

APPENDIX I

Risk Estimates

This appendix contains the estimates of risk for aquatic and terrestrial receptors based on the equations presented in Section 3.1.4.3 (Food Chain Uptake Model) and Section 4.1 (Risk Estimation). An example calculation for each of the exposures and receptor groups is presented below followed by the tables presenting risks:

- Table I-1: Sediment/Soil Risk Estimates for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
- Table I-2: Food Chain Uptake Risk Estimates for Birds and Mammals
- Table I-3: Sediment/Soil Risk Estimates for Aquatic Invertebrates
- Table I-4: Surface Water Risk Estimates for Aquatic Plants, Invertebrates, and Fish

I.1 Risk Equations

The equations used to calculate exposure and risk were previously presented, but are repeated here for easy reference. The basic risk estimates are calculated as follows:

Hazard quotients were developed for two types of comparisons using the indicated equation:

Method 1 - Direct comparisons of measured concentrations to media-based effect concentrations (RTVs) of COPECs in abiotic media. These comparisons were conducted for terrestrial plants and invertebrates, aquatic plants and benthic macroinvertebrates, and fish.

$$HQ = \left(\frac{\text{Exposure concentration (mg/kg or mg/L)}}{\text{RTV (mg/kg or mg/L)}} \right) \quad [\text{Equation 1}]$$

Method 2 - Comparisons of estimated exposure dosages via the food chain uptake model to effects dosages (RTVs). These comparisons were conducted for birds and mammals.

$$HQ = \left(\frac{\text{Exposure dosage (mg/kgbw/d)}}{\text{scaled RTVw (mg/kgbw/d)}} \right) \quad [\text{Equation 2}]$$

The exposure dosage portion of the risk estimate is based on the food chain uptake model for estimating exposure of birds and mammals to COPECs in soil-sediment, surface water, and food items. The end product or exposure estimate for external exposures for birds and mammals is a dosage (amount of chemical per kilogram receptor body weight per day [mg/kg/d]). This model is as follows:

$$E_t = E_o + E_d + E_i \quad [\text{Equation 3}]$$

Where:

E_t = the total chemical exposure experienced by wildlife

E_o , E_d , and E_i = oral, dermal, and inhalation exposure, respectively

For the purposes of this assessment, both dermal and inhalation exposure are assumed to be negligible. As a consequence, most exposure must be attributed to the oral exposure pathway. By replacing E_o with a generalized exposure model modified from Suter et al. (2000), the previous equation (Equation 3) was rewritten as follows:

$$E_o = \left[Soil_j \times P_s \times FIR \right] + \left[\sum_{i=1}^N B_{ij} \times P_i \times FIR \right] + \left[Water_j \times WIR \right] \quad [Equation 4]$$

Where:

- E_o = total oral exposure (mg/kg/d)
 $Soil_j$ = concentration of chemical (j) in soil (mg/kg)
 P_s = soil ingestion rate as proportion of diet
 FIR = species-specific food ingestion rate (kg food/kg body weight/d)
 B_{ij} = concentration of chemical (j) in biota type (i) (mg/kg)
 P_i = proportion of biota type (i) in diet
 $Water_j$ = concentration of chemical (j) in water (mg/L)
 WIR = species-specific water ingestion rate (L/kg body weight/d)

The species scaled RTV (or RTV_w) portion of the risk estimate was developed using allometric body weight scaling methods presented in Sample, et al. (1996) and Sample and Arenal (1999). The scaling factors applied were of 1.2 and 0.94 for birds and mammals, respectively (Sample and Arenal, 1999):

$$RTV_w = RTV_t \left(\frac{BW_t}{BW_w} \right)^{1-b} \quad [Equation 5]$$

Where:

- RTV_t = the RTV for a test species (Tables 3-27 and 3-28)
 BW_t and BW_w = the body weights (in kg) for the test and wildlife species, respectively, and
 b = the class-specific allometric scaling factor.

I.2 Example Calculations – Direct Comparisons

Risk estimates for terrestrial and aquatic plants and terrestrial invertebrates exposed to sediment/soil (Table I-1); aquatic invertebrates exposed to sediment/soil (Table I-3); and aquatic plants, invertebrates, and fish exposed to surface water (Table I-4) were calculated using Method 1 – Direct Comparisons as described by Equation 1 above.

Example 1 - Terrestrial and Aquatic Plants – Sediment/Soil

Terrestrial/aquatic plants exposure to benzo(a)pyrene in sediment/soil in the Muted Tidal area. Calculations completed using Hazard Quotient Method 1 above.

Exposure concentration – maximum value = 0.315 mg/kg (Table 3-2)

RTV - LOEC = 0.02 mg/kg (Table 3-25)

$$HQ = \frac{0.315 \text{ mg/kg}}{0.02 \text{ mg/kg}} = 16 \text{ (Table 4-1 and Table I-1)}$$

Example 2 - Terrestrial Invertebrates – Sediment/Soil

Terrestrial invertebrate exposure to lead in sediment/soil in the Future Full Tidal area. Calculations completed using Hazard Quotient Method 1 above.

Exposure concentration – maximum value = 17,000 mg/kg (Table 3-2)

RTV - LOEC = 500 mg/kg (Table 3-26)

$$HQ = \frac{17,000 \text{ mg/kg}}{500 \text{ mg/kg}} = 34 \text{ (Table 4-1 and Table I-1)}$$

Example 3 - Aquatic Invertebrates – Sediment/Soil

Aquatic invertebrate exposure to 4,4'-DDE in sediment/soil in the Garden Grove area. Calculations completed using Hazard Quotient Method 1 above.

Exposure concentration – maximum value = 0.098 mg/kg (Table 3-2)

RTV – ER-L = 0.0022 mg/kg (Table 3-29)

$$HQ = \frac{0.098 \text{ mg/kg}}{0.0022 \text{ mg/kg}} = 45 \text{ (Table 4-3 and Table I-3)}$$

Example 4 - Aquatic Plants – Surface Water

Aquatic plant exposure to copper in surface water in the Seasonal Ponds Area. Calculations completed using Hazard Quotient Method 1 above.

Exposure concentration – maximum value = 1.5 µg/L (Table 3-3)

RTV – plant LCV = 1 µg/L (Table 3-30)

$$HQ = \frac{1.5 \mu\text{g/L}}{1 \mu\text{g/L}} = 1.5 \text{ (Table 4-4 and Table I-4)}$$

Example 5 - Aquatic Invertebrates – Surface Water

Aquatic invertebrate exposure to BHC-delta in surface water in the Future Full Tidal area. Calculations completed using Hazard Quotient Method 1 above.

Exposure concentration – maximum value = 0.082 µg/L (Table 3-3)

RTV – *Mysidopsis* NOEC = 0.035 µg/L (Table 3-30)

$$HQ = \frac{0.082 \mu\text{g}/\text{L}}{0.035 \mu\text{g}/\text{L}} = 2.3 \text{ (Table 4-4 and Table I-4)}$$

Example 6 - Fish – Surface Water

Fish exposure to dieldrin in surface water in the Garden Grove area. Calculations completed using Hazard Quotient Method 1 above.

Exposure concentration – maximum value = 0.098 µg/L (Table 3-3)

RTV – chronic CA water quality standard = 0.0019 µg/L (Table 3-30)

$$HQ = \frac{0.098 \mu\text{g}/\text{L}}{0.0019 \mu\text{g}/\text{L}} = 52 \text{ (Table 4-4 and Table I-4)}$$

I.3 Example Calculations – Food Chain Uptake

Risk estimates for birds and mammals exposed to sediment/soil, surface water, and food items (Table I-2) were calculated using Method 2 – Food Chain Uptake Model as described by Equations 2, 4, and 5 above.

Example 7 - Black-Necked Stilt – Food Chain Uptake

Black-necked stilt exposure to chromium in the Future Full Tidal area. Exposure calculations completed using Equation 4 above. Risk calculations completed using Hazard Quotient Method 2 (Equation 2) above.

a) Exposure estimation (Equation 4)

- Soil concentration of lead ($Soil_{CR}$) = 89.481mg/kg (Table 3-2, 95th UCL)
- Proportion of diet consisting of soil (P_s) = 0.17 (Table 3-11)
- Species-specific ingestion rate (FIR) = 0.08 kg/kgbw/d (Table 3-11)
- Concentration of chromium in aquatic invertebrates - corixids ($B_{corixids}$) = 4.8 mg/kg (Table 3-8, maximum value selected because 95th UCL was greater than the maximum value)
- Concentration of chromium in aquatic invertebrates - shrimp (B_{shrimp}) = 3.8477mg/kg (not measured in tissue so estimated by multiplying the 90th percentile soil-to-biota bioaccumulation factor of 0.043 [Table 3-12] by sediment/soil concentration of 89.481 mg/kg [Table 3-2])
- Proportion of diet consisting of aquatic invertebrates - corixids ($P_{corixids}$) = 0.8 (Table 3-11)
- Proportion of diet consisting of aquatic invertebrates - shrimp (P_{shrimp}) = 0.2 (Table 3-11)

- Water concentration of chromium ($Water_{CR}$) = 13 µg/L = 0.0013 mg/L (Table 3-3, maximum value)
- Species-specific water ingestion rate (WIR) = 0.099 L/kgbw/d

Total Exposure = Eo

$$Eo = [Soil_j \times P_s \times FIR] + \left[\sum_{i=1}^N B_{ij} \times P_i \times FIR \right] + [Water_j \times WIR] \quad [Equation\ 4]$$

$$Eo = [89.481 \bullet 0.17 \bullet 0.08] + \begin{cases} (corixids : 4.8 \bullet 0.8 \bullet 0.08) + \\ (shrimp : 3.8477 \bullet 0.2 \bullet 0.08) \end{cases} + [0.013 \bullet 0.099]$$

$$Eo = [1.217] + [(0.3072) + (0.061)] + [0.0013]$$

$$Eo = 1.5865\ mg/kgbw/d \ (\text{Table 4-2, Total Exposure column: value rounded to 1.6 for presentation})$$

b) Conversion of test RTV to wildlife RTV (Equation 5)

- Chromium bird NOAEL (RTV_t) = 1.0 mg/kgbw/d (Table 3-27)
- Test species body weight (BW_t) = 1.25 kg (Table 3-27)
- Representative species - stilt body weight (BW_w) = 0.203 kg (Table 3-11)
- Bird scaling factor (b) = 1.2 (text section 4.1)

Scaled RTV for stilts = RTV_w

$$RTV_w = RTV_t \left(\frac{BW_t}{BW_w} \right)^{1-b} \quad [Equation\ 5]$$

$$RTV_w = 1.0 \left(\frac{1.25}{0.203} \right)^{1-1.2}$$

$$RTV_w = 1.0 (6.1576)^{-0.2}$$

$$RTV_w = 1.0 (0.6952)$$

$$RTV_w = 0.6952\ mg/kgbw/d \ (\text{this value is not presented in the tables, but is embedded in the calculations for risk (part "c" below)})$$

c) Risk estimation (Method 2, Equation 2)

- Exposure dosage to chromium for the stilt in Future Full Tidal area = 1.5865 mg/kgbw/d (part "a" above and in Table 4-2)

- Scaled RTVw for stilt = 0.6952 mg/kgbw/d (part "b" above)

HQ = hazard quotient

$$HQ = \left(\frac{\text{Exposure dosage (mg / kgbw / d)}}{\text{scaled RTVw (mg / kgbw / d)}} \right) \quad [\text{Equation 2}]$$

$$HQ = \left(\frac{1.5865}{0.6952} \right)$$

$HQ = 2.3$ (Table 4-2, there is no LOAEL available so the risk is categorized as "U" for uncertain as described in the introductory text to Section 4.0)

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Bolsa Bay	Arsenic	11	.	5.5	na	na
Bolsa Bay	Barium	1200	.	2.4	na	na
Bolsa Bay	Beryllium	1.2	.	0.12	na	na
Bolsa Bay	Cadmium	1.3	.	0.325	na	na
Bolsa Bay	Chromium	67	.	1.34	na	na
Bolsa Bay	Cobalt	15	.	0.75	na	na
Bolsa Bay	Copper	83	.	3.609	na	na
Bolsa Bay	Lead	110	.	5.5	na	na
Bolsa Bay	Mercury	0.14	.	0.467	na	na
Bolsa Bay	Nickel	140	7	2.8	na	na
Bolsa Bay	Selenium	3.2	6.4	2.133	na	na
Bolsa Bay	Silver	0.7	.	0.35	na	na
Bolsa Bay	Sulfate	3200	.	.	na	na
Bolsa Bay	Sulfide	1100	.	.	na	na
Bolsa Bay	Thallium	1	.	1	na	na
Bolsa Bay	Vanadium	110	.	2.2	na	na
Bolsa Bay	Zinc	230	.	1.756	na	na
Bolsa Bay	Ammonia as Nitrogen	75	.	.	na	na
Bolsa Bay	4,4'-DDD	0.035	.	.	na	na
Bolsa Bay	4,4'-DDE	0.055	.	.	na	na
Bolsa Bay	4,4'-DDT	0.0059	.	0.000472	na	na
Bolsa Bay	Anthracene	0.024	.	0.01	na	na
Bolsa Bay	Benzo(a)anthracene	0.051	.	0.176	na	na
Bolsa Bay	Benzo(a)pyrene	0.059	.	2.95	na	na
Bolsa Bay	Benzo(b)fluoranthene	0.072	.	.	na	na
Bolsa Bay	Benzo(e)pyrene	0.053	.	.	na	na
Bolsa Bay	Benzo(g,h,i)perylene	0.069	.	2.8279	na	na
Bolsa Bay	Benzo(k)fluoranthene	0.07	.	.	na	na
Bolsa Bay	BHC-alpha	0.008	.	.	na	na
Bolsa Bay	BHC-beta	0.025	.	0	na	na
Bolsa Bay	BHC-gamma	0.001	.	.	na	na
Bolsa Bay	Bis(2-ethylhexyl)phthalate	1.4	.	.	na	na
Bolsa Bay	Butylbenzylphthalate	0.17	.	.	na	na
Bolsa Bay	Chlordane (technical)	0.26	.	.	na	na
Bolsa Bay	Chlordane-alpha	0.054	.	.	na	na
Bolsa Bay	Chlordane-gamma	0.034	.	.	na	na
Bolsa Bay	Chrysene	0.12	.	.	na	na
Bolsa Bay	Dibenz(a,h)anthracene	0.011	.	.	na	na
Bolsa Bay	Dieldrin	0.0015	.	0.00012	na	na
Bolsa Bay	Diethylphthalate	0.066	.	0.000493	na	na
Bolsa Bay	Dimethylphthalate	0.017	.	.	na	na
Bolsa Bay	Di-n-butylphthalate	0.14	.	0.0007	na	na
Bolsa Bay	Di-n-octylphthalate	0.72	.	.	na	na

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Bolsa Bay	Endosulfan II	0.0016	.	1.6E-06	na	na
Bolsa Bay	Fluoranthene	0.21	.	.	na	na
Bolsa Bay	Indeno(1,2,3-c,d)pyrene	0.065	.	.	na	na
Bolsa Bay	Oil and Grease	8600	.	.	na	na
Bolsa Bay	Aroclor 1254	0.0405	0.00081	.	na	na
Bolsa Bay	Phenanthrene	0.051	.	.	na	na
Bolsa Bay	Phenol	0.12	.	0.001	na	na
Bolsa Bay	Pyrene	0.21	.	.	na	na
Bolsa Bay	TPH-Diesel	1800	.	.	na	na
Bolsa Bay	Waste oil	9600	.	.	na	na
Bolsa Bay	High MW PAHs	0.919	.	.	na	na
Bolsa Bay	Low MW PAHs	0.051	.	.	na	na
Bolsa Bay	Total DDT	0.09	.	.	na	na
Bolsa Bay	Total PAHs	0.97	.	.	na	na
Bolsa Bay	Total PCB	0.023	.	.	na	na
Bolsa Bay	Total phenol	0.12	.	.	na	na
Bolsa Bay	Total phthalate esters	1.68	.	.	na	na
Bolsa Bay	Total volatile solids	5.7	.	.	na	na
Full Tidal	Antimony	1.4	.	0.28	na	na
Full Tidal	Arsenic	37	.	18.5	na	na
Full Tidal	Barium	11400	.	22.8	na	na
Full Tidal	Beryllium	2	.	0.2	na	na
Full Tidal	Cadmium	1.3	.	0.325	na	na
Full Tidal	Chromium	244	.	4.88	na	na
Full Tidal	Cobalt	41.7	.	2.085	na	na
Full Tidal	Copper	163	.	7.087	na	na
Full Tidal	Lead	131	.	6.55	na	na
Full Tidal	Mercury	3.4	.	11.333	na	na
Full Tidal	Molybdenum	10.8	.	5.4	na	na
Full Tidal	Nickel	160	8	3.2	na	na
Full Tidal	Selenium	5.65	11.3	3.767	na	na
Full Tidal	Silver	1.15	.	0.575	na	na
Full Tidal	Sulfate	17000	.	.	na	na
Full Tidal	Sulfide	350	.	.	na	na
Full Tidal	Thallium	3	.	3	na	na
Full Tidal	Vanadium	120	.	2.4	na	na
Full Tidal	Zinc	230	.	1.756	na	na
Full Tidal	Ammonia as Nitrogen	110	.	.	na	na
Full Tidal	Chloride	23500	.	.	na	na
Full Tidal	Phosphorus, Total as P	0.45	.	.	na	na
Full Tidal	Phosphorus, Total as PO ₄	1.4	.	.	na	na
Full Tidal	1,2-Dichlorobenzene	0.019	.	.	na	na
Full Tidal	1,2-Dichloroethene (total)	0.019	.	.	na	na
Full Tidal	1,4-Dichlorobenzene	0.019	.	0.00008	na	na

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Full Tidal	2,4,5-TP (Silvex)	0.00093	.	.	na	na
Full Tidal	2,4-DB	0.049	.	.	na	na
Full Tidal	2-Butanone	0.39	.	.	na	na
Full Tidal	4,4'-DDD	0.077	.	.	na	na
Full Tidal	4,4'-DDE	0.045	.	.	na	na
Full Tidal	4,4'-DDT	0.059	.	0.00472	na	na
Full Tidal	4-Nitrophenol	0.67	.	0.0971	na	na
Full Tidal	Acenaphthene	0.96	.	0.038	na	na
Full Tidal	Acetone	1.2	.	0.002	na	na
Full Tidal	Aldrin	0.0019	.	0	na	na
Full Tidal	Anthracene	0.365	.	0.159	na	na
Full Tidal	Benzene	0.86	.	.	na	na
Full Tidal	Benzo(a)anthracene	0.365	.	1.259	na	na
Full Tidal	Benzo(a)pyrene	0.365	.	18.25	na	na
Full Tidal	Benzo(b)fluoranthene	0.365	.	.	na	na
Full Tidal	Benzo(e)pyrene	0.365	.	.	na	na
Full Tidal	Benzo(g,h,i)perylene	0.75	.	30.7377	na	na
Full Tidal	Benzo(k)fluoranthene	0.365	.	.	na	na
Full Tidal	BHC-alpha	0.017	.	.	na	na
Full Tidal	BHC-beta	0.0096	.	0	na	na
Full Tidal	BHC-delta	0.0019	.	0.0002	na	na
Full Tidal	BHC-gamma	0.035	.	.	na	na
Full Tidal	Bis(2-ethylhexyl)phthalate	0.88	.	.	na	na
Full Tidal	Butylbenzylphthalate	0.365	.	.	na	na
Full Tidal	Carbon disulfide	0.058	.	.	na	na
Full Tidal	Chlordane (technical)	0.023	.	.	na	na
Full Tidal	Chlordane-alpha	0.019	.	.	na	na
Full Tidal	Chlorobenzene	0.019	.	.	na	na
Full Tidal	Chloroform	0.00067	.	0	na	na
Full Tidal	Chrysene	0.96	.	.	na	na
Full Tidal	Diazinon	0.00044	.	.	na	na
Full Tidal	Dibenz(a,h)anthracene	0.75	.	.	na	na
Full Tidal	Dieldrin	0.0076	.	0.000608	na	na
Full Tidal	Diethylphthalate	0.365	.	0.002724	na	na
Full Tidal	Dimethylphthalate	0.365	.	.	na	na
Full Tidal	Di-n-butylphthalate	0.4	.	0.002	na	na
Full Tidal	Di-n-octylphthalate	0.81	.	.	na	na
Full Tidal	Disulfoton	0.00032	.	.	na	na
Full Tidal	Endosulfan I	0.012	.	0.000012	na	na
Full Tidal	Endosulfan II	0.0043	.	4.3E-06	na	na
Full Tidal	Endosulfan Sulfate	0.055	.	0.000055	na	na
Full Tidal	Endrin	0.016	.	.	na	na
Full Tidal	Endrin aldehyde	0.00305	.	.	na	na
Full Tidal	Endrin ketone	0.038	.	.	na	na

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Full Tidal	Ethylbenzene	3.7	.	.	na	na
Full Tidal	Fluoranthene	0.37	.	.	na	na
Full Tidal	Fluorene	1.4	.	.	na	na
Full Tidal	Indeno(1,2,3-c,d)pyrene	1	.	.	na	na
Full Tidal	Methylene chloride	0.019	.	0	na	na
Full Tidal	Naphthalene	1.8	.	0.018	na	na
Full Tidal	n-Propylbenzene	1.4	.	.	na	na
Full Tidal	Oil and Grease	47000	.	.	na	na
Full Tidal	Aroclor 1254	0.14	0.0028	.	na	na
Full Tidal	Aroclor 1260	0.075	0.0015	.	na	na
Full Tidal	Pentachlorophenol	0.48	.	0.053	na	na
Full Tidal	Phenanthrene	2.4	.	.	na	na
Full Tidal	Pyrene	0.84	.	.	na	na
Full Tidal	Toluene	0.17	.	0	na	na
Full Tidal	TPH-Diesel	12000	.	.	na	na
Full Tidal	Waste oil	41000	.	.	na	na
Full Tidal	Xylene (total)	5	.	0.005	na	na
Full Tidal	High MW PAHs	2.42	.	.	na	na
Full Tidal	Low MW PAHs	4.76	.	.	na	na
Full Tidal	Total DDT	0.146	.	.	na	na
Full Tidal	Total PAHs	6.56	.	.	na	na
Full Tidal	Total PCB	0.14	.	.	na	na
Full Tidal	Total phenol	0.48	.	.	na	na
Full Tidal	Total phthalate esters	1.901	.	.	na	na
Full Tidal	Total volatile solids	26	.	.	na	na
Future Full Tidal	Antimony	1.7	.	0.34	.	.
Future Full Tidal	Arsenic	700	.	350	.	10.294
Future Full Tidal	Barium	56000	.	112	.	207.407
Future Full Tidal	Beryllium	590	.	59	.	190.323
Future Full Tidal	Cadmium	190	.	47.5	19	10.5556
Future Full Tidal	Chromium	10000	.	200	.	312.5
Future Full Tidal	Cobalt	3900	.	195	.	13
Future Full Tidal	Copper	6900	.	300	.	69
Future Full Tidal	Lead	17000	.	850	.	34
Future Full Tidal	Mercury	190	.	633.333	.	380
Future Full Tidal	Molybdenum	18.5	.	9.25	.	0.356
Future Full Tidal	Nickel	13000	650	260	.	65
Future Full Tidal	Selenium	5.5	11	3.667	.	0.0714
Future Full Tidal	Silver	68	.	34	.	.
Future Full Tidal	Sulfate	18500	.	.	.	.
Future Full Tidal	Sulfide	1400	.	.	.	.
Future Full Tidal	Thallium	160	.	160	.	.
Future Full Tidal	Vanadium	26000	.	520	.	565.217
Future Full Tidal	Zinc	37000	.	282.443	115.625	.

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Future Full Tidal	Ammonia as Nitrogen	110	.	.	.	.
Future Full Tidal	Chloride	112000	.	.	.	.
Future Full Tidal	Phosphorus, Total as P	1610	.	.	.	.
Future Full Tidal	Phosphorus, Total as PO ₄	4940	.	.	.	.
Future Full Tidal	2,4-D	0.00098	.	.	.	.
Future Full Tidal	2-Butanone	0.044	.	.	.	.
Future Full Tidal	4,4'-DDD	0.26	.	.	.	.
Future Full Tidal	4,4'-DDE	0.34	.	.	.	.
Future Full Tidal	4,4'-DDT	0.088	.	0.00704	.	0.029333
Future Full Tidal	4-Methylphenol	4.7	.	.	.	.
Future Full Tidal	4-Nitrophenol	13	.	1.88406	.	0.34211
Future Full Tidal	Acenaphthene	1.7	.	0.068	.	4.146
Future Full Tidal	Acenaphthylene	7.7	.	.	.	4.529
Future Full Tidal	Acetone	0.18	.	0	.	.
Future Full Tidal	Aldrin	0.0065	.	0	.	.
Future Full Tidal	Anthracene	0.7	.	0.304	.	0.115
Future Full Tidal	Benzene	0.083	.	.	.	.
Future Full Tidal	Benzo(a)anthracene	0.7	.	2.414	.	0.149
Future Full Tidal	Benzo(a)pyrene	0.7	.	35	.	0.132
Future Full Tidal	Benzo(b)fluoranthene	1.5	.	.	.	0.326
Future Full Tidal	Benzo(e)pyrene	0.7	.	.	.	.
Future Full Tidal	Benzo(g,h,i)perylene	1.35	.	55.3279	.	1.125
Future Full Tidal	Benzo(k)fluoranthene	0.7	.	.	.	0.1489
Future Full Tidal	BHC-alpha	0.028	.	.	.	.
Future Full Tidal	BHC-beta	0.13	.	0.0001	.	.
Future Full Tidal	BHC-delta	0.042	.	0.0034	.	.
Future Full Tidal	BHC-gamma	0.023	.	.	.	.
Future Full Tidal	Bis(2-ethylhexyl)phthalate	3.7	.	.	.	.
Future Full Tidal	Butylbenzylphthalate	5.3	.	.	.	.
Future Full Tidal	Carbon disulfide	0.027	.	.	.	.
Future Full Tidal	Chlordane (technical)	3.8	.	.	.	.
Future Full Tidal	Chlordane-alpha	0.52	.	.	.	.
Future Full Tidal	Chlordane-gamma	0.28	.	.	.	.
Future Full Tidal	Chlorobenzene	0.0045	.	.	.	.
Future Full Tidal	Chrysene	5.6	.	.	.	1
Future Full Tidal	Diazinon	0.65	.	.	.	.
Future Full Tidal	Dibenz(a,h)anthracene	1.35	.	.	.	0.54
Future Full Tidal	Dieldrin	0.041	.	0.00328	.	0.00164
Future Full Tidal	Diethylphthalate	1	.	0.007463	.	.
Future Full Tidal	Dimethylphthalate	0.7	.	.	.	0.000658
Future Full Tidal	Di-n-butylphthalate	6.7	.	0.0335	.	.
Future Full Tidal	Di-n-octylphthalate	3.2	.	.	.	.
Future Full Tidal	Endosulfan I	0.055	.	0.000055	.	.
Future Full Tidal	Endosulfan II	0.0135	.	1.35E-05	.	.

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Future Full Tidal	Endrin	0.035	.	.	.	.
Future Full Tidal	Endrin aldehyde	0.05	.	.	.	.
Future Full Tidal	Endrin ketone	0.054	.	.	.	.
Future Full Tidal	Ethylbenzene	0.047	.	.	.	.
Future Full Tidal	Fluoranthene	0.6	.	.	.	0.054545
Future Full Tidal	Fluorene	3.8	.	.	.	0.021965
Future Full Tidal	Indeno(1,2,3-c,d)pyrene	1.35	.	.	.	2.045
Future Full Tidal	Methylene chloride	0.032	.	0	.	.
Future Full Tidal	Naphthalene	5.7	.	0.057	.	1.018
Future Full Tidal	Oil and Grease	370000	.	.	.	.
Future Full Tidal	Aroclor 1254	0.39	0.0078	.	.	.
Future Full Tidal	Aroclor 1260	0.16	0.0032	.	.	.
Future Full Tidal	PCB 008	0.41	.	.	.	.
Future Full Tidal	PCB 028	0.064	.	.	.	.
Future Full Tidal	PCB 044	0.027	.	.	.	.
Future Full Tidal	PCB 052	0.042	.	.	.	.
Future Full Tidal	PCB 066	0.03	.	.	.	.
Future Full Tidal	PCB 101	0.036	.	.	.	.
Future Full Tidal	PCB 105	0.0095	.	.	.	.
Future Full Tidal	PCB 118	0.012	.	.	.	.
Future Full Tidal	PCB 138	0.02	.	.	.	.
Future Full Tidal	PCB 153	0.018	.	.	.	.
Future Full Tidal	PCB 180	0.0071	.	.	.	.
Future Full Tidal	Pentachlorophenol	4.7	.	0.522	0.47	.
Future Full Tidal	Phenanthrene	9	.	.	.	1.9149
Future Full Tidal	Pyrene	1.5	.	.	.	0.1515
Future Full Tidal	Styrene	0.00076	.	0	.	.
Future Full Tidal	Tetrachloroethene	0.0045	.	0	.	.
Future Full Tidal	Toluene	0.0047	.	0	.	.
Future Full Tidal	TPH-Diesel	31000	.	.	.	.
Future Full Tidal	Trichloroethene	0.0045	.	.	.	.
Future Full Tidal	Waste oil	71000	.	.	.	.
Future Full Tidal	Xylene (total)	0.024	.	0	.	.
Future Full Tidal	High MW PAHs	3.639	.	.	.	.
Future Full Tidal	Low MW PAHs	18.9	.	.	.	.
Future Full Tidal	Total DDT	0.385	.	.	.	.
Future Full Tidal	Total PAHs	20.5	.	.	.	.
Future Full Tidal	Total PCB	0.39	.	.	.	.
Future Full Tidal	Total phenol	1.6	.	.	.	.
Future Full Tidal	Total phthalate esters	6.875	.	.	.	.
Future Full Tidal	Total volatile solids	20	.	.	.	.
Garden Grove	Arsenic	7.6	.	3.8	na	na
Garden Grove	Barium	152	.	0.304	na	na
Garden Grove	Beryllium	1.1	.	0.11	na	na

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Garden Grove	Cadmium	0.65	.	0.1625	na	na
Garden Grove	Chromium	35.5	.	0.71	na	na
Garden Grove	Cobalt	20.1	.	1.005	na	na
Garden Grove	Copper	34.8	.	1.513	na	na
Garden Grove	Lead	96	.	4.8	na	na
Garden Grove	Mercury	0.39	.	1.3	na	na
Garden Grove	Molybdenum	3.6	.	1.8	na	na
Garden Grove	Nickel	25	1.25	0.5	na	na
Garden Grove	Selenium	3.15	6.3	2.1	na	na
Garden Grove	Silver	0.65	.	0.325	na	na
Garden Grove	Sulfate	1300	.	.	na	na
Garden Grove	Sulfide	150	.	.	na	na
Garden Grove	Thallium	0.65	.	0.65	na	na
Garden Grove	Vanadium	79	.	1.58	na	na
Garden Grove	Zinc	140	.	1.069	na	na
Garden Grove	4,4'-DDD	0.037	.	.	na	na
Garden Grove	4,4'-DDE	0.098	.	.	na	na
Garden Grove	Acetone	0.05	.	0	na	na
Garden Grove	Benzo(a)anthracene	0.25	.	0.862	na	na
Garden Grove	Benzo(a)pyrene	0.25	.	12.5	na	na
Garden Grove	Benzo(b)fluoranthene	0.25	.	.	na	na
Garden Grove	Benzo(e)pyrene	0.25	.	.	na	na
Garden Grove	Benzo(g,h,i)perylene	0.25	.	10.2459	na	na
Garden Grove	Benzo(k)fluoranthene	0.25	.	.	na	na
Garden Grove	BHC-beta	0.0045	.	0	na	na
Garden Grove	BHC-delta	0.0016	.	0.0001	na	na
Garden Grove	Bis(2-ethylhexyl)phthalate	0.76	.	.	na	na
Garden Grove	Butylbenzylphthalate	0.25	.	.	na	na
Garden Grove	Chlordane (technical)	0.018	.	.	na	na
Garden Grove	Chlordane-alpha	0.0071	.	.	na	na
Garden Grove	Chlordane-gamma	0.0059	.	.	na	na
Garden Grove	Chrysene	0.25	.	.	na	na
Garden Grove	Dieldrin	0.0012	.	0.000096	na	na
Garden Grove	Diethylphthalate	0.25	.	0.001866	na	na
Garden Grove	Di-n-butylphthalate	0.25	.	0.00125	na	na
Garden Grove	Di-n-octylphthalate	0.25	.	.	na	na
Garden Grove	Endosulfan II	0.0021	.	2.1E-06	na	na
Garden Grove	Endrin aldehyde	0.003	.	.	na	na
Garden Grove	Fluoranthene	0.25	.	.	na	na
Garden Grove	Indeno(1,2,3-c,d)pyrene	0.25	.	.	na	na
Garden Grove	Oil and Grease	750	.	.	na	na
Garden Grove	Aroclor 1254	0.074	0.00148	.	na	na
Garden Grove	Phenanthrene	0.25	.	.	na	na
Garden Grove	Pyrene	0.12	.	.	na	na

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Garden Grove	Toluene	0.003	.	0	na	na
Garden Grove	Waste oil	650	.	.	na	na
Garden Grove	High MW PAHs	0.475	.	.	na	na
Garden Grove	Low MW PAHs	0.039	.	.	na	na
Garden Grove	Total DDT	0.135	.	.	na	na
Garden Grove	Total PAHs	0.514	.	.	na	na
Garden Grove	Total PCB	0.074	.	.	na	na
Garden Grove	Total phthalate esters	0.878	.	.	na	na
Garden Grove	Total volatile solids	3.8	.	.	na	na
Gas Plant	Arsenic	81	.	40.5	.	1.191
Gas Plant	Barium	249	.	0.498	.	0.922
Gas Plant	Beryllium	2	.	0.2	.	0.645
Gas Plant	Cadmium	1.05	.	0.2625	0.105	0.0583
Gas Plant	Chromium	120	.	2.4	.	3.75
Gas Plant	Cobalt	14	.	0.7	.	0.047
Gas Plant	Copper	110	.	4.783	.	1.1
Gas Plant	Lead	91	.	4.55	.	0.182
Gas Plant	Mercury	0.41	.	1.367	.	0.82
Gas Plant	Nickel	34	1.7	0.68	.	0.17
Gas Plant	Selenium	5.35	10.7	3.567	.	0.0695
Gas Plant	Silver	1.05	.	0.525	.	.
Gas Plant	Sulfate	1200	.	.	.	.
Gas Plant	Sulfide	2800	.	.	.	.
Gas Plant	Thallium	4.4	.	4.4	.	.
Gas Plant	Vanadium	110	.	2.2	.	2.391
Gas Plant	Zinc	300	.	2.29	0.938	.
Gas Plant	Ammonia as Nitrogen	40	.	.	.	.
Gas Plant	4,4'-DDD	0.16	.	.	.	.
Gas Plant	4,4'-DDE	0.013	.	.	.	.
Gas Plant	4,4'-DDT	0.00058	.	0.000046	.	0.000193
Gas Plant	Acenaphthene	0.7	.	0.028	.	1.707
Gas Plant	Benzo(a)anthracene	0.41	.	1.4138	.	0.087
Gas Plant	Benzo(a)pyrene	0.41	.	20.5	.	0.077
Gas Plant	Benzo(b)fluoranthene	0.41	.	.	.	0.089
Gas Plant	Benzo(g,h,i)perylene	0.55	.	22.541	.	0.458
Gas Plant	Benzo(k)fluoranthene	0.41	.	.	.	0.0872
Gas Plant	BHC-alpha	0.00052	.	.	.	.
Gas Plant	BHC-beta	0.0012	.	0	.	.
Gas Plant	Chlorobenzene	1.85	.	.	.	.
Gas Plant	Chrysene	0.41	.	.	.	0.073
Gas Plant	Dieldrin	0.0021	.	0.000168	.	0.000084
Gas Plant	Di-n-butylphthalate	0.15	.	0.00075	.	.
Gas Plant	Di-n-octylphthalate	0.59	.	.	.	.
Gas Plant	Ethylbenzene	1.85	.	.	.	.

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Gas Plant	Fluoranthene	0.41	.	.	.	0.037273
Gas Plant	Fluorene	3.6	.	.	.	0.020809
Gas Plant	Naphthalene	2.5	.	0.025	.	0.446
Gas Plant	n-Propylbenzene	1.3	.	.	.	.
Gas Plant	Oil and Grease	29000	.	.	.	.
Gas Plant	Aroclor 1254	0.067	0.00134	.	.	.
Gas Plant	Aroclor 1260	0.65	0.013	.	.	.
Gas Plant	PCB 138	0.048	.	.	.	.
Gas Plant	PCB 153	0.046	.	.	.	.
Gas Plant	PCB 180	0.08	.	.	.	.
Gas Plant	Phenanthrene	1.5	.	.	.	0.3191
Gas Plant	Pyrene	0.41	.	.	.	0.0414
Gas Plant	TPH-Diesel	1700	.	.	.	.
Gas Plant	Waste oil	13000	.	.	.	.
Gas Plant	High MW PAHs	0.249	.	.	.	.
Gas Plant	Low MW PAHs	6.75	.	.	.	.
Gas Plant	Total DDT	0.173	.	.	.	.
Gas Plant	Total PAHs	6.91	.	.	.	.
Gas Plant	Total PCB	0.65	.	.	.	.
Gas Plant	Total phthalate esters	0.59	.	.	.	.
Gas Plant	Total volatile solids	16	.	.	.	.
Muted Tidal	Antimony	0.95	.	0.19	.	.
Muted Tidal	Arsenic	130	.	65	.	1.912
Muted Tidal	Barium	9270	.	18.54	.	34.333
Muted Tidal	Beryllium	4.2	.	0.42	.	1.355
Muted Tidal	Cadmium	4.1	.	1.025	0.41	0.2278
Muted Tidal	Chromium	120	.	2.4	.	3.75
Muted Tidal	Cobalt	59	.	2.95	.	0.197
Muted Tidal	Copper	400	.	17.391	.	4
Muted Tidal	Lead	9600	.	480	.	19.2
Muted Tidal	Mercury	0.66	.	2.2	.	1.32
Muted Tidal	Molybdenum	8.1	.	4.05	.	0.156
Muted Tidal	Nickel	100	5	2	.	0.5
Muted Tidal	Selenium	4.2	8.4	2.8	.	0.0545
Muted Tidal	Silver	0.8	.	0.4	.	.
Muted Tidal	Sulfate	10200	.	.	.	.
Muted Tidal	Sulfide	110	.	.	.	.
Muted Tidal	Thallium	4	.	4	.	.
Muted Tidal	Vanadium	130	.	2.6	.	2.826
Muted Tidal	Zinc	460	.	3.511	1.438	.
Muted Tidal	Ammonia as Nitrogen	240	.	.	.	.
Muted Tidal	Chloride	17400	.	.	.	.
Muted Tidal	Phosphorus, Total as P	7.2	.	.	.	.
Muted Tidal	Phosphorus, Total as PO ₄	21.9	.	.	.	.

