	2.00
Bromo-chloromethane; Total; ug/L	EPA 8260	DFG-WPCL	0.070	0.342	0.400	2.00
Bromo-dichloromethane; Total; ug/L	EPA 8260	DFG-WPCL	0.035	0.200	0.200	2.00
Bromoform; Total; ug/L	EPA 8260	DFG-WPCL	0.071	0.189	0.400	2.00
Butylbenzene, n-; Total; ug/L	EPA 8260	DFG-WPCL	0.057	0.161	0.300	2.00
Butylbenzene, sec-; Total; ug/L	EPA 8260	DFG-WPCL	0.053	0.162	0.300	2.00
Butylbenzene, tert-; Total; ug/L	EPA 8260	DFG-WPCL	0.062	0.180	0.300	2.00
Carbon Tetrachloride; Total; ug/L	EPA 8260	DFG-WPCL	0.041	0.156	0.200	2.00
Chlorobenzene; Total; ug/L	EPA 8260	DFG-WPCL	0.042	0.090	0.200	2.00
Chlorotoluene, 2-; Total; ug/L	EPA 8260	DFG-WPCL	0.026	0.176	0.100	2.00
Chlorotoluene, 4-; Total; ug/L	EPA 8260	DFG-WPCL	0.033	0.117	0.200	2.00
Dibromo-3-Chloropropane, 1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.106	0.401	0.500	2.00
Dibromochloromethane ; Total; ug/L	EPA 8260	DFG-WPCL	0.071	0.122	0.400	2.00
Dibromomethane; Total; ug/L	EPA 8260	DFG-WPCL	0.075	0.191	0.400	2.00

Dichloroethane, 1,1-; Total; ug/L	EPA 8260	DFG-WPCL	0.023	0.132	0.100	2.00
Dichloroethane, 1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.050	0.111	0.300	2.00
Dichloroethylene, 1,1-; Total; ug/L	EPA 8260	DFG-WPCL	0.048	0.328	0.200	2.00
Dichloroethylene, cis 1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.063	0.215	0.300	2.00
Dichloroethylene, trans 1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.043	0.277	0.200	2.00
Dichloropropane, 1,3-; Total; ug/L	EPA 8260	DFG-WPCL	0.036	0.133	0.200	2.00
Dichloropropane, 2,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.067	0.127	0.300	2.00
Dichloropropene, 1,1-; Total; ug/L	EPA 8260	DFG-WPCL	0.027	0.146	0.100	2.00
Isopropylbenzene; Total; ug/L	EPA 8260	DFG-WPCL	0.017	0.120	0.100	2.00
Isopropyltoluene, p-; Total; ug/L	EPA 8260	DFG-WPCL	0.053	0.142	0.300	2.00
Propylbenzene, n-; Total; ug/L	EPA 8260	DFG-WPCL	0.031	0.111	0.200	2.00
Tetrachloroethane, 1,1,1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.043	0.140	0.200	2.00
Tetrachloroethane, 1,1,2,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.059	0.212	0.300	2.00
Trichlorobenzene, 1,2,3-; Total; ug/L	EPA 8260	DFG-WPCL	0.087	0.238	0.400	2.00
Trichloroethane, 1,1,1-; Total; ug/L	EPA 8260	DFG-WPCL	0.040	0.222	0.200	2.00
Trichloroethane, 1,1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.089	0.251	0.400	2.00
Trichloroethylene; Total; ug/L	EPA 8260	DFG-WPCL	0.062	0.174	0.300	2.00
Trichloropropane, 1,2,3-; Total; ug/L	EPA 8260	DFG-WPCL	0.050	0.178	0.200	2.00
Trimethylbenzene, 1,3,5-; Total; ug/L	EPA 8260	DFG-WPCL	0.024	0.142	0.100	2.00
Trimethylbenzene, 1,2,4-; Total; ug/L	EPA 8260	DFG-WPCL	0.049	0.162	0.200	2.00
Chloroform; Total; ug/L	EPA 8260	DFG-WPCL	0.043	0.157	0.200	2.00
Dibromoethane, 1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.090	0.103	0.500	2.00
Dichloropropane, 1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.064	0.190	0.300	2.00
Tetrachloroethylene; Total; ug/L	EPA 8260	DFG-WPCL	0.052	0.315	0.300	2.00
Benzene; Total; ug/L	EPA 8260	DFG-WPCL	0.044	0.142	0.200	2.00
Ethylbenzene; Total; ug/L	EPA 8260	DFG-WPCL	0.038	0.092	0.200	2.00
Methyl Tert-butyl Ether; Total; ug/L	EPA 8260	DFG-WPCL	0.077	0.093	0.400	2.00
Toluene; Total; ug/L	EPA 8260	DFG-WPCL	0.036	0.100	0.200	2.00
Xylene, m/p-; Total; ug/L	EPA 8260	DFG-WPCL	0.065	0.269	0.300	2.00

Xylene, o-; Total; ug/L	EPA 8260	DFG-WPCL	0.054	0.122	0.300	2.00
Dichlorobenzene, 1,2-; Total; ug/L	EPA 8260	DFG-WPCL	0.064	0.172	0.300	2.00
Dichlorobenzene, 1,3-; Total; ug/L	EPA 8260	DFG-WPCL	0.051	0.193	0.300	2.00
Dichlorobenzene, 1,4-; Total; ug/L	EPA 8260	DFG-WPCL	0.051	0.219	0.300	2.00
Acenaphthene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Acenaphthene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Acenaphthylene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Acenaphthylene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Anthracene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Anthracene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Benz(a)anthracene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Benz(a)anthracene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Benzo(a)pyrene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Benzo(a)pyrene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Benzo(b)fluoranthene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Benzo(b)fluoranthene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Benzo(e)pyrene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Benzo(e)pyrene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Benzo(g,h,i)perylene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Benzo(g,h,i)perylene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Benzo(k)fluoranthene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Benzo(k)fluoranthene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Biphenyl; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Biphenyl; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Chrysene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Chrysene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Chrysenes, C1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Chrysenes, C2-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Chrysenes, C3-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020

Dibenz(a,h)anthracene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Dibenz(a,h)anthracene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Dibenzothiophene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Dibenzothiophene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Dibenzothiophenes, C1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Dibenzothiophenes, C2-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Dibenzothiophenes, C3-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Dimethylnaphthalene, 2,6-; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Dimethylnaphthalene, 2,6-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Dimethylphenanthrene, 3,6-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Fluoranthene/Pyrenes, C1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Fluoranthene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Fluoranthene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Fluorene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Fluorene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Fluorenes, C1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Fluorenes, C2-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Fluorenes, C3-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Indeno(1,2,3-c,d)pyrene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Indeno(1,2,3-c,d)pyrene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Methyldibenzothiophene, 4-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Methylfluoranthene, 2-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Methylfluorene, 1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Methylnaphthalene, 1-; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Methylnaphthalene, 1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Methylnaphthalene, 2-; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Methylnaphthalene, 2-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Methylphenanthrene, 1-; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Methylphenanthrene, 1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020

Naphthalene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Naphthalene; Total; ug/L	EPA 8260	DFG-WPCL	0.087	0.087	0.400	0.400
Naphthalene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Naphthalenes, C1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Naphthalenes, C2-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Naphthalenes, C3-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Naphthalenes, C4-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Perylene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Perylene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Phenanthrene/Anthracene, C1-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Phenanthrene/Anthracene, C2-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Phenanthrene/Anthracene, C3-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Phenanthrene/Anthracene, C4-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Phenanthrene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Phenanthrene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Pyrene; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Pyrene; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
Trimethylnaphthalene, 2,3,5-; Total; ug/L	EPA 625M	CSULB-IIRMES	0.001	0.001	0.005	0.005
Trimethylnaphthalene, 2,3,5-; Total; ug/L	EPA 8270M	DFG-WPCL	0.00500	0.01020	0.00500	0.01020
PBDE 017; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 025; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 028; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 030; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 033; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 047; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 049; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 066; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 085; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 099; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002

PBDE 100; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 138; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 153; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 154; Total; ug/L	EPA 8081BM	DFG-WPCL	0.001	0.001	0.002	0.002
PBDE 179; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
PBDE 183; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
PBDE 184; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
PBDE 188; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
PBDE 190; Total; ug/L	EPA 8081BM	DFG-WPCL	0.002	0.002	0.005	0.005
PBDE 200; Total; ug/L	EPA 8081BM	DFG-WPCL	0.005	0.005	0.010	0.010
PBDE 201; Total; ug/L	EPA 8081BM	DFG-WPCL	0.005	0.005	0.010	0.010
PBDE 202; Total; ug/L	EPA 8081BM	DFG-WPCL	0.005	0.005	0.010	0.010
PBDE 203; Total; ug/L	EPA 8081BM	DFG-WPCL	0.005	0.005	0.010	0.010
PBDE 206; Total; ug/L	EPA 8081BM	DFG-WPCL	0.010	0.010	0.025	0.025
PBDE 207; Total; ug/L	EPA 8081BM	DFG-WPCL	0.010	0.010	0.025	0.025
PBDE 208; Total; ug/L	EPA 8081BM	DFG-WPCL	0.010	0.010	0.025	0.025
PBDE 209; Total; ug/L	EPA 8081BM	DFG-WPCL	0.050	0.050	0.100	0.100

Contaminants evaluated in sediments.

Analyte	Method	Laboratory	Min MDL	Max MDL	Min RL	Max RL
PBDE 017/25; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.154	0.198	0.625	0.806
PBDE 028/33; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.184	0.237	0.625	0.806
PBDE 030; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.151	0.195	0.625	0.806
PBDE 047; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.280	0.361	0.625	0.806
PBDE 049; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.167	0.216	0.625	0.806
PBDE 066; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.212	0.274	0.625	0.806
PBDE 085; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.325	0.419	0.625	0.806
PBDE 099; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.188	0.242	0.625	0.806
PBDE 100; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.153	0.198	0.625	0.806
PBDE 138; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.168	0.216	0.625	0.806
PBDE 153; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.154	0.199	0.625	0.806
PBDE 154; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.188	0.243	0.625	0.806
PBDE 179; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.262	0.338	1.25	1.61
PBDE 183; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.430	0.554	1.25	1.61
PBDE 184; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.140	0.181	1.25	1.61
PBDE 188; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.190	0.245	1.25	1.61
PBDE 190; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.325	0.419	1.25	1.61
PBDE 200/203; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.367	0.474	2.50	3.22
PBDE 201; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.171	0.220	2.50	3.22
PBDE 202; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.307	0.396	2.50	3.22
PBDE 206; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.752	0.970	3.75	4.83
PBDE 207; Total; ng/g dw	EPA 8081BM	DFG-WPCL	1.33	1.72	3.75	4.83
PBDE 208; Total; ng/g dw	EPA 8081BM	DFG-WPCL	1.05	1.35	3.75	4.83
PBDE 209; Total; ng/g dw	EPA 8081BM	DFG-WPCL	3.32	4.29	12.5	16.1
PCB AROCLOR 1248; Total; ng/g dw	Newman, et al., 1988	DFG-WPCL	6.13	7.33	30.7	36.7
PCB AROCLOR 1254; Total; ng/g dw	Newman, et al., 1988	DFG-WPCL	2.45	2.93	12.3	14.7

PCB AROCLOR 1260; Total; ng/g dw	Newman, et al., 1988	DFG-WPCL	2.45	2.93	12.3	14.7
PCB 008; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 018; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 027; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 028; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 029; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 031; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 033; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 044; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 049; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 052; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 056; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 060; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 064; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 066; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 070; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.368	0.440	1.10	1.32
PCB 074; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 077; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 087; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.368	0.440	1.10	1.32
PCB 095; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.368	0.440	1.10	1.32
PCB 097; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 099; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 101; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.368	0.440	1.10	1.32
PCB 105; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 110; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.368	0.440	1.10	1.32
PCB 114; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 118; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.368	0.440	1.10	1.32
PCB 126; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 128; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880

PCB 137; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 138; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 141; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 146; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 149; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 151; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 153; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 156; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 157; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 158; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 169; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 170; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 174; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 177; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 180; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 183; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 187; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 189; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 194; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 195; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 198/199; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 200; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 201; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 203; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 206; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
PCB 209; Total; ng/g dw	EPA 8082M	DFG-WPCL	0.245	0.293	0.736	0.880
Aldrin; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.508	0.607	1.23	1.47
Chlordane, cis-; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.491	0.586	1.23	1.47
Chlordane, trans-; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.552	0.660	1.23	1.47

Dacthal; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.119	0.142	1.23	1.47
DDD(o,p'); Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.118	0.141	1.23	1.47
DDD(p,p'); Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.152	0.182	1.23	1.47
DDE(o,p'); Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.218	0.261	2.45	2.93
DDE(p,p'); Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.589	0.704	2.45	2.93
DDMU(p,p'); Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.132	0.158	3.68	4.40
DDT(o,p'); Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.265	0.317	3.68	4.40
DDT(p,p'); Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.191	0.229	6.13	7.33
Dieldrin; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.530	0.633	0.610	0.730
Endosulfan I; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.687	0.821	2.45	2.93
Endrin; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.221	0.264	2.45	2.93
HCH, alpha-; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.321	0.384	0.610	0.730
HCH, beta-; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.258	0.308	1.23	1.47
HCH, gamma-; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.177	0.211	0.610	0.730
Heptachlor Epoxide; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.302	0.361	1.23	1.47
Heptachlor; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.437	0.522	1.23	1.47
Hexachlorobenzene; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.424	0.507	0.849	1.01
Methoxychlor; Total; ng/g dw	EPA 8081BM	DFG-WPCL	1.23	1.47	3.68	4.40
Mirex; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.368	0.440	1.84	2.20
Nonachlor, cis-; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.378	0.452	1.23	1.47
Nonachlor, trans-; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.238	0.284	1.23	1.47
Oxadiazon; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.667	0.798	1.23	1.47
Oxychlordane; Total; ng/g dw	EPA 8081BM	DFG-WPCL	0.581	0.695	1.23	1.47
Chlorpyrifos Methyl; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Chlorpyrifos; Total; ng/g dw	EPA 8141AM	DFG-WPCL	3.15	3.77	6.29	7.53
Diazinon; Total; ng/g dw	EPA 8141AM	DFG-WPCL	3.15	3.77	6.29	7.53
Dichlofenthion; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Dioxathion ; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Ethion; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7

Ethoprop; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Fenchlorphos; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Fenitrothion; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Fonofos; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Malathion; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Merphos; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Parathion, Ethyl; Total; ng/g dw	EPA 8141AM	DFG-WPCL	6.29	7.53	12.6	15.1
Parathion, Methyl; Total; ng/g dw	EPA 8141AM	DFG-WPCL	6.29	7.53	12.6	15.1
Phosphamidon; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Sulfotep; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Thionazin; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Tokuthion; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Trichloronate; Total; ng/g dw	EPA 8141AM	DFG-WPCL	15.7	18.8	31.5	37.7
Bifenthrin; Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.082	0.100	0.326	0.397
Cyfluthrin, total; Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.168	0.205	1.63	1.99
Cyhalothrin, Lambda, Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.069	0.084	0.652	0.795
Cypermethrin, Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.171	0.208	1.63	1.99
Deltamethrin/Tralomethrin; Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.289	0.353	1.30	1.59
Esfenvalerate/Fenvalerate, Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.170	0.207	0.652	0.795
Fenpropathrin; Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.057	0.069	0.326	0.397
Permethrin, cis-; Total; ng/g dw	WPCL SOP 67	DFG-WPCL	0.630	0.769	1.63	1.99
Permethrin, trans-; Total; ng/g dw	WPCL SOP 67	DFG-WPCL	1.04	1.27	3.26	3.97
Total Organic Carbon; Total; % dw	EPA 415.1	CSULB-IIRMES	0.01	0.01	0.02	0.02
Arsenic; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.10	0.10	0.30	0.30
Cadmium; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.03	0.03	0.10	0.10
Chromium; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.29	0.29	1.00	1.00
Copper; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.54	0.54	1.50	1.50
Lead; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.21	0.21	0.50	0.50
Manganese; Total; mg/Kg dw	EPA	MPSL-DFG	1.08	1.08	3.00	3.00

	200.8					
Mercury; Total; mg/Kg dw	EPA 7473	MPSL-DFG	0.004	0.004	0.012	0.012
Nickel; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.12	0.12	0.40	0.40
Silver; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	0.08	0.08	0.20	0.20
Zinc; Total; mg/Kg dw	EPA 200.8	MPSL-DFG	3.20	3.20	10.0	10.0
Acenaphthene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Acenaphthylene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Anthracene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Benz(a)anthracene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Benzo(a)pyrene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Benzo(b)fluoranthene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Benzo(e)pyrene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Benzo(g,h,i)perylene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Benzo(k)fluoranthene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Biphenyl; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Chrysene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Dibenz(a,h)anthracene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Dibenzothiophene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Dimethylnaphthalene, 2,6;- Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Fluoranthene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Fluorene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Indeno(1,2,3-c,d)pyrene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Methylnaphthalene, 1;- Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Methylnaphthalene, 2;- Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Methylphenanthrene, 1;- Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Naphthalene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Perylene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Phenanthrene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Pyrene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Trimethylnaphthalene, 2,3,5;- Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5

PBDE 017; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 028; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 047; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 066; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 085; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 099; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 100; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 138; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 153; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 154; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 183; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PBDE 190; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	0.25	0.25	1	1
PCB 003; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 008; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 018; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 028; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 031; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 033; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 037; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 044; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 049; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 052; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 056; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 066; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 070; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 074; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 077; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 081; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 087; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5

PCB 095; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 097; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 099; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 101; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 105; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 110; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 114; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 118; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 119; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 123; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 126; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 128; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 138; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 141; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 149; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 151; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 153; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 156; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 157; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 158; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 167; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 168; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 169; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 170; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 174; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 177; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 180; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 183; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 187; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5

PCB 189; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 194; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 195; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 201; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 206; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
PCB 209; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Aldrin; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Chlordane, cis-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Chlordane, trans-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
DDD(o,p'); Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
DDD(p,p'); Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
DDE(o,p'); Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
DDE(p,p'); Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
DDT(o,p'); Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
DDT(p,p'); Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Dieldrin; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Endosulfan I; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Endosulfan II; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Endosulfan Sulfate; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Endrin Aldehyde; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Endrin Ketone; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Endrin; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
HCH, alpha-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
HCH, beta-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
HCH, delta-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
HCH, gamma-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Heptachlor Epoxide; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Heptachlor; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Hexachlorobenzene; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5

Methoxychlor; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Mirex; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Nonachlor, cis-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Nonachlor, trans-; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Oxychlordane; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	1	1	5	5
Perthane; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	5	5	10	10
sulprofos; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Chlorpyrifos; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	5	5	10	10
Demeton-s; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Diazinon; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	5	5	10	10
Dichlorvos; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Disulfoton; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Ethoprop; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Fenchlorphos; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Fensulfothion; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Fenthion; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Malathion; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	5	5	10	10
Mevinphos; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Parathion, Methyl; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Phorate; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Tetrachlorvinphos; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Tokuthion; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20
Trichloronate; Total; ng/g dw	EPA 8270C	CSULB-IIRMES	10	10	20	20

Appendix D. Species of fish sampled for chemical analyses.

Common Name	Name
Common Carp	<i>Cyprinus carpio</i>
Channel Catfish	<i>Ictalurus punctatus</i>
Tilapia spp.	<i>Tilapia sp.</i>
Flathead Catfish	<i>Pylodictis olivaris</i>
Mosquitofish	<i>Gambusia affinis</i>
Grass Carp	<i>Ctenopharyngodon idella</i>

Appendix E1. Concentrations of organochlorine insecticides in fish tissues (ng/g ww) of the Alamo River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

Station Name	Earliest Date Sampled	Common Name	Tissue	Lipid; Total; %	SumDDTs(ng/g ww)_BOGLakes	DDD(o,p'); ng/g ww	DDD(p,p'); Total; ng/g ww	DDE(o,p'); Total; ng/g ww	DDE(p,p'); Total; ng/g ww	DDMU(o,p'); Total; ng/g ww	DDT(o,p'); Total; ng/g ww	DDT(p,p'); Total; ng/g ww	Dieldrin; Total; ng/g ww
<u>Barbara Worth Drain</u>	05/07/12	Mosquitofish	whole organism	3.59	651.1	6.87	14.4	10.5	594	7.14	5.13	20.2	-0.43
<u>Alamo River at Drop 10 Central Drain</u>	05/07/12	Common Carp	fillet	0.29	334.507	DNQ, 0.287	1.44	DNQ, 0.780	332	DNQ, 1.77	-0.197	-0.142	0.962
Alamo River at Drop 10 Central Drain	10/16/12	Common Carp	fillet	0.301	118.593	-0.091	DNQ, 0.671	-0.169	117	1.04	DNQ, 0.593	DNQ, 0.329	1.15
<u>Central Drain</u>	05/08/12	Common Carp	fillet	0.384	64.819	DNQ, 0.513	DNQ, 0.869	DNQ, 0.437	63	DNQ, 0.596	-0.206	-0.149	1.57
Central Drain	10/15/12	Mosquitofish	whole organism	1.14	396.68	DNQ, 0.162	6.86	DNQ, 0.925	383	7.1	DNQ, 0.763	4.97	-0.422
<u>Peach Drain</u>	05/07/12	Mosquitofish	whole organism	3.53	928.65	6.31	18.2	7.94	879	15.4	DNQ, 1.30	15.9	-0.57
Peach Drain	10/15/12	Mosquitofish	whole organism	4.38	392.047	1.03	6.34	DNQ, 0.807	378	5.34	1.22	4.65	11.3
<u>Oleander Drain</u>	05/09/12	Common Carp	fillet	0.295	105.657	DNQ, 0.457	DNQ, 0.770	DNQ, 0.430	104	DNQ, 0.679	-0.213	-0.154	2.03
Oleander Drain	10/16/12	Mosquitofish	whole organism	6.93	482.55	5.81	14.3	3.18	447	10.9	1.66	10.6	10.7
<u>Alamo River Outlet</u>	11/7/04	Channel Catfish	fillet	1.06	545.91	2.29	11.1	3.57	523	8.8	DNQ, 1.97	DNQ, 3.98	7.9
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	0.306	115.5	-0.762	2.24	DNQ, 1.26	112	DNQ, 1.41	-1.01	-2.45	2.14
Alamo River Outlet	11/7/04	Tilapia spp.	fillet	0.842	314.61	1.25	6	2.16	304	5.19	DNQ, 1.20	-2.47	4.75
Alamo River Outlet	2/8/11	Channel Catfish	fillet	1.46	1001.32	5.68	20.7	11.1	950	15.1	DNQ, 1.74	12.1	15.1
Alamo River Outlet	4/22/11	Flathead Catfish	fillet	1.03	656.77	5.26	15.3	5.78	621	6.05	DNQ, 1.79	7.64	8.95
Alamo River Outlet	05/08/12	Common Carp	fillet	0.475	63.066	DNQ, 0.227	DNQ, 0.730	DNQ, 0.309	61.8	DNQ, 0.642	-0.208	-0.151	0.912
Alamo River Outlet	10/16/12	Common Carp	fillet	0.573	274.851	1.4	4.92	1.89	264	2.01	0.971	1.67	2.04

Station Name	Earliest Date Sampled	Common Name	Tissue	Adrin: Total; ng/g ww	Chlordane, cis; Total; ng/g ww	Chlordane, trans; Total; ng/g ww	SumChlordanes(ng/g ww)_BOGLakes	Dacthal; Total; ng/g ww	Endosulfan I; Total; ng/g ww	Endrin; Total; ng/g ww	HCH, alpha-; Total; ng/g ww	HCH, beta-; Total; ng/g ww	HCH, gamma-; Total; ng/g ww
<u>Barbara Worth Drain</u>	05/07/12	Mosquitofish	whole organism	-0.412	1.11	DNQ, 0.491	10.061	-0.096	-0.557	-0.179	-0.261	-0.209	-0.143
<u>Alamo River at Drop 10 Central Drain</u>	05/07/12	Common Carp	fillet	-0.377	-0.364	-0.41	0.509	1.33	-0.51	DNQ, 0.885	-0.238	-0.191	-0.131
Alamo River at Drop 10 Central Drain	10/16/12	Common Carp	fillet	-0.393	-0.38	-0.427	0	63.8	-0.532	-0.171	-0.249	-0.199	-0.137
<u>Central Drain</u>	05/08/12	Common Carp	fillet	-0.395	-0.382	-0.43	0.375	2.79	DNQ, 0.756	DNQ, 1.18	-0.25	-0.201	-0.138
Central Drain	10/15/12	Mosquitofish	whole organism	-0.405	1.8	DNQ, 0.782	13.122	27.2	-5.48	-0.176	-0.256	-0.205	-0.141
<u>Peach Drain</u>	05/07/12	Mosquitofish	whole organism	-0.546	4.02	DNQ, 0.995	15.115	DNQ, 0.174	-0.739	-0.238	-0.346	-0.277	-0.19
Peach Drain	10/15/12	Mosquitofish	whole organism	-0.403	1.33	DNQ, 0.679	5.531	DNQ, 0.392	-5.45	-1.75	-0.255	-0.204	-0.14
<u>Oleander Drain</u>	05/09/12	Common Carp	fillet	-0.408	DNQ, 0.426	-0.443	0.861	1.72	DNQ, 0.863	DNQ, 1.64	-0.258	-0.207	-0.142
Oleander Drain	10/16/12	Mosquitofish	whole organism	-0.395	4.32	DNQ, 0.752	12.822	DNQ, 0.589	-5.35	-17.2	-0.25	-0.201	-0.138
<u>Alamo River Outlet</u>	11/7/04	Channel Catfish	fillet	-0.259	1.6	DNQ, 0.778	6.068	295	-1.08	-0.938			
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	-0.258	-0.711	-0.401	0.465	63.4	-1.07	-0.933			
Alamo River Outlet	11/7/04	Tilapia spp.	fillet	-0.26	DNQ, 0.993	-0.404	2.303	190	-1.08	-0.94			
Alamo River Outlet	2/8/11	Channel Catfish	fillet	-0.412	3.82	2.09	14.06	66.4	-0.557	DNQ, 1.57			
Alamo River Outlet	4/22/11	Flathead Catfish	fillet	-0.41	1.73	1.32	8.233	27.9	-0.554	2.15			
Alamo River Outlet	05/08/12	Common Carp	fillet	-0.4	-0.386	-0.434	0.351	1.43	-0.54	DNQ, 0.815	-0.253	-0.203	-0.139
Alamo River Outlet	10/16/12	Common Carp	fillet	-0.398	DNQ, 0.689	DNQ, 0.683	2.399	43.1	-0.538	-0.173	-0.252	-0.202	-0.138

Station Name	Earliest Date Sampled	Common Name	Tissue	Heptachlor Epoxide; Total; ng/g ww	Heptachlor; Total; ng/g ww	Hexachlorobenzene; Total; ng/g ww	Methoxychlor; Total; ng/g ww	Mirex; Total; ng/g ww	Nonachlor, cis-; Total; ng/g ww	Nonachlor, trans-; Total; ng/g ww	Oxadiazon; Total; ng/g ww	Oxychlordane; Total; ng/g ww	Chlordene, cis-; Total; ng/g ww
<u>Barbara Worth Drain</u>	05/07/12	Mosquitofish	whole organism	-0.245	-0.354	-0.344	-0.995	-0.299	1.35	7.11	-0.541	-0.472	
<u>Alamo River at Drop 10 Central Drain</u>	05/07/12	Common Carp	fillet	-0.224	-0.324	-0.315	-0.91	-0.273	-0.28	DNQ, 0.509	-0.495	-0.431	
Alamo River at Drop 10 Central Drain	10/16/12	Common Carp	fillet	-0.233	-0.338	-0.328	-0.949	-0.285	-0.292	-0.184	-0.516	-0.45	
<u>Central Drain</u>	05/08/12	Common Carp	fillet	-0.235	-0.34	-0.33	-0.955	-0.287	-0.294	DNQ, 0.375	-0.52	-0.453	
Central Drain	10/15/12	Mosquitofish	whole organism	-0.241	-0.348	-0.338	DNQ, 1.39	-0.293	1.55	8.45	-0.532	DNQ, 0.540	
<u>Peach Drain</u>	05/07/12	Mosquitofish	whole organism	-0.325	DNQ, 0.490	-0.457	-1.32	-0.396	1.83	8.27	-0.718	-0.626	
Peach Drain	10/15/12	Mosquitofish	whole organism	-0.239	-0.346	-0.337	DNQ, 1.29	-0.292	DNQ, 0.922	2.6	-0.529	-0.461	
<u>Oleander Drain</u>	05/09/12	Common Carp	fillet	-0.242	-0.351	-0.341	-0.985	-0.296	-0.303	DNQ, 0.435	-0.536	-0.467	
Oleander Drain	10/16/12	Mosquitofish	whole organism	-0.235	-0.34	-0.331	-0.955	-0.287	1.75	6	-0.52	-0.453	
<u>Alamo River Outlet</u>	11/7/04	Channel Catfish	fillet	-0.503	-0.515	DNQ, 0.151	-1.48	-0.942	1.19	2.5	-0.934	-0.367	-0.275
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	-0.5	-0.512	-0.107	-1.47	-0.937	-0.973	DNQ, 0.465	-0.929	-0.365	-0.276
Alamo River Outlet	11/7/04	Tilapia spp.	fillet	-0.504	-0.516	-0.108	-1.48	-0.944	-0.98	1.31	-0.936	-0.368	
Alamo River Outlet	2/8/11	Channel Catfish	fillet	-0.245	-0.354	0.804	-0.996	-0.299	2.13	6.02	-0.542	-0.472	
Alamo River Outlet	4/22/11	Flathead Catfish	fillet	-0.244	-0.352	DNQ, 0.368	-0.99	-0.297	1.11	3.31	-0.539	DNQ, 0.763	
Alamo River Outlet	05/08/12	Common Carp	fillet	-0.237	-0.344	-0.334	-0.965	-0.29	-0.297	DNQ, 0.351	-0.525	-0.457	
Alamo River Outlet	10/16/12	Common Carp	fillet	-0.236	-0.342	-0.333	-0.961	-0.288	DNQ, 0.412	DNQ, 0.615	-0.523	-0.456	

Station Name	Earliest Date Sampled	Common Name	Tissue	Chlordene, trans-; Total; ng/g ww	Endosulfan II; Total; ng/g ww	Endosulfan Sulfate; Total; ng/g ww	HCH, alpha-; Total; ng/g ww	HCH, beta-; Total; ng/g ww	HCH, delta-; Total; ng/g ww	HCH, gamma-; Total; ng/g ww	Toxaphene; Total; ng/g ww
<u>Central Drain</u>	05/08/12	Common Carp	fillet								-20
<u>Peach Drain</u>	05/07/12	Mosquitofish	whole organism								-20
<u>Alamo River Outlet</u>	11/7/04	Channel Catfish	fillet	-0.255	-2.71	-2.71	-0.475	-0.614	-0.359	-0.339	Screening only, -7.98
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	-0.256	-2.72	-2.72	-0.476	-0.616	-0.36	-0.34	Screening only, -8
Alamo River Outlet	11/7/04	Flathead Catfish	liver				-0.261	-0.209		-0.143	217
Alamo River Outlet	11/7/04	Tilapia spp.	fillet				-0.259	-0.208		-0.143	142

Appendix E2. Concentrations of organochlorine insecticides in fish tissues (ng/g ww) of the New River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

Station Name	Earliest Date Sampled	Common Name	Tissue	Lipid: Total; %	SumDDTs(ng/g ww)_BOGLakes	DDD(o,p'); Total; ng/g ww	DDE(o,p'); Total; ng/g ww	DDE(p,p'); Total; ng/g ww	DDMU(p,p'); Total; ng/g ww	DDT(o,p'); Total; ng/g ww	DDT(p,p'); Total; ng/g ww	Dieldrin; Total; ng/g ww	Aldrin; Total; ng/g ww	Chlordane, cis.; Total; ng/g ww	Chlordane, trans.; Total; ng/g ww	
New River at Boundary	05/08/12	Common Carp	fillet	1.04	25.272	DNQ, 0.519	1.44	DNQ, 0.513	22.8	DNQ, 1.04	-0.211	-0.152	0.962	-0.404	DNQ, 0.492	-0.439
New River at Boundary	10/17/12	Common Carp	fillet	0.662	19.045	-0.09	DNQ, 0.877	-0.167	17.3	1.01	DNQ, 0.503	DNQ, 0.365	1.12	-0.389	-0.376	DNQ, 0.454
<u>New River at Greeson Drain</u>	05/07/12	Tilapia spp.	fillet	0.26	12.811	-0.095	DNQ, 0.739	-0.175	11.8	DNQ, 0.383	-0.213	DNQ, 0.272	0.844	-0.408	DNQ, 0.444	-0.443
New River at Greeson Drain	10/15/12	Tilapia spp.	fillet	0.34	13.976	-0.09	DNQ, 0.868	-0.166	12.2	DNQ, 0.803	DNQ, 0.515	DNQ, 0.393	0.849	-0.387	-0.374	-0.421
<u>New River at Fig Drain</u>	05/09/12	Tilapia spp.	fillet	0.23	5.287	-0.092	DNQ, 0.217	-0.171	5.07	DNQ, 0.126	-0.207	-0.15	-0.415	-0.397	-0.384	-0.432
New River at Fig Drain	10/17/12	Tilapia spp.	fillet	0.274	2.812	-0.094	DNQ, 0.308	-0.175	2.18	DNQ, 0.563	-0.212	DNQ, 0.324	-0.425	-0.407	-0.393	-0.443
<u>Rice 3 Drain</u>	10/16/12	Common Carp	fillet	0.397	22.343	-0.092	DNQ, 0.399	-0.17	21.6	DNQ, 0.767	-0.206	DNQ, 0.344	1.04	-0.395	-0.382	-0.43
<u>New River Outlet</u>	11/5/04	Channel Catfish	fillet	1.35	194.5	1.15	5.84	DNQ, 1.51	186	4.48	-1.01	-2.47	3.86	-0.259	1.24	DNQ, 0.575
New River Outlet	2/9/11	Channel Catfish	fillet	6.51	548.66	3.69	14.1	3.61	515	10.7	DNQ, 1.86	10.4	16.9	-0.408	3.95	2.27
New River Outlet	4/22/11	Channel Catfish	fillet	4.6	542.48	6.36	22.5	3.95	497	14.8	DNQ, 1.07	11.6	10.9	-0.403	5.18	3.35
New River Outlet	05/08/12	Common Carp	fillet	0.323	131.835	DNQ, 0.550	1.28	DNQ, 0.745	129	DNQ, 0.843	-0.207	DNQ, 0.260	1.07	-0.397	-0.384	-0.432
New River Outlet	10/16/12	Common Carp	fillet	0.39	29.511	-0.093	DNQ, 0.571	-0.172	28	DNQ, 0.804	DNQ, 0.553	DNQ, 0.387	1.01	-0.401	-0.387	-0.435

Station Name	Earliest Date Sampled	Common Name	Tissue	SumChlordanes(ng/g ww)_BOGLakes	Dacthal; Total; ng/g ww	Endosulfan I; Total; ng/g ww	Endrin; Total; ng/g ww	HCH, alpha; Total; ng/g ww	HCH, beta; Total; ng/g ww	HCH, gamma; Total; ng/g ww	Heptachlor Epoxide; Total; ng/g ww	Heptachlor; Total; ng/g ww	Hexachlorobenzene; Total; ng/g ww	Methoxychlor; Total; ng/g ww	Mirex; Total; ng/g ww	Nonachlor, cis-; Total; ng/g ww
New River at Boundary	05/08/12	Common Carp	fillet	0.832	DNQ, 0.47	-0.546	DNQ, 0.943	-0.255	DNQ,	-0.14	-0.24	-0.347	-0.337	-0.975	-0.293	-0.3
New River at Boundary	10/17/12	Common Carp	fillet	0.454	1.09	-0.526	-0.169	-0.246	-0.2	-0.135	-0.231	-0.335	-0.325	-0.94	-0.282	-0.289
<u>New River at Greeson Drain</u>	05/07/12	Tilapia spp.	fillet	0.718	-0.095	DNQ, 0.867	DNQ, 0.775	-0.258	-0.21	-0.142	-0.242	-0.351	-0.341	-0.985	-0.296	-0.303
New River at Greeson Drain	10/15/12	Tilapia spp.	fillet	0	1.41	-0.524	-0.168	-0.245	-0.2	-0.135	-0.23	-0.333	-0.324	-0.935	-0.281	-0.288
<u>New River at Fig Drain</u>	05/09/12	Tilapia spp.	fillet	0	-0.093	DNQ, 0.890	DNQ, 0.339	-0.252	-0.2	-0.138	-0.236	-0.342	-0.332	-0.96	-0.288	-0.296
New River at Fig Drain	10/17/12	Tilapia spp.	fillet	0	1.23	-0.551	-0.177	-0.258	-0.21	-0.142	-0.242	-0.35	-0.34	-0.983	-0.295	-0.303
<u>Rice 3 Drain</u>	10/16/12	Common Carp	fillet	0	226	-0.535	-0.172	-0.25	-0.2	-0.138	-0.235	-0.34	-0.33	-0.955	-0.286	-0.294
<u>New River Outlet</u>	11/5/04	Channel Catfish	fillet	3.495	99.6	-1.08	-0.938				-0.503	-0.515	DNQ, 0.2	-1.48	-0.942	-0.978
New River Outlet	2/9/11	Channel Catfish	fillet	15	331	-0.552	DNQ, 1.35				DNQ, 0.272	-0.351	1.04	-0.986	-0.296	1.83
New River Outlet	4/22/11	Channel Catfish	fillet	20.392	77.3	DNQ, 1.16	DNQ, 1.75				-0.24	-0.347	1.36	-0.974	-0.292	2.55
New River Outlet	05/08/12	Common Carp	fillet	0.341	DNQ, 0.78	-0.538	DNQ, 0.987	-0.252	-0.2	-0.138	-0.236	-0.342	-0.332	-0.96	-0.288	-0.296
New River Outlet	10/16/12	Common Carp	fillet	0	250	-0.542	-0.174	-0.253	-0.2	-0.139	-0.238	-0.344	-0.335	-0.967	-0.29	-0.298

Appendix E3. Concentrations of organochlorine insecticides in fish tissues (ng/g ww) of the Salton Sea. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

Station Name	Earliest Date Sampled	Common Name	Tissue	Lipid; Total; %	SumDDTs(ng/g ww)_BOGLakes	DDD(o,p); Total; ng/g ww	DDD(p,p); Total; ng/g ww	DDE(o,p); Total; ng/g ww	DDE(p,p); Total; ng/g ww	DDMU(p,p); Total; ng/g ww	DDT(o,p); Total; ng/g ww	DDT(p,p); Total; ng/g ww	Dieldrin; Total; ng/g ww	Aldrin; Total; ng/g ww	Chlordane; cis-; Total; ng/g ww	Chlordane; trans-; Total; ng/g ww	SumChlordanes(ng/g ww)_BOGLakes	Dacthal; Total; ng/g ww
Salton Sea	10/30/07	Tilapia leucosticta	fillet	0.702	3.011	-0.092	DNQ, 0.131	-0.171	2.88	DNQ, 0.138	-0.207	-0.15	-0.415	-0.397	-0.384	-0.432	0	1.07
Station Name	Earliest Date Sampled	Common Name	Tissue	Endosulfan I; Total; ng/g ww	Endrin; Total; ng/g ww	HCH, alpha; Total; ng/g ww	HCH, beta; Total; ng/g ww	HCH, gamma; Total; ng/g ww	Heptachlor Epoxide; Total; ng/g ww	Heptachlor; Total; ng/g ww	Hexachlorobenzene; Total; ng/g ww	Methoxychlor; Total; ng/g ww	Mirex; Total; ng/g ww	Nonachlor, cis-; Total; ng/g ww	Nonachlor, trans-; Total; ng/g ww	Oxadiazon; Total; ng/g ww	Oxychlordane; Total; ng/g ww	Chlordene, cis-; Total; ng/g ww
Salton Sea	10/30/07	Tilapia leucosticta	fillet	-0.538	-0.173	-0.252	-0.202	-0.138	-0.236	-0.342	-0.332	-0.14	-0.288	-0.296	-0.186	-0.522	-0.455	

Appednix E4. Concentrations of organophosphate insecticides in fish tissues (ng/g ww) of the Alamo and New Rivers. Yellow values represent detected values. Negative values are below the limits of detection. Blank spaces were not analyzed.

Station Name	Earliest Date Sampled	Common Name	Tissue	Chlorpyrifos; Total: ng/g ww	Diazinon; Total: ng/g ww	Parathion, Ethyl; Total: ng/g ww	Parathion, Methyl; Total: ng/g ww	Tedion; Total: ng/g ww
Oleander Drain	10/16/12	Mosquitofish	whole organism				-1.02	
<u>Alamo River Outlet</u>	11/7/04	Channel Catfish	fillet	25.6	-6.74	-0.838	-1.52	-0.734
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	12.3	-6.76	-0.84	-1.52	-0.736
<u>New River at Fig Drain</u>	05/09/12	Tilapia spp.	fillet	6.21	-6.74	-0.838	-1.52	-0.734

Appendix E5. Concentrations of polychlorinated biphenyls (PCBs) in fish tissues (ng/g ww) of the Alamo River. Yellow values represent detected values. Negative values are below the limits of detection. Blank spaces were not analyzed.

