

LIST OF TABLES

Table 1-1.	Summary of the Los Angeles Harbor Monitoring Programs, including the 1993 NPDES requirements, the Interim program, the Post-Pier 400 monitoring program, and the new 2005 NPDES requirements.....	12
Table 2-1.	Constituents measured in the effluent monitoring program from January 2006 to December 2007.....	22
Table 2-2.	2005 most-sensitive-species screening, acute toxicity.....	23
Table 2-3.	2007 most-sensitive-species screening, acute toxicity.....	23
Table 2-4.	2005 most-sensitive-species screening, chronic toxicity.....	24
Table 2-5.	2007 most-sensitive-species screening, chronic toxicity.....	24
Table 2-6.	The NPDES effluent limits and annual averages of major effluent constituents in 2006 and 2007.	25
Table 2-7a.	2006 monthly averages for major wastewater constituents.	26
Table 2-7b.	2007 monthly averages for major wastewater constituents.	26
Table 2-8.	Annual average of major wastewater constituents from 1997 to 2007.....	27
Table 2-9a.	The NPDES effluent limits and annual averages of priority pollutant inorganics in 2006.....	28
Table 2-9b.	The NPDES effluent limits and annual averages of priority pollutant inorganics in 2007.....	29
Table 2-10.	Priority pollutant metal annual average concentrations in influent and effluent from 1997 to 2007.	30
Table 2-11a.	The NPDES effluent limits and annual averages of priority pollutant organics in 2006.....	31
Table 2-11b.	The NPDES effluent limits and annual averages of priority pollutant organics in 2007.....	32
Table 2-12.	2006 TIWRP effluent acute toxicity testing results.	33
Table 2-13.	2007 TIWRP effluent acute toxicity testing results.	34
Table 2-14.	2006 TIWRP effluent chronic toxicity testing results.	35

Table 2-15.	2006 TIWRP effluent chronic toxicity testing results.	36
Table 3-1.	Summary of the Los Angeles Harbor and Cabrillo Beach Microbiological Monitoring Program for 2006-2007.....	42
Table 3-2.	Number of occurrences and percent compliance with all materials of sewage origin at Cabrillo Beach shoreline stations in 2006-2007.	50
Table 3-3.	Number of dry-weather* non-compliance days and percent compliance with NPDES bathing water and shellfish harvesting coliform limits at Cabrillo Beach shoreline stations in 2006.....	50
Table 3-4.	Number of dry-weather* non-compliance days and percent compliance with NPDES bathing water and shellfish harvesting coliform limits at Cabrillo Beach shoreline stations in 2007.....	50
Table 4-1.	A partial list of “NPDES” receiving water limitations for the Terminal Island Water Reclamation Plant.	56
Table 4-2.	Minimum, maximum, with mean values for temperature (°C), Salinity (ppt), CDOM, chlorophyll (ug/L), dissolved oxygen (mg/L) and pH measured during each water quality survey, 2006-2007 compared to the outfall station HW33.....	60
Table 4-3.	Quarterly water quality survey discrete ammonia (mg/L) results for 2006 – 2007.....	68
Table 4-4.	Summary of acute toxicity.....	69
Table 4-5.	Summary of chronic toxicity.....	70
Table 4.6.	Summary of discrete surface samples for fecal/total coliform bacteria (CFU/100ml), ammonia (mg/l), CDOM, and salinity (ppt).	72
Table 5-1.	Grain size distribution of sediments at Los Angeles Harbor sites surveyed in the summer 2006 and 2007.....	85
Table 5-2.	TOC (mg/kg dry-wt) in Los Angeles Harbor sediment in the summers of 2006 and 2007.....	86
Table 5-3.	Cyanide, dissolved sulfide, TOX, and metals (mg/kg dry-wt) detected in sediments at stations HM2-HM4 and HM6-HM13 of Los Angeles Harbor in the summers of 2006 and 2007. Concentrations were normalized against the fine grain fraction (except HM13 in 2007).	87