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Muted Tidal	1,2-Dichlorobenzene	0.006	.	.	.	.
Muted Tidal	1,2-Dichloroethane	0.006	.	.	.	.
Muted Tidal	1,3-Dichlorobenzene	0.006	.	.	.	.
Muted Tidal	1,4-Dichlorobenzene	0.006	.	0.00002	.	0.00005
Muted Tidal	2-Butanone	0.06	.	.	.	.
Muted Tidal	4,4'-DDD	0.13	.	.	.	.
Muted Tidal	4,4'-DDE	0.045	.	.	.	.
Muted Tidal	4,4'-DDT	0.067	.	0.00536	.	0.022333
Muted Tidal	Acenaphthylene	4.8	.	.	.	2.824
Muted Tidal	Acetone	0.39	.	0.001	.	.
Muted Tidal	Anthracene	0.315	.	0.137	.	0.052
Muted Tidal	Benzene	0.006	.	.	.	.
Muted Tidal	Benzo(a)anthracene	0.315	.	1.0862	.	0.067
Muted Tidal	Benzo(a)pyrene	0.315	.	15.75	.	0.059
Muted Tidal	Benzo(b)fluoranthene	0.73	.	.	.	0.159
Muted Tidal	Benzo(e)pyrene	0.315	.	.	.	.
Muted Tidal	Benzo(g,h,i)perylene	0.65	.	26.6393	.	0.542
Muted Tidal	Benzo(k)fluoranthene	0.315	.	.	.	0.067
Muted Tidal	BHC-alpha	0.0025	.	.	.	.
Muted Tidal	BHC-beta	0.00695	.	0	.	.
Muted Tidal	BHC-delta	0.0054	.	0.0004	.	.
Muted Tidal	BHC-gamma	0.0018	.	.	.	.
Muted Tidal	Bis(2-ethylhexyl)phthalate	2.6	.	.	.	.
Muted Tidal	Butylbenzylphthalate	0.56	.	.	.	.
Muted Tidal	Chlordane (technical)	0.11	.	.	.	.
Muted Tidal	Chlordane-alpha	0.027	.	.	.	.
Muted Tidal	Chlordane-gamma	0.015	.	.	.	.
Muted Tidal	Chrysene	0.62	.	.	.	0.111
Muted Tidal	Dieldrin	0.026	.	0.00208	.	0.00104
Muted Tidal	Diethylphthalate	0.5	.	0.003731	.	.
Muted Tidal	Dimethylphthalate	0.315	.	.	.	0.000296
Muted Tidal	Di-n-butylphthalate	0.65	.	0.00325	.	.
Muted Tidal	Di-n-octylphthalate	0.69	.	.	.	.
Muted Tidal	Endosulfan I	0.105	.	0.000105	.	.
Muted Tidal	Endosulfan II	0.026	.	0.000026	.	.
Muted Tidal	Endrin	0.029	.	.	.	.
Muted Tidal	Endrin aldehyde	0.14	.	.	.	.
Muted Tidal	Endrin ketone	0.14	.	.	.	.
Muted Tidal	Fluoranthene	0.315	.	.	.	0.028636
Muted Tidal	Fluorene	0.315	.	.	.	0.001821
Muted Tidal	Indeno(1,2,3-c,d)pyrene	0.65	.	.	.	0.985
Muted Tidal	MCPP	0.098	.	.	.	.
Muted Tidal	Methylene chloride	0.006	.	0	.	.
Muted Tidal	Naphthalene	0.315	.	0.003	.	0.056

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Muted Tidal	Oil and Grease	77000	.	.	.	.
Muted Tidal	Aroclor 1254	0.12	0.0024	.	.	.
Muted Tidal	Aroclor 1260	2.8	0.056	.	.	.
Muted Tidal	PCB 101	0.039	.	.	.	.
Muted Tidal	PCB 138	0.22	.	.	.	.
Muted Tidal	PCB 153	0.24	.	.	.	.
Muted Tidal	PCB 170	0.17	.	.	.	.
Muted Tidal	PCB 180	0.36	.	.	.	.
Muted Tidal	PCB 187	0.085	.	.	.	.
Muted Tidal	PCB 206	0.01	.	.	.	.
Muted Tidal	Phenanthrene	0.63	.	.	.	0.134
Muted Tidal	Phenol	1.6	.	0.01	.	0.004
Muted Tidal	Pyrene	0.315	.	.	.	0.0318
Muted Tidal	Tetrachloroethene	0.01	.	0	.	.
Muted Tidal	Toluene	0.006	.	0	.	.
Muted Tidal	TPH-Diesel	7000	.	.	.	.
Muted Tidal	Waste oil	40000	.	.	.	.
Muted Tidal	Xylene (total)	0.006	.	0	.	.
Muted Tidal	High MW PAHs	0.62	.	.	.	.
Muted Tidal	Low MW PAHs	0.63	.	.	.	.
Muted Tidal	Total DDT	0.168	.	.	.	.
Muted Tidal	Total PAHs	0.63	.	.	.	.
Muted Tidal	Total PCB	2.8	.	.	.	.
Muted Tidal	Total phenol	0.3	.	.	.	.
Muted Tidal	Total phthalate esters	3.11	.	.	.	.
Muted Tidal	Total volatile solids	39	.	.	.	.
Seasonal Ponds	Arsenic	320	.	160	.	4.706
Seasonal Ponds	Barium	12100	.	24.2	.	44.815
Seasonal Ponds	Beryllium	3.2	.	0.32	.	1.032
Seasonal Ponds	Cadmium	1.165	.	0.2913	0.1165	0.0647
Seasonal Ponds	Chromium	250	.	5	.	7.813
Seasonal Ponds	Cobalt	18	.	0.9	.	0.06
Seasonal Ponds	Copper	58	.	2.522	.	0.58
Seasonal Ponds	Lead	220	.	11	.	0.44
Seasonal Ponds	Mercury	1.11	.	3.7	.	2.22
Seasonal Ponds	Molybdenum	4.1	.	2.05	.	0.079
Seasonal Ponds	Nickel	202	10.1	4.04	.	1.01
Seasonal Ponds	Selenium	5.5	11	3.667	.	0.071429
Seasonal Ponds	Silver	1.165	.	0.583	.	.
Seasonal Ponds	Sulfate	20000	.	.	.	.
Seasonal Ponds	Sulfide	11000	.	.	.	.
Seasonal Ponds	Thallium	3.4	.	3.4	.	.
Seasonal Ponds	Vanadium	120	.	2.4	.	2.609
Seasonal Ponds	Zinc	351	.	2.679	1.097	.

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Seasonal Ponds	Ammonia as Nitrogen	420	.	.	.	.
Seasonal Ponds	2,4,5-TP (Silvex)	0.31	.	.	.	.
Seasonal Ponds	2-Butanone	0.07	.	.	.	.
Seasonal Ponds	4,4'-DDD	0.053	.	.	.	.
Seasonal Ponds	4,4'-DDE	0.074	.	.	.	.
Seasonal Ponds	4,4'-DDT	0.0068	.	0.000544	.	0.002267
Seasonal Ponds	4-Nitrophenol	4.4	.	0.638	.	0.116
Seasonal Ponds	Acetone	0.16	.	0	.	.
Seasonal Ponds	Anthracene	0.65	.	0.283	.	0.107
Seasonal Ponds	Benzo(a)anthracene	0.65	.	2.2414	.	0.138
Seasonal Ponds	Benzo(a)pyrene	0.65	.	32.5	.	0.123
Seasonal Ponds	Benzo(b)fluoranthene	0.65	.	.	.	0.141
Seasonal Ponds	Benzo(e)pyrene	0.65	.	.	.	.
Seasonal Ponds	Benzo(k)fluoranthene	0.65	.	.	.	0.1383
Seasonal Ponds	BHC-alpha	0.0027	.	.	.	.
Seasonal Ponds	BHC-beta	0.012	.	0	.	.
Seasonal Ponds	BHC-gamma	0.0008	.	.	.	.
Seasonal Ponds	Bis(2-ethylhexyl)phthalate	0.65	.	.	.	.
Seasonal Ponds	Butylbenzylphthalate	0.65	.	.	.	.
Seasonal Ponds	Carbon disulfide	0.05	.	.	.	.
Seasonal Ponds	Chrysene	0.65	.	.	.	0.116
Seasonal Ponds	Dalapon	0.31	.	.	.	.
Seasonal Ponds	Dibenz(a,h)anthracene	0.9	.	.	.	0.36
Seasonal Ponds	Dieldrin	0.0032	.	0.000256	.	0.000128
Seasonal Ponds	Diethylphthalate	0.65	.	0.004851	.	.
Seasonal Ponds	Di-n-butylphthalate	0.65	.	0.00325	.	.
Seasonal Ponds	Di-n-octylphthalate	0.65	.	.	.	.
Seasonal Ponds	Endosulfan I	0.013	.	0.000013	.	.
Seasonal Ponds	Endosulfan Sulfate	0.065	.	0.000065	.	.
Seasonal Ponds	Endrin	0.019	.	.	.	.
Seasonal Ponds	Endrin aldehyde	0.017	.	.	.	.
Seasonal Ponds	Fluoranthene	0.65	.	.	.	0.059091
Seasonal Ponds	Methylene chloride	0.01	.	0	.	.
Seasonal Ponds	Oil and Grease	15000	.	.	.	.
Seasonal Ponds	Aroclor 1254	0.083	0.00166	.	.	.
Seasonal Ponds	Phenanthrene	4.8	.	.	.	1.0213
Seasonal Ponds	Pyrene	0.65	.	.	.	0.0657
Seasonal Ponds	TPH-Diesel	1650	.	.	.	.

Table I-1

Sediment/Soil Risk Estimations for Terrestrial and Aquatic Plants and Terrestrial Invertebrates
Bolsa Chica Lowlands

Area	Analyte	Maximum (mg/Kg)	Hazard Quotients			
			Terrestrial and/or Aquatic Plants		Terrestrial Worm	
			NOEC	LOEC	NOEC	LOEC
Seasonal Ponds	Waste oil	8500	.	.	.	.
Seasonal Ponds	High MW PAHs	0.463	.	.	.	.
Seasonal Ponds	Low MW PAHs	0.033	.	.	.	.
Seasonal Ponds	Total DDT	0.0812	.	.	.	.
Seasonal Ponds	Total PAHs	0.496	.	.	.	.
Seasonal Ponds	Total PCB	0.083	.	.	.	.
Seasonal Ponds	Total phthalate esters	0.234	.	.	.	.
Seasonal Ponds	Total volatile solids	17	.	.	.	.

Notes:

Non-detects for Tetra Tech data were given a "0" value

Risk estimates are presented only for those COPECs with hazard quotients exceeding 1 for either a NOAEL or a LOAEL. The risk estimates for all detected COPECs are presented in Appendix I, Table I-2.

COPEC - Chemical of potential ecological concern

HQ - Hazard quotient

NOEC - No observed effect concentration

LOEC - Lowest observed effect concentration

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Bolsa Bay	Aquatic	Bird	Stilt	Arsenic	0.05709	--	--	--	--	0.04224	--	--	--	9.9E-02	2.7E-02	1.1E-02
Bolsa Bay	Aquatic	Bird	Heron	Arsenic	0.01154	--	0.0013235	--	--	0.004719	--	--	--	1.8E-02	3.6E-03	1.4E-03
Bolsa Bay	Aquatic	Bird	Tern	Arsenic	0.00991	--	--	--	--	--	--	--	--	9.9E-03	3.7E-03	1.5E-03
Bolsa Bay	Aquatic	Bird	Stilt	Barium	1.72584	--	--	--	--	0.2624	--	0.0672	--	2.1E+00	1.5E-02	--
Bolsa Bay	Aquatic	Bird	Tern	Barium	0.29948	--	--	--	--	--	--	--	0.5898	8.9E-01	9.0E-03	--
Bolsa Bay	Aquatic	Bird	Heron	Barium	0.34898	--	0.0615839	0.1080323	--	0.029315	0.034934	0.03003	0.14295	7.6E-01	4.2E-03	--
Bolsa Bay	Aquatic	Bird	Stilt	Beryllium	0.00699	--	--	--	--	0.0463698	--	--	--	5.3E-02	--	--
Bolsa Bay	Aquatic	Bird	Heron	Beryllium	0.00141	--	0.0003985	--	--	0.0051804	0.000732	--	0.00205	9.8E-03	--	--
Bolsa Bay	Aquatic	Bird	Tern	Beryllium	0.00121	--	--	--	--	--	--	--	0.00844	9.7E-03	--	--
Bolsa Bay	Aquatic	Bird	Heron	Cadmium	0.00124	--	--	0.0109483	--	--	0.000553	--	0.00181	1.5E-02	1.1E-02	7.7E-04
Bolsa Bay	Aquatic	Bird	Tern	Cadmium	0.00107	--	--	--	--	--	--	--	0.00749	8.6E-03	1.1E-02	8.2E-04
Bolsa Bay	Aquatic	Bird	Stilt	Cadmium	0.00614	--	--	--	--	--	--	--	--	6.1E-03	6.0E-03	4.3E-04
Bolsa Bay	Aquatic	Bird	Stilt	Chromium	0.30875	--	--	--	--	0.0192	--	0.01504	--	3.4E-01	4.9E-01	--
Bolsa Bay	Aquatic	Bird	Tern	Chromium	0.05358	--	--	--	--	--	--	--	0.27408	3.3E-01	6.4E-01	--
Bolsa Bay	Aquatic	Bird	Heron	Chromium	0.06243	--	0.0036498	0.0128603	--	0.002145	0.039712	0.006721	0.06643	1.9E-01	2.1E-01	--
Bolsa Bay	Aquatic	Bird	Stilt	Cobalt	0.08261	--	--	--	--	0.02112	--	0.00192	--	1.1E-01	6.8E-01	7.0E-02
Bolsa Bay	Aquatic	Bird	Tern	Cobalt	0.01433	--	--	--	--	--	--	--	0.02698	4.1E-02	3.6E-01	3.7E-02
Bolsa Bay	Aquatic	Bird	Heron	Cobalt	0.0167	--	0.0004618	0.0011438	--	0.0023595	0.004279	0.000858	0.00654	3.2E-02	1.6E-01	1.6E-02
Bolsa Bay	Aquatic	Bird	Stilt	Copper	0.27115	--	--	--	--	0.2624	--	0.384	--	9.2E-01	3.0E-02	2.3E-02
Bolsa Bay	Aquatic	Bird	Tern	Copper	0.04705	--	--	--	--	--	--	--	0.61402	6.6E-01	3.0E-02	2.3E-02
Bolsa Bay	Aquatic	Bird	Heron	Copper	0.05483	--	0.0052307	0.1350497	--	0.029315	0.078823	0.1716	0.14882	6.2E-01	1.5E-02	1.2E-02
Bolsa Bay	Aquatic	Bird	Stilt	Lead	0.49893	--	--	--	--	0.05952	--	0.00576	--	5.6E-01	6.9E-01	6.9E-02
Bolsa Bay	Aquatic	Bird	Tern	Lead	0.08658	--	--	--	--	--	--	--	0.16862	2.6E-01	4.2E-01	4.2E-02
Bolsa Bay	Aquatic	Bird	Heron	Lead	0.10089	--	0.0058851	0.0327272	--	0.0066495	0.008359	0.002574	0.04087	2.0E-01	1.8E-01	1.8E-02
Bolsa Bay	Aquatic	Bird	Tern	Mercury	0.00021	--	--	--	--	--	--	--	0.0023	2.5E-03	1.3E-03	--
Bolsa Bay	Aquatic	Bird	Heron	Mercury	0.00024	--	--	0.0006065	--	--	--	--	0.00056	1.4E-03	4.0E-04	--
Bolsa Bay	Aquatic	Bird	Stilt	Mercury	0.00118	--	--	--	--	--	--	--	--	1.2E-03	4.5E-04	--
Bolsa Bay	Aquatic	Bird	Stilt	Nickel	0.25184	--	--	--	--	0.03072	--	0.01392	--	3.0E-01	5.4E-03	--
Bolsa Bay	Aquatic	Bird	Tern	Nickel	0.0437	--	--	--	--	--	--	--	0.20334	2.5E-01	6.1E-03	--
Bolsa Bay	Aquatic	Bird	Heron	Nickel	0.05092	--	0.0056407	0.0238175	--	0.003432	0.06837	0.006221	0.04928	2.1E-01	2.8E-03	--
Bolsa Bay	Aquatic	Bird	Tern	Selenium	0.00316	--	--	--	--	--	--	--	0.0913	9.4E-02	4.5E-01	--
Bolsa Bay	Aquatic	Bird	Heron	Selenium	0.00368	--	--	0.0180828	--	--	0.001391	0.004505	0.02213	5.0E-02	1.3E-01	--
Bolsa Bay	Aquatic	Bird	Stilt	Selenium	0.01822	--	--	--	--	--	0.01008	--	2.8E-02	1.0E-01	--	
Bolsa Bay	Aquatic	Bird	Stilt	Silver	0.00345	--	--	--	--	--	0.00176	--	5.2E-03	--	1.9E-04	
Bolsa Bay	Aquatic	Bird	Heron	Silver	0.0007	--	--	--	--	--	--	0.000787	--	1.5E-03	--	4.0E-05
Bolsa Bay	Aquatic	Bird	Tern	Silver	0.0006	--	--	--	--	--	--	--	--	6.0E-04	--	3.0E-05
Bolsa Bay	Aquatic	Bird	Tern	Sulfate	7.12001	--	--	--	384.1	--	--	--	--	3.9E+02	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Sulfate	41.0305	--	--	--	227.7	--	--	--	--	2.7E+02	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																				
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients						
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL					
Bolsa Bay	Aquatic	Bird	Heron	Sulfate	8.29662	--	--	--	140.3	--	--	--	--	1.5E+02	--	--				
Bolsa Bay	Aquatic	Bird	Stilt	Sulfide	9.90883	--	--	--	--	--	--	--	--	9.9E+00	--	--				
Bolsa Bay	Aquatic	Bird	Heron	Sulfide	2.00362	--	--	--	--	--	--	--	--	2.0E+00	--	--				
Bolsa Bay	Aquatic	Bird	Tern	Sulfide	1.71947	--	--	--	--	--	--	--	--	1.7E+00	--	--				
Bolsa Bay	Aquatic	Bird	Stilt	Thallium	0.00527	--	--	--	--	--	--	--	--	5.3E-03	--	2.0E-04				
Bolsa Bay	Aquatic	Bird	Heron	Thallium	0.00107	--	--	--	--	--	--	--	--	1.1E-03	--	3.1E-05				
Bolsa Bay	Aquatic	Bird	Tern	Thallium	0.00091	--	--	--	--	--	--	--	--	9.1E-04	--	4.8E-05				
Bolsa Bay	Aquatic	Bird	Stilt	Vanadium	0.64609	--	--	--	--	0.048	--	0.00416	--	7.0E-01	8.6E-02	--				
Bolsa Bay	Aquatic	Bird	Tern	Vanadium	0.11211	--	--	--	--	--	--	0.15766	2.7E-01	4.6E-02	--	--				
Bolsa Bay	Aquatic	Bird	Heron	Vanadium	0.13064	--	0.0043996	0.0021952	--	0.0053625	0.005148	0.001859	0.03821	1.9E-01	1.7E-02	--	--			
Bolsa Bay	Aquatic	Bird	Tern	Zinc	0.16696	--	--	--	--	--	--	--	6.27619	6.4E+00	9.4E-01	1.0E-01	--			
Bolsa Bay	Aquatic	Bird	Heron	Zinc	0.19455	--	0.0341934	1.946524	--	0.12155	0.287205	0.1573	1.52118	4.3E+00	3.4E-01	3.8E-02	--	--		
Bolsa Bay	Aquatic	Bird	Stilt	Zinc	0.96213	--	--	--	--	1.088	--	0.352	--	2.4E+00	2.6E-01	2.8E-02	--	--		
Bolsa Bay	Aquatic	Bird	Stilt	Ammonia as Nitrogen	0.77594	--	--	--	--	--	--	--	--	7.8E-01	--	--	--	--		
Bolsa Bay	Aquatic	Bird	Heron	Ammonia as Nitrogen	0.1569	--	--	--	--	--	--	--	--	1.6E-01	--	--	--	--		
Bolsa Bay	Aquatic	Bird	Tern	Ammonia as Nitrogen	0.13465	--	--	--	--	--	--	--	--	1.3E-01	--	--	--	--		
Bolsa Bay	Aquatic	Bird	Heron	2-Butanone	--	--	--	0.000594	--	--	--	--	--	5.9E-04	--	--	--	--		
Bolsa Bay	Aquatic	Bird	Stilt	2-Butanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Bolsa Bay	Aquatic	Bird	Tern	2-Butanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Bolsa Bay	Aquatic	Bird	Tern	4,4'-DDD	8E-06	--	--	--	--	--	--	--	0.00214	2.1E-03	7.9E-03	--	--			
Bolsa Bay	Aquatic	Bird	Heron	4,4'-DDD	9.3E-06	--	0.0000018	0.0000297	--	0.0000236	4.94E-05	--	0.00052	6.3E-04	1.3E-03	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	4,4'-DDD	4.6E-05	--	--	--	--	0.0002108	--	--	--	2.6E-04	7.0E-04	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	4,4'-DDE	2.4E-05	--	--	--	--	--	--	--	0.02463	2.5E-02	--	9.5E-02	--	--		
Bolsa Bay	Aquatic	Bird	Heron	4,4'-DDE	2.8E-05	--	0.0000168	0.0000104	--	0.0000218	0.000144	0.000122	0.00597	6.5E-03	--	1.4E-02	--	6.7E-03	--	
Bolsa Bay	Aquatic	Bird	Stilt	4,4'-DDE	0.00014	--	--	--	--	0.0019513	--	0.000272	--	2.4E-03	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	4,4'-DDT	2E-06	--	--	--	--	--	--	--	4.8E-05	5.0E-05	9.7E-04	--	--	--		
Bolsa Bay	Aquatic	Bird	Heron	4,4'-DDT	2.3E-06	--	--	0.0000266	--	--	--	--	1.2E-05	4.1E-05	4.3E-04	--	--	--		
Bolsa Bay	Aquatic	Bird	Stilt	4,4'-DDT	1.2E-05	--	--	--	--	--	--	--	--	1.2E-05	1.6E-04	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Heron	4-Methyl-2-pentanone	--	--	--	0.0000445	--	--	--	--	--	4.5E-05	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	4-Methyl-2-pentanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	4-Methyl-2-pentanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Acenaphthene	--	--	--	--	--	--	--	--	0.00114	1.1E-03	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Acenaphthene	--	--	--	0.0000012	--	--	--	--	0.00028	2.8E-04	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Acenaphthylene	--	--	--	--	--	--	--	--	0.00114	1.1E-03	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Acenaphthylene	--	--	--	--	--	--	--	--	0.00028	2.8E-04	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Acetone	--	--	--	--	--	--	--	--	0.06962	7.0E-02	2.9E-05	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL	
Bolsa Bay	Aquatic	Bird	Heron	Acetone	--	--	--	0.00594	--	--	--	0.01687	2.3E-02	5.2E-06	--	
Bolsa Bay	Aquatic	Bird	Stilt	Acetone	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Bolsa Bay	Aquatic	Bird	Stilt	Aldrin	--	--	--	--	--	--	--	0.000032	--	3.2E-05	--	
Bolsa Bay	Aquatic	Bird	Heron	Aldrin	--	--	--	--	--	5.1E-06	1.43E-05	--	1.9E-05	--	4.1E-06	
Bolsa Bay	Aquatic	Bird	Tern	Aldrin	--	--	--	--	--	--	--	--	--	--	0.0E+00	
Bolsa Bay	Aquatic	Bird	Tern	Anthracene	1.9E-05	--	--	--	--	--	--	0.00114	1.2E-03	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Anthracene	2.2E-05	--	--	0.0000014	--	--	--	0.00028	3.0E-04	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Anthracene	0.00011	--	--	--	--	--	--	--	1.1E-04	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Benzene	--	--	--	--	--	--	--	0.00034	3.4E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Benzene	--	--	--	0.0000282	--	--	--	8.3E-05	1.1E-04	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Benzene	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Benzo(a)anthracene	4.2E-05	--	--	--	--	--	--	0.00114	1.2E-03	1.3E-05	--	
Bolsa Bay	Aquatic	Bird	Heron	Benzo(a)anthracene	4.9E-05	--	--	0.0000045	--	--	--	0.00028	3.3E-04	2.0E-06	--	
Bolsa Bay	Aquatic	Bird	Stilt	Benzo(a)anthracene	0.00024	--	--	--	--	--	--	--	2.4E-04	2.0E-06	--	
Bolsa Bay	Aquatic	Bird	Tern	Benzo(a)pyrene	5.1E-05	--	--	--	--	--	--	0.00114	1.2E-03	1.3E-04	--	
Bolsa Bay	Aquatic	Bird	Heron	Benzo(a)pyrene	5.9E-05	--	--	0.0000004	--	--	--	0.00028	3.4E-04	2.1E-05	--	
Bolsa Bay	Aquatic	Bird	Stilt	Benzo(a)pyrene	0.00029	--	--	--	--	--	--	--	2.9E-04	2.4E-05	--	
Bolsa Bay	Aquatic	Bird	Tern	Benzo(b)fluoranthene	5.8E-05	--	--	--	--	--	--	0.00114	1.2E-03	1.4E-05	--	
Bolsa Bay	Aquatic	Bird	Heron	Benzo(b)fluoranthene	6.7E-05	--	--	0.000001	--	--	--	0.00028	3.4E-04	2.1E-06	--	
Bolsa Bay	Aquatic	Bird	Stilt	Benzo(b)fluoranthene	0.00033	--	--	--	--	--	--	--	3.3E-04	2.7E-06	--	
Bolsa Bay	Aquatic	Bird	Tern	Benzo(e)pyrene	5.1E-05	--	--	--	--	--	--	0.00114	1.2E-03	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Benzo(e)pyrene	5.9E-05	--	--	0.0000011	--	--	--	0.00028	3.4E-04	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Benzo(e)pyrene	0.00029	--	--	--	--	--	--	--	2.9E-04	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Benzo(g,h,i)perylene	6.1E-05	--	--	--	--	--	--	0.00114	1.2E-03	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Benzo(g,h,i)perylene	0.00035	--	--	--	--	--	--	--	3.5E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Benzo(g,h,i)perylene	7.1E-05	--	--	0.0000011	--	--	--	0.00028	3.5E-04	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Benzo(k)fluoranthene	5.5E-05	--	--	--	--	--	--	0.00114	1.2E-03	1.3E-05	--	
Bolsa Bay	Aquatic	Bird	Heron	Benzo(k)fluoranthene	6.4E-05	--	--	0.0000005	--	--	--	0.00028	3.4E-04	2.1E-06	--	
Bolsa Bay	Aquatic	Bird	Stilt	Benzo(k)fluoranthene	0.00031	--	--	--	--	--	--	--	3.1E-04	2.6E-06	--	
Bolsa Bay	Aquatic	Bird	Stilt	BHC-alpha	1.8E-05	--	--	--	--	0.0001191	9.4E-06	--	1.5E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	BHC-alpha	3.7E-06	--	0.000001	0.0000312	--	0.0000133	2.09E-05	4.2E-06	1.7E-05	9.1E-05	--	--
Bolsa Bay	Aquatic	Bird	Tern	BHC-alpha	3.2E-06	--	--	--	--	--	--	--	7E-05	7.3E-05	--	--
Bolsa Bay	Aquatic	Bird	Heron	BHC-beta	1.1E-05	--	0.0000141	0.0043795	--	0.0001833	3.29E-05	6.51E-05	4.9E-05	4.7E-03	--	--
Bolsa Bay	Aquatic	Bird	Stilt	BHC-beta	5.6E-05	--	--	--	--	0.001641	--	0.000146	--	1.8E-03	--	--
Bolsa Bay	Aquatic	Bird	Tern	BHC-beta	9.8E-06	--	--	--	--	--	--	--	0.0002	2.1E-04	--	--
Bolsa Bay	Aquatic	Bird	Tern	BHC-delta	--	--	--	--	--	--	--	0.00042	4.2E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	BHC-delta	--	--	--	--	--	0.000004	--	0.0001	1.1E-04	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Bolsa Bay	Aquatic	Bird	Tern	BHC-gamma	1.1E-06	--	--	--	--	--	--	--	7.6E-05	7.7E-05	--	7.4E-06
Bolsa Bay	Aquatic	Bird	Heron	BHC-gamma	1.3E-06	--	--	0.0000071	--	--	--	--	1.8E-05	2.7E-05	--	1.4E-06
Bolsa Bay	Aquatic	Bird	Stilt	BHC-gamma	6.3E-06	--	--	--	--	--	--	--	--	6.3E-06	--	4.0E-07
Bolsa Bay	Aquatic	Bird	Tern	Biphenyl	--	--	--	--	--	--	--	--	2.7E-05	2.7E-05	--	--
Bolsa Bay	Aquatic	Bird	Heron	Biphenyl	--	--	--	0.0000054	--	--	--	--	6.6E-06	1.2E-05	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Butylbenzylphthalate	0.00065	--	--	--	--	--	--	--	--	6.5E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	Butylbenzylphthalate	0.00013	--	--	--	--	--	--	--	--	1.3E-04	--	--
Bolsa Bay	Aquatic	Bird	Tern	Butylbenzylphthalate	0.00011	--	--	--	--	--	--	--	--	1.1E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Chlordane (technical)	0.00048	--	--	--	--	--	--	--	--	4.8E-04	2.3E-04	3.3E-05
Bolsa Bay	Aquatic	Bird	Tern	Chlordane (technical)	8.3E-05	--	--	--	--	--	--	--	0.00037	4.6E-04	3.0E-04	4.4E-05
Bolsa Bay	Aquatic	Bird	Heron	Chlordane (technical)	9.7E-05	--	--	--	--	--	--	--	9.1E-05	1.9E-04	6.8E-05	9.8E-06
Bolsa Bay	Aquatic	Bird	Tern	Chlordane-alpha	2.3E-05	--	--	--	--	--	--	--	0.00389	3.9E-03	2.6E-03	3.7E-04
Bolsa Bay	Aquatic	Bird	Heron	Chlordane-alpha	2.7E-05	--	--	--	--	--	--	--	0.00094	9.7E-04	3.5E-04	5.1E-05
Bolsa Bay	Aquatic	Bird	Stilt	Chlordane-alpha	0.00013	--	--	--	--	--	--	--	--	1.3E-04	6.5E-05	9.3E-06
Bolsa Bay	Aquatic	Bird	Tern	Chlordane-gamma	1.7E-05	--	--	--	--	--	--	--	0.00062	6.4E-04	4.2E-04	6.1E-05
Bolsa Bay	Aquatic	Bird	Heron	Chlordane-gamma	2E-05	--	--	--	--	--	--	--	0.00015	1.7E-04	6.2E-05	8.9E-06
Bolsa Bay	Aquatic	Bird	Stilt	Chlordane-gamma	9.9E-05	--	--	--	--	--	--	--	--	9.9E-05	4.8E-05	7.0E-06
Bolsa Bay	Aquatic	Bird	Heron	Chloroform	--	--	--	0.022275	--	--	--	--	--	2.2E-02	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Chloroform	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	Chloroform	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	Chrysene	7.5E-05	--	--	--	--	--	--	--	0.00114	1.2E-03	1.4E-06	--
Bolsa Bay	Aquatic	Bird	Stilt	Chrysene	0.00043	--	--	--	--	--	--	--	--	4.3E-04	4.0E-07	--
Bolsa Bay	Aquatic	Bird	Heron	Chrysene	8.7E-05	--	--	0.0000014	--	--	--	--	0.00028	3.7E-04	2.0E-07	--
Bolsa Bay	Aquatic	Bird	Tern	Dibenz(a,h)anthracene	1.7E-05	--	--	--	--	--	--	--	0.00114	1.2E-03	1.3E-04	--
Bolsa Bay	Aquatic	Bird	Heron	Dibenz(a,h)anthracene	1.9E-05	--	--	0.0000003	--	--	--	--	0.00028	3.0E-04	1.8E-05	--
Bolsa Bay	Aquatic	Bird	Stilt	Dibenz(a,h)anthracene	9.6E-05	--	--	--	--	--	--	--	--	9.6E-05	7.9E-06	--
Bolsa Bay	Aquatic	Bird	Tern	Dibenzothiophene	--	--	--	--	--	--	--	--	2E-05	2.0E-05	--	--
Bolsa Bay	Aquatic	Bird	Heron	Dibenzothiophene	--	--	--	0.0000011	--	--	--	--	4.8E-06	6.0E-06	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	Dieldrin	1.2E-06	--	--	--	--	--	--	--	0.00067	6.7E-04	1.4E-02	--
Bolsa Bay	Aquatic	Bird	Heron	Dieldrin	1.4E-06	--	--	0.0002927	--	--	--	--	5.1E-06	0.00016	4.6E-04	5.3E-03
Bolsa Bay	Aquatic	Bird	Stilt	Dieldrin	6.9E-06	--	--	--	--	--	--	--	1.15E-05	--	1.9E-05	2.8E-04
Bolsa Bay	Aquatic	Bird	Stilt	Diethylphthalate	0.00021	--	--	--	--	--	--	--	--	2.1E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	Diethylphthalate	4.2E-05	--	--	--	--	--	--	--	--	4.2E-05	--	--
Bolsa Bay	Aquatic	Bird	Tern	Diethylphthalate	3.6E-05	--	--	--	--	--	--	--	--	3.6E-05	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Dimethylphthalate	9.9E-05	--	--	--	--	--	--	--	--	9.9E-05	--	--
Bolsa Bay	Aquatic	Bird	Heron	Dimethylphthalate	2E-05	--	--	--	--	--	--	--	--	2.0E-05	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Bolsa Bay	Aquatic	Bird	Tern	Dimethylphthalate	1.7E-05	--	--	--	--	--	--	--	--	1.7E-05	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Di-n-butylphthalate	0.00038	--	--	--	--	--	--	--	--	3.8E-04	--	3.1E-04
Bolsa Bay	Aquatic	Bird	Heron	Di-n-butylphthalate	7.6E-05	--	--	--	--	--	--	--	--	7.6E-05	--	4.7E-05
Bolsa Bay	Aquatic	Bird	Tern	Di-n-butylphthalate	6.6E-05	--	--	--	--	--	--	--	--	6.6E-05	--	7.3E-05
Bolsa Bay	Aquatic	Bird	Stilt	Di-n-octylphthalate	0.00129	--	--	--	--	--	--	--	--	1.3E-03	--	7.0E-06
Bolsa Bay	Aquatic	Bird	Heron	Di-n-octylphthalate	0.00026	--	--	--	--	--	--	--	--	2.6E-04	--	1.1E-06
Bolsa Bay	Aquatic	Bird	Tern	Di-n-octylphthalate	0.00022	--	--	--	--	--	--	--	--	2.2E-04	--	1.7E-06
Bolsa Bay	Aquatic	Bird	Tern	Endosulfan I	--	--	--	--	--	--	--	--	0.00016	1.6E-04	2.5E-05	--
Bolsa Bay	Aquatic	Bird	Heron	Endosulfan I	--	--	--	--	--	--	--	--	3.9E-05	3.9E-05	3.3E-06	--
Bolsa Bay	Aquatic	Bird	Stilt	Endosulfan I	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Bolsa Bay	Aquatic	Bird	Stilt	Endosulfan II	6.9E-06	--	--	--	--	--	--	--	--	6.9E-06	8.0E-07	--
Bolsa Bay	Aquatic	Bird	Heron	Endosulfan II	1.4E-06	--	--	--	--	--	--	--	--	1.4E-06	1.0E-07	--
Bolsa Bay	Aquatic	Bird	Tern	Endosulfan II	1.2E-06	--	--	--	--	--	--	--	--	1.2E-06	2.0E-07	--
Bolsa Bay	Aquatic	Bird	Tern	Endrin aldehyde	--	--	--	--	--	--	--	--	0.00023	2.3E-04	1.5E-03	--
Bolsa Bay	Aquatic	Bird	Heron	Endrin aldehyde	--	--	--	--	--	--	--	--	5.7E-05	5.7E-05	2.0E-04	--
Bolsa Bay	Aquatic	Bird	Stilt	Endrin aldehyde	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Bolsa Bay	Aquatic	Bird	Tern	Endrin ketone	--	--	--	--	--	--	--	--	0.00016	1.6E-04	1.0E-03	--
Bolsa Bay	Aquatic	Bird	Heron	Endrin ketone	--	--	--	--	--	--	--	--	3.9E-05	3.9E-05	1.4E-04	--
Bolsa Bay	Aquatic	Bird	Stilt	Endrin ketone	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Bolsa Bay	Aquatic	Bird	Heron	Ethylbenzene	--	--	--	0.0000079	--	--	--	--	--	7.9E-06	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	Ethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	Fluoranthene	0.0001	--	--	--	--	--	--	--	0.00114	1.2E-03	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Fluoranthene	0.00058	--	--	--	--	--	--	--	--	5.8E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	Fluoranthene	0.00012	--	--	0.0000034	--	--	--	--	0.00028	4.0E-04	--	--
Bolsa Bay	Aquatic	Bird	Tern	Fluorene	--	--	--	--	--	--	--	--	0.00114	1.1E-03	--	--
Bolsa Bay	Aquatic	Bird	Heron	Fluorene	--	--	--	0.0000034	--	--	--	--	0.00028	2.8E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Fluorene	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	Heptachlor	--	--	--	--	--	--	--	--	9.3E-05	9.3E-05	--	3.1E-05
Bolsa Bay	Aquatic	Bird	Heron	Heptachlor	--	--	--	--	--	--	--	--	2.3E-05	2.3E-05	--	4.1E-06
Bolsa Bay	Aquatic	Bird	Stilt	Heptachlor	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Bolsa Bay	Aquatic	Bird	Tern	Indeno(1,2,3-c,d)pyrene	5.1E-05	--	--	--	--	--	--	--	0.00114	1.2E-03	1.3E-05	--
Bolsa Bay	Aquatic	Bird	Heron	Indeno(1,2,3-c,d)pyrene	5.9E-05	--	--	0.0000005	--	--	--	--	0.00028	3.4E-04	2.1E-06	--
Bolsa Bay	Aquatic	Bird	Stilt	Indeno(1,2,3-c,d)pyrene	0.00029	--	--	--	--	--	--	--	--	2.9E-04	2.4E-06	--
Bolsa Bay	Aquatic	Bird	Tern	Methylene chloride	--	--	--	--	--	--	--	--	0.0649	6.5E-02	--	--
Bolsa Bay	Aquatic	Bird	Heron	Methylene chloride	--	--	--	0.003663	--	--	--	--	0.01573	1.9E-02	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Methylene chloride	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	Naphthalene	--	--	--	--	--	--	--	--	0.00109	1.1E-03	--	1.0E-05

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Bolsa Bay	Aquatic	Bird	Heron	Naphthalene	--	--	--	0.0000248	--	--	--	--	0.00026	2.9E-04	--	1.5E-06
Bolsa Bay	Aquatic	Bird	Stilt	Naphthalene	--	--	--	--	--	--	--	--	--	--	--	0.0E+00
Bolsa Bay	Aquatic	Bird	Heron	n-Propylbenzene	--	--	--	0.0000277	--	--	--	--	--	2.8E-05	--	--
Bolsa Bay	Aquatic	Bird	Stilt	n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Oil and Grease	15.6587	--	--	--	--	--	--	--	--	1.6E+01	--	--
Bolsa Bay	Aquatic	Bird	Heron	Oil and Grease	3.16628	--	--	--	--	--	--	--	--	3.2E+00	--	--
Bolsa Bay	Aquatic	Bird	Tern	Oil and Grease	2.71724	--	--	--	--	--	--	--	--	2.7E+00	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB 1254	4.2E-05	--	--	--	--	--	--	--	0.01729	1.7E-02	--	1.8E-02
Bolsa Bay	Aquatic	Bird	Heron	PCB 1254	4.9E-05	--	0.0000058	--	--	0.0000749	--	--	0.00419	4.3E-03	--	2.5E-03
Bolsa Bay	Aquatic	Bird	Stilt	PCB 1254	0.00024	--	--	--	--	0.0006708	--	--	--	9.1E-04	--	7.0E-04
Bolsa Bay	Aquatic	Bird	Tern	PCB 1260	--	--	--	--	--	--	--	--	0.00662	6.6E-03	--	5.0E-05
Bolsa Bay	Aquatic	Bird	Heron	PCB 1260	--	--	--	--	--	--	--	--	0.00161	1.6E-03	--	6.6E-06
Bolsa Bay	Aquatic	Bird	Stilt	PCB 1260	--	--	--	--	--	--	--	--	--	--	--	0.0E+00
Bolsa Bay	Aquatic	Bird	Tern	PCB-008	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-008	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB-018	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-018	--	--	--	--	--	4.97E-05	--	0.00014	1.9E-04	--	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-018	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB-028	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-028	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-028	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB-044	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-044	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-044	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB-052	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-052	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB-052	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-066	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-066	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB-101	--	--	--	--	--	--	--	--	0.00062	6.2E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-101	--	--	--	--	--	--	--	--	0.00015	1.5E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-101	--	--	--	--	--	--	--	--	--	--	--	--
Bolsa Bay	Aquatic	Bird	Tern	PCB-105	--	--	--	--	--	--	--	--	0.00042	4.2E-04	--	--
Bolsa Bay	Aquatic	Bird	Heron	PCB-105	--	--	--	--	--	--	--	--	0.0001	1.0E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL	
Bolsa Bay	Aquatic	Bird	Tern	PCB-118	--	--	--	--	--	--	--	0.00101	1.0E-03	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-118	--	--	--	--	--	--	--	0.00024	2.4E-04	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	PCB-118	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-128	--	--	--	--	--	--	--	0.0003	3.0E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-128	--	--	--	--	--	--	--	7.2E-05	7.2E-05	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	PCB-128	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-138	--	--	--	--	--	--	--	0.00106	1.1E-03	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-138	--	--	--	--	0.0000743	--	--	--	0.00026	3.3E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-138	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-153	--	--	--	--	--	--	--	0.00147	1.5E-03	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-153	--	--	--	--	0.0000302	--	--	--	0.00036	3.9E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-153	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-170	--	--	--	--	--	--	--	0.00017	1.7E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-170	--	--	--	--	0.0000124	--	--	--	4.2E-05	5.5E-05	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-170	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-180	--	--	--	--	--	--	--	0.00054	5.4E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-180	--	--	--	--	0.0001386	--	--	--	0.00013	2.7E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-180	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-187	--	--	--	--	--	--	--	0.00039	3.9E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-187	--	--	--	--	0.0000109	--	--	--	9.3E-05	1.0E-04	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-187	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-195	--	--	--	--	--	--	--	0.00015	1.5E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-195	--	--	--	--	0.0000014	--	--	--	3.6E-05	3.7E-05	--	--
Bolsa Bay	Aquatic	Bird	Stilt	PCB-195	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	PCB-206	--	--	--	--	--	--	--	0.00015	1.5E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	PCB-206	--	--	--	--	--	--	--	3.6E-05	3.6E-05	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	PCB-206	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Perylene	--	--	--	--	--	--	--	1E-05	1.0E-05	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Perylene	--	--	--	--	0.0000004	--	--	--	2.5E-06	2.9E-06	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Perylene	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Phenanthrene	3.8E-05	--	--	--	--	--	--	0.00114	1.2E-03	--	1.1E-05	
Bolsa Bay	Aquatic	Bird	Heron	Phenanthrene	4.4E-05	--	--	--	0.0000104	--	--	--	0.00028	3.3E-04	--	1.7E-06
Bolsa Bay	Aquatic	Bird	Stilt	Phenanthrene	0.00022	--	--	--	--	--	--	--	2.2E-04	--	1.5E-06	
Bolsa Bay	Aquatic	Bird	Stilt	Phenol	0.00113	--	--	--	--	--	--	--	1.1E-03	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Phenol	0.00023	--	--	--	--	--	--	--	2.3E-04	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Phenol	0.0002	--	--	--	--	--	--	--	2.0E-04	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Pyrene	0.00011	--	--	--	--	--	--	--	0.00114	1.3E-03	--	--
Bolsa Bay	Aquatic	Bird	Stilt	Pyrene	0.00066	--	--	--	--	--	--	--	6.6E-04	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Bolsa Bay	Aquatic	Bird	Heron	Pyrene	0.00013	--	--	0.0000031	--	--	--	0.00028	4.1E-04	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Toluene	--	--	--	--	--	--	--	0.00055	5.5E-04	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Toluene	--	--	--	0.0001634	--	--	--	0.00013	3.0E-04	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Toluene	--	--	--	--	--	--	--	--	--	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	TPH-Diesel	1.57627	--	--	--	--	--	--	--	1.6E+00	--	--	
Bolsa Bay	Aquatic	Bird	Heron	TPH-Diesel	0.31873	--	--	--	--	--	--	--	3.2E-01	--	--	
Bolsa Bay	Aquatic	Bird	Tern	TPH-Diesel	0.27353	--	--	--	--	--	--	--	2.7E-01	--	--	
Bolsa Bay	Aquatic	Bird	Stilt	Waste oil	8.32198	--	--	--	--	--	--	--	8.3E+00	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Waste oil	1.68275	--	--	--	--	--	--	--	1.7E+00	--	--	
Bolsa Bay	Aquatic	Bird	Tern	Waste oil	1.44411	--	--	--	--	--	--	--	1.4E+00	--	--	
Bolsa Bay	Aquatic	Bird	Heron	Xylene (m,p-)	--	--	--	0.0000356	--	--	--	--	3.6E-05	1.0E-07	--	
Bolsa Bay	Aquatic	Bird	Stilt	Xylene (m,p-)	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Bolsa Bay	Aquatic	Bird	Tern	Xylene (m,p-)	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Bolsa Bay	Aquatic	Bird	Heron	Xylene (o-)	--	--	--	0.0000069	--	--	--	--	6.9E-06	0.0E+00	--	
Bolsa Bay	Aquatic	Bird	Stilt	Xylene (o-)	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Bolsa Bay	Aquatic	Bird	Tern	Xylene (o-)	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Full Tidal	Aquatic	Bird	Stilt	Antimony	0.00111	--	--	--	--	--	--	--	1.1E-03	--	--	
Full Tidal	Aquatic	Bird	Heron	Antimony	0.00022	--	--	--	--	--	--	--	2.2E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Antimony	0.00019	--	--	--	--	--	--	--	1.9E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	Arsenic	0.07198	--	--	--	--	0.04672	--	--	--	1.2E-01	3.3E-02	1.3E-02
Full Tidal	Aquatic	Bird	Heron	Arsenic	0.01455	--	0.0016686	--	--	0.0052195	--	--	--	2.1E-02	4.4E-03	1.8E-03
Full Tidal	Aquatic	Bird	Tern	Arsenic	0.01249	--	--	--	--	--	--	--	--	1.2E-02	4.7E-03	1.9E-03
Full Tidal	Aquatic	Bird	Stilt	Barium	5.16574	--	--	--	--	1.152	--	0.73985	--	7.1E+00	5.2E-02	--
Full Tidal	Aquatic	Bird	Heron	Barium	1.04454	--	0.184331	0.0195197	--	0.1287	0.02112	0.33062	0.24206	2.0E+00	1.1E-02	--
Full Tidal	Aquatic	Bird	Tern	Barium	0.89641	--	--	--	--	--	--	--	0.99869	1.9E+00	1.9E-02	--
Full Tidal	Aquatic	Bird	Stilt	Beryllium	0.0074	--	--	--	--	0.04544	--	--	--	5.3E-02	--	--
Full Tidal	Aquatic	Bird	Tern	Beryllium	0.00128	--	--	--	--	--	--	--	0.0149	1.6E-02	--	--
Full Tidal	Aquatic	Bird	Heron	Beryllium	0.0015	--	0.0004221	--	--	0.0050765	0.000858	--	0.00361	1.1E-02	--	--
Full Tidal	Aquatic	Bird	Tern	Cadmium	0.0009	--	--	--	--	--	--	--	0.00587	6.8E-03	9.0E-03	6.5E-04
Full Tidal	Aquatic	Bird	Stilt	Cadmium	0.00521	--	--	--	--	--	--	--	--	5.2E-03	5.1E-03	3.7E-04
Full Tidal	Aquatic	Bird	Heron	Cadmium	0.00105	--	--	0.0013181	--	--	0.000468	--	0.00142	4.3E-03	3.1E-03	2.2E-04
Full Tidal	Aquatic	Bird	Stilt	Chromium	0.2844	--	--	--	--	0.3072	--	0.014296	--	6.1E-01	8.7E-01	--
Full Tidal	Aquatic	Bird	Tern	Chromium	0.04935	--	--	--	--	--	--	--	0.28765	3.4E-01	6.6E-01	--
Full Tidal	Aquatic	Bird	Heron	Chromium	0.05751	--	0.003362	0.00495	--	0.03432	0.001518	0.006389	0.06972	1.8E-01	1.9E-01	--
Full Tidal	Aquatic	Bird	Stilt	Cobalt	0.07591	--	--	--	--	0.02624	--	0.001931	--	1.0E-01	6.7E-01	6.9E-02
Full Tidal	Aquatic	Bird	Heron	Cobalt	0.01535	--	0.0004244	0.0008853	--	0.0029315	0.003366	0.000863	0.00284	2.7E-02	1.3E-01	1.3E-02
Full Tidal	Aquatic	Bird	Tern	Cobalt	0.01317	--	--	--	--	--	--	--	0.01172	2.5E-02	2.2E-01	2.2E-02
Full Tidal	Aquatic	Bird	Stilt	Copper	0.181	--	--	--	--	0.256	--	0.222202	--	6.6E-01	2.2E-02	1.7E-02