Station Name	Earliest Date Sampled	Common Name	Tissue	SumpPCBs(ng/g ww)_BOGlakes	PCB008; Total: ng/g ww	PCB018; Total: ng/g ww	PCB027; Total: ng/g ww	PCB028; Total: ng/g ww	PCB029; Total: ng/g ww	PCB031; Total: ng/g ww	PCB033; Total: ng/g ww	PCB044; Total: ng/g ww	PCB049; Total: ng/g ww	PCB052; Total: ng/g ww	PCB056; Total: ng/g ww	
Barbara Worth Drain	05/07/12	Mosquitofish	whole organism	1.895	-0.199	-0.199	-0.199	-0.199	-0.199	-0.199	-0.199	-0.199	-0.199	-0.199	-0.199	
Alamo River at Drop 10 Central Drain	05/07/12	Common Carp	fillet	9.981	-0.182	-0.182	-0.182	-0.182	-0.182	-0.182	-0.182	-0.182	-0.182	-0.182	-0.182	
Alamo River at Drop 10 Central Drain	10/16/12	Common Carp	fillet	2.014	-0.19	-0.19	-0.19		-0.19		-0.19		DNO, 0.228	0.19	DNO, 0.192	
Central Drain	05/08/12	Common Carp	fillet	0.499	-0.191	-0.191	-0.191		-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	
Central Drain	10/15/12	Mosquitofish	whole organism	9.305	-0.196	-0.196	-0.196		-0.196		-0.196		DNO, 0.246	-0.196	DNO, 0.225	
Peach Drain	05/07/12	Mosquitofish	whole organism	1.384	-0.264	-0.264	-0.264	-0.264	-0.264	-0.264	-0.264	-0.264	-0.264	-0.264	-0.264	
Peach Drain	10/15/12	Mosquitofish	whole organism	1.32	-0.195	-0.195	-0.195		-0.195		-0.195		DNO, 0.227	-0.195	-0.195	
Oleander Drain	05/09/12	Common Carp	fillet	0	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	
Oleander Drain	10/16/12	Mosquitofish	whole organism	1.009	-0.191	-0.191	-0.191		-0.191		-0.191		DNO, 0.207	-0.191	DNO, 0.193	
Alamo River Outlet	11/7/04	Channel Catfish	fillet	15.696	-0.1	-0.1	-0.1	0.209	-0.1	0.233	-0.1	DNO, 0.105	0.202	0.479	0.408	
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	1.46	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	DNO, 0.105	-0.1
Alamo River Outlet	11/7/04	Tilapia spp.	fillet	4.414	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	DNO, 0.152	-0.1
Alamo River Outlet	2/8/11	Channel Catfish	fillet	19.171	-0.199	-0.199	-0.199	DNO, 0.450	-0.199	-0.199	-0.199		DNO, 0.264	DNO, 0.292	DNO, 0.387	-0.199
Alamo River Outlet	4/22/11	Flathead Catfish	fillet	4.46	-0.198	-0.198	-0.198	DNO, 0.235	0.198	-0.198	-0.198		DNO, 0.251	-0.198	DNO, 0.331	-0.198
Alamo River Outlet	05/08/12	Common Carp	fillet	3.091	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	
Alamo River Outlet	10/16/12	Common Carp	fillet	1.911	-0.192	-0.192	-0.192		-0.192		-0.192		DNO, 0.239	-0.192		DNO, 0.215

Station Name	Earliest Date Sampled	Common Name	Tissue	PCB 060; Total; ng/g ww	PCB 064; Total; ng/g ww	PCB 066; Total; ng/g ww	PCB 070; Total; ng/g ww	PCB 074; Total; ng/g ww	PCB 077; Total; ng/g ww	PCB 087; Total; ng/g ww	PCB 095; Total; ng/g ww	PCB 099; Total; ng/g ww	PCB 101; Total; ng/g ww	PCB 105; Total; ng/g ww	PCB 110; Total; ng/g ww	
Barbara Worth Drain	05/07/12	Mosquitofish	whole organism	-0.199	-0.199	-0.299	-0.199	DNO, 0.202	-0.299	-0.299	-0.199	-0.199	-0.299	-0.199	-0.299	
Alamo River at Drop 10 Central Drain	05/07/12	Common Carp	fillet	-0.182	-0.182	-0.182	-0.273	-0.182	DNO, 0.189	-0.273	-0.273	DNO, 0.204	DNO, 0.359	DNO, 0.682	DNO, 0.475	DNO, 0.721
Alamo River at Drop 10 Central Drain	10/16/12	Common Carp	fillet	-0.19	-0.19	-0.285	-0.19	-0.19	-0.285	-0.285	-0.19	-0.19	-0.285	DNO, 0.217	-0.285	
<u>Central Drain</u>	05/08/12	Common Carp	fillet	-0.191	-0.191	-0.191	-0.287	-0.191	-0.191	-0.287	-0.287	-0.191	-0.191	-0.287	-0.191	-0.287
Central Drain	10/15/12	Mosquitofish	whole organism	-0.196	-0.196	DNO, 0.349	DNO, 0.197	-0.196	DNO, 0.296	-0.293	-0.196	DNO, 0.259	DNO, 0.485	DNO, 0.379	DNO, 0.483	
<u>Peach Drain</u>	05/07/12	Mosquitofish	whole organism	-0.264	-0.264	-0.264	-0.396	-0.264	DNO, 0.264	-0.396	-0.396	-0.264	-0.264	-0.396	-0.264	-0.396
Peach Drain	10/15/12	Mosquitofish	whole organism	-0.195	-0.195	-0.292	-0.195	-0.195	-0.292	-0.292	-0.195	-0.195	-0.292	DNO, 0.203	-0.292	
<u>Oleander Drain</u>	05/09/12	Common Carp	fillet	-0.197	-0.197	-0.197	-0.296	-0.197	-0.197	-0.296	-0.296	-0.197	-0.197	-0.296	-0.197	-0.296
Oleander Drain	10/16/12	Mosquitofish	whole organism	-0.191	-0.191	-0.287	-0.191	-0.191	-0.287	-0.287	-0.191	-0.191	-0.287	DNO, 0.194	-0.287	
<u>Alamo River Outlet</u>	11/7/04	Channel Catfish	fillet	0.272	0.528	-0.1	0.366		-0.1	0.247	0.203	0.338	1.23	1.19	1.06	
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	-0.1	DNO, 0.101	-0.1	-0.1		-0.1	-0.1	-0.1	-0.1	DNO, 0.105	0.222	-0.1	
Alamo River Outlet	11/7/04	Tilapia spp.	fillet	-0.1	DNO, 0.102	-0.1	-0.1		-0.1	-0.1	-0.1	DNO, 0.120	0.254	0.608	0.558	
Alamo River Outlet	2/8/11	Channel Catfish	fillet	-0.199	-0.199	DNO, 0.522	-0.299	DNO, 0.361	-0.199	DNO, 0.432	DNO, 0.375	-0.199	0.679	DNO, 0.839	0.624	0.949
Alamo River Outlet	4/22/11	Flathead Catfish	fillet	-0.198	-0.198	DNO, 0.258	-0.297	-0.198	-0.198	-0.297	DNO, 0.309	-0.198	DNO, 0.249	DNO, 0.514	DNO, 0.266	
Alamo River Outlet	05/08/12	Common Carp	fillet	-0.193	-0.193	-0.193	-0.29	-0.193	DNO, 0.21	-0.29	-0.29	-0.193	-0.193	-0.29	-0.193	-0.29
Alamo River Outlet	10/16/12	Common Carp	fillet	-0.192	-0.192	-0.288	-0.192	-0.192	-0.288	-0.288	-0.192	-0.192	-0.288	DNO, 0.224	-0.288	

Station Name	Earliest Date Sampled	Common Name	Tissue	PCB 114; Total; ng/g ww	PCB 118; Total; ng/g ww	PCB 126; Total; ng/g ww	PCB 128; Total; ng/g ww	PCB 137; Total; ng/g ww	PCB 138; Total; ng/g ww	PCB 141; Total; ng/g ww	PCB 146; Total; ng/g ww	PCB 149; Total; ng/g ww	PCB 151; Total; ng/g ww	PCB 153; Total; ng/g ww	PCB 156; Total; ng/g ww	PCB 157; Total; ng/g ww	
Barbara Worth Drain	05/07/12	Mosquitofish	whole organism	-0.199	-0.299	-0.199	-0.199	-0.199	DNO, 0.492	-0.199	-0.199	-0.199	DNO, 0.582	-0.199	-0.199	-0.199	
Alamo River at Drop 10 Central Drain	05/07/12	Common Carp	fillet	-0.182	1.31	-0.182	DNO, 0.307	-0.182	1.3	DNO, 0.219	-0.182	DNO, 0.394	-0.182	1.74	DNO, 0.273	-0.182	
Alamo River at Drop 10 Central Drain	10/16/12	Common Carp	fillet	-0.19	DNO, 0.307	-0.19	-0.19	-0.19	-0.19	-0.19	DNO, 0.197	-0.19	DNO, 0.286	-0.19	DNO, 0.286	-0.19	-0.19
Central Drain	05/08/12	Common Carp	fillet	-0.191	-0.287	-0.191	-0.191	-0.191	DNO, 0.241	-0.191	-0.191	-0.191	DNO, 0.258	-0.191	-0.191	-0.191	-0.191
Central Drain	10/15/12	Mosquitofish	whole organism	-0.196	DNO, 0.681	-0.196	DNO, 0.279	-0.196	0.789	-0.196	DNO, 0.216	DNO, 0.314	-0.196	0.81	-0.196	-0.196	-0.196
Peach Drain	05/07/12	Mosquitofish	whole organism	-0.264	-0.396	-0.264	-0.264	-0.264	DNO, 0.359	-0.264	-0.264	-0.264	DNO, 0.427	-0.264	-0.264	-0.264	-0.264
Peach Drain	10/15/12	Mosquitofish	whole organism	-0.195	-0.292	-0.195	-0.195	-0.195	-0.195	-0.195	-0.195	-0.195	DNO, 0.226	-0.195	-0.195	-0.195	-0.195
Oleander Drain	05/09/12	Common Carp	fillet	-0.197	-0.296	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197
Oleander Drain	10/16/12	Mosquitofish	whole organism	-0.191	-0.287	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	DNO, 0.221	-0.191	-0.191	-0.191	-0.191
Alamo River Outlet	11/7/04	Channel Catfish	fillet	-0.1	0.96		0.24	-0.1	1.3	0.22			0.769	-0.1	1.48	-0.1	-0.1
Alamo River Outlet	11/7/04	Flathead Catfish	fillet	-0.1	0.587		-0.1	-0.1	DNO, 0.196	-0.1			-0.1	-0.1	DNO, 0.144	-0.1	-0.1
Alamo River Outlet	11/7/04	Tilapia spp.	fillet	-0.1	0.401		-0.1	-0.1	0.548	-0.1			0.281	-0.1	0.688	-0.1	-0.1
Alamo River Outlet	2/8/11	Channel Catfish	fillet	-0.199	1.67	-0.199	DNO, 0.328	-0.199	1.73	DNO, 0.239	-0.199	DNO, 0.547	-0.199	2.79	DNO, 0.212	-0.199	
Alamo River Outlet	4/22/11	Flathead Catfish	fillet	-0.198		-0.198	-0.198	-0.198	DNO, 0.512	-0.198	-0.198	DNO, 0.247	-0.198	0.647	-0.198	-0.198	-0.198
Alamo River Outlet	05/08/12	Common Carp	fillet	-0.193	DNO, 0.301	-0.193	-0.193	-0.193	DNO, 0.423	-0.193	-0.193	DNO, 0.289	-0.193	0.807	-0.193	0.807	-0.193
Alamo River Outlet	10/16/12	Common Carp	fillet	-0.192	DNO, 0.321	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	DNO, 0.199	-0.192	DNO, 0.281	-0.192	-0.192	-0.192

Station Name	Earliest Date Sampled	Common Name	Tissue	PCB 199; Total: ng/g ww	PCB 200; Total: ng/g ww	PCB 201; Total: ng/g ww	PCB 203; Total: ng/g ww	PCB 206; Total: ng/g ww	PCB 209; Total: ng/g ww	PCB AROCLOR 1248; Total: ng/g ww	PCB AROCLOR 254; Total: ng/g ww	PCB AROCLOR 1260; Total: ng/g ww
<u>Barbara Worth Drain</u>	05/07/12	Mosquitofish	whole organism	-0.199	-0.199	-0.199	-0.199	-0.199	-0.199			
<u>Alamo River at Drop 10 Central Drain</u>	05/07/12	Common Carp	fillet		-0.182	DNO, 0.184	DNO, 0.227	DNO, 0.186	-0.182			
Alamo River at Drop 10 Central Drain	10/16/12	Common Carp	fillet	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19			
<u>Central Drain</u>	05/08/12	Common Carp	fillet		-0.191	-0.191	-0.191	-0.191	-0.191			
Central Drain	10/15/12	Mosquitofish	whole organism	DNO, 0.338	-0.196	-0.196	DNO, 0.235	DNO, 0.203	0.767			
<u>Peach Drain</u>	05/07/12	Mosquitofish	whole organism		-0.264	-0.264	-0.264	-0.264	-0.264			
Peach Drain	10/15/12	Mosquitofish	whole organism	DNO, 0.230	-0.195	-0.195	-0.195	-0.195	-0.195			
<u>Oleander Drain</u>	05/09/12	Common Carp	fillet		-0.197	-0.197	-0.197	-0.197	-0.197			
Oleander Drain	10/16/12	Mosquitofish	whole organism	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	Screening only, -4.8	Screening only, -1.92	Screening only, -1.92
<u>Alamo River Outlet</u>	11/7/04	Channel Catfish	fillet		-0.1	0.28	0.219	-0.1	DNO, 0.190	Screening only, -10	Screening only, 11.0	Screening only, 10.0
Alamo River Outlet	11/7/04	Flathead Catfish	fillet		-0.1	-0.1	-0.1	-0.1	-0.1	Screening only, -10	Screening only,	Screening only,
Alamo River Outlet	11/7/04	Tilapia spp.	fillet		-0.1	-0.1	-0.1	-0.1	-0.1			
Alamo River Outlet	2/8/11	Channel Catfish	fillet		-0.199	DNO, 0.532	DNO, 0.366	DNO, 0.306	DNO, 0.302			
Alamo River Outlet	4/22/11	Flathead Catfish	fillet		-0.198	-0.198	-0.198	-0.198	-0.198			
Alamo River Outlet	05/08/12	Common Carp	fillet		-0.193	-0.193	-0.193	-0.193	-0.193			
Alamo River Outlet	10/16/12	Common Carp	fillet	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192			

Appendix E6. Concentrations of polychlorinated biphenyls (PCBs) in fish tissues (ng/g ww) of the New River. Yellow values represent detected values. Negative values are below the limits of detection. Blank spaces were not analyzed.

Station Name	Earliest Date Sampled	Common Name	Tissue	SumPCBs(ng/g ww)_BOGLakes	PCB 008; Total: ng/g ww	PCB 018; Total: ng/g ww	PCB 027; Total: ng/g ww	PCB 028/31; Total: ng/g ww	PCB 028; Total: ng/g ww	PCB 029; Total: ng/g ww	PCB 031; Total: ng/g ww	PCB 033; Total: ng/g ww	PCB 041; Total: ng/g ww	PCB 052; Total: ng/g ww	PCB 056; Total: ng/g ww	
New River at Boundary	05/08/12	Common Carp	fillet	22.196	-0.195	DNO, 0.347	-0.195	1.01	-0.195	0.604	DNO, 0.315	DNO, 0.517	DNO, 0.57	0.779	DNO, 0.266	
New River at Boundary	10/17/12	Common Carp	fillet	11.421	-0.188	DNO, 0.215	-0.188	0.856		-0.188		DNO, 0.398	DNO, 0.315		DNO, 0.267	
New River at Greeson Drain	05/07/12	Tilapia spp.	fillet	1.798	-0.197	-0.197	-0.197		DNO, 0.249	-0.197	DNO, 0.204	-0.197	-0.197	DNO, 0.225	-0.197	
New River at Greeson Drain	10/15/12	Tilapia spp.	fillet	4.916	-0.187	-0.187	-0.187		-0.187		-0.187		DNO, 0.277	DNO, 0.219	DNO, 0.202	
New River at Fig Drain	05/09/12	Tilapia spp.	fillet	0.225	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	
New River at Fig Drain	10/17/12	Tilapia spp.	fillet	0	-0.197	-0.197	-0.197		-0.197		-0.197		-0.197	-0.197	-0.197	
Rice 3 Drain	10/16/12	Common Carp	fillet	0.191	-0.191	-0.191	-0.191		-0.191		-0.191	DNO, 0.191	-0.191		-0.191	
New River Outlet	11/5/04	Channel Catfish	fillet	33.585	-0.1	0.327	-0.1		0.498	-0.1	-0.1	DNO, 0.131	0.484	0.419	0.394	-0.1
New River Outlet	2/9/11	Channel Catfish	fillet	35.691	DNO, 0.281	DNO, 0.529	-0.197		1.86	-0.197	DNO, 0.540	-0.197	DNO, 0.591	0.725	1.1	-0.197
New River Outlet	4/22/11	Channel Catfish	fillet	49.221	DNO, 0.249	DNO, 0.580	-0.195		2.73	-0.195	0.725	-0.195	1.07	1.32	1.33	-0.195
New River Outlet	05/08/12	Common Carp	fillet	0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	
New River Outlet	10/16/12	Common Carp	fillet	1.814	-0.193	-0.193	-0.193		-0.193		-0.193	DNO, 0.221	-0.193		DNO, 0.205	
Station Name	Earliest Date Sampled	Common Name	Tissue	PCB 060; Total: ng/g ww	PCB 064; Total: ng/g ww	PCB 066; Total: ng/g ww	PCB 070; Total: ng/g ww	PCB 074; Total: ng/g ww	PCB 077; Total: ng/g ww	PCB 087; Total: ng/g ww	PCB 095; Total: ng/g ww	PCB 097; Total: ng/g ww	PCB 099; Total: ng/g ww	PCB 101; Total: ng/g ww	PCB 105; Total: ng/g ww	PCB 110; Total: ng/g ww
New River at Boundary	05/08/12	Common Carp	fillet	-0.195	DNO, 0.209	DNO, 0.583	DNO, 0.691	DNO, 0.466	DNO, 0.235	DNO, 0.364	DNO, 0.532	DNO, 0.292	DNO, 0.507	1.14	DNO, 0.537	1.06
New River at Boundary	10/17/12	Common Carp	fillet	-0.188	DNO, 0.201		DNO, 0.538	DNO, 0.290	-0.188	DNO, 0.324	DNO, 0.358	DNO, 0.232	DNO, 0.312	DNO, 0.643	DNO, 0.355	DNO, 0.544
New River at Greeson Drain	05/07/12	Tilapia spp.	fillet	-0.197	-0.197	-0.197	-0.296	-0.197	-0.197	-0.296	-0.296	-0.197	-0.197	-0.296	-0.197	-0.296
New River at Greeson Drain	10/15/12	Tilapia spp.	fillet	-0.187	-0.187		DNO, 0.338	DNO, 0.190	-0.187	-0.281	-0.281	-0.187	DNO, 0.201	DNO, 0.361	DNO, 0.228	DNO, 0.317
New River at Fig Drain	05/09/12	Tilapia spp.	fillet	-0.192	-0.192	-0.192	-0.288	-0.192	-0.192	-0.288	-0.288	-0.192	-0.192	-0.288	-0.192	-0.288
New River at Fig Drain	10/17/12	Tilapia spp.	fillet	-0.197	-0.197		-0.295	-0.197	-0.197	-0.295	-0.295	-0.197	-0.197	-0.295	-0.197	-0.295
Rice 3 Drain	10/16/12	Common Carp	fillet	-0.191	-0.191		-0.286	-0.191	-0.191	-0.286	-0.286	-0.191	-0.191	-0.286	-0.191	-0.286
New River Outlet	11/5/04	Channel Catfish	fillet	DNO, 0.100	0.825	-0.1	-0.1		0.767	0.214	-0.1	0.607	0.631	0.858	0.766	
New River Outlet	2/9/11	Channel Catfish	fillet	DNO, 0.309	DNO, 0.221	1.27	DNO, 0.453	0.718	-0.197	DNO, 0.394	DNO, 0.601	DNO, 0.253	0.824	1.54	0.76	1.05
New River Outlet	4/22/11	Channel Catfish	fillet	DNO, 0.493	DNO, 0.484	1.95	DNO, 0.624	1.22	-0.195	DNO, 0.757	DNO, 0.848	DNO, 0.397	1.22	2.05	1.06	1.8
New River Outlet	05/08/12	Common Carp	fillet	-0.192	-0.192	-0.192	-0.288	-0.192	-0.192	-0.288	-0.288	-0.192	-0.192	-0.288	-0.192	-0.288
New River Outlet	10/16/12	Common Carp	fillet	0.193	0.193		0.29	0.193	0.193	0.29	0.29	0.193	0.193	0.29	DNO, 0.204	0.29

Station Name	Earliest Date Sampled	Common Name	Tissue	PCB 114; Total; ng/g ww	PCB 118; Total; ng/g ww	PCB 126; Total; ng/g ww	PCB 128; Total; ng/g ww	PCB 137; Total; ng/g ww	PCB 138; Total; ng/g ww	PCB 141; Total; ng/g ww	PCB 146; Total; ng/g ww	PCB 149; Total; ng/g ww	PCB 151; Total; ng/g ww	PCB 153; Total; ng/g ww	PCB 156; Total; ng/g ww	PCB 157; Total; ng/g ww
New River at Boundary	05/08/12	Common Carp	fillet	-0.195	1.42	-0.195	DNO, 0.27	-0.195	1.45	DNO, 0.36	-0.195	0.834	DNO, 0.255	2.33	DNO, 0.283	-0.195
New River at Boundary	10/17/12	Common Carp	fillet	-0.188	DNO, 0.692	-0.188	DNO, 0.235	-0.188	0.732	DNO, 0.188	DNO, 0.219	DNO, 0.431	-0.188	0.974	-0.188	-0.188
New River at Greeson Drain	05/07/12	Tilapia spp.	fillet	-0.197	-0.296	-0.197	-0.197	-0.197	DNO, 0.316	-0.197	-0.197	-0.197	-0.197	DNO, 0.49	-0.197	-0.197
New River at Greeson Drain	10/15/12	Tilapia spp.	fillet	-0.187	DNO, 0.353	-0.187	-0.187	-0.187	DNO, 0.296	-0.187	-0.187	DNO, 0.270	-0.187	DNO, 0.478	-0.187	-0.187
New River at Fig Drain	05/09/12	Tilapia spp.	fillet	-0.192	-0.288	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	DNO, 0.225	-0.192	-0.192
New River at Fig Drain	10/17/12	Tilapia spp.	fillet	-0.197	-0.295	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197
Rice 3 Drain	10/16/12	Common Carp	fillet	-0.191	-0.286	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191
New River Outlet	11/5/04	Channel Catfish	fillet	-0.1	1.19		0.368	-0.1	3.72	0.771		1.03	0.281	5.7	DNO, 0.135	-0.1
New River Outlet	2/9/11	Channel Catfish	fillet	-0.197	1.85	-0.197	DNO, 0.360	-0.197	2.46	0.732	DNO, 0.348	1.1	DNO, 0.504	3.96	DNO, 0.339	-0.197
New River Outlet	4/22/11	Channel Catfish	fillet	-0.195	2.55	-0.195	DNO, 0.540	-0.195	3.36	0.88	DNO, 0.447	1.62	DNO, 0.554	5.2	DNO, 0.405	-0.195
New River Outlet	05/08/12	Common Carp	fillet	-0.192	-0.288	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	DNO, 0.192	-0.192	-0.192
New River Outlet	10/16/12	Common Carp	fillet	-0.193	-0.29	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193	DNO, 0.196	-0.193	DNO, 0.302	-0.193

Station Name	Earliest Date Sampled	Common Name	Tissue	PCB 199; Total: ng/g ww	PCB 200; Total: ng/g ww	PCB 201; Total: ng/g ww	PCB 203; Total: ng/g ww	PCB 206; Total: ng/g ww	PCB 209; Total: ng/g ww	PCB AROCLOR 1248; Total: ng/g ww	PCB AROCLOR 1254; Total: ng/g ww	PCB AROCLOR 1260; Total: ng/g ww
New River at Boundary	05/08/12	Common Carp	fillet	-0.195	DNQ, 0.232	DNQ, 0.266	-0.195	-0.195	-0.195			
New River at Boundary	10/17/12	Common Carp	fillet	DNO, 0.236	-0.188	-0.188	DNO, 0.227	-0.188	-0.188			
New River at Greeson Drain	05/07/12	Tilapia spp.	fillet	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197			
New River at Greeson Drain	10/15/12	Tilapia spp.	fillet	-0.187	-0.187	-0.187	-0.187	-0.187	-0.187			
New River at Fig Drain	05/09/12	Tilapia spp.	fillet	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192	Screening only,	Screening only, 16.0	Screening only, 27.0
New River at Fig Drain	10/17/12	Tilapia spp.	fillet	-0.197	-0.197	-0.197	-0.197	-0.197	-0.197			
Rice 3 Drain	10/16/12	Common Carp	fillet	-0.191	-0.191	-0.191	-0.191	-0.191	-0.191			
New River Outlet	11/5/04	Channel Catfish	fillet	-0.1	0.78	0.605	DNO, 0.146	DNO, 0.171				
New River Outlet	2/9/11	Channel Catfish	fillet	-0.197	0.609	DNO, 0.316	DNO, 0.197	DNO, 0.205				
New River Outlet	4/22/11	Channel Catfish	fillet	-0.195	0.797	DNO, 0.410	DNO, 0.238	DNO, 0.212				
New River Outlet	05/08/12	Common Carp	fillet	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192			
New River Outlet	10/16/12	Common Carp	fillet	-0.193	-0.193	-0.193	-0.193	-0.193	-0.193			

Appendix E7. Concentrations of polychlorinated biphenyls (PCBs) in fish tissues (ng/g ww) of the Salton Sea. Yellow values represent detected values. Negative values are below the limits of detection. Blank spaces were not analyzed.

Appendix E8. Concentrations of PBDEs in fish tissues (ng/g ww) of the Salton Sea. Negative values are below detection limits.

Station Name	Earliest Date Sampled	Common Name	Tissue	PBDE 017; Total: ng/g ww	PBDE 028; Total: ng/g ww	PBDE 047; Total: ng/g ww	PBDE 066; Total: ng/g ww	PBDE 085; Total: ng/g ww	PBDE 099; Total: ng/g ww	PBDE 100; Total: ng/g ww
Salton Sea	10/30/07	Tilapia leucostict	fillet	Screening only, -0.048	Screening only, -0.062	Screening only, -0.261	Screening only, -0.038	Screening only, -0.065	Screening only, -0.147	Screening only, -0.075

Appendix E9. Concentrations of metals in fish tissues (ng/g ww) of the Salton Sea, Alamo and New Rivers. Yellow values represent detected values. Negative values are below the limits of detection. Blank spaces were not analyzed.

Appendix F. Concentrations of dissolved metals (ug/L) in surface water from the Salton Sea, Alamo River and New Rivers. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blanks spaces were not analyzed.

StationName	Sample Date		Aluminum; Dissolved; ug/L	Arsenic; Dissolved; ug/L	Cadmium; Dissolved; ug/L	Chromium; Dissolved; ug/L	Copper; Dissolved; ug/L	Lead; Dissolved; ug/L	Manganese; Dissolved; ug/L	Mercury; Dissolved; ng/L	Nickel; Dissolved; ug/L	Selenium; Dissolved; ug/L	Silver; Dissolved; ug/L	Zinc; Dissolved; ug/L
<u>Alamo River at International Boundary</u>	5/10/11	-1.7	14	0.11	0.75	4.27	-0.015	298	0.992	5.55	3.68	0.07	1.87	
Alamo River at International Boundary	10/11/11	-1.7	13.3	0.04	0.58	2.1	0.118	276	1.01	5.79	1.62	-0.02	3.01	
<u>Barbara Worth Drain</u>	10/17/12	-1.7	5.09	0.04	DNQ, 0.29	2.83	-0.015	54.8		3.46	4.6	-0.02	0.82	
<u>Alamo River at Drop 10 Central Drain</u>	10/17/12	-1.7	7.03	0.05	0.34	3.12	-0.015	9.96		3.85	8.07	-0.02	0.71	
<u>Central Drain</u>	10/17/12	-1.7	7.54	0.06	0.39	3.13	0.037	47		3.6	6.38	0.23	1.25	
<u>Peach Drain</u>	10/17/12	-1.7	5.26	0.04	0.33	4.1	-0.015	15.6		3.69	2.74	-0.02	5.4	
<u>Oleander Drain</u>	10/16/12	DNQ, 1.97	9.12	0.04	0.34	3.82	-0.015	12.9		3.9	5.61	-0.02	DNQ, 0.63	
<u>Alamo River Outlet</u>	5/10/11	-1.7	11.4	0.11	4.28	6.77	0.07	54.7	1.7	5.92	7.2	0.26	2.69	
Alamo River Outlet	10/11/11	9.02	10.2	0.05	0.6	3.94	0.058	8.64	0.788	7.99	8.15	-0.02	2.71	
Alamo River Outlet	10/11/11	7.01	10	0.08	0.58	3.94	0.058	9.16	0.627	8.37	7.63	-0.02	2.91	
Alamo River Outlet	5/7/12								0.708					
Alamo River Outlet	10/15/12	-1.7	9.41	0.05	0.37	3.81	-0.015	6.35	0.8	4.07	7.49	-0.02	1.93	

<u>New River at Boundary</u>	5/10/11	2.31	4.34	-0.16	-0.21	4.64	0.18	60.1	0.795	1.73	-0.66	-0.02	3.98	
New River at Boundary	10/11/11	1.14	3.31	-0.16	-0.21	-0.16	-0.16	78.5	0.882	1.77	-0.66	-0.02	4.85	
New River at Boundary	5/8/12								1.53					
New River at Boundary	10/16/12	3.93	4.24	-0.16	-0.21	0.46	-0.16	65.8	0.951	1.53	1.28	-0.02	3.32	
<u>New River at Greeson Drain</u>	10/16/12	DNQ, 2.07	6	0.06	DNQ, 0.29	2.14	0.033	22.7		3.07	4.41	0.07	-0.5	
<u>New River at Fig Drain</u>	10/16/12	-1.7	3.09	0.05	DNQ, 0.28	1.77	0.043	12		2.61	3.48	0.46	-0.5	
<u>Rice 3 Drain</u>	10/16/12	-1.7	12.4	0.04	0.31	3.17	-0.015	26.1		3.51	5.57	-0.02	0.84	

<u>New River Outlet</u>	5/10/11	-1.7	10.9	0.03	2.99	4.73	-0.015	55.4	0.743	6.2	7.51	-0.02	2.55
New River Outlet	5/10/11	DNQ, 1.95	8.97	0.07	4.35	6.88	DNQ, 0.02	16.2	0.758	5.48	7.65	-0.02	2.37
New River Outlet	10/11/11	-1.7	14.7	0.08	1.1	4.96	0.085	43.5	0.591	8.84	8.94	0.15	3.36
New River Outlet	5/7/12								0.626				
New River Outlet	5/7/12								0.647				
New River Outlet	10/16/12	DNQ, 2.84	9.15	0.04	0.36	3.46	-0.015	12.5	0.635	3.58	5.96	0.05	0.75

<u>Salton Sea USGS2</u>	5/11/11	1.63	16.4	-0.16	-0.21	1.69	-0.16	33	0.83	1.08	0.81	-0.02	0.74
<u>Salton Sea USGS7</u>	5/11/11	1.39	17.3	-0.16	-0.21	1.17	-0.16	26.7	0.903	1.19	-0.66	-0.02	0.35
<u>Salton Sea USGS9</u>	5/11/11	0.58	17.1	-0.16	-0.21	0.87	-0.16	33.8	0.864	1.13	1.02	-0.02	0.65

Appendix G1. Concentrations of organochlorine insecticides (ug/L) in surface water from the Alamo River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aldrin; Total; ug/L	Chlordane, cis-; Total; ug/L	Chlordane, trans-; Total; ug/L	Dacthal; Total; ug/L	DDD(o,p'); Total; ug/L	DDD(p,p'); Total; ug/L	DDE(o,p'); Total; ug/L	DDE(p,p'); Total; ug/L	DDMU(p,p'); Total; ug/L	DDT(o,p'); Total; ug/L	DDT(p,p'); Total; ug/L	Dieldrin; Total; ug/L	Endosulfan I; Total; ug/L
Alamo River at International Boundary	5/10/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River at International Boundary	10/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
<u>Barbara Worth Drain</u>	5/8/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.005	-0.001	-0.001	-0.002	-0.001	-0.001
Barbara Worth Drain	10/17/12	-0.001	-0.001	-0.001	0.139	-0.001	-0.001	-0.001	0.017	-0.001	-0.001	-0.002	-0.001	-0.001
<u>Alamo River at Drop 10 Central Drain</u>	4/21/11	-0.001	-0.001	-0.001	0.074	0.019	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River at Drop 10 Central Drain	5/10/11	-0.001	-0.001	-0.001	0.015	-0.001	-0.001	-0.001	0.009	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River at Drop 10 Central Drain	10/11/11	-0.001	-0.001	-0.001	1.15	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River at Drop 10 Central Drain	5/8/12	-0.001	-0.001	-0.001	0.007	-0.001	-0.001	-0.001	0.011	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River at Drop 10 Central Drain	10/17/12	-0.001	-0.001	-0.001	0.77	-0.001	-0.001	-0.001	0.013	-0.001	-0.001	-0.002	-0.001	-0.001
<u>Central Drain</u>	2/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
Central Drain	2/11/11	-0.001	-0.001	-0.001	0.069	-0.001	-0.001	-0.001	0.011	-0.001	-0.001	-0.002	-0.001	-0.001
Central Drain	2/11/11	-0.001	-0.001	-0.001	0.075	-0.001	-0.001	-0.001	0.011	-0.001	-0.001	-0.002	-0.001	-0.001
Central Drain	4/21/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
Central Drain	5/8/12	-0.001	-0.001	-0.001	0.036	-0.001	-0.001	-0.001	0.016	-0.001	-0.001	-0.002	-0.001	-0.001
Central Drain	10/17/12	-0.001	-0.001	-0.001	0.191	-0.001	-0.001	-0.001	0.013	-0.001	-0.001	-0.002	-0.001	-0.001
<u>Peach Drain</u>	5/8/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.009	-0.001	-0.001	-0.002	-0.001	-0.001
Peach Drain	10/17/12	-0.001	-0.001	-0.001	0.019	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
<u>Oleander Drain</u>	5/8/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.006	-0.001	-0.001	-0.002	-0.001	-0.001
Oleander Drain	10/16/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.007	-0.001	-0.001	-0.002	-0.001	-0.001
<u>Alamo River Outlet</u>	2/11/11	-0.001	-0.001	-0.001	0.105	-0.001	-0.001	-0.001	0.021	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River Outlet	4/22/11	0.018	-0.001	-0.001	0.019	-0.001	0.024	-0.001	-0.001	-0.001	-0.001	-0.002	0.003	-0.001
Alamo River Outlet	5/10/11	-0.001	-0.001	-0.001	0.013	-0.001	-0.001	-0.001	0.013	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River Outlet	10/11/11	-0.001	-0.001	-0.001	0.34	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River Outlet	10/11/11	-0.001	-0.001	-0.001	0.382	-0.001	-0.001	-0.001	0.018	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River Outlet	5/7/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.025	-0.001	-0.001	-0.002	-0.001	-0.001
Alamo River Outlet	10/15/12	-0.001	-0.001	-0.001	0.338	-0.001	-0.001	-0.001	0.02	-0.001	-0.001	-0.002	0.005	-0.001

StationName	Sample Date	Endosulfan II; Total; ug/L	Endosulfan Sulfate; Total; ug/L	Endrin Aldehyde; Total; ug/L	Endrin Ketone; Total; ug/L	HCH, alpha-; Total; ug/L	HCH, beta-; Total; ug/L	HCH, gamma-; Total; ug/L	Heptachlor Epoxide; Total; ug/L	Heptachlor; Total; ug/L	Hexachlorobenzene; Total; ug/L	Methoxychlor; Total; ug/L	Mirex; Total; ug/L
Alamo River at International Boundary	5/10/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River at International Boundary	10/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Barbara Worth Drain	5/8/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Barbara Worth Drain	10/17/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River at Drop 10 Central Drain	4/21/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River at Drop 10 Central Drain	5/10/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River at Drop 10 Central Drain	10/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River at Drop 10 Central Drain	5/8/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River at Drop 10 Central Drain	10/17/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Central Drain	2/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Central Drain	2/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Central Drain	2/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Central Drain	4/21/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Central Drain	5/8/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Central Drain	10/17/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Peach Drain	5/8/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Peach Drain	10/17/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Oleander Drain	5/8/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Oleander Drain	10/16/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River Outlet	2/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River Outlet	4/22/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River Outlet	5/10/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River Outlet	10/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River Outlet	10/11/11	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River Outlet	5/7/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001
Alamo River Outlet	10/15/12	-0.001	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.0005	-0.001	-0.001

Appendix G2. Concentrations of organochlorine insecticides (ug/L) in surface waters from the New River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aldrin; Total; ug/L	Chlordane, cis; Total; ug/L	Chlordane, trans; Total; ug/L	Dacthal; Total; ug/L	DDD(o,p'); Total; ug/L	DDD(p,p'); Total; ug/L	DDE(o,p'); Total; ug/L	DDE(p,p'); Total; ug/L	DDMU(p,p'); Total; ug/L	DDT(o,p'); Total; ug/L	DDT(p,p'); Total; ug/L	Dieldrin; Total; ug/L	Endosulfan I; Total; ug/L	Endosulfan II; Total; ug/L	Endosulfan Sulfate; Total; ug/L
<u>New River at Boundary</u>	2/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	2/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	2/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	4/22/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	4/22/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	5/10/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	10/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	5/8/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Boundary	10/16/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
<u>New River at Greeson Drain</u>	5/9/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Greeson Drain	10/16/12	-0.001	-0.001	-0.001	0.026	-0.001	-0.001	-0.001	0.007	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
<u>New River at Fig Drain</u>	5/8/12	-0.001	-0.001	-0.001	0.006	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River at Fig Drain	10/16/12	-0.001	-0.001	-0.001	0.1	-0.001	-0.001	-0.001	0.002	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
<u>Rice 3 Drain</u>	5/8/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.024	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
Rice 3 Drain	10/16/12	-0.001	-0.001	-0.001	1.11	-0.001	-0.001	-0.001	0.004	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
<u>New River Outlet</u>	2/11/11	-0.001	-0.001	-0.001	0.047	-0.001	-0.001	-0.001	0.007	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River Outlet	4/22/11	0.011	-0.001	-0.001	0.019	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River Outlet	5/10/11	-0.001	-0.001	-0.001	0.01	-0.001	-0.001	-0.001	0.008	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River Outlet	5/10/11	-0.001	-0.001	-0.001	0.008	-0.001	-0.001	-0.001	0.007	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River Outlet	10/11/11	-0.001	-0.001	-0.001	1.4	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River Outlet	5/7/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River Outlet	5/7/12	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001
New River Outlet	10/16/12	-0.001	-0.001	-0.001	0.466	-0.001	-0.001	-0.001	0.008	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.001

Appendix G3. Concentrations of organochlorine insecticides (ug/L) in surface waters from the Salton Sea. Negative values are below the limits of detection.

StationName	Sample Date	Aldrin; Total; ug/L	Chlordane, cis-; Total; ug/L	Chlordane, trans-; Total; ug/L	Dacthal; Total; ug/L	DDD(o,p'); Total; ug/L	DDD(p,p'); Total; ug/L	DDE(o,p'); Total; ug/L	DDE(p,p'); Total; ug/L	DDMU(p,p'); Total; ug/L	DDT(o,p'); Total; ug/L	DDT(p,p'); Total; ug/L	Dieldrin; Total; ug/L	Endosulfan I; Total; ug/L	Endosulfan II; Total; ug/L	Endosulfan Sulfate; Total; ug/L	Endrin Aldehyde; Total; ug/L	Endrin Ketone; Total; ug/L	Endrin; Total; ug/L
Salton Sea USGS2	5/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	
Salton Sea USGS7	5/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.002	-0.001
Salton Sea USGS9	5/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.002	-0.001

Appendix G4. Concentrations of organophosphate and carbamate pesticides (ug/L) in surface waters from the Alamo River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aspon; Total; ug/L	Azinphos Ethyl; Total; ug/L	Azinphos Methyl; Total; ug/L	Bolstar; Total; ug/L	Carbofenothon; Total; ug/L	Chlorfenvinphos; Total; ug/L	Chlorpyrifos Methyl; Total; ug/L	Chlorpyrifos; Total; ug/L	Clodrin; Total; ug/L	Coumaphos; Total; ug/L	Demeton-s; Total; ug/L	Diazinon; Total; ug/L	Dichlofenthion; Total; ug/L	Dichlonovos; Total; ug/L	Dicrotophos; Total; ug/L	Dimethoate; Total; ug/L	Dioxathion ; Total; ug/L	Disulfoton; Total; ug/L
Alamo River at International Boundary	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River at International Boundary	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Barbara Worth Drain	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003		-0.042	-0.022			
Barbara Worth Drain	10/17/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003		-0.042	-0.022			
Alamo River at Drop 10 Central Drain	4/21/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	DNQ, 0.019	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River at Drop 10 Central Drain	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River at Drop 10 Central Drain	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River at Drop 10 Central Drain	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	0.043		-0.064	-0.022	-0.014	-0.003		0.366	-0.022			
Alamo River at Drop 10 Central Drain	10/17/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	0.294		-0.064	-0.022	0.069	-0.003			-0.042	-0.022		
Central Drain	4/21/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Central Drain	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	0.055		-0.064	-0.022	-0.014	-0.003		-0.042	0.176			
Central Drain	10/17/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	0.07	-0.003		-0.042	DNQ, 0.05			
Peach Drain	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	DNQ, 0.039		-0.064	-0.022	-0.014	-0.003		-0.042	-0.022			
Peach Drain	10/17/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003		-0.042	-0.022			
Oleander Drain	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003		-0.042	-0.022			
Oleander Drain	10/16/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003		-0.042	-0.022			
Alamo River Outlet	2/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	0.836	-0.03 -0.01	
Alamo River Outlet	4/22/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	DNQ, 0.006	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River Outlet	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River Outlet	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River Outlet	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	
Alamo River Outlet	10/15/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	0.049		-0.064	-0.022	DNQ, 0.018	-0.003		-0.042	-0.022			
Alamo River Outlet	5/7/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	0.058		-0.064	-0.022	-0.014	-0.003		0.308	-0.022			

StationName	Sample Date	Ethion; Total; ug/L	Ethoprop; Total; ug/L	Famphur ; Total; ug/L	Fenchlorphos; Total; ug/L	Fenitrothion; Total; ug/L	Fensulfothion; Total; ug/L	Fenthion; Total; ug/L	Fonofos; Total; ug/L	Leptophos; Total; ug/L	Malathion; Total; ug/L	Mephos; Total; ug/L	Methidathion; Total; ug/L	Mevinphos; Total; ug/L	Molinate; Total; ug/L	Parathion, Ethyl; Total; ug/L	Parathion, Methyl; Total; ug/L	Phorate; Total; ug/L	Phosmet; Total; ug/L
Alamo River at International Boundary	5/10/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002	-0.03	-0.01	-0.05	-0.05
Alamo River at International Boundary	10/11/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002	-0.03	-0.01	-0.05	-0.05
Barbara Worth Drain	5/8/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Barbara Worth Drain	10/17/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Alamo River at Drop 10 Central Drain	4/21/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03		-0.03	-0.01	-0.05	-0.05
Alamo River at Drop 10 Central Drain	5/10/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	0.16	-0.03	-0.03	-0.03	-0.002	-0.03	-0.01	-0.05	-0.05
Alamo River at Drop 10 Central Drain	10/11/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002	-0.03	-0.01	-0.05	-0.05
Alamo River at Drop 10 Central Drain	5/8/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Alamo River at Drop 10 Central Drain	10/17/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Central Drain	4/21/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03		-0.03	-0.01	-0.05	-0.05
Central Drain	5/8/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Central Drain	10/17/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Peach Drain	5/8/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0	-0.014	-0.01	-0.034
Peach Drain	10/17/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0	-0.014	-0.01	-0.034
Oleander Drain	5/8/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Oleander Drain	10/16/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Alamo River Outlet	2/11/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	0.166	-0.03	-0.03	-0.03		-0.03	-0.01	-0.05	-0.05
Alamo River Outlet	4/22/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03		-0.03	-0.01	-0.05	-0.05
Alamo River Outlet	5/10/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002	-0.03	-0.01	-0.05	-0.05
Alamo River Outlet	10/11/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002	-0.03	-0.01	-0.05	-0.05
Alamo River Outlet	10/11/11	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002	-0.03	-0.01	-0.05	-0.05
Alamo River Outlet	10/15/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034
Alamo River Outlet	5/7/12	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017		-0.003	-0.014	-0.013	-0.034

StationName	Sample Date	Phosphamidon; Total; ug/L	Sulfotep; Total; ug/L	Terbufos; Total; ug/L	Tetrachlorvinphos; Total; ug/L	Thiobencarb; Total; ug/L	Thionazin; Total; ug/L	Tokuthion; Total; ug/L	Trichlorfon; Total; ug/L	Trichloronate; Total; ug/L		
Alamo River at International Boundary	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03		
Alamo River at International Boundary	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03		
Barbara Worth Drain	5/8/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Barbara Worth Drain	10/17/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Alamo River at Drop 10 Central Drain	4/21/11	-0.03	-0.03	-0.03	-0.03		-0.04	-0.03	-0.03	-0.03		
Alamo River at Drop 10 Central Drain	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03		
Alamo River at Drop 10 Central Drain	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03		
Alamo River at Drop 10 Central Drain	5/8/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Alamo River at Drop 10 Central Drain	10/17/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Central Drain	4/21/11	-0.03	-0.03	-0.03	-0.03		-0.04	-0.03	-0.03	-0.03		
Central Drain	5/8/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Central Drain	10/17/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Peach Drain	5/8/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Peach Drain	10/17/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Oleander Drain	5/8/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Oleander Drain	10/16/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Alamo River Outlet	2/11/11	-0.03	-0.03	-0.03	-0.03		-0.04	-0.03	-0.03	-0.03		
Alamo River Outlet	4/22/11	-0.03	-0.03	-0.03	-0.03		-0.04	-0.03	-0.03	-0.03		
Alamo River Outlet	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03		
Alamo River Outlet	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03		
Alamo River Outlet	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03		
Alamo River Outlet	10/15/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		
Alamo River Outlet	5/7/12		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004		