Table 5-4.	BNA (mg/kg dry wt) and Pesticides/PCBs ($\mu\text{g}/\text{kg}$ dry wt) detected in sediments at station HM2-HM4 and HM6-HM13 of Los Angeles Harbor in the summers of 2006 and 2007. Concentrations were normalized against the fine grain fraction (except HM13 in 2007).....	89
Table 5-5.	Metals (mg/kg dry wt) in sediments of Los Angeles Harbor in the summers of 2006 and 2007. Concentrations were normalized against fine the grain fraction (except HM13 in 2007).....	91
Table 5-6.	BNA (mg/kg dry wt) and Pesticides ($\mu\text{g}/\text{kg}$ dry wt) detected in sediments of Los Angeles Harbor, in the summers of 2006 and 2007. Concentrations were normalized against the fine grain fraction (except HM13 in 2007).	91
Table 5-7.	Concentrations of metals (mg/kg dry wt) and organic pollutants ($\mu\text{g}/\text{kg}$ dry wt) in Los Angeles Harbor during the summers of 2006 and 2007 with a comparison to concentrations in Southern California Bight (SCB) ports in 2003.....	92
Table 5-8.	Comparison of contaminant levels at TITP outfall, stations in Santa Monica, and a reference site at Dana Point. Concentrations were normalized against the fine grain fraction.....	93
Table 5-9.	Temporal pattern of total DDT ($\mu\text{g}/\text{kg}$ dry wt) and metals concentrations (mg/kg dry wt) at HM13 (outside breakwater of the Harbor) and HM3 (outfall). Concentrations were normalized against the fine grain fraction (except for HM13 data for 2007).....	93
Table 5-10.	Concentrations of metals (mg/kg dry wt) and organic pollutants (mg/kg dry wt) in sediments of Los Angeles Harbor, summer 2006 and 2007, with comparison to Effective level* (ER-L and ER-M). Concentrations were normalized against fine grain fraction.....	95
Table 6-1.	Los Angeles Harbor 2006-2007 biennium community parameters for combined fish and megainvertebrates. Community parameters: total number of species (S), total number of individuals (N), Margalef's species richness (d), Pielou's evenness (J'), Shannon-Wiener index of diversity (H'), Simpson's dominance ($1-\lambda'$), Benthic Response Index (BRI), and phylodiversity indices [taxonomic diversity (Δ), taxonomic distinctness (Δ^*), average taxonomic distinctness (Δ^+), total taxonomic distinctness ($S\Delta^+$), variation in taxonomic distinctness (Λ^+), average phylogenetic diversity (Φ^+), and total phylogenetic diversity ($S\Phi^+$)].....	105
Table 7-1.	Raw abundance data matrix for fish species during the 2006-2007 biennium.....	125
Table 7-2.	Raw abundance data matrix for megainvertebrate species during the 2006 sampling period.....	129

Table 7-3.	Raw abundance data matrix for megainvertebrate species during the 2007 sampling period.....	130
Table 7-4.	Los Angeles Harbor 2006-2007 biennium community parameters for combined fish and megainvertebrates. Community parameters: total number of species (S), total number of individuals (N), Margalef's species richness (d), Pielou's evenness (J'), Shannon-Wiener index of diversity (H'), Simpson's dominance (1-λ'), Benthic Response Index (BRI), and phylodiversity indices [taxonomic diversity (Δ), taxonomic distinctness (Δ*), average taxonomic distinctness (Δ+), total taxonomic distinctness (SΔ+), variation in taxonomic distinctness (Λ+), average phylogenetic diversity (Φ+), and total phylogenetic diversity (SΦ+)].	132
Table 8-1.	Location and number of trawl and sportfish samples collected during 2006 and 2007.....	145
Table 8-2.	Total DDT, DDT Derivatives, Total PCB, PCB Aroclors, and % Lipid found in muscle tissues of white croaker at HT7 in Los Angeles Harbor during 2006 to 2007 period. Bold numbers indicate DDT and PCB levels are greater than the California OEHHA fish advisory trigger level of 0.100 mg/kg for PCB Aroclors and the USEPA screening value of 0.560 mg/kg for DDT.....	147
Table 8-3.	Total DDT, DDT Derivatives, Total PCB, PCB Aroclors, and % Lipid found in muscle tissues of white surfperch and queenfish at HT12 in Los Angeles Harbor during 2006 to 2007 period. Bold numbers indicate DDT and PCB levels are greater than the U.S. EPA/ OEHHA Screening Value of 0.560 mg/kg for DDT and the California OEHHA Fish Consumption Advisories trigger level of 0.100 mg/kg for PCB Aroclors....	148
Table 8-4.	Total DDT, DDT Derivatives, Total PCB, PCB Aroclors, and % Lipid found in liver tissues of white croaker at HT7 in Los Angeles Harbor during 2006 to 2007 period. Bold numbers indicate DDT and PCB levels are greater than the U.S. EPA/ OEHHA Screening Value of 0.560 mg/kg for DDT and the California OEHHA Fish Consumption Advisories trigger level of 0.100 mg/kg for PCB Aroclors.	149
Table 8-5.	Total DDT, DDT Derivatives, Total PCB, PCB Aroclors, and % Lipid found in muscle tissues of white croaker and in sediment samples near the TIWRP outfall, stations HT7 and HM3, respectively, in Los Angeles Harbor during 2006 to 2007 period. Bold numbers indicate DDT and PCB levels are greater than the U.S. EPA/ OEHHA Screening Value of 0.560 mg/kg for DDT and the California OEHHA Fish Consumption Advisories trigger level of 0.100 mg/kg for PCB Aroclors.	150