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Full Tidal	Aquatic	Bird	Tern	Copper	0.03141	--	--	--	--	--	--	0.42636	4.6E-01	2.1E-02	1.6E-02		
Full Tidal	Aquatic	Bird	Heron	Copper	0.0366	--	0.0034917	0.0371177	--	0.0286	0.0231	0.099297	0.10334	3.3E-01	8.1E-03	6.2E-03	
Full Tidal	Aquatic	Bird	Stilt	Lead	0.22281	--	--	--	--	0.1152	--	0.00242	--	3.4E-01	4.2E-01	4.2E-02	
Full Tidal	Aquatic	Bird	Tern	Lead	0.03866	--	--	--	--	--	--	--	0.03992	7.9E-02	1.3E-01	1.3E-02	
Full Tidal	Aquatic	Bird	Heron	Lead	0.04505	--	0.0026281	0.0026585	--	0.01287	0.000726	0.001081	0.00968	7.5E-02	6.8E-02	6.8E-03	
Full Tidal	Aquatic	Bird	Tern	Mercury	0.00034	--	--	--	1.8E-05	--	--	--	0.00377	4.1E-03	2.1E-03	--	
Full Tidal	Aquatic	Bird	Stilt	Mercury	0.00194	--	--	--	1.1E-05	--	--	--	--	2.0E-03	7.5E-04	--	
Full Tidal	Aquatic	Bird	Heron	Mercury	0.00039	--	--	0.0001762	6.7E-06	--	--	--	0.00091	1.5E-03	4.2E-04	--	
Full Tidal	Aquatic	Bird	Stilt	Molybdenum	0.03181	--	--	--	--	--	--	--	--	3.2E-02	--	1.4E-03	
Full Tidal	Aquatic	Bird	Heron	Molybdenum	0.00643	--	--	--	--	--	--	--	--	6.4E-03	--	2.1E-04	
Full Tidal	Aquatic	Bird	Tern	Molybdenum	0.00552	--	--	--	--	--	--	--	--	5.5E-03	--	3.3E-04	
Full Tidal	Aquatic	Bird	Stilt	Nickel	0.21243	--	--	--	--	0.2048	--	0.019501	--	4.4E-01	8.0E-03	--	
Full Tidal	Aquatic	Bird	Tern	Nickel	0.03686	--	--	--	--	--	--	--	0.21465	2.5E-01	6.2E-03	--	
Full Tidal	Aquatic	Bird	Heron	Nickel	0.04296	--	0.0047581	0.0098431	--	0.02288	0.06138	0.008714	0.05202	2.0E-01	2.8E-03	--	
Full Tidal	Aquatic	Bird	Stilt	Selenium	0.01993	--	--	--	--	--	--	0.072061	--	9.2E-02	3.2E-01	--	
Full Tidal	Aquatic	Bird	Tern	Selenium	0.00346	--	--	--	--	--	--	--	0.08161	8.5E-02	4.1E-01	--	
Full Tidal	Aquatic	Bird	Heron	Selenium	0.00403	--	--	0.001576	--	--	0.001466	0.032202	0.01978	5.9E-02	1.6E-01	--	
Full Tidal	Aquatic	Bird	Stilt	Silver	0.00448	--	--	--	--	--	--	0.011597	--	1.6E-02	--	5.9E-04	
Full Tidal	Aquatic	Bird	Heron	Silver	0.00091	--	--	--	--	--	--	0.005183	--	6.1E-03	--	1.7E-04	
Full Tidal	Aquatic	Bird	Tern	Silver	0.00078	--	--	--	--	--	--	--	--	7.8E-04	--	3.9E-05	
Full Tidal	Aquatic	Bird	Tern	Sulfate	10.612	--	--	--	1052.1	--	--	--	--	1.1E+03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Sulfate	61.1536	--	--	--	623.7	--	--	--	--	6.8E+02	--	--	
Full Tidal	Aquatic	Bird	Heron	Sulfate	12.3656	--	--	--	384.3	--	--	--	--	4.0E+02	--	--	
Full Tidal	Aquatic	Bird	Stilt	Sulfide	0.65284	--	--	--	--	--	--	--	--	6.5E-01	--	--	
Full Tidal	Aquatic	Bird	Heron	Sulfide	0.13201	--	--	--	--	--	--	--	--	1.3E-01	--	--	
Full Tidal	Aquatic	Bird	Tern	Sulfide	0.11329	--	--	--	--	--	--	--	--	1.1E-01	--	--	
Full Tidal	Aquatic	Bird	Stilt	Thallium	0.00575	--	--	--	--	--	--	--	--	5.7E-03	--	2.2E-04	
Full Tidal	Aquatic	Bird	Heron	Thallium	0.00116	--	--	--	--	--	--	--	--	1.2E-03	--	3.3E-05	
Full Tidal	Aquatic	Bird	Tern	Thallium	0.001	--	--	--	--	--	--	--	--	1.0E-03	--	5.2E-05	
Full Tidal	Aquatic	Bird	Stilt	Vanadium	0.48925	--	--	--	--	0.1344	--	0.003363	--	6.3E-01	7.8E-02	--	
Full Tidal	Aquatic	Bird	Heron	Vanadium	0.09893	--	0.0033316	0.001287	--	0.015015	0.001056	0.001503	0.01065	1.3E-01	1.2E-02	--	
Full Tidal	Aquatic	Bird	Tern	Vanadium	0.0849	--	--	--	--	--	--	--	0.04395	1.3E-01	2.2E-02	--	
Full Tidal	Aquatic	Bird	Tern	Zinc	0.11189	--	--	--	--	--	--	--	5.94302	6.1E+00	8.8E-01	9.7E-02	
Full Tidal	Aquatic	Bird	Heron	Zinc	0.13038	--	0.022916	0.7180084	--	0.2063967	0.0924	0.083798	1.44043	2.7E+00	2.1E-01	2.4E-02	
Full Tidal	Aquatic	Bird	Stilt	Zinc	0.64481	--	--	--	--	1.847467	--	0.187519	--	2.7E+00	2.9E-01	3.2E-02	
Full Tidal	Aquatic	Bird	Stilt	Ammonia as Nitrogen	0.25733	--	--	--	--	--	--	--	--	2.6E-01	--	--	
Full Tidal	Aquatic	Bird	Heron	Ammonia as Nitrogen	0.05203	--	--	--	--	--	--	--	--	5.2E-02	--	--	
Full Tidal	Aquatic	Bird	Tern	Ammonia as Nitrogen	0.04465	--	--	--	--	--	--	--	--	4.5E-02	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Full Tidal	Aquatic	Bird	Stilt	Chloride	319.6	--	--	--	--	--	--	--	--	3.2E+02	--	--
Full Tidal	Aquatic	Bird	Heron	Chloride	64.625	--	--	--	--	--	--	--	--	6.5E+01	--	--
Full Tidal	Aquatic	Bird	Tern	Chloride	55.46	--	--	--	--	--	--	--	--	5.5E+01	--	--
Full Tidal	Aquatic	Bird	Stilt	Phosphorus, Total as P	0.00612	--	--	--	--	--	--	--	--	6.1E-03	--	--
Full Tidal	Aquatic	Bird	Heron	Phosphorus, Total as P	0.00124	--	--	--	--	--	--	--	--	1.2E-03	--	--
Full Tidal	Aquatic	Bird	Tern	Phosphorus, Total as P	0.00106	--	--	--	--	--	--	--	--	1.1E-03	--	--
Full Tidal	Aquatic	Bird	Stilt	Phosphorus, Total as PO4	0.01904	--	--	--	--	--	--	--	--	1.9E-02	--	--
Full Tidal	Aquatic	Bird	Heron	Phosphorus, Total as PO4	0.00385	--	--	--	--	--	--	--	--	3.9E-03	--	--
Full Tidal	Aquatic	Bird	Tern	Phosphorus, Total as PO4	0.0033	--	--	--	--	--	--	--	--	3.3E-03	--	--
Full Tidal	Aquatic	Bird	Stilt	1,2-Dichlorobenzene	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	--	--
Full Tidal	Aquatic	Bird	Heron	1,2-Dichlorobenzene	5.3E-06	--	--	--	--	--	--	--	--	5.3E-06	--	--
Full Tidal	Aquatic	Bird	Tern	1,2-Dichlorobenzene	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	--	--
Full Tidal	Aquatic	Bird	Heron	1,2-Dichloroethene (cis)	--	--	--	0.0001584	--	--	--	--	--	1.6E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	1,2-Dichloroethene (cis)	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	1,2-Dichloroethene (cis)	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Stilt	1,2-Dichloroethene (cis/trans)	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	--	--
Full Tidal	Aquatic	Bird	Heron	1,2-Dichloroethene (cis/trans)	5.3E-06	--	--	--	--	--	--	--	--	5.3E-06	--	--
Full Tidal	Aquatic	Bird	Tern	1,2-Dichloroethene (cis/trans)	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	--	--
Full Tidal	Aquatic	Bird	Stilt	1,4-Dichlorobenzene	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	--	--
Full Tidal	Aquatic	Bird	Heron	1,4-Dichlorobenzene	5.3E-06	--	--	--	--	--	--	--	--	5.3E-06	--	--
Full Tidal	Aquatic	Bird	Tern	1,4-Dichlorobenzene	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	--	--
Full Tidal	Aquatic	Bird	Stilt	2,4,5-TP (Silvex)	4.2E-06	--	--	--	--	--	--	--	--	4.2E-06	--	0.0E+00
Full Tidal	Aquatic	Bird	Heron	2,4,5-TP (Silvex)	8E-07	--	--	--	--	--	--	--	--	8.0E-07	--	0.0E+00
Full Tidal	Aquatic	Bird	Tern	2,4,5-TP (Silvex)	7E-07	--	--	--	--	--	--	--	--	7.0E-07	--	0.0E+00
Full Tidal	Aquatic	Bird	Stilt	2,4-DB	0.00025	--	--	--	--	--	--	--	--	2.5E-04	1.4E-06	--
Full Tidal	Aquatic	Bird	Heron	2,4-DB	5.2E-05	--	--	--	--	--	--	--	--	5.2E-05	2.0E-07	--
Full Tidal	Aquatic	Bird	Tern	2,4-DB	4.4E-05	--	--	--	--	--	--	--	--	4.4E-05	3.0E-07	--
Full Tidal	Aquatic	Bird	Tern	2-Butanone	6.6E-05	--	--	--	--	--	--	--	0.01062	1.1E-02	--	--
Full Tidal	Aquatic	Bird	Heron	2-Butanone	7.6E-05	--	--	--	--	--	--	--	0.00257	2.7E-03	--	--
Full Tidal	Aquatic	Bird	Stilt	2-Butanone	0.00038	--	--	--	--	--	--	--	--	3.8E-04	--	--
Full Tidal	Aquatic	Bird	Tern	2-Hexanone	--	--	--	--	--	--	--	--	0.00177	1.8E-03	--	--
Full Tidal	Aquatic	Bird	Heron	2-Hexanone	--	--	--	--	--	--	--	--	0.00043	4.3E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	4,4'-DDD	1.1E-05	--	--	--	--	--	--	--	0.00131	1.3E-03	4.9E-03	--
Full Tidal	Aquatic	Bird	Heron	4,4'-DDD	1.2E-05	--	0.0000024	0.0002394	--	0.0000312	0.000188	--	0.00032	7.9E-04	1.6E-03	--
Full Tidal	Aquatic	Bird	Stilt	4,4'-DDD	6.1E-05	--	--	--	--	0.0002794	--	--	--	3.4E-04	9.2E-04	--
Full Tidal	Aquatic	Bird	Tern	4,4'-DDE	5.5E-06	--	--	--	--	--	--	--	0.00421	4.2E-03	--	1.6E-02
Full Tidal	Aquatic	Bird	Heron	4,4'-DDE	6.4E-06	--	0.0000039	0.0001273	--	0.0000056	5.7E-06	1.67E-05	0.00102	1.2E-03	--	2.5E-03

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Full Tidal	Aquatic	Bird	Stilt	4,4'-DDE	3.2E-05	--	--	--	--	0.0000505	--	3.73E-05	--	1.2E-04	--	3.4E-04	
Full Tidal	Aquatic	Bird	Heron	4,4'-DDT	1.1E-05	--	--	0.0001226	--	--	--	--	3.7E-05	1.7E-04	1.8E-03	--	
Full Tidal	Aquatic	Bird	Tern	4,4'-DDT	9.3E-06	--	--	--	--	--	--	--	0.00015	1.6E-04	3.1E-03	--	
Full Tidal	Aquatic	Bird	Stilt	4,4'-DDT	5.3E-05	--	--	--	--	--	--	--	--	5.3E-05	7.5E-04	--	
Full Tidal	Aquatic	Bird	Stilt	4-Nitrophenol	0.0018	--	--	--	--	--	--	--	--	1.8E-03	--	--	
Full Tidal	Aquatic	Bird	Heron	4-Nitrophenol	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	4-Nitrophenol	0.00031	--	--	--	--	--	--	--	--	3.1E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Acenaphthene	8.3E-05	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Acenaphthene	0.00048	--	--	--	--	--	--	--	--	4.8E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Acenaphthene	9.6E-05	--	--	0.0000007	--	--	--	--	0.00029	3.8E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Acenaphthylene	--	--	--	--	--	--	--	--	0.00118	1.2E-03	--	--	
Full Tidal	Aquatic	Bird	Heron	Acenaphthylene	--	--	--	--	--	--	--	--	0.00029	2.9E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	Acenaphthylene	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	Acetone	0.00017	--	--	--	--	--	--	--	0.118	1.2E-01	4.9E-05	--	
Full Tidal	Aquatic	Bird	Heron	Acetone	0.0002	--	--	0.016335	--	--	--	--	0.0286	4.5E-02	1.0E-05	--	
Full Tidal	Aquatic	Bird	Stilt	Acetone	0.00098	--	--	--	--	--	--	--	--	9.8E-04	3.0E-07	--	
Full Tidal	Aquatic	Bird	Stilt	Aldrin	--	--	--	--	--	0.0002023	--	--	--	2.0E-04	--	5.7E-05	
Full Tidal	Aquatic	Bird	Heron	Aldrin	--	--	--	--	--	0.0000226	--	--	--	2.3E-05	--	4.8E-06	
Full Tidal	Aquatic	Bird	Tern	Aldrin	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	
Full Tidal	Aquatic	Bird	Tern	Anthracene	0.00011	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Anthracene	0.00061	--	--	--	--	--	--	--	--	6.1E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Anthracene	0.00012	--	--	0.000001	--	--	--	--	0.00029	4.1E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	Benzene	0.00053	--	--	--	--	--	--	--	--	5.3E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Benzene	9.2E-05	--	--	--	--	--	--	--	0.0004	4.9E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Benzene	0.00011	--	--	0.0000144	--	--	--	--	9.7E-05	2.2E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Benzo(a)anthracene	0.00011	--	--	--	--	--	--	--	0.00118	1.3E-03	1.5E-05	--	
Full Tidal	Aquatic	Bird	Stilt	Benzo(a)anthracene	0.00064	--	--	--	--	--	--	--	--	6.4E-04	5.3E-06	--	
Full Tidal	Aquatic	Bird	Heron	Benzo(a)anthracene	0.00013	--	--	0.0000031	--	--	--	--	0.00029	4.2E-04	2.6E-06	--	
Full Tidal	Aquatic	Bird	Tern	Benzo(a)pyrene	0.00011	--	--	--	--	--	--	--	0.00118	1.3E-03	1.5E-04	--	
Full Tidal	Aquatic	Bird	Stilt	Benzo(a)pyrene	0.00062	--	--	--	--	--	--	--	--	6.2E-04	5.1E-05	--	
Full Tidal	Aquatic	Bird	Heron	Benzo(a)pyrene	0.00013	--	--	0.0000003	--	--	--	--	0.00029	4.1E-04	2.5E-05	--	
Full Tidal	Aquatic	Bird	Tern	Benzo(b)fluoranthene	0.00012	--	--	--	--	--	--	--	0.00118	1.3E-03	1.5E-05	--	
Full Tidal	Aquatic	Bird	Stilt	Benzo(b)fluoranthene	0.00067	--	--	--	--	--	--	--	--	6.7E-04	5.5E-06	--	
Full Tidal	Aquatic	Bird	Heron	Benzo(b)fluoranthene	0.00013	--	--	0.0000012	--	--	--	--	0.00029	4.2E-04	2.6E-06	--	
Full Tidal	Aquatic	Bird	Tern	Benzo(e)pyrene	0.00014	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Benzo(e)pyrene	0.00079	--	--	--	--	--	--	--	--	7.9E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Benzo(e)pyrene	0.00016	--	--	0.0000011	--	--	--	--	0.00029	4.5E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Benzo(g,h,i)perylene	0.00013	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Full Tidal	Aquatic	Bird	Stilt	Benzo(g,h,i)perylene	0.00077	--	--	--	--	--	--	--	--	7.7E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Benzo(g,h,i)perylene	0.00016	--	--	0.0000012	--	--	--	--	0.00029	4.4E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Benzo(k)fluoranthene	0.00011	--	--	--	--	--	--	--	0.00118	1.3E-03	1.5E-05	--	
Full Tidal	Aquatic	Bird	Stilt	Benzo(k)fluoranthene	0.00063	--	--	--	--	--	--	--	--	6.3E-04	5.2E-06	--	
Full Tidal	Aquatic	Bird	Heron	Benzo(k)fluoranthene	0.00013	--	--	0.0000006	--	--	--	--	0.00029	4.1E-04	2.6E-06	--	
Full Tidal	Aquatic	Bird	Stilt	BHC-alpha	7.5E-06	--	--	--	0.0003601	--	1.3E-06	--	--	3.7E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	BHC-alpha	1.3E-06	--	--	--	--	--	--	--	0.00021	2.1E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	BHC-alpha	1.5E-06	--	0.0000004	0.0000054	--	0.0000402	2.8E-06	6E-07	5.1E-05	1.0E-04	--	--	--
Full Tidal	Aquatic	Bird	Heron	BHC-beta	1.9E-06	--	0.0000023	0.0002833	--	0.0000134	0.000039	9.4E-06	6E-05	4.1E-04	--	--	--
Full Tidal	Aquatic	Bird	Tern	BHC-beta	1.6E-06	--	--	--	--	--	--	--	0.00025	2.5E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	BHC-beta	9.3E-06	--	--	--	--	0.0001202	--	0.000021	--	1.5E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	BHC-delta	4.4E-06	--	--	--	--	0.0023998	--	--	--	2.4E-03	--	--	
Full Tidal	Aquatic	Bird	Tern	BHC-delta	8E-07	--	--	--	--	--	--	--	0.00046	4.6E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	BHC-delta	9E-07	--	--	0.0000343	--	0.0002681	--	--	0.00011	4.1E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	BHC-gamma	1.1E-05	--	--	--	--	0.0002212	--	--	--	2.3E-04	--	1.6E-05	
Full Tidal	Aquatic	Bird	Tern	BHC-gamma	1.9E-06	--	--	--	--	--	--	--	5.8E-05	6.0E-05	--	5.7E-06	
Full Tidal	Aquatic	Bird	Heron	BHC-gamma	2.2E-06	--	--	0.0000123	--	0.0000247	--	--	1.4E-05	5.3E-05	--	2.8E-06	
Full Tidal	Aquatic	Bird	Tern	Biphenyl	--	--	--	--	--	--	--	--	3.8E-05	3.8E-05	--	--	
Full Tidal	Aquatic	Bird	Heron	Biphenyl	--	--	--	0.0000036	--	--	--	--	9.2E-06	1.3E-05	--	--	
Full Tidal	Aquatic	Bird	Stilt	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Stilt	Butylbenzylphthalate	0.00064	--	--	--	--	--	--	--	--	6.4E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Butylbenzylphthalate	0.00013	--	--	--	--	--	--	--	--	1.3E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Butylbenzylphthalate	0.00011	--	--	--	--	--	--	--	--	1.1E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	Carbon disulfide	6.1E-05	--	--	--	--	--	--	--	--	6.1E-05	--	--	
Full Tidal	Aquatic	Bird	Heron	Carbon disulfide	1.2E-05	--	--	--	--	--	--	--	--	1.2E-05	--	--	
Full Tidal	Aquatic	Bird	Tern	Carbon disulfide	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	--	--	
Full Tidal	Aquatic	Bird	Tern	Chlordane (technical)	9.9E-06	--	--	--	--	--	--	--	0.00041	4.1E-04	2.8E-04	4.0E-05	
Full Tidal	Aquatic	Bird	Heron	Chlordane (technical)	1.2E-05	--	--	--	--	--	--	--	9.8E-05	1.1E-04	4.0E-05	5.7E-06	
Full Tidal	Aquatic	Bird	Stilt	Chlordane (technical)	5.7E-05	--	--	--	--	--	--	--	--	5.7E-05	2.8E-05	4.0E-06	
Full Tidal	Aquatic	Bird	Tern	Chlordane-alpha	7.6E-06	--	--	--	--	--	--	--	0.00031	3.2E-04	2.1E-04	3.0E-05	
Full Tidal	Aquatic	Bird	Heron	Chlordane-alpha	8.8E-06	--	--	--	--	--	--	--	7.5E-05	8.4E-05	3.1E-05	4.4E-06	
Full Tidal	Aquatic	Bird	Stilt	Chlordane-alpha	4.4E-05	--	--	--	--	--	--	--	--	4.4E-05	2.1E-05	3.1E-06	
Full Tidal	Aquatic	Bird	Stilt	Chlorobenzene	2.8E-05	--	--	--	--	--	--	--	--	2.8E-05	--	--	
Full Tidal	Aquatic	Bird	Heron	Chlorobenzene	5.7E-06	--	--	--	--	--	--	--	--	5.7E-06	--	--	
Full Tidal	Aquatic	Bird	Tern	Chlorobenzene	4.9E-06	--	--	--	--	--	--	--	--	4.9E-06	--	--	
Full Tidal	Aquatic	Bird	Heron	Chloroform	1E-07	--	--	0.1386	--	--	--	--	0.00069	1.4E-01	--	--	
Full Tidal	Aquatic	Bird	Tern	Chloroform	1E-07	--	--	--	--	--	--	--	0.00283	2.8E-03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Chloroform	6E-07	--	--	--	--	--	--	--	--	6.0E-07	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)															
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL
Full Tidal	Aquatic	Bird	Tern	Chrysene	0.00014	--	--	--	--	--	--	0.00118	1.3E-03	1.5E-06	--
Full Tidal	Aquatic	Bird	Stilt	Chrysene	0.00079	--	--	--	--	--	--	--	7.9E-04	7.0E-07	--
Full Tidal	Aquatic	Bird	Heron	Chrysene	0.00016	--	--	0.0000019	--	--	--	--	4.5E-04	3.0E-07	--
Full Tidal	Aquatic	Bird	Stilt	Diazinon	3E-06	--	--	--	--	--	--	--	3.0E-06	--	2.0E-07
Full Tidal	Aquatic	Bird	Heron	Diazinon	6E-07	--	--	--	--	--	--	--	6.0E-07	--	0.0E+00
Full Tidal	Aquatic	Bird	Tern	Diazinon	5E-07	--	--	--	--	--	--	--	5.0E-07	--	0.0E+00
Full Tidal	Aquatic	Bird	Tern	Dibenz(a,h)anthracene	0.00013	--	--	--	--	--	--	0.00118	1.3E-03	1.5E-04	--
Full Tidal	Aquatic	Bird	Stilt	Dibenz(a,h)anthracene	0.00078	--	--	--	--	--	--	--	7.8E-04	6.4E-05	--
Full Tidal	Aquatic	Bird	Heron	Dibenz(a,h)anthracene	0.00016	--	--	0.0000003	--	--	--	0.00029	4.4E-04	2.7E-05	--
Full Tidal	Aquatic	Bird	Tern	Dibenzothiophene	--	--	--	--	--	--	--	4.5E-05	4.5E-05	--	--
Full Tidal	Aquatic	Bird	Heron	Dibenzothiophene	--	--	--	0.0000009	--	--	--	1.1E-05	1.2E-05	--	--
Full Tidal	Aquatic	Bird	Stilt	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	Dieldrin	1.3E-06	--	--	--	2.2E-06	--	--	0.00053	5.3E-04	1.1E-02	--
Full Tidal	Aquatic	Bird	Heron	Dieldrin	1.5E-06	--	--	0.0001075	8E-07	--	--	0.00013	2.4E-04	2.7E-03	--
Full Tidal	Aquatic	Bird	Stilt	Dieldrin	7.4E-06	--	--	--	1.3E-06	--	--	--	8.6E-06	1.3E-04	--
Full Tidal	Aquatic	Bird	Stilt	Diethylphthalate	0.00067	--	--	--	--	--	--	--	6.7E-04	--	--
Full Tidal	Aquatic	Bird	Heron	Diethylphthalate	0.00014	--	--	--	--	--	--	--	1.4E-04	--	--
Full Tidal	Aquatic	Bird	Tern	Diethylphthalate	0.00012	--	--	--	--	--	--	--	1.2E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	Dimethylphthalate	0.00062	--	--	--	--	--	--	--	6.2E-04	--	--
Full Tidal	Aquatic	Bird	Heron	Dimethylphthalate	0.00013	--	--	--	--	--	--	--	1.3E-04	--	--
Full Tidal	Aquatic	Bird	Tern	Dimethylphthalate	0.00011	--	--	--	--	--	--	--	1.1E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	Di-n-butylphthalate	0.00091	--	--	--	--	--	--	--	9.1E-04	--	7.5E-04
Full Tidal	Aquatic	Bird	Heron	Di-n-butylphthalate	0.00018	--	--	--	--	--	--	--	1.8E-04	--	1.1E-04
Full Tidal	Aquatic	Bird	Tern	Di-n-butylphthalate	0.00016	--	--	--	--	--	--	--	1.6E-04	--	1.8E-04
Full Tidal	Aquatic	Bird	Stilt	Di-n-octylphthalate	0.00124	--	--	--	--	--	--	--	1.2E-03	--	6.7E-06
Full Tidal	Aquatic	Bird	Heron	Di-n-octylphthalate	0.00025	--	--	--	--	--	--	--	2.5E-04	--	1.0E-06
Full Tidal	Aquatic	Bird	Tern	Di-n-octylphthalate	0.00022	--	--	--	--	--	--	--	2.2E-04	--	1.6E-06
Full Tidal	Aquatic	Bird	Stilt	Disyston (Disulfoton)	2.1E-06	--	--	--	--	--	--	--	2.1E-06	--	1.0E-07
Full Tidal	Aquatic	Bird	Heron	Disyston (Disulfoton)	4E-07	--	--	--	--	--	--	--	4.0E-07	--	0.0E+00
Full Tidal	Aquatic	Bird	Tern	Disyston (Disulfoton)	4E-07	--	--	--	--	--	--	--	4.0E-07	--	0.0E+00
Full Tidal	Aquatic	Bird	Stilt	Endosulfan I	2.3E-05	--	--	--	--	--	--	--	2.3E-05	2.7E-06	--
Full Tidal	Aquatic	Bird	Heron	Endosulfan I	4.7E-06	--	--	--	--	--	--	--	4.7E-06	4.0E-07	--
Full Tidal	Aquatic	Bird	Tern	Endosulfan I	4E-06	--	--	--	--	--	--	--	4.0E-06	6.0E-07	--
Full Tidal	Aquatic	Bird	Stilt	Endosulfan II	6.1E-06	--	--	--	--	--	--	--	6.1E-06	7.0E-07	--
Full Tidal	Aquatic	Bird	Heron	Endosulfan II	1.2E-06	--	--	--	--	--	--	--	1.2E-06	1.0E-07	--
Full Tidal	Aquatic	Bird	Tern	Endosulfan II	1.1E-06	--	--	--	--	--	--	--	1.1E-06	2.0E-07	--
Full Tidal	Aquatic	Bird	Heron	Endrin	2.1E-06	--	--	0.0000156	3.3E-06	--	--	--	2.1E-05	7.4E-05	--
Full Tidal	Aquatic	Bird	Stilt	Endrin	1.1E-05	--	--	--	5.3E-06	--	--	--	1.6E-05	7.5E-05	--

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Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Full Tidal	Aquatic	Bird	Tern	Endrin	1.8E-06	--	--	--	9E-06	--	--	--	--	1.1E-05	7.0E-05	--	
Full Tidal	Aquatic	Bird	Tern	Endrin aldehyde	1.1E-06	--	--	--	--	--	--	--	0.00032	3.2E-04	2.0E-03	--	
Full Tidal	Aquatic	Bird	Heron	Endrin aldehyde	1.3E-06	--	--	--	--	--	--	--	7.7E-05	7.8E-05	2.7E-04	--	
Full Tidal	Aquatic	Bird	Stilt	Endrin aldehyde	6.2E-06	--	--	--	--	--	--	--	--	6.2E-06	2.9E-05	--	
Full Tidal	Aquatic	Bird	Stilt	Endrin ketone	1.6E-05	--	--	--	--	--	--	--	--	1.6E-05	7.5E-05	--	
Full Tidal	Aquatic	Bird	Heron	Endrin ketone	3.2E-06	--	--	0.0000091	--	--	--	--	--	1.2E-05	4.3E-05	--	
Full Tidal	Aquatic	Bird	Tern	Endrin ketone	2.8E-06	--	--	--	--	--	--	--	--	2.8E-06	1.8E-05	--	
Full Tidal	Aquatic	Bird	Stilt	Ethylbenzene	0.00232	--	--	--	--	--	--	--	--	2.3E-03	--	--	
Full Tidal	Aquatic	Bird	Heron	Ethylbenzene	0.00047	--	--	--	--	--	--	--	--	4.7E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Ethylbenzene	0.0004	--	--	--	--	--	--	--	--	4.0E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Fluoranthene	0.00012	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Fluoranthene	0.00067	--	--	--	--	--	--	--	--	6.7E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Fluoranthene	0.00013	--	--	0.0000109	--	--	--	--	0.00029	4.3E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Fluorene	0.00015	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Fluorene	0.00086	--	--	--	--	--	--	--	--	8.6E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Fluorene	0.00017	--	--	0.0000013	--	--	--	--	0.00029	4.6E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	Heptachlor	--	--	--	--	--	--	--	--	6.3E-05	6.3E-05	--	2.1E-05	
Full Tidal	Aquatic	Bird	Heron	Heptachlor	--	--	--	--	--	--	--	--	1.5E-05	1.5E-05	--	2.8E-06	
Full Tidal	Aquatic	Bird	Stilt	Heptachlor	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Full Tidal	Aquatic	Bird	Tern	Indeno(1,2,3-c,d)pyrene	0.00014	--	--	--	--	--	--	--	0.00118	1.3E-03	1.5E-05	--	
Full Tidal	Aquatic	Bird	Stilt	Indeno(1,2,3-c,d)pyrene	0.00082	--	--	--	--	--	--	--	--	8.2E-04	6.8E-06	--	
Full Tidal	Aquatic	Bird	Heron	Indeno(1,2,3-c,d)pyrene	0.00017	--	--	0.0000005	--	--	--	--	0.00029	4.5E-04	2.8E-06	--	
Full Tidal	Aquatic	Bird	Tern	Methylene chloride	4.9E-06	--	--	--	--	--	--	--	0.03776	3.8E-02	--	--	
Full Tidal	Aquatic	Bird	Heron	Methylene chloride	5.7E-06	--	--	0.004059	--	--	--	--	0.00915	1.3E-02	--	--	
Full Tidal	Aquatic	Bird	Stilt	Methylene chloride	2.8E-05	--	--	--	--	--	--	--	--	2.8E-05	--	--	
Full Tidal	Aquatic	Bird	Tern	Naphthalene	0.00017	--	--	--	--	--	--	--	0.00111	1.3E-03	--	1.2E-05	
Full Tidal	Aquatic	Bird	Stilt	Naphthalene	0.00095	--	--	--	--	--	--	--	--	9.5E-04	--	6.5E-06	
Full Tidal	Aquatic	Bird	Heron	Naphthalene	0.00019	--	--	0.0000089	--	--	--	--	0.00027	4.7E-04	--	2.4E-06	
Full Tidal	Aquatic	Bird	Stilt	n-Propylbenzene	0.0026	--	--	--	--	--	--	--	--	2.6E-03	--	--	
Full Tidal	Aquatic	Bird	Heron	n-Propylbenzene	0.00053	--	--	--	--	--	--	--	--	5.3E-04	--	--	
Full Tidal	Aquatic	Bird	Tern	n-Propylbenzene	0.00045	--	--	--	--	--	--	--	--	4.5E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	Oil and Grease	36.425	--	--	--	--	--	--	--	--	3.6E+01	--	--	
Full Tidal	Aquatic	Bird	Heron	Oil and Grease	7.36535	--	--	--	--	--	--	--	--	7.4E+00	--	--	
Full Tidal	Aquatic	Bird	Tern	Oil and Grease	6.32081	--	--	--	--	--	--	--	--	6.3E+00	--	--	
Full Tidal	Aquatic	Bird	Tern	PCB 1254	3.4E-05	--	--	--	--	--	--	--	0.00823	8.3E-03	--	8.6E-03	
Full Tidal	Aquatic	Bird	Heron	PCB 1254	0.00004	--	0.0000047	--	--	0.0000613	--	--	0.002	2.1E-03	--	1.2E-03	
Full Tidal	Aquatic	Bird	Stilt	PCB 1254	0.0002	--	--	--	--	0.0005491	--	--	--	7.5E-04	--	5.7E-04	
Full Tidal	Aquatic	Bird	Tern	PCB 1260	3E-05	--	--	--	--	--	--	--	0.00353	3.6E-03	--	2.7E-05	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Full Tidal	Aquatic	Bird	Heron	PCB 1260	3.5E-05	--	--	--	--	--	--	0.00085	8.9E-04	--	3.7E-06	
Full Tidal	Aquatic	Bird	Stilt	PCB 1260	0.00017	--	--	--	--	--	--	--	--	1.7E-04	--	1.0E-06
Full Tidal	Aquatic	Bird	Tern	PCB-008	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-008	--	--	--	0.0002475	--	--	--	--	0.00014	3.9E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-018	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-018	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-018	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-028	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-028	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-028	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-044	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-044	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-044	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-052	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-052	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-066	--	--	--	--	--	--	--	--	0.00059	5.9E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-066	--	--	--	--	--	--	--	--	0.00014	1.4E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-101	--	--	--	--	--	--	--	--	0.00082	8.2E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-101	--	--	--	--	--	--	--	--	0.0002	2.0E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-101	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-105	--	--	--	--	--	--	--	--	0.00035	3.5E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-105	--	--	--	0.0001238	--	--	--	--	8.6E-05	2.1E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-118	--	--	--	--	--	--	--	--	0.00071	7.1E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-118	--	--	--	0.0001238	--	--	--	--	0.00017	3.0E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-128	--	--	--	--	--	--	--	--	0.0003	3.0E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-128	--	--	--	--	--	--	--	--	7.2E-05	7.2E-05	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--
Full Tidal	Aquatic	Bird	Tern	PCB-138	--	--	--	--	--	--	--	--	0.00094	9.4E-04	--	--
Full Tidal	Aquatic	Bird	Heron	PCB-138	--	--	--	0.0001238	--	--	--	--	0.00023	3.5E-04	--	--
Full Tidal	Aquatic	Bird	Stilt	PCB-138	--	--	--	--	--	--	--	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Full Tidal	Aquatic	Bird	Tern	PCB-153	--	--	--	--	--	--	--	--	0.00116	1.2E-03	--	--	
Full Tidal	Aquatic	Bird	Heron	PCB-153	--	--	--	0.0001238	--	--	--	--	0.00028	4.0E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	PCB-153	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	PCB-170	--	--	--	--	--	--	--	--	0.00019	1.9E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	PCB-170	--	--	--	0.0000644	--	--	--	--	4.7E-05	1.1E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	PCB-180	--	--	--	--	--	--	--	--	0.00036	3.6E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	PCB-180	--	--	--	0.0000642	--	--	--	--	8.8E-05	1.5E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	PCB-180	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	PCB-187	--	--	--	--	--	--	--	--	0.00036	3.6E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	PCB-187	--	--	--	0.0001238	--	--	--	--	8.6E-05	2.1E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	PCB-195	--	--	--	--	--	--	--	--	0.00015	1.5E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	PCB-195	--	--	--	--	--	--	--	--	3.6E-05	3.6E-05	--	--	
Full Tidal	Aquatic	Bird	Stilt	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	PCB-206	--	--	--	--	--	--	--	--	0.00015	1.5E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	PCB-206	--	--	--	--	--	--	--	--	3.6E-05	3.6E-05	--	--	
Full Tidal	Aquatic	Bird	Stilt	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	PCB-209	--	--	--	--	--	--	--	--	0.00027	2.7E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	PCB-209	--	--	--	--	--	--	--	--	6.5E-05	6.5E-05	--	--	
Full Tidal	Aquatic	Bird	Stilt	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Stilt	Pentachlorophenol	0.00107	--	--	--	--	--	--	--	--	1.1E-03	--	3.3E-02	
Full Tidal	Aquatic	Bird	Heron	Pentachlorophenol	0.00022	--	--	--	--	--	--	--	--	2.2E-04	--	5.0E-03	
Full Tidal	Aquatic	Bird	Tern	Pentachlorophenol	0.00019	--	--	--	--	--	--	--	--	1.9E-04	--	7.8E-03	
Full Tidal	Aquatic	Bird	Tern	Perylene	--	--	--	--	--	--	--	--	8.9E-05	8.9E-05	--	--	
Full Tidal	Aquatic	Bird	Heron	Perylene	--	--	--	0.0000003	--	--	--	--	2.2E-05	2.2E-05	--	--	
Full Tidal	Aquatic	Bird	Stilt	Perylene	--	--	--	--	--	--	--	--	--	--	--	--	
Full Tidal	Aquatic	Bird	Tern	Phenanthrene	0.00021	--	--	--	--	--	--	--	0.00118	1.4E-03	--	1.3E-05	
Full Tidal	Aquatic	Bird	Stilt	Phenanthrene	0.00122	--	--	--	--	--	--	--	--	1.2E-03	--	8.2E-06	
Full Tidal	Aquatic	Bird	Heron	Phenanthrene	0.00025	--	--	0.0000079	--	--	--	--	0.00029	5.4E-04	--	2.7E-06	
Full Tidal	Aquatic	Bird	Tern	Pyrene	0.00013	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--	
Full Tidal	Aquatic	Bird	Stilt	Pyrene	0.00078	--	--	--	--	--	--	--	--	7.8E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Pyrene	0.00016	--	--	0.0000025	--	--	--	--	0.00029	4.5E-04	--	--	
Full Tidal	Aquatic	Bird	Stilt	Toluene	0.00012	--	--	--	--	--	--	--	--	1.2E-04	--	--	
Full Tidal	Aquatic	Bird	Heron	Toluene	2.4E-05	--	--	--	--	--	--	--	--	2.4E-05	--	--	
Full Tidal	Aquatic	Bird	Tern	Toluene	2.1E-05	--	--	--	--	--	--	--	--	2.1E-05	--	--	
Full Tidal	Aquatic	Bird	Stilt	TPH-Diesel	4.77683	--	--	--	0.3069	--	--	--	--	5.1E+00	--	--	
Full Tidal	Aquatic	Bird	Tern	TPH-Diesel	0.82892	--	--	--	0.5177	--	--	--	--	1.3E+00	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	Total Exposure	NOAEL	LOAEL
Full Tidal	Aquatic	Bird	Heron	TPH-Diesel	0.9659	--	--	--	0.1891	--	--	--	--	1.2E+00	--	--
Full Tidal	Aquatic	Bird	Stilt	Waste oil	16.2284	--	--	--	1.386	--	--	--	--	1.8E+01	--	--
Full Tidal	Aquatic	Bird	Tern	Waste oil	2.81611	--	--	--	2.338	--	--	--	--	5.2E+00	--	--
Full Tidal	Aquatic	Bird	Heron	Waste oil	3.28148	--	--	--	0.854	--	--	--	--	4.1E+00	--	--
Full Tidal	Aquatic	Bird	Stilt	Xylene (total)	0.00307	--	--	--	--	--	--	--	--	3.1E-03	7.5E-06	--
Full Tidal	Aquatic	Bird	Heron	Xylene (total)	0.00062	--	--	--	--	--	--	--	--	6.2E-04	1.1E-06	--
Full Tidal	Aquatic	Bird	Tern	Xylene (total)	0.00053	--	--	--	--	--	--	--	--	5.3E-04	1.8E-06	--
Future Full Tidal	Aquatic	Bird	Stilt	Antimony	0.00105	--	--	--	--	--	--	--	--	1.1E-03	--	--
Future Full Tidal	Aquatic	Bird	Heron	Antimony	0.00021	--	--	--	--	--	--	--	--	2.1E-04	--	--
Future Full Tidal	Aquatic	Bird	Tern	Antimony	0.00018	--	--	--	--	--	--	--	--	1.8E-04	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Arsenic	0.30684	--	--	--	0.00382	0.0896	--	--	--	4.0E-01	1.1E-01	4.4E-02
Future Full Tidal	Aquatic	Bird	Heron	Arsenic	0.06204	--	0.0071134	--	0.00236	0.01001	--	--	--	8.2E-02	1.7E-02	6.7E-03
Future Full Tidal	Aquatic	Bird	Tern	Arsenic	0.05325	--	--	--	0.00645	--	--	--	--	6.0E-02	2.2E-02	9.0E-03
Future Full Tidal	Aquatic	Bird	Stilt	Barium	8.30666	--	--	--	0.05269	9.488079	--	1.1897	--	1.9E+01	1.4E-01	--
Future Full Tidal	Aquatic	Bird	Heron	Barium	1.67966	--	0.2964097	0.0884818	0.03247	1.059996	0.607597	0.531647	0.09937	4.4E+00	2.4E-02	--
Future Full Tidal	Aquatic	Bird	Tern	Barium	1.44145	--	--	--	0.08889	--	--	--	0.41001	1.9E+00	2.0E-02	--
Future Full Tidal	Aquatic	Bird	Stilt	Beryllium	0.05843	--	--	--	--	0.04096	--	--	--	9.9E-02	--	--
Future Full Tidal	Aquatic	Bird	Heron	Beryllium	0.01182	--	0.003332	--	--	0.004576	0.007734	--	0.00414	3.2E-02	--	--
Future Full Tidal	Aquatic	Bird	Tern	Beryllium	0.01014	--	--	--	--	--	--	--	0.01709	2.7E-02	--	--
Future Full Tidal	Aquatic	Bird	Tern	Cadmium	0.00382	--	--	--	9.8E-05	--	--	--	0.02479	2.9E-02	3.8E-02	2.8E-03
Future Full Tidal	Aquatic	Bird	Stilt	Cadmium	0.022	--	--	--	5.8E-05	--	--	--	--	2.2E-02	2.1E-02	1.6E-03
Future Full Tidal	Aquatic	Bird	Heron	Cadmium	0.00445	--	--	0.0007359	3.6E-05	--	0.001977	--	0.00601	1.3E-02	9.6E-03	6.9E-04
Future Full Tidal	Aquatic	Bird	Stilt	Chromium	1.21694	--	--	--	0.00129	0.3072	--	0.061172	--	1.6E+00	2.3E+00	--
Future Full Tidal	Aquatic	Bird	Heron	Chromium	0.24607	--	0.0143858	0.012375	0.00079	0.03432	0.088942	0.027336	0.01802	4.4E-01	4.7E-01	--
Future Full Tidal	Aquatic	Bird	Tern	Chromium	0.21117	--	--	--	0.00217	--	--	--	0.07437	2.9E-01	5.6E-01	--
Future Full Tidal	Aquatic	Bird	Stilt	Cobalt	0.42216	--	--	--	0.0003	0.06016	--	0.010739	--	4.9E-01	3.2E+00	3.2E-01
Future Full Tidal	Aquatic	Bird	Heron	Cobalt	0.08536	--	0.00236	0.0011794	0.00018	0.006721	0.029511	0.004799	0.00393	1.3E-01	6.4E-01	6.6E-02
Future Full Tidal	Aquatic	Bird	Tern	Cobalt	0.07326	--	--	--	0.0005	--	--	--	0.01619	9.0E-02	7.9E-01	8.1E-02
Future Full Tidal	Aquatic	Bird	Stilt	Copper	0.83756	--	--	--	0.00147	0.5301533	--	1.028207	--	2.4E+00	7.9E-02	6.0E-02
Future Full Tidal	Aquatic	Bird	Heron	Copper	0.16936	--	0.0161573	0.04257	0.00091	0.0592281	0.283631	0.45948	0.08765	1.1E+00	2.7E-02	2.1E-02
Future Full Tidal	Aquatic	Bird	Tern	Copper	0.14534	--	--	--	0.00249	--	--	--	0.36165	5.1E-01	2.3E-02	1.7E-02
Future Full Tidal	Aquatic	Bird	Stilt	Lead	1.81634	--	--	--	0.002	0.192	--	0.019725	--	2.0E+00	2.5E+00	2.5E-01
Future Full Tidal	Aquatic	Bird	Heron	Lead	0.36727	--	0.0214243	0.0068982	0.00123	0.02145	0.036162	0.008815	0.01742	4.8E-01	4.4E-01	4.4E-02
Future Full Tidal	Aquatic	Bird	Tern	Lead	0.31519	--	--	--	0.00338	--	--	--	0.07189	3.9E-01	6.5E-01	6.5E-02
Future Full Tidal	Aquatic	Bird	Tern	Mercury	0.00537	--	--	--	1.5E-05	--	--	--	0.06011	6.6E-02	3.4E-02	--
Future Full Tidal	Aquatic	Bird	Stilt	Mercury	0.03097	--	--	--	8.9E-06	--	--	--	--	3.1E-02	1.2E-02	--
Future Full Tidal	Aquatic	Bird	Heron	Mercury	0.00626	--	--	0.0001584	5.5E-06	--	--	--	0.01457	2.1E-02	6.0E-03	--
Future Full Tidal	Aquatic	Bird	Stilt	Molybdenum	0.03842	--	--	--	--	--	--	--	--	3.8E-02	--	1.7E-03