Appendix G5. Concentrations of organophosphate and carbamate pesticides (ug/L) in surface waters from the New River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aspon; Total; ug/L	Azinphos Ethyl; Total; ug/L	Azinphos Methyl; Total; ug/L	Bolstar; Total; ug/L	Carbophenothion; Total; ug/L	Chlorfenvinphos; Total; ug/L	Chlorpyrifos Methyl; Total; ug/L	Chlorpyrifos; Total; ug/L	Ciodrin; Total; ug/L	Coumaphos; Total; ug/L	Demeton-s; Total; ug/L	Diazinon	Dichlofenithion; Total; ug/L	Dichlorvos; Total; ug/L	Dicrotophos; Total; ug/L	Dimethoate; Total; ug/L
New River at Boundary	2/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River at Boundary	2/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River at Boundary	2/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River at Boundary	4/22/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	DNQ, 0.005	-0.03	-0.04	-0.04	DNQ, 0.006	-0.03	-0.03	-0.03	-0.03
New River at Boundary	4/22/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River at Boundary	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River at Boundary	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River at Boundary	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003			-0.042	
New River at Boundary	10/16/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003			-0.042	
New River at Greeson Drain	5/9/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003			-0.042	
New River at Greeson Drain	10/16/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	1.15	-0.003			-0.042	
New River at Fig Drain	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	DNQ, 0.038		-0.064	-0.022	-0.014	-0.003			0.368	
New River at Fig Drain	10/16/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003			-0.042	
Rice 3 Drain	5/8/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003			1.4	
Rice 3 Drain	10/16/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	-0.018		-0.064	-0.022	-0.014	-0.003			-0.042	
New River Outlet	2/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	0.662
New River Outlet	4/22/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River Outlet	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River Outlet	5/10/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River Outlet	10/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03
New River Outlet	5/7/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	DNQ, 0.033		-0.064	-0.022	-0.014	-0.003			0.41	
New River Outlet	5/7/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	DNQ, 0.033		-0.064	-0.022	-0.014	-0.003			0.378	
New River Outlet	10/16/12	-0.008	-0.041	-0.033	-0.012	-0.007	-0.003	0.051		-0.064	-0.022	0.143	-0.003			-0.042	

StationName	Sample Date	Dioxathion ; Total; ug/L	Disulfoton; Total; ug/L	Ethion; Total; ug/L	Ethoprop; Total; ug/L	Famphur ; Total; ug/L	Fenchlorphos; Total; ug/L	Fenitrothion; Total; ug/L	Fensulfothion; Total; ug/L	Fenthion; Total; ug/L	Fonofos; Total; ug/L	Leptophos; Total; ug/L	Malathion; Total; ug/L	Merphos; Total; ug/L	Methidathion; Total; ug/L	Mevinphos; Total; ug/L	Mollinate; Total; ug/L
<u>New River at Boundary</u>	2/11/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	
New River at Boundary	2/11/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	
New River at Boundary	2/11/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	
New River at Boundary	4/22/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	DNO, 0.	-0.03	-0.03	-0.03	-0.03	-0.03	
New River at Boundary	4/22/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	
New River at Boundary	5/10/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002
New River at Boundary	10/11/11	-0.03	0.095	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002
New River at Boundary	5/8/12		0.197	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	
New River at Boundary	10/16/12		0.11	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	
<u>New River at Greeson Drain</u>	5/9/12		0.198	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	
New River at Greeson Drain	10/16/12		-0.022	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	
<u>New River at Fig Drain</u>	5/8/12		-0.022	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	
New River at Fig Drain	10/16/12		-0.022	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	
<u>Rice 3 Drain</u>	5/8/12		-0.022	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	DNO, 0.061		-0.016	-0.017	
Rice 3 Drain	10/16/12		-0.022	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	
<u>New River Outlet</u>	2/11/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	0.426	-0.03	-0.03	-0.03	
New River Outlet	4/22/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	
New River Outlet	5/10/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002
New River Outlet	5/10/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002
New River Outlet	10/11/11	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.002
New River Outlet	5/7/12		0.173	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	DNO, 0.082		-0.016	-0.017	
New River Outlet	5/7/12		0.172	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	DNO, 0.078		-0.016	-0.017	
New River Outlet	10/16/12		-0.022	-0.007	-0.012	-0.006	-0.013	-0.005	-0.035	-0.005	-0.004	-0.007	-0.018		-0.016	-0.017	

StationName	Sample Date	Parathion, Ethyl; Total; ug/L	Parathion, Methyl; Total; ug/L	Phorate; Total; ug/L	Phosmet; Total; ug/L	Phosphamidon; Total; ug/L	Sulfotep; Total; ug/L	Terbufos; Total; ug/L	Tetrachlorvinphos; Total; ug/L	Thiobencarb; Total; ug/L	Thionazin; Total; ug/L	Tokuthion; Total; ug/L	Trichlorfon; Total; ug/L	Trichloronate; Total; ug/L
<u>New River at Boundary</u>	2/11/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03	-0.03
New River at Boundary	2/11/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03	-0.03
New River at Boundary	2/11/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03	-0.03
New River at Boundary	4/22/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03	-0.03
New River at Boundary	4/22/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03	-0.03
New River at Boundary	5/10/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03
New River at Boundary	10/11/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03
New River at Boundary	5/8/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
New River at Boundary	10/16/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
<u>New River at Greeson Drain</u>	5/9/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
New River at Greeson Drain	10/16/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
<u>New River at Fig Drain</u>	5/8/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
New River at Fig Drain	10/16/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
<u>Rice 3 Drain</u>	5/8/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
Rice 3 Drain	10/16/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
<u>New River Outlet</u>	2/11/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03	-0.03
New River Outlet	4/22/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.03	-0.03
New River Outlet	5/10/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03
New River Outlet	5/10/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03
New River Outlet	10/11/11	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.03	-0.002	-0.04	-0.03	-0.03	-0.03
New River Outlet	5/7/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
New River Outlet	5/7/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004
New River Outlet	10/16/12	-0.003	-0.014	-0.013	-0.034		-0.006	-0.008	-0.03		-0.004	-0.027		-0.004

Appendix G6. Concentrations of organophosphate and carbamate pesticides (ug/L) in surface waters from the Salton Sea. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aspon; Total; ug/L	Azinphos Ethyl; Total; ug/L	Azinphos Methyl; Total; ug/L	Bolstar; Total; ug/L	Carbophenothion; Total; ug/L	Chlortenvinphos; Total; ug/L	Chlorpyrifos Methyl; Total; ug/L	Chlorpyrifos; Total; ug/L	Ciodrin; Total; ug/L	Coumaphos; Total; ug/L	Demeton-s; Total; ug/L	Diazinon; Total; ug/L	Dichlofenthion; Total; ug/L	Dichlorvos; Total; ug/L	Dicrotophos; Total; ug/L	Dimethoate; Total; ug/L	Dioxathion ; Total; ug/L	Disulfoton; Total; ug/L	Ethion; Total; ug/L	Ethoprop; Total; ug/L	Famphur ; Total; ug/L	Fenchlorphos; Total; ug/L	Fenitrothion; Total; ug/L	Fensulfotion; Total; ug/L
Salton Sea USGS2	5/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
Salton Sea USGS7	5/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
Salton Sea USGS9	5/11/11	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.005	-0.03	-0.04	-0.04	-0.005	-0.03	-0.03	-0.03	-0.03	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
StationName	Sample Date	Fenthion; Total; ug/L	Fonofos; Total; ug/L	Lepiophos; Total; ug/L	Malathion; Total; ug/L	Mephos; Total; ug/L	Methidathion; Total; ug/L	Mevinphos; Total; ug/L	Molinate; Total; ug/L	Parathion; Ethyl; Total; ug/L	Parathion; Methyl; Total; ug/L	Phorate; Total; ug/L	Phosmet; Total; ug/L	Phosphamidon; Total; ug/L	Sulfotep; Total; ug/L	Terbufos; Total; ug/L	Tetrachlorvinphos; Total; ug/L	Thiobencarb; Total; ug/L	Thionazin; Total; ug/L	Toxithion; Total; ug/L	Trichlorfon; Total; ug/L	Trichloronate; Total; ug/L			
Salton Sea USGS2	5/11/11	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.002	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.02	-0.01	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03
Salton Sea USGS7	5/11/11	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.002	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.02	-0.01	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03
Salton Sea USGS9	5/11/11	-0.03	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.002	-0.03	-0.01	-0.05	-0.05	-0.03	-0.03	-0.03	-0.02	-0.01	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03

Appendix G7. Concentrations (ug/L) of PBDEs in water from the Alamo River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	SampleDate	PBDE 049; Total; ug/L	PBDE 066; Total; ug/L	PBDE 085; Total; ug/L	PBDE 099; Total; ug/L	PBDE 100; Total; ug/L	PBDE 138; Total; ug/L
<u>Alamo River at International Boundary</u>	2011						
Alamo River at International Boundary	5/10/11	-0.001	-0.001	-0.001	DNQ, 0.001	-0.001	-0.001
Alamo River at International Boundary	10/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
<u>Alamo River at Drop 10 Central Drain</u>	2011						
Alamo River at Drop 10 Central Drain	5/10/11	-0.001	DNQ, 0.001	-0.001	-0.001	-0.001	-0.001
Alamo River at Drop 10 Central Drain	10/11/11	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
<u>Alamo River Outlet</u>	2011						
Alamo River Outlet	5/10/11	-0.001	-0.001	-0.001	DNQ, 0.001	-0.001	-0.001
Alamo River Outlet	10/11/11	-0.001	-0.001	DNQ, 0.001	0.013	0.002	DNQ, 0.001
Alamo River Outlet	10/11/11	-0.001	-0.001	-0.001	0.004	-0.001	-0.001

StationName	SampleDate	PBDE 153; Total; ug/L	PBDE 154; Total; ug/L	PBDE 179; Total; ug/L	PBDE 183; Total; ug/L	PBDE 184; Total; ug/L	PBDE 188; Total; ug/L
<u>Alamo River at International Boundary</u>	2011						
Alamo River at International Boundary	5/10/11	DNQ, 0.001	-0.001	-0.002	-0.002	-0.002	-0.002
Alamo River at International Boundary	10/11/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
<u>Alamo River at Drop 10 Central Drain</u>	2011						
Alamo River at Drop 10 Central Drain	5/10/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
Alamo River at Drop 10 Central Drain	10/11/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
<u>Alamo River Outlet</u>	2011						
Alamo River Outlet	5/10/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
Alamo River Outlet	10/11/11	0.005	-0.001	-0.002	-0.002	-0.002	-0.002
Alamo River Outlet	10/11/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002

StationName	SampleDate	PBDE 188; Total; ug/L	PBDE 190; Total; ug/L	PBDE 200; Total; ug/L	PBDE 201; Total; ug/L	PBDE 202; Total; ug/L	PBDE 203; Total; ug/L
<u>Alamo River at International Boundary</u>	2011						
Alamo River at International Boundary	5/10/11	-0.002	-0.002	-0.005	-0.005	-0.005	-0.005
Alamo River at International Boundary	10/11/11	-0.002	-0.002	-0.005	-0.005	-0.005	-0.005
<u>Alamo River at Drop 10 Central Drain</u>	2011						
Alamo River at Drop 10 Central Drain	5/10/11	-0.002	-0.002	-0.005	-0.005	-0.005	-0.005
Alamo River at Drop 10 Central Drain	10/11/11	-0.002	-0.002	-0.005	-0.005	-0.005	-0.005
<u>Alamo River Outlet</u>	2011						
Alamo River Outlet	5/10/11	-0.002	-0.002	-0.005	-0.005	-0.005	-0.005
Alamo River Outlet	10/11/11	-0.002	-0.002	-0.005	-0.005	-0.005	-0.005
Alamo River Outlet	10/11/11	-0.002	-0.002	-0.005	-0.005	-0.005	-0.005

StationName	SampleDate	PBDE 206; Total; ug/L	PBDE 207; Total; ug/L	PBDE 208; Total; ug/L	PBDE 209; Total; ug/L
<u>Alamo River at International Boundary</u>	2011				
Alamo River at International Boundary	5/10/11	-0.01	-0.01	-0.01	-0.05
Alamo River at International Boundary	10/11/11	-0.01	-0.01	-0.01	-0.05
<u>Alamo River at Drop 10 Central Drain</u>	2011				
Alamo River at Drop 10 Central Drain	5/10/11	-0.01	-0.01	-0.01	-0.05
Alamo River at Drop 10 Central Drain	10/11/11	-0.01	-0.01	-0.01	-0.05
<u>Alamo River Outlet</u>	2011				
Alamo River Outlet	5/10/11	-0.01	-0.01	-0.01	-0.05
Alamo River Outlet	10/11/11	-0.01	-0.01	-0.01	-0.05
Alamo River Outlet	10/11/11	-0.01	-0.01	-0.01	-0.05

Appendix G8. Concentrations (ug/L) of PBDEs from the New River and Salton Sea. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	SampleDate	PBDE 153; Total; ug/L	PBDE 154; Total; ug/L	PBDE 179; Total; ug/L	PBDE 183; Total; ug/L	PBDE 184; Total; ug/L	PBDE 188; Total; ug/L
New River at Boundary	2011						
New River at Boundary	5/10/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
New River at Boundary	10/11/11	0.002	-0.001	-0.002	-0.002	-0.002	-0.002
New River Outlet	2011						
New River Outlet	5/10/11	DNQ, 0.001	-0.001	-0.002	-0.002	-0.002	-0.002
New River Outlet	5/10/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
New River Outlet	10/11/11	0.005	-0.001	-0.002	-0.002	-0.002	-0.002
Salton Sea USGS2	2011						
Salton Sea USGS2	5/11/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
Salton Sea USGS7	2011						
Salton Sea USGS7	5/11/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002
Salton Sea USGS9	2011						
Salton Sea USGS9	5/11/11	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002

StationName	SampleDate	PBDE 190; Total; ug/L	PBDE 200; Total; ug/L	PBDE 201; Total; ug/L	PBDE 202; Total; ug/L	PBDE 203; Total; ug/L	PBDE 206; Total; ug/L
New River at Boundary	2011						
New River at Boundary	5/10/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01
New River at Boundary	10/11/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01
New River Outlet	2011						
New River Outlet	5/10/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01
New River Outlet	5/10/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01
New River Outlet	10/11/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01
Salton Sea USGS2	2011						
Salton Sea USGS2	5/11/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01
Salton Sea USGS7	2011						
Salton Sea USGS7	5/11/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01
Salton Sea USGS9	2011						
Salton Sea USGS9	5/11/11	-0.002	-0.005	-0.005	-0.005	-0.005	-0.01

StationName	SampleDate	PBDE 207; Total; ug/L	PBDE 208; Total; ug/L	PBDE 209; Total; ug/L
New River at Boundary	2011			
New River at Boundary	5/10/11	-0.01	-0.01	-0.05
New River at Boundary	10/11/11	-0.01	-0.01	-0.05
New River Outlet	2011			
New River Outlet	5/10/11	-0.01	-0.01	-0.05
New River Outlet	5/10/11	-0.01	-0.01	-0.05
New River Outlet	10/11/11	-0.01	-0.01	-0.05
Salton Sea USGS2	2011			
Salton Sea USGS2	5/11/11	-0.01	-0.01	-0.05
Salton Sea USGS7	2011			
Salton Sea USGS7	5/11/11	-0.01	-0.01	-0.05
Salton Sea USGS9	2011			
Salton Sea USGS9	5/11/11	-0.01	-0.01	-0.05

Appendix G9. Concentrations of pyrethroid insecticides and triazine herbicides (ug/L) in surface waters from the Alamo River.

Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection.

StationName	Sample Date	Ametryn; Total; ug/L	Atraton; Total; ug/L	Atrazine; Total; ug/L	Bifenthrin; Total; ug/L	Cyanazine; Total; ug/L	Cyfluthrin; total; Total; ug/L	Cyhalothrin, Lambda; Total; ug/L	Cypermethrin; Total; Total; ug/L	Deltamethrin/Tralomethrin; Total; ug/L	Desethyl-Atrazine; Total; ug/L	Desisopropyl-Atrazine; Total; ug/L	Desmetryn; Total; ug/L	Dipropetryn; Total; ug/L	Esfenvalerate/Fenvalerate, Total; Total; ug/L
Alamo River at International Boundary	5/10/11	-0.002	-0.002	-0.002	-0.001	-0.002	-0.002	0.006	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.001
Alamo River at International Boundary	10/11/11	-0.002	-0.002	-0.002	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.001
Alamo River at Drop 10 Central Drain	5/10/11	-0.002	-0.002	0.028	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.014	-0.002	-0.002	-0.002	-0.001
Alamo River at Drop 10 Central Drain	10/11/11	-0.002	-0.002	0.006	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.02	-0.002	-0.002	-0.002	-0.001
Alamo River Outlet	5/10/11	-0.002	-0.002	0.077	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.028	-0.002	-0.002	-0.002	-0.001
Alamo River Outlet	10/11/11	-0.002	-0.002	0.079	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.045	-0.002	-0.002	-0.002	0.004
Alamo River Outlet	10/11/11	-0.002	-0.002	0.091	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.052	-0.002	-0.002	-0.002	-0.001
StationName	Sample Date	Fenpropidin; Total; ug/L	Hydroxyatrazine, 2; Total; ug/L	Permethrin, cis; Total; ug/L	Permethrin, trans; Total; ug/L	Prometon; Total; ug/L	Prometryn; Total; ug/L	Propazine; Total; ug/L	Secbumeton; Total; ug/L	Simazine; Total; ug/L	Simetryn; Total; ug/L	Terbutylazine; Total; ug/L	Terbutryn; Total; ug/L		
Alamo River at International Boundary	5/10/11	-0.002	0.007	-0.003	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	
Alamo River at International Boundary	10/11/11	-0.002	-0.002	-0.003	-0.003	-0.002	DNQ, 0.004	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	
Alamo River at Drop 10 Central Drain	5/10/11	-0.002	0.008	-0.003	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	
Alamo River at Drop 10 Central Drain	10/11/11	-0.002	DNQ, 0.004	-0.003	-0.003	DNQ, 0.004	0.072	-0.002	-0.002	-0.002	-0.002	DNQ, 0.003	-0.002		
Alamo River Outlet	5/10/11	-0.002	0.014	-0.003	-0.003	-0.002	-0.002	DNQ, 0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	
Alamo River Outlet	10/11/11	-0.002	0.023	-0.003	-0.003	DNQ, 0.003	DNQ, 0.004	-0.002	-0.002	-0.002	-0.002	DNQ, 0.003	-0.002		
Alamo River Outlet	10/11/11	-0.002	-0.002	-0.003	-0.003	DNQ, 0.003	DNQ, 0.004	-0.002	-0.002	-0.002	-0.002	DNQ, 0.004	-0.002		

Appendix G10. Concentrations of pyrethroid insecticides and triazine herbicides (ug/L) in surface waters from the New River.
Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection.

StationName	Sample Date	Ametryn; Total; ug/L	Atraton; Total; ug/L	Atrazine; Total; ug/L	Bifenthrin; Total; ug/L	Cyanazine; Total; ug/L	Cyfluthrin; total; Total; ug/L	Cyhalothrin, Lambda, Total; Total; ug/L	Cypermethrin; Total; Total; ug/L	Deltamethrin/Traломethrin; Total; ug/L	Desethyl-Atrazine; Total; ug/L	Desisopropyl-Atrazine; Total; ug/L	Desmetyl; Total; ug/L	Dipropetyn; Total; ug/L	Esfenvalerate/Fenvalerate, Total; Total; ug/L	Fenpropathrin; Total; ug/L
New River at Boundary	5/10/11	-0.002	-0.002	-0.002	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.001	-0.002
New River at Boundary	10/11/11	-0.002	-0.002	0.008	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.017	-0.002	-0.002	-0.002	-0.001	-0.002
New River Outlet	5/10/11	-0.002	-0.002	0.404	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.039	-0.002	-0.002	-0.002	-0.001	-0.002
New River Outlet	5/10/11	-0.002	-0.002	0.392	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.038	-0.002	-0.002	-0.002	-0.001	-0.002
New River Outlet	10/11/11	-0.002	-0.002	0.012	-0.001	-0.002	-0.002	0.011	-0.002	-0.002	0.026	-0.002	-0.002	-0.002	-0.001	-0.002
StationName	Sample Date	Hydroxyatrazine, 2-; Total; ug/L	Permethrin, cis-; Total; ug/L	Permethrin, trans-; Total; ug/L	Prometon; Total; ug/L	Prometryn; Total; ug/L	Propazine; Total; ug/L	Secbumeton; Total; ug/L	Simazine; Total; ug/L	Simetryn; Total; ug/L	Terbutylazine; Total; ug/L	Terbutryn; Total; ug/L				
New River at Boundary	5/10/11	-0.002	-0.003	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
New River at Boundary	10/11/11	DNQ, 0.	-0.003	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
New River Outlet	5/10/11	0.018	-0.003	-0.003	-0.002	-0.002	DNQ, 0.004	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
New River Outlet	5/10/11	0.016	-0.003	-0.003	-0.002	-0.002	DNQ, 0.004	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
New River Outlet	10/11/11	0.011	-0.003	-0.003	DNQ, 0.003	DNQ, 0.004	-0.002	-0.002	-0.002	-0.002	DNQ, 0.003	-0.002	-0.002	-0.002	-0.002	-0.002

Appendix G11. Concentrations of pyrethroid insecticides and triazine herbicides (ug/L) in surface waters from the Salton Sea. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection.

StationName	Sample Date	Ametryn; Total; ug/L	Atraton; Total; ug/L	Atrazine; Total; ug/L	Bifenthrin; Total; ug/L	Cyanazine; Total; ug/L	Cyfluthrin, total; Total; ug/L	Cyhalothrin, Lambda, Total; Total; ug/L	Cypermethrin, Total; Total; ug/L	Deltamethrin/Tralomethrin; Total; ug/L	Desethyl-Atrazine; Total; ug/L	Desisopropyl-Atrazine; Total; ug/L	Desmetryn; Total; ug/L	Dipropetryn; Total; ug/L	Esfenvalerate/Fenvalerate, Total; Total; ug/L	Fenpropathrin; Total; ug/L	Hydroxyatrazine, 2-; Total; ug/L
Salton Sea USGS2	5/11/11	DNQ, 0.002	-0.002	0.034	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.021	-0.002	-0.002	-0.002	-0.001	-0.002	0.183
Salton Sea USGS7	5/11/11	DNQ, 0.002	-0.002	0.033	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.021	-0.002	-0.002	-0.002	-0.001	-0.002	0.183
Salton Sea USGS9	5/11/11	DNQ, 0.002	-0.002	0.032	-0.001	-0.002	-0.002	-0.001	-0.002	-0.002	0.021	-0.002	-0.002	-0.002	-0.001	-0.002	0.2
StationName	Sample Date	Permethrin, trans-; Total; ug/L	Prometon; Total; ug/L	Prometryn; Total; ug/L	Propazine; Total; ug/L	Sebumeton; Total; ug/L	Simazine; Total; ug/L	Simetryn; Total; ug/L	Terbutylazine; Total; ug/L	Tertbutyln; Total; ug/L							
Salton Sea USGS2	5/11/11	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002							
Salton Sea USGS7	5/11/11	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002							
Salton Sea USGS9	5/11/11	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002							

Appendix G12. Concentrations of Volatile organic contaminants (ug/L) in surface waters from the New River. Yellow values represent detected values. Negative values are below the limits of detection.

StationName	Sample Date	CountOfDW/C_Result_TextWResQualCodeWScreen	Benzene; Total; ug/L	Bromobenzene; Total; ug/L	Bromochloromethane; Total; ug/L	Bromodichloromethane; Total; ug/L	Bromoform; Total; ug/L	Butylbenzene, n-; Total; ug/L	Butylbenzene, sec-; Total; ug/L	Butylbenzene, tert-; Total; ug/L	Carbon Tetrachloride; Total; ug/L	Chlorobenzene; Total; ug/L	Chloroform; Total; ug/L	Chlorotoluene, 2-; Total; ug/L	Chlorotoluene, 4-; Total; ug/L	Dibromo-3-Chloropropane, 1,2-; Total; ug/L	Dibromochloromethane; Total; ug/L	Dibromoethane, 1,2-; Total; ug/L	Dibromomethane; Total; ug/L
New River at Boundary	10/11/11	49	-0.142	-0.277	-0.342	-0.2	-0.189	-0.161	-0.162	-0.18	-0.156	-0.09	-0.157	-0.176	-0.117	-0.401	-0.122	-0.103	-0.191
New River at Boundary	5/10/11	49	-0.044	-0.041	-0.07	-0.035	-0.071	-0.057	-0.053	-0.062	-0.041	-0.042	-0.043	-0.026	-0.033	-0.106	-0.071	-0.09	-0.075
New River Outlet	10/11/11	49	-0.142	-0.277	-0.342	-0.2	-0.189	-0.161	-0.162	-0.18	-0.156	-0.09	-0.157	-0.176	-0.117	-0.401	-0.122	-0.103	-0.191
New River Outlet	5/10/11	49	-0.044	-0.041	-0.07	-0.035	-0.071	-0.057	-0.053	-0.062	-0.041	-0.042	-0.043	-0.026	-0.033	-0.106	-0.071	-0.09	-0.075
New River Outlet	5/10/11	49	-0.044	-0.041	-0.07	-0.035	-0.071	-0.057	-0.053	-0.062	-0.041	-0.042	-0.043	-0.026	-0.033	-0.106	-0.071	-0.09	-0.075

StationName	Sample Date	Dichlorobenzene, 1,2-; Total; ug/L	Dichlorobenzene, 1,3-; Total; ug/L	Dichlorobenzene, 1,4-; Total; ug/L	Dichloroethane, 1,1-; Total; ug/L	Dichloroethane, 1,2-; Total; ug/L	Dichloroethane, 1,1,1,2-; Total; ug/L	Toluene; Total; ug/L	Trichlorobenzene, 1,2,3-; Total; ug/L	Trichlorobenzene, 1,2,4-; Total; ug/L	Trichloroethane, 1,1,1-; Total; ug/L	Trichloroethane, 1,1,2-; Total; ug/L	Trichloroethylene; Total; ug/L	Trichloropropane, 1,2,3-; Total; ug/L	Trimethylbenzene, 1,2,4-; Total; ug/L	Trimethylbenzene, 1,3,5-; Total; ug/L	Xylene, m/p-; Total; ug/L	Xylene, o-; Total; ug/L	Isopropylbenzene; Total; ug/L	Isopropyltoluene, p-; Total; ug/L	Methyl Tert-butyl Ether; Total; ug/L	Propylbenzene, n-; Total; ug/L
New River at Boundary	10/11/11	-0.172	-0.193	-0.219	-0.132	-0.111	-0.328	-0.05	-0.328	-0.215	-0.277	-0.19	-0.133	-0.127	-0.146	-0.092	-0.285	-0.12	-0.142	-0.093	-0.111	
New River at Boundary	5/10/11	-0.064	-0.051	-0.051	-0.023	-0.05	-0.048	-0.063	-0.043	-0.064	-0.067	-0.027	-0.038	-0.027	-0.038	-0.088	-0.017	-0.053	-0.077	-0.031		
<u>New River Outlet</u>	10/11/11	-0.172	-0.193	-0.219	-0.132	-0.111	-0.328	-0.215	-0.277	-0.19	-0.133	-0.127	-0.146	-0.092	-0.285	-0.12	-0.142	-0.093	-0.111			
New River Outlet	5/10/11	-0.064	-0.051	-0.051	-0.023	-0.05	-0.048	-0.063	-0.043	-0.064	-0.067	-0.027	-0.038	-0.027	-0.038	-0.088	-0.017	-0.053	-0.077	-0.031		
New River Outlet	5/10/11	-0.064	-0.051	-0.051	-0.023	-0.05	-0.048	-0.063	-0.043	-0.064	-0.067	-0.027	-0.038	-0.027	-0.038	-0.088	-0.017	-0.053	-0.077	-0.031		
StationName	Sample Date	Tetrachloroethane, 1,1,1,2-; Total; ug/L	Tetrachloroethane, 1,1,2,2-; Total; ug/L	Tetrachloroethylene; Total; ug/L	Toluene; Total; ug/L	Trichlorobenzene, 1,2,3-; Total; ug/L	Trichlorobenzene, 1,2,4-; Total; ug/L	Trichloroethane, 1,1,1-; Total; ug/L	Trichloroethane, 1,1,2-; Total; ug/L	Trichloroethylene; Total; ug/L	Trichloropropane, 1,2,3-; Total; ug/L	Trimethylbenzene, 1,2,3-; Total; ug/L	Trimethylbenzene, 1,2,4-; Total; ug/L	Trimethylbenzene, 1,3,5-; Total; ug/L	Xylene, m/p-; Total; ug/L	Xylene, o-; Total; ug/L	Isopropylbenzene; Total; ug/L	Isopropyltoluene, p-; Total; ug/L	Methyl Tert-butyl Ether; Total; ug/L	Propylbenzene, n-; Total; ug/L		
		-0.14	-0.212	-0.315	-0.1	-0.238	-0.262	-0.222	-0.251	-0.174	-0.178	-0.162	-0.142	-0.269	-0.122							
New River at Boundary	10/11/11	-0.14	-0.212	-0.315	-0.1	-0.238	-0.262	-0.222	-0.251	-0.174	-0.178	-0.162	-0.142	-0.269	-0.122							
New River at Boundary	5/10/11	-0.043	-0.059	-0.052	0.39	-0.087	-0.092	-0.04	-0.089	-0.062	-0.05	-0.049	-0.024	-0.065	-0.054							
<u>New River Outlet</u>	10/11/11	-0.14	-0.212	-0.315	-0.1	-0.238	-0.262	-0.222	-0.251	-0.174	-0.178	-0.162	-0.142	-0.269	-0.122							
New River Outlet	5/10/11	-0.043	-0.059	-0.052	-0.036	-0.087	-0.092	-0.04	-0.089	-0.062	-0.05	-0.049	-0.024	-0.065	-0.054							
New River Outlet	5/10/11	-0.043	-0.059	-0.052	-0.036	-0.087	-0.092	-0.04	-0.089	-0.062	-0.05	-0.049	-0.024	-0.065	-0.054							

Appendix H1. Concentrations of metals from sediments (mg/kg dw) of the Alamo River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aluminum; Tot	Arsenic; Total;	Cadmium; Total	Chromium; Tot	Copper; Total;	Lead; Total; mg	Manganese; To	Mercury; Total;	Nickel; Total; m	Selenium; Total	Silver; Total; m	Zinc; Total; mg
Alamo River at International Boundary	5/10/11	27345	4.12	0.27	20	10.8	11.6	272	DNQ, 0.004	9.86	0.293	0.21	31.9
Alamo River at International Boundary	10/11/11	33646	3.15	DNQ, 0.08	12.1	5.75	9.5	313	-0.004	6.22	DNQ, 0.099	-0.08	22.8
Alamo River at Drop 10 Central Drain	10/11/11									0.352			
Alamo River Outlet	5/6/02	52700	6.97	0.37	37.3	27.7	14.6	506	-0.015	14.5	0.5	0.533	55.7
Alamo River Outlet	10/2/02	42622	6.54	0.418	34.9	26.8	12.9	581	-0.013	17.4	0.58	0.546	64.1
Alamo River Outlet	10/2/02	39707	6.18	0.442	34.8	25.1	13.1	540	-0.013	16.8	0.43	0.553	62.3
Alamo River Outlet	4/15/03	32468	3.95	0.381	25.8	17	13	344	-0.004	10.5	0.26	0.524	41.9
Alamo River Outlet	11/4/03	24562	4.54	0.52	24.7	12.9	11.4	300	-0.003	8.54	DNQ, 0.16	0.86	32.4
Alamo River Outlet	5/3/04	24541	DNQ, 4.83	0.33	25.6	17.5	12.7	315	DNQ, 0.008	11.8	0.47	0.49	43.6
Alamo River Outlet	10/5/04	43687	DNQ, 4.48	0.39	32.2	21.3	14.9	497	DNQ, 0.015	14.8	0.31	0.63	53.5
Alamo River Outlet	5/9/05	43889	DNQ, 4.87	0.45	30.6	19.4	14.5	475	DNQ, 0.009	12.7	0.5	0.52	50.8
Alamo River Outlet	5/9/05	65039	DNQ, 4.19	0.36	32.7	19.3	12.9	527	DNQ, 0.007	11.3	0.57	0.46	51.8
Alamo River Outlet	10/26/05	48785	DNQ, 4.45	0.38	25.4	16.3	13.5	363	-0.005	10.6	0.287	0.4	45.2
Alamo River Outlet	5/1/06	50910	8.84	0.61	46.1	31.6	19.4	704	DNQ, 0.012	23.1	0.81	0.73	84
Alamo River Outlet	5/7/07	49760	5.71	0.37	33.5	17	13.8	607	0.014	15.6	0.51	0.48	50.9
Alamo River Outlet	10/23/07	1957	DNQ, 0.13	-0.03	1.53	DNQ, 0.75	0.68	27.1	0.024	-0.12	0.389	-0.08	-3.2
Alamo River Outlet	4/21/08	65685	5.01	0.33	31.7	16.3	13	401	DNQ, 0.004	15.8	0.418	0.45	48.1
Alamo River Outlet	10/28/08	83292	8.89	0.46	46.6	23.2	17.9	567	0.029	21.8	1.5	0.5	77.3
Alamo River Outlet	4/28/09	81245	4.81	0.4	37.5	19.5	13.7	469	0.027	17.6	0.505	0.48	56.5
Alamo River Outlet	10/19/09	41774	8	0.4	41.3	22.5	15.9	548	0.023	20.1		0.61	67.3
Alamo River Outlet	5/4/10	76601	5.5	0.32	34	16.3	11.6	440	DNQ, 0.011	14.4	0.543	0.44	51.1
Alamo River Outlet	10/6/10	14323	5.43	0.32	24.1	16.1	13.8	314	-0.004	14.4		0.36	74.7
Alamo River Outlet	5/10/11	31433	6.75	0.6	36.7	19.7	13.9	462	DNQ, 0.009	18.8	0.428	0.43	62.2
Alamo River Outlet	10/11/11	44532	5.14	0.32	26.3	17	15.9	387	DNQ, 0.01	15		0.24	55
Alamo River Outlet	10/11/11	38968	5.47	0.36	26.5	17.2	12.4	377	DNQ, 0.011	15.1		0.53	55
Alamo River Outlet	10/11/11									0.444			
Alamo River Outlet	10/11/11									0.507			
Alamo River Outlet	5/7/12		4.3	0.24	23.5	15.1	13.5	350		12.6		0.22	49.7
Alamo River Outlet	10/15/12		4.74	0.25	26.6	16.1	14.1	360	DNQ, 0.008	13.6		0.51	51

Appendix H2. Concentrations of metals from sediments (mg/kg dw) of the New River.
Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aluminum; Total; mg/Kg dw	Arsenic; Total; mg/Kg dw	Cadmium; Total; mg/Kg	Chromium; Total; mg/Kg	Copper; Total; mg/Kg dw	Lead; Total; mg/Kg dw	Manganese; Total; mg/Kg	Mercury; Total; mg/Kg dw	Nickel; Total; mg/Kg dw	Selenium; Total; mg/Kg dw	Silver; Total; mg/Kg dw	Zinc; Total; mg/Kg dw
New River at Boun	5/8/02	41000	5.48	0.77	29.5	30.7	30.5	327	0.138	11.2	0.56	1.44	105
New River at Boun	10/1/02	27543	5.57	2.31	29.3	37.5	28.3	312	0.217	12.5	0.83	1.95	193
New River at Boun	4/9/03	24339	6.29	0.893	39.4	59.9	47.2	316	0.458	28.3	1.31	2.64	184
New River at Boun	11/4/03	28623	7.93	1.15	71.8	84.1	41.4	284	0.386	25.5	2.03	4.6	632
New River at Boun	5/3/04	40198	6.91	1.23	50.8	64.8	55.5	384	0.238	24.1	1.65	4.13	299
New River at Boun	10/4/04	50889	11.5	1.24	83.9	106	51	434	0.857	30.6	2.01	4.34	721
New River at Boun	5/9/05	32188	5.15	1.02	53.4	53.9	40.7	237	0.32	21.8	2.24	2.17	245
New River at Boun	10/25/05	47466	5.97	1.08	52.6	77.7	53.3	332	0.742	37.3	1.26	5.37	351
New River at Boun	5/1/06	29332	6.38	1.07	54.7	77	36.3	255	0.522	30.6	2.58	3.77	332
New River at Boun	5/7/07	1861	DNQ, 0.17	-0.03	1.7	DNQ, 1.48	1.68	22.2	0.125	DNQ, 0.17	0.82	-0.08	DNQ, 3.98
New River at Boun	10/23/07	1985	DNQ, 0.14	-0.03	1.38	DNQ, 0.72	0.77	20.3	0.018	-0.12	DNQ, 0.275	-0.08	-3.2
New River at Boun	4/21/08	44413	4.1	0.39	28.1	21.8	22.5	292	0.063	12.8	0.776	0.8	70.5
New River at Boun	4/28/09	63367	4.49	0.53	39.9	39.5	47.8	272	DNQ, 0.008	17.2	0.774	2.46	175
New River at Boun	10/19/09	54894	5.13	0.66	40.9	37.4	35	554	0.3	20.8	1.01	2.36	157
New River at Boun	10/19/09	38359	4.4	0.35	36.7	36.7	37.2	309	0.154	18.1	1.17	2.07	119
New River at Boun	5/4/10	53918	4.91	0.3	30.2	19.9	18.2	337	0.049	13.5	0.386	0.65	69.3
New River at Boun	5/4/10	45896	4.94	0.29	27.7	18.1	19.5	319	0.052	13.1	0.459	0.84	71.6
New River at Boun	10/5/10	37391	8.32	1.21	49.7	93.9	70.2	308	1.09	32.2	2.14	8.17	428
New River at Boun	5/10/11	22262	4.62	0.41	24.3	35.5	29.2	295	0.098	14.2	0.5	0.79	93.7
New River at Boun	10/11/11	38671	5.04	0.43	29.6	49.3	52	301	0.536	15.7	0.364	1.16	189
New River at Boun	5/8/12		4.77	0.32	24.9	32.2	50.7	378		13.4		1.36	122
New River at Boun	10/16/12		4.52	0.27	21.6	18.5	26.6	224		12.5		0.2	69.3
New River at Fig D	5/7/02										0.45		
New River at Fig D	9/30/02										0.51		
New River at Rice	5/7/02										0.44		
New River at Rice	9/30/02										0.46		
New River Outlet	5/6/02	68300	10.5	0.54	55	43.4	21.4	654	-0.015	21.5	0.79	0.963	94.2
New River Outlet	5/6/02	47200	6.53	0.34	33.9	29.4	13.4	415	-0.015	13.7	0.77	0.582	60.3
New River Outlet	10/2/02	37362	2.73	0.465	7.64	5.88	8.88	174	-0.013	3.35	0.3	0.164	14.6
New River Outlet	4/15/03	23605	5.28	0.391	27	20	13.8	334	0.015	13	0.3	0.681	51.5
New River Outlet	11/4/03	21431	5.69	0.43	30.2	21.4	14	350	-0.003	14.1	0.45	0.73	60.5
New River Outlet	5/4/04	23087	DNQ, 3.15	0.19	16.8	8.75	9.63	205	-0.006	5.79	DNQ, 0.19	0.49	24.6
New River Outlet	10/5/04	34439	DNQ, 3.88	0.25	25.6	17.2	10.5	371	0.031	11.4	0.45	0.41	45.7
New River Outlet	5/10/05	39170	DNQ, 4.98	0.38	32.8	19.1	14.2	425	0.014	13.5	0.38	0.58	56.4
New River Outlet	10/26/05	51250	5.42	0.43	33.7	20.8	14.5	406	0.021	13.7	0.35	0.63	62.9

StationName	Sample Date	Aluminum; Total; mg/Kg dw	Arsenic; Total; mg/Kg dw	Cadmium; Total; mg/Kg dw	Chromium; Total; mg/Kg dw	Copper; Total; mg/Kg dw	Lead; Total; mg/Kg dw	Manganese; Total; mg/Kg dw	Mercury; Total; mg/Kg dw	Nickel; Total; mg/Kg dw	Selenium; Total; mg/Kg dw	Silver; Total; mg/Kg dw	Zinc; Total; mg/Kg dw
New River Outlet	10/26/05	54394	5.9	0.43	36.3	21.5	15.6	435	0.022	14.6	0.357	0.68	66.4
New River Outlet	5/1/06	33613	6.31	0.44	34.7	21.3	14.6	418	0.019	15.8	0.58	0.65	63.5
New River Outlet	5/7/07	63579	5.61	0.32	32.4	17.3	14.2	616	0.025	15.3	0.49	0.67	53.3
New River Outlet	10/22/07	2854	DNQ, 0.2	-0.03	1.82	DNQ, 0.85	0.76	36.6	0.054	DNQ, 0.14	0.463	-0.08	-3.2
New River Outlet	4/21/08	91893	7.24	0.44	44	22.2	15.4	529	0.024	21.3	0.654	0.58	73.4
New River Outlet	4/21/08	51826	6.96	0.41	38.7	22.5	14.7	410	0.024	20.1	0.686	0.54	65.3
New River Outlet	10/28/08	70379	6.94	0.4	38	18.9	15.1	486	0.013	18.2	DNQ, 0.91	0.39	57
New River Outlet	4/28/09	45654	6.36	0.33	35.8	18.7	14.4	382	-0.004	17	0.515	0.66	53.2
New River Outlet	4/28/09	60205	6.17	0.35	34.1	18.1	14.6	434	0.019	17.4	0.524	0.57	56.3
New River Outlet	10/19/09	28557	5.56	0.3	29.1	16.8	12.9	327	DNQ, 0.007	15		0.66	41.9
New River Outlet	5/4/10	53462	6.96	0.35	38.7	18.9	13.7	436	0.022	17.9	0.472	0.53	62.2
New River Outlet	10/6/10	45493	6.91	0.31	35.7	19	15.4	430	0.016	18.8		0.51	52.5
New River Outlet	5/10/11	39699	7.85	0.39	42.3	23	15.3	695	0.02	21.8	0.727	0.4	76.3
New River Outlet	5/10/11	28655	8.19	0.43	41.2	24.3	15.6	579	0.02	21.3	0.576	0.4	74.3
New River Outlet	10/11/11	44349	6	0.3	31.1	18.6	16.9	490	0.016	17		0.31	63.2
New River Outlet	10/11/11										0.483		
New River Outlet	5/7/12		5.78	0.28	32.4	20.4	16.4	486		17.4		0.2	105
New River Outlet	5/7/12		7.63	0.4	37	24.8	20.5	547		21.4		0.3	117
New River Outlet	10/16/12		6.96	0.29	35.9	21.9	17.7	577	0.024	19.9		0.23	78.6

Appendix H3. Concentrations of metals from sediments (mg/kg dw) of the Salton Sea. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Aluminum; Total; mg/kg	Arsenic; Total; mg/kg	Cadmium; Total; mg/kg	Chromium; Total; mg/kg	Copper; Total; mg/kg	Lead; Total; mg/Kg dw	Manganese; Total; mg/kg	Mercury; Total; mg/kg	Nickel; Total; mg/kg dw	Selenium; Total; mg/kg	Silver; Total; mg/kg dw	Zinc; Total; mg/kg dw
Salton Sea USGS2	5/14/02	15400	9.58	0.384	35.1	28.1	18.3	471	-0.015	21.3	11.9	1.06	65
Salton Sea USGS2	10/3/02	25916	12.6	0.375	21.6	17.9	15.1	576	-0.004	10.5	1.29	0.642	51.3
Salton Sea USGS2	10/3/02	15234	5.14	0.171	10.5	9.18	7.05	280	-0.004	5.66	1.04	0.261	28.1
Salton Sea USGS2	4/10/03	13413	7.53	0.311	15.9	21.4	13	389	DNQ, 0.01	17.5	1.27	0.677	62.2
Salton Sea USGS2	11/4/03	5693	4.4	0.19	18.2	12.1	6.54	230	-0.003	10.5	3.92	0.23	36.1
Salton Sea USGS2	5/5/04	10849	5.85	0.27	32.8	16.3	11.7	370	DNQ, 0.01	14.2	2.66	0.35	56.9
Salton Sea USGS2	10/6/04	30391	11	0.27	22	19.6	10.5	349	-0.006	15.9	4.59	0.45	49.4
Salton Sea USGS2	5/11/05	26592	5.26	0.24	20	16.2	8.29	337	DNQ, 0.008	13	2.43	0.25	47.6
Salton Sea USGS2	10/26/05	19812	DNQ, 3.76	0.08	3.25	DNQ, 3.58	7.49	111	-0.005	1.21	0.352	DNQ, 0.13	11.2
Salton Sea USGS2	5/3/06	24159	8.05	0.25	27.4	17.5	10.8	342	DNQ, 0.008	13.8	3.77	0.32	54.5
Salton Sea USGS2	5/3/06	21253	5.54	0.16	17	11.4	6.34	222	DNQ, 0.007	8.6	3.58	DNQ, 0.18	34.1
Salton Sea USGS2	5/9/07	8863	7.9	0.26	31.2	16.8	12	388	0.024	18.6	1.47	0.48	52
Salton Sea USGS2	10/24/07	11141	6	0.23	21.3	15.4	9.01	241	DNQ, 0.012	17.9	5.86	0.54	36.6
Salton Sea USGS2	4/22/08	46731	5.54	0.25	21.5	14.4	9.44	261	DNQ, 0.011	21.2	7.86	0.3	36.3
Salton Sea USGS2	4/29/09	19852	6.29	0.26	19.1	17.9	13	340	DNQ, 0.008	16.9	8.85	0.44	51.9
Salton Sea USGS2	10/21/09	10273	3.39	0.11	9.35	8.71	5.52	150	0.017	8.15	6.36	-0.08	23.8
Salton Sea USGS2	5/4/10	26540	14.1	0.18	17.9	15.9	9.37	355	0.025	13.6	9.11	0.34	37
Salton Sea USGS2	5/11/11	11323	7.63	0.36	17.2	19	11.8	434	0.036	19	7.62	0.22	36.6
Salton Sea USGS7	5/14/02	26500	8.65	0.33	31	26.4	15	501	-0.015	19	8.95	1.46	58.8
Salton Sea USGS7	9/30/02	30421	5.45	0.338	23	19.6	9.13	455	-0.013	13.7	4.74	0.518	50.6
Salton Sea USGS7	4/10/03	7943	6.86	0.284	11.4	23.2	13.6	333	0.015	17.3	4.47	0.284	58.2
Salton Sea USGS7	11/4/03	8111	5.32	0.22	20.2	13.7	7.83	253	-0.003	12.7	3.49	0.32	37.9
Salton Sea USGS7	5/5/04	6731	DNQ, 4.72	0.2	21.8	12.5	8.09	287	-0.006	11.5	2.65	0.21	43.6
Salton Sea USGS7	10/6/04	28182	7.15	0.17	19	12.6	7.37	244	DNQ, 0.015	10.8	4.09	0.38	32
Salton Sea USGS7	5/11/05	26424	DNQ, 4.99	0.25	25.8	15.9	8.45	336	DNQ, 0.007	12.9	3.46	0.26	47.3
Salton Sea USGS7	10/26/05	20116	DNQ, 3.5	0.07	3.36	DNQ, 3.81	6.63	108	-0.005	1.36	0.314	DNQ, 0.12	10.5
Salton Sea USGS7	5/3/06	20516	9.15	0.31	27.1	17.9	11.9	380	DNQ, 0.012	14.5	5.14	0.38	52.3
Salton Sea USGS7	5/9/07	21096	6.36	0.2	16.2	13.8	9.2	309	0.02	18.6	2.73	0.44	46
Salton Sea USGS7	10/24/07	13379	6.32	0.25	23.6	15.5	9.91	259	DNQ, 0.01	18.5	4.6	0.46	37.9
Salton Sea USGS7	4/22/08	21966	5.41	0.22	17.5	15.1	8.76	229	DNQ, 0.006	17.7	7.37	-0.08	35.6
Salton Sea USGS7	4/29/09	17991	6.79	0.33	27.4	18.8	14.7	399	0.019	19.5	8.28	0.64	59.8
Salton Sea USGS7	10/21/09	9734	3.84	0.14	9.16	8.16	5.37	167	0.014	8.27	4.92	-0.08	26
Salton Sea USGS7	5/4/10	25160	7.29	0.15	14.7	17.5	11.3	333	0.054	14.2	15	0.59	32.8
Salton Sea USGS7	5/11/11	12318	8.04	0.38	16.1	13.9	8.21	230	0.025	15.2	7.87	0.22	22.6

StationName	Sample Date	Aluminum; Total; mg/Kg dw	Arsenic; Total; mg/Kg dw	Cadmium; Total; mg/Kg dw	Chromium; Total; mg/Kg dw	Copper; Total; mg/Kg dw	Lead; Total; mg/Kg dw	Manganese; Total; mg/Kg dw	Mercury; Total; mg/Kg dw	Nickel; Total; mg/Kg dw	Selenium; Total; mg/Kg dw	Silver; Total; mg/Kg dw	Zinc; Total; mg/Kg dw
Salton Sea USGS9	5/14/02									11.9			
Salton Sea USGS9	5/14/02	57300	7.36	0.44	28.7	44.7	11.8	358	-0.015	18.5	9.96	1.01	49.6
Salton Sea USGS9	9/30/02									5.21			
Salton Sea USGS9	10/30/02	7148	4.52	0.197	8.56	13.9	6.38	170	-0.004	7.75	11.8	0.127	32.1
Salton Sea USGS9	4/10/03	8838	5.19	0.18	12.4	15.3	7.5	181	-0.004	10.6	4.07	0.133	34.8
Salton Sea USGS9	11/5/03	11785	8.81	0.41	17.7	25.6	17.1	299	-0.003	16.7	12.2	1.98	53.5
Salton Sea USGS9	5/5/04	4492	6.07	0.26	24.5	15.8	11.4	280	DNQ, 0.007	12.5	6.65	0.48	44
Salton Sea USGS9	10/6/04	12739	12.3	0.27	9.2	17.1	9.07	183	-0.006	11.9	6.58	0.58	25.3
Salton Sea USGS9	5/11/05	17701	DNQ, 3.7	0.2	12.6	14.6	6.32	184	-0.004	7.53	4.63	0.3	31
Salton Sea USGS9	10/26/05	8806	6.94	0.28	17	19.3	13.6	282	0.014	13.1	7.434	0.48	45.9
Salton Sea USGS9	5/3/06	18410	8.04	0.23	16.9	18.3	9.97	251	DNQ, 0.011	12.6	7.34	0.26	47.2
Salton Sea USGS9	5/9/07	11511	3.76	0.13	8.72	8.97	4.97	113	0.026	10.9	9.24	0.29	18.3
Salton Sea USGS9	10/24/07	15165	5.14	0.22	20.6	14.1	8.24	227	DNQ, 0.008	17	5.54	0.38	34.9
Salton Sea USGS9	4/22/08	50482	6.11	0.28	23.9	16	9.73	272	DNQ, 0.006	22	7.21	0.29	39.5
Salton Sea USGS9	4/29/09	9797	3.18	0.16	6.68	9.58	6.01	112	DNQ, 0.011	7.72	10.2	0.37	24
Salton Sea USGS9	10/21/09	11824	3.81	DNQ, 0.06	6.39	7.25	3.1	112	-0.004	6.94	4.69	-0.08	22.5
Salton Sea USGS9	5/4/10	10976	3.24	0.14	7.28	10.8	5.62	125	0.012	8.36	12.4	DNQ, 0.1	22
Salton Sea USGS9	5/11/11	8139	8.66	0.38	12.6	17.4	8.05	250	0.027	16.2	14.2	-0.08	30.8

Appendix II. Concentrations of organochlorine insecticides from sediments (ng/g dw) of the Alamo River. Yellow values represent detections. DNQ represents values below quantification. Negative values represent levels below the detection limit. Blank values were not evaluated.