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Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Future Full Tidal	Aquatic	Bird	Heron	Molybdenum	0.00777	--	--	--	--	--	--	--	--	7.8E-03	--	2.5E-04
Future Full Tidal	Aquatic	Bird	Tern	Molybdenum	0.00667	--	--	--	--	--	--	--	--	6.7E-03	--	4.0E-04
Future Full Tidal	Aquatic	Bird	Stilt	Nickel	1.36807	--	--	--	0.00129	0.4608	--	0.125584	--	2.0E+00	3.6E-02	--
Future Full Tidal	Aquatic	Bird	Heron	Nickel	0.27663	--	0.0306422	0.01188	0.00079	0.05148	0.801277	0.05612	0.02582	1.3E+00	1.7E-02	--
Future Full Tidal	Aquatic	Bird	Tern	Nickel	0.2374	--	--	--	0.00217	--	--	--	0.10653	3.5E-01	8.6E-03	--
Future Full Tidal	Aquatic	Bird	Stilt	Selenium	0.01832	--	--	--	--	--	--	0.066225	--	8.5E-02	3.0E-01	--
Future Full Tidal	Aquatic	Bird	Heron	Selenium	0.0037	--	--	0.0014764	--	--	0.001347	0.029594	0.0043	4.0E-02	1.1E-01	--
Future Full Tidal	Aquatic	Bird	Tern	Selenium	0.00318	--	--	--	--	--	--	--	0.01775	2.1E-02	1.0E-01	--
Future Full Tidal	Aquatic	Bird	Stilt	Silver	0.00974	--	--	--	9.9E-05	--	--	0.025203	--	3.5E-02	--	1.3E-03
Future Full Tidal	Aquatic	Bird	Heron	Silver	0.00197	--	--	--	6.1E-05	--	--	0.011263	--	1.3E-02	--	3.6E-04
Future Full Tidal	Aquatic	Bird	Tern	Silver	0.00169	--	--	--	0.00017	--	--	--	--	1.9E-03	--	9.3E-05
Future Full Tidal	Aquatic	Bird	Tern	Sulfate	14.4739	--	--	--	189.194	--	--	--	--	2.0E+02	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Sulfate	83.4088	--	--	--	112.157	--	--	--	--	2.0E+02	--	--
Future Full Tidal	Aquatic	Bird	Heron	Sulfate	16.8658	--	--	--	69.1067	--	--	--	--	8.6E+01	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Sulfide	1.90285	--	--	--	--	--	--	--	--	1.9E+00	--	--
Future Full Tidal	Aquatic	Bird	Heron	Sulfide	0.38477	--	--	--	--	--	--	--	--	3.8E-01	--	--
Future Full Tidal	Aquatic	Bird	Tern	Sulfide	0.3302	--	--	--	--	--	--	--	--	3.3E-01	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Thallium	0.02097	--	--	--	--	--	--	--	--	2.1E-02	--	8.1E-04
Future Full Tidal	Aquatic	Bird	Heron	Thallium	0.00424	--	--	--	--	--	--	--	--	4.2E-03	--	1.2E-04
Future Full Tidal	Aquatic	Bird	Tern	Thallium	0.00364	--	--	--	--	--	--	--	--	3.6E-03	--	1.9E-04
Future Full Tidal	Aquatic	Bird	Stilt	Vanadium	2.79068	--	--	--	0.0069	0.3136	--	0.019183	--	3.1E+00	3.9E-01	--
Future Full Tidal	Aquatic	Bird	Heron	Vanadium	0.56429	--	0.0190037	0.0018315	0.00425	0.035035	0.02526	0.008572	0.02375	6.8E-01	6.3E-02	--
Future Full Tidal	Aquatic	Bird	Tern	Vanadium	0.48427	--	--	--	0.01163	--	--	--	0.09797	5.9E-01	1.0E-01	--
Future Full Tidal	Aquatic	Bird	Stilt	Zinc	4.42584	--	--	--	0.00743	1.664	--	1.287092	--	7.4E+00	7.9E-01	8.7E-02
Future Full Tidal	Aquatic	Bird	Heron	Zinc	0.89493	--	0.157291	1.3266	0.00458	0.1859	2.025102	0.575169	1.347	6.5E+00	5.2E-01	5.7E-02
Future Full Tidal	Aquatic	Bird	Tern	Zinc	0.76801	--	--	--	0.01253	--	--	--	5.55754	6.3E+00	9.2E-01	1.0E-01
Future Full Tidal	Aquatic	Bird	Stilt	Ammonia as Nitrogen	0.3236	--	--	--	--	--	--	--	--	3.2E-01	--	--
Future Full Tidal	Aquatic	Bird	Heron	Ammonia as Nitrogen	0.06543	--	--	--	--	--	--	--	--	6.5E-02	--	--
Future Full Tidal	Aquatic	Bird	Tern	Ammonia as Nitrogen	0.05615	--	--	--	--	--	--	--	--	5.6E-02	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Chloride	630.008	--	--	--	--	--	--	--	--	6.3E+02	--	--
Future Full Tidal	Aquatic	Bird	Heron	Chloride	127.391	--	--	--	--	--	--	--	--	1.3E+02	--	--
Future Full Tidal	Aquatic	Bird	Tern	Chloride	109.325	--	--	--	--	--	--	--	--	1.1E+02	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Phosphorus, Total as P	6.48656	--	--	--	--	--	--	--	--	6.5E+00	--	--
Future Full Tidal	Aquatic	Bird	Heron	Phosphorus, Total as P	1.31162	--	--	--	--	--	--	--	--	1.3E+00	--	--
Future Full Tidal	Aquatic	Bird	Tern	Phosphorus, Total as P	1.12561	--	--	--	--	--	--	--	--	1.1E+00	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Phosphorus, Total as PO4	19.9029	--	--	--	--	--	--	--	--	2.0E+01	--	--
Future Full Tidal	Aquatic	Bird	Heron	Phosphorus, Total as PO4	4.02447	--	--	--	--	--	--	--	--	4.0E+00	--	--
Future Full Tidal	Aquatic	Bird	Tern	Phosphorus, Total as PO4	3.45373	--	--	--	--	--	--	--	--	3.5E+00	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Future Full Tidal	Aquatic	Bird	Heron	1,2-Dichloroethene (cis)	--	--	--	0.0007425	--	--	--	--	--	7.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	1,2-Dichloroethene (cis)	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Tern	1,2-Dichloroethene (cis)	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Tern	2,4-D	9E-07	--	--	--	0.0002	--	--	--	--	2.0E-04	--	7.0E-07	
Future Full Tidal	Aquatic	Bird	Stilt	2,4-D	5E-06	--	--	--	0.00012	--	--	--	--	1.2E-04	--	3.0E-07	
Future Full Tidal	Aquatic	Bird	Heron	2,4-D	1E-06	--	--	--	7.3E-05	--	--	--	--	7.4E-05	--	1.0E-07	
Future Full Tidal	Aquatic	Bird	Tern	2,4-DB	--	--	--	--	0.0006	--	--	--	--	6.0E-04	4.4E-06	--	
Future Full Tidal	Aquatic	Bird	Stilt	2,4-DB	--	--	--	--	0.00035	--	--	--	--	3.5E-04	1.9E-06	--	
Future Full Tidal	Aquatic	Bird	Heron	2,4-DB	--	--	--	--	0.00022	--	--	--	--	2.2E-04	9.0E-07	--	
Future Full Tidal	Aquatic	Bird	Stilt	2-Butanone	0.0002	--	--	--	--	--	--	--	--	2.0E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	2-Butanone	4.1E-05	--	--	--	--	--	--	--	--	4.1E-05	--	--	
Future Full Tidal	Aquatic	Bird	Tern	2-Butanone	3.5E-05	--	--	--	--	--	--	--	--	3.5E-05	--	--	
Future Full Tidal	Aquatic	Bird	Tern	2-Hexanone	--	--	--	--	--	--	--	--	0.00092	9.2E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	2-Hexanone	--	--	--	--	--	--	--	--	0.00022	2.2E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Tern	4,4'-DDD	4.4E-05	--	--	--	--	--	--	--	0.00307	3.1E-03	1.2E-02	--	
Future Full Tidal	Aquatic	Bird	Heron	4,4'-DDD	5.2E-05	--	0.0000101	0.0001656	--	0.0000782	0.000791	--	0.00074	1.8E-03	3.7E-03	--	
Future Full Tidal	Aquatic	Bird	Stilt	4,4'-DDD	0.00026	--	--	--	--	0.0007003	--	--	--	9.6E-04	2.6E-03	--	
Future Full Tidal	Aquatic	Bird	Tern	4,4'-DDE	4E-05	--	--	--	--	--	--	--	0.00728	7.3E-03	--	2.8E-02	
Future Full Tidal	Aquatic	Bird	Heron	4,4'-DDE	4.6E-05	--	0.0000282	0.0000105	--	0.0000265	0.000615	0.00012	0.00176	2.6E-03	--	5.5E-03	
Future Full Tidal	Aquatic	Bird	Stilt	4,4'-DDE	0.00023	--	--	--	--	0.0002368	--	0.000269	--	7.3E-04	--	2.1E-03	
Future Full Tidal	Aquatic	Bird	Tern	4,4'-DDT	9.1E-06	--	--	--	1.6E-06	--	--	--	0.00019	2.0E-04	3.8E-03	--	
Future Full Tidal	Aquatic	Bird	Heron	4,4'-DDT	1.1E-05	--	--	0.0001205	6E-07	0.0000078	--	--	4.6E-05	1.9E-04	1.9E-03	--	
Future Full Tidal	Aquatic	Bird	Stilt	4,4'-DDT	5.3E-05	--	--	--	1E-06	0.0000697	--	--	--	1.2E-04	1.7E-03	--	
Future Full Tidal	Aquatic	Bird	Stilt	4-Methylphenol	0.01146	--	--	--	--	--	--	--	--	1.1E-02	--	--	
Future Full Tidal	Aquatic	Bird	Heron	4-Methylphenol	0.00232	--	--	--	--	--	--	--	--	2.3E-03	--	--	
Future Full Tidal	Aquatic	Bird	Tern	4-Methylphenol	0.00199	--	--	--	--	--	--	--	--	2.0E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	4-Nitrophenol	0.01799	--	--	--	0.00219	--	--	--	--	2.0E-02	--	--	
Future Full Tidal	Aquatic	Bird	Tern	4-Nitrophenol	0.00312	--	--	--	0.00369	--	--	--	--	6.8E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	4-Nitrophenol	0.00364	--	--	--	0.00135	--	--	--	--	5.0E-03	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Acenaphthene	0.0002	--	--	--	--	--	--	--	0.00175	2.0E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Acenaphthene	0.00118	--	--	--	--	--	--	--	--	1.2E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Acenaphthene	0.00024	--	--	0.0000495	--	--	--	--	0.00043	7.1E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Acenaphthylene	0.00032	--	--	--	--	--	--	--	0.00175	2.1E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Acenaphthylene	0.00182	--	--	--	--	--	--	--	--	1.8E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Acenaphthylene	0.00037	--	--	0.0000495	--	--	--	--	0.00042	8.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Acetone	0.00006	--	--	--	--	--	--	--	0.17392	1.7E-01	7.2E-05	--	
Future Full Tidal	Aquatic	Bird	Heron	Acetone	7E-05	--	--	0.018315	--	--	--	--	0.04215	6.1E-02	1.4E-05	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Future Full Tidal	Aquatic	Bird	Stilt	Acetone	0.00035	--	--	--	--	--	--	--	--	3.5E-04	1.0E-07	--	
Future Full Tidal	Aquatic	Bird	Tern	Aldrin	1.4E-06	--	--	--	--	--	--	--	4.7E-05	4.8E-05	--	1.9E-05	
Future Full Tidal	Aquatic	Bird	Heron	Aldrin	1.6E-06	--	--	0.0000232	--	--	--	--	1.1E-05	3.6E-05	--	7.6E-06	
Future Full Tidal	Aquatic	Bird	Stilt	Aldrin	8E-06	--	--	--	--	--	--	--	--	8.0E-06	--	2.3E-06	
Future Full Tidal	Aquatic	Bird	Tern	Anthracene	0.00019	--	--	--	--	--	--	--	0.00175	1.9E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Anthracene	0.00112	--	--	--	--	--	--	--	--	1.1E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Anthracene	0.00023	--	--	0.0000495	--	--	--	--	0.00042	7.0E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Benzene	8.2E-06	--	--	--	--	--	--	--	0.00058	5.9E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Benzene	9.6E-06	--	--	--	--	--	--	--	0.00014	1.5E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Benzene	4.8E-05	--	--	--	--	--	--	--	--	4.8E-05	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Benzo(a)anthracene	0.00019	--	--	--	--	--	--	--	0.00197	2.2E-03	2.4E-05	--	
Future Full Tidal	Aquatic	Bird	Stilt	Benzo(a)anthracene	0.00111	--	--	--	--	--	--	--	--	1.1E-03	9.2E-06	--	
Future Full Tidal	Aquatic	Bird	Heron	Benzo(a)anthracene	0.00023	--	--	0.0000495	--	--	--	--	0.00048	7.5E-04	4.6E-06	--	
Future Full Tidal	Aquatic	Bird	Tern	Benzo(a)pyrene	0.0002	--	--	--	--	--	--	--	0.00196	2.2E-03	2.4E-04	--	
Future Full Tidal	Aquatic	Bird	Stilt	Benzo(a)pyrene	0.00118	--	--	--	--	--	--	--	--	1.2E-03	9.7E-05	--	
Future Full Tidal	Aquatic	Bird	Heron	Benzo(a)pyrene	0.00024	--	--	0.0000495	--	--	--	--	0.00048	7.6E-04	4.7E-05	--	
Future Full Tidal	Aquatic	Bird	Tern	Benzo(b)fluoranthene	0.00026	--	--	--	--	--	--	--	0.00196	2.2E-03	2.5E-05	--	
Future Full Tidal	Aquatic	Bird	Stilt	Benzo(b)fluoranthene	0.00149	--	--	--	--	--	--	--	--	1.5E-03	1.2E-05	--	
Future Full Tidal	Aquatic	Bird	Heron	Benzo(b)fluoranthene	0.0003	--	--	0.0000495	--	--	--	--	0.00048	8.3E-04	5.1E-06	--	
Future Full Tidal	Aquatic	Bird	Tern	Benzo(e)pyrene	0.00025	--	--	--	--	--	--	--	0.00196	2.2E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Benzo(e)pyrene	0.00143	--	--	--	--	--	--	--	--	1.4E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Benzo(e)pyrene	0.00029	--	--	0.0000495	--	--	--	--	0.00048	8.1E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Benzo(g,h,i)perylene	0.00024	--	--	--	--	--	--	--	0.00631	6.6E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Benzo(g,h,i)perylene	0.00028	--	--	0.0000495	--	--	--	--	0.00153	1.9E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Benzo(g,h,i)perylene	0.0014	--	--	--	--	--	--	--	--	1.4E-03	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Benzo(k)fluoranthene	0.00019	--	--	--	--	--	--	--	0.00196	2.2E-03	2.4E-05	--	
Future Full Tidal	Aquatic	Bird	Stilt	Benzo(k)fluoranthene	0.00111	--	--	--	--	--	--	--	--	1.1E-03	9.2E-06	--	
Future Full Tidal	Aquatic	Bird	Heron	Benzo(k)fluoranthene	0.00023	--	--	0.0000495	--	--	--	--	0.00048	7.5E-04	4.6E-06	--	
Future Full Tidal	Aquatic	Bird	Tern	BHC-alpha	2.3E-06	--	--	--	--	--	--	--	0.00058	5.8E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	BHC-alpha	2.6E-06	--	0.0000007	0.0000044	--	0.0000095	4.9E-06	0.000001	0.00014	1.6E-04	--	--	--
Future Full Tidal	Aquatic	Bird	Stilt	BHC-alpha	1.3E-05	--	--	--	--	0.0000852	--	2.2E-06	--	1.0E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	BHC-beta	3.2E-05	--	--	--	--	0.0009427	--	7.31E-05	--	1.0E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	BHC-beta	6.6E-06	--	0.0000081	0.0000579	--	0.0001053	0.000136	3.27E-05	9E-05	4.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	BHC-beta	5.6E-06	--	--	--	--	--	--	--	0.00037	3.8E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	BHC-delta	3E-06	--	--	--	8.4E-06	--	--	--	0.00023	2.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	BHC-delta	3.5E-06	--	--	0.0000137	3.1E-06	--	--	--	5.6E-05	7.6E-05	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	BHC-delta	1.7E-05	--	--	--	5E-06	--	--	--	--	2.2E-05	--	--	
Future Full Tidal	Aquatic	Bird	Tern	BHC-gamma	2E-06	--	--	--	--	--	--	--	0.00024	2.4E-04	--	2.3E-05	

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Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Future Full Tidal	Aquatic	Bird	Stilt	BHC-gamma	1.2E-05	--	--	--	--	0.0001518	--	--	--	1.6E-04	--	1.2E-05
Future Full Tidal	Aquatic	Bird	Heron	BHC-gamma	2.4E-06	--	--	0.000005	--	0.000017	--	--	5.7E-05	8.1E-05	--	4.3E-06
Future Full Tidal	Aquatic	Bird	Tern	Biphenyl	--	--	--	--	--	--	--	--	8.8E-05	8.8E-05	--	--
Future Full Tidal	Aquatic	Bird	Heron	Biphenyl	--	--	--	0.000003	--	--	--	--	2.1E-05	2.4E-05	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Butylbenzylphthalate	0.00263	--	--	--	--	--	--	--	--	2.6E-03	--	--
Future Full Tidal	Aquatic	Bird	Heron	Butylbenzylphthalate	0.00053	--	--	--	--	--	--	--	--	5.3E-04	--	--
Future Full Tidal	Aquatic	Bird	Tern	Butylbenzylphthalate	0.00046	--	--	--	--	--	--	--	--	4.6E-04	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Carbon disulfide	3.4E-05	--	--	--	--	--	--	--	--	3.4E-05	--	--
Future Full Tidal	Aquatic	Bird	Heron	Carbon disulfide	6.9E-06	--	--	--	--	--	--	--	--	6.9E-06	--	--
Future Full Tidal	Aquatic	Bird	Tern	Carbon disulfide	6E-06	--	--	--	--	--	--	--	--	6.0E-06	--	--
Future Full Tidal	Aquatic	Bird	Tern	Chlordane (technical)	0.00021	--	--	--	--	--	--	--	0.00865	8.9E-03	5.9E-03	8.5E-04
Future Full Tidal	Aquatic	Bird	Heron	Chlordane (technical)	0.00025	--	--	--	--	--	--	--	0.0021	2.3E-03	8.5E-04	1.2E-04
Future Full Tidal	Aquatic	Bird	Stilt	Chlordane (technical)	0.00122	--	--	--	--	--	--	--	--	1.2E-03	5.9E-04	8.5E-05
Future Full Tidal	Aquatic	Bird	Tern	Chlordane-alpha	3.2E-05	--	--	--	--	--	--	--	0.00272	2.8E-03	1.8E-03	2.6E-04
Future Full Tidal	Aquatic	Bird	Heron	Chlordane-alpha	3.7E-05	--	--	--	--	--	--	--	0.00066	7.0E-04	2.5E-04	3.6E-05
Future Full Tidal	Aquatic	Bird	Stilt	Chlordane-alpha	0.00018	--	--	--	--	--	--	--	--	1.8E-04	8.9E-05	1.3E-05
Future Full Tidal	Aquatic	Bird	Stilt	Chlordane-gamma	0.00012	--	--	--	--	--	--	--	--	1.2E-04	5.9E-05	8.5E-06
Future Full Tidal	Aquatic	Bird	Heron	Chlordane-gamma	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	8.9E-06	1.3E-06
Future Full Tidal	Aquatic	Bird	Tern	Chlordane-gamma	2.1E-05	--	--	--	--	--	--	--	--	2.1E-05	1.4E-05	2.0E-06
Future Full Tidal	Aquatic	Bird	Stilt	Chlorobenzene	2E-05	--	--	--	--	--	--	--	--	2.0E-05	--	--
Future Full Tidal	Aquatic	Bird	Heron	Chlorobenzene	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	--	--
Future Full Tidal	Aquatic	Bird	Tern	Chlorobenzene	3.4E-06	--	--	--	--	--	--	--	--	3.4E-06	--	--
Future Full Tidal	Aquatic	Bird	Tern	Chloroform	--	--	--	--	--	--	--	--	1.16435	1.2E+00	--	--
Future Full Tidal	Aquatic	Bird	Heron	Chloroform	--	--	--	0.3267	--	--	--	--	0.28221	6.1E-01	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Chloroform	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Chrysene	0.00252	--	--	--	--	--	--	--	--	2.5E-03	2.1E-06	--
Future Full Tidal	Aquatic	Bird	Tern	Chrysene	0.00044	--	--	--	--	--	--	--	0.00197	2.4E-03	2.7E-06	--
Future Full Tidal	Aquatic	Bird	Heron	Chrysene	0.00051	--	--	0.0000495	--	--	--	--	0.00048	1.0E-03	6.0E-07	--
Future Full Tidal	Aquatic	Bird	Stilt	Diazinon	0.00201	--	--	--	--	4.6E-05	--	--	--	2.1E-03	--	1.5E-04
Future Full Tidal	Aquatic	Bird	Heron	Diazinon	0.00041	--	--	--	--	2.8E-05	--	--	--	4.4E-04	--	2.3E-05
Future Full Tidal	Aquatic	Bird	Tern	Diazinon	0.00035	--	--	--	--	7.8E-05	--	--	--	4.3E-04	--	4.1E-05
Future Full Tidal	Aquatic	Bird	Tern	Dibenz(a,h)anthracene	0.00023	--	--	--	--	--	--	--	0.0063	6.5E-03	7.4E-04	--
Future Full Tidal	Aquatic	Bird	Heron	Dibenz(a,h)anthracene	0.00027	--	--	0.0000495	--	--	--	--	0.00153	1.8E-03	1.1E-04	--
Future Full Tidal	Aquatic	Bird	Stilt	Dibenz(a,h)anthracene	0.00132	--	--	--	--	--	--	--	--	1.3E-03	1.1E-04	--
Future Full Tidal	Aquatic	Bird	Tern	Dibenzothiophene	--	--	--	--	--	--	--	--	6.9E-05	6.9E-05	--	--
Future Full Tidal	Aquatic	Bird	Heron	Dibenzothiophene	--	--	--	0.0000007	--	--	--	--	1.7E-05	1.8E-05	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Future Full Tidal	Aquatic	Bird	Tern	Dicamba	--	--	--	--	1.7E-05	--	--	--	--	1.7E-05	1.0E-07	--	
Future Full Tidal	Aquatic	Bird	Stilt	Dicamba	--	--	--	--	9.9E-06	--	--	--	--	9.9E-06	0.0E+00	--	
Future Full Tidal	Aquatic	Bird	Heron	Dicamba	--	--	--	--	6.1E-06	--	--	--	--	6.1E-06	0.0E+00	--	
Future Full Tidal	Aquatic	Bird	Tern	Dieldrin	5.2E-06	--	--	--	1.7E-06	--	--	--	0.00049	5.0E-04	1.0E-02	--	
Future Full Tidal	Aquatic	Bird	Heron	Dieldrin	6E-06	--	--	--	6E-07	--	--	--	0.00012	1.3E-04	1.5E-03	--	
Future Full Tidal	Aquatic	Bird	Stilt	Dieldrin	3E-05	--	--	--	1E-06	--	--	--	--	3.1E-05	4.7E-04	--	
Future Full Tidal	Aquatic	Bird	Stilt	Diethylphthalate	0.00133	--	--	--	--	--	--	--	--	1.3E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Diethylphthalate	0.00027	--	--	--	--	--	--	--	--	2.7E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Diethylphthalate	0.00023	--	--	--	--	--	--	--	--	2.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Dimethylphthalate	0.00119	--	--	--	--	--	--	--	--	1.2E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Dimethylphthalate	0.00024	--	--	--	--	--	--	--	--	2.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Dimethylphthalate	0.00021	--	--	--	--	--	--	--	--	2.1E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Di-n-butylphthalate	0.00325	--	--	--	--	--	--	--	--	3.3E-03	--	2.7E-03	
Future Full Tidal	Aquatic	Bird	Heron	Di-n-butylphthalate	0.00066	--	--	--	--	--	--	--	--	6.6E-04	--	4.0E-04	
Future Full Tidal	Aquatic	Bird	Tern	Di-n-butylphthalate	0.00056	--	--	--	--	--	--	--	--	5.6E-04	--	6.3E-04	
Future Full Tidal	Aquatic	Bird	Stilt	Di-n-octylphthalate	0.00271	--	--	--	--	--	--	--	--	2.7E-03	--	1.5E-05	
Future Full Tidal	Aquatic	Bird	Heron	Di-n-octylphthalate	0.00055	--	--	--	--	--	--	--	--	5.5E-04	--	2.2E-06	
Future Full Tidal	Aquatic	Bird	Tern	Di-n-octylphthalate	0.00047	--	--	--	--	--	--	--	--	4.7E-04	--	3.5E-06	
Future Full Tidal	Aquatic	Bird	Tern	Dursban (Chlorpyrifos)	--	--	--	--	1.7E-05	--	--	--	--	1.7E-05	--	1.4E-06	
Future Full Tidal	Aquatic	Bird	Stilt	Dursban (Chlorpyrifos)	--	--	--	--	9.8E-06	--	--	--	--	9.8E-06	--	6.0E-07	
Future Full Tidal	Aquatic	Bird	Heron	Dursban (Chlorpyrifos)	--	--	--	--	6.1E-06	--	--	--	--	6.1E-06	--	3.0E-07	
Future Full Tidal	Aquatic	Bird	Stilt	Endosulfan I	5.4E-05	--	--	--	--	--	--	--	--	5.4E-05	6.2E-06	--	
Future Full Tidal	Aquatic	Bird	Heron	Endosulfan I	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	9.0E-07	--	
Future Full Tidal	Aquatic	Bird	Tern	Endosulfan I	9.4E-06	--	--	--	--	--	--	--	--	9.4E-06	1.5E-06	--	
Future Full Tidal	Aquatic	Bird	Heron	Endosulfan II	2.8E-06	--	--	--	0.0000316	--	--	--	--	3.4E-05	2.9E-06	--	
Future Full Tidal	Aquatic	Bird	Stilt	Endosulfan II	1.4E-05	--	--	--	--	--	--	--	--	1.4E-05	1.6E-06	--	
Future Full Tidal	Aquatic	Bird	Tern	Endosulfan II	2.4E-06	--	--	--	--	--	--	--	--	2.4E-06	4.0E-07	--	
Future Full Tidal	Aquatic	Bird	Tern	Endosulfan Sulfate	--	--	--	--	--	--	--	--	0.00055	5.5E-04	8.6E-05	--	
Future Full Tidal	Aquatic	Bird	Heron	Endosulfan Sulfate	--	--	--	--	--	--	--	--	0.00013	1.3E-04	1.1E-05	--	
Future Full Tidal	Aquatic	Bird	Stilt	Endosulfan Sulfate	--	--	--	--	--	--	--	--	--	0.0E+00	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Endrin	6.1E-06	--	--	--	0.0000445	--	--	--	--	5.1E-05	1.8E-04	--	
Future Full Tidal	Aquatic	Bird	Stilt	Endrin	3E-05	--	--	--	--	--	--	--	--	3.0E-05	1.4E-04	--	
Future Full Tidal	Aquatic	Bird	Tern	Endrin	5.2E-06	--	--	--	--	--	--	--	--	5.2E-06	3.3E-05	--	
Future Full Tidal	Aquatic	Bird	Tern	Endrin aldehyde	5.3E-06	--	--	--	--	--	--	--	0.00047	4.8E-04	3.1E-03	--	
Future Full Tidal	Aquatic	Bird	Heron	Endrin aldehyde	6.2E-06	--	--	--	--	--	--	--	0.00012	1.2E-04	4.2E-04	--	
Future Full Tidal	Aquatic	Bird	Stilt	Endrin aldehyde	3E-05	--	--	--	--	--	--	--	--	3.0E-05	1.4E-04	--	
Future Full Tidal	Aquatic	Bird	Tern	Endrin ketone	5.4E-06	--	--	--	--	--	--	--	0.00012	1.3E-04	8.2E-04	--	
Future Full Tidal	Aquatic	Bird	Heron	Endrin ketone	6.3E-06	--	--	--	0.0000075	--	--	--	--	3E-05	4.4E-05	1.5E-04	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Future Full Tidal	Aquatic	Bird	Stilt	Endrin ketone	3.1E-05	--	--	--	--	--	--	--	--	3.1E-05	1.5E-04	--	
Future Full Tidal	Aquatic	Bird	Stilt	Ethylbenzene	3.4E-05	--	--	--	--	--	--	--	--	3.4E-05	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Ethylbenzene	6.9E-06	--	--	--	--	--	--	--	--	6.9E-06	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Ethylbenzene	5.9E-06	--	--	--	--	--	--	--	--	5.9E-06	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Fluoranthene	0.0002	--	--	--	--	--	--	--	0.00176	2.0E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Fluoranthene	0.00117	--	--	--	--	--	--	--	--	1.2E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Fluoranthene	0.00024	--	--	0.0000495	--	--	--	--	0.00043	7.1E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Fluorene	0.00035	--	--	--	--	--	--	--	0.00177	2.1E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Fluorene	0.002	--	--	--	--	--	--	--	--	2.0E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Fluorene	0.0004	--	--	0.0000495	--	--	--	--	0.00043	8.8E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Indeno(1,2,3-c,d)pyrene	0.00023	--	--	--	--	--	--	--	0.00631	6.5E-03	7.4E-05	--	
Future Full Tidal	Aquatic	Bird	Heron	Indeno(1,2,3-c,d)pyrene	0.00027	--	--	0.0000495	--	--	--	--	0.00153	1.8E-03	1.1E-05	--	
Future Full Tidal	Aquatic	Bird	Stilt	Indeno(1,2,3-c,d)pyrene	0.00133	--	--	--	--	--	--	--	--	1.3E-03	1.1E-05	--	
Future Full Tidal	Aquatic	Bird	Tern	Malathion	--	--	--	--	3.3E-05	--	--	--	--	3.3E-05	--	4.0E-07	
Future Full Tidal	Aquatic	Bird	Stilt	Malathion	--	--	--	--	2E-05	--	--	--	--	2.0E-05	--	2.0E-07	
Future Full Tidal	Aquatic	Bird	Heron	Malathion	--	--	--	--	1.2E-05	--	--	--	--	1.2E-05	--	1.0E-07	
Future Full Tidal	Aquatic	Bird	Tern	Methylene chloride	5.5E-06	--	--	--	--	--	--	--	0.04598	4.6E-02	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Methylene chloride	6.5E-06	--	--	0.009405	--	--	--	--	0.01114	2.1E-02	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Methylene chloride	3.2E-05	--	--	--	--	--	--	--	--	3.2E-05	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Naphthalene	0.00275	--	--	--	--	--	--	--	--	2.7E-03	--	1.9E-05	
Future Full Tidal	Aquatic	Bird	Tern	Naphthalene	0.00048	--	--	--	--	--	--	--	0.00146	1.9E-03	--	1.8E-05	
Future Full Tidal	Aquatic	Bird	Heron	Naphthalene	0.00056	--	--	0.0000381	--	--	--	--	0.00035	9.5E-04	--	4.8E-06	
Future Full Tidal	Aquatic	Bird	Stilt	Oil and Grease	190.602	--	--	--	--	--	--	--	--	1.9E+02	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Oil and Grease	38.5409	--	--	--	--	--	--	--	--	3.9E+01	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Oil and Grease	33.0751	--	--	--	--	--	--	--	--	3.3E+01	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB 1254	6.7E-05	--	--	--	--	--	--	--	0.03846	3.9E-02	--	4.0E-02	
Future Full Tidal	Aquatic	Bird	Heron	PCB 1254	7.8E-05	--	0.0000092	--	--	0.0001196	--	--	0.00932	9.5E-03	--	5.4E-03	
Future Full Tidal	Aquatic	Bird	Stilt	PCB 1254	0.00039	--	--	--	--	0.001071	--	--	--	1.5E-03	--	1.1E-03	
Future Full Tidal	Aquatic	Bird	Tern	PCB 1260	4.5E-05	--	--	--	--	--	--	--	0.00266	2.7E-03	--	2.1E-05	
Future Full Tidal	Aquatic	Bird	Heron	PCB 1260	5.3E-05	--	--	--	--	--	--	--	0.00064	7.0E-04	--	2.9E-06	
Future Full Tidal	Aquatic	Bird	Stilt	PCB 1260	0.00026	--	--	--	--	--	--	--	--	2.6E-04	--	1.4E-06	
Future Full Tidal	Aquatic	Bird	Tern	PCB-008	7.4E-05	--	--	--	--	--	--	--	0.00075	8.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-008	0.00043	--	--	--	--	--	--	--	--	4.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-008	8.6E-05	--	--	0.0000891	--	--	--	--	0.00018	3.6E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-018	--	--	--	--	--	--	--	--	0.00049	4.9E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-018	--	--	--	--	--	--	--	--	0.00012	1.2E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-018	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-028	2.8E-05	--	--	--	--	--	--	--	0.00055	5.7E-04	--	--	

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Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Future Full Tidal	Aquatic	Bird	Heron	PCB-028	3.2E-05	--	--	0.0000891	--	--	--	--	0.00013	2.5E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-028	0.00016	--	--	--	--	--	--	--	--	1.6E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-044	2.4E-05	--	--	--	--	--	--	--	0.00068	7.1E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-044	2.8E-05	--	--	0.0000891	--	--	--	--	0.00017	2.8E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-044	0.00014	--	--	--	--	--	--	--	--	1.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-052	2.6E-05	--	--	--	--	--	--	--	0.00128	1.3E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-052	3.1E-05	--	--	0.0000906	--	--	--	--	0.00031	4.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-052	0.00015	--	--	--	--	--	--	--	--	1.5E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-066	2.4E-05	--	--	--	--	--	--	--	0.00077	7.9E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-066	2.8E-05	--	--	0.0000915	--	--	--	--	0.00019	3.1E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-066	0.00014	--	--	--	--	--	--	--	--	1.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-101	2.5E-05	--	--	--	--	--	--	--	0.00317	3.2E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-101	3E-05	--	--	0.0000994	--	--	--	--	0.00077	9.0E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-101	0.00015	--	--	--	--	--	--	--	--	1.5E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-105	1.1E-05	--	--	--	--	--	--	--	0.00147	1.5E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-105	1.3E-05	--	--	0.0000846	--	--	--	--	0.00036	4.5E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-105	6.4E-05	--	--	--	--	--	--	--	--	6.4E-05	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-118	1.1E-05	--	--	--	--	--	--	--	0.00348	3.5E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-118	1.3E-05	--	--	0.0002539	--	--	--	--	0.00084	1.1E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-118	6.5E-05	--	--	--	--	--	--	--	--	6.5E-05	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Aquatic	Bird	Stilt	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Aquatic	Bird	Tern	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Aquatic	Bird	Tern	PCB-128	--	--	--	--	--	--	--	--	0.0008	8.0E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-128	--	--	--	0.0000742	--	--	--	--	0.00019	2.7E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Aquatic	Bird	Tern	PCB-138	1.2E-05	--	--	--	--	--	--	--	0.00383	3.8E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-138	1.4E-05	--	--	0.0007762	--	--	--	--	0.00093	1.7E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-138	0.00007	--	--	--	--	--	--	--	--	7.0E-05	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-153	1.3E-05	--	--	--	--	--	--	--	0.00354	3.6E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-153	1.5E-05	--	--	0.0012191	--	--	--	--	0.00086	2.1E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-153	7.6E-05	--	--	--	--	--	--	--	--	7.6E-05	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-170	--	--	--	--	--	--	--	--	0.00042	4.2E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-170	--	--	--	0.0002358	--	--	--	--	0.0001	3.4E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Aquatic	Bird	Tern	PCB-180	5.7E-06	--	--	--	--	--	--	--	0.00092	9.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-180	6.7E-06	--	--	0.0005938	--	--	--	--	0.00022	8.2E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-180	3.3E-05	--	--	--	--	--	--	--	--	3.3E-05	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Future Full Tidal	Aquatic	Bird	Heron	PCB-187	--	--	--	0.0004821	--	--	--	--	0.00013	6.1E-04	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-187	--	--	--	--	--	--	--	--	0.00052	5.2E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-195	--	--	--	--	--	--	--	--	0.00013	1.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-195	--	--	--	0.0000718	--	--	--	--	3.2E-05	1.0E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-206	--	--	--	--	--	--	--	--	0.00013	1.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-206	--	--	--	0.0000383	--	--	--	--	3.2E-05	7.0E-05	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Tern	PCB-209	--	--	--	--	--	--	--	--	0.00015	1.5E-04	--	--	
Future Full Tidal	Aquatic	Bird	Heron	PCB-209	--	--	--	0.000023	--	--	--	--	3.6E-05	5.9E-05	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Pentachlorophenol	0.01167	--	--	--	--	--	--	--	--	1.2E-02	--	3.6E-01	
Future Full Tidal	Aquatic	Bird	Heron	Pentachlorophenol	0.00236	--	--	--	--	--	--	--	--	2.4E-03	--	5.4E-02	
Future Full Tidal	Aquatic	Bird	Tern	Pentachlorophenol	0.00202	--	--	--	--	--	--	--	--	2.0E-03	--	8.5E-02	
Future Full Tidal	Aquatic	Bird	Tern	Perylene	--	--	--	--	--	--	--	--	1.6E-05	1.6E-05	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Perylene	--	--	--	0.0000004	--	--	--	--	3.8E-06	4.2E-06	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Perylene	--	--	--	--	--	--	--	--	--	--	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Phenanthrene	0.00422	--	--	--	--	--	--	--	--	4.2E-03	--	2.9E-05	
Future Full Tidal	Aquatic	Bird	Tern	Phenanthrene	0.00073	--	--	--	--	--	--	--	0.00179	2.5E-03	--	2.3E-05	
Future Full Tidal	Aquatic	Bird	Heron	Phenanthrene	0.00085	--	--	0.0000495	--	--	--	--	0.00043	1.3E-03	--	6.8E-06	
Future Full Tidal	Aquatic	Bird	Tern	Pyrene	0.00029	--	--	--	--	--	--	--	0.00197	2.3E-03	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Pyrene	0.00167	--	--	--	--	--	--	--	--	1.7E-03	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Pyrene	0.00034	--	--	0.0001182	--	--	--	--	0.00048	9.3E-04	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Styrene	4E-07	--	--	--	--	--	--	--	--	4.0E-07	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Styrene	1E-07	--	--	--	--	--	--	--	--	1.0E-07	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Styrene	1E-07	--	--	--	--	--	--	--	--	1.0E-07	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Tetrachloroethene	1.9E-05	--	--	--	--	--	--	--	--	1.9E-05	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Tetrachloroethene	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Tetrachloroethene	3.3E-06	--	--	--	--	--	--	--	--	3.3E-06	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Toluene	2.2E-05	--	--	--	--	--	--	--	--	2.2E-05	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Toluene	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	--	--	
Future Full Tidal	Aquatic	Bird	Tern	Toluene	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	TPH-Diesel	10.5748	--	--	--	0.03458	--	--	--	--	1.1E+01	--	--	
Future Full Tidal	Aquatic	Bird	Heron	TPH-Diesel	2.13828	--	--	--	0.02131	--	--	--	--	2.2E+00	--	--	
Future Full Tidal	Aquatic	Bird	Tern	TPH-Diesel	1.83504	--	--	--	0.05833	--	--	--	--	1.9E+00	--	--	
Future Full Tidal	Aquatic	Bird	Stilt	Trichloroethene	1.9E-05	--	--	--	--	--	--	--	--	1.9E-05	--	--	
Future Full Tidal	Aquatic	Bird	Heron	Trichloroethene	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Future Full Tidal	Aquatic	Bird	Tern	Trichloroethene	3.3E-06	--	--	--	--	--	--	--	--	3.3E-06	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Waste oil	38.2142	--	--	--	0.11476	--	--	--	--	3.8E+01	--	--
Future Full Tidal	Aquatic	Bird	Heron	Waste oil	7.72713	--	--	--	0.07071	--	--	--	--	7.8E+00	--	--
Future Full Tidal	Aquatic	Bird	Tern	Waste oil	6.63128	--	--	--	0.19358	--	--	--	--	6.8E+00	--	--
Future Full Tidal	Aquatic	Bird	Stilt	Xylene (total)	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	1.0E-07	--
Future Full Tidal	Aquatic	Bird	Heron	Xylene (total)	5.3E-06	--	--	--	--	--	--	--	--	5.3E-06	0.0E+00	--
Future Full Tidal	Aquatic	Bird	Tern	Xylene (total)	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	0.0E+00	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Antimony	0.0004	--	--	--	--	--	--	--	--	4.0E-04	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Antimony	0.00018	--	--	--	--	--	--	--	--	1.8E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Arsenic	0.11642	0.03928	2.002091	--	0.00857	--	--	--	--	2.2E+00	9.7E-01	3.9E-01
Future Full Tidal	Terrestrial	Bird	Kestrel	Arsenic	0.05234	--	0.4500824	--	0.00463	--	--	--	--	5.1E-01	1.6E-01	6.3E-02
Future Full Tidal	Terrestrial	Bird	Sparrow	Barium	3.15164	4.60844	83.42585	--	0.11816	--	--	--	--	9.1E+01	1.1E+00	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Barium	1.41702	--	18.75465	1.451458	0.06387	--	--	--	--	2.2E+01	1.8E-01	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Beryllium	0.02217	0.01249	0.9378132	--	--	--	--	--	--	9.7E-01	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Beryllium	0.00997	--	0.2108262	--	--	--	--	--	--	2.2E-01	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Cadmium	0.00835	0.02143	--	--	0.00013	--	--	--	--	3.0E-02	4.7E-02	3.4E-03
Future Full Tidal	Terrestrial	Bird	Kestrel	Cadmium	0.00375	--	--	0.0120717	7.1E-05	--	--	--	--	1.6E-02	1.7E-02	1.3E-03
Future Full Tidal	Terrestrial	Bird	Sparrow	Chromium	0.46172	0.18554	4.048939	--	0.00289	--	--	--	--	4.7E+00	1.1E+01	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Chromium	0.2076	--	0.9102267	0.203	0.00156	--	--	--	--	1.3E+00	2.1E+00	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Cobalt	0.16017	0.02748	0.6642408	--	0.00067	--	--	--	--	8.5E-01	8.9E+00	9.1E-01
Future Full Tidal	Terrestrial	Bird	Kestrel	Cobalt	0.07202	--	0.1493255	0.0193473	0.00036	--	--	--	--	2.4E-01	1.7E+00	1.8E-01
Future Full Tidal	Terrestrial	Bird	Sparrow	Copper	0.31778	0.46574	4.547544	--	0.00331	--	--	--	--	5.3E+00	2.9E-01	2.2E-01
Future Full Tidal	Terrestrial	Bird	Kestrel	Copper	0.14288	--	1.022316	0.69832	0.00179	--	--	--	--	1.9E+00	6.9E-02	5.2E-02
Future Full Tidal	Terrestrial	Bird	Sparrow	Lead	0.68914	0.15416	6.029972	--	0.00449	--	--	--	--	6.9E+00	1.4E+01	1.4E+00
Future Full Tidal	Terrestrial	Bird	Kestrel	Lead	0.30985	--	1.355575	0.1131587	0.00243	--	--	--	--	1.8E+00	2.4E+00	2.4E-01
Future Full Tidal	Terrestrial	Bird	Sparrow	Mercury	0.01175	0.01542	--	--	2E-05	--	--	--	--	2.7E-02	1.7E-02	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Mercury	0.00528	--	--	0.0025984	1.1E-05	--	--	--	--	7.9E-03	3.4E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Molybdenum	0.01458	--	--	--	--	--	--	--	--	1.5E-02	--	1.0E-03
Future Full Tidal	Terrestrial	Bird	Kestrel	Molybdenum	0.00655	--	--	--	--	--	--	--	--	6.6E-03	--	3.2E-04
Future Full Tidal	Terrestrial	Bird	Sparrow	Nickel	0.51906	0.1627	8.624394	--	0.00289	--	--	--	--	9.3E+00	2.8E-01	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Nickel	0.23338	--	1.938817	0.19488	0.00156	--	--	--	--	2.4E+00	4.8E-02	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Selenium	0.00695	0.06377	--	--	--	--	--	--	--	7.1E-02	4.0E-01	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Selenium	0.00312	--	--	0.0242193	--	--	--	--	2.7E-02	1.1E-01	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Silver	0.00369	0.00516	--	--	0.00022	--	--	--	--	9.1E-03	--	5.4E-04
Future Full Tidal	Terrestrial	Bird	Kestrel	Silver	0.00166	--	--	--	0.00012	--	--	--	--	1.8E-03	--	7.3E-05
Future Full Tidal	Terrestrial	Bird	Sparrow	Sulfate	31.6463	--	--	--	251.503	--	--	--	--	2.8E+02	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Sulfate	14.2286	--	--	--	135.948	--	--	--	--	1.5E+02	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Sulfide	0.72196	--	--	--	--	--	--	--	--	7.2E-01	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Future Full Tidal	Terrestrial	Bird	Kestrel	Sulfide	0.3246	--	--	--	--	--	--	--	--	3.2E-01	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Thallium	0.00796	--	--	--	--	--	--	--	--	8.0E-03	--	5.0E-04
Future Full Tidal	Terrestrial	Bird	Kestrel	Thallium	0.00358	--	--	--	--	--	--	--	--	3.6E-03	--	1.5E-04
Future Full Tidal	Terrestrial	Bird	Sparrow	Vanadium	1.05882	0.22674	5.34867	--	0.01546	--	--	--	--	6.6E+00	1.3E+00	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Vanadium	0.47606	--	1.202414	0.030044	0.00836	--	--	--	--	1.7E+00	2.4E-01	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Zinc	1.67922	6.53889	44.27026	--	0.01665	--	--	--	--	5.3E+01	9.1E+00	1.0E+00
Future Full Tidal	Terrestrial	Bird	Kestrel	Zinc	0.755	--	9.952229	21.7616	0.009	--	--	--	--	3.2E+01	3.9E+00	4.3E-01
Future Full Tidal	Terrestrial	Bird	Sparrow	Ammonia as Nitrogen	0.12278	--	--	--	--	--	--	--	--	1.2E-01	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Ammonia as Nitrogen	0.0552	--	--	--	--	--	--	--	--	5.5E-02	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Chloride	239.033	--	--	--	--	--	--	--	--	2.4E+02	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Chloride	107.472	--	--	--	--	--	--	--	--	1.1E+02	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Phosphorus, Total as P	2.46108	--	--	--	--	--	--	--	--	2.5E+00	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Phosphorus, Total as P	1.10653	--	--	--	--	--	--	--	--	1.1E+00	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Phosphorus, Total as PO4	7.55137	--	--	--	--	--	--	--	--	7.6E+00	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Phosphorus, Total as PO4	3.39519	--	--	--	--	--	--	--	--	3.4E+00	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	1,2-Dichloroethene (cis)	--	--	--	0.01218	--	--	--	--	--	1.2E-02	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	1,2-Dichloroethene (cis)	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	2,4-D	1.9E-06	--	--	--	0.00027	--	--	--	--	2.7E-04	--	1.1E-06
Future Full Tidal	Terrestrial	Bird	Kestrel	2,4-D	9E-07	--	--	--	0.00014	--	--	--	--	1.4E-04	--	4.0E-07
Future Full Tidal	Terrestrial	Bird	Sparrow	2,4-DB	--	--	--	--	0.00079	--	--	--	--	7.9E-04	7.0E-06	--
Future Full Tidal	Terrestrial	Bird	Kestrel	2,4-DB	--	--	--	--	0.00043	--	--	--	--	4.3E-04	2.6E-06	--
Future Full Tidal	Terrestrial	Bird	Sparrow	2-Butanone	7.7E-05	--	--	--	--	--	--	--	--	7.7E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	2-Butanone	3.5E-05	--	--	--	--	--	--	--	--	3.5E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	4,4'-DDD	4.4E-05	--	0.0006402	0.0027169	--	--	--	--	--	3.4E-03	1.0E-02	--
Future Full Tidal	Terrestrial	Bird	Sparrow	4,4'-DDD	9.7E-05	--	0.0028478	--	--	--	--	--	--	2.9E-03	1.3E-02	--
Future Full Tidal	Terrestrial	Bird	Sparrow	4,4'-DDE	8.7E-05	--	0.007942	--	--	--	--	--	--	8.0E-03	--	3.7E-02
Future Full Tidal	Terrestrial	Bird	Kestrel	4,4'-DDE	3.9E-05	--	0.0017854	0.0001716	--	--	--	--	--	2.0E-03	--	6.3E-03
Future Full Tidal	Terrestrial	Bird	Kestrel	4,4'-DDT	9E-06	--	--	0.0019766	1.2E-06	--	--	--	--	2.0E-03	3.1E-02	--
Future Full Tidal	Terrestrial	Bird	Sparrow	4,4'-DDT	2E-05	--	--	--	2.2E-06	--	--	--	--	2.2E-05	5.1E-04	--
Future Full Tidal	Terrestrial	Bird	Sparrow	4-Methylphenol	0.00435	--	--	--	--	--	--	--	--	4.3E-03	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	4-Methylphenol	0.00196	--	--	--	--	--	--	--	--	2.0E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	4-Nitrophenol	0.00683	--	--	--	0.00491	--	--	--	--	1.2E-02	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	4-Nitrophenol	0.00307	--	--	--	0.00265	--	--	--	--	5.7E-03	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Acenaphthene	0.0002	--	--	0.000812	--	--	--	--	--	1.0E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Acenaphthene	0.00045	--	--	--	--	--	--	--	--	4.5E-04	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Acenaphthylene	0.00031	--	--	0.000812	--	--	--	--	--	1.1E-03	--	--

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Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Future Full Tidal	Terrestrial	Bird	Sparrow	Acenaphthylene	0.00069	--	--	--	--	--	--	--	--	6.9E-04	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Acetone	5.9E-05	--	--	0.30044	--	--	--	--	--	3.0E-01	1.0E-04	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Acetone	0.00013	--	--	--	--	--	--	--	--	1.3E-04	1.0E-07	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Aldrin	1.4E-06	--	--	0.0003809	--	--	--	--	--	3.8E-04	--	1.2E-04
Future Full Tidal	Terrestrial	Bird	Sparrow	Aldrin	3E-06	--	--	--	--	--	--	--	--	3.0E-06	--	1.4E-06
Future Full Tidal	Terrestrial	Bird	Kestrel	Anthracene	0.00019	--	--	0.000812	--	--	--	--	--	1.0E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Anthracene	0.00043	--	--	--	--	--	--	--	--	4.3E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Benzene	1.8E-05	--	--	--	--	--	--	--	--	1.8E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Benzene	8.1E-06	--	--	--	--	--	--	--	--	8.1E-06	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Benzo(a)anthracene	0.00019	--	--	0.000812	--	--	--	--	--	1.0E-03	9.3E-06	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Benzo(a)anthracene	0.00042	--	--	--	--	--	--	--	--	4.2E-04	5.7E-06	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Benzo(a)pyrene	0.0002	--	--	0.000812	--	--	--	--	--	1.0E-03	9.4E-05	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Benzo(a)pyrene	0.00045	--	--	--	--	--	--	--	--	4.5E-04	6.0E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Benzo(b)fluoranthene	0.00025	--	--	0.000812	--	--	--	--	--	1.1E-03	9.9E-06	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Benzo(b)fluoranthene	0.00057	--	--	--	--	--	--	--	--	5.7E-04	7.6E-06	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Benzo(e)pyrene	0.00024	--	--	0.000812	--	--	--	--	--	1.1E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Benzo(e)pyrene	0.00054	--	--	--	--	--	--	--	--	5.4E-04	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Benzo(g,h,i)perylene	0.00024	--	--	0.000812	--	--	--	--	--	1.1E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Benzo(g,h,i)perylene	0.00053	--	--	--	--	--	--	--	--	5.3E-04	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Benzo(k)fluoranthene	0.00019	--	--	0.000812	--	--	--	--	--	1.0E-03	9.3E-06	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Benzo(k)fluoranthene	0.00042	--	--	--	--	--	--	--	--	4.2E-04	5.7E-06	--
Future Full Tidal	Terrestrial	Bird	Sparrow	BHC-alpha	5E-06	--	0.000206	--	--	--	--	--	--	2.1E-04	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	BHC-alpha	2.2E-06	--	0.0000463	0.0000725	--	--	--	--	--	1.2E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	BHC-beta	1.2E-05	0.00023	0.0022803	--	--	--	--	--	--	2.5E-03	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	BHC-beta	5.5E-06	--	0.0005126	0.0009504	--	--	--	--	--	1.5E-03	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	BHC-delta	3E-06	--	--	0.0002245	6.1E-06	--	--	--	--	2.3E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	BHC-delta	6.6E-06	--	--	--	1.1E-05	--	--	--	--	1.8E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	BHC-gamma	2E-06	--	--	0.0000828	--	--	--	--	--	8.5E-05	--	6.7E-06
Future Full Tidal	Terrestrial	Bird	Sparrow	BHC-gamma	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	--	5.0E-07
Future Full Tidal	Terrestrial	Bird	Kestrel	Biphenyl	--	--	--	0.0000487	--	--	--	--	--	4.9E-05	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Butylbenzylphthalate	0.001	--	--	--	--	--	--	--	--	1.0E-03	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Butylbenzylphthalate	0.00045	--	--	--	--	--	--	--	--	4.5E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Carbon disulfide	1.3E-05	--	--	--	--	--	--	--	--	1.3E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Carbon disulfide	5.9E-06	--	--	--	--	--	--	--	--	5.9E-06	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Chlordane (technical)	0.00046	--	--	--	--	--	--	--	--	4.6E-04	3.6E-04	5.3E-05
Future Full Tidal	Terrestrial	Bird	Kestrel	Chlordane (technical)	0.00021	--	--	--	--	--	--	--	--	2.1E-04	1.1E-04	1.6E-05
Future Full Tidal	Terrestrial	Bird	Sparrow	Chlordane-alpha	7E-05	--	--	--	--	--	--	--	--	7.0E-05	5.5E-05	7.9E-06

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Area	Exposure Type	Class	Species	Analyte	Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)								Hazard Quotients				
					Terrestrial Food Chain				Aquatic Food Chain								
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	Total Exposure	NOAEL	LOAEL	
Future Full Tidal	Terrestrial	Bird	Kestrel	Chlordane-alpha	3.1E-05	--	--	--	--	--	--	--	--	3.1E-05	1.7E-05	2.5E-06	
Future Full Tidal	Terrestrial	Bird	Sparrow	Chlordane-gamma	4.6E-05	--	--	--	--	--	--	--	--	4.6E-05	3.6E-05	5.2E-06	
Future Full Tidal	Terrestrial	Bird	Kestrel	Chlordane-gamma	2.1E-05	--	--	--	--	--	--	--	--	2.1E-05	1.1E-05	1.6E-06	
Future Full Tidal	Terrestrial	Bird	Sparrow	Chlorobenzene	7.4E-06	--	--	--	--	--	--	--	--	7.4E-06	--	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Chlorobenzene	3.3E-06	--	--	--	--	--	--	--	--	3.3E-06	--	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Chloroform	--	--	--	5.3592	--	--	--	--	--	5.4E+00	--	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Chloroform	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Chrysene	0.00043	--	--	0.000812	--	--	--	--	--	1.2E-03	1.1E-06	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Chrysene	0.00096	--	--	--	--	--	--	--	--	9.6E-04	1.3E-06	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Diazinon	0.00076	--	--	--	0.0001	--	--	--	--	8.7E-04	--	9.9E-05	
Future Full Tidal	Terrestrial	Bird	Kestrel	Diazinon	0.00034	--	--	--	5.6E-05	--	--	--	--	4.0E-04	--	3.2E-05	
Future Full Tidal	Terrestrial	Bird	Kestrel	Dibenz(a,h)anthracene	0.00023	--	--	0.000812	--	--	--	--	--	1.0E-03	9.6E-05	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Dibenz(a,h)anthracene	0.0005	--	--	--	--	--	--	--	--	5.0E-04	6.7E-05	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Dibenzothiophene	--	--	--	0.0000122	--	--	--	--	--	1.2E-05	--	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Dicamba	--	--	--	--	2.2E-05	--	--	--	--	2.2E-05	1.0E-07	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Dicamba	--	--	--	--	1.2E-05	--	--	--	--	1.2E-05	0.0E+00	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Dieldrin	5.1E-06	--	--	0.000075	1.2E-06	--	--	--	--	8.1E-05	1.4E-03	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Dieldrin	1.1E-05	--	--	--	2.3E-06	--	--	--	--	1.4E-05	3.4E-04	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Diethylphthalate	0.0005	--	--	--	--	--	--	--	--	5.0E-04	--	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Diethylphthalate	0.00023	--	--	--	--	--	--	--	--	2.3E-04	--	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Dimethylphthalate	0.00045	--	--	--	--	--	--	--	--	4.5E-04	--	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Dimethylphthalate	0.0002	--	--	--	--	--	--	--	--	2.0E-04	--	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Di-n-butylphthalate	0.00123	--	--	--	--	--	--	--	--	1.2E-03	--	1.6E-03	
Future Full Tidal	Terrestrial	Bird	Kestrel	Di-n-butylphthalate	0.00056	--	--	--	--	--	--	--	--	5.6E-04	--	5.1E-04	
Future Full Tidal	Terrestrial	Bird	Sparrow	Di-n-octylphthalate	0.00103	--	--	--	--	--	--	--	--	1.0E-03	--	9.0E-06	
Future Full Tidal	Terrestrial	Bird	Kestrel	Di-n-octylphthalate	0.00046	--	--	--	--	--	--	--	--	4.6E-04	--	2.8E-06	
Future Full Tidal	Terrestrial	Bird	Sparrow	Dursban (Chlorpyrifos)	--	--	--	--	2.2E-05	--	--	--	--	2.2E-05	--	2.2E-06	
Future Full Tidal	Terrestrial	Bird	Kestrel	Dursban (Chlorpyrifos)	--	--	--	--	1.2E-05	--	--	--	--	1.2E-05	--	8.0E-07	
Future Full Tidal	Terrestrial	Bird	Sparrow	Endosulfan I	2.1E-05	--	--	--	--	--	--	--	--	2.1E-05	3.8E-06	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Endosulfan I	9.3E-06	--	--	--	--	--	--	--	--	9.3E-06	1.2E-06	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Endosulfan II	2.3E-06	--	--	0.0005184	--	--	--	--	--	5.2E-04	6.7E-05	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Endosulfan II	5.2E-06	--	--	--	--	--	--	--	--	5.2E-06	1.0E-06	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Endosulfan Sulfate	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Endosulfan Sulfate	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Future Full Tidal	Terrestrial	Bird	Kestrel	Endrin	5.1E-06	--	--	0.0007292	--	--	--	--	--	7.3E-04	3.9E-03	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Endrin	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	8.7E-05	--	
Future Full Tidal	Terrestrial	Bird	Sparrow	Endrin aldehyde	1.2E-05	--	--	--	--	--	--	--	--	1.2E-05	8.8E-05	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Area	Exposure Type	Class	Species	Analyte	Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)								Hazard Quotients		
					Terrestrial Food Chain				Aquatic Food Chain						
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	Total Exposure	
Future Full Tidal	Terrestrial	Bird	Kestrel	Endrin aldehyde	5.2E-06	--	--	--	--	--	--	--	--	5.2E-06	2.7E-05
Future Full Tidal	Terrestrial	Bird	Kestrel	Endrin ketone	5.3E-06	--	--	0.0001226	--	--	--	--	--	1.3E-04	6.7E-04
Future Full Tidal	Terrestrial	Bird	Sparrow	Endrin ketone	1.2E-05	--	--	--	--	--	--	--	--	1.2E-05	9.0E-05
Future Full Tidal	Terrestrial	Bird	Sparrow	Ethylbenzene	1.3E-05	--	--	--	--	--	--	--	--	1.3E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Ethylbenzene	5.8E-06	--	--	--	--	--	--	--	--	5.8E-06	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Fluoranthene	0.0002	--	--	0.000812	--	--	--	--	--	1.0E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Fluoranthene	0.00044	--	--	--	--	--	--	--	--	4.4E-04	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Fluorene	0.00034	--	--	0.000812	--	--	--	--	--	1.2E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Fluorene	0.00076	--	--	--	--	--	--	--	--	7.6E-04	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Indeno(1,2,3-c,d)pyrene	0.00023	--	--	0.000812	--	--	--	--	--	1.0E-03	9.6E-06
Future Full Tidal	Terrestrial	Bird	Sparrow	Indeno(1,2,3-c,d)pyrene	0.00051	--	--	--	--	--	--	--	--	5.1E-04	6.8E-06
Future Full Tidal	Terrestrial	Bird	Sparrow	Malathion	--	--	--	--	4.4E-05	--	--	--	--	4.4E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Malathion	--	--	--	--	2.4E-05	--	--	--	--	2.4E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Methylene chloride	5.5E-06	--	--	0.15428	--	--	--	--	--	1.5E-01	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Methylene chloride	1.2E-05	--	--	--	--	--	--	--	--	1.2E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Naphthalene	0.00047	--	--	0.0006255	--	--	--	--	--	1.1E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Naphthalene	0.00104	--	--	--	--	--	--	--	--	1.0E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Oil and Grease	72.3167	--	--	--	--	--	--	--	--	7.2E+01	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Oil and Grease	32.5145	--	--	--	--	--	--	--	--	3.3E+01	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB 1254	0.00015	--	0.0025905	--	--	--	--	--	--	2.7E-03	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB 1254	6.6E-05	--	0.0005824	--	--	--	--	--	--	6.5E-04	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB 1260	9.9E-05	--	--	--	--	--	--	--	--	9.9E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB 1260	4.4E-05	--	--	--	--	--	--	--	--	4.4E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-008	7.3E-05	--	--	0.0014617	--	--	--	--	--	1.5E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-008	0.00016	--	--	--	--	--	--	--	--	1.6E-04	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-018	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-018	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-028	2.7E-05	--	--	0.0014621	--	--	--	--	--	1.5E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-028	0.00006	--	--	--	--	--	--	--	--	6.0E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-044	2.3E-05	--	--	0.001462	--	--	--	--	--	1.5E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-044	5.2E-05	--	--	--	--	--	--	--	--	5.2E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-052	2.6E-05	--	--	0.0014869	--	--	--	--	--	1.5E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-052	5.8E-05	--	--	--	--	--	--	--	--	5.8E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-066	2.4E-05	--	--	0.0015004	--	--	--	--	--	1.5E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-066	5.3E-05	--	--	--	--	--	--	--	--	5.3E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-101	2.5E-05	--	--	0.0016298	--	--	--	--	--	1.7E-03	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-101	5.6E-05	--	--	--	--	--	--	--	--	5.6E-05	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-105	1.1E-05	--	--	0.0013873	--	--	--	--	--	1.4E-03	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Area	Exposure Type	Class	Species	Analyte	Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)								Hazard Quotients			
					Terrestrial Food Chain				Aquatic Food Chain							
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	Total Exposure	NOAEL	LOAEL
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-105	2.4E-05	--	--	--	--	--	--	--	--	2.4E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-118	1.1E-05	--	--	0.0041645	--	--	--	--	--	4.2E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-118	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-128	--	--	--	0.001217	--	--	--	--	--	1.2E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-138	1.2E-05	--	--	0.0127332	--	--	--	--	--	1.3E-02	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-138	2.7E-05	--	--	--	--	--	--	--	--	2.7E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-153	1.3E-05	--	--	0.0199985	--	--	--	--	--	2.0E-02	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-153	2.9E-05	--	--	--	--	--	--	--	--	2.9E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-170	--	--	--	0.0038686	--	--	--	--	--	3.9E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-180	5.6E-06	--	--	0.0097411	--	--	--	--	--	9.7E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-180	1.3E-05	--	--	--	--	--	--	--	--	1.3E-05	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-187	--	--	--	0.0079077	--	--	--	--	--	7.9E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-195	--	--	--	0.0011771	--	--	--	--	--	1.2E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-206	--	--	--	0.0006281	--	--	--	--	--	6.3E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	PCB-209	--	--	--	0.0003768	--	--	--	--	--	3.8E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Pentachlorophenol	0.00443	--	--	--	--	--	--	--	--	4.4E-03	--	2.2E-01
Future Full Tidal	Terrestrial	Bird	Kestrel	Pentachlorophenol	0.00199	--	--	--	--	--	--	--	--	2.0E-03	--	6.9E-02
Future Full Tidal	Terrestrial	Bird	Kestrel	Perylene	--	--	--	0.0000065	--	--	--	--	--	6.5E-06	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Perylene	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Phenanthrene	0.0016	--	--	--	--	--	--	--	--	1.6E-03	--	1.8E-05
Future Full Tidal	Terrestrial	Bird	Kestrel	Phenanthrene	0.00072	--	--	0.000812	--	--	--	--	--	1.5E-03	--	1.2E-05
Future Full Tidal	Terrestrial	Bird	Kestrel	Pyrene	0.00029	--	--	0.0019387	--	--	--	--	--	2.2E-03	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Pyrene	0.00064	--	--	--	--	--	--	--	--	6.4E-04	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Styrene	2E-07	--	--	--	--	--	--	--	--	2.0E-07	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Styrene	1E-07	--	--	--	--	--	--	--	--	1.0E-07	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Tetrachloroethene	7.3E-06	--	--	--	--	--	--	--	--	7.3E-06	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Tetrachloroethene	3.3E-06	--	--	--	--	--	--	--	--	3.3E-06	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Toluene	8.5E-06	--	--	--	--	--	--	--	--	8.5E-06	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Toluene	3.8E-06	--	--	--	--	--	--	--	--	3.8E-06	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	TPH-Diesel	4.0122	--	--	--	0.07754	--	--	--	--	4.1E+00	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Future Full Tidal	Terrestrial	Bird	Kestrel	TPH-Diesel	1.80393	--	--	--	0.04191	--	--	--	--	1.8E+00	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Trichloroethene	7.3E-06	--	--	--	--	--	--	--	--	7.3E-06	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Trichloroethene	3.3E-06	--	--	--	--	--	--	--	--	3.3E-06	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Waste oil	14.4989	--	--	--	0.25733	--	--	--	--	1.5E+01	--	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Waste oil	6.51889	--	--	--	0.1391	--	--	--	--	6.7E+00	--	--
Future Full Tidal	Terrestrial	Bird	Sparrow	Xylene (total)	9.9E-06	--	--	--	--	--	--	--	--	9.9E-06	0.0E+00	--
Future Full Tidal	Terrestrial	Bird	Kestrel	Xylene (total)	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	0.0E+00	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Antimony	0.00035	--	--	--	--	--	--	--	--	3.5E-04	--	7.1E-04
Future Full Tidal	Terrestrial	Mammal	Coyote	Antimony	3E-05	--	--	--	--	--	--	--	--	3.0E-05	--	9.7E-05
Future Full Tidal	Terrestrial	Mammal	Mouse	Arsenic	0.10243	0.06998	0.5578177	--	0.00606	--	--	--	--	7.4E-01	--	5.5E-01
Future Full Tidal	Terrestrial	Mammal	Coyote	Arsenic	0.0088	0.0003	--	--	0.00278	--	--	--	--	1.2E-02	--	1.4E-02
Future Full Tidal	Terrestrial	Mammal	Mouse	Barium	2.77296	8.2108	23.24391	--	0.08357	--	--	--	--	3.4E+01	6.9E+01	9.2E-02
Future Full Tidal	Terrestrial	Mammal	Coyote	Barium	0.23821	0.03483	--	0.6901577	0.03832	--	--	--	--	1.0E+00	3.2E+00	4.3E-03
Future Full Tidal	Terrestrial	Mammal	Mouse	Beryllium	0.01951	0.02226	0.2612912	--	--	--	--	--	--	3.0E-01	4.5E-01	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Beryllium	0.00168	9.4E-05	--	--	--	--	--	--	--	1.8E-03	4.2E-03	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Cadmium	0.00734	0.03819	--	--	9.3E-05	--	--	--	--	4.6E-02	3.7E-02	3.7E-03
Future Full Tidal	Terrestrial	Mammal	Coyote	Cadmium	0.00063	0.00016	--	0.00574	4.2E-05	--	--	--	--	6.6E-03	8.5E-03	8.5E-04
Future Full Tidal	Terrestrial	Mammal	Mouse	Chromium	0.40624	0.33058	1.128106	--	0.00204	--	--	--	--	1.9E+00	5.5E-04	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Chromium	0.0349	0.0014	--	0.096525	0.00094	--	--	--	--	1.3E-01	6.3E-05	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Cobalt	0.14093	0.04897	0.1850692	--	0.00047	--	--	--	--	3.8E-01	6.1E+00	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Cobalt	0.01211	0.00021	--	0.0091995	0.00022	--	--	--	--	2.2E-02	5.6E-01	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Copper	0.2796	0.8298	1.267026	--	0.00234	--	--	--	--	2.4E+00	1.5E-01	1.2E-01
Future Full Tidal	Terrestrial	Mammal	Coyote	Copper	0.02402	0.00352	--	0.332046	0.00107	--	--	--	--	3.6E-01	3.7E-02	2.9E-02
Future Full Tidal	Terrestrial	Mammal	Mouse	Lead	0.60634	0.27466	1.680056	--	0.00317	--	--	--	--	2.6E+00	5.2E+00	2.6E-02
Future Full Tidal	Terrestrial	Mammal	Coyote	Lead	0.05209	0.00117	--	0.0538061	0.00146	--	--	--	--	1.1E-01	3.5E-01	1.7E-03
Future Full Tidal	Terrestrial	Mammal	Mouse	Mercury	0.01034	0.02747	--	--	1.4E-05	--	--	--	--	3.8E-02	9.5E-01	1.9E-01
Future Full Tidal	Terrestrial	Mammal	Coyote	Mercury	0.00089	0.00012	--	0.0012355	6.4E-06	--	--	--	--	2.2E-03	9.0E-02	1.8E-02
Future Full Tidal	Terrestrial	Mammal	Mouse	Molybdenum	0.01282	--	--	--	--	--	--	--	--	1.3E-02	5.3E-04	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Molybdenum	0.0011	--	--	--	--	--	--	--	--	1.1E-03	7.2E-05	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Nickel	0.45669	0.28988	2.402908	--	0.00204	--	--	--	--	3.2E+00	3.2E-01	3.2E-02
Future Full Tidal	Terrestrial	Mammal	Coyote	Nickel	0.03923	0.00123	--	0.092664	0.00094	--	--	--	--	1.3E-01	2.2E-02	2.2E-03
Future Full Tidal	Terrestrial	Mammal	Mouse	Selenium	0.00611	0.11362	--	--	--	--	--	--	--	1.2E-01	2.8E-01	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Selenium	0.00053	0.00048	--	0.0115161	--	--	--	--	--	1.3E-02	4.7E-02	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Silver	0.00325	0.00919	--	--	0.00016	--	--	--	--	1.3E-02	--	4.4E-04
Future Full Tidal	Terrestrial	Mammal	Coyote	Silver	0.00028	3.9E-05	--	--	7.2E-05	--	--	--	--	3.9E-04	--	2.2E-05
Future Full Tidal	Terrestrial	Mammal	Mouse	Sulfate	27.8438	--	--	--	177.865	--	--	--	--	2.1E+02	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Sulfate	2.39187	--	--	--	81.5686	--	--	--	--	8.4E+01	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Sulfide	0.63521	--	--	--	--	--	--	--	--	6.4E-01	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Future Full Tidal	Terrestrial	Mammal	Coyote	Sulfide	0.05457	--	--	--	--	--	--	--	--	5.5E-02	--	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Thallium	0.007	--	--	--	--	--	--	--	--	7.0E-03	2.5E-02	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Thallium	0.0006	--	--	--	--	--	--	--	--	6.0E-04	3.4E-03	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Vanadium	0.9316	0.40398	1.490233	--	0.01094	--	--	--	--	2.8E+00	5.7E+00	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Vanadium	0.08003	0.00171	--	0.0142857	0.00502	--	--	--	--	1.0E-01	3.2E-01	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Zinc	1.47745	11.6502	12.33447	--	0.01178	--	--	--	--	2.5E+01	8.5E-01	6.4E-02	
Future Full Tidal	Terrestrial	Mammal	Coyote	Zinc	0.12692	0.04942	--	10.34748	0.0054	--	--	--	--	1.1E+01	5.6E-01	4.2E-02	
Future Full Tidal	Terrestrial	Mammal	Mouse	Ammonia as Nitrogen	0.10803	--	--	--	--	--	--	--	--	1.1E-01	4.5E-02	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Ammonia as Nitrogen	0.00928	--	--	--	--	--	--	--	--	9.3E-03	6.2E-03	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Chloride	210.312	--	--	--	--	--	--	--	--	2.1E+02	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Chloride	18.0664	--	--	--	--	--	--	--	--	1.8E+01	--	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Phosphorus, Total as P	2.16537	--	--	--	--	--	--	--	--	2.2E+00	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Phosphorus, Total as P	0.18601	--	--	--	--	--	--	--	--	1.9E-01	--	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Phosphorus, Total as PO4	6.64404	--	--	--	--	--	--	--	--	6.6E+00	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Phosphorus, Total as PO4	0.57074	--	--	--	--	--	--	--	--	5.7E-01	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	1,2-Dichloroethene (cis)	--	--	--	0.0057915	--	--	--	--	--	5.8E-03	2.3E-04	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	1,2-Dichloroethene (cis)	--	--	--	--	--	--	--	--	--	0.0E+00	--	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	2,4-D	1.7E-06	--	--	--	0.00019	--	--	--	--	1.9E-04	--	1.4E-06	
Future Full Tidal	Terrestrial	Mammal	Coyote	2,4-D	1E-07	--	--	--	8.6E-05	--	--	--	--	8.6E-05	--	1.0E-06	
Future Full Tidal	Terrestrial	Mammal	Mouse	2,4-DB	--	--	--	--	0.00056	--	--	--	--	5.6E-04	4.6E-05	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	2,4-DB	--	--	--	--	0.00026	--	--	--	--	2.6E-04	3.3E-05	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	2-Butanone	6.8E-05	--	--	--	--	--	--	--	--	6.8E-05	3.0E-07	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	2-Butanone	5.8E-06	--	--	--	--	--	--	--	--	5.8E-06	0.0E+00	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Future Full Tidal	Terrestrial	Mammal	Mouse	2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Future Full Tidal	Terrestrial	Mammal	Coyote	4,4'-DDD	7.3E-06	--	--	0.0012919	--	--	--	--	--	1.3E-03	--	1.4E-05	
Future Full Tidal	Terrestrial	Mammal	Mouse	4,4'-DDD	8.6E-05	--	0.0007934	--	--	--	--	--	--	8.8E-04	--	5.9E-06	
Future Full Tidal	Terrestrial	Mammal	Mouse	4,4'-DDE	7.6E-05	--	0.0022128	--	--	--	--	--	--	2.3E-03	--	8.4E-05	
Future Full Tidal	Terrestrial	Mammal	Coyote	4,4'-DDE	6.6E-06	--	--	0.0000816	--	--	--	--	--	8.8E-05	--	5.2E-06	
Future Full Tidal	Terrestrial	Mammal	Coyote	4,4'-DDT	1.5E-06	--	--	0.0009399	7E-07	--	--	--	--	9.4E-04	1.5E-03	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	4,4'-DDT	1.8E-05	--	--	--	1.5E-06	--	--	--	--	1.9E-05	1.9E-05	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	4-Methylphenol	0.00383	--	--	--	--	--	--	--	--	3.8E-03	5.4E-04	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	4-Methylphenol	0.00033	--	--	--	--	--	--	--	--	3.3E-04	7.3E-05	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	4-Nitrophenol	0.00601	--	--	--	0.00347	--	--	--	--	9.5E-03	--	2.3E-05	
Future Full Tidal	Terrestrial	Mammal	Coyote	4-Nitrophenol	0.00052	--	--	--	0.00159	--	--	--	--	2.1E-03	--	8.3E-06	
Future Full Tidal	Terrestrial	Mammal	Coyote	Acenaphthene	3.4E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	3.6E-06	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Acenaphthene	0.00039	--	--	--	--	--	--	--	--	3.9E-04	2.1E-06	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Acenaphthylene	0.00061	--	--	--	--	--	--	--	--	6.1E-04	--	--	