StationName	Sample Date	Endrin; Total; ng/g dw	HCH, alpha; Total; ng/g dw	HCH, beta; Total; ng/g dw	HCH, delta; Total; ng/g dw	HCH, gamma; Total; ng/g dw	Heptachlor Epoxide; Total; ng/g dw	Heptachlor; Total; ng/g dw	Hexachlorobenzene; Total; ng/g dw	Methoxychlor; Total; ng/g dw	Mirex; Total; ng/g dw	Nonachlor, cis; Total; ng/g dw	Nonachlor, trans; Total; ng/g dw	Oxadiazon; Total; ng/g dw	Oxychlordane; Total; ng/g dw	Oxyfluorfen; Total; ng/g dw	Perthane; Total; ng/g dw	Tedion; Total; ng/g dw	Toxaphene; Total; ng/g dw	Total DDT; ng/g dw
Alamo River at Int'l Boundary	5/10/11	-0.223	-0.325	-0.261		-0.179	-0.305	-0.44	-0.429	-1.24	-0.372	-0.38	-0.241	-0.675	-0.59					5.14
Alamo River at Int'l Boundary	10/11/11	-0.198	-0.289	-0.231		-0.159	-0.271	-0.39	-0.381	-1.1	-0.331	-0.34	-0.214	-0.599	-0.52					3.26
Alamo River Outlet	5/6/02	-2.85	-1.44	-1.87	-1.09	-1.03	-1.53	-1.56	-0.33	-4.49	-2.86	-2.97	-1.18	-2.84	-1.12			-2.23	-24.3	58.60
Alamo River Outlet	10/2/02	-1.5	-0.758	-0.981		-0.541	-0.803	-0.822	DNQ, 0.195	-2.36	-1.5	-1.56	-0.618	-1.49	-0.586			-1.17	DNQ, 17	77.01
Alamo River Outlet	10/2/02	-1.53	-0.777	-1.01		-0.555	-0.823	-0.842	-0.176	-2.42	-1.54	-1.6	-0.633	-1.53	-0.601			-1.2	DNQ, 15	71.89
Alamo River Outlet	4/8/03															-6.1				78.90
Alamo River Outlet	4/15/03	-1.22	-0.619	-0.801	-0.468	-0.442	-0.655	-0.671	-0.14	-1.92	-1.23	-1.27	-0.504	-1.22	-0.478			-0.957	-10.4	28.10
Alamo River Outlet	11/4/03	-1.23	-0.622	-0.805	-0.471	-0.445	-0.659	-0.675	-0.141	-1.94	-1.23	-1.28	-0.507	-1.22	-0.481			-0.962	-10.5	13.30
Alamo River Outlet	5/3/04	-1.38	-0.701	-0.907	-0.53	-0.501	-0.742	-0.76	-0.159	-2.18	-1.39	-1.44	-0.571	-1.38	-0.542			-1.08	-11.8	39.14
Alamo River Outlet	10/5/04	-1.58	-0.8	-1.03	-0.605	-0.571	-0.847	-0.867	-0.181	-2.49	-1.59	-1.65	-0.652	-1.57	-0.618			-1.24	-13.4	12.80
Alamo River Outlet	5/9/05	-1.34	-0.681	-0.881	-0.515	-0.486	-0.721	-0.738	-0.154	-2.12	-1.35	-1.4	-0.555	-1.34	-0.526			-1.05	-11.4	33.40
Alamo River Outlet	5/9/05	-1.33	-0.676	-0.875	-0.511	-0.483	-0.716	-0.733	-0.153	-2.1	-1.34	-1.39	-0.551	-1.33	-0.523			-1.05	-11.4	35.20
Alamo River Outlet	10/26/05	-0.639	-0.324	-0.419	-0.245	-0.231	-0.343	-0.351	-0.073	-1.01	-0.642	-0.666	DNQ, 0.304	-0.636	-0.25			-0.5	-5.44	30.60
Alamo River Outlet	5/1/06	-1.77	-0.895	-1.16	-0.677	-0.639	-0.948	-0.97	-0.203	-2.78	-1.77	-1.84	DNQ, 1.46	-1.76	-0.692			-1.38	-15	70.76
Alamo River Outlet	10/23/07	-0.503	-0.732	-0.587		-0.402	-0.688	-0.995	DNQ, 1.07	-0.408	-0.839	-0.861	-0.542	-1.52	-1.32			-2.98		28.00
Alamo River Outlet	4/21/08	-0.492	-0.717	-0.574		-0.394	-0.673	-0.974	-0.946	DNQ, 0.418	-0.821	-0.842	DNQ, 1.46	-1.49	-1.3			-2.92		36.00
Alamo River Outlet	10/28/08	-0.248	-0.36	-0.289		-0.198	-0.338	-0.49	-0.476	-0.201	-0.413	-0.424	-0.267	-0.748	-0.652			-1.47		22.56
Alamo River Outlet	4/28/09	-0.718	-0.359	-0.359		-0.359	-0.359	-0.718	-0.496	-0.718	-0.718	-0.718	-0.359	-0.718	-0.718			-1.44		48.89
Alamo River Outlet	10/19/09	-0.842	-0.421	-0.421		-0.421	-0.421	-0.842	-0.581	-0.842	-0.842	-0.842	-0.421	-0.842	-0.842			-1.68		12.80
Alamo River Outlet	5/4/10	-0.784	-1.14	DNQ, 1.19		-0.627	-1.07	-1.55	-1.51	-4.36	-1.31	DNQ, 1	7.17	-2.37	-2.06					109.70
Alamo River Outlet	10/6/10	-0.258	-0.375	-0.301		-0.206	-0.353	-0.51	-0.496	-1.43	-0.43	-0.441	-0.278	-0.78	-0.679					37.80
Alamo River Outlet	5/10/11	DNQ, 0.352	-0.369	-0.296		-0.203	-0.346	-0.5	-0.487	-1.41	-0.422	-0.43	-0.273	-0.766	-0.67					45.80
Alamo River Outlet	10/11/11	-0.25	-0.364	-0.292		-0.2	-0.342	-0.5	-0.481	-1.39	-0.417	-0.43	-0.27	-0.756	-0.66					32.40
Alamo River Outlet	10/11/11	-0.243	-0.353	-0.283		-0.194	-0.331	-0.48	-0.466	-1.35	-0.404	-0.42	-0.261	-0.733	-0.64					27.10
Alamo River Outlet	10/15/12	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-5		

Appendix I2. Concentrations of organochlorine insecticides from sediments (ng/g dw) of the New Rivers.(1 of 2). Yellow values represent detections. DNQ represents values below quantification. Negative values represent levels below detection. Blank values were not evaluated.

StationName	Sample Date	Hepiachlor; Total: ng/g dw	Hexachlorobenzene; Total: ng/g dw	Methoxychlor; Total: ng/g dw	Mitex; Total: ng/g dw	Nonachlor, cis-; Total: ng/g dw	Nonachlor, trans-; Total: ng/g dw	Oxadiazon; Total: ng/g dw	Oxychlordane; Total: ng/g dw	Oxyfluorfen; Total: ng/g dw	Perthane; Total: ng/g dw	Tedion; Total: ng/g dw	Toxaphene; Total: ng/g dw	Total DDT; ng/g dw
<u>New River at Boundary</u>	5/8/02	-1.5	2.79	-4.31	-2.75	-2.85	1.99	-2.73	-1.07		DNQ, 2.64	-23.3	23.23	
New River at Boundary	10/1/02	-0.84	2.19	-2.41	-1.54	-1.59	2.76	-1.52	-0.599			-1.2	-13	73.36
New River at Boundary	4/9/03	-0.81	2.63	-2.32	-1.48	DNQ, 1.69	4.73	-1.47	-0.578			-1.16	-12.6	64.40
New River at Boundary	4/16/03									-6.1				
New River at Boundary	11/4/03	DNQ, 3.32	3.66	-4.31	-2.75	-2.85	4.1	-2.73	-1.07		DNQ, 3.71	-23.3	56.20	
New River at Boundary	5/3/04	-0.832	2.67	-2.39	-1.52	-1.58	2.86	-1.51	-0.593			-1.19	-12.9	42.93
New River at Boundary	10/4/04	-1.67	-0.349	-4.78	-3.05	-3.17	DNQ, 1.6	-3.03	-1.19			-2.38	-25.9	39.88
New River at Boundary	5/9/05	-1.44	2.69	-4.13	-2.64	-2.74	DNQ, 1.3	-2.61	-1.03			-2.06	-22.3	45.75
New River at Boundary	10/25/05	-0.431	1.35	-1.24	-0.788	DNQ, 1.22	4.26	-0.782	-0.307			-0.615	-6.68	43.62
New River at Boundary	5/1/06	-1.58	2.74	-4.52	-2.88	-2.99	3.35	-2.86	-1.12			-2.25	-24.4	42.19
New River at Boundary	10/23/07	-0.979	-0.952	-0.402	-0.825	-0.847	-0.534	-1.5	-1.3			-2.93		4.40
New River at Boundary	5/7/07													
New River at Boundary	4/21/08	-1.31	-1.27	-0.537	-1.1	-1.13	DNQ, 1.5	-2	-1.74			-3.92		22.76
New River at Boundary	4/28/09	-0.769	DNQ, 0.72	-0.769	-0.769		2.15	-0.769	-0.769			-1.54		44.36
New River at Boundary	10/19/09	-0.512	DNQ, 0.62	-1.44	-0.432		1.85	-0.783	-0.682			-1.53		32.62
New River at Boundary	10/19/09	-0.53	DNQ, 0.67	-1.49	-0.447	-0.459	DNQ, 1.0	-0.81	-0.706			-1.59		23.39
New River at Boundary	5/4/10	-0.86	-0.836	-2.42	-0.725	-0.744	-0.469	-1.31	-1.14					14.40
New River at Boundary	5/4/10	-1.44	-1.4	-4.06	-1.22	-1.25	-0.787	-2.21	-1.92					13.50
New River at Boundary	10/5/10	-0.755	DNQ, 1.46	-2.12	-0.636	DNQ, 1.7	5.08	-1.15	-1					84.26
New River at Boundary	5/10/11	-0.458	-0.445	DNQ, 2.12	-0.386	-0.4	DNQ, 0.5	-0.7	-0.61					10.70
New River at Boundary	10/11/11	-0.35		-0.982	-0.295	DNQ, 0.46	1.45	-0.534	-0.465					17.55
<u>New River at Rice Drain #3</u>	4/12/03								-6.1					

Appendix I2. Concentrations of organochlorine insecticides from sediments (ng/g dw) of the New River. (2 of 2). Yellow values represent detections; DNQ represents values below quantification; blank values were not evaluated.

StationName	Sample Date	Heptachlor: Total: ng/g dw	Hexachlorobenzene: Total: ng/g dw	Methoxychlor: Total: ng/g dw	Mirex: Total: ng/g dw	Nonachlor, cis- : Total: ng/g dw	Nonachlor, trans- : Total: ng/g dw	Oxadazon: Total: ng/g dw	Oxychlordane: Total: ng/g dw	Oxyfluorfen: Total: ng/g dw	Perthane: Total: ng/g dw	Tedion: Total: ng/g dw	Toxaphene: Total: ng/g dw	Total DDT: ng/g dw
New River Outlet	5/6/02	-1.84	-0.39	-5.28	-3.37	-3.5	-1.39	-3.34	-1.31		-2.63	-28.6		39.40
New River Outlet	5/6/02	-1.85	-0.39	-5.31	-3.38	-3.51	-1.39	-3.36	-1.32		-2.64	-28.7		37.00
New River Outlet	10/2/02	-0.606	-0.127	-1.74	-1.11	-1.15	-0.456	-1.1	-0.432		-0.865	-9.4		
New River Outlet	4/14/03									-6.1				6.80
New River Outlet	4/15/03	-0.704	DNQ, 0.19	-2.02	-1.29	-1.34	-0.53	-1.28	-0.502		-1	-10.9		17.90
New River Outlet	11/4/03	-0.799	-0.167	-2.29	-1.46	-1.52	-0.6	-1.45	-0.569		-1.14	-12.4		17.40
New River Outlet	5/4/04	-0.646	-0.135	-1.85	-1.18	-1.23	-0.486	-1.17	-0.461		-0.922	-10		3.04
New River Outlet	10/5/04	-0.96	-0.201	-2.75	-1.76	-1.82	-0.722	-1.74	-0.684		-1.37	-14.9		37.90
New River Outlet	5/10/05	-0.771	-0.161	-2.21	-1.41	-1.47	-0.58	-1.4	-0.55		-1.1	-12		14.60
New River Outlet	10/26/05	-0.381	DNQ, 0.12	-1.09	-0.696	-0.723	-0.286	-0.69	-0.271		-0.543	-5.9		14.50
New River Outlet	10/26/05	-0.379	DNQ, 0.13	-1.09	-0.694	-0.72	-0.285	-0.688	-0.27		-0.541	-5.88		14.70
New River Outlet	5/1/06	-0.743	-0.156	-2.13	-1.36	-1.41	DNQ, 0.74	-1.35	-0.53		-1.06	-11.5		20.30
New River Outlet	5/7/07													
New River Outlet	10/22/07	-1.05	-1.02	-0.429	-0.882	-0.906	-0.57	-1.6	-1.39		-3.13			14.00
New River Outlet	4/21/08	-1.16	-1.13	-0.476	-0.978	-1	-0.632	-1.77	-1.55		-3.48			27.05
New River Outlet	4/21/08	-1.27	-1.24	DNQ, 0.98	-1.07	-1.1	DNQ, 0.98	-1.94	-1.69		-3.81			26.90
New River Outlet	10/28/08	-0.522	-0.507	-0.214	-0.44	-0.451	DNQ, 0.36	-0.797	-0.694		-1.56			79.54
New River Outlet	4/28/09	-0.716	-0.494	-0.716	-0.716	-0.716	-0.358	-0.716	-0.716		-1.43			19.87
New River Outlet	4/28/09	-0.725	-0.5	-0.725	-0.725	-0.725	-0.362	-0.725	-0.725		-1.45			17.60
New River Outlet	10/19/09	-0.723	-0.499	-0.723	-0.723	-0.723	-0.361	-0.723	-0.723		-1.45			42.36
New River Outlet	5/4/10	-0.996	-0.968	-2.8	-0.839	-0.862	-0.543	-1.52	-1.33					75.00
New River Outlet	10/6/10	-0.514	-0.499	-1.44	-0.433	-0.445	DNQ, 0.28	-0.795	-0.684					11.80
New River Outlet	5/10/11	-0.608	-0.59	-1.71	-0.512	-0.526	-0.331	-0.928	-0.809					28.20
New River Outlet	5/10/11	-0.58	-0.564	-1.63	-0.489	-0.502	DNQ, 0.50	-0.886	-0.772					34.30
New River Outlet	10/11/11	-0.522	-0.507	-1.47	-0.44	-0.452	-0.284	-0.798	-0.695					9.99
New River Outlet	10/16/12	-1	-1	-1	-1	-1	-1	-1	-1		-5			

Appendix I3. Concentrations of organochlorine insecticides from sediments (ng/g dw) of the Salton Sea. Ye

StationName	Sample Date	Aldrin; Total; ng/g dw	Chlordane, cis.; Total; ng/g dw	Chlordane, trans.; Total; ng/g dw	Chlordene, cis.; Total; ng/g dw	Chlordene, trans.; Total; ng/g dw	Dacthal; Total; ng/g dw	DCBP(p,p'); Total; ng/g dw	DDD(o,p'); Total; ng/g dw	DDD(p,p'); Total; ng/g dw	DDE(o,p'); Total; ng/g dw	DDE(p,p'); Total; ng/g dw	DDMU(p,p'); Total; ng/g dw	DDT(o,p'); Total; ng/g dw	DDT(p,p'); Total; ng/g dw	Dieldrin; Total; ng/g dw
Salton Sea USGS2	5/14/02	-1.6	-4.39	-2.48	-1.69	-1.57	-3.88	-4.91	-4.71	-5.52	-4.12	46	9.23	-6.23	-15.2	-2.58
Salton Sea USGS2	10/3/02	-0.335	-0.924	-0.521	-0.356	-0.33	-0.815	-1.03	-0.991	-1.16	-0.867	DNQ, 1.68	-1.55	-1.31	-3.19	-0.542
Salton Sea USGS2	10/3/02	-0.335	-0.922	DNQ, 0.70	-0.355	-0.33	-0.814	-1.03	-0.989	-1.16	-0.865	DNQ, 1.69	-1.55	-1.31	-3.18	-0.541
Salton Sea USGS2	4/10/03	-0.578	-1.59	DNQ, 0.91	-0.613	-0.569	-1.4	-1.78	-1.71	-2	-1.49	16	-2.68	-2.26	-5.49	-0.933
Salton Sea USGS2	11/4/03	-0.688	-1.9	-1.07	-0.731	-0.678	-1.67	-2.12	-2.03	-2.38	-1.78	19.3	-3.19	-2.69	-6.54	DNQ, 1.
Salton Sea USGS2	5/5/04	-0.562	-1.55	-0.874	-0.597	-0.554	-1.37	-1.73	-1.66	-1.95	-1.45	12.7	-2.6	-2.2	-5.35	-0.908
Salton Sea USGS2	10/6/04	-0.958	-2.64	-1.49	-1.02	-0.943	-2.33		-2.83	-3.32	-2.48	19.3	-4.44	-3.74	-9.11	-1.55
Salton Sea USGS2	5/11/05	-0.634	-1.75	-0.985	-0.673	-0.624	-1.54		-1.87	-2.19	-1.64	13.8	-2.93	-2.48	-6.03	-1.02
Salton Sea USGS2	10/26/05	-0.164	-0.451	-0.255	-0.174	-0.161	-0.398		-0.484	-0.567	-0.423	-0.363	-0.759	-0.64	-1.56	-0.265
Salton Sea USGS2	5/3/06	-0.799	-2.2	DNQ, 2.38	-0.848	-0.787	-1.94		-2.36	-2.77	-2.06	15.6	-3.7	-3.12	-7.6	-1.29
Salton Sea USGS2	5/3/06	-0.662	-1.82	DNQ, 1.78	-0.703	-0.652	-1.61		-1.96	-2.29	-1.71	16	-3.07	-2.59	-6.3	-1.07
Salton Sea USGS2	10/24/07	-2.61	-2.52	-2.84			-0.606		-0.606	-0.782	-1.12	32.1	DNQ, 1.63	-1.36	-0.984	-2.73
Salton Sea USGS2	4/22/08	-2.63	-2.54	-2.86			-0.609		-0.609	-0.787	DNQ, 1.18	39	DNQ, 2.16	-1.37	-0.99	-2.74
Salton Sea USGS2	4/29/09	-1.51	-1.51	DNQ, 1.82			-0.757		2.17	5.51	2.66	63	13.4	-1.51	-1.51	2.8
Salton Sea USGS2	10/21/09	-1.66	-1.61	-1.81			-0.389		-0.386	-0.498	DNQ, 0.74	24.8	DNQ, 1.56	-0.868	-0.627	-1.74
Salton Sea USGS2	5/4/10	-0.57	-0.551	-0.619			-0.133		DNQ, 0.21	DNQ, 0.38	DNQ, 0.48	11.1	DNQ, 0.84	-0.297	-0.215	-0.595
Salton Sea USGS2	5/11/11	-1.37	-1.32	-1.48			-0.319		DNQ, 0.80	DNQ, 1.18	DNQ, 1.53	39.2	DNQ, 3.38	-0.712	-0.515	2.41
Salton Sea USGS7	5/14/02	-1.62	-4.46	-2.52	-1.72	-1.59	-3.94	-4.98	-4.78	-5.6	-4.18	57.7	11	-6.33	-15.4	-2.62
Salton Sea USGS7	9/30/02	-0.554	-1.53	-0.862	-0.589	-0.546	-1.35	-1.71	-1.64	-1.92	-1.43	14	-2.57	-2.17	-5.27	-0.9
Salton Sea USGS7	4/10/03	-0.955	-2.63	DNQ, 1.66	-1.01	-0.94	DNQ, 3.68	-2.94	-2.82	-3.31	-2.47	38.6	-4.42	-3.73	-9.08	-1.54
Salton Sea USGS7	11/4/03	-0.648	-1.78	-1.01	-0.688	-0.638	-1.58	-1.99	-1.91	-2.24	-1.67	15.3	-3	-2.53	-6.16	DNQ, 1.05
Salton Sea USGS7	5/5/04	-0.554	-1.53	-0.862	-0.589	-0.546	-1.35	-1.71	-1.64	-1.92	-1.43	10.1	-2.57	-2.17	-5.27	-0.896
Salton Sea USGS7	10/6/04	-0.922	-2.54	-1.43	-0.978	-0.908	-2.24		-2.72	-3.19	-2.38	17.3	-4.27	-3.6	-8.76	-1.49
Salton Sea USGS7	5/11/05	-0.595	-1.64	-0.925	-0.632	-0.586	-1.45		-1.76	-2.06	-1.54	9.35	-2.76	-2.33	-5.66	-0.962
Salton Sea USGS7	10/26/05	-0.169	-0.465	-0.263	-0.179	-0.166	-0.411		-0.499	-0.585	-0.437	-0.374	-0.783	-0.66	-1.61	-0.273
Salton Sea USGS7	5/3/06	-0.757	-2.09	DNQ, 2.66	-0.804	-0.746	-1.84		-2.24	-2.62	-1.96	19.7	-3.51	-2.96	-7.2	-1.22
Salton Sea USGS7	10/24/07	-2.74	-2.65	-2.98			-0.636		-0.636	-0.821	-1.18	17.6	DNQ, 0.94	-1.43	-1.03	-2.86
Salton Sea USGS7	4/22/08	-2.83	-2.74	-3.08			-0.657		-0.657	DNQ, 0.84	DNQ, 1.96	60.5	DNQ, 4.66	-1.48	-1.07	-2.95
Salton Sea USGS7	4/29/09	-1.48	-1.48	-1.48			-0.741		DNQ, 0.94	1.9	2.15	60.5	7.07	-1.48	-1.48	2.02
Salton Sea USGS7	10/21/09	-1.52	-1.47	-1.66			-0.356		-0.353	-0.456	-0.655	18.8	DNQ, 1.26	-0.795	-0.574	DNQ, 1.6
Salton Sea USGS7	5/4/10	-0.536	-0.518	-0.583			-0.125		DNQ, 0.84	1.79	DNQ, 0.98	17.8	DNQ, 3.4	-0.28		DNQ, 0.59
Salton Sea USGS7	5/11/11	-1.97	-1.91	-2.15			-0.462		DNQ, 0.73	DNQ, 1.01	DNQ, 1.5	36.8	DNQ, 3.16	-1.03	-0.744	2.79
Salton Sea USGS9	5/14/02	-2	-5.52	-3.11	-2.13	-1.97	-4.87	-6.17	-5.92	-6.94	-5.18	-4.44	-9.28	-7.83	-19.1	-3.24
Salton Sea USGS9	10/30/02	-1.03	-2.85	DNQ, 2.04	-1.1	-1.02	-2.51	-3.18	-3.05	5.17	-2.67	66.9	DNQ, 8.96	-4.04	-9.83	-1.67
Salton Sea USGS9	4/10/03	-0.842	-2.32	-1.31	-0.894	-0.829	DNQ, 3.21	-2.59	-2.49	-2.91	-2.18	16.5	-3.9	-3.29	-8	-1.36
Salton Sea USGS9	11/5/03	-1.07	-2.94	-1.66	-1.13	-1.05	-2.59	-3.28	DNQ, 4.84	15	DNQ, 6.23	113	26.2	-4.17	-10.1	DNQ, 3.47
Salton Sea USGS9	5/5/04	-0.799	-2.2	-1.24	-0.848	-0.787	-1.94	-2.46	-2.36	-2.77	-2.06	37.1	-3.7	-3.12	-7.6	-1.29
Salton Sea USGS9	10/6/04	-1.56	-4.3	-2.43	-1.66	-1.54	-3.8		-4.62	-5.41	-4.04	83.4	-7.24	-6.11	-14.9	3.51
Salton Sea USGS9	5/11/05	-0.938	-2.58	-1.46	-0.996	-0.924	-2.28		-2.77	-3.25	-2.42	15.5	-4.34	-3.67	-8.92	DNQ, 1.57
Salton Sea USGS9	10/26/05	-0.477	-1.31	-0.741	-0.506	-0.47	-1.16		-1.41	DNQ, 2.08	DNQ, 2.76	66.5	DNQ, 7.57	-1.86	-4.54	DNQ, 1.58
Salton Sea USGS9	5/3/06	-1.02	-2.81	DNQ,	-1.08	-1.01	-2.48		-3.02	-3.53	-2.64	18.6	-4.73	-3.99	-9.71	-1.65
Salton Sea USGS9	10/24/07	-3	-2.9	-3.26			-0.696		-0.696	-0.899	-1.29	23.2	DNQ, 1.18	-1.57	-1.13	3.42
Salton Sea USGS9	4/22/08	-2.73	-2.64	-2.97			-0.634		-0.634	-0.819	-1.18	40.5	DNQ, 2.44	-1.43	-1.03	4.69
Salton Sea USGS9	4/29/09	-2.62	-2.62	-2.62			-1.31		5.1	14.2	3.87	105	18.9	-2.62	-2.62	5.04
Salton Sea USGS9	10/21/09	-1.47	-1.42	-1.6			-0.344		-0.341	-0.441	-0.633	17.4	DNQ, 0.90	-0.768	-0.555	-1.54
Salton Sea USGS9	5/4/10	-0.533	-0.515	-0.58			-0.125		1.93	5.24	DNQ, 1.54	26.4	7.6	-0.278		0.905
Salton Sea USGS9	5/11/11	-1.79	-1.73	-1.95			-0.419		DNQ, 3.1	5.84	DNQ, 4.23	63.1	14	-0.934	-0.674	2.84

StationName	Sample Date	Endosulfan I; Total; ng/g dw	Endosulfan II; Total; ng/g dw	Endosulfan Sulfate; Total; ng/g dw	Endrin Aldehyde; Total; ng/g dw	Endrin Ketone; Total; ng/g dw	Endrin; Total; ng/g dw	HCH, alpha-; Total; ng/g dw	HCH, beta-; Total; ng/g dw	HCH, delta-; Total; ng/g dw	HCH, gamma-; Total; ng/g dw	Heptachlor Epoxide; Total; ng/g dw	Heptachlor; Total; ng/g dw	Hexachlorobenzene; Total; ng/g dw
Salton Sea USGS2	5/14/02	-6.63	-12.3	-12.3		-5.77	-2.92	-3.78	-2.21	-2.09	-3.09	-3.17	-0.66	
Salton Sea USGS2	10/3/02	-1.39	-5.16	-5.16		-1.21	-0.614	-0.795		-0.439	-0.65	-0.666	-0.139	
Salton Sea USGS2	10/3/02	-1.39	-5.15	-5.15		-1.21	-0.613	-0.793		-0.438	-0.649	-0.664	-0.139	
Salton Sea USGS2	4/10/03	-2.4	-8.89	-8.89		-2.09	-1.06	-1.37	-0.8	-0.756	-1.12	-1.15	-0.24	
Salton Sea USGS2	11/4/03	-2.86	-10.6	-10.6		-2.49	-1.26	-1.63	-0.953	-0.9	-1.33	-1.37	-0.286	
Salton Sea USGS2	5/5/04	-2.34	-2.34	-2.34		-2.03	-1.03	-1.33	-0.779	-0.735	-1.09	-1.12	-0.234	
Salton Sea USGS2	10/6/04	-3.98	-14.7	-14.7		-3.46	-1.75	-2.27	-1.33	-1.25	-1.86	-1.9	-0.398	
Salton Sea USGS2	5/11/05	-2.63	-6.63	-6.63		-2.29	-1.16	-1.5	-0.878	-0.829	-1.23	-1.26	-0.263	
Salton Sea USGS2	10/26/05	-0.68	-2.52	-2.52		-0.592	-0.3	-0.388	-0.227	-0.214	-0.318	-0.325	-0.068	
Salton Sea USGS2	5/3/06	-3.32	-12.3	-12.3		-2.89	-1.46	-1.89	-1.11	-1.04	-1.55	-1.59	-0.332	
Salton Sea USGS2	5/3/06	-2.75	-10.2	-10.2		-2.39	-1.21	-1.57	-0.917	-0.866	-1.28	-1.31	-0.275	
Salton Sea USGS2	10/24/07	-3.53	-4.3	-3.45		-1.14	-1.65	-1.33		-0.909	-1.55	-2.25	-2.18	
Salton Sea USGS2	4/22/08	-3.55	-4.33	-3.46		-1.14	-1.66	-1.33		-0.914	-1.56	-2.26	-2.2	
Salton Sea USGS2	4/29/09	-1.51				-1.51	-0.757	-0.757		-0.757	-0.757	-1.51	-1.04	
Salton Sea USGS2	10/21/09	-2.25					-1.05	-0.844		-0.579	-0.988	-1.43	-1.39	
Salton Sea USGS2	5/4/10	-0.771				-0.248	-0.361	-0.289		-0.198	-0.339	-0.49	-0.476	
Salton Sea USGS2	5/11/11	-1.85				-0.594	-0.864	-0.693		-0.475	-0.811	-1.17	-1.14	
<u>Salton Sea USGS7</u>	5/14/02	-6.73	-12.5	-12.5		-5.85	-2.96	-3.84	-2.24	-2.12	-3.14	-3.21	-0.67	
Salton Sea USGS7	9/30/02	-2.3	-8.53	-8.53		-2	-1.02	-1.31		-0.725	-1.07	-1.1	-0.23	
Salton Sea USGS7	4/10/03	-3.97	-14.7	-14.7		-3.45	-1.75	-2.26	-1.32	-1.25	-1.85	-1.9	-0.397	
Salton Sea USGS7	11/4/03	-2.69	-9.97	-9.97		-2.34	-1.19	-1.54	-0.897	-0.847	-1.26	-1.29	-0.269	
Salton Sea USGS7	5/5/04	-2.3	-2.3	-2.3		-2	-1.02	-1.31	-0.768	-0.725	-1.07	-1.1	-0.23	
Salton Sea USGS7	10/6/04	-3.83	-14.2	-14.2		-3.33	-1.69	-2.18	-1.28	-1.21	-1.79	-1.83	-0.383	
Salton Sea USGS7	5/11/05	-2.47	-6.23	-6.23		-2.15	-1.09	-1.41	-0.824	-0.779	-1.15	-1.18	-0.247	
Salton Sea USGS7	10/26/05	-0.702	-2.6	-2.6		-0.611	-0.309	-0.4	-0.234	-0.221	-0.328	-0.335	-0.07	
Salton Sea USGS7	5/3/06	-3.15	-11.7	-11.7		-2.74	-1.39	-1.79	-1.05	-0.99	-1.47	-1.5	-0.315	
Salton Sea USGS7	10/24/07	-3.71	-4.51	-3.61		-1.19	-1.73	-1.39		-0.953	-1.63	-2.36	-2.29	
Salton Sea USGS7	4/22/08	-3.83	-4.66	-3.73		-1.23	-1.79	-1.44		-0.985	-1.68	-2.44	-2.37	
Salton Sea USGS7	4/29/09	-1.48				-1.48	-0.741	-0.741		-0.741	-0.741	-1.48	-1.02	
Salton Sea USGS7	10/21/09	-2.06				-0.662	-0.964	-0.773		-0.53	-0.905	-1.31	-1.27	
Salton Sea USGS7	5/4/10	-0.725				-0.233	-0.339	-0.272		-0.186	-0.318	-0.461	-0.448	
Salton Sea USGS7	5/11/11	-2.67				-0.859	-1.25	-1		-0.687	-1.17	-1.7	-1.65	
<u>Salton Sea USGS9</u>	5/14/02	-8.32	-15.4	-15.4		-7.25	-3.67	-4.75	-2.77	-2.62	-3.88	-3.98	-0.83	
Salton Sea USGS9	10/30/02	-4.29	-15.9	-15.9		-3.74	-1.89	-2.45		-1.35	-2	-2.05	-0.429	
Salton Sea USGS9	4/10/03	-3.5	-13	-13		-3.04	-1.54	-1.99	-1.17	-1.1	-1.63	-1.67	-0.35	
Salton Sea USGS9	11/5/03	-4.43	-16.4	-16.4		-3.86	-1.95	-2.53	-1.48	-1.4	-2.07	-2.12	-0.443	
Salton Sea USGS9	5/5/04	-3.32	-3.32	-3.32		-2.89	-1.46	-1.89	-1.11	-1.04	-1.55	-1.59	-0.332	
Salton Sea USGS9	10/6/04	-6.49	-24.1	-24.1		-5.65	-2.86	-3.7	-2.16	-2.04	-3.03	-3.1	-0.649	
Salton Sea USGS9	5/11/05	-3.9	-9.81	-9.81		-3.39	-1.72	-2.22	-1.3	-1.23	-1.82	-1.86	-0.39	
Salton Sea USGS9	10/26/05	-1.98	-7.34	-7.34		-1.72	-0.873	-1.13	-0.661	-0.624	-0.925	-0.947	-0.198	
Salton Sea USGS9	5/3/06	-4.24	-15.7	-15.7		-3.69	-1.87	-2.42	-1.41	-1.34	-1.98	-2.03	-0.424	
Salton Sea USGS9	10/24/07	-4.06	-4.94	-3.96		-1.31	-1.9	-1.52		-1.04	-1.78	-2.58	-2.51	
Salton Sea USGS9	4/22/08	-3.7	-4.5	-3.61		-1.19	-1.73	-1.39		-0.951	-1.62	-2.35	-2.29	
Salton Sea USGS9	4/29/09	-2.62				-2.62	-1.31	-1.31		-1.31	-1.31	-2.62	-1.81	
Salton Sea USGS9	10/21/09	-1.99				-0.64	-0.932	-0.747		-0.512	-0.875	-1.27	-1.23	
Salton Sea USGS9	5/4/10	-0.721				-0.232	-0.337	-0.27		-0.185	-0.317	-0.459	-0.446	
Salton Sea USGS9	5/11/11	-2.42				-0.778	-1.13	-0.908		-0.623	-1.06	-1.54	-1.5	

StationName	Sample Date	Methoxychlor; Total; ng/g dw	Mirex; Total; ng/g dw	Nonachlor, cis-; Total; ng/g dw	Nonachlor, trans-; Total; ng/g dw	Oxadiazon; Total; ng/g dw	Oxychlordane; Total; ng/g dw	Oxyfluorfen; Total; ng/g dw	Pentane; Total; ng/g dw	Tedion; Total; ng/g dw	Toxaphene; Total; ng/g dw	Total DDT; ng/g dw
<u>Salton Sea USGS2</u>	5/14/02	-9.08	-5.79	-6.01	-2.38	-5.74	-2.26		-4.52	-49.1		55.23
Salton Sea USGS2	10/3/02	-1.91	-1.22	-1.26	-0.5	-1.21	-0.475		-0.949	-10.3		
Salton Sea USGS2	10/3/02	-1.91	-1.22	-1.26	-0.5	-1.21	-0.474		-0.948	-10.3		
Salton Sea USGS2	4/10/03	-3.29	-2.1	-2.18	-0.862	-2.08	-0.818		-1.64	-17.8		16.00
Salton Sea USGS2	11/4/03	-3.92	-2.5	-2.59	-1.03	-2.48	-0.974		-1.95	-21.2		19.30
Salton Sea USGS2	5/5/04	-3.2	-2.04	-2.12	-0.839	-2.02	-0.796		-1.59	-17.3		12.70
Salton Sea USGS2	10/6/04	-5.45	-3.48	-3.61	-1.43	-3.45	-1.36		-2.71	-29.5		19.30
Salton Sea USGS2	5/11/05	-3.61	-2.3	-2.39	-0.946	-2.28	-0.897		-1.79	-19.5		13.80
Salton Sea USGS2	10/26/05	-0.932	-0.595	-0.617	-0.244	-0.59	-0.232		-0.464	-5.04		
Salton Sea USGS2	5/3/06	-4.55	-2.9	-3.01	-1.19	-2.88	-1.13		-2.26	-24.6		15.60
Salton Sea USGS2	5/3/06	-3.77	-2.4	-2.5	-0.988	-2.38	-0.937		-1.87	-20.4		16.00
Salton Sea USGS2	10/24/07	-0.921	-1.89	-1.94	-1.22	-3.43	-2.99		-6.73			32.10
Salton Sea USGS2	4/22/08	-0.926	-1.9	-1.95	-1.23	-3.45	-3.01		-6.76			39.00
Salton Sea USGS2	4/29/09	-1.51	-1.51	-1.51	-0.757	5.23	-1.51		-3.03			86.74
Salton Sea USGS2	10/21/09	-4.02	-1.21	-1.24	-0.779	-2.19	-1.9		-4.28			24.80
Salton Sea USGS2	5/4/10	-1.38	-0.413	-0.424	-0.267	-0.749	-0.652					11.10
Salton Sea USGS2	5/11/11	-3.3	-0.99	-1.02	-0.64	-1.79	-1.56					39.20
<u>Salton Sea USGS7</u>	5/14/02	-9.22	-5.88	-6.1	-2.42	-5.83	-2.29		-4.58	-49.8		68.70
Salton Sea USGS7	9/30/02	-3.16	-2.01	-2.09	-0.827	-2	-0.785		-1.57	-17.1		14.00
Salton Sea USGS7	4/10/03	-5.44	-3.47	-3.6	-1.42	-3.44	-1.35		-2.7	-29.4		38.60
Salton Sea USGS7	11/4/03	-3.69	-2.35	-2.44	-0.967	-2.33	-0.917		-1.83	-19.9		15.30
Salton Sea USGS7	5/5/04	-3.16	-2.01	-2.09	-0.827	-2	-0.785		-1.57	-17.1		10.10
Salton Sea USGS7	10/6/04	-5.25	-3.35	-3.47	-1.38	-3.32	-1.3		-2.61	-28.4		17.30
Salton Sea USGS7	5/11/05	-3.39	-2.16	-2.24	-0.889	-2.14	-0.843		-1.69	-18.3		9.35
Salton Sea USGS7	10/26/05	-0.962	-0.614	-0.637	-0.252	-0.608	-0.239		-0.478	-5.2		
Salton Sea USGS7	5/3/06	-4.31	-2.75	-2.85		-2.73	-1.07		-2.14	-23.3		19.70
Salton Sea USGS7	10/24/07	-0.967	-1.99	-2.04	-1.28	-3.6	-3.14		-7.06			17.60
Salton Sea USGS7	4/22/08	-0.999	-2.05	-2.11	-1.33	-3.72	-3.24		-7.29			60.50
Salton Sea USGS7	4/29/09	-1.48	-1.48	-1.48	-0.741	-1.48	-1.48		-2.96			71.62
Salton Sea USGS7	10/21/09	-3.68	-1.1	-1.13	-0.714	-2	-1.74		-3.92			18.80
Salton Sea USGS7	5/4/10	-1.29	-0.388	-0.399	-0.251	-0.704	-0.614					19.59
Salton Sea USGS7	5/11/11	-4.77	-1.43	-1.47	-0.925	-2.59	-2.26					36.80
<u>Salton Sea USGS9</u>	5/14/02	-11.4	-7.28	-7.55	-2.99	-7.21	-2.84		-5.67	-61.7		
Salton Sea USGS9	10/30/02	-5.88	-3.75	-3.9	-1.54	-3.72	-1.46		-2.93	-31.8		72.07
Salton Sea USGS9	4/10/03	-4.79	-3.06	-3.17	-1.26	-3.03	-1.19		-2.38	-25.9		16.50
Salton Sea USGS9	11/5/03	-6.08	-3.88	-4.02	-1.59	-3.84	-1.51		-3.02	-32.8		154.20
Salton Sea USGS9	5/5/04	-4.55	-2.9	-3.01	-1.19	-2.88	-1.13		-2.26	-24.6		37.10
Salton Sea USGS9	10/6/04	-8.9	-5.68	-5.89	-2.33	-5.63	-2.21		-4.43	-48.1		83.40
Salton Sea USGS9	5/11/05	-5.34	-3.41	-3.54	-1.4	-3.38	-1.33		-2.66	-28.9		15.50
Salton Sea USGS9	10/26/05	-2.72	-1.73	-1.8	-0.712	-1.72	-0.675		-1.35	-14.7		66.50
Salton Sea USGS9	5/3/06	-5.81	-3.71	-3.85	-1.52	-3.68	-1.45		-2.89	-31.4		18.60
Salton Sea USGS9	10/24/07	-1.06	-2.18	-2.23	-1.41	-3.94	-3.44		-7.73			23.20
Salton Sea USGS9	4/22/08		-1.98	-2.03	-1.28	-3.59	-3.13		-7.04			40.50
Salton Sea USGS9	4/29/09	-2.62	-2.62	-2.62	-1.31	-2.62	-2.62		-5.24			147.07
Salton Sea USGS9	10/21/09	-3.56	-1.07	-1.1	-0.69	-1.93	-1.69		-3.79			17.40
Salton Sea USGS9	5/4/10	-1.29	-0.386	-0.397	-0.25	-0.701	-0.611					41.17
Salton Sea USGS9	5/11/11	-4.32	-1.3	-1.33	-0.839	-2.35	-2.05					82.94