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Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Future Full Tidal	Terrestrial	Mammal	Coyote	Acenaphthylene	5.2E-05	--	--	0.0003861	--	--	--	--	--	4.4E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Acetone	9.9E-06	--	--	0.142857	--	--	--	--	--	1.4E-01	1.8E-03	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Acetone	0.00012	--	--	--	--	--	--	--	--	1.2E-04	9.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Aldrin	2E-07	--	--	0.0001811	--	--	--	--	--	1.8E-04	1.2E-03	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Aldrin	2.7E-06	--	--	--	--	--	--	--	--	2.7E-06	1.1E-05	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Anthracene	3.2E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	2.0E-07
Future Full Tidal	Terrestrial	Mammal	Mouse	Anthracene	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	1.0E-07
Future Full Tidal	Terrestrial	Mammal	Mouse	Benzene	1.6E-05	--	--	--	--	--	--	--	--	1.6E-05	5.5E-06	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Benzene	1.4E-06	--	--	--	--	--	--	--	--	1.4E-06	7.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Benzo(a)anthracene	3.2E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	2.7E-04
Future Full Tidal	Terrestrial	Mammal	Mouse	Benzo(a)anthracene	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	1.5E-04
Future Full Tidal	Terrestrial	Mammal	Coyote	Benzo(a)pyrene	3.4E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	6.3E-04
Future Full Tidal	Terrestrial	Mammal	Mouse	Benzo(a)pyrene	0.00039	--	--	--	--	--	--	--	--	3.9E-04	--	3.7E-04
Future Full Tidal	Terrestrial	Mammal	Mouse	Benzo(b)fluoranthene	0.0005	--	--	--	--	--	--	--	--	5.0E-04	--	1.0E-05
Future Full Tidal	Terrestrial	Mammal	Coyote	Benzo(b)fluoranthene	4.3E-05	--	--	0.0003861	--	--	--	--	--	4.3E-04	--	1.4E-05
Future Full Tidal	Terrestrial	Mammal	Mouse	Benzo(e)pyrene	0.00048	--	--	--	--	--	--	--	--	4.8E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Benzo(e)pyrene	4.1E-05	--	--	0.0003861	--	--	--	--	--	4.3E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Benzo(g,h,i)perylene	0.00047	--	--	--	--	--	--	--	--	4.7E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Benzo(g,h,i)perylene	4E-05	--	--	0.0003861	--	--	--	--	--	4.3E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Benzo(k)fluoranthene	3.2E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	7.5E-06
Future Full Tidal	Terrestrial	Mammal	Mouse	Benzo(k)fluoranthene	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	4.2E-06
Future Full Tidal	Terrestrial	Mammal	Mouse	BHC-alpha	4.4E-06	--	0.0000574	--	--	--	--	--	--	6.2E-05	4.4E-06	--
Future Full Tidal	Terrestrial	Mammal	Coyote	BHC-alpha	4E-07	--	--	0.0000345	--	--	--	--	--	3.5E-05	4.0E-06	--
Future Full Tidal	Terrestrial	Mammal	Mouse	BHC-beta	1.1E-05	0.00041	0.0006353	--	--	--	--	--	--	1.1E-03	2.1E-04	--
Future Full Tidal	Terrestrial	Mammal	Coyote	BHC-beta	9E-07	1.8E-06	--	0.0004519	--	--	--	--	--	4.5E-04	1.5E-04	--
Future Full Tidal	Terrestrial	Mammal	Coyote	BHC-delta	5E-07	--	--	0.0001067	3.6E-06	--	--	--	--	1.1E-04	5.1E-06	--
Future Full Tidal	Terrestrial	Mammal	Mouse	BHC-delta	5.8E-06	--	--	--	7.9E-06	--	--	--	--	1.4E-05	4.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Coyote	BHC-gamma	3E-07	--	--	0.0000394	--	--	--	--	--	4.0E-05	6.4E-06	--
Future Full Tidal	Terrestrial	Mammal	Mouse	BHC-gamma	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	4.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Biphenyl	--	--	--	0.0000232	--	--	--	--	--	2.3E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Butylbenzylphthalate	0.00088	--	--	--	--	--	--	--	--	8.8E-04	4.5E-06	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Butylbenzylphthalate	7.5E-05	--	--	--	--	--	--	--	--	7.5E-05	6.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Carbon disulfide	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	7.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Carbon disulfide	1E-06	--	--	--	--	--	--	--	--	1.0E-06	1.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Chlordane (technical)	0.00041	--	--	--	--	--	--	--	--	4.1E-04	1.4E-03	2.8E-04
Future Full Tidal	Terrestrial	Mammal	Coyote	Chlordane (technical)	3.5E-05	--	--	--	--	--	--	--	--	3.5E-05	2.0E-04	3.8E-05
Future Full Tidal	Terrestrial	Mammal	Mouse	Chlordane-alpha	6.1E-05	--	--	--	--	--	--	--	--	6.1E-05	2.2E-04	4.2E-05

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Future Full Tidal	Terrestrial	Mammal	Coyote	Chlordane-alpha	5.3E-06	--	--	--	--	--	--	--	--	5.3E-06	3.0E-05	5.8E-06	
Future Full Tidal	Terrestrial	Mammal	Mouse	Chlordane-gamma	4.1E-05	--	--	--	--	--	--	--	--	4.1E-05	1.4E-04	2.8E-05	
Future Full Tidal	Terrestrial	Mammal	Coyote	Chlordane-gamma	3.5E-06	--	--	--	--	--	--	--	--	3.5E-06	2.0E-05	3.8E-06	
Future Full Tidal	Terrestrial	Mammal	Mouse	Chlorobenzene	6.5E-06	--	--	--	--	--	--	--	--	6.5E-06	--	6.0E-06	
Future Full Tidal	Terrestrial	Mammal	Coyote	Chlorobenzene	6E-07	--	--	--	--	--	--	--	--	6.0E-07	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Chloroform	--	--	--	2.54826	--	--	--	--	--	2.5E+00	2.2E-02	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Chloroform	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Chrysene	0.00084	--	--	--	--	--	--	--	--	8.4E-04	--	6.9E-06	
Future Full Tidal	Terrestrial	Mammal	Coyote	Chrysene	7.2E-05	--	--	0.0003861	--	--	--	--	--	4.6E-04	--	6.0E-06	
Future Full Tidal	Terrestrial	Mammal	Mouse	Diazinon	0.00067	--	--	--	7.3E-05	--	--	--	--	7.5E-04	6.7E-03	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Diazinon	5.8E-05	--	--	--	3.3E-05	--	--	--	--	9.1E-05	1.3E-03	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Dibenz(a,h)anthracene	0.00044	--	--	--	--	--	--	--	--	4.4E-04	--	5.9E-02	
Future Full Tidal	Terrestrial	Mammal	Coyote	Dibenz(a,h)anthracene	3.8E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	9.1E-02	
Future Full Tidal	Terrestrial	Mammal	Coyote	Dibenzothiophene	--	--	--	0.0000058	--	--	--	--	--	5.8E-06	--	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Dicamba	--	--	--	--	1.6E-05	--	--	--	--	1.6E-05	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Dicamba	--	--	--	--	7.2E-06	--	--	--	--	7.2E-06	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Dieldrin	9E-07	--	--	0.0000357	7E-07	--	--	--	--	3.7E-05	9.6E-03	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Dieldrin	9.9E-06	--	--	--	1.6E-06	--	--	--	--	1.2E-05	1.9E-03	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Diethylphthalate	0.00044	--	--	--	--	--	--	--	--	4.4E-04	1.0E-07	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Diethylphthalate	3.8E-05	--	--	--	--	--	--	--	--	3.8E-05	0.0E+00	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Dimethylphthalate	0.0004	--	--	--	--	--	--	--	--	4.0E-04	--	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Dimethylphthalate	3.4E-05	--	--	--	--	--	--	--	--	3.4E-05	--	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Di-n-butylphthalate	0.00109	--	--	--	--	--	--	--	--	1.1E-03	1.8E-06	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Di-n-butylphthalate	9.3E-05	--	--	--	--	--	--	--	--	9.3E-05	3.0E-07	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Di-n-octylphthalate	0.0009	--	--	--	--	--	--	--	--	9.0E-04	--	4.2E-06	
Future Full Tidal	Terrestrial	Mammal	Coyote	Di-n-octylphthalate	7.8E-05	--	--	--	--	--	--	--	--	7.8E-05	--	6.0E-07	
Future Full Tidal	Terrestrial	Mammal	Mouse	Dursban (Chlorpyrifos)	--	--	--	--	1.6E-05	--	--	--	--	1.6E-05	--	1.0E-07	
Future Full Tidal	Terrestrial	Mammal	Coyote	Dursban (Chlorpyrifos)	--	--	--	--	7.1E-06	--	--	--	--	7.1E-06	--	1.0E-07	
Future Full Tidal	Terrestrial	Mammal	Mouse	Endosulfan I	1.8E-05	--	--	--	--	--	--	--	--	1.8E-05	1.5E-05	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Endosulfan I	1.6E-06	--	--	--	--	--	--	--	--	1.6E-06	2.0E-06	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Endosulfan II	4E-07	--	--	0.0002465	--	--	--	--	--	2.5E-04	3.2E-04	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Endosulfan II	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	3.7E-06	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Endosulfan Sulfate	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Future Full Tidal	Terrestrial	Mammal	Mouse	Endosulfan Sulfate	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Future Full Tidal	Terrestrial	Mammal	Coyote	Endrin	9E-07	--	--	0.0003467	--	--	--	--	--	3.5E-04	--	5.6E-04	
Future Full Tidal	Terrestrial	Mammal	Mouse	Endrin	0.00001	--	--	--	--	--	--	--	--	1.0E-05	--	1.0E-05	
Future Full Tidal	Terrestrial	Mammal	Mouse	Endrin aldehyde	1E-05	--	--	--	--	--	--	--	--	1.0E-05	--	1.0E-05	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Future Full Tidal	Terrestrial	Mammal	Coyote	Endrin aldehyde	9E-07	--	--	--	--	--	--	--	--	9.0E-07	--	1.4E-06
Future Full Tidal	Terrestrial	Mammal	Coyote	Endrin ketone	9E-07	--	--	0.0000583	--	--	--	--	--	5.9E-05	--	9.6E-05
Future Full Tidal	Terrestrial	Mammal	Mouse	Endrin ketone	1E-05	--	--	--	--	--	--	--	--	1.0E-05	--	1.1E-05
Future Full Tidal	Terrestrial	Mammal	Mouse	Ethylbenzene	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	1.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Ethylbenzene	1E-06	--	--	--	--	--	--	--	--	1.0E-06	0.0E+00	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Fluoranthene	3.3E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	5.0E-06	2.5E-06
Future Full Tidal	Terrestrial	Mammal	Mouse	Fluoranthene	0.00039	--	--	--	--	--	--	--	--	3.9E-04	2.9E-06	1.5E-06
Future Full Tidal	Terrestrial	Mammal	Mouse	Fluorene	0.00067	--	--	--	--	--	--	--	--	6.7E-04	5.0E-06	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Fluorene	5.7E-05	--	--	0.0003861	--	--	--	--	--	4.4E-04	5.3E-06	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Indeno(1,2,3-c,d)pyrene	0.00045	--	--	--	--	--	--	--	--	4.5E-04	--	5.0E-06
Future Full Tidal	Terrestrial	Mammal	Coyote	Indeno(1,2,3-c,d)pyrene	3.8E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	7.6E-06
Future Full Tidal	Terrestrial	Mammal	Mouse	Malathion	--	--	--	--	3.1E-05	--	--	--	--	3.1E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Malathion	--	--	--	--	1.4E-05	--	--	--	--	1.4E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Methylene chloride	9E-07	--	--	0.073359	--	--	--	--	--	7.3E-02	1.6E-02	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Methylene chloride	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	1.5E-06	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Naphthalene	0.00092	--	--	--	--	--	--	--	--	9.2E-04	1.8E-05	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Naphthalene	7.9E-05	--	--	0.0002974	--	--	--	--	--	3.8E-04	1.2E-05	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Oil and Grease	63.6274	--	--	--	--	--	--	--	--	6.4E+01	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Oil and Grease	5.46579	--	--	--	--	--	--	--	--	5.5E+00	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB 1254	0.00013	--	0.0007217	--	--	--	--	--	--	8.5E-04	2.1E-03	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB 1254	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	4.4E-05	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB 1260	8.7E-05	--	--	--	--	--	--	--	--	8.7E-05	1.0E-05	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB 1260	7.5E-06	--	--	--	--	--	--	--	--	7.5E-06	1.4E-06	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-008	1.2E-05	--	--	0.000695	--	--	--	--	--	7.1E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-008	0.00014	--	--	--	--	--	--	--	--	1.4E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-018	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-018	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-028	4.5E-06	--	--	0.0006952	--	--	--	--	--	7.0E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-028	5.3E-05	--	--	--	--	--	--	--	--	5.3E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-044	3.9E-06	--	--	0.0006952	--	--	--	--	--	7.0E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-044	4.6E-05	--	--	--	--	--	--	--	--	4.6E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-052	4.4E-06	--	--	0.000707	--	--	--	--	--	7.1E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-052	5.1E-05	--	--	--	--	--	--	--	--	5.1E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-066	4E-06	--	--	0.0007134	--	--	--	--	--	7.2E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-066	4.7E-05	--	--	--	--	--	--	--	--	4.7E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-101	4.2E-06	--	--	0.000775	--	--	--	--	--	7.8E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-101	4.9E-05	--	--	--	--	--	--	--	--	4.9E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-105	1.8E-06	--	--	0.0006597	--	--	--	--	--	6.6E-04	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Area	Exposure Type	Class	Species	Analyte	Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)								Hazard Quotients			
					Terrestrial Food Chain				Aquatic Food Chain							
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	Total Exposure	NOAEL	LOAEL
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-105	2.2E-05	--	--	--	--	--	--	--	--	2.2E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-118	1.9E-06	--	--	0.0019802	--	--	--	--	--	2.0E-03	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-118	2.2E-05	--	--	--	--	--	--	--	--	2.2E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-128	--	--	--	0.0005787	--	--	--	--	--	5.8E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-138	2E-06	--	--	0.0060545	--	--	--	--	--	6.1E-03	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-138	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-153	2.2E-06	--	--	0.0095091	--	--	--	--	--	9.5E-03	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-153	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-170	--	--	--	0.0018395	--	--	--	--	--	1.8E-03	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-180	9E-07	--	--	0.0046318	--	--	--	--	--	4.6E-03	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-180	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-187	--	--	--	0.00376	--	--	--	--	--	3.8E-03	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-195	--	--	--	0.0005597	--	--	--	--	--	5.6E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-206	--	--	--	0.0002987	--	--	--	--	--	3.0E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	PCB-209	--	--	--	0.0001792	--	--	--	--	--	1.8E-04	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Pentachlorophenol	0.00389	--	--	--	--	--	--	--	--	3.9E-03	1.1E-03	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Pentachlorophenol	0.00033	--	--	--	--	--	--	--	--	3.3E-04	1.4E-04	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Perylene	--	--	--	0.0000031	--	--	--	--	--	3.1E-06	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Perylene	--	--	--	--	--	--	--	--	--	--	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Phenanthrene	0.00141	--	--	--	--	--	--	--	--	1.4E-03	--	1.6E-06
Future Full Tidal	Terrestrial	Mammal	Coyote	Phenanthrene	0.00012	--	--	0.0003861	--	--	--	--	--	5.1E-04	--	9.0E-07
Future Full Tidal	Terrestrial	Mammal	Coyote	Pyrene	4.8E-05	--	--	0.0009219	--	--	--	--	--	9.7E-04	1.2E-05	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Pyrene	0.00056	--	--	--	--	--	--	--	--	5.6E-04	4.2E-06	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Styrene	1E-07	--	--	--	--	--	--	--	--	1.0E-07	--	0.0E+00
Future Full Tidal	Terrestrial	Mammal	Coyote	Styrene	--	--	--	--	--	--	--	--	--	--	--	0.0E+00
Future Full Tidal	Terrestrial	Mammal	Mouse	Tetrachloroethene	6.4E-06	--	--	--	--	--	--	--	--	6.4E-06	4.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Tetrachloroethene	6E-07	--	--	--	--	--	--	--	--	6.0E-07	1.0E-07	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Toluene	7.4E-06	--	--	--	--	--	--	--	--	7.4E-06	--	0.0E+00
Future Full Tidal	Terrestrial	Mammal	Coyote	Toluene	6E-07	--	--	--	--	--	--	--	--	6.0E-07	--	0.0E+00
Future Full Tidal	Terrestrial	Mammal	Mouse	TPH-Diesel	3.53011	--	--	--	0.05484	--	--	--	--	3.6E+00	--	5.7E-04

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Future Full Tidal	Terrestrial	Mammal	Coyote	TPH-Diesel	0.30325	--	--	--	0.02515	--	--	--	--	3.3E-01	--	8.3E-05
Future Full Tidal	Terrestrial	Mammal	Mouse	Trichloroethene	6.4E-06	--	--	--	--	--	--	--	--	6.4E-06	--	1.0E-07
Future Full Tidal	Terrestrial	Mammal	Coyote	Trichloroethene	6E-07	--	--	--	--	--	--	--	--	6.0E-07	--	0.0E+00
Future Full Tidal	Terrestrial	Mammal	Mouse	Waste oil	12.7568	--	--	--	0.18199	--	--	--	--	1.3E+01	--	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Waste oil	1.09585	--	--	--	0.08346	--	--	--	--	1.2E+00	--	--
Future Full Tidal	Terrestrial	Mammal	Mouse	Xylene (total)	8.7E-06	--	--	--	--	--	--	--	--	8.7E-06	0.0E+00	--
Future Full Tidal	Terrestrial	Mammal	Coyote	Xylene (total)	8E-07	--	--	--	--	--	--	--	--	8.0E-07	0.0E+00	--
Garden Grove	Aquatic	Bird	Stilt	Arsenic	0.09256	--	--	--	0.00022	0.2496898	--	--	--	3.4E-01	9.4E-02	3.8E-02
Garden Grove	Aquatic	Bird	Heron	Arsenic	0.01872	--	0.0021458	--	0.00013	0.027895	--	--	--	4.9E-02	1.0E-02	4.0E-03
Garden Grove	Aquatic	Bird	Tern	Arsenic	0.01606	--	--	--	0.00037	--	--	--	--	1.6E-02	6.1E-03	2.5E-03
Garden Grove	Aquatic	Bird	Stilt	Barium	1.12751	--	--	--	0.00406	4.681716	--	0.161485	--	6.0E+00	4.4E-02	--
Garden Grove	Aquatic	Bird	Tern	Barium	0.19566	--	--	--	0.00685	--	--	--	1.65883	1.9E+00	1.9E-02	--
Garden Grove	Aquatic	Bird	Heron	Barium	0.22799	--	0.0402335	0.0705788	0.0025	0.5230355	0.082473	0.072164	0.40206	1.4E+00	7.9E-03	--
Garden Grove	Aquatic	Bird	Stilt	Beryllium	0.00939	--	--	--	--	0.0623075	--	--	--	7.2E-02	--	--
Garden Grove	Aquatic	Bird	Tern	Beryllium	0.00163	--	--	--	--	--	--	--	0.02211	2.4E-02	--	--
Garden Grove	Aquatic	Bird	Heron	Beryllium	0.0019	--	0.0005355	--	--	0.0069609	0.001243	--	0.00536	1.6E-02	--	--
Garden Grove	Aquatic	Bird	Heron	Cadmium	0.00151	--	--	0.0133013	4.3E-05	--	0.00067	--	0.00204	1.8E-02	1.3E-02	9.2E-04
Garden Grove	Aquatic	Bird	Tern	Cadmium	0.00129	--	--	--	0.00012	--	--	--	0.0084	9.8E-03	1.3E-02	9.4E-04
Garden Grove	Aquatic	Bird	Stilt	Cadmium	0.00746	--	--	--	6.9E-05	--	--	--	--	7.5E-03	7.3E-03	5.3E-04
Garden Grove	Aquatic	Bird	Stilt	Chromium	0.34356	--	--	--	0.00079	0.4725926	--	0.01727	--	8.3E-01	1.2E+00	--
Garden Grove	Aquatic	Bird	Tern	Chromium	0.05962	--	--	--	0.00134	--	--	--	0.21549	2.8E-01	5.4E-01	--
Garden Grove	Aquatic	Bird	Heron	Chromium	0.06947	--	0.0040613	0.0143105	0.00049	0.0527975	0.02511	0.007718	0.05223	2.3E-01	2.4E-01	--
Garden Grove	Aquatic	Bird	Stilt	Cobalt	0.15486	--	--	--	0.00013	0.1007415	--	0.003939	--	2.6E-01	1.7E+00	1.7E-01
Garden Grove	Aquatic	Bird	Tern	Cobalt	0.02687	--	--	--	0.00022	--	--	--	0.06416	9.1E-02	8.0E-01	8.2E-02
Garden Grove	Aquatic	Bird	Heron	Cobalt	0.03131	--	0.0008657	0.0021443	7.9E-05	0.0112547	0.010826	0.00176	0.01555	7.4E-02	3.5E-01	3.6E-02
Garden Grove	Aquatic	Bird	Stilt	Copper	0.32437	--	--	--	0.00168	0.7281318	--	0.398203	--	1.5E+00	4.8E-02	3.6E-02
Garden Grove	Aquatic	Bird	Tern	Copper	0.05629	--	--	--	0.00284	--	--	--	1.05153	1.1E+00	5.0E-02	3.8E-02
Garden Grove	Aquatic	Bird	Heron	Copper	0.06559	--	0.0062574	0.1615571	0.00104	0.081346	0.109844	0.177947	0.25486	8.6E-01	2.1E-02	1.6E-02
Garden Grove	Aquatic	Bird	Stilt	Lead	0.87039	--	--	--	0.00061	1.194657	--	0.009452	--	2.1E+00	2.5E+00	2.5E-01
Garden Grove	Aquatic	Bird	Tern	Lead	0.15104	--	--	--	0.00104	--	--	--	0.76664	9.2E-01	1.5E+00	1.5E-01
Garden Grove	Aquatic	Bird	Heron	Lead	0.176	--	0.0102666	0.0570932	0.00038	0.1334656	0.017329	0.004224	0.18581	5.8E-01	5.3E-01	5.3E-02
Garden Grove	Aquatic	Bird	Tern	Mercury	0.00039	--	--	--	1.5E-05	--	--	--	0.00436	4.8E-03	2.5E-03	--
Garden Grove	Aquatic	Bird	Heron	Mercury	0.00045	--	--	0.0011503	5.3E-06	--	--	--	0.00106	2.7E-03	7.6E-04	--
Garden Grove	Aquatic	Bird	Stilt	Mercury	0.00224	--	--	--	8.6E-06	--	--	--	--	2.3E-03	8.6E-04	--
Garden Grove	Aquatic	Bird	Stilt	Molybdenum	0.04896	--	--	--	--	--	--	--	--	4.9E-02	--	2.1E-03
Garden Grove	Aquatic	Bird	Heron	Molybdenum	0.0099	--	--	--	--	--	--	--	--	9.9E-03	--	3.2E-04
Garden Grove	Aquatic	Bird	Tern	Molybdenum	0.0085	--	--	--	--	--	--	--	--	8.5E-03	--	5.1E-04
Garden Grove	Aquatic	Bird	Stilt	Nickel	0.22598	--	--	--	0.00535	0.5889679	--	0.020744	--	8.4E-01	1.5E-02	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Garden Grove	Aquatic	Bird	Heron	Nickel	0.04569	--	0.0050614	0.0213716	0.00329	0.0657988	0.132354	0.00927	0.07101	3.5E-01	4.8E-03	--	
Garden Grove	Aquatic	Bird	Tern	Nickel	0.03921	--	--	--	0.00902	--	--	--	0.29297	3.4E-01	8.5E-03	--	
Garden Grove	Aquatic	Bird	Tern	Selenium	0.00409	--	--	--	0.00019	--	--	--	0.62385	6.3E-01	3.0E+00	--	
Garden Grove	Aquatic	Bird	Heron	Selenium	0.00477	--	--	0.0234102	7.1E-05	--	0.001734	0.038103	0.1512	2.2E-01	5.8E-01	--	
Garden Grove	Aquatic	Bird	Stilt	Selenium	0.02358	--	--	--	0.00012	--	--	0.085266	--	1.1E-01	3.8E-01	--	
Garden Grove	Aquatic	Bird	Stilt	Silver	0.00345	--	--	--	--	--	--	0.00893	--	1.2E-02	--	4.5E-04	
Garden Grove	Aquatic	Bird	Heron	Silver	0.0007	--	--	--	--	--	--	0.00399	--	4.7E-03	--	1.3E-04	
Garden Grove	Aquatic	Bird	Tern	Silver	0.0006	--	--	--	--	--	--	--	--	6.0E-04	--	3.0E-05	
Garden Grove	Aquatic	Bird	Tern	Sulfate	3.068	--	--	--	53.44	--	--	--	--	5.7E+01	--	--	
Garden Grove	Aquatic	Bird	Stilt	Sulfate	17.68	--	--	--	31.68	--	--	--	--	4.9E+01	--	--	
Garden Grove	Aquatic	Bird	Heron	Sulfate	3.575	--	--	--	19.52	--	--	--	--	2.3E+01	--	--	
Garden Grove	Aquatic	Bird	Stilt	Sulfide	2.04	--	--	--	--	--	--	--	--	2.0E+00	--	--	
Garden Grove	Aquatic	Bird	Heron	Sulfide	0.4125	--	--	--	--	--	--	--	--	4.1E-01	--	--	
Garden Grove	Aquatic	Bird	Tern	Sulfide	0.354	--	--	--	--	--	--	--	--	3.5E-01	--	--	
Garden Grove	Aquatic	Bird	Stilt	Thallium	0.00472	--	--	--	--	--	--	--	--	4.7E-03	--	1.8E-04	
Garden Grove	Aquatic	Bird	Heron	Thallium	0.00095	--	--	--	--	--	--	--	--	9.5E-04	--	2.7E-05	
Garden Grove	Aquatic	Bird	Tern	Thallium	0.00082	--	--	--	--	--	--	--	--	8.2E-04	--	4.3E-05	
Garden Grove	Aquatic	Bird	Stilt	Vanadium	0.80158	--	--	--	0.00802	0.6351705	--	0.00551	--	1.5E+00	1.8E-01	--	
Garden Grove	Aquatic	Bird	Tern	Vanadium	0.1391	--	--	--	0.01353	--	--	0.19536	3.5E-01	5.9E-02	--		
Garden Grove	Aquatic	Bird	Heron	Vanadium	0.16208	--	0.0054585	0.0027236	0.00494	0.0709605	0.007256	0.002462	0.04735	3.0E-01	2.8E-02	--	
Garden Grove	Aquatic	Bird	Tern	Zinc	0.25024	--	--	--	0.01069	--	--	19.6614	2.0E+01	2.9E+00	3.2E-01		
Garden Grove	Aquatic	Bird	Heron	Zinc	0.29159	--	0.051249	2.917443	0.0039	0.6662372	0.659825	0.187403	4.7654	9.5E+00	7.6E-01	8.4E-02	
Garden Grove	Aquatic	Bird	Stilt	Zinc	1.44204	--	--	--	0.00634	5.963522	--	0.419364	--	7.8E+00	8.4E-01	9.2E-02	
Garden Grove	Aquatic	Bird	Tern	2,4-DB	--	--	--	--	0.00039	--	--	--	--	3.9E-04	2.9E-06	--	
Garden Grove	Aquatic	Bird	Stilt	2,4-DB	--	--	--	--	0.00023	--	--	--	--	2.3E-04	1.3E-06	--	
Garden Grove	Aquatic	Bird	Heron	2,4-DB	--	--	--	--	0.00014	--	--	--	--	1.4E-04	6.0E-07	--	
Garden Grove	Aquatic	Bird	Tern	4,4'-DDD	4.5E-05	--	--	--	--	--	--	0.09927	9.9E-02	3.7E-01	--		
Garden Grove	Aquatic	Bird	Heron	4,4'-DDD	5.3E-05	--	0.0000103	0.0001685	--	0.0001338	0.000804	--	0.02406	2.5E-02	5.1E-02	--	
Garden Grove	Aquatic	Bird	Stilt	4,4'-DDD	0.00026	--	--	--	--	0.0011979	--	--	--	1.5E-03	4.0E-03	--	
Garden Grove	Aquatic	Bird	Tern	4,4'-DDE	0.00013	--	--	--	--	--	--	2.23141	2.2E+00	--	8.6E+00		
Garden Grove	Aquatic	Bird	Heron	4,4'-DDE	0.00016	--	0.000096	0.0222965	--	0.0012483	0.002094	0.000409	0.54083	5.7E-01	--	1.2E+00	
Garden Grove	Aquatic	Bird	Stilt	4,4'-DDE	0.00078	--	--	--	--	0.0111735	--	0.000915	--	1.3E-02	--	3.6E-02	
Garden Grove	Aquatic	Bird	Tern	4-Nitrophenol	--	--	--	--	0.00418	--	--	--	--	4.2E-03	--	--	
Garden Grove	Aquatic	Bird	Stilt	4-Nitrophenol	--	--	--	--	0.00248	--	--	--	--	2.5E-03	--	--	
Garden Grove	Aquatic	Bird	Heron	4-Nitrophenol	--	--	--	--	0.00153	--	--	--	--	1.5E-03	--	--	
Garden Grove	Aquatic	Bird	Tern	Acetone	0.00012	--	--	--	--	--	--	0.63917	6.4E-01	2.7E-04	--		
Garden Grove	Aquatic	Bird	Heron	Acetone	0.00014	--	--	0.005775	--	--	--	0.15492	1.6E-01	3.7E-05	--		
Garden Grove	Aquatic	Bird	Stilt	Acetone	0.00068	--	--	--	--	--	--	--	--	6.8E-04	2.0E-07	--	

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Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL	
Garden Grove	Aquatic	Bird	Tern	Benzo(a)anthracene	0.00027	--	--	--	--	--	--	0.02583	2.6E-02	2.9E-04	--	
Garden Grove	Aquatic	Bird	Heron	Benzo(a)anthracene	0.00032	--	--	0.000948	--	--	--	0.00626	7.5E-03	4.6E-05	--	
Garden Grove	Aquatic	Bird	Stilt	Benzo(a)anthracene	0.00156	--	--	--	--	--	--	--	1.6E-03	1.3E-05	--	
Garden Grove	Aquatic	Bird	Tern	Benzo(a)pyrene	0.00029	--	--	--	--	--	--	0.02791	2.8E-02	3.2E-03	--	
Garden Grove	Aquatic	Bird	Heron	Benzo(a)pyrene	0.00034	--	--	0.0010246	--	--	--	0.00677	8.1E-03	5.0E-04	--	
Garden Grove	Aquatic	Bird	Stilt	Benzo(a)pyrene	0.00169	--	--	--	--	--	--	--	1.7E-03	1.4E-04	--	
Garden Grove	Aquatic	Bird	Tern	Benzo(b)fluoranthene	0.00029	--	--	--	--	--	--	0.0279	2.8E-02	3.2E-04	--	
Garden Grove	Aquatic	Bird	Heron	Benzo(b)fluoranthene	0.00034	--	--	0.0003234	--	--	--	0.00676	7.4E-03	4.6E-05	--	
Garden Grove	Aquatic	Bird	Stilt	Benzo(b)fluoranthene	0.00169	--	--	--	--	--	--	--	1.7E-03	1.4E-05	--	
Garden Grove	Aquatic	Bird	Tern	Benzo(e)pyrene	0.00038	--	--	--	--	--	--	0.03659	3.7E-02	--	--	
Garden Grove	Aquatic	Bird	Heron	Benzo(e)pyrene	0.00045	--	--	0.0001679	--	--	--	0.00887	9.5E-03	--	--	
Garden Grove	Aquatic	Bird	Stilt	Benzo(e)pyrene	0.00221	--	--	--	--	--	--	--	2.2E-03	--	--	
Garden Grove	Aquatic	Bird	Tern	Benzo(g,h,i)perylene	0.00027	--	--	--	--	--	--	0.02572	2.6E-02	--	--	
Garden Grove	Aquatic	Bird	Heron	Benzo(g,h,i)perylene	0.00031	--	--	0.0001812	--	--	--	0.00623	6.7E-03	--	--	
Garden Grove	Aquatic	Bird	Stilt	Benzo(g,h,i)perylene	0.00156	--	--	--	--	--	--	--	1.6E-03	--	--	
Garden Grove	Aquatic	Bird	Tern	Benzo(k)fluoranthene	0.00029	--	--	--	--	--	--	0.02739	2.8E-02	3.1E-04	--	
Garden Grove	Aquatic	Bird	Heron	Benzo(k)fluoranthene	0.00034	--	--	0.0010055	--	--	--	0.00664	8.0E-03	4.9E-05	--	
Garden Grove	Aquatic	Bird	Stilt	Benzo(k)fluoranthene	0.00166	--	--	--	--	--	--	--	1.7E-03	1.4E-05	--	
Garden Grove	Aquatic	Bird	Heron	BHC-beta	5.6E-06	--	0.0000069	0.0021327	--	0.0000893	0.000115	2.77E-05	0.00014	2.5E-03	--	--
Garden Grove	Aquatic	Bird	Stilt	BHC-beta	2.8E-05	--	--	--	--	0.0007991	--	6.19E-05	--	8.9E-04	--	--
Garden Grove	Aquatic	Bird	Tern	BHC-beta	4.8E-06	--	--	--	--	--	--	--	0.00056	5.7E-04	--	--
Garden Grove	Aquatic	Bird	Tern	BHC-delta	1.8E-06	--	--	--	5.8E-06	--	--	--	0.00057	5.8E-04	--	--
Garden Grove	Aquatic	Bird	Heron	BHC-delta	2.2E-06	--	--	--	2.1E-06	--	--	--	0.00014	1.4E-04	--	--
Garden Grove	Aquatic	Bird	Stilt	BHC-delta	1.1E-05	--	--	--	3.5E-06	--	--	--	--	1.4E-05	--	--
Garden Grove	Aquatic	Bird	Tern	BHC-gamma	--	--	--	--	2E-06	--	--	--	--	2.0E-06	--	2.0E-07
Garden Grove	Aquatic	Bird	Stilt	BHC-gamma	--	--	--	--	1.2E-06	--	--	--	--	1.2E-06	--	1.0E-07
Garden Grove	Aquatic	Bird	Heron	BHC-gamma	--	--	--	--	7E-07	--	--	--	--	7.0E-07	--	0.0E+00
Garden Grove	Aquatic	Bird	Stilt	Butylbenzylphthalate	0.00231	--	--	--	--	--	--	--	--	2.3E-03	--	--
Garden Grove	Aquatic	Bird	Heron	Butylbenzylphthalate	0.00047	--	--	--	--	--	--	--	--	4.7E-04	--	--
Garden Grove	Aquatic	Bird	Tern	Butylbenzylphthalate	0.0004	--	--	--	--	--	--	--	--	4.0E-04	--	--
Garden Grove	Aquatic	Bird	Tern	Chlordane (technical)	3.4E-05	--	--	--	--	--	--	--	0.00137	1.4E-03	9.3E-04	1.3E-04
Garden Grove	Aquatic	Bird	Heron	Chlordane (technical)	3.9E-05	--	--	--	--	--	--	--	0.00033	3.7E-04	1.3E-04	1.9E-05
Garden Grove	Aquatic	Bird	Stilt	Chlordane (technical)	0.00019	--	--	--	--	--	--	--	--	1.9E-04	9.4E-05	1.4E-05
Garden Grove	Aquatic	Bird	Tern	Chlordane-alpha	1.1E-05	--	--	--	--	--	--	--	0.00045	4.6E-04	3.1E-04	4.4E-05
Garden Grove	Aquatic	Bird	Heron	Chlordane-alpha	1.3E-05	--	--	--	--	--	--	--	0.00011	1.2E-04	4.4E-05	6.4E-06
Garden Grove	Aquatic	Bird	Stilt	Chlordane-alpha	6.4E-05	--	--	--	--	--	--	--	--	6.4E-05	3.1E-05	4.5E-06
Garden Grove	Aquatic	Bird	Stilt	Chlordane-gamma	5.8E-05	--	--	--	--	--	--	--	--	5.8E-05	2.8E-05	4.1E-06
Garden Grove	Aquatic	Bird	Heron	Chlordane-gamma	1.2E-05	--	--	--	--	--	--	--	--	1.2E-05	4.3E-06	6.0E-07

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Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Garden Grove	Aquatic	Bird	Tern	Chlordane-gamma	1E-05	--	--	--	--	--	--	--	--	1.0E-05	6.7E-06	1.0E-06
Garden Grove	Aquatic	Bird	Tern	Chrysene	0.00028	--	--	--	--	--	--	--	0.02357	2.4E-02	2.7E-05	--
Garden Grove	Aquatic	Bird	Heron	Chrysene	0.00033	--	--	0.0009889	--	--	--	--	0.00571	7.0E-03	4.3E-06	--
Garden Grove	Aquatic	Bird	Stilt	Chrysene	0.00163	--	--	--	--	--	--	--	--	1.6E-03	1.3E-06	--
Garden Grove	Aquatic	Bird	Tern	Diazinon	--	--	--	--	8.4E-05	--	--	--	--	8.4E-05	--	8.0E-06
Garden Grove	Aquatic	Bird	Stilt	Diazinon	--	--	--	--	5E-05	--	--	--	--	5.0E-05	--	3.5E-06
Garden Grove	Aquatic	Bird	Heron	Diazinon	--	--	--	--	3.1E-05	--	--	--	--	3.1E-05	--	1.6E-06
Garden Grove	Aquatic	Bird	Tern	Dieldrin	1.8E-06	--	--	--	1.6E-05	--	--	--	0.00265	2.7E-03	5.6E-02	--
Garden Grove	Aquatic	Bird	Heron	Dieldrin	2.1E-06	--	--	0.0004351	6E-06	--	--	--	0.00064	1.1E-03	1.2E-02	--
Garden Grove	Aquatic	Bird	Stilt	Dieldrin	1E-05	--	--	--	9.7E-06	--	--	--	--	2.0E-05	3.1E-04	--
Garden Grove	Aquatic	Bird	Stilt	Diethylphthalate	0.00208	--	--	--	--	--	--	--	--	2.1E-03	--	--
Garden Grove	Aquatic	Bird	Heron	Diethylphthalate	0.00042	--	--	--	--	--	--	--	--	4.2E-04	--	--
Garden Grove	Aquatic	Bird	Tern	Diethylphthalate	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	--
Garden Grove	Aquatic	Bird	Stilt	Di-n-butylphthalate	0.00219	--	--	--	--	--	--	--	--	2.2E-03	--	1.8E-03
Garden Grove	Aquatic	Bird	Heron	Di-n-butylphthalate	0.00044	--	--	--	--	--	--	--	--	4.4E-04	--	2.7E-04
Garden Grove	Aquatic	Bird	Tern	Di-n-butylphthalate	0.00038	--	--	--	--	--	--	--	--	3.8E-04	--	4.2E-04
Garden Grove	Aquatic	Bird	Stilt	Di-n-octylphthalate	0.00206	--	--	--	--	--	--	--	--	2.1E-03	--	1.1E-05
Garden Grove	Aquatic	Bird	Heron	Di-n-octylphthalate	0.00042	--	--	--	--	--	--	--	--	4.2E-04	--	1.7E-06
Garden Grove	Aquatic	Bird	Tern	Di-n-octylphthalate	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	2.6E-06
Garden Grove	Aquatic	Bird	Stilt	Endosulfan II	1.4E-05	--	--	--	--	--	--	--	--	1.4E-05	1.6E-06	--
Garden Grove	Aquatic	Bird	Heron	Endosulfan II	2.8E-06	--	--	--	--	--	--	--	--	2.8E-06	2.0E-07	--
Garden Grove	Aquatic	Bird	Tern	Endosulfan II	2.4E-06	--	--	--	--	--	--	--	--	2.4E-06	4.0E-07	--
Garden Grove	Aquatic	Bird	Tern	Endrin aldehyde	3.3E-06	--	--	--	--	--	--	--	0.00026	2.7E-04	1.7E-03	--
Garden Grove	Aquatic	Bird	Heron	Endrin aldehyde	3.8E-06	--	--	--	--	--	--	--	6.4E-05	6.8E-05	2.4E-04	--
Garden Grove	Aquatic	Bird	Stilt	Endrin aldehyde	1.9E-05	--	--	--	--	--	--	--	--	1.9E-05	8.9E-05	--
Garden Grove	Aquatic	Bird	Tern	Fluoranthene	0.00031	--	--	--	--	--	--	--	0.0261	2.6E-02	--	--
Garden Grove	Aquatic	Bird	Heron	Fluoranthene	0.00036	--	--	0.0002265	--	--	--	--	0.00633	6.9E-03	--	--
Garden Grove	Aquatic	Bird	Stilt	Fluoranthene	0.0018	--	--	--	--	--	--	--	--	1.8E-03	--	--
Garden Grove	Aquatic	Bird	Tern	Indeno(1,2,3-c,d)pyrene	0.00027	--	--	--	--	--	--	--	0.02588	2.6E-02	2.9E-04	--
Garden Grove	Aquatic	Bird	Heron	Indeno(1,2,3-c,d)pyrene	0.00032	--	--	0.00095	--	--	--	--	0.00627	7.5E-03	4.6E-05	--
Garden Grove	Aquatic	Bird	Stilt	Indeno(1,2,3-c,d)pyrene	0.00157	--	--	--	--	--	--	--	--	1.6E-03	1.3E-05	--
Garden Grove	Aquatic	Bird	Stilt	Oil and Grease	9.48706	--	--	--	--	--	--	--	--	9.5E+00	--	--
Garden Grove	Aquatic	Bird	Heron	Oil and Grease	1.91834	--	--	--	--	--	--	--	--	1.9E+00	--	--
Garden Grove	Aquatic	Bird	Tern	Oil and Grease	1.64628	--	--	--	--	--	--	--	--	1.6E+00	--	--
Garden Grove	Aquatic	Bird	Tern	PCB 1254	0.00011	--	--	--	--	--	--	--	0.06267	6.3E-02	--	6.5E-02
Garden Grove	Aquatic	Bird	Heron	PCB 1254	0.00013	--	0.000015	--	--	0.000195	--	--	0.01519	1.6E-02	--	8.8E-03
Garden Grove	Aquatic	Bird	Stilt	PCB 1254	0.00063	--	--	--	--	0.0017452	--	--	--	2.4E-03	--	1.8E-03
Garden Grove	Aquatic	Bird	Tern	Phenanthrene	0.00028	--	--	--	--	--	--	--	0.02674	2.7E-02	--	2.5E-04

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Garden Grove	Aquatic	Bird	Heron	Phenanthrene	0.00033	--	--	0.000736	--	--	--	--	0.00648	7.5E-03	--	3.8E-05
Garden Grove	Aquatic	Bird	Stilt	Phenanthrene	0.00162	--	--	--	--	--	--	--	--	1.6E-03	--	1.1E-05
Garden Grove	Aquatic	Bird	Tern	Pyrene	0.00022	--	--	--	--	--	--	--	0.01814	1.8E-02	--	--
Garden Grove	Aquatic	Bird	Heron	Pyrene	0.00025	--	--	0.0007609	--	--	--	--	0.0044	5.4E-03	--	--
Garden Grove	Aquatic	Bird	Stilt	Pyrene	0.00125	--	--	--	--	--	--	--	--	1.3E-03	--	--
Garden Grove	Aquatic	Bird	Stilt	Toluene	4.1E-05	--	--	--	--	--	--	--	--	4.1E-05	--	--
Garden Grove	Aquatic	Bird	Heron	Toluene	8.3E-06	--	--	--	--	--	--	--	--	8.3E-06	--	--
Garden Grove	Aquatic	Bird	Tern	Toluene	7.1E-06	--	--	--	--	--	--	--	--	7.1E-06	--	--
Garden Grove	Aquatic	Bird	Tern	TPH-Diesel	--	--	--	--	0.05511	--	--	--	--	5.5E-02	--	--
Garden Grove	Aquatic	Bird	Stilt	TPH-Diesel	--	--	--	--	0.03267	--	--	--	--	3.3E-02	--	--
Garden Grove	Aquatic	Bird	Heron	TPH-Diesel	--	--	--	--	0.02013	--	--	--	--	2.0E-02	--	--
Garden Grove	Aquatic	Bird	Stilt	Waste oil	7.3986	--	--	--	0.1881	--	--	--	--	7.6E+00	--	--
Garden Grove	Aquatic	Bird	Heron	Waste oil	1.49604	--	--	--	0.1159	--	--	--	--	1.6E+00	--	--
Garden Grove	Aquatic	Bird	Tern	Waste oil	1.28387	--	--	--	0.3173	--	--	--	--	1.6E+00	--	--
Gas Plant	Aquatic	Bird	Stilt	Arsenic	0.35458	--	--	--	--	0.4224	--	--	--	7.8E-01	2.1E-01	8.6E-02
Gas Plant	Aquatic	Bird	Heron	Arsenic	0.0717	--	0.00822	--	--	0.04719	--	--	--	1.3E-01	2.6E-02	1.0E-02
Gas Plant	Aquatic	Bird	Tern	Arsenic	0.06153	--	--	--	--	--	--	--	--	6.2E-02	2.3E-02	9.2E-03
Gas Plant	Aquatic	Bird	Stilt	Barium	1.92968	--	--	--	--	1.792	--	0.276373	--	4.0E+00	3.0E-02	--
Gas Plant	Aquatic	Bird	Heron	Barium	0.39019	--	0.0688574	0.1207918	--	0.2002	0.141148	0.123504	0.09438	1.1E+00	6.3E-03	--
Gas Plant	Aquatic	Bird	Tern	Barium	0.33486	--	--	--	--	--	--	--	0.3894	7.2E-01	7.3E-03	--
Gas Plant	Aquatic	Bird	Stilt	Beryllium	0.01577	--	--	--	--	0.05248	--	--	--	6.8E-02	--	--
Gas Plant	Aquatic	Bird	Tern	Beryllium	0.00274	--	--	--	--	--	--	--	0.03713	4.0E-02	--	--
Gas Plant	Aquatic	Bird	Heron	Beryllium	0.00319	--	0.000899	--	--	0.005863	0.002087	--	0.009	2.1E-02	--	--
Gas Plant	Aquatic	Bird	Heron	Cadmium	0.00212	--	--	0.0187211	--	--	0.000943	--	0.00287	2.5E-02	1.8E-02	1.3E-03
Gas Plant	Aquatic	Bird	Tern	Cadmium	0.00182	--	--	--	--	--	--	--	0.01183	1.4E-02	1.8E-02	1.3E-03
Gas Plant	Aquatic	Bird	Stilt	Cadmium	0.0105	--	--	--	--	--	--	--	--	1.0E-02	1.0E-02	7.4E-04
Gas Plant	Aquatic	Bird	Stilt	Chromium	0.67387	--	--	--	--	0.2048	--	0.033874	--	9.1E-01	1.3E+00	--
Gas Plant	Aquatic	Bird	Heron	Chromium	0.13626	--	0.007966	0.028069	--	0.02288	0.049251	0.015137	0.00429	2.6E-01	2.8E-01	--
Gas Plant	Aquatic	Bird	Tern	Chromium	0.11694	--	--	--	--	--	--	--	0.0177	1.3E-01	2.6E-01	--
Gas Plant	Aquatic	Bird	Stilt	Cobalt	0.12294	--	--	--	--	0.0128	--	0.003127	--	1.4E-01	9.0E-01	9.1E-02
Gas Plant	Aquatic	Bird	Tern	Cobalt	0.02133	--	--	--	--	--	--	--	0.05093	7.2E-02	6.4E-01	6.5E-02
Gas Plant	Aquatic	Bird	Heron	Cobalt	0.02486	--	0.0006873	0.0017023	--	0.00143	0.008594	0.001397	0.01234	5.1E-02	2.5E-01	2.5E-02
Gas Plant	Aquatic	Bird	Stilt	Copper	0.5212	--	--	--	--	0.1728	--	0.639841	--	1.3E+00	4.4E-02	3.3E-02
Gas Plant	Aquatic	Bird	Heron	Copper	0.10539	--	0.0100545	0.2595933	--	0.019305	0.1765	0.285929	0.0429	9.0E-01	2.2E-02	1.7E-02
Gas Plant	Aquatic	Bird	Tern	Copper	0.09044	--	--	--	--	--	--	--	0.177	2.7E-01	1.2E-02	9.1E-03
Gas Plant	Aquatic	Bird	Stilt	Lead	0.42104	--	--	--	--	0.1856	--	0.004572	--	6.1E-01	7.5E-01	7.5E-02
Gas Plant	Aquatic	Bird	Heron	Lead	0.08514	--	0.0049664	0.0276183	--	0.020735	0.008383	0.002043	0.00429	1.5E-01	1.4E-01	1.4E-02
Gas Plant	Aquatic	Bird	Tern	Lead	0.07306	--	--	--	--	--	--	--	0.0177	9.1E-02	1.5E-01	1.5E-02

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals
Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL		
Gas Plant	Aquatic	Bird	Tern	Mercury	0.00049	--	--	--	--	--	--	0.00389	4.4E-03	2.3E-03	--		
Gas Plant	Aquatic	Bird	Heron	Mercury	0.00057	--	--	0.0014367	--	--	--	0.00094	2.9E-03	8.4E-04	--		
Gas Plant	Aquatic	Bird	Stilt	Mercury	0.0028	--	--	--	--	--	--	--	2.8E-03	1.1E-03	--		
Gas Plant	Aquatic	Bird	Stilt	Nickel	0.29556	--	--	--	--	0.096	--	0.027131	--	4.2E-01	7.6E-03	--	
Gas Plant	Aquatic	Bird	Heron	Nickel	0.05976	--	0.00662	0.0279525	--	0.010725	0.173109	0.012124	0.01316	3.0E-01	4.1E-03	--	
Gas Plant	Aquatic	Bird	Tern	Nickel	0.05129	--	--	--	--	--	--	--	0.05428	1.1E-01	2.6E-03	--	
Gas Plant	Aquatic	Bird	Tern	Selenium	0.00905	--	--	--	--	--	--	--	1.37936	1.4E+00	6.7E+00	--	
Gas Plant	Aquatic	Bird	Heron	Selenium	0.01054	--	--	0.0517612	--	--	0.003834	0.084249	0.33432	4.8E-01	1.3E+00	--	--
Gas Plant	Aquatic	Bird	Stilt	Selenium	0.05214	--	--	--	--	--	--	0.188529	--	2.4E-01	8.5E-01	--	
Gas Plant	Aquatic	Bird	Stilt	Silver	0.01041	--	--	--	--	--	--	0.026942	--	3.7E-02	--	1.4E-03	
Gas Plant	Aquatic	Bird	Heron	Silver	0.0021	--	--	--	--	--	--	0.01204	--	1.4E-02	--	3.9E-04	
Gas Plant	Aquatic	Bird	Tern	Silver	0.00181	--	--	--	--	--	--	--	--	1.8E-03	--	9.0E-05	
Gas Plant	Aquatic	Bird	Stilt	Sulfate	16.32	--	--	--	--	--	--	--	--	1.6E+01	--	--	
Gas Plant	Aquatic	Bird	Heron	Sulfate	3.3	--	--	--	--	--	--	--	--	3.3E+00	--	--	
Gas Plant	Aquatic	Bird	Tern	Sulfate	2.832	--	--	--	--	--	--	--	--	2.8E+00	--	--	
Gas Plant	Aquatic	Bird	Stilt	Sulfide	38.08	--	--	--	--	--	--	--	--	3.8E+01	--	--	
Gas Plant	Aquatic	Bird	Heron	Sulfide	7.7	--	--	--	--	--	--	--	--	7.7E+00	--	--	
Gas Plant	Aquatic	Bird	Tern	Sulfide	6.608	--	--	--	--	--	--	--	--	6.6E+00	--	--	
Gas Plant	Aquatic	Bird	Stilt	Thallium	0.03404	--	--	--	--	--	--	--	--	3.4E-02	--	1.3E-03	
Gas Plant	Aquatic	Bird	Heron	Thallium	0.00688	--	--	--	--	--	--	--	--	6.9E-03	--	2.0E-04	
Gas Plant	Aquatic	Bird	Tern	Thallium	0.00591	--	--	--	--	--	--	--	--	5.9E-03	--	3.1E-04	
Gas Plant	Aquatic	Bird	Stilt	Vanadium	1.01134	--	--	--	--	0.1472	--	0.006952	--	1.2E+00	1.4E-01	--	
Gas Plant	Aquatic	Bird	Heron	Vanadium	0.2045	--	0.0068869	0.0034363	--	0.016445	0.009154	0.003107	0.00801	2.5E-01	2.3E-02	--	
Gas Plant	Aquatic	Bird	Tern	Vanadium	0.1755	--	--	--	--	--	--	--	0.03304	2.1E-01	3.5E-02	--	
Gas Plant	Aquatic	Bird	Heron	Zinc	0.32412	--	0.0569667	3.242933	--	0.1573	0.733439	0.208311	0.8866	5.6E+00	4.5E-01	4.9E-02	
Gas Plant	Aquatic	Bird	Tern	Zinc	0.27815	--	--	--	--	--	--	--	3.658	3.9E+00	5.7E-01	6.3E-02	
Gas Plant	Aquatic	Bird	Stilt	Zinc	1.60293	--	--	--	--	1.408	--	0.466151	--	3.5E+00	3.7E-01	4.1E-02	
Gas Plant	Aquatic	Bird	Stilt	Ammonia as Nitrogen	0.544	--	--	--	--	--	--	--	--	5.4E-01	--	--	
Gas Plant	Aquatic	Bird	Heron	Ammonia as Nitrogen	0.11	--	--	--	--	--	--	--	--	1.1E-01	--	--	
Gas Plant	Aquatic	Bird	Tern	Ammonia as Nitrogen	0.0944	--	--	--	--	--	--	--	--	9.4E-02	--	--	
Gas Plant	Aquatic	Bird	Heron	4,4'-DDD	0.00034	--	0.0000662	0.0010837	--	0.0000164	0.005173	--	0.00043	7.1E-03	1.4E-02	--	
Gas Plant	Aquatic	Bird	Tern	4,4'-DDD	0.00029	--	--	--	--	--	--	--	0.00177	2.1E-03	7.6E-03	--	
Gas Plant	Aquatic	Bird	Stilt	4,4'-DDD	0.00168	--	--	--	--	0.0001472	--	--	--	1.8E-03	4.9E-03	--	
Gas Plant	Aquatic	Bird	Heron	4,4'-DDE	3.4E-05	--	0.0000206	0.0047829	--	0.0002678	0.000449	8.77E-05	0.0001	5.7E-03	--	1.2E-02	
Gas Plant	Aquatic	Bird	Stilt	4,4'-DDE	0.00017	--	--	--	--	0.0023968	--	0.000196	--	2.8E-03	--	7.8E-03	
Gas Plant	Aquatic	Bird	Tern	4,4'-DDE	2.9E-05	--	--	--	--	--	--	--	0.00042	4.5E-04	--	1.7E-03	
Gas Plant	Aquatic	Bird	Tern	4,4'-DDT	1.2E-06	--	--	--	--	--	--	--	0.00014	1.4E-04	2.7E-03	--	
Gas Plant	Aquatic	Bird	Heron	4,4'-DDT	1.4E-06	--	--	0.0000162	--	--	--	--	3.4E-05	5.1E-05	5.4E-04	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Gas Plant	Aquatic	Bird	Stilt	4,4'-DDT	7.1E-06	--	--	--	--	--	--	--	--	7.1E-06	1.0E-04	--	
Gas Plant	Aquatic	Bird	Heron	Acenaphthene	0.00118	--	--	0.0047812	--	--	--	--	0.00108	7.0E-03	--	--	
Gas Plant	Aquatic	Bird	Stilt	Acenaphthene	0.00585	--	--	--	--	--	--	--	--	5.8E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Acenaphthene	0.00101	--	--	--	--	--	--	--	0.00445	5.5E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Benzo(a)anthracene	0.00052	--	--	--	--	--	--	--	0.04927	5.0E-02	5.6E-04	--	
Gas Plant	Aquatic	Bird	Heron	Benzo(a)anthracene	0.0006	--	--	0.0018084	--	--	--	--	0.01194	1.4E-02	8.8E-05	--	
Gas Plant	Aquatic	Bird	Stilt	Benzo(a)anthracene	0.00298	--	--	--	--	--	--	--	--	3.0E-03	2.5E-05	--	
Gas Plant	Aquatic	Bird	Tern	Benzo(a)pyrene	0.00052	--	--	--	--	--	--	--	0.04927	5.0E-02	5.6E-03	--	
Gas Plant	Aquatic	Bird	Heron	Benzo(a)pyrene	0.0006	--	--	0.0018084	--	--	--	--	0.01194	1.4E-02	8.8E-04	--	
Gas Plant	Aquatic	Bird	Stilt	Benzo(a)pyrene	0.00298	--	--	--	--	--	--	--	--	3.0E-03	2.5E-04	--	
Gas Plant	Aquatic	Bird	Tern	Benzo(b)fluoranthene	0.00053	--	--	--	--	--	--	--	0.05003	5.1E-02	5.7E-04	--	
Gas Plant	Aquatic	Bird	Heron	Benzo(b)fluoranthene	0.00061	--	--	0.0005799	--	--	--	--	0.01213	1.3E-02	8.2E-05	--	
Gas Plant	Aquatic	Bird	Stilt	Benzo(b)fluoranthene	0.00303	--	--	--	--	--	--	--	--	3.0E-03	2.5E-05	--	
Gas Plant	Aquatic	Bird	Tern	Benzo(g,h,i)perylene	0.00069	--	--	--	--	--	--	--	0.06593	6.7E-02	--	--	
Gas Plant	Aquatic	Bird	Heron	Benzo(g,h,i)perylene	0.00081	--	--	0.0004647	--	--	--	--	0.01598	1.7E-02	--	--	
Gas Plant	Aquatic	Bird	Stilt	Benzo(g,h,i)perylene	0.00399	--	--	--	--	--	--	--	--	4.0E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Benzo(k)fluoranthene	0.00053	--	--	--	--	--	--	--	0.05005	5.1E-02	5.7E-04	--	
Gas Plant	Aquatic	Bird	Heron	Benzo(k)fluoranthene	0.00061	--	--	0.001837	--	--	--	--	0.01213	1.5E-02	9.0E-05	--	
Gas Plant	Aquatic	Bird	Stilt	Benzo(k)fluoranthene	0.00303	--	--	--	--	--	--	--	--	3.0E-03	2.5E-05	--	
Gas Plant	Aquatic	Bird	Tern	BHC-alpha	1.1E-06	--	--	--	--	--	--	--	0.00194	1.9E-03	--	--	
Gas Plant	Aquatic	Bird	Heron	BHC-alpha	1.3E-06	--	0.0000004	0.0000113	--	0.0000051	2.5E-06	5E-07	0.00047	4.9E-04	--	--	
Gas Plant	Aquatic	Bird	Stilt	BHC-alpha	6.6E-06	--	--	--	--	0.0000454	--	1.1E-06	--	5.3E-05	--	--	
Gas Plant	Aquatic	Bird	Heron	BHC-beta	2.7E-06	--	0.0000033	0.0010243	--	0.0000429	5.53E-05	1.33E-05	6.6E-05	1.2E-03	--	--	
Gas Plant	Aquatic	Bird	Stilt	BHC-beta	1.3E-05	--	--	--	--	0.0003838	--	2.97E-05	--	4.3E-04	--	--	
Gas Plant	Aquatic	Bird	Tern	BHC-beta	2.3E-06	--	--	--	--	--	--	--	0.00027	2.7E-04	--	--	
Gas Plant	Aquatic	Bird	Tern	BHC-delta	--	--	--	--	--	--	--	--	8.4E-05	8.4E-05	--	--	
Gas Plant	Aquatic	Bird	Heron	BHC-delta	--	--	--	--	--	--	--	--	2E-05	2.0E-05	--	--	
Gas Plant	Aquatic	Bird	Stilt	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--	
Gas Plant	Aquatic	Bird	Stilt	BHC-gamma	--	--	--	--	--	0.0001024	--	--	--	1.0E-04	--	7.2E-06	
Gas Plant	Aquatic	Bird	Heron	BHC-gamma	--	--	--	--	--	0.0000114	--	--	--	1.1E-05	--	6.0E-07	
Gas Plant	Aquatic	Bird	Tern	BHC-gamma	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	
Gas Plant	Aquatic	Bird	Stilt	Chlorobenzene	0.02516	--	--	--	--	--	--	--	--	2.5E-02	--	--	
Gas Plant	Aquatic	Bird	Heron	Chlorobenzene	0.00509	--	--	--	--	--	--	--	--	5.1E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Chlorobenzene	0.00437	--	--	--	--	--	--	--	--	4.4E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Chrysene	0.00052	--	--	--	--	--	--	--	0.04351	4.4E-02	5.0E-05	--	
Gas Plant	Aquatic	Bird	Heron	Chrysene	0.00061	--	--	0.0018251	--	--	--	--	0.01054	1.3E-02	8.0E-06	--	
Gas Plant	Aquatic	Bird	Stilt	Chrysene	0.00301	--	--	--	--	--	--	--	--	3.0E-03	2.5E-06	--	
Gas Plant	Aquatic	Bird	Tern	Dieldrin	3.9E-06	--	--	--	--	--	--	--	0.00576	5.8E-03	1.2E-01	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Gas Plant	Aquatic	Bird	Heron	Dieldrin	4.5E-06	--	--	0.0009445	--	--	--	--	0.0014	2.3E-03	2.7E-02	--	
Gas Plant	Aquatic	Bird	Stilt	Dieldrin	2.2E-05	--	--	--	--	--	--	--	--	2.2E-05	3.4E-04	--	
Gas Plant	Aquatic	Bird	Stilt	Di-n-butylphthalate	0.00173	--	--	--	--	--	--	--	--	1.7E-03	--	1.4E-03	
Gas Plant	Aquatic	Bird	Heron	Di-n-butylphthalate	0.00035	--	--	--	--	--	--	--	--	3.5E-04	--	2.1E-04	
Gas Plant	Aquatic	Bird	Tern	Di-n-butylphthalate	0.0003	--	--	--	--	--	--	--	--	3.0E-04	--	3.3E-04	
Gas Plant	Aquatic	Bird	Stilt	Di-n-octylphthalate	0.00385	--	--	--	--	--	--	--	--	3.8E-03	--	2.1E-05	
Gas Plant	Aquatic	Bird	Heron	Di-n-octylphthalate	0.00078	--	--	--	--	--	--	--	--	7.8E-04	--	3.1E-06	
Gas Plant	Aquatic	Bird	Tern	Di-n-octylphthalate	0.00067	--	--	--	--	--	--	--	--	6.7E-04	--	4.9E-06	
Gas Plant	Aquatic	Bird	Stilt	Ethylbenzene	0.02516	--	--	--	--	--	--	--	--	2.5E-02	--	--	
Gas Plant	Aquatic	Bird	Heron	Ethylbenzene	0.00509	--	--	--	--	--	--	--	--	5.1E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Ethylbenzene	0.00437	--	--	--	--	--	--	--	--	4.4E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Fluoranthene	0.00052	--	--	--	--	--	--	--	0.0435	4.4E-02	--	--	
Gas Plant	Aquatic	Bird	Heron	Fluoranthene	0.00061	--	--	0.0003776	--	--	--	--	0.01054	1.2E-02	--	--	
Gas Plant	Aquatic	Bird	Stilt	Fluoranthene	0.00301	--	--	--	--	--	--	--	--	3.0E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	Fluorene	0.00256	--	--	--	--	--	--	--	0.08503	8.8E-02	--	--	
Gas Plant	Aquatic	Bird	Heron	Fluorene	0.00298	--	--	0.0089439	--	--	--	--	0.02061	3.3E-02	--	--	
Gas Plant	Aquatic	Bird	Stilt	Fluorene	0.01474	--	--	--	--	--	--	--	--	1.5E-02	--	--	
Gas Plant	Aquatic	Bird	Tern	Naphthalene	0.00206	--	--	--	--	--	--	--	0.03347	3.6E-02	--	3.3E-04	
Gas Plant	Aquatic	Bird	Heron	Naphthalene	0.0024	--	--	0.0042126	--	--	--	--	0.00811	1.5E-02	--	7.4E-05	
Gas Plant	Aquatic	Bird	Stilt	Naphthalene	0.01187	--	--	--	--	--	--	--	--	1.2E-02	--	8.1E-05	
Gas Plant	Aquatic	Bird	Stilt	n-Propylbenzene	0.01768	--	--	--	--	--	--	--	--	1.8E-02	--	--	
Gas Plant	Aquatic	Bird	Heron	n-Propylbenzene	0.00358	--	--	--	--	--	--	--	--	3.6E-03	--	--	
Gas Plant	Aquatic	Bird	Tern	n-Propylbenzene	0.00307	--	--	--	--	--	--	--	--	3.1E-03	--	--	
Gas Plant	Aquatic	Bird	Stilt	Oil and Grease	303.546	--	--	--	--	--	--	--	--	3.0E+02	--	--	
Gas Plant	Aquatic	Bird	Heron	Oil and Grease	61.3789	--	--	--	--	--	--	--	--	6.1E+01	--	--	
Gas Plant	Aquatic	Bird	Tern	Oil and Grease	52.6742	--	--	--	--	--	--	--	--	5.3E+01	--	--	
Gas Plant	Aquatic	Bird	Tern	PCB 1254	0.00014	--	--	--	--	--	--	--	0.07913	7.9E-02	--	8.3E-02	
Gas Plant	Aquatic	Bird	Heron	PCB 1254	0.00016	--	0.0000189	--	--	0.0001502	--	--	0.01918	2.0E-02	--	1.1E-02	
Gas Plant	Aquatic	Bird	Stilt	PCB 1254	0.00079	--	--	--	--	0.001344	--	--	--	2.1E-03	--	1.6E-03	
Gas Plant	Aquatic	Bird	Tern	PCB 1260	0.00115	--	--	--	--	--	--	--	0.09601	9.7E-02	--	7.4E-04	
Gas Plant	Aquatic	Bird	Heron	PCB 1260	0.00134	--	--	--	--	--	--	--	0.02327	2.5E-02	--	1.0E-04	
Gas Plant	Aquatic	Bird	Stilt	PCB 1260	0.00664	--	--	--	--	--	--	--	--	6.6E-03	--	3.7E-05	
Gas Plant	Aquatic	Bird	Tern	PCB-105	--	--	--	--	--	--	--	--	0.0008	8.0E-04	--	--	
Gas Plant	Aquatic	Bird	Heron	PCB-105	--	--	--	--	--	--	--	--	0.00019	1.9E-04	--	--	
Gas Plant	Aquatic	Bird	Stilt	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--	
Gas Plant	Aquatic	Bird	Tern	PCB-118	--	--	--	--	--	--	--	--	0.00118	1.2E-03	--	--	
Gas Plant	Aquatic	Bird	Heron	PCB-118	--	--	--	--	--	--	--	--	0.00029	2.9E-04	--	--	
Gas Plant	Aquatic	Bird	Stilt	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL	
Gas Plant	Aquatic	Bird	Tern	PCB-138	0.00011	--	--	--	--	--	--	0.00076	8.7E-04	--	--	
Gas Plant	Aquatic	Bird	Stilt	PCB-138	0.00065	--	--	--	--	--	--	--	6.5E-04	--	--	
Gas Plant	Aquatic	Bird	Heron	PCB-138	0.00013	--	--	--	--	--	--	--	0.00018	3.1E-04	--	--
Gas Plant	Aquatic	Bird	Tern	PCB-153	0.00011	--	--	--	--	--	--	--	0.00118	1.3E-03	--	--
Gas Plant	Aquatic	Bird	Stilt	PCB-153	0.00062	--	--	--	--	--	--	--	--	6.2E-04	--	--
Gas Plant	Aquatic	Bird	Heron	PCB-153	0.00013	--	--	0.0000117	--	--	--	--	0.00029	4.2E-04	--	--
Gas Plant	Aquatic	Bird	Stilt	PCB-180	0.00107	--	--	--	--	--	--	--	--	1.1E-03	--	--
Gas Plant	Aquatic	Bird	Heron	PCB-180	0.00022	--	--	0.0000106	--	--	--	--	--	2.3E-04	--	--
Gas Plant	Aquatic	Bird	Tern	PCB-180	0.00019	--	--	--	--	--	--	--	--	1.9E-04	--	--
Gas Plant	Aquatic	Bird	Tern	Phenanthrene	0.00124	--	--	--	--	--	--	--	0.11854	1.2E-01	--	1.1E-03
Gas Plant	Aquatic	Bird	Heron	Phenanthrene	0.00145	--	--	0.0032634	--	--	--	--	0.02873	3.3E-02	--	1.7E-04
Gas Plant	Aquatic	Bird	Stilt	Phenanthrene	0.00717	--	--	--	--	--	--	--	--	7.2E-03	--	4.9E-05
Gas Plant	Aquatic	Bird	Tern	Pyrene	0.00054	--	--	--	--	--	--	--	0.04487	4.5E-02	--	--
Gas Plant	Aquatic	Bird	Heron	Pyrene	0.00063	--	--	0.0018824	--	--	--	--	0.01088	1.3E-02	--	--
Gas Plant	Aquatic	Bird	Stilt	Pyrene	0.0031	--	--	--	--	--	--	--	--	3.1E-03	--	--
Gas Plant	Aquatic	Bird	Stilt	TPH-Diesel	6.45856	--	--	--	--	--	--	--	--	6.5E+00	--	--
Gas Plant	Aquatic	Bird	Heron	TPH-Diesel	1.30596	--	--	--	--	--	--	--	--	1.3E+00	--	--
Gas Plant	Aquatic	Bird	Tern	TPH-Diesel	1.12075	--	--	--	--	--	--	--	--	1.1E+00	--	--
Gas Plant	Aquatic	Bird	Stilt	Waste oil	39.8235	--	--	--	--	--	--	--	--	4.0E+01	--	--
Gas Plant	Aquatic	Bird	Heron	Waste oil	8.05254	--	--	--	--	--	--	--	--	8.1E+00	--	--
Gas Plant	Aquatic	Bird	Tern	Waste oil	6.91054	--	--	--	--	--	--	--	--	6.9E+00	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Arsenic	0.13453	0.68256	2.313566	--	--	--	--	--	--	3.1E+00	1.4E+00	5.6E-01
Gas Plant	Terrestrial	Bird	Kestrel	Arsenic	0.06049	--	0.520104	--	--	--	--	--	--	5.8E-01	1.8E-01	7.2E-02
Gas Plant	Terrestrial	Bird	Sparrow	Barium	0.73214	6.79339	19.38024	--	--	--	--	--	--	2.7E+01	3.2E-01	--
Gas Plant	Terrestrial	Bird	Kestrel	Barium	0.32918	--	4.356798	1.981474	--	--	--	--	--	6.7E+00	5.5E-02	--
Gas Plant	Terrestrial	Bird	Sparrow	Beryllium	0.00598	0.02815	0.2530285	--	--	--	--	--	--	2.9E-01	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Beryllium	0.00269	--	0.0568824	--	--	--	--	--	--	6.0E-02	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Cadmium	0.00179	--	--	0.3071019	--	--	--	--	--	3.1E-01	3.4E-01	2.4E-02
Gas Plant	Terrestrial	Bird	Sparrow	Cadmium	0.00398	0.14869	--	--	--	--	--	--	--	1.5E-01	2.4E-01	1.7E-02
Gas Plant	Terrestrial	Bird	Sparrow	Chromium	0.25568	0.59726	2.242074	--	--	--	--	--	--	3.1E+00	7.2E+00	--
Gas Plant	Terrestrial	Bird	Kestrel	Chromium	0.11495	--	0.504032	0.4604452	--	--	--	--	--	1.1E+00	1.7E+00	--
Gas Plant	Terrestrial	Bird	Sparrow	Cobalt	0.04664	0.03953	0.1934319	--	--	--	--	--	--	2.8E-01	2.9E+00	3.0E-01
Gas Plant	Terrestrial	Bird	Kestrel	Cobalt	0.02097	--	0.0434847	0.0279238	--	--	--	--	--	9.2E-02	6.7E-01	6.8E-02
Gas Plant	Terrestrial	Bird	Kestrel	Copper	0.08891	--	0.6361751	4.258379	--	--	--	--	--	5.0E+00	1.8E-01	1.4E-01
Gas Plant	Terrestrial	Bird	Sparrow	Copper	0.19775	1.40772	2.829882	--	--	--	--	--	--	4.4E+00	2.4E-01	1.8E-01
Gas Plant	Terrestrial	Bird	Sparrow	Lead	0.15975	0.54081	1.397806	--	--	--	--	--	--	2.1E+00	4.2E+00	4.2E-01
Gas Plant	Terrestrial	Bird	Kestrel	Lead	0.07183	--	0.3142355	0.4530516	--	--	--	--	--	8.4E-01	1.1E+00	1.1E-01
Gas Plant	Terrestrial	Bird	Kestrel	Mercury	0.00048	--	--	0.0235681	--	--	--	--	--	2.4E-02	1.0E-02	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Gas Plant	Terrestrial	Bird	Sparrow	Mercury	0.00106	0.01606	--	--	--	--	--	--	--	1.7E-02	1.1E-02	--
Gas Plant	Terrestrial	Bird	Sparrow	Nickel	0.11214	0.29185	1.863223	--	--	--	--	--	--	2.3E+00	6.7E-02	--
Gas Plant	Terrestrial	Bird	Kestrel	Nickel	0.05042	--	0.4188642	0.4585335	--	--	--	--	--	9.3E-01	1.9E-02	--
Gas Plant	Terrestrial	Bird	Sparrow	Selenium	0.01978	1.13053	--	--	--	--	--	--	--	1.2E+00	6.6E+00	--
Gas Plant	Terrestrial	Bird	Kestrel	Selenium	0.0089	--	--	0.8490932	--	--	--	--	--	8.6E-01	3.4E+00	--
Gas Plant	Terrestrial	Bird	Sparrow	Silver	0.00395	0.09479	--	--	--	--	--	--	--	9.9E-02	--	5.9E-03
Gas Plant	Terrestrial	Bird	Kestrel	Silver	0.00178	--	--	--	--	--	--	--	--	1.8E-03	--	7.3E-05
Gas Plant	Terrestrial	Bird	Sparrow	Sulfate	6.192	--	--	--	--	--	--	--	--	6.2E+00	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Sulfate	2.784	--	--	--	--	--	--	--	--	2.8E+00	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Sulfide	14.448	--	--	--	--	--	--	--	--	1.4E+01	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Sulfide	6.496	--	--	--	--	--	--	--	--	6.5E+00	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Thallium	0.01291	--	--	--	--	--	--	--	--	1.3E-02	--	8.1E-04
Gas Plant	Terrestrial	Bird	Kestrel	Thallium	0.00581	--	--	--	--	--	--	--	--	5.8E-03	--	2.5E-04
Gas Plant	Terrestrial	Bird	Sparrow	Vanadium	0.38372	0.33516	1.938359	--	--	--	--	--	--	2.7E+00	5.3E-01	--
Gas Plant	Terrestrial	Bird	Kestrel	Vanadium	0.17252	--	0.4357551	0.0563691	--	--	--	--	--	6.6E-01	9.2E-02	--
Gas Plant	Terrestrial	Bird	Kestrel	Zinc	0.27344	--	3.604438	53.1972	--	--	--	--	--	5.7E+01	6.8E+00	7.5E-01
Gas Plant	Terrestrial	Bird	Sparrow	Zinc	0.60817	9.52059	16.03354	--	--	--	--	--	--	2.6E+01	4.5E+00	5.0E-01
Gas Plant	Terrestrial	Bird	Sparrow	Ammonia as Nitrogen	0.2064	--	--	--	--	--	--	--	--	2.1E-01	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Ammonia as Nitrogen	0.0928	--	--	--	--	--	--	--	--	9.3E-02	--	--
Gas Plant	Terrestrial	Bird	Kestrel	4,4'-DDD	0.00029	--	0.0041887	0.0177763	--	--	--	--	--	2.2E-02	6.8E-02	--
Gas Plant	Terrestrial	Bird	Sparrow	4,4'-DDD	0.00064	--	0.0186326	--	--	--	--	--	--	1.9E-02	8.5E-02	--
Gas Plant	Terrestrial	Bird	Kestrel	4,4'-DDE	2.9E-05	--	0.0013033	0.0784584	--	--	--	--	--	8.0E-02	--	2.5E-01
Gas Plant	Terrestrial	Bird	Sparrow	4,4'-DDE	6.3E-05	--	0.0057974	--	--	--	--	--	--	5.9E-03	--	2.7E-02
Gas Plant	Terrestrial	Bird	Kestrel	4,4'-DDT	1.2E-06	--	--	0.000266	--	--	--	--	--	2.7E-04	4.2E-03	--
Gas Plant	Terrestrial	Bird	Sparrow	4,4'-DDT	2.7E-06	--	--	--	--	--	--	--	--	2.7E-06	6.1E-05	--
Gas Plant	Terrestrial	Bird	Kestrel	Acenaphthene	0.001	--	--	0.0784313	--	--	--	--	--	7.9E-02	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Acenaphthene	0.00222	--	--	--	--	--	--	--	--	2.2E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Benzo(a)anthracene	0.00051	--	--	0.0296648	--	--	--	--	--	3.0E-02	2.8E-04	--
Gas Plant	Terrestrial	Bird	Sparrow	Benzo(a)anthracene	0.00113	--	--	--	--	--	--	--	--	1.1E-03	1.5E-05	--
Gas Plant	Terrestrial	Bird	Kestrel	Benzo(a)pyrene	0.00051	--	--	0.0296648	--	--	--	--	--	3.0E-02	2.8E-03	--
Gas Plant	Terrestrial	Bird	Sparrow	Benzo(a)pyrene	0.00113	--	--	--	--	--	--	--	--	1.1E-03	1.5E-04	--
Gas Plant	Terrestrial	Bird	Kestrel	Benzo(b)fluoranthene	0.00052	--	--	0.0095131	--	--	--	--	--	1.0E-02	9.3E-05	--
Gas Plant	Terrestrial	Bird	Sparrow	Benzo(b)fluoranthene	0.00115	--	--	--	--	--	--	--	--	1.1E-03	1.5E-05	--
Gas Plant	Terrestrial	Bird	Kestrel	Benzo(g,h,i)perylene	0.00068	--	--	0.0076223	--	--	--	--	--	8.3E-03	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Benzo(g,h,i)perylene	0.00151	--	--	--	--	--	--	--	--	1.5E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Benzo(k)fluoranthene	0.00052	--	--	0.0301339	--	--	--	--	--	3.1E-02	2.8E-04	--
Gas Plant	Terrestrial	Bird	Sparrow	Benzo(k)fluoranthene	0.00115	--	--	--	--	--	--	--	--	1.1E-03	1.5E-05	--
Gas Plant	Terrestrial	Bird	Kestrel	BHC-alpha	1.1E-06	--	0.0000234	0.000185	--	--	--	--	--	2.1E-04	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Gas Plant	Terrestrial	Bird	Sparrow	BHC-alpha	2.5E-06	--	0.0001041	--	--	--	--	--	--	1.1E-04	--	--
Gas Plant	Terrestrial	Bird	Kestrel	BHC-beta	2.3E-06	--	0.0002087	0.0168024	--	--	--	--	--	1.7E-02	--	--
Gas Plant	Terrestrial	Bird	Sparrow	BHC-beta	5E-06	9.5E-05	0.0009283	--	--	--	--	--	--	1.0E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Bird	Sparrow	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Bird	Kestrel	BHC-gamma	--	--	--	--	--	--	--	--	--	--	0.0E+00	0.0E+00
Gas Plant	Terrestrial	Bird	Sparrow	BHC-gamma	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Chlorobenzene	0.00955	--	--	--	--	--	--	--	--	9.5E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Chlorobenzene	0.00429	--	--	--	--	--	--	--	--	4.3E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Chrysene	0.00051	--	--	0.0299386	--	--	--	--	--	3.0E-02	2.8E-05	--
Gas Plant	Terrestrial	Bird	Sparrow	Chrysene	0.00114	--	--	--	--	--	--	--	--	1.1E-03	1.5E-06	--
Gas Plant	Terrestrial	Bird	Kestrel	Dieldrin	3.8E-06	--	--	0.0154936	--	--	--	--	--	1.5E-02	2.7E-01	--
Gas Plant	Terrestrial	Bird	Sparrow	Dieldrin	8.5E-06	--	--	--	--	--	--	--	--	8.5E-06	2.1E-04	--
Gas Plant	Terrestrial	Bird	Sparrow	Di-n-butylphthalate	0.00066	--	--	--	--	--	--	--	--	6.6E-04	--	8.7E-04
Gas Plant	Terrestrial	Bird	Kestrel	Di-n-butylphthalate	0.0003	--	--	--	--	--	--	--	--	3.0E-04	--	2.7E-04
Gas Plant	Terrestrial	Bird	Sparrow	Di-n-octylphthalate	0.00146	--	--	--	--	--	--	--	--	1.5E-03	--	1.3E-05
Gas Plant	Terrestrial	Bird	Kestrel	Di-n-octylphthalate	0.00066	--	--	--	--	--	--	--	--	6.6E-04	--	4.0E-06
Gas Plant	Terrestrial	Bird	Sparrow	Ethylbenzene	0.00955	--	--	--	--	--	--	--	--	9.5E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Ethylbenzene	0.00429	--	--	--	--	--	--	--	--	4.3E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Fluoranthene	0.00051	--	--	0.0061936	--	--	--	--	--	6.7E-03	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Fluoranthene	0.00114	--	--	--	--	--	--	--	--	1.1E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Fluorene	0.00252	--	--	0.1467155	--	--	--	--	--	1.5E-01	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Fluorene	0.00559	--	--	--	--	--	--	--	--	5.6E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Naphthalene	0.00203	--	--	0.0691034	--	--	--	--	--	7.1E-02	--	5.4E-04
Gas Plant	Terrestrial	Bird	Sparrow	Naphthalene	0.0045	--	--	--	--	--	--	--	--	4.5E-03	--	5.0E-05
Gas Plant	Terrestrial	Bird	Sparrow	n-Propylbenzene	0.00671	--	--	--	--	--	--	--	--	6.7E-03	--	--
Gas Plant	Terrestrial	Bird	Kestrel	n-Propylbenzene	0.00302	--	--	--	--	--	--	--	--	3.0E-03	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Oil and Grease	115.169	--	--	--	--	--	--	--	--	1.2E+02	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Oil and Grease	51.7814	--	--	--	--	--	--	--	--	5.2E+01	--	--
Gas Plant	Terrestrial	Bird	Sparrow	PCB 1254	0.0003	--	0.0053304	--	--	--	--	--	--	5.6E-03	--	7.0E-03
Gas Plant	Terrestrial	Bird	Kestrel	PCB 1254	0.00014	--	0.0011983	--	--	--	--	--	--	1.3E-03	--	1.1E-03
Gas Plant	Terrestrial	Bird	Sparrow	PCB 1260	0.00252	--	--	--	--	--	--	--	--	2.5E-03	--	2.3E-05
Gas Plant	Terrestrial	Bird	Kestrel	PCB 1260	0.00113	--	--	--	--	--	--	--	--	1.1E-03	--	7.0E-06
Gas Plant	Terrestrial	Bird	Kestrel	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Bird	Sparrow	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Bird	Kestrel	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Bird	Sparrow	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Bird	Sparrow	PCB-138	0.00024	--	--	--	--	--	--	--	--	2.4E-04	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Gas Plant	Terrestrial	Bird	Kestrel	PCB-138	0.00011	--	--	--	--	--	--	--	--	1.1E-04	--	--
Gas Plant	Terrestrial	Bird	Kestrel	PCB-153	0.00011	--	--	0.0001922	--	--	--	--	--	3.0E-04	--	--
Gas Plant	Terrestrial	Bird	Sparrow	PCB-153	0.00023	--	--	--	--	--	--	--	--	2.3E-04	--	--
Gas Plant	Terrestrial	Bird	Sparrow	PCB-180	0.00041	--	--	--	--	--	--	--	--	4.1E-04	--	--
Gas Plant	Terrestrial	Bird	Kestrel	PCB-180	0.00018	--	--	0.0001737	--	--	--	--	--	3.6E-04	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Phenanthrene	0.00122	--	--	0.0535324	--	--	--	--	--	5.5E-02	--	4.2E-04
Gas Plant	Terrestrial	Bird	Sparrow	Phenanthrene	0.00272	--	--	--	--	--	--	--	--	2.7E-03	--	3.0E-05
Gas Plant	Terrestrial	Bird	Kestrel	Pyrene	0.00053	--	--	0.0308791	--	--	--	--	--	3.1E-02	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Pyrene	0.00118	--	--	--	--	--	--	--	--	1.2E-03	--	--
Gas Plant	Terrestrial	Bird	Sparrow	TPH-Diesel	2.45045	--	--	--	--	--	--	--	--	2.5E+00	--	--
Gas Plant	Terrestrial	Bird	Kestrel	TPH-Diesel	1.10175	--	--	--	--	--	--	--	--	1.1E+00	--	--
Gas Plant	Terrestrial	Bird	Sparrow	Waste oil	15.1095	--	--	--	--	--	--	--	--	1.5E+01	--	--
Gas Plant	Terrestrial	Bird	Kestrel	Waste oil	6.79341	--	--	--	--	--	--	--	--	6.8E+00	--	--
Gas Plant	Terrestrial	Mammal	Mouse	Arsenic	0.11837	1.21611	0.6446002	--	--	--	--	--	--	2.0E+00	--	1.5E+00
Gas Plant	Terrestrial	Mammal	Coyote	Arsenic	0.01017	0.00516	--	--	--	--	--	--	--	1.5E-02	--	1.8E-02
Gas Plant	Terrestrial	Mammal	Mouse	Barium	0.64417	12.1037	5.399675	--	--	--	--	--	--	1.8E+01	3.7E+01	4.9E-02
Gas Plant	Terrestrial	Mammal	Coyote	Barium	0.05534	0.05135	--	0.9421761	--	--	--	--	--	1.0E+00	3.4E+00	4.5E-03
Gas Plant	Terrestrial	Mammal	Mouse	Beryllium	0.00526	0.05015	0.0704982	--	--	--	--	--	--	1.3E-01	1.9E-01	--
Gas Plant	Terrestrial	Mammal	Coyote	Beryllium	0.00045	0.00021	--	--	--	--	--	--	--	6.6E-04	1.6E-03	--
Gas Plant	Terrestrial	Mammal	Mouse	Cadmium	0.0035	0.26492	--	--	--	--	--	--	--	2.7E-01	2.2E-01	2.2E-02
Gas Plant	Terrestrial	Mammal	Coyote	Cadmium	0.0003	0.00112	--	0.1460247	--	--	--	--	--	1.5E-01	1.9E-01	1.9E-02
Gas Plant	Terrestrial	Mammal	Mouse	Chromium	0.22495	1.06412	0.6246811	--	--	--	--	--	--	1.9E+00	5.6E-04	--
Gas Plant	Terrestrial	Mammal	Coyote	Chromium	0.01932	0.00451	--	0.2189383	--	--	--	--	--	2.4E-01	1.1E-04	--
Gas Plant	Terrestrial	Mammal	Mouse	Cobalt	0.04104	0.07043	0.0538935	--	--	--	--	--	--	1.7E-01	2.7E+00	--
Gas Plant	Terrestrial	Mammal	Coyote	Cobalt	0.00353	0.0003	--	0.0132776	--	--	--	--	--	1.7E-02	4.4E-01	--
Gas Plant	Terrestrial	Mammal	Mouse	Copper	0.17399	2.50811	0.788455	--	--	--	--	--	--	3.5E+00	2.3E-01	1.7E-01
Gas Plant	Terrestrial	Mammal	Coyote	Copper	0.01495	0.01064	--	2.024828	--	--	--	--	--	2.1E+00	2.1E-01	1.6E-01
Gas Plant	Terrestrial	Mammal	Mouse	Lead	0.14055	0.96356	0.3894534	--	--	--	--	--	--	1.5E+00	3.0E+00	1.5E-02
Gas Plant	Terrestrial	Mammal	Coyote	Lead	0.01207	0.00409	--	0.2154227	--	--	--	--	--	2.3E-01	7.4E-01	3.7E-03
Gas Plant	Terrestrial	Mammal	Mouse	Mercury	0.00094	0.02862	--	--	--	--	--	--	--	3.0E-02	7.5E-01	1.5E-01
Gas Plant	Terrestrial	Mammal	Coyote	Mercury	8E-05	0.00012	--	0.0112064	--	--	--	--	--	1.1E-02	4.6E-01	9.2E-02
Gas Plant	Terrestrial	Mammal	Mouse	Nickel	0.09866	0.51998	0.5191268	--	--	--	--	--	--	1.1E+00	1.1E-01	1.1E-02
Gas Plant	Terrestrial	Mammal	Coyote	Nickel	0.00848	0.00221	--	0.2180293	--	--	--	--	--	2.3E-01	3.7E-02	3.7E-03
Gas Plant	Terrestrial	Mammal	Mouse	Selenium	0.01741	2.01425	--	--	--	--	--	--	--	2.0E+00	4.8E+00	--
Gas Plant	Terrestrial	Mammal	Coyote	Selenium	0.0015	0.00854	--	0.4037375	--	--	--	--	--	4.1E-01	1.5E+00	--
Gas Plant	Terrestrial	Mammal	Mouse	Silver	0.00347	0.16888	--	--	--	--	--	--	--	1.7E-01	--	6.0E-03
Gas Plant	Terrestrial	Mammal	Coyote	Silver	0.0003	0.00072	--	--	--	--	--	--	--	1.0E-03	--	5.6E-05
Gas Plant	Terrestrial	Mammal	Mouse	Sulfate	5.448	--	--	--	--	--	--	--	--	5.4E+00	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Gas Plant	Terrestrial	Mammal	Coyote	Sulfate	0.468	--	--	--	--	--	--	--	--	4.7E-01	--	--	
Gas Plant	Terrestrial	Mammal	Mouse	Sulfide	12.712	--	--	--	--	--	--	--	--	1.3E+01	--	--	
Gas Plant	Terrestrial	Mammal	Coyote	Sulfide	1.092	--	--	--	--	--	--	--	--	1.1E+00	--	--	
Gas Plant	Terrestrial	Mammal	Mouse	Thallium	0.01136	--	--	--	--	--	--	--	--	1.1E-02	4.0E-02	--	
Gas Plant	Terrestrial	Mammal	Coyote	Thallium	0.00098	--	--	--	--	--	--	--	--	9.8E-04	5.5E-03	--	
Gas Plant	Terrestrial	Mammal	Mouse	Vanadium	0.33761	0.59716	0.5400609	--	--	--	--	--	--	1.5E+00	3.0E+00	--	
Gas Plant	Terrestrial	Mammal	Coyote	Vanadium	0.029	0.00253	--	0.0268031	--	--	--	--	--	5.8E-02	1.9E-01	--	
Gas Plant	Terrestrial	Mammal	Coyote	Zinc	0.04597	0.07196	--	25.29488	--	--	--	--	--	2.5E+01	1.3E+00	1.0E-01	
Gas Plant	Terrestrial	Mammal	Mouse	Zinc	0.53509	16.9627	4.467225	--	--	--	--	--	--	2.2E+01	7.3E-01	5.5E-02	
Gas Plant	Terrestrial	Mammal	Mouse	Ammonia as Nitrogen	0.1816	--	--	--	--	--	--	--	--	1.8E-01	7.6E-02	--	
Gas Plant	Terrestrial	Mammal	Coyote	Ammonia as Nitrogen	0.0156	--	--	--	--	--	--	--	--	1.6E-02	1.0E-02	--	
Gas Plant	Terrestrial	Mammal	Coyote	4,4'-DDD	4.8E-05	--	--	0.0084525	--	--	--	--	--	8.5E-03	--	9.0E-05	
Gas Plant	Terrestrial	Mammal	Mouse	4,4'-DDD	0.00056	--	0.0051914	--	--	--	--	--	--	5.8E-03	--	3.8E-05	
Gas Plant	Terrestrial	Mammal	Coyote	4,4'-DDE	4.8E-06	--	--	0.0373064	--	--	--	--	--	3.7E-02	--	2.2E-03	
Gas Plant	Terrestrial	Mammal	Mouse	4,4'-DDE	5.6E-05	--	0.0016152	--	--	--	--	--	--	1.7E-03	--	6.2E-05	
Gas Plant	Terrestrial	Mammal	Coyote	4,4'-DDT	2E-07	--	--	0.0001265	--	--	--	--	--	1.3E-04	2.0E-04	--	
Gas Plant	Terrestrial	Mammal	Mouse	4,4'-DDT	2.4E-06	--	--	--	--	--	--	--	--	2.4E-06	2.4E-06	--	
Gas Plant	Terrestrial	Mammal	Coyote	Acenaphthene	0.00017	--	--	0.0372935	--	--	--	--	--	3.7E-02	3.2E-04	--	
Gas Plant	Terrestrial	Mammal	Mouse	Acenaphthene	0.00195	--	--	--	--	--	--	--	--	2.0E-03	1.0E-05	--	
Gas Plant	Terrestrial	Mammal	Coyote	Benzo(a)anthracene	8.6E-05	--	--	0.0141054	--	--	--	--	--	1.4E-02	--	9.1E-03	
Gas Plant	Terrestrial	Mammal	Mouse	Benzo(a)anthracene	0.001	--	--	--	--	--	--	--	--	1.0E-03	--	4.0E-04	
Gas Plant	Terrestrial	Mammal	Coyote	Benzo(a)pyrene	8.6E-05	--	--	0.0141054	--	--	--	--	--	1.4E-02	--	2.1E-02	
Gas Plant	Terrestrial	Mammal	Mouse	Benzo(a)pyrene	0.001	--	--	--	--	--	--	--	--	1.0E-03	--	9.3E-04	
Gas Plant	Terrestrial	Mammal	Coyote	Benzo(b)fluoranthene	8.7E-05	--	--	0.0045234	--	--	--	--	--	4.6E-03	--	1.5E-04	
Gas Plant	Terrestrial	Mammal	Mouse	Benzo(b)fluoranthene	0.00101	--	--	--	--	--	--	--	--	1.0E-03	--	2.0E-05	
Gas Plant	Terrestrial	Mammal	Coyote	Benzo(g,h,i)perylene	0.00011	--	--	0.0036243	--	--	--	--	--	3.7E-03	--	--	
Gas Plant	Terrestrial	Mammal	Mouse	Benzo(g,h,i)perylene	0.00133	--	--	--	--	--	--	--	--	1.3E-03	--	--	
Gas Plant	Terrestrial	Mammal	Coyote	Benzo(k)fluoranthene	8.7E-05	--	--	0.0143285	--	--	--	--	--	1.4E-02	--	2.6E-04	
Gas Plant	Terrestrial	Mammal	Mouse	Benzo(k)fluoranthene	0.00101	--	--	--	--	--	--	--	--	1.0E-03	--	1.1E-05	
Gas Plant	Terrestrial	Mammal	Coyote	BHC-alpha	2E-07	--	--	0.0000879	--	--	--	--	--	8.8E-05	1.0E-05	--	
Gas Plant	Terrestrial	Mammal	Mouse	BHC-alpha	2.2E-06	--	0.000029	--	--	--	--	--	--	3.1E-05	2.2E-06	--	
Gas Plant	Terrestrial	Mammal	Coyote	BHC-beta	4E-07	7E-07	--	0.0079894	--	--	--	--	--	8.0E-03	2.6E-03	--	
Gas Plant	Terrestrial	Mammal	Mouse	BHC-beta	4.4E-06	0.00017	0.0002586	--	--	--	--	--	--	4.3E-04	8.7E-05	--	
Gas Plant	Terrestrial	Mammal	Coyote	BHC-delta	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Gas Plant	Terrestrial	Mammal	Mouse	BHC-delta	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Gas Plant	Terrestrial	Mammal	Coyote	BHC-gamma	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Gas Plant	Terrestrial	Mammal	Mouse	BHC-gamma	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Gas Plant	Terrestrial	Mammal	Mouse	Chlorobenzene	0.0084	--	--	--	--	--	--	--	--	8.4E-03	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Gas Plant	Terrestrial	Mammal	Coyote	Chlorobenzene	0.00072	--	--	--	--	--	--	--	--	7.2E-04	--	--
Gas Plant	Terrestrial	Mammal	Coyote	Chrysene	8.6E-05	--	--	0.0142356	--	--	--	--	--	1.4E-02	--	1.9E-04
Gas Plant	Terrestrial	Mammal	Mouse	Chrysene	0.001	--	--	--	--	--	--	--	--	1.0E-03	--	8.2E-06
Gas Plant	Terrestrial	Mammal	Coyote	Dieldrin	6E-07	--	--	0.0073671	--	--	--	--	--	7.4E-03	1.9E+00	--
Gas Plant	Terrestrial	Mammal	Mouse	Dieldrin	7.5E-06	--	--	--	--	--	--	--	--	7.5E-06	1.2E-03	--
Gas Plant	Terrestrial	Mammal	Mouse	Di-n-butylphthalate	0.00058	--	--	--	--	--	--	--	--	5.8E-04	1.0E-06	--
Gas Plant	Terrestrial	Mammal	Coyote	Di-n-butylphthalate	5E-05	--	--	--	--	--	--	--	--	5.0E-05	1.0E-07	--
Gas Plant	Terrestrial	Mammal	Mouse	Di-n-octylphthalate	0.00128	--	--	--	--	--	--	--	--	1.3E-03	--	5.9E-06
Gas Plant	Terrestrial	Mammal	Coyote	Di-n-octylphthalate	0.00011	--	--	--	--	--	--	--	--	1.1E-04	--	8.0E-07
Gas Plant	Terrestrial	Mammal	Mouse	Ethylbenzene	0.0084	--	--	--	--	--	--	--	--	8.4E-03	7.0E-05	--
Gas Plant	Terrestrial	Mammal	Coyote	Ethylbenzene	0.00072	--	--	--	--	--	--	--	--	7.2E-04	9.6E-06	--
Gas Plant	Terrestrial	Mammal	Coyote	Fluoranthene	8.6E-05	--	--	0.002945	--	--	--	--	--	3.0E-03	3.6E-05	1.8E-05
Gas Plant	Terrestrial	Mammal	Mouse	Fluoranthene	0.001	--	--	--	--	--	--	--	--	1.0E-03	7.5E-06	3.8E-06
Gas Plant	Terrestrial	Mammal	Coyote	Fluorene	0.00042	--	--	0.0697621	--	--	--	--	--	7.0E-02	8.4E-04	--
Gas Plant	Terrestrial	Mammal	Mouse	Fluorene	0.00492	--	--	--	--	--	--	--	--	4.9E-03	3.7E-05	--
Gas Plant	Terrestrial	Mammal	Coyote	Naphthalene	0.00034	--	--	0.0328582	--	--	--	--	--	3.3E-02	1.0E-03	--
Gas Plant	Terrestrial	Mammal	Mouse	Naphthalene	0.00396	--	--	--	--	--	--	--	--	4.0E-03	7.8E-05	--
Gas Plant	Terrestrial	Mammal	Mouse	n-Propylbenzene	0.0059	--	--	--	--	--	--	--	--	5.9E-03	--	--
Gas Plant	Terrestrial	Mammal	Coyote	n-Propylbenzene	0.00051	--	--	--	--	--	--	--	--	5.1E-04	--	--
Gas Plant	Terrestrial	Mammal	Mouse	Oil and Grease	101.331	--	--	--	--	--	--	--	--	1.0E+02	--	--
Gas Plant	Terrestrial	Mammal	Coyote	Oil and Grease	8.70464	--	--	--	--	--	--	--	--	8.7E+00	--	--
Gas Plant	Terrestrial	Mammal	Mouse	PCB 1254	0.00026	--	0.0014851	--	--	--	--	--	--	1.7E-03	4.4E-03	--
Gas Plant	Terrestrial	Mammal	Coyote	PCB 1254	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	9.1E-05	--
Gas Plant	Terrestrial	Mammal	Mouse	PCB 1260	0.00222	--	--	--	--	--	--	--	--	2.2E-03	2.6E-04	--
Gas Plant	Terrestrial	Mammal	Coyote	PCB 1260	0.00019	--	--	--	--	--	--	--	--	1.9E-04	3.6E-05	--
Gas Plant	Terrestrial	Mammal	Coyote	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Mammal	Mouse	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Mammal	Coyote	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Mammal	Mouse	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Gas Plant	Terrestrial	Mammal	Mouse	PCB-138	0.00022	--	--	--	--	--	--	--	--	2.2E-04	--	--
Gas Plant	Terrestrial	Mammal	Coyote	PCB-138	1.9E-05	--	--	--	--	--	--	--	--	1.9E-05	--	--
Gas Plant	Terrestrial	Mammal	Mouse	PCB-153	0.00021	--	--	--	--	--	--	--	--	2.1E-04	--	--
Gas Plant	Terrestrial	Mammal	Coyote	PCB-153	1.8E-05	--	--	0.0000914	--	--	--	--	--	1.1E-04	--	--
Gas Plant	Terrestrial	Mammal	Mouse	PCB-180	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	--
Gas Plant	Terrestrial	Mammal	Coyote	PCB-180	3.1E-05	--	--	0.0000826	--	--	--	--	--	1.1E-04	--	--
Gas Plant	Terrestrial	Mammal	Coyote	Phenanthrene	0.00021	--	--	0.0254543	--	--	--	--	--	2.6E-02	--	4.7E-05
Gas Plant	Terrestrial	Mammal	Mouse	Phenanthrene	0.00239	--	--	--	--	--	--	--	--	2.4E-03	--	2.8E-06
Gas Plant	Terrestrial	Mammal	Coyote	Pyrene	8.9E-05	--	--	0.0146828	--	--	--	--	--	1.5E-02	1.8E-04	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Gas Plant	Terrestrial	Mammal	Mouse	Pyrene	0.00104	--	--	--	--	--	--	--	--	1.0E-03	7.8E-06	--
Gas Plant	Terrestrial	Mammal	Mouse	TPH-Diesel	2.15602	--	--	--	--	--	--	--	--	2.2E+00	--	3.4E-04
Gas Plant	Terrestrial	Mammal	Coyote	TPH-Diesel	0.18521	--	--	--	--	--	--	--	--	1.9E-01	--	4.7E-05
Gas Plant	Terrestrial	Mammal	Mouse	Waste oil	13.294	--	--	--	--	--	--	--	--	1.3E+01	--	--
Gas Plant	Terrestrial	Mammal	Coyote	Waste oil	1.142	--	--	--	--	--	--	--	--	1.1E+00	--	--
Muted Tidal	Aquatic	Bird	Stilt	Antimony	0.00167	--	--	--	--	--	--	--	--	1.7E-03	--	--
Muted Tidal	Aquatic	Bird	Heron	Antimony	0.00034	--	--	--	--	--	--	--	--	3.4E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	Antimony	0.00029	--	--	--	--	--	--	--	--	2.9E-04	--	--
Muted Tidal	Aquatic	Bird	Stilt	Arsenic	0.12337	--	--	--	--	0.3328089	--	--	--	4.6E-01	1.3E-01	5.0E-02
Muted Tidal	Aquatic	Bird	Heron	Arsenic	0.02495	--	0.0028601	--	--	0.037181	--	--	--	6.5E-02	1.3E-02	5.3E-03
Muted Tidal	Aquatic	Bird	Tern	Arsenic	0.02141	--	--	--	--	--	--	--	--	2.1E-02	8.0E-03	3.2E-03
Muted Tidal	Aquatic	Bird	Stilt	Barium	2.72455	--	--	--	--	11.31301	--	0.390217	--	1.4E+01	1.1E-01	--
Muted Tidal	Aquatic	Bird	Tern	Barium	0.47279	--	--	--	--	--	--	--	4.00843	4.5E+00	4.5E-02	--
Muted Tidal	Aquatic	Bird	Heron	Barium	0.55092	--	0.0972212	0.0204921	--	1.263875	0.199289	0.174378	0.97154	3.3E+00	1.8E-02	--
Muted Tidal	Aquatic	Bird	Stilt	Beryllium	0.0092	--	--	--	--	0.0610282	--	--	--	7.0E-02	--	--
Muted Tidal	Aquatic	Bird	Tern	Beryllium	0.0016	--	--	--	--	--	--	--	0.02166	2.3E-02	--	--
Muted Tidal	Aquatic	Bird	Heron	Beryllium	0.00186	--	0.0005245	--	--	0.006818	0.001217	--	0.00525	1.6E-02	--	--
Muted Tidal	Aquatic	Bird	Tern	Cadmium	0.0009	--	--	--	--	--	--	--	0.00582	6.7E-03	8.9E-03	6.5E-04
Muted Tidal	Aquatic	Bird	Stilt	Cadmium	0.00517	--	--	--	--	--	--	--	--	5.2E-03	5.0E-03	3.6E-04
Muted Tidal	Aquatic	Bird	Heron	Cadmium	0.00104	--	--	0.0005373	--	--	0.000464	--	0.00141	3.5E-03	2.5E-03	1.8E-04
Muted Tidal	Aquatic	Bird	Stilt	Chromium	0.30122	--	--	--	--	0.4143425	--	0.015141	--	7.3E-01	1.1E+00	--
Muted Tidal	Aquatic	Bird	Tern	Chromium	0.05227	--	--	--	--	--	--	--	0.18893	2.4E-01	4.7E-01	--
Muted Tidal	Aquatic	Bird	Heron	Chromium	0.06091	--	0.0035608	0.0064946	--	0.0462898	0.022015	0.006766	0.04579	1.9E-01	2.1E-01	--
Muted Tidal	Aquatic	Bird	Stilt	Cobalt	0.09515	--	--	--	--	0.0618965	--	0.00242	--	1.6E-01	1.0E+00	1.0E-01
Muted Tidal	Aquatic	Bird	Tern	Cobalt	0.01651	--	--	--	--	--	--	--	0.03942	5.6E-02	4.9E-01	5.0E-02
Muted Tidal	Aquatic	Bird	Heron	Cobalt	0.01924	--	0.0005319	0.0006441	--	0.006915	0.006652	0.001082	0.00955	4.5E-02	2.1E-01	2.2E-02
Muted Tidal	Aquatic	Bird	Stilt	Copper	0.2384	--	--	--	--	0.5351603	--	0.29267	--	1.1E+00	3.5E-02	2.7E-02
Muted Tidal	Aquatic	Bird	Tern	Copper	0.04137	--	--	--	--	--	--	--	0.77285	8.1E-01	3.7E-02	2.8E-02
Muted Tidal	Aquatic	Bird	Heron	Copper	0.04821	--	0.004599	0.0323763	--	0.0597874	0.080733	0.130787	0.18732	5.4E-01	1.3E-02	1.0E-02
Muted Tidal	Aquatic	Bird	Stilt	Lead	1.85951	--	--	--	--	2.552263	--	0.020194	--	4.4E+00	5.4E+00	5.4E-01
Muted Tidal	Aquatic	Bird	Tern	Lead	0.32268	--	--	--	--	--	--	--	1.63784	2.0E+00	3.3E+00	3.3E-01
Muted Tidal	Aquatic	Bird	Heron	Lead	0.376	--	0.0219335	0.0137498	--	0.2851356	0.037022	0.009024	0.39697	1.1E+00	1.0E+00	1.0E-01
Muted Tidal	Aquatic	Bird	Tern	Mercury	0.00027	--	--	--	--	--	--	--	0.00306	3.3E-03	1.7E-03	--
Muted Tidal	Aquatic	Bird	Stilt	Mercury	0.00158	--	--	--	--	--	--	--	--	1.6E-03	6.0E-04	--
Muted Tidal	Aquatic	Bird	Heron	Mercury	0.00032	--	--	0.0001065	--	--	--	--	0.00074	1.2E-03	3.3E-04	--
Muted Tidal	Aquatic	Bird	Stilt	Molybdenum	0.02452	--	--	--	--	--	--	--	--	2.5E-02	--	1.1E-03
Muted Tidal	Aquatic	Bird	Heron	Molybdenum	0.00496	--	--	--	--	--	--	--	--	5.0E-03	--	1.6E-04
Muted Tidal	Aquatic	Bird	Tern	Molybdenum	0.00425	--	--	--	--	--	--	--	--	4.3E-03	--	2.5E-04