Appendix J1. Concentrations of pyrethroid insecticides and triazine herbicides from sediments (ng/g dw) of the Alamo Rivers. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon: Total: % dw	Atrazine: Total: ng/g dw	Bifenthrin: Total: ng/g dw	Cyfluthrin, total: Total: ng/g dw	Cyhalothrin, Lambda, Total: Total: ng/g dw	Cypermethrin, Total: Total: ng/g dw	Delamethrin/Talomethrin: Total: ng/g dw	Deltafenvvalerate/Fenvvalerate, Total: ng/g dw	Efenvalerate/Fenvvalerate, Total: ng/g dw	Fenpropathrin: Total: ng/g dw	Hexazone: Total: ng/g dw	Permethrin, cis: Total: ng/g dw	Permethrin, Total: Total: ng/g dw	Permethrin, trans: Total: ng/g dw	Piperonyl Buloxide: Total: ng/g dw	Pronetryn: Total: ng/g dw	Simazine: Total: ng/g dw
Alamo River at International Boundary	5/10/11		-0.319	-0.255	-0.191	-0.383		-0.255	-0.255	-1.02	-0.893		-1.53					
Alamo River at International Boundary	10/11/11		-0.312	-0.249	-0.187	-0.374		-0.249	-0.249	-0.997	-0.873		-1.5					
Alamo River at Drop 10 Central Drain	10/11/11		2.67	DNQ, 0.463	1.23	-0.415		-0.277	8.79	-1.11	DNQ, 1.51		-1.66					
Alamo River Outlet	4/8/03	-0.6	-0.9		-0.5				-1.4		-3.2		-1.4		-1.2	-1.8	-2.1	
Alamo River Outlet	10/26/05	0.27		-0.5	-1.5	-0.5	-1.5		-0.5	-1			-2					
Alamo River Outlet	5/1/06	0.94		-0.5	-2	-1	-2		-2	-1			-4					
Alamo River Outlet	5/7/07	0.56		-0.5	-2	-1	DNQ, 3.57		-2	-1			-4					
Alamo River Outlet	10/23/07	0.44		-0.5	-2	-1	-2		-2	-1	-2		-4					
Alamo River Outlet	4/21/08	0.53		-0.5	-2	-1	-2		-2	-1	-2		-2					
Alamo River Outlet	10/28/08	0.94		-0.5	-2	-1	-2		-2	DNQ, 1.86	-2	-4		-4				
Alamo River Outlet	4/28/09	0.018		5.12	-1	1.66	-1		-1	1.8	-1	-1		-1				
Alamo River Outlet	10/19/09	0.874		-0.5	DNQ, 3.13	-1	-2	-2		3.41	-2	-2.5		-2.5				
Alamo River Outlet	5/4/10	1.61		1.75	-0.308	-0.231	-0.461	-0.308		2.11	-1.23	-1.076		-1.845				
Alamo River Outlet	10/6/10	1.97		0.912	-0.148	-0.111	-0.222	-0.148		3.07	-0.592	-0.518		-0.889				
Alamo River Outlet	5/10/11		-0.386	-0.309	1.16	-0.463		-0.309	-0.309	-1.24		-1.08		-1.85				
Alamo River Outlet	10/11/11		2.23	DNQ, 0.246	DNQ, 0.357	DNQ, 0.601		-0.333	2.6	-0.065		-0.725		-1.2				
Alamo River Outlet	10/11/11		2.09	DNQ, 0.256	DNQ, 0.308	DNQ, 0.546		-0.308	2.8	-0.06		-0.671		-1.11				
Alamo River Outlet	10/15/12		0.844	-0.182	0.811	DNQ, 1.33		-0.314	4.85	-0.061	DNQ, 0.959		-1.13					

Appendix J2. Concentrations of pyrethroid insecticides and triazine herbicides from sediments (ng/g dw) of the New River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon: Total: % dw	Atrazine: Total: ng/g dw	Bifenthrin: Total: ng/g dw	Cyfluthrin: Total: ng/g dw	Cyhalothrin, Lambda, Total: ng/g dw	Cypermethrin, Total: ng/g dw	Deltamethrin/Tralomethrin: Total: ng/g dw	Deltamethrin: Total: ng/g dw	Esfenvalerate/Evalerate, Total: Total: ng/g dw	Fenpropathrin: Total: ng/g dw	Hexazone: Total: ng/g dw	Permethrin, cis-: Total: ng/g dw	Permethrin, trans-: Total: ng/g dw	Piperonyl Butoxide: Total: ng/g dw	Prometryn: Total: ng/g dw	Simazine: Total: ng/g dw
New River at Boundary	4/16/03	-0.6	-0.9		-0.5				-1.4		-3.2		-1.4		-1.2	-1.8	-2.1
New River at Boundary	5/3/04 2.24		11.5	-2	-1	182.9			-1				59				
New River at Boundary	10/25/05 2.27		21.8	992.5	6.51	58.41		10.5	-1				4.42				
New River at Boundary	5/1/06 5.86		12.85	-2	-1	-2		-2	-1				53.33				
New River at Boundary	5/7/07 1.25		-0.5	-2	-1	-2		-2	-1				-4				
New River at Boundary	10/23/07 0.4		-0.5	-2	-1	-2		-2	-1	DNQ, 2.45			-4				
New River at Boundary	4/21/08 1.12		-0.5	-2	-1	13.3		-2	-1	-2		-2		-2			
New River at Boundary	4/28/09 0.113		4.93	-1	8.59	36.9		-1	-0.5	-1		-1		-1			
New River at Boundary	10/19/09		4.35	-2	-1	-2		-2		3.1	-2		-2.5		-2.5		
New River at Boundary	10/19/09		2.54	-2	-1	12		-2		3.21	-2		-2.5		6.87		
New River at Boundary	5/4/10 1.43		-0.369	-0.295	-0.221	8.5	-0.295		-0.295	-1.18		-1.033		-1.771			
New River at Boundary	5/4/10 1.32		-0.384	-0.307	-0.23	6.85	-0.307		-0.307	-1.228		-1.074		-1.841			
New River at Boundary	10/5/10 8.53		-0.565	-0.452	-0.339	-0.678	-0.452		-0.452	-1.809		-1.583		-2.714			
New River at Boundary	5/10/11		1.62	-0.262	DNQ, 0.343	8.83		-0.262	-0.262	-1.05	4.14		4.16				
New River at Boundary	10/11/11		7.39	2.19	3.69	112		4.82	3.6	-1.15	35.7		65.1				
New River, Rice Drain #3	4/12/03		-0.6	-0.9		-0.5			-1.4		-3.2		-1.4		-1.2	-1.8	-2.1
New River Outlet	4/14/03		-0.6	-0.9		-0.5			-1.4		-3.2		-1.4		-1.2	-1.8	-2.1
New River Outlet	10/26/05 0.41		DNQ, 0.65	-1.5	-0.5	-1.5		-0.5	-1				DNQ, 2.37				
New River Outlet	10/26/05 0.49		1.23	-1.5	-0.5	-1.5		-0.5	-1				DNQ, 2.3				
New River Outlet	5/1/06 0.67		-0.5	-2	-1	-2		-2	-1				-4				
New River Outlet	5/7/07 0.57		-0.5	-2	-1	-2		-2	-1				-4				
New River Outlet	10/22/07 0.52		-0.5	-2	-1	4.09		-2	2.85	-2			-4				
New River Outlet	4/21/08 1.09		-0.5	-2	-1	-2		-2	-1	-2		-2		-2			
New River Outlet	4/21/08 1.59		-0.5	-2	2.86	-2		-2	-1	-2		-2		-2			
New River Outlet	10/28/08 0.94		1.26	-2	-1	DNQ, 3.36		-2	4.93	-2		-4		-4			
New River Outlet	4/28/09 0.013		-0.25	-1	-0.5	-1		-1	-0.5	-1	6.46		15.2				
New River Outlet	4/28/09 0.052		DNQ, 0.342	-1	1.05	-1		-1	-0.5	-1	-1		-1				
New River Outlet	10/19/09 0.475		-0.5	DNQ, 3.23	-1	DNQ, 3.44	-2		3.59	-2		-2.5		-2.5			
New River Outlet	5/4/10 1.3		1.21	-0.296	-0.222	-0.445	-0.296		-0.296	-1.186		-1.037		-1.778			
New River Outlet	10/6/10 2.06		2.02	-0.15	3.18	8.48	-0.15		12.8	-0.599	10.3		10.9				
New River Outlet	5/10/11		0.953	-0.354	1.54	1.79		-0.354	2.26	-1.41		-1.24		-2.12			
New River Outlet	5/10/11		0.91	-0.357	1.6	2.31		-0.357	2.47	-1.43		-1.25		-2.14			
New River Outlet	10/11/11		0.653	-0.205	DNQ, 0.389	DNQ, 0.446		-0.353	1.17	-0.069	DNQ, 1.12		-1.27				
New River Outlet	10/16/12		1.51	-0.2	4.81	2.63		-0.344	7.01	-0.067	3.28		DNQ, 2.02				

Appendix J3. Concentrations of pyrethroid insecticides and triazine herbicides from sediments (ng/g dw) of the Salton Sea. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	SampleDate	Total Organic Carbon: Total: % dw	Atrazine: Total: ng/g dw	Bifenthrin: Total: ng/g dw	Cyfluthrin: Total: ng/g dw	Cyhalothrin, Lambda: Total: ng/g dw	Cypermethrin, Total: Total: ng/g dw	Deltamethrin/Tralomethrin: Total: ng/g dw	Deltamethrin: Total: ng/g dw	Esfenvaleate/Fenvalerate, Total: Total: ng/g dw	Fenopropothrin: Total: ng/g dw	Hexazone: Total: ng/g dw	Permethrin, cis-: Total: ng/g dw	Permethrin, Total: Total: ng/g dw	Piperonyl Butoxide: Total: ng/g dw	Prometryn: Total: ng/g dw	Simazine: Total: ng/g dw
Salton Sea USGS2	10/26/05	0.1	-0.5	-1.5	-0.5	-1.5			-0.5	-1				-2			
Salton Sea USGS2	5/3/06	5	-0.5	-2	-1	-2			-2	-1				-4			
Salton Sea USGS2	5/3/06	5.02	-0.5	-2	-1	-2			-2	-1				-4			
Salton Sea USGS2	5/9/07	2.54	-0.5	-2	-1	-2			-2	-1				-4			
Salton Sea USGS2	10/24/07	10.22	-0.5	-2	-1	-2			-2	-1	-2			-4			
Salton Sea USGS2	4/22/08	0.28	-0.5	-2	-1	-2			-2	-1	-2	-2		-2			
Salton Sea USGS2	4/29/09	0.07	-0.25	-1	-0.5	-1			-1	-0.5	-1	-1		-1			
Salton Sea USGS2	10/21/09	0.03	-0.5	-2	-1	-2	-2			2.47	-2	-2.5		-2.5			
Salton Sea USGS2	5/4/10	5.48	-0.829	-0.663	-0.497	-0.995	-0.663			-0.663	-2.653	-2.321		-3.979			
Salton Sea USGS2	5/11/11		-0.591	-0.473	-0.355	-0.709			-0.473	-0.473	-1.89	-1.65		-2.84			
Salton Sea USGS7	10/26/05	0.13	-0.5	-1.5	-0.5	-1.5			-0.5	-1				-2			
Salton Sea USGS7	5/3/06	5.28	-0.5	-2	-1	-2			-2	-1				-4			
Salton Sea USGS7	5/9/07	6.79	-0.5	-2	-1	-2			-2	-1				-4			
Salton Sea USGS7	10/24/07	11.93	-0.5	-2	-1	-2			-2	-1	-2			-4			
Salton Sea USGS7	4/22/08	0.51	-0.5	-2	-1	-2			-2	-1	-2	-2		-2			
Salton Sea USGS7	4/29/09	0.186	-0.25	-1	-0.5	-1			-1	-0.5	-1	-1		-1			
Salton Sea USGS7	10/21/09	0.276	-0.5	-2	-1	-2	-2			-1	-2	-2.5		-2.5			
Salton Sea USGS7	5/4/10	6.93	-0.743	-0.594	-0.446	-0.891	-0.594			-0.594	-2.376	-2.079		-3.564			
Salton Sea USGS7	5/11/11		-1.14	-0.911	-0.683	-1.37			-0.911	-0.911	-3.64	-3.19		-5.46			
Salton Sea USGS9	10/26/05	10.64	-0.5	-1.5	-0.5	-1.5			-0.5	-1				-2			
Salton Sea USGS9	5/3/06	7.6	-0.5	-2	-1	-2			-2	-1				-4			
Salton Sea USGS9	5/9/07	17.59	-0.5	-2	-1	-2			-2	-1				-4			
Salton Sea USGS9	10/24/07	12.16	DNQ, 0.873	-2	-1	-2			-2	-1	-2			-4			
Salton Sea USGS9	4/22/08	0.5	-0.5	-2	-1	-2			-2	-1	-2	-2		-2			
Salton Sea USGS9	4/29/09	0.042	-0.25	-1	-0.5	-1			-1	-0.5	-1	-1		-1			
Salton Sea USGS9	10/21/09	0.078	-0.5	-2	-1	-2	-2			-1	-2	-2.5		-2.5			
Salton Sea USGS9	5/4/10	9.5	-1.226	-0.981	-0.736	-1.472	-0.981			-0.981	-3.924	-3.434		-5.887			
Salton Sea USGS9	5/11/11		-1.01	-0.809	-0.607	-1.21			-0.809	-0.809	-3.24	-2.83		-4.86			

Appendix K1. Concentrations of organophosphate and carbamate pesticides from sediments (ng/g dw) of the Alamo River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Azinphos Methyl; Total; ng/g dw	Bolstar; Total; ng/g dw	Chlorpyrifos Methyl; Total; ng/g dw	Chlorpyrifos; Total; ng/g dw	Demeton-S; Total; ng/g dw	Diazinon; Total; ng/g dw	Dichlofenthion; Total; ng/g dw	Dichlonovos; Total; ng/g dw	Dioxathion ; Total; ng/g dw	Disulfoton; Total; ng/g dw	Ethion; Total; ng/g dw	Ethoprop; Total; ng/g dw	Fenchlorphos; Total; ng/g dw	Fenitrothion; Total; ng/g dw	Fensulfothion; Total; ng/g dw	
<u>Alamo River at International Boundary</u>	5/10/11	-31.9	-6.38			-6.38	-31.9		-31.9		-31.9	-31.9	-31.9	-31.9	-31.9	-31.9	
Alamo River at International Boundary	10/11/11	-31.2	-6.23			-6.23	-31.2		-31.2		-31.2	-31.2	-31.2	-31.2	-31.2	-31.2	
<u>Alamo River at Drop 10 Central Drain</u>	10/11/11	-34.6	-6.91			-6.91	-34.6		-34.6		-34.6	-34.6	-34.6	-34.6	-34.6	-34.6	
<u>Alamo River Outlet</u>	5/6/02			3.52		-20.5											
Alamo River Outlet	10/2/02			6.34		-10.8											
Alamo River Outlet	10/2/02			4.6		-11											
Alamo River Outlet	4/8/03	-7.6		9		-1.5											
Alamo River Outlet	4/15/03			3.15		-8.79											
Alamo River Outlet	11/4/03			3.68		-8.84											
Alamo River Outlet	5/3/04			3.18		-9.95											
Alamo River Outlet	10/5/04			14.2		-11.4											
Alamo River Outlet	5/9/05	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	5/9/05	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	10/26/05	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	5/1/06	-25	DNQ, 5.37			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	10/23/07	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	4/21/08	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	10/28/08	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	4/28/09	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	10/19/09	-25	-5			-5	-25		-25		-25	-25	-25	-25	-25	-25	
Alamo River Outlet	5/4/10	-38.9	-7.78			-7.78	-38.9		-38.9		-38.9	-38.9	-38.9	-38.9	-38.9	-38.9	
Alamo River Outlet	10/6/10	-37.1	-7.41			-7.41	-37.1		-37.1		-37.1	-37.1	-37.1	-37.1	-37.1	-37.1	
Alamo River Outlet	5/10/11	-38.6	-7.72			-7.72	-38.6		-38.6		-38.6	-38.6	-38.6	-38.6	-38.6	-38.6	
Alamo River Outlet	10/11/11	-17.8	DNQ, 5.22			-3.55	-17.8		-17.8		-17.8	-17.8	-17.8	-17.8	-17.8	-17.8	
Alamo River Outlet	10/11/11	-18.5	DNQ, 5.96			-3.7	-18.5		-18.5		-18.5	-18.5	-18.5	-18.5	-18.5	-18.5	
Alamo River Outlet	10/15/12	-10	-5			-10	-5		-10		-10	-10	-10	-10	-10	-10	

StationName	Sample Date	Fenthion; Total; ng/g dw	Fonofos; Total; ng/g dw	Malathion; Total; ng/g dw	Mephos; Total; ng/g dw	Methidathion; Total; ng/g dw	Mevinphos; Total; ng/g dw	Molinate; Total; ng/g dw	Parathion, Ethyl; Total; ng/g dw	Parathion, Methyl; Total; ng/g dw	Phorate; Total; ng/g dw	Phosmet; Total; ng/g dw	Phosphamidon; Total; ng/g dw	Sulfotep; Total; ng/g dw	Tetrachlorvinphos; Total; ng/g dw	Thiobencarb; Total; ng/g dw
Alamo River at International Boundary	5/10/11	-32	-31.9	-31.9					-13	-12.8			-31.9	-31.9		
Alamo River at International Boundary	10/11/11	-31	-31.2	-31.2					-13	-12.5			-31.2	-31.2		
Alamo River at Drop 10 Central Drain	10/11/11	-34.6	-34.6	-34.6					-13.8	-13.8			-34.6	-34.6		
Alamo River Outlet	5/6/02								-2.55	-4.61						
Alamo River Outlet	10/2/02								-1.34	-2.42						
Alamo River Outlet	10/2/02								-1.37	-2.48						
Alamo River Outlet	4/8/03		-1.5		-3.4		-2	-1.6			-0.8					-4.4
Alamo River Outlet	4/15/03								-1.09	-1.98						
Alamo River Outlet	11/4/03								-1.1	-1.99						
Alamo River Outlet	5/3/04								-1.24	-2.24						
Alamo River Outlet	10/5/04								-1.41	-2.55						
Alamo River Outlet	5/9/05	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	5/9/05	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	10/26/05	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	5/1/06	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	10/23/07	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	4/21/08	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	10/28/08	-25	-25	-25					-10	-10			-25			
Alamo River Outlet	4/28/09	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	10/19/09	-25	-25	-25					-10	-10			-25	-25		
Alamo River Outlet	5/4/10	-38.9	-38.9	-38.9					-15.6	-15.6			-38.9	-38.9		
Alamo River Outlet	10/6/10	-37.1	-37.1	-37.1					-14.8	-14.8			-37.1	-37.1		
Alamo River Outlet	5/10/11	-39	-38.6	-38.6					-15	-15.4			-38.6	-38.6		
Alamo River Outlet	10/11/11	-18	-17.8	-17.8					-7.1	-7.1			-17.8	-17.8		
Alamo River Outlet	10/11/11	-19	-18.5	-18.5					-7.4	-7.4			-18.5	-18.5		
Alamo River Outlet	10/15/12	-10	-5				-10		-10	-10			-10			

StationName	Sample Date	Thionazin: Total: ng/g dw	Tokuthione: Total: ng/g dw	Trichloronale: Total: ng/g dw
<u>Alamo River at International Boundary</u>	5/10/11	-32	-32	-31.9
Alamo River at International Boundary	10/11/11	-31	-31	-31.2
<u>Alamo River at Drop 10 Central Drain</u>	10/11/11	-34.6	-34.6	-34.6
Alamo River Outlet	5/9/05	-25	-25	-10
Alamo River Outlet	5/9/05	-25	-25	-10
Alamo River Outlet	10/26/05	-25	-25	-10
Alamo River Outlet	5/1/06	-25	-25	-10
Alamo River Outlet	10/23/07	-25	-25	-10
Alamo River Outlet	4/21/08	-25	-25	-10
Alamo River Outlet	10/28/08	-25	-25	-10
Alamo River Outlet	4/28/09	-25	-25	-25
Alamo River Outlet	10/19/09	-25	-25	-25
Alamo River Outlet	5/4/10	-38.9	-38.9	-38.9
Alamo River Outlet	10/6/10	-37.1	-37.1	-37.1
Alamo River Outlet	5/10/11	-39	-39	-38.6
Alamo River Outlet	10/11/11	-18	-18	-17.8
Alamo River Outlet	10/11/11	-19	-19	-18.5
Alamo River Outlet	10/15/12		-10	-10

Appendix K2. Concentrations of organophosphate and carbamate pesticides from sediments (ng/g dw) of the New River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Azinphos Methyl: Total: ng/g dw	Bolstar: Total: ng/g dw	Chlorpyrifos: Total: ng/g dw	Chlorpyrifos; Total: ng/g dw	Demeton-S: Total: ng/g dw	Diaznon: Total: ng/g dw	Dichlofenthion: Total: ng/g dw	Dichlorvos: Total: ng/g dw	Dioxathion : Total: ng/g dw	Disulfoton: Total: ng/g dw	Ethion: Total: ng/g dw	Ethoprop: Total: ng/g dw	Fenchlorphos: Total: ng/g dw	Fenitrothion: Total: ng/g dw	Fensulfuron: Total: ng/g dw	Fenthion: Total: ng/g dw	Fonios: Total: ng/g dw	Malathion: Total: ng/g dw
New River at Boundary	5/8/02			14.7		-19.7													
New River at Boundary	10/1/02			87.3		-11													
New River at Boundary	4/9/03			21.1		-10.6													
New River at Boundary	4/16/03 -7.6			55.7		-1.5													-1.5
New River at Boundary	11/4/03			526		-19.7													
New River at Boundary	5/3/04			70.4		-10.9													
New River at Boundary	10/4/04			364		-21.9													
New River at Boundary	5/9/05	-25	90.9	13.18	-25		-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	10/25/05	-25	171		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	5/1/06	-25	253		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	10/23/07	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	4/21/08	-25	DNQ, 5.68		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	4/28/09	-25	14.7		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	10/19/09	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	10/19/09	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River at Boundary	5/4/10	-37.6	-7.52		-7.52	-37.6	-37.6	-37.6	-37.6	-37.6	-37.6	-37.6	-37.6		-37.6	-37.6			
New River at Boundary	5/4/10	-38.8	-7.76		-7.76	-38.8	-38.8	-38.8	-38.8	-38.8	-38.8	-38.8	-38.8		-38.8	-38.8			
New River at Boundary	10/5/10	-56.8	-11.4		-11.4	-56.8	-56.8	-56.8	-56.8	-56.8	-56.8	-56.8	-56.8		-56.8	-56.8			
New River at Boundary	5/10/11	-32.7	-6.55		-6.55	-32.7	-32.7	-32.7	-32.7	-32.7	-32.7	-32.7	-32.7		-32.7	-32.7			
New River at Boundary	10/11/11	-36.1	-7.2		-7.2	-36.1	-36.1	-36.1	-36.1	-36.1	-36.1	-36.1	-36.1		-36.1	-36.1			
New River at Rice Drain #3	4/12/03 -7.6		-1.5		-1.5													-1.5	
New River Outlet	5/6/02		6.86		-24.1														
New River Outlet	5/6/02		5.86		-24.2														
New River Outlet	10/2/02		-0.982		-7.94														
New River Outlet	4/14/03 -7.6		-1.5		-1.5													-1.5	
New River Outlet	4/15/03		3.75		-9.23														
New River Outlet	11/4/03		4.59		-10.5														
New River Outlet	5/4/04		-1.05		-8.47														
New River Outlet	10/5/04		17.1		-12.6														
New River Outlet	5/10/05	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	10/26/05	-25	11.8		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	10/26/05	-25	DNQ, 6.85		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	5/1/06	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	10/22/07	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	4/21/08	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	4/21/08	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	10/28/08	-25	14		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	4/28/09	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	4/28/09	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	10/19/09	-25	-5		-5	-25	-25	-25	-25	-25	-25	-25	-25		-25	-25			
New River Outlet	5/4/10	-37.7	-7.54		-7.54	-37.7	-37.7	-37.7	-37.7	-37.7	-37.7	-37.7	-37.7		-37.7	-37.7			
New River Outlet	10/6/10	-40.1	-8.02		-8.02	-40.1	-40.1	-40.1	-40.1	-40.1	-40.1	-40.1	-40.1		-40.1	-40.1			
New River Outlet	5/10/11	-44.2	-8.84		-8.84	-44.2	-44.2	-44.2	-44.2	-44.2	-44.2	-44.2	-44.2		-44.2	-44.2			
New River Outlet	5/10/11	-44.6	-8.92		-8.92	-44.6	-44.6	-44.6	-44.6	-44.6	-44.6	-44.6	-44.6		-44.6	-44.6			
New River Outlet	10/11/11	-18.8	-3.77		-3.77	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8	-18.8		-18.8	-18.8			
New River Outlet	10/16/12	-10	-5		-10	-5	-10	-10	-10	-10	-10	-10	-10		-10	-10		-5	

StationName	Sample Date	Mephos; Total: ng/g dw	Methidathion; Total: ng/g dw	Mevinphos; Total: ng/g dw	Molinate; Total: ng/g dw	Parathion; Ethyl; Total: ng/g dw	Parathion; Methyl; Total: ng/g dw	Phorate; Total: ng/g dw	Phosmet; Total: ng/g dw	Phosphamidon; Total: ng/g dw	Sulfotep; Total: ng/g dw	Tetrachlorvinphos; Total: ng/g dw	Thiobencarb; Total: ng/g dw	Thionazin; Total: ng/g dw	Tokuthion; Total: ng/g dw	Trichloronate; Total: ng/g dw	
New River at Boundary	5/8/02					-2.45	-4.43										
New River at Boundary	10/1/02					-1.37	-2.47										
New River at Boundary	4/9/03					-1.32	-2.39										
New River at Boundary	4/16/03	-3.4		-2		-1.6		-0.8				-4.4					
New River at Boundary	11/4/03					-2.45	-4.43										
New River at Boundary	5/3/04					-1.35	-2.45										
New River at Boundary	10/4/04					-2.72	-4.91										
New River at Boundary	5/9/05	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River at Boundary	10/25/05	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River at Boundary	5/1/06	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River at Boundary	10/23/07	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River at Boundary	4/21/08	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River at Boundary	4/28/09	-25				-10	-10		-25	-25		-25	-25	-25	-25	-25	
New River at Boundary	10/19/09	-25				-10	-10		-25	-25		-25	-25	-25	-25	-25	
New River at Boundary	10/19/09	-25				-10	-10		-25	-25		-25	-25	-25	-25	-25	
New River at Boundary	5/4/10	-37.6				-15	-15		-37.6	-37.6		-37.6	-37.6	-37.6	-37.6	-37.6	
New River at Boundary	5/4/10	-38.8				-15.5	-15.5		-38.8	-38.8		-38.8	-38.8	-38.8	-38.8	-38.8	
New River at Boundary	10/5/10	-56.8				-22.7	-22.7		-56.8	-56.8		-56.8	-56.8	-56.8	-56.8	-56.8	
New River at Boundary	5/10/11	-33				-13.1	-13.1		-32.7	-33		-32.7	-32.7	-32.7	-32.7	-33	
New River at Boundary	10/11/11	-36				-14.4	-14.4		-36.1	-36		-36.1	-36.1	-36.1	-36.1	-36	
New River at Rice Drain #3	4/12/03	-3.4		-2		-1.6		-0.8				-4.4					
New River Outlet	5/6/02					-3	-5.43										
New River Outlet	5/6/02					-3.01	-5.45										
New River Outlet	10/2/02					-0.987	-1.79										
New River Outlet	4/14/03	-3.4		-2		-1.6		-0.8				-4.4					
New River Outlet	4/15/03					-1.15	-2.07										
New River Outlet	11/4/03					-1.3	-2.35										
New River Outlet	5/4/04					-1.05	-1.9										
New River Outlet	10/5/04					-1.56	-2.83										
New River Outlet	5/10/05	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	10/26/05	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	10/26/05	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	5/1/06	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	10/22/07	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	4/21/08	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	4/21/08	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	10/28/08	-25				-10	-10		-25	-25		-25	-25	-25	-25	-10	
New River Outlet	4/28/09	-25				-10	-10		-25	-25		-25	-25	-25	-25	-25	
New River Outlet	4/28/09	-25				-10	-10		-25	-25		-25	-25	-25	-25	-25	
New River Outlet	10/19/09	-25				-10	-10		-25	-25		-25	-25	-25	-25	-25	
New River Outlet	5/4/10	-37.7				-15.1	-15.1		-37.7	-37.7		-37.7	-37.7	-37.7	-37.7	-37.7	
New River Outlet	10/6/10	-40.1				-16	-16		-40.1	-40.1		-40.1	-40.1	-40.1	-40.1	-40.1	
New River Outlet	5/10/11	-44				-17.7	-17.7		-44.2	-44		-44.2	-44.2	-44.2	-44.2	-44	
New River Outlet	5/10/11	-45				-17.8	-17.8		-44.6	-45		-44.6	-44.6	-44.6	-44.6	-45	
New River Outlet	10/11/11	-19				-7.53	-7.53		-18.8	-19		-18.8	-18.8	-18.8	-18.8	-19	
New River Outlet	10/16/12		-10			-10	-10				-10			-10	-10	-10	

Mephos; Total: ng/g dw	Mehidation: Total: ng/g dw	Mevinphos; Total: ng/g dw	Molinate; Total: ng/g dw	Parathion, Ethyl; Total: ng/g dw	Parathion, Methyl; Total: ng/g dw	Phorate; Total: ng/g dw	Phosmet; Total: ng/g dw	Phosphamidon; Total: ng/g dw	Sulfotep; Total: ng/g dw	Tetrachlorinphos; Total: ng/g dw	Theobencarb; Total: ng/g dw	Thionazin; Total: ng/g dw	Tokuthion; Total: ng/g dw	Trichloronate; Total: ng/g dw
				-2.45	-4.43									
				-1.37	-2.47									
				-1.32	-2.39									
-3.4	-2	-1.6			-0.8					-4.4				
				-2.45	-4.43									
				-1.35	-2.45									
				-2.72	-4.91									
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-25		
-25		-10	-10		-25	-25				-25	-25	-25		
-37.6		-15	-15		-37.6	-37.6				-37.6	-37.6	-37.6		
-38.8		-15.5	-15.5		-38.8	-38.8				-38.8	-38.8	-38.8		
-56.8		-22.7	-22.7		-56.8	-56.8				-56.8	-56.8	-56.8		
-32.7		-13.1	-13.1		-32.7	-32.7				-32.7	-32.7	-32.7		
-36.1		-14.4	-14.4		-36.1	-36.1				-36.1	-36.1	-36.1		
-3.4	-2	-1.6			-0.8					-4.4				
				-3	-5.43									
				-3.01	-5.45									
				-0.987	-1.79									
-3.4	-2	-1.6			-0.8					-4.4				
				-1.15	-2.07									
				-1.3	-2.35									
				-1.05	-1.9									
				-1.56	-2.83									
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-10		
-25		-10	-10		-25	-25				-25	-25	-25		
-25		-10	-10		-25	-25				-25	-25	-25		
-25		-10	-10		-25	-25				-25	-25	-25		
-37.7		-15.1	-15.1		-37.7	-37.7				-37.7	-37.7	-37.7		
-40.1		-16	-16		-40.1	-40.1				-40.1	-40.1	-40.1		
-44.2		-17.7	-17.7		-44.2	-44.2				-44.2	-44.2	-44.2		
-44.6		-17.8	-17.8		-44.6	-44.6				-44.6	-44.6	-44.6		
-18.8		-7.53	-7.53		-18.8	-18.8				-18.8	-18.8	-18.8		
	-10		-10	-10		-10				-10	-10	-10		

Appendix K3. Concentrations of organophosphate and carbamate pesticides from sediments (ng/g dw) of the Salton Sea.
Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Azinphos Methyl: Total; ng/g dw	Bolstar: Total; ng/g dw	Chlopyrifos Methyl: Total; ng/g dw	Chlopyrifos: Total; ng/g dw	Deneon-s: Total; ng/g dw	Diazinon: Total; ng/g dw	Dichlorfenthion: Total; ng/g dw	Dichlorvos: Total; ng/g dw	Dioxathion : Total; ng/g dw	Disulfoton: Total; ng/g dw	Ethion: Total; ng/g dw	Ethoprop: Total; ng/g dw	Fencloriphos: Total; ng/g dw	Fenthion: Total; ng/g dw	Fensulfation: Total; ng/g dw	Fonofos: Total; ng/g dw	Malathion: Total; ng/g dw	Mephos: Total; ng/g dw	Methidathion: Total; ng/g dw	Metrifos: Total; ng/g dw	Molinate: Total; ng/g dw	Parathion, Ethyl: Total; ng/g dw
Salton Sea USGS2	5/14/02			-5.13	-41.5																		-5.15
Salton Sea USGS2	10/3/02			-1.08	-8.72																		-1.08
Salton Sea USGS2	10/3/02			-1.08	-8.7																		-1.08
Salton Sea USGS2	4/10/03			-1.86	-15																		-1.87
Salton Sea USGS2	11/4/03			-2.21	-17.9																		-2.22
Salton Sea USGS2	5/5/04			-1.81	-14.6																		-1.82
Salton Sea USGS2	10/6/04			-3.08	-24.9																		-3.1
Salton Sea USGS2	5/11/05	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	10/26/05	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	5/3/06	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	5/3/06	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	10/24/07	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	4/22/08	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	4/29/09	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	10/21/09	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS2	5/4/10	-84	-16.8	-16.8	-84			-84		-84	-84	-84	-84					-84	-84	-84			-33.6
Salton Sea USGS2	5/11/11	-59.1	-11.8	-11.8	-59.1			-59.1		-59.1	-59.1	-59.1	-59.1					-59.1	-59.1	-59.1			-23.6
Salton Sea USGS7	5/14/02		-5.21	-42.1																			-5.23
Salton Sea USGS7	9/30/02		-1.78	-14.4																			-1.79
Salton Sea USGS7	4/10/03		-3.07	-24.8																			-3.08
Salton Sea USGS7	11/4/03		-2.08	-16.8																			-2.09
Salton Sea USGS7	5/5/04		-1.78	-14.4																			-1.79
Salton Sea USGS7	10/6/04		-2.96	-24																			-2.98
Salton Sea USGS7	5/11/05	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS7	10/26/05	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS7	5/3/06	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS7	10/24/07	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS7	4/22/08	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS7	4/29/09	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS7	10/21/09	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS7	5/4/10	-75	-15	-15	-75			-75		-75	-75	-75	-75					-75	-75	-75			-30
Salton Sea USGS7	5/11/11	-114	-22.8	-22.8	-114			-114		-114	-114	-114	-114					-114	-114	-114			-45.5
Salton Sea USGS9	5/14/02		-6.44	-52.1																			-6.47
Salton Sea USGS9	10/30/02		-3.32	-26.9																			-3.34
Salton Sea USGS9	4/10/03		-2.71	-21.9																			-2.72
Salton Sea USGS9	11/5/03		-3.43	-27.7																			-3.45
Salton Sea USGS9	5/5/04		-2.57	-20.8																			-2.58
Salton Sea USGS9	10/6/04		-5.03	-40.6																			-5.05
Salton Sea USGS9	5/11/05	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS9	10/26/05	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS9	5/3/06	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS9	10/24/07	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS9	4/22/08	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS9	4/29/09	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS9	10/21/09	-25	-5	-5	-25			-25		-25	-25	-25	-25					-25	-25	-25			-10
Salton Sea USGS9	5/4/10	-125	-24.9	-24.9	-125			-125		-125	-125	-125	-125					-125	-125	-125			-49.9
Salton Sea USGS9	5/11/11	-101	-20.2	-20.2	-101			-101		-101	-101	-101	-101					-101	-101	-101			-40.5

StationName	Sample Date	Parathion; Methyl; Total; ng/g dw	Phorate; Total; ng/g dw	Phosmet; Total; ng/g dw	Phosphamidon; Total; ng/g dw	Sulfotep; Total; ng/g dw	Tetrachlorvinphos; Total; ng/g dw	Thibencarb; Total; ng/g dw	Thionazin; Total; ng/g dw	Tofuttion; Total; ng/g dw	Trichloronate; Total; ng/g dw
Salton Sea USGS2	5/14/02	-9.33									
Salton Sea USGS2	10/3/02	-1.96									
Salton Sea USGS2	10/3/02	-1.96									
Salton Sea USGS2	4/10/03	-3.38									
Salton Sea USGS2	11/4/03	-4.02									
Salton Sea USGS2	5/5/04	-3.29									
Salton Sea USGS2	10/6/04	-5.6									
Salton Sea USGS2	5/11/05	-10		-25	-25			-25	-25	-10	
Salton Sea USGS2	10/26/05	-10		-25	-25			-25	-25	-10	
Salton Sea USGS2	5/3/06	-10		-25	-25			-25	-25	-10	
Salton Sea USGS2	5/3/06	-10		-25	-25			-25	-25	-10	
Salton Sea USGS2	10/24/07	-10		-25	-25			-25	-25	-10	
Salton Sea USGS2	4/22/08	-10		-25	-25			-25	-25	-10	
Salton Sea USGS2	4/29/09	-10		-25	-25			-25	-25	-25	
Salton Sea USGS2	10/21/09	-10		-25	-25			-25	-25	-25	
Salton Sea USGS2	5/4/10	-33.6		-84	-84			-84	-84	-84	
Salton Sea USGS2	5/11/11	-24		-59.1	-59.1			-59.1	-59.1	-59.1	
Salton Sea USGS7	5/14/02	-9.47									
Salton Sea USGS7	9/30/02	-3.24									
Salton Sea USGS7	4/10/03	-5.58									
Salton Sea USGS7	11/4/03	-3.79									
Salton Sea USGS7	5/5/04	-3.24									
Salton Sea USGS7	10/6/04	-5.39									
Salton Sea USGS7	5/11/05	-10		-25	-25			-25	-25	-10	
Salton Sea USGS7	10/26/05	-10		-25	-25			-25	-25	-10	
Salton Sea USGS7	5/3/06	-10		-25	-25			-25	-25	-10	
Salton Sea USGS7	10/24/07	-10		-25	-25			-25	-25	-10	
Salton Sea USGS7	4/22/08	-10		-25	-25			-25	-25	-10	
Salton Sea USGS7	4/29/09	-10		-25	-25			-25	-25	-25	
Salton Sea USGS7	10/21/09	-10		-25	-25			-25	-25	-25	
Salton Sea USGS7	5/4/10	-30		-75	-75			-75	-75	-75	
Salton Sea USGS7	5/11/11	-46		-114	-114			-114	-114	-114	
Salton Sea USGS9	5/14/02	-11.7									
Salton Sea USGS9	10/30/02	-6.04									
Salton Sea USGS9	4/10/03	-4.92									
Salton Sea USGS9	11/5/03	-6.24									
Salton Sea USGS9	5/5/04	-4.67									
Salton Sea USGS9	10/6/04	-9.14									
Salton Sea USGS9	5/11/05	-10		-25	-25			-25	-25	-10	
Salton Sea USGS9	10/26/05	-10		-25	-25			-25	-25	-10	
Salton Sea USGS9	5/3/06	-10		-25	-25			-25	-25	-10	
Salton Sea USGS9	10/24/07	-10		-25	-25			-25	-25	-10	
Salton Sea USGS9	4/22/08	-10		-25	-25			-25	-25	-10	
Salton Sea USGS9	4/29/09	-10		-25	-25			-25	-25	-25	
Salton Sea USGS9	10/21/09	-10		-25	-25			-25	-25	-25	
Salton Sea USGS9	5/4/10	-49.9		-125	-125			-125	-125	-125	
Salton Sea USGS9	5/11/11	-41		-101	-101			-101	-101	-101	

Appendix L1. Concentrations of polycyclic aromatic hydrocarbons (PAHs) from sediments (ng/g dw) of the Alamo River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon; Total; % dw	Acenaphthene; Total; ng/g dw	Acenaphthylene; Total; ng/g dw	Anthracene; Total; ng/g dw	Benz(a)anthracene; Total; ng/g dw	Benz(a)fluoranthene; Total; ng/g dw	Benz(a)pyrene; Total; ng/g dw	Benz(b)fluoranthene; Total; ng/g dw	Benz(e)pyrene; Total; ng/g dw	Benz(g,h,i)perylene; Total; ng/g dw	Benz(f/k)fluoranthene; Total; ng/g dw	Biphenyl; Total; ng/g dw	Chrysene/Triphenylene; Total; ng/g dw	Chrysene; Total; ng/g dw	Chrysenes, C1; Total; ng/g dw	Chrysenes, C2; Total; ng/g dw	Chrysenes, C3; Total; ng/g dw	Dibenz(a,h)anthracene; Total; ng/g dw	
Alamo River Outlet	5/6/02	0.48	-3.03	-3.03	-3.03	4.27		4.17	7.11	5.14	3.95		4.78	-3.03		8.55	5.91	4.82	4.08	-3.03
Alamo River Outlet	10/2/02	0.69	-1.51	-1.51	-1.51	-1.51		-1.51	4.03	-1.51	2.62		-1.51	-1.51		2.98	1.94	1.63	-1.51	-1.51
Alamo River Outlet	10/2/02	0.67	-1.47	-1.47	-1.47	1.88		2.02	5.77	2.52	3.04		-1.47	-1.47		5.03	3.08	2.02	-1.47	-1.47
Alamo River Outlet	4/15/03	0.37	-1.31	-1.31	-1.31	-1.31		-1.31	-1.31	-1.31	-1.31		-1.31	-1.31		-1.31	-1.31	-1.31	-1.31	-1.31
Alamo River Outlet	11/4/03	0.14	-1.27	-1.27	-1.27	-1.27		-1.27	-1.27	-1.27	-1.27		-1.27	-1.27		-1.27	-1.27	-1.27	-1.27	-1.27
Alamo River Outlet	5/3/04	0.59	-1.59	-1.59	-1.59	-1.59		-1.59	-1.59	-1.59	-1.59		-1.59	-1.59		-1.59	-1.59	-1.59	-1.59	-1.59
Alamo River Outlet	10/5/04	0.48	-0.829	-0.829	-0.829	-0.829		-0.829	2.02	1.44	2.05		-0.829	-0.829		1.87	1.66	1.41	-0.829	-0.829
Alamo River Outlet	5/9/05	0.55	-0.721	-0.721	-0.721	-0.721		-0.721	1.03	0.96	-0.721		-0.721	-0.721		3.91	1.75	-0.721	-0.721	-0.721
Alamo River Outlet	5/9/05	0.47	-0.713	-0.713	-0.713	-0.713		-0.713	-0.713	-0.713	-0.713		-0.713	-0.713		-0.713	-0.713	-0.713	-0.713	-0.713
Alamo River Outlet	10/26/05	0.27	-0.676	-0.676	-0.676	1.14		0.91	1.62	1.14	1.71		-0.676	0.84		1.36	1.28	0.87	-0.676	-0.676
Alamo River Outlet	5/1/06	0.94	-0.94	-0.94	-0.94	-0.94		-0.94	1.86	1.88	-0.94		-0.94	-0.94		2.51	1.49	-0.94	-0.94	-0.94
Alamo River Outlet	5/7/07	0.56																		
Alamo River Outlet	10/23/07	0.44	-0.698	-0.698	-0.698	-0.698		-0.698	-0.698	-0.698	-0.698		-0.698	-0.698		-0.698	-0.698	-0.698	-0.698	-0.698
Alamo River Outlet	4/21/08	0.53	-0.684	-0.684	-0.684	1.39		1.03	2.23	1.4	1.27		-0.684	-0.684		1.86	1.26	1.05	-0.684	-0.684
Alamo River Outlet	10/28/08	0.94																		
Alamo River Outlet	4/28/09	0.018	-0.726	-0.726	-0.726	0.77		0.98	2	1.19	1.23		-0.726	-0.726		0.98	1.01	0.77	-0.726	-0.726
Alamo River Outlet	10/19/09	0.874																		
Alamo River Outlet	5/4/10	1.61	-0.61	-0.61	1.51	3.7		5.56	9.6	7.37	9.28		2.91	2.88		6.29	8.51	11	11.2	2.55
Alamo River Outlet	10/11/11	-0.659	-0.659	-0.659	1.08		0.96	1.39	1.26	1.35		-0.659	-0.659		1.33	1.24	1	-0.659	-0.659	
Alamo River Outlet	10/11/11	-0.706	-0.706	-0.706	0.72		-0.706	1.25	1.1	1.35		-0.706	-0.706		0.95	1.08	0.9	-0.706	-0.706	
Alamo River Outlet	5/10/11	-1	-1	-1	-1		-1	-1	-1	-1		-1	-1		-1				-1	
Alamo River Outlet	10/15/12	-1	-1	DNQ, 1.2	DNQ, 2.1		DNQ, 1.7	DNQ, 1.5	DNQ, 1.4	-1		DNQ, 1.6	-1		DNQ, 1.8				-1	

StationName	Sample Date	Dibenzothiophene; Total; ng/g dw	Dibenzothiophenes, C1-; Total; ng/g dw	Dibenzothiophenes, C2-; Total; ng/g dw	Dibenzothiophenes, C3-; Total; ng/g dw	Dimethylnaphthalene, 2,6-; Total; ng/g dw	Dimethylphenanthrene, 3,6-; Total; ng/g dw	Fluoranthene/Pyrenes, C1-; Total; ng/g dw	Fluoranthene; Total; ng/g dw	Fluorene; Total; ng/g dw	Fluorenes, C1-; Total; ng/g dw	Fluorenes, C2-; Total; ng/g dw	Fluorenes, C3-; Total; ng/g dw	Indeno(1,2,3-c,d)pyrene; Total; ng/g dw	Methyl dibenzothiophene, 4-; Total; ng/g dw	Methylfluoranthene, 2-; Total; ng/g dw	Methylfluorene, 1-; Total; ng/g dw	Methylnaphthalene, 1-; Total; ng/g dw	Methylnaphthalene, 2-; Total; ng/g dw	Methylphenanthrene, 1-; Total; ng/g dw
Alamo River Outlet	5/6/02	4.54	-3.03	3.67	-3.03	-3.03		5.8	7.68	-3.03	-3.03	-3.03	4.48	5.01			-3.03	-3.03	-3.03	
Alamo River Outlet	10/2/02	-1.51	1.56	2.02	-1.51	-1.51		1.95	2.8	-1.51	-1.51	-1.51	3.82	2.08			-1.51	2.48	-1.51	
Alamo River Outlet	10/2/02	-1.47	-1.47	2.04	-1.47	-1.47		2.37	3.9	-1.47	-1.47	-1.47	3.79	3.62			-1.47	2.5	-1.47	
Alamo River Outlet	4/15/03	-1.31	-1.31	1.69	-1.31	-1.31		-1.31	-1.31	-1.31	-1.31	-1.31	2.14	-1.31			-1.31	-1.31	-1.31	
Alamo River Outlet	11/4/03	-1.27	-1.27	-1.27	-1.27	-1.27		-1.27	-1.27	-1.27	-1.27	-1.27	-1.27	-1.27			-1.27	-1.27	-1.27	
Alamo River Outlet	5/3/04	-1.59	-1.59	-1.59	-1.59	-1.59		-1.59	2.05	-1.59	-1.59	-1.59	-1.59	-1.59			-1.59	-1.59	-1.59	
Alamo River Outlet	10/5/04	-0.829	-0.829	4.63	4.54	-0.829	-0.829	6.19	2.53	-0.829	-0.829	3.03	4.69	-0.829	-0.829	-0.829	-0.829	-0.829	-0.829	
Alamo River Outlet	5/9/05	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	3.64	4.26	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	
Alamo River Outlet	5/9/05	-0.713	-0.713	-0.713	-0.713	-0.713	-0.713	2.22	-0.713	-0.713	-0.713	-0.713	-0.713	-0.713	-0.713	-0.713	-0.713	-0.713	-0.713	
Alamo River Outlet	10/26/05	-0.676	-0.676	-0.676	1.5	-0.676	-0.676	2.74	2.76	-0.676	-0.676	2.33	6.76	0.9	-0.676	-0.676	-0.676	-0.676	0.87	
Alamo River Outlet	5/1/06	-0.94	-0.94	-0.94	-0.94	-0.94	-0.94	3.83	5.1	-0.94	-0.94	-0.94	-0.94	-0.94	-0.94	-0.94	-0.94	-0.94	1.57	
Alamo River Outlet	5/7/07																			
Alamo River Outlet	10/23/07	-0.698	-0.698	1.14	0.95	-0.698	-0.698	2.3	1.2	-0.698	-0.698	2.9	2.3	-0.698	-0.698	-0.698	-0.698	-0.698	-0.698	
Alamo River Outlet	4/21/08	-0.684	-0.684	1.95	2.09	-0.684	-0.684	3.97	2.37	-0.684	-0.684	2.7	5.4	-0.684	-0.684	-0.684	-0.684	-0.684	-0.684	
Alamo River Outlet	10/28/08																			
Alamo River Outlet	4/28/09	-0.726	-0.726	-0.726	-0.726	16.6	-0.726	2.5	2.7	-0.726	1.7	2.3	4.9	1.26	-0.726	-0.726	-0.726	-0.726	-0.726	
Alamo River Outlet	10/19/09																			
Alamo River Outlet	5/4/10	1.41	8.22	22.3	26.4	12.9	3.05	24.4	9.43	1.85	7.37	19.9	32.3	7.49	3.01	2.12	2.28	3.39	5.79	
Alamo River Outlet	10/11/11	-0.659	-0.659	0.73	0.76	-0.659	-0.659	2.33	2.13	-0.659	0.8	1.95	2.41	1.69	-0.659	-0.659	-0.659	-0.659	0.81	
Alamo River Outlet	10/11/11	-0.706	-0.706	0.84	1.03	-0.706	-0.706	2.83	1.89	-0.706	0.82	1.99	3.04	1.35	-0.706	-0.706	-0.706	-0.706	0.93	
Alamo River Outlet	5/10/11	-1				-1				-1	-1			-1			-1	-1	-1	
Alamo River Outlet	10/15/12	-1				-1				DQO, 1.3	-1			DQO, 1.4			-1	-1	-1	

StationName	Sample Date	Naphthalene; Total; ng/g dw	Naphthalenes, C1; Total; ng/g dw	Naphthalenes, C2; Total; ng/g dw	Naphthalenes, C3; Total; ng/g dw	Naphthalenes, C4; Total; ng/g dw	Perylene; Total; ng/g dw	Phenanthrene/Anthracene, C1; Total; ng/g dw	Phenanthrene/Anthracene, C2; Total; ng/g dw	Phenanthrene/Anthracene, C3; Total; ng/g dw	Phenanthrene/Anthracene, C4; Total; ng/g dw	Pyrene; Total; ng/g dw	Trimethylnaphthalene, 1,6,7; Total; ng/g dw	Trimethylnaphthalene, 2,3,5; Total; ng/g dw	Total PAH; ng/g dw	
Alamo River Outlet	5/6/02	6.17	8.41	7.51	7.57	5.3	9.95	8.63	7.91	5.96	-3.03	7.37	7.95		-3.03	166.69
Alamo River Outlet	10/2/02	2.13	3.9	3.62	3.06	1.62	3.79	4.61	4.55	3.71	-1.51	-1.51	2.74		-1.51	63.64
Alamo River Outlet	10/2/02	2.03	3.68	3.3	2.77	1.77	3.78	4.63	4.51	3.56	-1.47	-1.47	3.76		-1.47	77.37
Alamo River Outlet	4/15/03	1.35	1.51	1.5	1.67	-1.31	1.63	2.15	2.57	1.48	-1.31	-1.31	1.63		-1.31	19.32
Alamo River Outlet	11/4/03	-1.27	-1.27	-1.27	1.6	-1.27	-1.27	1.54	1.51	-1.27	-1.27	-1.27	2.19		-1.27	6.84
Alamo River Outlet	5/3/04	-1.59	-1.59	-1.59	-1.59	-1.59	4.45	2.78	2.77	2.74	-1.59	3.45	2.01		-1.59	20.25
Alamo River Outlet	10/5/04	1.17	1.97	2.62	3.56	2.44	2.92	6.24	9.03	7.36	1.96	2.04	2.53		-0.829	79.9
Alamo River Outlet	5/9/05	0.77	1.63	1.83	-0.721	-0.721	1.94	2.38	3.08	-0.721	-0.721	1.83	3.53		-0.721	32.54
Alamo River Outlet	5/9/05	-0.713	1.46	1.41	-0.713	-0.713	1.7	1.96	1.78	-0.713	-0.713	1.55	-0.713		-0.713	12.08
Alamo River Outlet	10/26/05	0.85	1.54	1.66	1.97	0.74	3.18	2.78	1.88	2.28	-0.676	1.78	2.39		-0.676	49.78
Alamo River Outlet	5/1/06	1.46	2.3	2.85	1.89	-0.94	3.36	-0.94	-0.94	-0.94	-0.94	3.99	4.38		-0.94	38.47
Alamo River Outlet	5/7/07															
Alamo River Outlet	10/23/07	-0.698	1.14	2.1	1.23	-0.698	3.1	2.3	3.2	1.5	-0.698	1.2	1.1		-0.698	27.66
Alamo River Outlet	4/21/08	-0.684	1.37	2.24	1.85	-0.684	3.1	2.84	4.39	2.43	1.56	1.77	2.45		-0.684	53.97
Alamo River Outlet	10/28/08															
Alamo River Outlet	4/28/09	-0.726	-0.726	18.4	-0.726	-0.726	1.6	1.7	1.9	0.8	-0.726	1.19	2.3		-0.726	68.78
Alamo River Outlet	10/19/09															
Alamo River Outlet	5/4/10	4.64	9.28	25.4	24.9	21	5.82	17.3	38.4	37.8	17.7	6.87	10.1		2.55	501.06
Alamo River Outlet	10/11/11	0.91	1.37	2.28	1.45	-0.659	3.42	2.09	2.68	1.9	-0.659	1.57	1.87		-0.659	42.76
Alamo River Outlet	10/11/11	0.87	1.5	2.04	1.76	-0.706	3.64	2.17	2.69	1.5	-0.706	1.9	1.54		-0.706	41.68
Alamo River Outlet	5/10/11	-1					-1					DNQ, 1.9	-1		-1	
Alamo River Outlet	10/15/12	-1					DNQ, 1.1					DNQ, 2	DNQ, 1.2		-1	

Appendix L2. Concentrations of polycyclic aromatic hydrocarbons (PAHs) from sediments (ng/g dw) of the New River. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon: Total: % dw	Acenaphthene: Total: ng/g dw	Acenaphthylene: Total: ng/g dw	Anthracene: Total: ng/g dw	Benz(a)anthracene: Total: ng/g dw	Benzo(a)fluoranthene: Total: ng/g dw	Benzo(a)pyrene: Total: ng/g dw	Benzo(b)fluoranthene: Total: ng/g dw	Benzo(b)pyrene: Total: ng/g dw	Benzo(e)pyrene: Total: ng/g dw	Benzo(g,h,i)perylene: Total: ng/g dw	Benzo(k)fluoranthene: Total: ng/g dw	Biphenyl: Total: ng/g dw	Chrysene/triphenylene: Total: ng/g dw
New River at Boundary	5/8/02	0.96	17.7	7	21.7	49.6		68.1	133	51.6	28.7		33.8	26	
New River at Boundary	10/1/02	4.52	5.37	-1.6	11.1	17.7		21.7	-1.6	-1.6	10.5		23.5	10.1	
New River at Boundary	4/9/03	1.83	12.6	2.86	13.4	30		22.4	59.1	31	42.5		17.8	12.9	
New River at Boundary	11/4/03	9.8	10.1	4.07	11.4	20.4		31	24.1	28.4	39.2		8.03	28.8	
New River at Boundary	5/3/04	2.24	3.1	1.97	6.5	17.6		28.4	34.4	33.2	44.7		12	8.19	
New River at Boundary	10/4/04	6.73	8.8	5	17.2	26.2		28.4	45.5	37.1	89.6		13.5	26	
New River at Boundary	5/9/05	5.73	8.4	3.35	8.36	20.7		15.9	24.2	23.1	41.7		9.58	18.8	
New River at Boundary	10/25/05	2.27	3.3	2.5	7.1	16.4		28.6	49.3	36.9	48.9		15.5	13.2	
New River at Boundary	5/10/6	5.86	6.79	3.65	11.9	36.7		56.6	58.3	47.5	63.2		67.6	29.2	
New River at Boundary	5/7/07	1.25													
New River at Boundary	10/23/07	0.4	-0.688	-0.688	-0.688	1.14		1.27	2.65	1.96	2.84		-0.688	1.24	
New River at Boundary	4/21/08	1.12	-0.92	-0.92	1.6	5.13		6.86	12.2	8.51	9.89		3.79	3.53	
New River at Boundary	4/28/09	0.113	1.43	1.45	4.38	13.4		25.1	40.5	31.4	33.1		12.4	5.01	
New River at Boundary	10/19/09	0.86	-0.744	3.78	11.1			17.1	23.2	23.6	27.9		8.97	2.85	
New River at Boundary	10/19/09		1.18	3.15	6.57	9.5		12	38.3	27.4	21.7		13.9	3.33	
New River at Boundary	5/4/10	1.43	-0.839	-0.839	-0.839	0.86		0.88	1.7	1.09	1.69		-0.839	-0.839	
New River at Boundary	5/4/10	1.32	-0.631	-0.631	-0.631	-0.631		-0.631	-0.631	-0.631	-0.631		-0.631	-0.631	
New River at Boundary	10/5/10	8.53	7.54	16.1	32.7	153	22.7	157	363	294	255	70.5		34.4	462
New River at Boundary	5/10/11	-1	-1	-1	DNQ,	3.7		6.2	6.6	6.2	DNQ,	3.6		8.3	DNQ, 1.5
New River at Boundary	10/11/11	1.7	1.68	4.19	36.8			45.6	82	51	44.8		30.1	6.18	
New River Outlet	5/6/02	1.03	-3.57	-3.57	-3.57	13		14.4	28	12.3	7.49		9.64	-3.57	
New River Outlet	5/6/02	1.01	-3.58	-3.58	-3.58	6.43		7.53	15	9.01	6.36		7.18	-3.58	
New River Outlet	10/2/02	0.15	-1.24	-1.24	-1.24	-1.24		-1.24	-1.24	-1.24	-1.24		-1.24	-1.24	
New River Outlet	4/15/03	0.5	-1.46	-1.46	-1.46	1.53		-1.46	3.16	1.98	2.58		-1.46	-1.46	
New River Outlet	11/4/03	0.63	-1.56	-1.56	-1.56	1.56		2	3.13	2.65	3.42		-1.56	-1.56	
New River Outlet	5/4/04	0.09	-1.18	-1.18	-1.18	-1.18		-1.18	-1.18	-1.18	-1.18		-1.18	-1.18	
New River Outlet	10/5/04	0.9	-0.931	-0.931	-0.931	-0.931		-0.931	-0.931	-0.931	-0.931		-0.931	-0.931	
New River Outlet	5/10/05	0.55	-0.735	-0.735	-0.735	-0.735		-0.735	0.81	0.84	2.12		-0.735	-0.735	
New River Outlet	10/26/05	0.41	-0.745	-0.745	-0.745	-0.745		-0.745	1.09	1.13	2.22		-0.745	-0.745	
New River Outlet	10/26/05	0.49	-0.723	-0.723	-0.723	-0.723		-0.723	1.1	1.16	2.05		-0.723	0.88	
New River Outlet	5/1/06	0.67	-0.721	-0.721	-0.721	-0.721		-0.721	1.66	1.47	2.6		-0.721	-0.721	
New River Outlet	5/7/07	0.57													
New River Outlet	10/22/07	0.52	-0.735	-0.735	-0.735	-0.735		-0.735	1.1	1.1	2		-0.735	-0.735	
New River Outlet	4/21/08	1.09	-0.815	-0.815	-0.815	0.86		-0.815	2.1	1.87	2.6		-0.815	-0.815	
New River Outlet	4/21/08	1.59	-0.894	-0.894	-0.894	1.25		1.31	2.24	2.18	2.9		-0.894	-0.894	
New River Outlet	10/28/08	0.94													
New River Outlet	4/28/09	0.013	-0.789	-0.789	-0.789	0.8		0.98	2.2	1.46	2.27		-0.789	-0.789	
New River Outlet	4/28/09	0.052	-0.766	-0.766	-0.766	-0.766		-0.766	1.82	1.34	1.93		-0.766	1.25	
New River Outlet	10/19/09	0.475													
New River Outlet	5/4/10	1.3	-0.766	-0.766	-0.766	-0.766		-0.766	1.7	1.11	1.47		-0.766	-0.766	
New River Outlet	10/6/10	2.06													
New River Outlet	5/10/11	-1	-1	-1	-1	-1		-1	-1	-1	-1		-1	-1	
New River Outlet	5/10/11	-1	-1	-1	-1	-1		-1	-1	-1	-1		-1	-1	
New River Outlet	10/11/11	-0.73	-0.73	-0.73	0.88			0.82	1.68	1.44	1.99		-0.73	-0.73	
New River Outlet	10/16/12	-1	-1	DNQ, 1.9	DNQ, 2.4			-1	-1	-1	-1		-1	-1	

StationName	Sample Date	Chrysene: Total: ng/g dw	Chrysene, C1: Total: ng/g dw	Chrysene, C2: Total: ng/g dw	Chrysene, C3: Total: ng/g dw	Dibenz(a,h)anthracene: Total: ng/g dw	Dibenzothiophene: Total: ng/g dw	Dibenzothiophenes, C1: Total: ng/g dw	Dibenzothiophenes, C2: Total: ng/g dw	Dibenzothiophenes, C3: Total: ng/g dw	Dimethylaphthalene: 2,6: Total: ng/g dw	Fluoranthene/Pyrenes, C1: Total: ng/g dw	Fluoranthene: Total: ng/g dw
New River at Boundary	5/8/02	149	78.7	66.3	48.8	17.3	33.3	118	202	127	88.6		125
New River at Boundary	10/1/02	55.4	35.1	35.2	36.6	-1.6	12.1	47.1	70.8	55.7	28.4		41.2
New River at Boundary	4/9/03	29.9	58.3	45	44	7.95	28	24.9	108	115	39.4		66.7
New River at Boundary	11/4/03	77.7	50.1	35.6	8.81	8.6	13.5	19.5	304	257	93.7		135
New River at Boundary	5/3/04	42.6	36	35.6	11.8	15.4	6.33	18.2	69.9	75.4	21.3		46.7
New River at Boundary	10/4/04	650	63.5	52.3	25.4	-1.61	16.2	175	363	483	155	65.7	400
New River at Boundary	5/9/05	103	105	79.8	20.6	5.3	16.4	144	450	433	104	56	215
New River at Boundary	10/25/05	68.3	77.1	79.2	42.9	10.2	11.9	70.1	348	242	61.6	47.7	201
New River at Boundary	5/1/06	97.3	40.9	27	20.8	-1.53	15.7	120	264	329	121	45.6	272
New River at Boundary	5/7/07												
New River at Boundary	10/23/07	3.8	1.95	1.8	1.53	-0.688	-0.688	2.99	8.18	7.31	2.37	1.39	10
New River at Boundary	4/21/08	9.82	8.96	9.07	8.66	2.51	1.56	8.26	22.4	26.8	32.9	3.83	29.3
New River at Boundary	4/28/09	19.6	23.6	26.1	32.1	9.23	2.72	13.1	29.2	40.7	7.54	4.39	59.5
New River at Boundary	10/19/09	13.9	20.1	28.6	32.1	6.43	2.83	12.3	33.2	34.5	9.88	3.75	60.9
New River at Boundary	10/19/09	32.8	19.3	20.1	17.1	4.15	3.7	16.1	57.1	60.7	17.1	6.67	77.7
New River at Boundary	5/4/10	0.85	1.84	1.15	-0.839	-0.839	-0.839	-0.839	-0.839	5.8	-0.839	2.7	3
New River at Boundary	5/4/10	-0.631	-0.631	0.96	-0.631	-0.631	-0.631	-0.631	-0.631	5.59	-0.631	2.48	0.74
New River at Boundary	10/5/10		490	533	375	131	65.2	225	447	629	142	99.4	467
New River at Boundary	5/10/11	7.7				-1	-1				DNO, 1.5		9.4
New River at Boundary	10/11/11	58.4	39.1	36.2	38.7	14.2	7.56	42.4	104	113	18.9	10.2	119
New River Outlet	5/6/02	23.6	16.6	13.2	10.4	4.67	-3.57	7.54	15.4	14	-3.57		21.4
New River Outlet	5/6/02	16.1	13.6	11.9	8.81	3.73	-3.58	7.19	15.5	14.1	-3.58		15.6
New River Outlet	10/2/02	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24
New River Outlet	4/15/03	4.4	2.56	2.69	1.9	-1.46	-1.46	2.63	7.35	5.29	-1.46	4.74	3.56
New River Outlet	11/4/03	3.24	3.64	2.8	-1.56	-1.56	-1.56	-1.56	3.83	5.83	-1.56	4.66	3.73
New River Outlet	5/4/04	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18
New River Outlet	10/5/04	-0.931	-0.931	-0.931	-0.931	-0.931	-0.931	-0.931	-0.931	-0.931	-0.931	2.77	2.39
New River Outlet	5/10/05	1.65	2.47	1.74	-0.735	-0.735	-0.735	1.37	4.69	4.79	1.84	-0.735	4.37
New River Outlet	10/26/05	1.55	1.93	1.9	0.76	2.27	-0.745	1.76	7.97	5.84	0.83	1.22	6.6
New River Outlet	10/26/05	1.47	1.54	1.42	-0.723	1.97	-0.723	1.59	7.23	5.17	1.42	1	4.39
New River Outlet	5/1/06	1.78	1.47	-0.721	-0.721	7.68	-0.721	1.12	3.4	4.27	-0.721	-0.721	5.96
New River Outlet	5/7/07												
New River Outlet	10/22/07	1.2	0.83	1.1	-0.735	-0.735	-0.735	0.91	2.97	5.18	-0.735	3.7	1.5
New River Outlet	4/21/08	1.97	2.04	1.86	-0.815	-0.815	-0.815	1.33	4.26	5.38	-0.815	5.1	2.5
New River Outlet	4/21/08	2.24	2.41	2.06	-0.894	-0.894	-0.894	1.48	4.23	5.12	-0.894	-0.894	5.78
New River Outlet	10/28/08												
New River Outlet	4/28/09	1.24	1.52	1.57	1.31	-0.789	-0.789	0.85	2.89	3.62	-0.789	-0.789	3.66
New River Outlet	4/28/09	1.08	1.45	1.69	1.32	-0.766	-0.766	0.86	2.88	3.44	1	-0.766	4.1
New River Outlet	10/19/09												
New River Outlet	5/4/10	0.97	1.13	1.06	-0.766	-0.766	-0.766	-0.766	1.3	1.2	1.8	-0.766	3.1
New River Outlet	10/6/10												
New River Outlet	5/10/11	-1				-1	-1				-1		DNO, 1
New River Outlet	5/10/11	-1				-1	-1				-1		DNO, 1.8
New River Outlet	10/11/11	1.14	1.29	1.42	-0.73	-0.73	-0.73	0.82	1.64	2.02	-0.73	-0.73	2.57
New River Outlet	10/16/12	DNO, 2.2				-1	-1				-1		DNO, 3.9

StationName	Sample Date	Fluorenes, C1; Total: ng/g dw	Fluorenes, C2; Total: ng/g dw	Fluorenes, C3; Total: ng/g dw	Indeno[1,2,3-c,d]pyrene; Total: ng/g dw	Methylbenzothiophene, 4; Total: ng/g dw	Methylfluoranthene, 2; Total: ng/g dw	Methylfluorene, 1; Total: ng/g dw	Methylnaphthalene, 1; Total: ng/g dw	Methylnaphthalene, 2; Total: ng/g dw	Methylphenanthrene, 1; Total: ng/g dw	Naphthalenes, C1; Total: ng/g dw	Naphthalenes, C2; Total: ng/g dw	Naphthalenes, C3; Total: ng/g dw	
New River at Boundary	5/8/02	97.7	23.8	155	120				54.2	67.7	54.3	30.9	121	304	580
New River at Boundary	10/1/02	27.8	8.95	80.8	-1.6				25.2	48.3	21.8	16	83.8	78.4	107
New River at Boundary	4/9/03	51.4	12.2	84.5	65.5				14.9	26.6	26.5	16.1	46.2	116	228
New River at Boundary	11/4/03	78.8	182	305	30.1				63.9	66.4	99.5	36.4	110	306	423
New River at Boundary	5/3/04	26.2	37.9	41.3	45				13.1	23.8	19.2	13.9	36.8	66.6	88.2
New River at Boundary	10/4/04	178	322	341	55.6	68.1	43.3	63.4	32.2	62.6	65.6	39	98.5	569	666
New River at Boundary	5/9/05	121	254	260	22.1	69.9	24	52.7	35	60.1	67.6	34.5	95	391	588
New River at Boundary	10/25/05	56.8	98.3	209	29.1	35.5	23.4	29.6	33	62.9	38.4	34.4	81.3	186	278
New River at Boundary	5/1/06	90.1	-1.53	-1.53	55.7	60.2	35.8	62.1	56.7	107	55.5	46.8	169	462	687
New River at Boundary	5/7/07														
New River at Boundary	10/23/07	3.51	7.67	13.6	1.97	1.27	0.95	1.3	1.48	2.77	1.82	2.26	4.36	7.27	11.1
New River at Boundary	4/21/08	10.4	22.6	32.8	9.08	3.42	2.88	3.1	3.33	6.76	4.45	6.57	10.6	45.4	32.6
New River at Boundary	4/28/09	13.1	32.6	54.5	32.7	4.91	5.17	4.17	4.99	13.5	5.15	11.8	18.8	22.6	40.6
New River at Boundary	10/19/09	9.41	26.2	39.1	20.4	5.03	5.71	3.22	4.2	11.7	4.19	5.57	16.4	26.2	27.1
New River at Boundary	10/19/09	18.5	50.6	84.5	17.6	7.16	8.22	8.17	2.6	5.71	6.67	5.02	9.7	38.4	65.3
New River at Boundary	5/4/10	-0.839	1.7	2.6	1.14	-0.839	-0.839	-0.839	-0.839	-0.839	-0.839	-0.839	0.9	7.9	1.2
New River at Boundary	5/4/10	-0.631	2.2	2.2	-0.631	-0.631	-0.631	-0.631	-0.631	-0.631	-0.631	-0.631	0.91	6.72	1.15
New River at Boundary	10/5/10	102	437	1140	253	129	70.5	64.6	60.1	116	121	61.8	105	255	690
New River at Boundary	5/10/11				DNO, 3.7				DNO, 1.5	DNO, 2.9	DNO, 2.1	DNO, 3.3			
New River at Boundary	10/11/11	29.6	63.6	101	50.5	17.1	12.8	9.4	13	24.8	15.8	15.7	39.3	66.3	103
New River Outlet	5/6/02	-3.57	-3.57	17.3	17.5				-3.57	-3.57	6.54	-3.57	11.8	13	16.7
New River Outlet	5/6/02	-3.58	-3.58	16.5	7.53				-3.58	-3.58	5.36	-3.58	11.4	12.3	16.5
New River Outlet	10/2/02	-1.24	-1.24	2.09	-1.24				-1.24	-1.24	-1.24	-1.24	-1.24	-1.24	-1.24
New River Outlet	4/15/03	1.74	-1.46	4.64	2.31				-1.46	1.63	-1.46	2.39	2.89	3.79	5.02
New River Outlet	11/4/03	-1.56	3.64	5.07	2.56				-1.56	-1.56	-1.56	1.85	2.95	4.28	6.1
New River Outlet	5/4/04	-1.18	-1.18	-1.18	-1.18				-1.18	-1.18	-1.18	-1.18	-1.18	-1.18	-1.18
New River Outlet	10/5/04	-0.931	-0.931	3.04	-0.931	-0.931	-0.931	-0.931	-0.931	-0.931	-0.931	1.48	2.16	2.73	2.72
New River Outlet	5/10/05	-0.735	2.1	3.46	-0.735	-0.735	-0.735	-0.735	-0.735	-0.735	-0.735	-0.735	1.47	3.63	2.12
New River Outlet	10/26/05	0.95	4.24	6.22	0.81	-0.745	0.93	-0.745	-0.745	0.88	1.23	0.81	1.65	2.37	3.2
New River Outlet	10/26/05	0.8	3.22	4.93	0.95	0.82	-0.723	-0.723	-0.723	0.8	1.17	0.8	1.48	3.23	2.55
New River Outlet	5/1/06	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	-0.721	1.49	1.71	2.19
New River Outlet	5/7/07														
New River Outlet	10/22/07	-0.735	3.4	4.94	1.6	-0.735	-0.735	-0.735	-0.735	-0.735	-0.735	0.97	1.59	2.37	2.14
New River Outlet	4/21/08	1.34	5.56	7.37	1.78	-0.815	-0.815	-0.815	-0.815	1.33	-0.815	1.32	2.15	3.1	3.06
New River Outlet	4/21/08	1.42	3.72	5.58	1.78	-0.894	-0.894	-0.894	-0.894	1.55	-0.894	-0.894	2.6	3.35	2.95
New River Outlet	10/28/08														
New River Outlet	4/28/09	1.32	4.52	8.2	1.48	-0.789	-0.789	-0.789	-0.789	0.93	-0.789	1.03	1.61	2.08	2.23
New River Outlet	4/28/09	2.02	4.82	10.3	1.21	-0.766	-0.766	-0.766	-0.766	-0.766	-0.766	-0.766	7.79	3.41	2.81
New River Outlet	10/19/09														
New River Outlet	5/4/10	0.8	2.9	4.2	1.08	-0.766	-0.766	-0.766	-0.766	1.2	-0.766	1.24	2	3.4	2.3
New River Outlet	10/6/10														
New River Outlet	5/10/11				-1				-1	-1	-1	DNO, 1.5			
New River Outlet	5/10/11				-1				-1	-1	-1	-1			
New River Outlet	10/11/11	1.02	1.96	3.08	1.85	-0.73	-0.73	-0.73	-0.73	0.74	-0.73	0.76	1.33	1.82	1.48
New River Outlet	10/16/12				-1				-1	-1	DNO, 1.4	-1			

StationName	Sample Date	Naphthalenes, C4; Total: ng/g dw	Perylene: Total: ng/g dw	Phenanthrene/Anthracene, C1; Total: ng/g dw	Phenanthrene/Anthracene, C2; Total: ng/g dw	Phenanthrene/Anthracene, C3; Total: ng/g dw	Phenanthrene/Anthracene, C4; Total: ng/g dw	Pyrene: Total: ng/g dw	Trimethylnaphthalene, 1,6,7; Total: ng/g dw	Total PAH: ng/g dw
New River at Boundary	5/8/02	178	-25	223	338	286	113	119	144	90.8
New River at Boundary	10/1/02	46.6	-1.6	71.4	105	89.4	41.3	38.4	44.9	23.3
New River at Boundary	4/9/03	172	14.2	110	190	170	76.7	77	74.8	20.9
New River at Boundary	11/4/03	322	21.7	567	758	520	208	83.1	123	36.2
New River at Boundary	5/3/04	102	13.6	90.8	116	127	54	38.4	50.5	11.3
New River at Boundary	10/4/04	510	23.5	409	1078	571	201	81.2	121	72.3
New River at Boundary	5/9/05	183	-1.39	428	1074	750	86.3	85.7	108	30
New River at Boundary	10/25/05	90.5	13.1	163	403	314	76.7	43.9	134	31.1
New River at Boundary	5/1/06	246	17.3	388	771	596	139	77.1	156	82.7
New River at Boundary	5/7/07									
New River at Boundary	10/23/07	9.65	9.5	9.71	17.7	15.2	6.77	3.22	4.1	1.73
New River at Boundary	4/21/08	19.7	5.76	23.2	46.9	42	23.8	8.77	15.3	3.08
New River at Boundary	4/28/08	26.2	9.48	29.4	61	56.3	38	15.5	37.9	1.61
New River at Boundary	10/19/09	23.4	12.6	22.5	46.5	46.8	32.6	9.49	30.7	2.45
New River at Boundary	10/19/09	62.1	7.87	30	92.8	87.9	42	10.1	49	5.51
New River at Boundary	5/4/10	-0.839	2.26	1.3	2.1	-0.839	-0.839	1.55	2.6	-0.839
New River at Boundary	5/4/10	1.29	-0.631	3.1	3.81	2.07	-0.631	1.43	0.97	-0.631
New River at Boundary	10/5/10	476	48.3	454	794	1860	394	191	325	50.7
New River at Boundary	5/10/11	DNO, 1.3						5.9	9.2	DNO, 1.1
New River at Boundary	10/11/11	3.75	14.5	83.4	157	126	58.7	36.8	80.1	10.5
<u>New River Outlet</u>	5/6/02	12.1	12.8	25.1	38.6	36.4	16.3	13.8	26.7	-3.57
New River Outlet	5/6/02	12.9	12.1	21.6	35.4	36.7	16.4	10.6	16.3	-3.58
New River Outlet	10/2/02	-1.24	-1.24	1.38	1.95	1.8	-1.24	-1.24	-1.24	7.22
New River Outlet	4/15/03	3.91	2.22	6.41	12.8	10.7	4.26	2.5	5.81	-1.46
New River Outlet	11/4/03	5.65	4.6	9.2	15.5	13.5	5.37	3.77	5.93	-1.56
New River Outlet	5/4/04	-1.18	-1.18	1.39	1.85	1.99	-1.18	-1.18	-1.18	5.23
New River Outlet	10/5/04	-0.931	3.99	4.12	3.07	2.31	-0.931	2.55	2.18	-0.931
New River Outlet	5/10/05	-0.735	1.82	5.02	9.41	10.2	1.84	2.06	2.73	-0.735
New River Outlet	10/26/05	2.03	3.02	5.6	10.7	10.9	2.05	1.72	2.25	-0.745
New River Outlet	10/26/05	1.63	3.15	4.94	8.95	10.6	2.15	1.65	2.63	-0.723
New River Outlet	5/10/6	1.56	2.99	4.14	8.85	10.3	2.46	1.43	2.52	-0.721
New River Outlet	5/7/07									
New River Outlet	10/22/07	-0.735	3	2.8	5.6	5.3	-0.735	1.6	1.5	-0.735
New River Outlet	4/21/08	2.82	3.61	4.6	8.7	7.8	5.07	2.18	2.38	-0.815
New River Outlet	4/21/08	-0.894	3.69	5.36	9.35	6.93	5.2	2.59	3.3	-0.894
New River Outlet	10/28/08									
New River Outlet	4/28/09	1.67	3.07	3.07	5.25	5.58	3.51	1.51	1.78	-0.789
New River Outlet	4/28/09	1.19	3.2	3.4	5.32	3.86	2.35	1.6	1.78	-0.766
New River Outlet	10/19/09									
New River Outlet	5/4/10	1.2	4.68	3.8	3.9	3.1	-0.766	1.7	1.6	-0.766
New River Outlet	10/6/10									
New River Outlet	5/10/11	-1						DNO, 2.4	DNO, 1.2	-1
New River Outlet	5/10/11	-1						DNO, 3.3	DNO, 1.5	-1
New River Outlet	10/11/11	-0.73	3.43	2.22	2.7	2.09	-0.73	1.4	1.69	-0.73
New River Outlet	10/16/12	-1						DNO, 3.8	DNO, 3	-1

Appendix L3. Concentrations of polycyclic aromatic hydrocarbons (PAHs) from sediments (ng/g dw) of the Salton Sea. Yellow values represent detected values. DNQ represents values below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon: Total: %dw	Aacenaphthene: Total: ng/g dw	Aacenaphthylene: Total: ng/g dw	Anthracene: Total: ng/g dw	Benz(a)anthracene: Total: ng/g dw	Benz(a)fluoranthene: Total: ng/g dw	Benz(e)pyrene: Total: ng/g dw	Benz(a)pyrene: Total: ng/g dw	Benz(b)fluoranthene: Total: ng/g dw	Benz(g,h,i)perylene: Total: ng/g dw	Benz(j,k,l)fluoranthene: Total: ng/g dw	Benz(k)fluoranthene: Total: ng/g dw	Biphenyl: Total: ng/g dw	Chrysene/Triphenylene: Total: ng/g dw	Chrysene: Total: ng/g dw	Chrysenes, C1: Total: ng/g dw	Chrysenes, C2: Total: ng/g dw	Chrysenes, C3: Total: ng/g dw	Chrysenes, C3: Total: ng/g dw
Salton Sea USGS2	5/14/02 5.31	-6.13	-6.13	-6.13	-6.13	-6.13	-6.13	7.45	8.14	7.33		9.02	-6.13		10.8	14	15.8	10.5		
Salton Sea USGS2	10/3/02 0.39																			
Salton Sea USGS2	10/3/02 0.55	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4									-1.4	-1.4	1.71	-1.4	
Salton Sea USGS2	4/10/03 1.55	-2.14	-2.14	-2.14	-2.14	-2.14	-2.14									-2.14	-2.14	-2.14	-2.14	
Salton Sea USGS2	11/4/03 6.93	-2.66	-2.66	-2.66	-2.66	-2.66	-2.66									-2.66	-2.66	-2.66	-2.66	
Salton Sea USGS2	5/5/04 3.08	-2.19	-2.19	-2.19	-2.19	-2.19	-2.19									-2.19	-2.19	-2.19	-2.19	
Salton Sea USGS2	10/6/04 7	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9									-1.9	-1.9	-1.9	-1.9	
Salton Sea USGS2	5/11/05 1.89	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22									-1.22	-1.22	-1.22	-1.22	
Salton Sea USGS2	10/26/05 0.1	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624									-0.624	-0.624	-0.624	-0.624	
Salton Sea USGS2	5/3/06 5	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54									-1.54	-1.54	-1.54	-1.54	
Salton Sea USGS2	5/3/06 5.02	-1.27	-1.27	-1.27	-1.27	-1.27	-1.27									-1.27	-1.27	-1.27	-1.27	
Salton Sea USGS2	5/9/07 2.54																			
Salton Sea USGS2	10/24/07 10.22	-1.58	-1.58	-1.58	-1.58	-1.58	-1.58									-1.58	-1.58	4.06	-1.58	
Salton Sea USGS2	4/22/08 0.28	-1.59	-1.59	-1.59	-1.59	-1.59	-1.59		2.24	-1.59	-1.59					-1.59	6.68	-1.59	-1.59	
Salton Sea USGS2	4/29/09 0.07	-1.66	-1.66	-1.66	-1.66	-1.66	-1.66		2.16	-1.66	1.8					-1.66	3.97	3.21	2.03	
Salton Sea USGS2	10/21/09 0.03	-2.07	-2.07	-2.07	-2.07	-2.07	-2.07		-2.07	-2.07	-2.07					-2.07	5.48	5.43	-2.07	
Salton Sea USGS2	5/4/10 5.48	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54		2.18	-1.54	1.9					-1.54	2.28	-1.54	-1.54	
Salton Sea USGS2	5/11/11	-1	-1	-1	-1	-1	-1		-1	-1	-1					-1	-1	-1	-1	
Salton Sea USGS7	5/14/02 7.01	-6.23	-6.23	-6.23	-6.23	-6.23	-6.23	6.9	8.78	8.35	8.03	-6.23				10.3	15.2	15.8	12.6	
Salton Sea USGS7	9/30/02 4.72	-2.28	-2.28	-2.28	-2.28	-2.28	-2.28	2.89	-2.28	2.84						-2.28	3.14	4.06	-2.28	
Salton Sea USGS7	4/10/03 8.54	-3.57	-3.57	-3.57	-3.57	-3.57	-3.57		-3.57	-3.57	-3.57					-3.57	7.92	-3.57	-3.57	
Salton Sea USGS7	11/4/03 4.96	-2.53	-2.53	-2.53	-2.53	-2.53	-2.53		-2.53	-2.53	-2.53					-2.53	-2.53	-2.53	-2.53	
Salton Sea USGS7	5/5/04 2.65	-2.18	-2.18	-2.18	-2.18	-2.18	-2.18		-2.18	-2.18	-2.18					-2.18	-2.18	-2.18	-2.18	
Salton Sea USGS7	10/6/04 8.58	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77		-1.77	-1.77	-1.77					-1.77	-1.77	-1.77	-1.77	
Salton Sea USGS7	5/11/05 1.04	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14		-1.14	-1.14	-1.14					-1.14	-1.14	-1.14	-1.14	
Salton Sea USGS7	10/26/05 0.13	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633		-0.633	-0.633	-0.633					-0.633	-0.633	-0.633	-0.633	
Salton Sea USGS7	5/3/06 5.28	-1.46	-1.46	-1.46	-1.46	-1.46	-1.46		-1.46	-1.46	-1.46					-1.46	-1.46	-1.46	-1.46	
Salton Sea USGS7	5/9/07 6.79																			
Salton Sea USGS7	10/24/07 11.93	-1.66	-1.66	-1.66	-1.66	-1.66	-1.66		-1.66	-1.66	-1.66					-1.66	1.7	-1.66	-1.66	
Salton Sea USGS7	4/22/08 0.51	-1.71	-1.71	-1.71	-1.71	-1.71	-1.71		2.77	2.04	-1.71					-1.71	9.56	1.93	-1.71	
Salton Sea USGS7	4/29/09 0.186	-1.51	-1.51	-1.51	-1.51	-1.51	-1.51		2.2	-1.51	1.8					-1.51	4.17	3.75	-1.51	
Salton Sea USGS7	10/21/09 0.276	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88		-1.88	-1.88	-1.88					-1.88	4.53	-1.88	-1.88	
Salton Sea USGS7	5/4/10 6.93	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9		2.98	-1.9	2.5					-1.9	4.06	-1.9	-1.9	
Salton Sea USGS7	5/11/11	-1	-1	-1	-1	-1	-1		-1	-1	-1					-1	-1	-1	-1	
Salton Sea USGS9	5/14/02 6.78	-7.71	-7.71	-7.71	-7.71	-7.71	-7.71	8.69	8.89		9.26	-7.71				13.3	13.7	11	-7.71	
Salton Sea USGS9	9/30/02 3.97																			
Salton Sea USGS9	10/30/02 12.88	9.97	3.44	3.63	13		-3	8.71	-3	3.42		3.34	3.62			3.46	3.94	-3	-3	
Salton Sea USGS9	4/10/03 9.82	-3.58	-3.58	-3.58	-3.58	-3.58	-3.58		-3.58	-3.58	-3.58					-3.58	-3.58	-3.58	-3.58	
Salton Sea USGS9	11/5/03 18.11	-4.18	-4.18	-4.18	-4.18	-4.18	-4.18		-4.18	-4.18	-4.18					-4.18	6.14	-4.18	-4.18	
Salton Sea USGS9	5/5/04 8.34	-3.03	-3.03	-3.03	-3.03	-3.03	-3.03		-3.03	-3.03	-3.03					-3.03	-3.03	-3.03	-3.03	
Salton Sea USGS9	10/6/04 24.31	-2.95	-2.95	-2.95	-2.95	-2.95	-2.95		-2.95	-2.95	-2.95					-2.95	-2.95	21.8	-2.95	
Salton Sea USGS9	5/11/05 12.37	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79		-1.79	-1.79	-1.79					-1.79	-1.79	-1.79	-1.79	
Salton Sea USGS9	10/26/05 10.64	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81		-1.81	-1.81	-1.81					-1.81	-1.81	-1.81	-1.81	
Salton Sea USGS9	5/3/06 7.6	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96		-1.96	-1.96	-1.96					-1.96	-1.96	-1.96	-1.96	
Salton Sea USGS9	5/9/07 17.59																			
Salton Sea USGS9	10/24/07 12.16	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81		-1.81	-1.81	-1.81					-1.81	2.56	-1.81	-1.81	
Salton Sea USGS9	4/22/08 0.5	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65		3.14	-1.65	-1.65					-1.65	7.29	-1.65	-1.65	
Salton Sea USGS9	4/29/09 0.042	-2.66	-2.66	-2.66	-2.66	-2.66	-2.66		3.2	-2.66	-2.66					-2.66	7.59	8.07	-2.66	
Salton Sea USGS9	10/21/09 0.078	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79		-1.79	-1.79	-1.79					-1.79	2.95	4.47	-1.79	
Salton Sea USGS9	5/4/10 9.5	-2.28	-2.28	-2.28	-2.28	-2.28	-2.28		2.4	-2.28	-2.28					-2.28	-2.28	-2.28	-2.28	
Salton Sea USGS9	5/11/11	-1	-1	-1	-1	-1	-1		-1	-1	-1					-1	-1	-1	-1	

StationName	Sample Date	Dibenz(a,h)anthracene; Total: ng/g dw	Dibenzothiophene; Total: ng/g dw	Dibenzothiophenes, C1; Total: ng/g dw	Dibenzothiophenes, C2; Total: ng/g dw	Dibenzothiophenes, C3; Total: ng/g dw	Dimethylnaphthalene, 2,6; Total: ng/g dw	Dimethylphenanthrene, 3,6; Total: ng/g dw	Fluoranthene/Pyrene, C1; Total: ng/g dw	Fluoranthene; Total: ng/g dw	Fluorene; Total: ng/g dw	Fluorenes, C2; Total: ng/g dw	Fluorenes, C3; Total: ng/g dw	Indeno[1,2,3-c,d]pyrene; Total: ng/g dw	Methylbenzothiophene, 4; Total: ng/g dw	Methylfluoranthene, 2; Total: ng/g dw	Methylfluorene, 1; Total: ng/g dw	Methylnaphthalene, 1; Total: ng/g dw
Salton Sea USGS2	5/14/02 -6.13	-6.13	14.8	9.83	-6.13	-6.13		8.16	12	-6.13	12.5	-6.13	-6.13					-6.13
Salton Sea USGS2	10/3/02																	
Salton Sea USGS2	10/3/02 -1.4	-1.4	-1.4	-1.4	-1.4	-1.4		-1.4	-1.4	-1.4	-1.4	-1.4	1.85	-1.4				-1.4
Salton Sea USGS2	4/10/03 -2.14	-2.14	-2.14	-2.14	-2.14	-2.14		-2.14	-2.14	-2.14	-2.14	-2.14	2.82	-2.14				-2.14
Salton Sea USGS2	11/4/03 -2.66	-2.66	-2.66	-2.66	-2.66	4.42		-2.66	-2.66	-2.66	-2.66	-2.66	-2.66	-2.66				-2.66
Salton Sea USGS2	5/5/04 -2.19	-2.19	-2.19	-2.19	-2.19	-2.19		-2.19	-2.19	-2.19	-2.19	-2.19	-2.19	-2.19				-2.19
Salton Sea USGS2	10/6/04 -1.9	-1.9	-1.9	-1.9	-1.9	75.7	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9
Salton Sea USGS2	5/11/05 -1.22	-1.22	-1.22	-1.22	-1.22	26.7	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22
Salton Sea USGS2	10/26/05 -0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624	-0.624
Salton Sea USGS2	5/3/06 -1.54	-1.54	-1.54	-1.54	-1.54	37.1	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54	-1.54
Salton Sea USGS2	5/3/06 -1.27	-1.27	-1.27	-1.27	1.58	3.44	-1.27	-1.27	1.95	-1.27	1.97	-1.27	-1.27	-1.27	-1.27	-1.27	-1.27	-1.27
Salton Sea USGS2	5/9/07																	
Salton Sea USGS2	10/24/07 -1.58	-1.58	3.02	4.23	3.62	175	-1.58	3	3.1	2.44	4.4	7.3	20	-1.58	-1.58	-1.58	-1.58	-1.58
Salton Sea USGS2	4/22/08 -1.59	-1.59	3	3.61	3.98	-1.59	-1.59	3.16	3.21	-1.59	5.01	5.23	14.1	-1.59	-1.59	-1.59	-1.59	-1.59
Salton Sea USGS2	4/29/09 -1.66	-1.66	3.44	5.69	4.04	119	-1.66	4.48	3.73	2.58	8.39	9.52	38.2	1.7	1.97	-1.66	4.24	-1.66
Salton Sea USGS2	10/21/09 -2.07	-2.07	-2.07	3.88	-2.07	260	-2.07	-2.07	2.32	3.27	4.22	8.42	59.3	-2.07	-2.07	-2.07	-2.07	-2.07
Salton Sea USGS2	5/4/10 -1.54	-1.54	1.59	2.44	-1.54	88.8	-1.54	-1.54	3.64	1.87	3.1	4.5	-1.54	21	-1.54	-1.54	-1.54	-1.54
Salton Sea USGS2	5/11/11 -1	-1				DNO, 1.5				DNO, 1.9	-1			-1				-1
Salton Sea USGS7	5/14/02 -6.23	-6.23	13.4	11	7.46	-6.23		8.87	13.8	-6.23	12.5	-6.23	10					-6.23
Salton Sea USGS7	9/30/02 -2.28	-2.28	2.37	-2.28	-2.28	12		-2.28	-2.28	-2.28	-2.28	3.47	-2.28					-2.28
Salton Sea USGS7	4/10/03 -3.57	-3.57	6.2	4.85	-3.57	28.9		-3.57	3.79	-3.57	6.04	-3.57	5.28	-3.57				-3.57
Salton Sea USGS7	11/4/03 -2.53	-2.53	-2.53	-2.53	-2.53	2.82		-2.53	-2.53	-2.53	-2.53	-2.53	-2.53	-2.53				-2.53
Salton Sea USGS7	5/5/04 -2.18	-2.18	-2.18	-2.18	-2.18	-2.18		-2.18	-2.18	-2.18	-2.18	-2.18	-2.18	-2.18				-2.18
Salton Sea USGS7	10/6/04 -1.77	-1.77	-1.77	-1.77	-1.77	84.2	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77	-1.77
Salton Sea USGS7	5/11/05 -1.14	-1.14	-1.14	-1.14	-1.14	28.5	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14	-1.14
Salton Sea USGS7	10/26/05 -0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633	-0.633
Salton Sea USGS7	5/3/06 -1.46	-1.46	-1.46	-1.46	-1.46	62.1	2.47	-1.46	-1.46	-1.46	-1.46	-1.46	-1.46	-1.46	-1.46	-1.46	-1.46	-1.46
Salton Sea USGS7	5/9/07																	
Salton Sea USGS7	10/24/07 -1.66	-1.66	2.22	3.1	2.3	107	-1.66	-1.66	2	-1.66	3.9	7.7	26.6	-1.66	-1.66	-1.66	-1.66	-1.66
Salton Sea USGS7	4/22/08 -1.71	-1.71	4.52	6.44	7.4	-1.71	-1.71	4.8	4.48	2.56	7.57	10	24.1	-1.71	2.53	-1.71	3.01	-1.71
Salton Sea USGS7	4/29/09 -1.51	-1.51	3.24	4.43	3.18	103	-1.51	3.9	3.18	2.23	6.24	7.45	25.5	1.8	1.91	-1.51	3.06	-1.51
Salton Sea USGS7	10/21/09 -1.88	-1.88	2.72	4.87	-1.88	326	-1.88	-1.88	2.72	2.81	4.29	6.76	76.3	-1.88	-1.88	-1.88	-1.88	-1.88
Salton Sea USGS7	5/4/10 -1.9	-1.9	5.18	5.92	3.48	134	-1.9	-1.9	4.16	2.21	6.68	9.17	-1.9	2.7	2.47	-1.9	3.39	-1.9
Salton Sea USGS7	5/11/11 -1	-1				DNO, 1.4			-1	-1				-1				-1
Salton Sea USGS9	5/14/02 10	-7.71	-7.71	9.23	-7.71	-7.71		-7.71	14.4	11.9	11.7	-7.71	8.47	-7.71				-7.71
Salton Sea USGS9	9/30/02																	
Salton Sea USGS9	10/30/02 -3	19.2	27.8	17.4	5.09	8.44		17.2	12.9	8.34	7.83	4.36	-3	-3				-3
Salton Sea USGS9	4/10/03 4.84	-3.58	3.97	3.75	-3.58	36.8		-3.58	-3.58	-3.58	5.11	-3.58	4.39	-3.58				-3.58
Salton Sea USGS9	11/5/03 -4.18	-4.18	-4.18	-4.18	4.61	14.4		4.38	7.88	4.63	-4.18	6.18	4.87	-4.18				-4.18
Salton Sea USGS9	5/5/04 -3.03	-3.03	-3.03	-3.03	-3.03	-3.03		-3.03	-3.03	-3.03	-3.03	-3.03	-3.03	-3.03				-3.03
Salton Sea USGS9	10/6/04 -2.95	-2.95	11.1	-2.95	11.5	-2.95	-2.95	7.44	8.31	7.82	13.4	7.29	-2.95	-2.95	-2.95	-2.95	6.55	-2.95
Salton Sea USGS9	5/11/05 -1.79	-1.79	-1.79	-1.79	-1.79	92	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79
Salton Sea USGS9	10/26/05 -1.81	-1.81	4.05	-1.81	3.41	176	-1.81	4.89	4.6	2.04	5.52	2.69	-1.81	-1.81	2.41	-1.81	3.59	-1.81
Salton Sea USGS9	5/3/06 -1.96	-1.96	-1.96	-1.96	-1.96	140	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96	-1.96
Salton Sea USGS9	5/9/07																	
Salton Sea USGS9	10/24/07 -1.81	-1.81	3.22	4.09	2.88	73.8	-1.81	4.4	2.8	-1.81	3.86	7.81	29.2	-1.81	-1.81	-1.81	-1.81	-1.81
Salton Sea USGS9	4/22/08 -1.65	-1.65	3.72	4.9	4.98	-1.65	-1.65	4.44	3.94	-1.65	6.23	8.15	13.9	-1.65	-1.65	-1.65	-1.65	-1.65
Salton Sea USGS9	4/29/09 -2.66	-2.66	5.18	8.18	8.77	291	-2.66	8.6	6.5	7.53	13.5	13.9	48.7	-2.66	2.73	-2.66	5.35	-2.66
Salton Sea USGS9	10/21/09 -1.79	-1.79	-1.79	-1.79	-1.79	284	-1.79	-1.79	2.7	2.21	3.6	9.8	118	-1.79	-1.79	-1.79	-1.79	-1.79
Salton Sea USGS9	5/4/10 -2.28	-2.28	3.34	5.66	5.24	169	-2.28	-2.28	4.51	3.32	8.72	9.46	-2.28	2.6	-2.28	-2.28	3.38	-2.28
Salton Sea USGS9	5/11/11 -1	-1				-1			DNO, 1.2	-1				-1				-1

Appendix M1. Concentrations of polychlorinated biphenyls (PCBs) from sediments (ng/g dw) of the Alamo River. Yellow values represent DNQ values which are below levels of quantification. Green values are quantified values. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon; Total: % dw	PCB 003; Total: ng/g dw	PCB 008; Total: ng/g dw	PCB 018; Total: ng/g dw	PCB 027; Total: ng/g dw	PCB 028; Total: ng/g dw	PCB 029; Total: ng/g dw	PCB 031; Total: ng/g dw	PCB 033; Total: ng/g dw	PCB 037; Total: ng/g dw	PCB 044; Total: ng/g dw	PCB 049; Total: ng/g dw	PCB 052; Total: ng/g dw	PCB 056; Total: ng/g dw
Alamo River at International Boundary	5/10/11			-0.248	-0.248	-0.248	-0.248	-0.248	-0.248			-0.248	-0.248	-0.248	-0.248
Alamo River at International Boundary	10/11/11			-0.22	-0.22	-0.22	-0.22	-0.22	-0.22			-0.22	-0.22	-0.22	-0.22
Alamo River Outlet	5/6/02	0.48		-0.303	-0.303	-0.303	-0.303	-0.303	-0.303			-0.303	-0.303	-0.303	-0.303
Alamo River Outlet	10/2/02	0.69		-0.159	-0.159	-0.159	-0.159	-0.159	-0.159			-0.159	-0.159	-0.159	-0.159
Alamo River Outlet	10/2/02	0.67		-0.163	-0.163	-0.163	-0.163	-0.163	-0.163			-0.163	-0.163	-0.163	-0.163
Alamo River Outlet	4/15/03	0.37		-0.052	-0.052	-0.052	DNO, 0.062	-0.052	-0.052			-0.052	-0.052	DNO, 0.091	-0.052
Alamo River Outlet	11/4/03	0.14		-0.052	-0.052	-0.052	DNO, 0.071	-0.052	DNO, 0.103			DNO, 0.163	-0.052	DNO, 0.116	-0.052
Alamo River Outlet	5/3/04	0.59		-0.147	-0.147	-0.147	-0.147	-0.147	-0.147			-0.147	-0.147	DNO, 0.21	-0.147
Alamo River Outlet	10/5/04	0.48		-0.168	-0.168	-0.168	-0.168	-0.168	-0.168			-0.168	-0.168	-0.168	-0.168
Alamo River Outlet	5/9/05	0.55		-0.143	-0.143	-0.143	-0.143	-0.143	DNO, 0.219	-0.143		-0.143	-0.143	-0.143	-0.143
Alamo River Outlet	5/9/05	0.47		-0.142	-0.142	-0.142	-0.142	-0.142	DNO, 0.177	-0.142		-0.142	-0.142	DNO, 0.168	-0.142
Alamo River Outlet	10/26/05	0.27		DNO, 0.114	DNO, 0.103	-0.068	DNO, 0.234	-0.068	DNO, 0.192	DNO, 0.165		DNO, 0.228	DNO, 0.137	0.283	DNO, 0.105
Alamo River Outlet	5/1/06	0.94		-0.188	-0.188	-0.188	-0.188	-0.188	-0.188			-0.188	-0.188	DNO, 0.216	-0.188
Alamo River Outlet	5/7/07	0.56													
Alamo River Outlet	10/23/07	0.44		-0.316	-0.26	-0.177	-0.413	-0.176	-0.333	-0.332		-0.343	-0.196	-0.456	-0.15
Alamo River Outlet	4/21/08	0.53		-0.309	-0.254	-0.173	DNO, 0.489	-0.172	DNO, 0.363	DNO, 0.36		DNO, 0.621	DNO, 0.282	DNO, 0.737	DNO, 0.282
Alamo River Outlet	10/28/08	0.94		-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275		-0.275	-0.275	-0.275	-0.275
Alamo River Outlet	4/28/09	0.018		-0.287	-0.287	-0.287	-0.287	-0.287	-0.287	-0.287		DNO, 0.289	-0.287	DNO, 0.372	-0.287
Alamo River Outlet	10/19/09	0.874		-0.168	-0.168	-0.168	-0.168	-0.168	-0.168	-0.168		-0.337	-0.337	-0.337	-0.337
Alamo River Outlet	5/4/10	1.61		DNO, 0.924	DNO, 2.17	-0.871	2.84	-0.871	DNO, 2.41	-0.871		DNO, 2.3	DNO, 2.17	DNO, 2.55	-0.871
Alamo River Outlet	10/6/10	1.97		-0.287	-0.287	-0.287	-0.287	-0.287	-0.287	-0.287		-0.287	-0.287	-0.287	-0.287
Alamo River Outlet	5/10/11			-0.282	-0.282	-0.282	-0.282	-0.282	-0.282	-0.282		-0.282	-0.282	-0.282	-0.282
Alamo River Outlet	10/11/11			-0.278	-0.278	-0.278	-0.278	-0.278	-0.278	-0.278		-0.278	-0.278	-0.278	-0.278
Alamo River Outlet	10/11/11			-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27		-0.27	-0.27	-0.27	-0.27
Alamo River Outlet	10/15/12			-1	-1		-1		-1	-1		-1	-1	-1	-1

StationName	Sample Date	PCB 060; Total: ng/g dw	PCB 064; Total: ng/g dw	PCB 066; Total: ng/g dw	PCB 070; Total: ng/g dw	PCB 074; Total: ng/g dw	PCB 077; Total: ng/g dw	PCB 081; Total: ng/g dw	PCB 087; Total: ng/g dw	PCB 095; Total: ng/g dw	PCB 097; Total: ng/g dw	PCB 101; Total: ng/g dw	PCB 105; Total: ng/g dw	PCB 110; Total: ng/g dw	
Alamo River at International Boundary	5/10/11	-0.248	-0.248	-0.248	-0.372	-0.248	-0.248		-0.372	-0.372	-0.248	-0.248	-0.372	-0.248	DNQ, 0.393
Alamo River at International Boundary	10/11/11	-0.22	-0.22	-0.22	-0.331	-0.22	-0.22		-0.331	-0.331	-0.22	-0.22	-0.331	-0.22	-0.331
Alamo River Outlet	5/6/02	-0.303		-0.303	-0.303	-0.303			DNQ, 0.327	-0.303	-0.303	-0.303	-0.303	-0.303	-0.303
Alamo River Outlet	10/2/02	-0.159		-0.159	-0.159	-0.159			-0.159	-0.159	-0.159	-0.159	-0.159	-0.159	DNQ, 0.29
Alamo River Outlet	10/2/02	-0.163		DNQ, 0.177	-0.163	-0.163			-0.163	-0.163	-0.163	-0.163	-0.163	-0.163	DNQ, 0.277
Alamo River Outlet	4/15/03	-0.052		DNQ, 0.071	DNQ, 0.104	-0.052			-0.052	-0.052	-0.052	-0.052	DNQ, 0.087	DNQ, 0.223	DNQ, 0.16
Alamo River Outlet	11/4/03	-0.052		DNQ, 0.093	DNQ, 0.201	-0.052			DNQ, 0.083	DNQ, 0.148	-0.052	-0.052	DNQ, 0.162	DNQ, 0.157	DNQ, 0.329
Alamo River Outlet	5/3/04	-0.147		-0.147	DNQ, 0.161	-0.147			DNQ, 0.214	-0.147	-0.147	-0.147	-0.147	DNQ, 0.17	0.343
Alamo River Outlet	10/5/04	-0.168		-0.168	-0.168	-0.168			DNQ, 0.214	DNQ, 0.179	-0.168	-0.168	DNQ, 0.201	-0.168	0.366
Alamo River Outlet	5/9/05	-0.143		-0.143	-0.143	-0.143			-0.143	-0.143	-0.143	-0.143	-0.143	-0.143	DNQ, 0.144
Alamo River Outlet	5/9/05	-0.142		-0.142	-0.142	-0.142			-0.142	DNQ, 0.147	-0.142	-0.142	DNQ, 0.198	-0.142	-0.142
Alamo River Outlet	10/26/05	DNQ, 0.07		DNQ, 0.179	0.371	DNQ, 0.137			DNQ, 0.182	0.275	DNQ, 0.099	DNQ, 0.134	0.336	DNQ, 0.161	0.37
Alamo River Outlet	5/1/06	-0.188		-0.188	0.461	-0.188			DNQ, 0.256	-0.188	-0.188	-0.188	0.394	-0.188	0.519
Alamo River Outlet	5/7/07														
Alamo River Outlet	10/23/07	-0.161	-0.131	-0.272	-0.363	-0.198	-0.158		-0.212	-0.307	-0.173	-0.237	-0.347	-0.373	-0.475
Alamo River Outlet	4/21/08	-0.158	-0.128	0.532	1.09	DNQ, 0.344	-0.155		0.609	0.937	0.422	DNQ, 0.427	0.939	DNQ, 0.656	1.51
Alamo River Outlet	10/28/08	-0.275	-0.275	-0.275	-0.413	-0.275	-0.275		-0.413	-0.413	-0.275	-0.275	-0.413	-0.275	-0.413
Alamo River Outlet	4/28/09	-0.287	-0.287	-0.287	DNQ, 0.531	-0.287	-0.287		-0.431	DNQ, 0.438	-0.287	-0.287	DNQ, 0.539	DNQ, 0.312	DNQ, 0.695
Alamo River Outlet	10/19/09	-0.337	-0.337	-0.337	-0.337	-0.337	-0.337		-0.337	-0.337	-0.337	-0.337	-0.337	-0.337	-0.337
Alamo River Outlet	5/4/10	-0.871	-0.871	DNQ, 1.31	-1.31	-0.871	-0.871		DNQ, 1.32	-1.31	-0.871	-0.871	DNQ, 2.09	DNQ, 0.9	DNQ, 3.09
Alamo River Outlet	10/6/10	-0.287	-0.287	-0.287	-0.43	-0.287	-0.287		-0.43	-0.43	-0.287	-0.287	-0.43	-0.287	-0.43
Alamo River Outlet	5/10/11	-0.282	-0.282	-0.282	-0.422	-0.282	-0.282		-0.422	-0.422	-0.282	-0.282	-0.422	-0.282	-0.422
Alamo River Outlet	10/11/11	-0.278	-0.278	-0.278	-0.417	-0.278	-0.278		-0.417	-0.417	-0.278	-0.278	-0.417	-0.278	-0.417
Alamo River Outlet	10/11/11	-0.27	-0.27	-0.27	-0.404	-0.27	-0.27		-0.404	-0.404	-0.27	-0.27	-0.404	-0.27	-0.404
Alamo River Outlet	10/15/12			-1	-1	-1	-1		-1	-1	-1	-1	-1	-1	-1

StationName	Sample Date	PCB 198/199; Total: ng/g dw	PCB 200; Total: ng/g dw	PCB 201; Total: ng/g dw	PCB 203; Total: ng/g dw	PCB 206; Total: ng/g dw	PCB 209; Total: ng/g dw	PCB AROCLOR 1248; Total: ng/g dw	PCB AROCLOR 1254; Total: ng/g dw	PCB AROCLOR 1260; Total: ng/g dw	PCB; Total: ng/g dw
Alamo River at International Boundary	5/10/11	-0.248	-0.248	-0.248	-0.248	-0.248	-0.248	-6.21	-2.48	-2.48	
Alamo River at International Boundary	10/11/11	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	-5.51	-2.2	-2.2	
Alamo River Outlet	5/6/02		-0.303	-0.303	-0.303	-0.303	-0.303	-30.3	-12.1	-12.1	
Alamo River Outlet	10/2/02		-0.159	-0.159	-0.159	-0.159	-0.159	-15.9	-6.37	-6.37	
Alamo River Outlet	10/2/02		-0.163	-0.163	-0.163	-0.163	-0.163	-16.3	-6.53	-6.53	
Alamo River Outlet	4/15/03		-0.052	-0.052	-0.052	-0.052	-0.052	-13	-5.2	-5.2	
Alamo River Outlet	11/4/03		-0.052	-0.052	-0.052	-0.052	-0.052	-13.1	-5.23	-5.23	
Alamo River Outlet	5/3/04		-0.147	-0.147	-0.147	-0.147	-0.147	-14.7	-5.89	DNO, 9	0.343
Alamo River Outlet	10/5/04		-0.168	-0.168	-0.168	-0.168	-0.168	-17	-7	-7	0.366
Alamo River Outlet	5/9/05		-0.143	-0.143	-0.143	-0.143	-0.143	7	-14.3	DNO, 10	0.359
Alamo River Outlet	5/9/05		-0.142	-0.142	-0.142	-0.142	-0.142	6	-14.2	DNO, 10	
Alamo River Outlet	10/26/05		-0.068	-0.068	-0.068	-0.068	-0.068	DNO, 7	DNO, 3	-2.72	1.946
Alamo River Outlet	5/1/06		-0.188	-0.188	-0.188	-0.188	-0.188	-18.8	-7.52	-7.52	1.947
Alamo River Outlet	5/7/07										
Alamo River Outlet	10/23/07	-0.095	-0.116	-0.179	-0.096	-0.167	-0.073	.14	-5.59	-5.59	
Alamo River Outlet	4/21/08	-0.093	-0.114	-0.175	-0.094	-0.163	-0.072	-13.7	DNO, 11	-5.47	7.349
Alamo River Outlet	10/28/08	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-6.88	-2.75	-2.75	
Alamo River Outlet	4/28/09	-0.287	-0.287	-0.287	-0.287	-0.287	-0.287	-7.18	DNO, 6	-2.87	
Alamo River Outlet	10/19/09	-0.337	-0.337	-0.337	-0.337	-0.337	-0.337	-8.42	-3.37	-3.37	
Alamo River Outlet	5/4/10	-0.871	-0.871	DNO, 1.31	-0.871	-0.871	-0.871	DNO, 84	-8.71	-8.71	24.180
Alamo River Outlet	10/6/10	-0.287	-0.287	-0.287	-0.287	-0.287	-0.287	-7.17	-2.87	-2.87	
Alamo River Outlet	5/10/11	-0.282	-0.282	-0.282	-0.282	-0.282	-0.282	-7.04	-2.82	-2.82	
Alamo River Outlet	10/11/11	-0.278	-0.278	-0.278	-0.278	-0.278	-0.278	-6.95	-2.78	-2.78	
Alamo River Outlet	10/11/11	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-6.74	-2.7	-2.7	
Alamo River Outlet	10/15/12			-1		-1	-1				

Appendix M2. Concentrations of polychlorinated biphenyls (PCBs) from sediments (ng/g dw) of the New River. Yellow values represent DNO values which are below levels of quantification. Green values are quantified values. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon; Total; % dw	PCB 003; Total; ng/g dw	PCB 008; Total; ng/g dw	PCB 018; Total; ng/g dw	PCB 027; Total; ng/g dw	PCB 028; Total; ng/g dw	PCB 029; Total; ng/g dw	PCB 031; Total; ng/g dw	PCB 033; Total; ng/g dw	PCB 037; Total; ng/g dw	PCB 044; Total; ng/g dw	PCB 049; Total; ng/g dw	PCB 052; Total; ng/g dw	PCB 056; Total; ng/g dw
New River at Boundary	5/8/02	0.96		-0.291	0.773	-0.291	1.29	-0.291	1.46	0.655		1.09	0.63	1.21	DNO, 0.341
New River at Boundary	10/1/02	4.52		0.399	1.54	-0.163	2.5	-0.163	2.43	1.34		1.55	1.11	1.65	-0.163
New River at Boundary	4/9/03	1.83		0.496	4.15	0.44	6.81	-0.063	5.13	2.66		4.89	4.02	5.27	2.09
New River at Boundary	11/4/03	9.8		3.12	5.32	-0.117	9.83	-0.117	8.11	5.85		3.63	3.26	4.95	0.968
New River at Boundary	5/3/04	2.24		-0.161	2.54	DNO, 0.166	2.65	-0.161	3.16	1.9		2.17	1.7	2.66	0.529
New River at Boundary	10/4/04	6.73		-0.323	-0.323	-0.323	-0.323	-0.323	2.78	-0.323		-0.323	-0.323	-0.323	-0.323
New River at Boundary	5/9/05	5.73		-0.279	3.11	-0.279	2.77	-0.279	3.48	2.22		2.06	1.55	2.52	DNO, 0.43
New River at Boundary	10/25/05	2.27		0.734	1.72	DNO, 0.153	2.76	DNO, 0.154	2.14	1.77		1.87	1.81	2.19	0.679
New River at Boundary	5/1/06	5.86		0.825	1.64	-0.305	2.67	-0.305	2.11	1.7		1.56	1.54	2.13	0.759
New River at Boundary	5/7/07	1.25													
New River at Boundary	10/23/07	0.4		-0.311	DNO, 0.274	-0.174	DNO, 0.476	-0.173	DNO, 0.357	DNO, 0.333		DNO, 0.431	DNO, 0.337	DNO, 0.616	DNO, 0.158
New River at Boundary	4/21/08	1.12		DNO, 0.574	0.841	-0.233	1.75	-0.231	1.31	1.16		1.58	1.08	2.02	0.645
New River at Boundary	4/28/09	0.113		-0.308	DNO, 0.585	-0.308	1.38	-0.308	DNO, 0.862	DNO, 0.617		1.13	0.986	1.52	DNO, 0.43
New River at Boundary	10/19/09			-0.288	DNO, 0.667	-0.288	1.38	-0.288	DNO, 0.772	DNO, 0.465		0.973	0.889	1.4	DNO, 0.401
New River at Boundary	10/19/09			-0.298	DNO, 0.432	-0.298	DNO, 0.881	-0.298	DNO, 0.589	DNO, 0.436		DNO, 0.597	DNO, 0.524	DNO, 0.765	-0.298
New River at Boundary	5/4/10	1.43		-0.483	-0.483	-0.483	-0.483	-0.483	-0.483	-0.483		-0.483	-0.483	-0.483	-0.483
New River at Boundary	5/4/10	1.32		-0.812	-0.812	-0.812	-0.812	-0.812	-0.812	-0.812		-0.812	-0.812	-0.812	-0.812
New River at Boundary	10/5/10	8.53		4.43	5.48	-0.424	5.63	-0.424	4.73	3.62		3.09	2.68	3.56	DNO, 0.854
New River at Boundary	5/10/11			1.71	2.23	-0.258	2.45	-0.258	2.06	1.62		1.18	1.15	1.36	DNO, 0.269
New River at Boundary	10/11/11			0.96	1.96	-0.196	3.14	-0.196	3.02	1.7		1.9	1.96	2.01	DNO, 0.348
New River Outlet	5/6/02	1.03		-0.357	-0.357	-0.357	-0.357	-0.357	-0.357	-0.357		-0.357	-0.357	-0.357	-0.357
New River Outlet	5/6/02	1.01		-0.359	-0.359	-0.359	-0.359	-0.359	-0.359	-0.359		-0.359	-0.359	-0.359	-0.359
New River Outlet	10/2/02	0.15		-0.118	-0.118	-0.118	-0.118	-0.118	-0.118	-0.118		-0.118	-0.118	-0.118	-0.118
New River Outlet	4/15/03	0.5		-0.055	-0.055	-0.055	DNO, 0.137	-0.055	DNO, 0.132	DNO, 0.091		DNO, 0.094	DNO, 0.066	DNO, 0.211	-0.055
New River Outlet	11/4/03	0.63		-0.062	DNO, 0.101	-0.062	DNO, 0.185	-0.062	DNO, 0.175	-0.062		DNO, 0.232	DNO, 0.087	DNO, 0.201	DNO, 0.067
New River Outlet	5/4/04	0.09		-0.125	-0.125	-0.125	-0.125	-0.125	-0.125	-0.125		-0.125	-0.125	DNO, 0.191	-0.125
New River Outlet	10/5/04	0.9		-0.186	-0.186	-0.186	-0.186	-0.186	-0.186	-0.186		DNO, 0.204	-0.186	DNO, 0.32	-0.186
New River Outlet	5/10/05	0.55		-0.15	DNO, 0.286	-0.15	DNO, 0.23	-0.15	0.371	DNO, 0.167		-0.15	-0.15	DNO, 0.203	-0.15
New River Outlet	10/26/05	0.41		DNO, 0.149	DNO, 0.143	-0.074	0.365	-0.074	DNO, 0.28	DNO, 0.265		0.313	DNO, 0.204	0.457	DNO, 0.127
New River Outlet	10/26/05	0.49		DNO, 0.108	DNO, 0.115	-0.074	DNO, 0.284	-0.074	DNO, 0.22	DNO, 0.192		DNO, 0.217	DNO, 0.174	0.331	DNO, 0.116
New River Outlet	5/1/06	0.67		-0.144	-0.144	-0.144	0.305	-0.144	DNO, 0.212	DNO, 0.189		DNO, 0.273	DNO, 0.191	0.319	-0.144
New River Outlet	5/7/07	0.57													
New River Outlet	10/22/07	0.52		-0.333	-0.273	-0.187	-0.435	-0.185	-0.35	-0.349		-0.361	-0.206	-0.48	-0.158
New River Outlet	4/21/08	1.09		-0.369	-0.303	-0.207	DNO, 0.541	-0.205	DNO, 0.416	DNO, 0.392		DNO, 0.651	DNO, 0.333	DNO, 0.792	DNO, 0.25
New River Outlet	4/21/08	1.59		-0.404	-0.332	-0.227	DNO, 0.732	-0.225	DNO, 0.537	DNO, 0.53		1	DNO, 0.358	DNO, 0.864	0.597
New River Outlet	10/28/08	0.94		-0.293	-0.293	-0.293	-0.293	-0.293	-0.293	-0.293		-0.293	-0.293	-0.293	-0.293
New River Outlet	4/28/09	0.013		-0.287	-0.287	-0.287	DNO, 0.322	-0.287	-0.287	-0.287		DNO, 0.41	-0.287	DNO, 0.608	-0.287
New River Outlet	4/28/09	0.052		-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29		-0.29	-0.29	DNO, 0.417	-0.29
New River Outlet	10/19/09	0.475		-0.145	-0.145	-0.145	-0.145	-0.145	-0.145	-0.289		-0.289	-0.289	-0.289	-0.289
New River Outlet	5/4/10	1.3		-0.56	-0.56	-0.56	-0.56	-0.56	-0.56	-0.56		-0.56	-0.56	-0.56	-0.56
New River Outlet	10/6/10	2.06		-0.289	-0.289	-0.289	-0.289	-0.289	-0.289	-0.289		-0.289	-0.289	-0.289	-0.289
New River Outlet	5/10/11			-0.341	-0.341	-0.341	-0.341	-0.341	-0.341	-0.341		-0.341	-0.341	DNO, 0.362	-0.341
New River Outlet	5/10/11			-0.326	-0.326	-0.326	-0.326	-0.326	-0.326	-0.326		-0.326	-0.326	-0.326	-0.326
New River Outlet	10/11/11			-0.293	-0.293	-0.293	-0.293	-0.293	-0.293	-0.293		-0.293	-0.293	-0.293	-0.293
New River Outlet	10/16/12			-1	-1	-1	-1	-1	-1	-1		-1	-1	-1	-1

StationName	Sample Date	PCB 060; Total; ng/g dw	PCB 064; Total; ng/g dw	PCB 066; Total; ng/g dw	PCB 070; Total; ng/g dw	PCB 074; Total; ng/g dw	PCB 077; Total; ng/g dw	PCB 081; Total; ng/g dw	PCB 087; Total; ng/g dw	PCB 095; Total; ng/g dw	PCB 097; Total; ng/g dw	PCB 101; Total; ng/g dw	PCB 105; Total; ng/g dw	PCB 110; Total; ng/g dw	
New River at Boundary	5/8/02	-0.291		0.89	1.26	DNO, 0.508			0.791	1.21	-0.291	DNO, 0.419	1.91	DNO, 0.344	1.94
New River at Boundary	10/1/02	-0.163		1.38	1.36	0.593			0.397	1.15	-0.163	DNO, 0.231	1.68	0.874	1.68
New River at Boundary	4/9/03	1.37		4.18	4.32	2.42			2.06	5.57	1.31	1.65	7.24	1.47	6.01
New River at Boundary	11/4/03	DNO, 0.558		1.59	2.25	1.34			0.642	1.84	-0.117	DNO, 0.203	2.18	-0.117	4.6
New River at Boundary	5/3/04	DNO, 0.314		1.18	1.57	0.73			0.702	1.2	0.421	-0.161	1.64	0.628	1.84
New River at Boundary	10/4/04	-0.323		2.11	-0.323	-0.323			-0.323	1.26	DNO, 0.335	DNO, 0.522	1.44	0.958	2.7
New River at Boundary	5/9/05	-0.279		1.62	1.65	-0.279			0.995	1.43	0.56	0.564	1.77	0.741	2.16
New River at Boundary	10/25/05	0.353		1.33	1.73	0.946			0.814	2.16	0.475	0.813	3.12	0.533	2.4
New River at Boundary	5/1/06	DNO, 0.399		1.1	1.82	0.825			0.922	1.52	DNO, 0.472	0.767	2.11	0.759	2.11
New River at Boundary	5/7/07														
New River at Boundary	10/23/07	-0.159	-0.128	DNO, 0.384	DNO, 0.426	DNO, 0.205	-0.156		DNO, 0.235	DNO, 0.442	0.17	-0.233	DNO, 0.461	-0.367	DNO, 0.628
New River at Boundary	4/21/08	DNO, 0.339	DNO, 0.327	1.31	2.23	0.795	-0.208		1.11	2.08	0.759	0.902	2.23	1.13	2.78
New River at Boundary	4/28/09	-0.308	DNO, 0.368	DNO, 0.846	DNO, 1.18	DNO, 0.49	-0.308		DNO, 0.747	1.95	DNO, 0.462	DNO, 0.664	2.14	DNO, 0.731	2.38
New River at Boundary	10/19/09	-0.288	DNO, 0.382	DNO, 0.77	DNO, 0.871	DNO, 0.406	-0.288		DNO, 0.783	2.21	DNO, 0.563	DNO, 0.829	2.54	DNO, 0.752	2.71
New River at Boundary	10/19/09	-0.298	-0.298	DNO, 0.442	DNO, 0.557	-0.298	-0.298		-0.447	DNO, 0.735	-0.298	DNO, 0.305	DNO, 0.917	DNO, 0.317	DNO, 0.924
New River at Boundary	5/4/10	-0.483	-0.483	-0.483	-0.725	-0.483	-0.483		-0.725	-0.725	-0.483	-0.483	-0.725	-0.483	-0.725
New River at Boundary	5/4/10	-0.812	-0.812	-0.812	-1.22	-0.812	-0.812		-1.22	-1.22	-0.812	-0.812	-1.22	-0.812	-1.22
New River at Boundary	10/5/10	DNO, 0.457	DNO, 0.562	1.51	2.01	DNO, 0.971	-0.424		DNO, 0.957	DNO, 1.66	DNO, 0.649	DNO, 0.813	DNO, 1.87	DNO, 0.849	2.28
New River at Boundary	5/10/11	-0.258	DNO, 0.283	DNO, 0.617	DNO, 0.757	DNO, 0.397	-0.258		DNO, 0.396	DNO, 0.718	0.258	DNO, 0.262	DNO, 0.814	DNO, 0.405	DNO, 0.888
New River at Boundary	10/11/11	DNO, 0.205	DNO, 0.435	0.631	0.899	1.3	-0.196		DNO, 0.359	0.914	DNO, 0.267	DNO, 0.299	DNO, 0.843	DNO, 0.399	0.916
<u>New River Outlet</u>	5/6/02	-0.357		-0.357	-0.357	-0.357			-0.357	-0.357	-0.357	-0.357	-0.357	-0.357	-0.357
New River Outlet	5/6/02	-0.359		-0.359	-0.359	-0.359			-0.359	-0.359	-0.359	-0.359	-0.359	-0.359	-0.359
New River Outlet	10/2/02	-0.118		-0.118	-0.118	-0.118			-0.118	-0.118	-0.118	-0.118	DNO, 0.122	-0.118	DNO, 0.224
New River Outlet	4/15/03	-0.055		DNO, 0.149	DNO, 0.211	DNO, 0.105			DNO, 0.115	DNO, 0.144	0.055	-0.055	DNO, 0.232	0.302	0.285
New River Outlet	11/4/03	-0.062		DNO, 0.16	DNO, 0.278	DNO, 0.118			DNO, 0.111	DNO, 0.21	-0.062	DNO, 0.071	DNO, 0.246	0.426	0.475
New River Outlet	5/4/04	-0.125		-0.125	-0.125	-0.125			-0.125	DNO, 0.141	-0.125	-0.125	-0.125	DNO, 0.136	0.353
New River Outlet	10/5/04	-0.186		DNO, 0.228	-0.186	-0.186			-0.186	0.458	-0.186	-0.186	0.451	DNO, 0.252	0.798
New River Outlet	5/10/05	-0.15		DNO, 0.16	-0.15	-0.15			DNO, 0.15	-0.15	-0.15	-0.15	DNO, 0.152	DNO, 0.158	0.385
New River Outlet	10/26/05	DNO, 0.091		DNO, 0.232	0.461	DNO, 0.161			DNO, 0.236	0.381	DNO, 0.125	DNO, 0.198	0.444	DNO, 0.197	0.47
New River Outlet	10/26/05	DNO, 0.074		DNO, 0.212	0.361	DNO, 0.141			DNO, 0.18	0.297	DNO, 0.102	DNO, 0.164	0.361	DNO, 0.199	0.372
New River Outlet	5/1/06	-0.144			0.354	0.594	DNO, 0.19		0.297	0.403	DNO, 0.195	DNO, 0.232	0.51	0.299	0.662
New River Outlet	5/7/07														
New River Outlet	10/22/07	-0.17	-0.137	-0.286	-0.382	-0.208	-0.166		-0.223	-0.323	-0.182	-0.249	-0.366	-0.393	-0.5
New River Outlet	4/21/08	-0.188	-0.152	DNO, 0.517	1.01	DNO, 0.33	-0.185		0.519	0.951	DNO, 0.357	DNO, 0.41	0.929	DNO, 0.53	1.24
New River Outlet	4/21/08	DNO, 0.246	DNO, 0.228	0.976	1.73	0.571	-0.202		0.938	1.73	0.665	DNO, 0.58	1.34	1.12	2.63
New River Outlet	10/28/08	-0.293	-0.293	-0.293	-0.44	-0.293	-0.293		-0.44	-0.44	-0.293	-0.293	-0.44	-0.293	-0.44
New River Outlet	4/28/09	-0.287	-0.287	DNO, 0.333	DNO, 0.693	-0.287	-0.287		DNO, 0.52	DNO, 0.844	DNO, 0.334	DNO, 0.387	DNO, 0.992	DNO, 0.501	DNO, 1.23
New River Outlet	4/28/09	-0.29	-0.29	-0.29	DNO, 0.553	-0.29	-0.29		-0.435	DNO, 0.489	0.29	-0.29	DNO, 0.662	DNO, 0.385	DNO, 0.836
New River Outlet	10/19/09	-0.289	-0.289	-0.289	-0.289	-0.289	-0.289		-0.289	-0.289	-0.289	-0.289	-0.289	-0.289	-0.289
New River Outlet	5/4/10	-0.56	-0.56	-0.56	-0.839	-0.56	-0.56		-0.839	-0.839	-0.56	-0.56	-0.839	-0.839	-0.839
New River Outlet	10/6/10	-0.289	-0.289	-0.289	-0.433	-0.289	-0.289		-0.433	-0.433	-0.289	-0.289	-0.433	-0.289	-0.433
New River Outlet	5/10/11	-0.341	-0.341	-0.341	-0.512	-0.341	-0.341		-0.512	-0.512	-0.341	-0.341	-0.512	-0.341	-0.512
New River Outlet	5/10/11	-0.326	-0.326	-0.326	-0.489	-0.326	-0.326		-0.489	-0.489	-0.326	-0.326	-0.489	-0.326	-0.489
New River Outlet	10/11/11	-0.293	-0.293	-0.293	-0.44	-0.293	-0.293		-0.44	-0.44	-0.293	-0.293	-0.44	-0.293	-0.44
New River Outlet	10/16/12				-1	-1	-1		-1	-1	-1	-1	-1	-1	-1

StationName	Sample Date	PCB 198/199; Total; ng/g dw	PCB 200; Total; ng/g dw	PCB 201; Total; ng/g dw	PCB 203; Total; ng/g dw	PCB 206; Total; ng/g dw	PCB 209; Total; ng/g dw	PCB AROCLOR 1248; Total; ng/g dw	PCB AROCLOR 1254; Total; ng/g dw	PCB AROCLOR 1260; Total; ng/g dw	PCB; Total; ng/g dw
New River at Boundary	5/8/02	-0.291	0.608	DNO, 0.482	-0.291	-0.291	40	DNO, 13	23	38.293	
New River at Boundary	10/1/02	-0.163	0.438	DNO, 0.236	-0.163	-0.163	72	DNO, 9	DNO, 12	43.903	
New River at Boundary	4/9/03	0.952	4.32	2.89	1.33	0.419	170	32	160	222.705	
New River at Boundary	11/4/03	-0.117	0.653	DNO, 0.527	DNO, 0.136	-0.117	237	DNO, 20	DNO, 14	82.867	
New River at Boundary	5/3/04	1.45	0.989	0.614	DNO, 0.279	-0.161	91	DNO, 7	32	56.567	
New River at Boundary	10/4/04	-0.323	0.877	0.676	-0.323	DNO, 0.348	-32	DNO, 19	DNO, 28	37.855	
New River at Boundary	5/9/05	-0.279	0.677	0.593	-0.279	-0.279	100	-27.9	DNO, 24	53.738	
New River at Boundary	10/25/05	DNO, 0.256	2.22	2.34	0.614	DNO, 0.125	73	-3.34	82	108.998	
New River at Boundary	5/1/06	-0.305	1.03	0.638	-0.305	-0.305	DNO, 72	-12.2	33	52.667	
New River at Boundary	5/7/07										
New River at Boundary	10/23/07	-0.093	-0.114	-0.176	-0.095	-0.164	-0.072	15	-5.5	-5.5	
New River at Boundary	4/21/08	-0.125	-0.153	DNO, 0.382	0.531	-0.22	-0.097	DNO, 42	DNO, 17	DNO, 16	41.320
New River at Boundary	4/28/09	-0.308	-0.308	1.23	DNO, 0.853	DNO, 0.393	-0.308	DNO, 33	DNO, 12	43	47.696
New River at Boundary	10/19/09	-0.288	-0.288	1.42	0.949	DNO, 0.431	-0.288	DNO, 33	15	48	54.281
New River at Boundary	10/19/09	-0.298	-0.298	DNO, 0.504	DNO, 0.318	-0.298	-0.298	DNO, 23	DNO, 4	17	8.900
New River at Boundary	5/4/10	-0.483	-0.483	-0.483	-0.483	-0.483	-0.483	-12.1	-4.83	-4.83	
New River at Boundary	5/4/10	-0.812	-0.812	-0.812	-0.812	-0.812	-0.812	-20.3	-8.12	-8.12	
New River at Boundary	10/5/10	-0.424	-0.424	1.95	2.45	DNO, 0.978	-0.424	170	-4.24	74	75.340
New River at Boundary	5/10/11	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	77	-2.58	-2.58	17.790
New River at Boundary	10/11/11	-0.196	-0.196	DNO, 0.516	DNO, 0.468	DNO, 0.302	-0.196	89	DNO, 2	19	30.241
New River Outlet	5/6/02		-0.357	-0.357	-0.357	-0.357	-0.357	-35.7	-14.3	-14.3	
New River Outlet	5/6/02		-0.359	-0.359	-0.359	-0.359	-0.359	-35.9	-14.3	-14.3	
New River Outlet	10/2/02		-0.118	-0.118	-0.118	-0.118	-0.118	-11.8	-4.7	-4.7	
New River Outlet	4/15/03		-0.055	-0.055	-0.055	-0.055	-0.055	-13.7	-5.46	-5.46	0.876
New River Outlet	11/4/03		-0.062	-0.062	-0.062	-0.062	-0.062	-15.5	-6.19	-6.19	1.266
New River Outlet	5/4/04		-0.125	-0.125	-0.125	-0.125	-0.125	-12.5	-5.01	DNO, 9	0.353
New River Outlet	10/5/04		-0.186	-0.186	-0.186	-0.186	-0.186	-19	-7	-7	1.707
New River Outlet	5/10/05		-0.15	-0.15	-0.15	-0.15	-0.15	12	-15	DNO, 10	1.582
New River Outlet	10/26/05		-0.074	-0.074	-0.074	-0.074	-0.074	DNO, 10	DNO, 4	-2.95	3.311
New River Outlet	10/26/05		-0.074	-0.074	-0.074	-0.074	-0.074	DNO, 8	DNO, 3	-2.94	2.087
New River Outlet	5/1/06		-0.144	-0.144	-0.144	-0.144	-0.144	-14.4	DNO, 7	-5.77	4.731
New River Outlet	5/7/07										
New River Outlet	10/22/07	-0.1	-0.122	-0.188	-0.101	-0.176	-0.077	-14.7	-5.88	-5.88	
New River Outlet	4/21/08	-0.111	-0.135	-0.209	-0.112	-0.195	-0.086	-16.3	DNO, 8	-6.52	4.649
New River Outlet	4/21/08	-0.121	-0.148	-0.229	-0.123	-0.214	-0.094	DNO, 18	DNO, 17	-7.15	16.072
New River Outlet	10/28/08	-0.293	-0.293	-0.293	-0.293	-0.293	-0.293	-7.33	-2.93	-2.93	
New River Outlet	4/28/09	-0.287	-0.287	-0.287	-0.287	-0.287	-0.287	DNO, 9	DNO, 12	-2.87	
New River Outlet	4/28/09	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	-7.25	DNO, 9	-2.9	
New River Outlet	10/19/09	-0.289	-0.289	-0.289	-0.289	-0.289	-0.289	-7.23	-2.89	-2.89	
New River Outlet	5/4/10	-0.56	-0.56	-0.56	-0.56	-0.56	-0.56	-14	-5.6	-5.6	
New River Outlet	10/6/10	-0.289	-0.289	-0.289	-0.289	-0.289	-0.289	-7.22	-2.89	-2.89	
New River Outlet	5/10/11	-0.341	-0.341	-0.341	-0.341	-0.341	-0.341	-8.53	-3.41	-3.41	
New River Outlet	5/10/11	-0.326	-0.326	-0.326	-0.326	-0.326	-0.326	-8.15	-3.26	-3.26	
New River Outlet	10/11/11	-0.293	-0.293	-0.293	-0.293	-0.293	-0.293	-7.33	-2.93	-2.93	
New River Outlet	10/16/12		-1		-1	-1	-1				

Appendix M3. Concentrations of polychlorinated biphenyls (PCBs) from sediments (ng/g dw) of the Salton Sea. Yellow values represent DNQ values which are below levels of quantification. Green values are quantified values. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon; Total; % dw	PCB 003; Total; ng/g dw	PCB 008; Total; ng/g dw	PCB 018; Total; ng/g dw	PCB 027; Total; ng/g dw	PCB 028; Total; ng/g dw	PCB 029; Total; ng/g dw	PCB 031; Total; ng/g dw	PCB 033; Total; ng/g dw	PCB 037; Total; ng/g dw	PCB 044; Total; ng/g dw	PCB 049; Total; ng/g dw	PCB 052; Total; ng/g dw	PCB 056; Total; ng/g dw	PCB 060; Total; ng/g dw
Salton Sea USGS2	5/14/02	5.31	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	
Salton Sea USGS2	10/3/02	0.39	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	
Salton Sea USGS2	10/3/02	0.55	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	
Salton Sea USGS2	4/10/03	1.55	-0.089	-0.089	-0.089	DNQ, 0.214	-0.089	DNQ, 0.399	DNQ, 0.158	DNQ, 0.101	-0.089	DNQ, 0.21	-0.089	DNQ, 0.21	-0.089	
Salton Sea USGS2	11/4/03	6.93	DNQ, 0.315	-0.106	-0.106	-0.106	-0.106	DNQ, 0.267	-0.106	-0.106	DNQ, 0.333	-0.106	-0.106	DNQ, 0.333	-0.106	
Salton Sea USGS2	5/5/04	3.08	-0.216	-0.216	-0.216	DNQ, 0.418	-0.216	DNQ, 0.339	DNQ, 0.298	0.768	0.493	1.44	DNQ, 0.268	-0.216		
Salton Sea USGS2	10/6/04	7	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	
Salton Sea USGS2	5/11/05	1.89	-0.244	DNQ, 0.249	-0.244	-0.244	-0.244	DNQ, 0.291	-0.244	-0.244	-0.244	-0.244	-0.244	-0.244	-0.244	
Salton Sea USGS2	10/26/05	0.1	DNQ, 0.111	DNQ, 0.095	-0.063	DNQ, 0.216	-0.063	DNQ, 0.172	DNQ, 0.165	DNQ, 0.214	DNQ, 0.134	0.289	DNQ, 0.114	DNQ, 0.066		
Salton Sea USGS2	5/3/06	5	-0.308	-0.308	-0.308	DNQ, 0.479	-0.308	DNQ, 0.346	-0.308	DNQ, 0.411	-0.308	DNQ, 0.571	-0.308	-0.308	-0.308	
Salton Sea USGS2	5/3/06	5.02	-0.255	-0.255	-0.255	DNQ, 0.399	-0.255	DNQ, 0.278	-0.255	DNQ, 0.347	-0.255	DNQ, 0.413	-0.255	-0.255	-0.255	
Salton Sea USGS2	5/9/07	2.54														
Salton Sea USGS2	10/24/07	10.22	-0.714	-0.586	-0.4	-0.933	-0.397	-0.752	-0.75	-0.774	-0.442	-1.03	-0.339	-0.364		
Salton Sea USGS2	4/22/08	0.28	-0.718	-0.589	-0.403	-0.939	-0.399	-0.756	-0.754	-0.778	-0.444	-1.04	-0.341	-0.366		
Salton Sea USGS2	4/29/09	0.07	-0.606	-0.606	-0.606	DNQ, 0.973	-0.606	DNQ, 0.725	DNQ, 0.649	DNQ, 1.18	-0.606	DNQ, 1.39	-0.606	-0.606	-0.606	
Salton Sea USGS2	10/21/09	0.03	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	
Salton Sea USGS2	5/4/10	5.48	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	
Salton Sea USGS2	5/11/11		-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	DNQ, 0.685	-0.66	
Salton Sea USGS7	5/14/02	7.01	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	
Salton Sea USGS7	9/30/02	4.72	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	
Salton Sea USGS7	4/10/03	8.54	-0.147	-0.147	-0.147	DNQ, 0.236	-0.147	DNQ, 0.279	-0.147	DNQ, 0.29	DNQ, 0.154	DNQ, 0.369	-0.147		-0.147	
Salton Sea USGS7	11/4/03	4.96	-0.1	-0.1	-0.1	-0.1	-0.1	DNQ, 0.123	-0.1	-0.1	-0.1	DNQ, 0.177	-0.1	-0.1	-0.1	
Salton Sea USGS7	5/5/04	2.65	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	DNQ, 0.282	-0.213	-0.213	-0.213	
Salton Sea USGS7	10/6/04	8.58	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	
Salton Sea USGS7	5/11/05	1.04	-0.229	DNQ, 0.275	-0.229	-0.229	-0.229	DNQ, 0.29	-0.229	-0.229	-0.229	DNQ, 0.242	-0.229	-0.229	-0.229	
Salton Sea USGS7	10/26/05	0.13	DNQ, 0.09	DNQ, 0.074	-0.065	DNQ, 0.177	-0.065	DNQ, 0.136	DNQ, 0.124	DNQ, 0.165	DNQ, 0.101	DNQ, 0.235	DNQ, 0.088	-0.065		
Salton Sea USGS7	5/3/06	5.28	-0.291	-0.291	-0.291	DNQ, 0.566	-0.291	DNQ, 0.459	DNQ, 0.366	DNQ, 0.532	DNQ, 0.418	0.861	-0.291	-0.291		
Salton Sea USGS7	5/9/07	6.79														
Salton Sea USGS7	10/24/07	11.93	-0.749	-0.615	-0.42	-0.979	-0.416	-0.789	-0.787	-0.812	-0.463	-1.08	-0.355	-0.382		
Salton Sea USGS7	4/22/08	0.51	-0.774	-0.635	-0.434	-1.01	-0.43	-0.815	-0.813	-0.839	-0.479	-1.12	-0.367	-0.394		
Salton Sea USGS7	4/29/09	0.186	-0.592	-0.592	-0.592	-0.592	-0.592	-0.592	-0.592	DNQ, 0.727	-0.592	DNQ, 0.849	-0.592	-0.592	-0.592	
Salton Sea USGS7	10/21/09	0.276	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	
Salton Sea USGS7	5/4/10	6.93	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	
Salton Sea USGS7	5/11/11		-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	
Salton Sea USGS9	5/14/02	6.78	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	
Salton Sea USGS9	9/30/02	3.97														
Salton Sea USGS9	10/30/02	12.88	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	
Salton Sea USGS9	4/10/03	9.82	-0.13	-0.13	-0.13	DNQ, 0.197	-0.13	-0.13	-0.13	-0.13	-0.13	DNQ, 0.22	-0.13	-0.13	-0.13	
Salton Sea USGS9	11/5/03	18.11	-0.164	-0.164	-0.164	-0.164	-0.164	DNQ, 0.398	-0.164	DNQ, 0.431	-0.164	0.913	-0.164	-0.164	-0.164	
Salton Sea USGS9	5/5/04	8.34	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	0.783	-0.307	-0.307	-0.307	
Salton Sea USGS9	10/6/04	24.31	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	
Salton Sea USGS9	5/11/05	12.37	-0.361	1	-0.361	-0.361	-0.361	0.9	-0.361	-0.361	-0.361	DNQ, 0.443	-0.361	-0.361	-0.361	
Salton Sea USGS9	10/26/05	10.64	DNQ, 0.352	DNQ, 0.321	-0.184	0.78	-0.184	DNQ, 0.627	DNQ, 0.562	0.833	DNQ, 0.52	1.08	DNQ, 0.403	DNQ, 0.252		
Salton Sea USGS9	5/3/06	7.6	-0.393	-0.393	-0.393	DNQ, 0.659	-0.393	DNQ, 0.441	DNQ, 0.397	DNQ, 0.509	-0.393	DNQ, 0.645	-0.393	-0.393	-0.393	
Salton Sea USGS9	5/9/07	17.59														
Salton Sea USGS9	10/24/07	12.16	-0.82	-0.673	-0.46	-1.07	-0.456	-0.864	-0.861	-0.889	-0.507	-1.18	-0.389	-0.418		
Salton Sea USGS9	4/22/08	0.5	-0.747	-0.613	-0.419	-0.977	-0.415	-0.787	-0.785	DNQ, 1.02	-0.462	DNQ, 1.27	DNQ, 0.477	-0.381		
Salton Sea USGS9	4/29/09	0.042	-1.05	-1.05	-1.05	-1.05	-1.05	-1.05	-1.05	DNQ, 1.16	-1.05	DNQ, 1.39	-1.05	-1.05	-1.05	
Salton Sea USGS9	10/21/09	0.078	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	
Salton Sea USGS9	5/4/10	9.5	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	DNQ, 0.269	-0.258	-0.258	
Salton Sea USGS9	5/11/11		-0.865	-0.865	-0.865	-0.865	-0.865	-0.865	-0.865	DNQ, 0.922	-0.865	DNQ, 1.01	-0.865	-0.865	-0.865	

StationName	Sample Date	PCB 064: Total; ng/g dw	PCB 066: Total; ng/g dw	PCB 070: Total; ng/g dw	PCB 074: Total; ng/g dw	PCB 077: Total; ng/g dw	PCB 081: Total; ng/g dw	PCB 087: Total; ng/g dw	PCB 095: Total; ng/g dw	PCB 097: Total; ng/g dw	PCB 101: Total; ng/g dw	PCB 105: Total; ng/g dw	PCB 110: Total; ng/g dw	PCB 114: Total; ng/g dw	PCB 118: Total; ng/g dw
Salton Sea USGS2	5/14/02	1.47	-0.614	-0.614			-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	DNO, 1.04	-0.614	DNO, 0.621
Salton Sea USGS2	10/3/02	DNO, 0.164	-0.129	-0.129			-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	DNO, 0.135	-0.129	DNO, 0.146
Salton Sea USGS2	10/3/02	-0.129	-0.129	-0.129			-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	DNO, 0.172	-0.129	DNO, 0.138
Salton Sea USGS2	4/10/03	DNO, 0.165	DNO, 0.25	DNO, 0.113			DNO, 0.166	DNO, 0.111	-0.089	-0.089	DNO, 0.238	DNO, 0.138	DNO, 0.329	-0.089	DNO, 0.275
Salton Sea USGS2	11/4/03	DNO, 0.144	DNO, 0.327	DNO, 0.138			-0.106	DNO, 0.312	-0.106	-0.106	DNO, 0.26	DNO, 0.198	0.8	-0.106	DNO, 0.302
Salton Sea USGS2	5/5/04	0.812	1.49	0.487			0.813	1.39	0.477	0.625	1.46	0.67	2.01	-0.216	1.48
Salton Sea USGS2	10/6/04	-0.369	-0.369	-0.369			0.922	DNO, 0.642	-0.369	-0.369	DNO, 0.594	DNO, 0.42	1.1	-0.369	-0.369
Salton Sea USGS2	5/11/05	-0.244	-0.244	-0.244			-0.244	-0.244	-0.244	-0.244	-0.244	-0.244	DNO, 0.403	-0.244	DNO, 0.431
Salton Sea USGS2	10/26/05	DNO, 0.198	0.398	DNO, 0.133			DNO, 0.203	0.274	DNO, 0.126	DNO, 0.159	0.347	DNO, 0.221	0.451	-0.063	0.404
Salton Sea USGS2	5/3/06	DNO, 0.586	1.21	DNO, 0.355			DNO, 0.538	0.751	DNO, 0.355	DNO, 0.443	1.02	DNO, 0.558	1.17	-0.308	1.1
Salton Sea USGS2	5/3/06	0.723	1.33	DNO, 0.426			0.569	DNO, 0.504	DNO, 0.395	DNO, 0.501	0.99	0.739	1.32	-0.255	1.52
Salton Sea USGS2	5/9/07														
Salton Sea USGS2	10/24/07	-0.295	-0.614	-0.819	-0.446	-0.357	-0.479	-0.693	-0.391	-0.534	-0.784	-0.843	-1.07	-0.329	-1.33
Salton Sea USGS2	4/22/08	-0.296	-0.617	DNO, 0.826	-0.448	-0.359	DNO, 0.577	DNO, 0.815	DNO, 0.448	-0.537	DNO, 0.982	-0.847	DNO, 1.66	-0.331	-1.34
Salton Sea USGS2	4/29/09	-0.606	DNO, 0.944	DNO, 1.82	-0.606	-0.606	DNO, 1.03	DNO, 1.61	DNO, 0.66	DNO, 0.757	DNO, 1.69	DNO, 0.926	DNO, 2.35	-0.606	DNO, 2.05
Salton Sea USGS2	10/21/09	-0.804	-0.804	-1.21	-0.804	-0.804	-1.21	-1.21	-0.804	-0.804	-1.21	-0.804	-1.21	-0.804	-1.21
Salton Sea USGS2	5/4/10	-0.275	-0.275	-0.413	-0.275	-0.275	-0.413	-0.413	-0.275	-0.275	-0.413	-0.275	-0.413	-0.275	-0.413
Salton Sea USGS2	5/11/11	-0.66	-0.66	-0.99	-0.66	-0.66	-0.99	-0.99	-0.66	-0.66	-0.99	-0.66	DNO, 1.08	-0.66	-0.99
Salton Sea USGS7	5/14/02	-0.623	-0.623	-0.623			-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	1.27	-0.623	-0.623
Salton Sea USGS7	9/30/02	-0.213	-0.213	-0.213			-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	DNO, 0.296	-0.213	DNO, 0.246
Salton Sea USGS7	4/10/03	DNO, 0.256	DNO, 0.528	DNO, 0.156			DNO, 0.345	DNO, 0.292	-0.147	-0.147	DNO, 0.566	DNO, 0.338	DNO, 0.734	-0.147	DNO, 0.602
Salton Sea USGS7	11/4/03	-0.1	DNO, 0.286	-0.1			-0.1	DNO, 0.248	-0.1	-0.1	DNO, 0.194	DNO, 0.225	0.749	-0.1	DNO, 0.369
Salton Sea USGS7	5/5/04	-0.213	-0.213	-0.213			-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	DNO, 0.335	-0.213	-0.213
Salton Sea USGS7	10/6/04	-0.355	-0.355	-0.355			DNO, 0.379	DNO, 0.546	-0.355	-0.355	DNO, 0.596	DNO, 0.362	1.04	-0.355	-0.355
Salton Sea USGS7	5/11/05	1.06	-0.229	-0.229			-0.229	-0.229	-0.229	-0.229	-0.229	-0.229	DNO, 0.435	-0.229	DNO, 0.415
Salton Sea USGS7	10/26/05	DNO, 0.139	0.284	DNO, 0.108			DNO, 0.17	DNO, 0.214	DNO, 0.097	DNO, 0.13	0.285	DNO, 0.182	0.359	-0.065	0.335
Salton Sea USGS7	5/3/06	0.77	1.5	DNO, 0.412			0.688	0.981	DNO, 0.474	DNO, 0.566	1.27	0.686	1.55	-0.291	1.42
Salton Sea USGS7	5/9/07														
Salton Sea USGS7	10/24/07	-0.309	-0.644	-0.859	-0.468	-0.375	DNO, 0.51	-0.727	-0.41	-0.56	-0.823	-0.884	-1.13	-0.345	-1.4
Salton Sea USGS7	4/22/08	-0.319	-0.665	DNO, 0.9	-0.483	-0.387	DNO, 0.648	DNO, 1.01	DNO, 0.457	-0.579	DNO, 1.34	-0.913	DNO, 1.87	-0.357	-1.45
Salton Sea USGS7	4/29/09	-0.592	DNO, 0.608	DNO, 1.12	-0.592	-0.592	-0.889	DNO, 0.975	-0.592	-0.592	DNO, 1.33	DNO, 0.679	DNO, 1.61	-0.592	DNO, 1.48
Salton Sea USGS7	10/21/09	-0.736	-0.736	-1.1	-0.736	-0.736	-1.1	-1.1	-0.736	-0.736	-1.1	-0.736	-1.1	-0.736	-1.1
Salton Sea USGS7	5/4/10	-0.259	-0.259	-0.388	-0.259	-0.259	-0.388	-0.388	-0.259	-0.259	-0.388	-0.259	-0.388	-0.259	-0.388
Salton Sea USGS7	5/11/11	-0.954	-0.954	-1.43	-0.954	-0.954	-1.43	-1.43	-0.954	-0.954	-1.43	-0.954	-1.43	-0.954	-1.43
Salton Sea USGS9	5/14/02	-0.771	-0.771	-0.771			-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771
Salton Sea USGS9	9/30/02														
Salton Sea USGS9	10/30/02	-0.398	-0.398	-0.398			-0.398	-0.398	-0.398	-0.398	DNO, 0.496	-0.398	DNO, 0.768	-0.398	DNO, 0.678
Salton Sea USGS9	4/10/03	DNO, 0.147	-0.13	-0.13			DNO, 0.168	DNO, 0.149	0.13	-0.13	DNO, 0.343	DNO, 0.2	DNO, 0.466	-0.13	DNO, 0.367
Salton Sea USGS9	11/5/03	DNO, 0.612	1.15	DNO, 0.699			DNO, 0.549	0.905	DNO, 0.252	-0.164	0.941	DNO, 0.8	2.96	-0.164	1.33
Salton Sea USGS9	5/5/04	-0.307	-0.307	-0.307			-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	0.769	-0.307	DNO, 0.388
Salton Sea USGS9	10/6/04	-0.601	-0.601	-0.601			-0.601	-0.601	-0.601	-0.601	DNO, 0.691	-0.601	-0.601	-0.601	-0.601
Salton Sea USGS9	5/11/05	-0.361	-0.361	-0.361			-0.361	DNO, 0.384	-0.361	-0.361	DNO, 0.482	-0.361	0.801	-0.361	0.818
Salton Sea USGS9	10/26/05	0.737	1.35	DNO, 0.444			DNO, 0.662	1.01	DNO, 0.39	DNO, 0.518	1.28	DNO, 0.664	1.36	-0.184	1.31
Salton Sea USGS9	5/3/06	0.921	1.67	DNO, 0.499			DNO, 0.732	0.904	DNO, 0.48	DNO, 0.582	1.28	DNO, 0.771	1.58	-0.393	1.63
Salton Sea USGS9	5/9/07														
Salton Sea USGS9	10/24/07	-0.339	-0.705	-0.941	-0.512	-0.411	-0.551	-0.796	-0.449	-0.614	-0.901	-0.968	-1.23	-0.378	-1.53
Salton Sea USGS9	4/22/08	-0.308	DNO, 0.769	DNO, 1.58	DNO, 0.5	-0.374	1.08	DNO, 1.36	DNO, 0.785	DNO, 0.783	1.9	2.28	3.56	-0.344	3.16
Salton Sea USGS9	4/29/09	-1.05	-1.05	DNO, 1.86	-1.05	-1.05	-1.57	DNO, 1.64	-1.05	-1.05	DNO, 2.22	DNO, 1.23	DNO, 2.66	-1.05	DNO, 2.5
Salton Sea USGS9	10/21/09	-0.711	-0.711	-1.07	-0.711	-0.711	-1.07	-1.07	-0.711	-0.711	-1.07	-0.711	-1.07	-0.711	-1.07
Salton Sea USGS9	5/4/10	-0.258	-0.258	-0.386	-0.258	-0.258	-0.386	-0.386	-0.258	-0.258	-0.386	-0.258	-0.386	-0.258	-0.386
Salton Sea USGS9	5/11/11	-0.865	-0.865	-1.3	-0.865	-0.865	-1.3	-1.3	-0.865	-0.865	-1.3	-0.865	DNO, 1.72	-0.865	DNO, 1.43

StationName	Sample Date	PCB 168; Total; ng/g dw	PCB 169; Total; ng/g dw	PCB 170; Total; ng/g dw	PCB 174; Total; ng/g dw	PCB 177; Total; ng/g dw	PCB 180; Total; ng/g dw	PCB 183; Total; ng/g dw	PCB 187; Total; ng/g dw	PCB 189; Total; ng/g dw	PCB 194; Total; ng/g dw	PCB 195; Total; ng/g dw	PCB 198/199; Total; ng/g dw	PCB 200; Total; ng/g dw	PCB 201; Total; ng/g dw	PCB 203; Total; ng/g dw	PCB 204; Total; ng/g dw
Salton Sea USGS2	5/14/02		-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614	-0.614		-0.614	-0.614	-0.614	
Salton Sea USGS2	10/3/02		-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129		-0.129	-0.129	-0.129	
Salton Sea USGS2	10/3/02		-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129	-0.129		-0.129	-0.129	-0.129	
Salton Sea USGS2	4/10/03		-0.089	-0.089	-0.089	-0.089	-0.089	-0.089	-0.089	-0.089	-0.089	-0.089	DNO, 0.179	-0.089	-0.089	-0.089	
Salton Sea USGS2	11/4/03		-0.106	-0.106	-0.106	-0.106	-0.106	-0.106	-0.106	-0.106	-0.106	-0.106		-0.106	-0.106	-0.106	
Salton Sea USGS2	5/5/04		-0.216	-0.216	-0.216	-0.216	-0.216	-0.216	-0.216	-0.216	-0.216	-0.216		-0.216	-0.216	-0.216	
Salton Sea USGS2	10/6/04		-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369	-0.369		-0.369	-0.369	-0.369	
Salton Sea USGS2	5/11/05		-0.244	-0.244	-0.244	-0.244	-0.244	-0.244	-0.244	-0.244	-0.244	-0.244		-0.244	-0.244	-0.244	
Salton Sea USGS2	10/26/05		-0.063	-0.063	-0.063	-0.063	-0.063	-0.063	-0.063	-0.063	-0.063	-0.063		-0.063	-0.063	-0.063	
Salton Sea USGS2	5/3/06		-0.308	-0.308	-0.308	-0.308	-0.308	-0.308	-0.308	-0.308	-0.308	-0.308		-0.308	-0.308	-0.308	
Salton Sea USGS2	5/3/06		-0.255	-0.255	-0.255	-0.255	-0.255	-0.255	-0.255	-0.255	-0.255	-0.255		-0.255	-0.255	-0.255	
Salton Sea USGS2	5/9/07																
Salton Sea USGS2	10/24/07		-0.272	-0.539	-0.371	-0.239	-0.339	-0.27	-0.437	-0.267	-0.335	-0.362		-0.214	-0.262	-0.404	-0.218
Salton Sea USGS2	4/22/08		-0.273	-0.542	-0.373	-0.241	-0.34	-0.271	-0.44	-0.268	-0.337	-0.364		-0.215	-0.263	-0.406	-0.219
Salton Sea USGS2	4/29/09		-0.606	-0.606	-0.606	-0.606	-0.606	-0.606	-0.606	-0.606	-0.606	-0.606		-0.606	-0.606	-0.606	
Salton Sea USGS2	10/21/09		-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804	-0.804		-0.804	-0.804	-0.804	
Salton Sea USGS2	5/4/10		-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275	-0.275		-0.275	-0.275	-0.275	
Salton Sea USGS2	5/11/11		-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66		-0.66	-0.66	-0.66	
Salton Sea USGS7	5/14/02		-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623	-0.623		-0.623	-0.623	-0.623	
Salton Sea USGS7	9/30/02		-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213		-0.213	-0.213	-0.213	
Salton Sea USGS7	4/10/03		-0.147	-0.147	-0.147	-0.147	-0.147	-0.147	-0.147	-0.147	-0.147	-0.147		-0.147	-0.147	-0.147	
Salton Sea USGS7	11/4/03		-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1		-0.1	-0.1	-0.1	
Salton Sea USGS7	5/5/04		-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213	-0.213		1.23	-0.213	-0.213	
Salton Sea USGS7	10/6/04		-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355	-0.355		-0.355	-0.355	-0.355	
Salton Sea USGS7	5/11/05		-0.229	-0.229	-0.229	-0.229	-0.229	-0.229	-0.229	-0.229	-0.229	-0.229		-0.229	-0.229	-0.229	
Salton Sea USGS7	10/26/05		-0.065	-0.065	-0.065	-0.065	-0.065	-0.065	-0.065	-0.065	-0.065	-0.065		-0.065	-0.065	-0.065	
Salton Sea USGS7	5/3/06		-0.291	-0.291	-0.291	-0.291	-0.291	-0.291	-0.291	-0.291	-0.291	-0.291		-0.291	-0.291	-0.291	
Salton Sea USGS7	5/9/07																
Salton Sea USGS7	10/24/07		-0.285	-0.566	-0.389	-0.251	-0.355	-0.283	-0.459	-0.28	-0.351	-0.379		-0.225	-0.275	-0.423	-0.228
Salton Sea USGS7	4/22/08		-0.294	-0.585	-0.402	-0.259	-0.367	-0.293	-0.474	-0.289	-0.363	-0.392		-0.232	-0.284	-0.438	-0.236
Salton Sea USGS7	4/29/09		-0.592	-0.592	-0.592	-0.592	-0.592	-0.592	-0.592	-0.592	-0.592	-0.592		-0.592	-0.592	-0.592	
Salton Sea USGS7	10/21/09		-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736	-0.736		-0.736	-0.736	-0.736	
Salton Sea USGS7	5/4/10		-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259	-0.259		-0.259	-0.259	-0.259	
Salton Sea USGS7	5/11/11		-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954	-0.954		-0.954	-0.954	-0.954	
Salton Sea USGS9	5/14/02		-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771	-0.771		-0.771	-0.771	-0.771	
Salton Sea USGS9	9/30/02																
Salton Sea USGS9	10/30/02		-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398	-0.398		-0.398	-0.398	-0.398	
Salton Sea USGS9	4/10/03		-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13		-0.13	-0.13	-0.13	
Salton Sea USGS9	11/5/03		-0.164	-0.164	-0.164	DNO, 0.268	-0.164	-0.164	-0.164	-0.164	-0.164	-0.164		-0.164	-0.164	-0.164	
Salton Sea USGS9	5/5/04		-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307	-0.307		-0.307	-0.307	-0.307	
Salton Sea USGS9	10/6/04		-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601	-0.601		-0.601	-0.601	-0.601	
Salton Sea USGS9	5/11/05		DNO, 0.473	-0.361	-0.361	-0.361	-0.361	-0.361	-0.361	-0.361	-0.361	-0.361		-0.361	-0.361	-0.361	
Salton Sea USGS9	10/26/05		-0.184	-0.184	-0.184	DNO, 0.238	-0.184	-0.184	-0.184	-0.184	-0.184	-0.184		-0.184	-0.184	-0.184	
Salton Sea USGS9	5/3/06		-0.393	-0.393	-0.393	-0.393	-0.393	-0.393	-0.393	-0.393	-0.393	-0.393		-0.393	-0.393	-0.393	
Salton Sea USGS9	5/9/07																
Salton Sea USGS9	10/24/07		-0.312	-0.62	-0.426	-0.275	-0.389	-0.31	-0.502	-0.307	-0.385	-0.415		-0.246	-0.301	-0.464	-0.25
Salton Sea USGS9	4/22/08		-0.284	-0.564	-0.388	-0.25	-0.354	-0.282	-0.458	-0.279	-0.351	-0.378		-0.224	-0.274	-0.422	-0.228
Salton Sea USGS9	4/29/09		-1.05	-1.05	-1.05	-1.05	-1.05	-1.05	-1.05	-1.05	-1.05	-1.05		-1.05	-1.05	-1.05	
Salton Sea USGS9	10/21/09		-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711	-0.711		-0.711	-0.711	-0.711	
Salton Sea USGS9	5/4/10		-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258	-0.258		-0.258	-0.258	-0.258	
Salton Sea USGS9	5/11/11		-0.865	-0.865	-0.865	-0.865	-0.865	-0.865	-0.865	-0.865	-0.865	-0.865		-0.865	-0.865	-0.865	

StationName	Sample Date	PCB 206; Total; ng/g dw	PCB 209; Total; ng/g dw	PCB AROCLOR 1248; Total; ng/g dw	PCB AROCLOR 1254; Total; ng/g dw	PCB AROCLOR 1260; Total; ng/g dw	PCB; Total; ng/g dw
Salton Sea USGS2	5/14/02	-0.614	-0.614	-61.4	-24.5	-24.5	1.470
Salton Sea USGS2	10/3/02	-0.129	-0.129	-12.9	-5.16	-5.16	
Salton Sea USGS2	10/3/02	-0.129	-0.129	-12.9	-5.15	-5.15	
Salton Sea USGS2	4/10/03	-0.089	-0.089	-22.2	-8.89	-8.89	
Salton Sea USGS2	11/4/03	-0.106	-0.106	-26.5	-10.6	-10.6	0.800
Salton Sea USGS2	5/5/04	-0.216	-0.216	-21.6	DNQ, 11	DNQ, 9	16.150
Salton Sea USGS2	10/6/04	-0.369	-0.369	-37	-15	-15	2.032
Salton Sea USGS2	5/11/05	-0.244	-0.244	9	-24.4	-9.75	
Salton Sea USGS2	10/26/05	-0.063	-0.063	DNQ, 7	DNQ, 4	-2.52	2.163
Salton Sea USGS2	5/3/06	-0.308	-0.308	-30.8	-12.3	-12.3	5.251
Salton Sea USGS2	5/3/06	-0.255	-0.255	-25.5	DNQ, 15	-10.2	7.782
Salton Sea USGS2	5/9/07						
Salton Sea USGS2	10/24/07	-0.377	-0.166	-31.6	-12.6	-12.6	
Salton Sea USGS2	4/22/08	-0.379	-0.167	-31.7	-12.7	-12.7	
Salton Sea USGS2	4/29/09	-0.606	-0.606	DNQ, 24	DNQ, 17	-6.06	
Salton Sea USGS2	10/21/09	-0.804	-0.804	-20.1	-8.04	-8.04	
Salton Sea USGS2	5/4/10	-0.275	-0.275	-6.88	-2.75	-2.75	
Salton Sea USGS2	5/11/11	-0.66	-0.66	-16.5	-6.6	-6.6	
Salton Sea USGS7	5/14/02	-0.623	-0.623	-62.3	-24.9	-24.9	1.270
Salton Sea USGS7	9/30/02	-0.213	-0.213	-21.3	-8.53	-8.53	
Salton Sea USGS7	4/10/03	-0.147	-0.147	-36.7	-14.7	-14.7	
Salton Sea USGS7	11/4/03	-0.1	-0.1	-24.9	-9.97	-9.97	0.749
Salton Sea USGS7	5/5/04	-0.213	-0.213	-21.3	-8.53	DNQ, 9	
Salton Sea USGS7	10/6/04	-0.355	-0.355	-35	-14	-14	1.749
Salton Sea USGS7	5/11/05	-0.229	-0.229	10	-22.9	-9.16	1.060
Salton Sea USGS7	10/26/05	-0.065	-0.065	-6.5	DNQ, 3	-2.6	1.263
Salton Sea USGS7	5/3/06	-0.291	-0.291	-29.1	DNQ, 14	-11.7	10.392
Salton Sea USGS7	5/9/07						
Salton Sea USGS7	10/24/07	-0.395	-0.174	-33.1	-13.2	-13.2	
Salton Sea USGS7	4/22/08	-0.409	-0.18	-34.2	DNQ, 14	-13.7	
Salton Sea USGS7	4/29/09	-0.592	-0.592	-14.8	DNQ, 12	-5.92	
Salton Sea USGS7	10/21/09	-0.736	-0.736	-18.4	-7.36	-7.36	
Salton Sea USGS7	5/4/10	-0.259	-0.259	-6.47	-2.59	-2.59	
Salton Sea USGS7	5/11/11	-0.954	-0.954	-23.8	-9.54	-9.54	
Salton Sea USGS9	5/14/02	-0.771	-0.771	-77.1	-30.8	-30.8	
Salton Sea USGS9	9/30/02						
Salton Sea USGS9	10/30/02	-0.398	-0.398	-39.8	-15.9	-15.9	
Salton Sea USGS9	4/10/03	-0.13	-0.13	-32.4	-13	-13	
Salton Sea USGS9	11/5/03	-0.164	-0.164	-41.1	-16.4	-16.4	9.319
Salton Sea USGS9	5/5/04	-0.307	-0.307	-30.7	-12.3	-12.3	79.252
Salton Sea USGS9	10/6/04	-0.601	-0.601	-60	-24	-24	
Salton Sea USGS9	5/11/05	-0.361	-0.361	28	-36.1	-14.4	3.519
Salton Sea USGS9	10/26/05	-0.184	-0.184	DNQ, 21	DNQ, 11	-7.34	9.740
Salton Sea USGS9	5/3/06	-0.393	-0.393	-39.3	DNQ, 16	-15.7	8.836
Salton Sea USGS9	5/9/07						
Salton Sea USGS9	10/24/07	-0.433	-0.19	-36.3	-14.5	-14.5	
Salton Sea USGS9	4/22/08	-0.395	-0.173	-33	DNQ, 31	-13.2	11.980
Salton Sea USGS9	4/29/09	-1.05	-1.05	-26.2	DNQ, 23	-10.5	
Salton Sea USGS9	10/21/09	-0.711	-0.711	-17.8	-7.11	-7.11	
Salton Sea USGS9	5/4/10	-0.258	-0.258	-6.44	-2.58	-2.58	
Salton Sea USGS9	5/11/11	-0.865	-0.865	-21.6	DNQ, 11	-8.65	

Appendix N1. Concentrations of polybrominated diphenylethers (PBDEs) from sediments (ng/g dw) of the Alamo Rivers. Yellow values represent detected values. DNQ values are below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon; Total; % dw
Alamo River at International Boundary	10/11/11	-0.136
Alamo River Outlet	10/11/11	-0.198
Alamo River Outlet	10/11/11	-0.161
Alamo River Outlet	10/15/12	-0.25
Alamo River at International Boundary	10/11/11	PBDE 154; Total; ng/g dw
Alamo River Outlet	10/11/11	PBDE 179; Total; ng/g dw
Alamo River Outlet	10/11/11	PBDE 183; Total; ng/g dw
Alamo River Outlet	10/15/12	PBDE 184; Total; ng/g dw
Alamo River at International Boundary	10/11/11	PBDE 188; Total; ng/g dw
Alamo River Outlet	10/11/11	PBDE 190; Total; ng/g dw
Alamo River at International Boundary	10/11/11	PBDE 200/203; Total; ng/g dw
Alamo River Outlet	10/11/11	PBDE 201; Total; ng/g dw
Alamo River Outlet	10/15/12	PBDE 202; Total; ng/g dw
Alamo River at International Boundary	10/11/11	PBDE 203; Total; ng/g dw
Alamo River Outlet	10/11/11	PBDE 206; Total; ng/g dw
Alamo River Outlet	10/15/12	PBDE 207; Total; ng/g dw
Alamo River at International Boundary	10/11/11	PBDE 208; Total; ng/g dw
Alamo River Outlet	10/11/11	PBDE 209; Total; ng/g dw
Alamo River Outlet	10/15/12	PBDE 153; Total; ng/g dw

Appendix N2. Concentrations of polybrominated diphenylethers (PBDEs) from sediments (ng/g dw) of the New River. Yellow values represent detected values. DNQ values are below levels of quantification. Negative values are below the limits of detection. Blank spaces were not analyzed.

StationName	Sample Date	Total Organic Carbon; Total; % dw	PBDE 017/25; Total; ng/g dw	PBDE 017; Total; ng/g dw	PBDE 025; Total; ng/g dw	PBDE 028/33; Total; ng/g dw	PBDE 028; Total; ng/g dw	PBDE 030; Total; ng/g dw	PBDE 033; Total; ng/g dw	PBDE 047; Total; ng/g dw	PBDE 049; Total; ng/g dw	PBDE 066; Total; ng/g dw	PBDE 085; Total; ng/g dw	PBDE 099; Total; ng/g dw	PBDE 100; Total; ng/g dw	PBDE 138; Total; ng/g dw	PBDE 153; Total; ng/g dw
New River at Boundary	5/10/11																
New River at Boundary	10/11/11	DNO, 0.441	-0.188			0.668	-0.154	-0.123	30.6	2.46	-0.217	3.13	39.6	9.03	DNO, 0.635	4.83	4.16
<u>New River Outlet</u>	10/11/11	DNO, 0.215			-0.215		-0.176			1.16	DNO, 0.51	-0.248	-0.379	0.767	DNO, 0.241	-0.196	-0.18
New River Outlet	10/16/12	-0.25			-0.25			-0.25		-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25
StationName	Sample Date	PBDE 154; Total; ng/g dw	PBDE 179; Total; ng/g dw	PBDE 183; Total; ng/g dw	PBDE 184; Total; ng/g dw	PBDE 188; Total; ng/g dw	PBDE 190; Total; ng/g dw	PBDE 200/203; Total; ng/g dw	PBDE 200; Total; ng/g dw	PBDE 201; Total; ng/g dw	PBDE 202; Total; ng/g dw	PBDE 203; Total; ng/g dw	PBDE 206; Total; ng/g dw	PBDE 207; Total; ng/g dw	PBDE 208; Total; ng/g dw	PBDE 209; Total; ng/g dw	
New River at Boundary	5/10/11																
New River at Boundary	10/11/11	-0.269	1.81	-0.143	-0.194	-0.332		-0.2	DNO, 0.275	-0.315	-0.375	DNO, 3.72	DNO, 1.84	DNO, 1.44	123		
<u>New River Outlet</u>	10/11/11	-0.22	-0.306	-0.502	-0.164	-0.222	-0.379	-0.429		-0.2	-0.359		-0.879	-1.56	-1.23	-3.88	
New River Outlet	10/16/12	-0.25				-0.25									-1		