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Muted Tidal	Aquatic	Bird	Stilt	Nickel	0.21085	--	--	--	--	0.5495433	--	0.019355	--	7.8E-01	1.4E-02	--	
Muted Tidal	Aquatic	Bird	Heron	Nickel	0.04263	--	0.0047226	0.0085628	--	0.0613943	0.123494	0.008649	0.06626	3.2E-01	4.3E-03	--	
Muted Tidal	Aquatic	Bird	Tern	Nickel	0.03659	--	--	--	--	--	--	--	0.27336	3.1E-01	7.7E-03	--	
Muted Tidal	Aquatic	Bird	Tern	Selenium	0.00332	--	--	--	--	--	--	--	0.50608	5.1E-01	2.4E+00	--	
Muted Tidal	Aquatic	Bird	Heron	Selenium	0.00387	--	--	0.0010612	--	--	0.001407	0.03091	0.12266	1.6E-01	4.2E-01	--	
Muted Tidal	Aquatic	Bird	Stilt	Selenium	0.01913	--	--	--	--	--	--	0.06917	--	8.8E-02	3.1E-01	--	
Muted Tidal	Aquatic	Bird	Stilt	Silver	0.00398	--	--	--	--	--	--	0.010295	--	1.4E-02	--	5.2E-04	
Muted Tidal	Aquatic	Bird	Heron	Silver	0.0008	--	--	--	--	--	--	0.004601	--	5.4E-03	--	1.5E-04	
Muted Tidal	Aquatic	Bird	Tern	Silver	0.00069	--	--	--	--	--	--	--	--	6.9E-04	--	3.4E-05	
Muted Tidal	Aquatic	Bird	Stilt	Sulfate	76.8592	--	--	--	--	--	--	--	--	7.7E+01	--	--	
Muted Tidal	Aquatic	Bird	Heron	Sulfate	15.5414	--	--	--	--	--	--	--	--	1.6E+01	--	--	
Muted Tidal	Aquatic	Bird	Tern	Sulfate	13.3373	--	--	--	--	--	--	--	--	1.3E+01	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Sulfide	0.19159	--	--	--	--	--	--	--	--	1.9E-01	--	--	
Muted Tidal	Aquatic	Bird	Heron	Sulfide	0.03874	--	--	--	--	--	--	--	--	3.9E-02	--	--	
Muted Tidal	Aquatic	Bird	Tern	Sulfide	0.03325	--	--	--	--	--	--	--	--	3.3E-02	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Thallium	0.00815	--	--	--	--	--	--	--	--	8.2E-03	--	3.1E-04	
Muted Tidal	Aquatic	Bird	Heron	Thallium	0.00165	--	--	--	--	--	--	--	--	1.6E-03	--	4.7E-05	
Muted Tidal	Aquatic	Bird	Tern	Thallium	0.00141	--	--	--	--	--	--	--	--	1.4E-03	--	7.4E-05	
Muted Tidal	Aquatic	Bird	Stilt	Vanadium	0.62638	--	--	--	--	0.4963437	--	0.004306	--	1.1E+00	1.4E-01	--	
Muted Tidal	Aquatic	Bird	Tern	Vanadium	0.1087	--	--	--	--	--	--	--	0.15266	2.6E-01	4.4E-02	--	
Muted Tidal	Aquatic	Bird	Heron	Vanadium	0.12666	--	0.0042655	0.0012785	--	0.0554509	0.00567	0.001924	0.037	2.3E-01	2.1E-02	--	
Muted Tidal	Aquatic	Bird	Tern	Zinc	0.14233	--	--	--	--	--	--	--	11.183	1.1E+01	1.6E+00	1.8E-01	
Muted Tidal	Aquatic	Bird	Stilt	Zinc	0.8202	--	--	--	--	3.391909	--	0.238524	--	4.5E+00	4.7E-01	5.3E-02	
Muted Tidal	Aquatic	Bird	Heron	Zinc	0.16585	--	0.0291492	0.5496712	--	0.3789398	0.375293	0.106591	2.71045	4.3E+00	3.4E-01	3.8E-02	
Muted Tidal	Aquatic	Bird	Stilt	Ammonia as Nitrogen	0.65732	--	--	--	--	--	--	--	--	6.6E-01	--	--	
Muted Tidal	Aquatic	Bird	Heron	Ammonia as Nitrogen	0.13291	--	--	--	--	--	--	--	--	1.3E-01	--	--	
Muted Tidal	Aquatic	Bird	Tern	Ammonia as Nitrogen	0.11406	--	--	--	--	--	--	--	--	1.1E-01	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Chloride	216.638	--	--	--	--	--	--	--	--	2.2E+02	--	--	
Muted Tidal	Aquatic	Bird	Heron	Chloride	43.8055	--	--	--	--	--	--	--	--	4.4E+01	--	--	
Muted Tidal	Aquatic	Bird	Tern	Chloride	37.5931	--	--	--	--	--	--	--	--	3.8E+01	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Phosphorus, Total as P	0.06642	--	--	--	--	--	--	--	--	6.6E-02	--	--	
Muted Tidal	Aquatic	Bird	Heron	Phosphorus, Total as P	0.01343	--	--	--	--	--	--	--	--	1.3E-02	--	--	
Muted Tidal	Aquatic	Bird	Tern	Phosphorus, Total as P	0.01153	--	--	--	--	--	--	--	--	1.2E-02	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Phosphorus, Total as PO4	0.20548	--	--	--	--	--	--	--	--	2.1E-01	--	--	
Muted Tidal	Aquatic	Bird	Heron	Phosphorus, Total as PO4	0.04155	--	--	--	--	--	--	--	--	4.2E-02	--	--	
Muted Tidal	Aquatic	Bird	Tern	Phosphorus, Total as PO4	0.03566	--	--	--	--	--	--	--	--	3.6E-02	--	--	
Muted Tidal	Aquatic	Bird	Stilt	1,2-Dichlorobenzene	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	--	--	
Muted Tidal	Aquatic	Bird	Heron	1,2-Dichlorobenzene	4.7E-06	--	--	--	--	--	--	--	--	4.7E-06	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL	
Muted Tidal	Aquatic	Bird	Tern	1,2-Dichlorobenzene	4E-06	--	--	--	--	--	--	--	--	4.0E-06	--	--	
Muted Tidal	Aquatic	Bird	Stilt	1,2-Dichloroethane	2.4E-05	--	--	--	--	--	--	--	--	2.4E-05	2.1E-06	--	
Muted Tidal	Aquatic	Bird	Heron	1,2-Dichloroethane	4.7E-06	--	--	--	--	--	--	--	--	4.7E-06	3.0E-07	--	
Muted Tidal	Aquatic	Bird	Tern	1,2-Dichloroethane	4.1E-06	--	--	--	--	--	--	--	--	4.1E-06	5.0E-07	--	
Muted Tidal	Aquatic	Bird	Stilt	1,3-Dichlorobenzene	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	--	--	
Muted Tidal	Aquatic	Bird	Heron	1,3-Dichlorobenzene	4.7E-06	--	--	--	--	--	--	--	--	4.7E-06	--	--	
Muted Tidal	Aquatic	Bird	Tern	1,3-Dichlorobenzene	4E-06	--	--	--	--	--	--	--	--	4.0E-06	--	--	
Muted Tidal	Aquatic	Bird	Stilt	1,4-Dichlorobenzene	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	--	--	
Muted Tidal	Aquatic	Bird	Heron	1,4-Dichlorobenzene	4.7E-06	--	--	--	--	--	--	--	--	4.7E-06	--	--	
Muted Tidal	Aquatic	Bird	Tern	1,4-Dichlorobenzene	4E-06	--	--	--	--	--	--	--	--	4.0E-06	--	--	
Muted Tidal	Aquatic	Bird	Stilt	2-Butanone	0.00023	--	--	--	--	--	--	--	--	2.3E-04	--	--	
Muted Tidal	Aquatic	Bird	Heron	2-Butanone	4.7E-05	--	--	--	--	--	--	--	--	4.7E-05	--	--	
Muted Tidal	Aquatic	Bird	Tern	2-Butanone	4.1E-05	--	--	--	--	--	--	--	--	4.1E-05	--	--	
Muted Tidal	Aquatic	Bird	Tern	4,4'-DDD	2.7E-05	--	--	--	--	--	--	--	0.06001	6.0E-02	2.2E-01	--	
Muted Tidal	Aquatic	Bird	Heron	4,4'-DDD	3.2E-05	--	0.0000062	0.0001019	--	0.0000809	0.000486	--	0.01454	1.5E-02	3.1E-02	--	
Muted Tidal	Aquatic	Bird	Stilt	4,4'-DDD	0.00016	--	--	--	--	0.0007241	--	--	--	8.8E-04	2.4E-03	--	
Muted Tidal	Aquatic	Bird	Tern	4,4'-DDE	1.3E-05	--	--	--	--	--	--	--	0.20784	2.1E-01	--	8.0E-01	
Muted Tidal	Aquatic	Bird	Heron	4,4'-DDE	1.5E-05	--	0.0000089	0.0000187	--	0.0001163	0.000195	3.81E-05	0.05038	5.1E-02	--	1.1E-01	--
Muted Tidal	Aquatic	Bird	Stilt	4,4'-DDE	7.2E-05	--	--	--	--	0.0010407	--	8.52E-05	--	1.2E-03	--	3.4E-03	--
Muted Tidal	Aquatic	Bird	Tern	4,4'-DDT	1.1E-05	--	--	--	--	--	--	--	0.00128	1.3E-03	2.5E-02	--	
Muted Tidal	Aquatic	Bird	Heron	4,4'-DDT	1.3E-05	--	--	0.0000242	--	--	--	--	0.00031	3.5E-04	3.6E-03	--	
Muted Tidal	Aquatic	Bird	Stilt	4,4'-DDT	6.5E-05	--	--	--	--	--	--	--	--	6.5E-05	9.1E-04	--	
Muted Tidal	Aquatic	Bird	Heron	Acenaphthene	--	--	--	0.0000495	--	--	--	--	--	5.0E-05	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	
Muted Tidal	Aquatic	Bird	Tern	Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Acenaphthylene	0.00202	--	--	--	--	--	--	--	--	2.0E-03	--	--	
Muted Tidal	Aquatic	Bird	Heron	Acenaphthylene	0.00041	--	--	--	--	--	--	--	--	4.1E-04	--	--	
Muted Tidal	Aquatic	Bird	Tern	Acenaphthylene	0.00035	--	--	--	--	--	--	--	--	3.5E-04	--	--	
Muted Tidal	Aquatic	Bird	Tern	Acetone	8.1E-05	--	--	--	--	--	--	--	0.43808	4.4E-01	1.8E-04	--	
Muted Tidal	Aquatic	Bird	Heron	Acetone	9.4E-05	--	--	0.0039581	--	--	--	--	0.10618	1.1E-01	2.5E-05	--	
Muted Tidal	Aquatic	Bird	Stilt	Acetone	0.00047	--	--	--	--	--	--	--	--	4.7E-04	1.0E-07	--	
Muted Tidal	Aquatic	Bird	Heron	Aldrin	--	--	--	0.0002383	--	--	--	--	--	2.4E-04	--	5.0E-05	
Muted Tidal	Aquatic	Bird	Stilt	Aldrin	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	
Muted Tidal	Aquatic	Bird	Tern	Aldrin	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	
Muted Tidal	Aquatic	Bird	Tern	Anthracene	0.00017	--	--	--	--	--	--	--	0.00547	5.6E-03	--	--	
Muted Tidal	Aquatic	Bird	Heron	Anthracene	0.0002	--	--	0.0000495	--	--	--	--	0.00132	1.6E-03	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Anthracene	0.00099	--	--	--	--	--	--	--	--	9.9E-04	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Benzene	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Muted Tidal	Aquatic	Bird	Heron	Benzene	4.6E-06	--	--	--	--	--	--	--	--	4.6E-06	--	--
Muted Tidal	Aquatic	Bird	Tern	Benzene	4E-06	--	--	--	--	--	--	--	--	4.0E-06	--	--
Muted Tidal	Aquatic	Bird	Tern	Benzo(a)anthracene	0.00017	--	--	--	--	--	--	--	0.01658	1.7E-02	1.9E-04	--
Muted Tidal	Aquatic	Bird	Heron	Benzo(a)anthracene	0.0002	--	--	0.0000495	--	--	--	--	0.00402	4.3E-03	2.6E-05	--
Muted Tidal	Aquatic	Bird	Stilt	Benzo(a)anthracene	0.001	--	--	--	--	--	--	--	--	1.0E-03	8.3E-06	--
Muted Tidal	Aquatic	Bird	Tern	Benzo(a)pyrene	0.00018	--	--	--	--	--	--	--	0.01671	1.7E-02	1.9E-03	--
Muted Tidal	Aquatic	Bird	Heron	Benzo(a)pyrene	0.0002	--	--	0.0000495	--	--	--	--	0.00405	4.3E-03	2.6E-04	--
Muted Tidal	Aquatic	Bird	Stilt	Benzo(a)pyrene	0.00101	--	--	--	--	--	--	--	--	1.0E-03	8.4E-05	--
Muted Tidal	Aquatic	Bird	Tern	Benzo(b)fluoranthene	0.00021	--	--	--	--	--	--	--	0.01989	2.0E-02	2.3E-04	--
Muted Tidal	Aquatic	Bird	Heron	Benzo(b)fluoranthene	0.00024	--	--	0.0000495	--	--	--	--	0.00482	5.1E-03	3.2E-05	--
Muted Tidal	Aquatic	Bird	Stilt	Benzo(b)fluoranthene	0.0012	--	--	--	--	--	--	--	--	1.2E-03	9.9E-06	--
Muted Tidal	Aquatic	Bird	Tern	Benzo(e)pyrene	0.00014	--	--	--	--	--	--	--	0.01315	1.3E-02	--	--
Muted Tidal	Aquatic	Bird	Heron	Benzo(e)pyrene	0.00016	--	--	0.0000495	--	--	--	--	0.00319	3.4E-03	--	--
Muted Tidal	Aquatic	Bird	Stilt	Benzo(e)pyrene	0.0008	--	--	--	--	--	--	--	--	8.0E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	Benzo(g,h,i)perylene	0.00019	--	--	--	--	--	--	--	0.0178	1.8E-02	--	--
Muted Tidal	Aquatic	Bird	Heron	Benzo(g,h,i)perylene	0.00022	--	--	0.0000495	--	--	--	--	0.00431	4.6E-03	--	--
Muted Tidal	Aquatic	Bird	Stilt	Benzo(g,h,i)perylene	0.00108	--	--	--	--	--	--	--	--	1.1E-03	--	--
Muted Tidal	Aquatic	Bird	Tern	Benzo(k)fluoranthene	0.00017	--	--	--	--	--	--	--	0.01654	1.7E-02	1.9E-04	--
Muted Tidal	Aquatic	Bird	Heron	Benzo(k)fluoranthene	0.0002	--	--	0.0000495	--	--	--	--	0.00401	4.3E-03	2.6E-05	--
Muted Tidal	Aquatic	Bird	Stilt	Benzo(k)fluoranthene	0.001	--	--	--	--	--	--	--	--	1.0E-03	8.3E-06	--
Muted Tidal	Aquatic	Bird	Tern	BHC-alpha	9E-07	--	--	--	--	--	--	--	0.00157	1.6E-03	--	--
Muted Tidal	Aquatic	Bird	Heron	BHC-alpha	1.1E-06	--	0.0000003	0.0000156	--	0.0000039	0.000002	4E-07	0.00038	4.0E-04	--	--
Muted Tidal	Aquatic	Bird	Stilt	BHC-alpha	5.4E-06	--	--	--	--	0.0000349	--	9E-07	--	4.1E-05	--	--
Muted Tidal	Aquatic	Bird	Stilt	BHC-beta	9.3E-06	--	--	--	--	0.0002696	--	2.09E-05	--	3.0E-04	--	--
Muted Tidal	Aquatic	Bird	Heron	BHC-beta	1.9E-06	--	0.0000023	0.0001293	--	0.0000301	3.88E-05	9.3E-06	4.6E-05	2.6E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	BHC-beta	1.6E-06	--	--	--	--	--	--	--	0.00019	1.9E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	BHC-delta	1.1E-06	--	--	--	--	--	--	--	0.00033	3.3E-04	--	--
Muted Tidal	Aquatic	Bird	Heron	BHC-delta	1.2E-06	--	--	0.0000288	--	--	--	--	7.9E-05	1.1E-04	--	--
Muted Tidal	Aquatic	Bird	Stilt	BHC-delta	6.1E-06	--	--	--	--	--	--	--	--	6.1E-06	--	--
Muted Tidal	Aquatic	Bird	Heron	BHC-gamma	1E-06	--	--	0.0000057	--	--	--	--	--	6.7E-06	--	4.0E-07
Muted Tidal	Aquatic	Bird	Stilt	BHC-gamma	5E-06	--	--	--	--	--	--	--	--	5.0E-06	--	4.0E-07
Muted Tidal	Aquatic	Bird	Tern	BHC-gamma	9E-07	--	--	--	--	--	--	--	--	9.0E-07	--	1.0E-07
Muted Tidal	Aquatic	Bird	Heron	Biphenyl	--	--	--	0.0000054	--	--	--	--	--	5.4E-06	--	--
Muted Tidal	Aquatic	Bird	Stilt	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Stilt	Butylbenzylphthalate	0.00102	--	--	--	--	--	--	--	--	1.0E-03	--	--
Muted Tidal	Aquatic	Bird	Heron	Butylbenzylphthalate	0.00021	--	--	--	--	--	--	--	--	2.1E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	Butylbenzylphthalate	0.00018	--	--	--	--	--	--	--	--	1.8E-04	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Muted Tidal	Aquatic	Bird	Tern	Chlordane (technical)	1.7E-05	--	--	--	--	--	--	--	0.00069	7.0E-04	4.7E-04	6.7E-05	
Muted Tidal	Aquatic	Bird	Heron	Chlordane (technical)	2E-05	--	--	--	--	--	--	--	0.00017	1.9E-04	6.7E-05	9.7E-06	
Muted Tidal	Aquatic	Bird	Stilt	Chlordane (technical)	9.6E-05	--	--	--	--	--	--	--	--	9.6E-05	4.7E-05	6.8E-06	
Muted Tidal	Aquatic	Bird	Tern	Chlordane-alpha	9.2E-06	--	--	--	--	--	--	--	0.00038	3.9E-04	2.6E-04	3.7E-05	
Muted Tidal	Aquatic	Bird	Heron	Chlordane-alpha	1.1E-05	--	--	0.0000547	--	--	--	--	9.1E-05	1.6E-04	5.7E-05	8.2E-06	
Muted Tidal	Aquatic	Bird	Stilt	Chlordane-alpha	5.3E-05	--	--	--	--	--	--	--	--	5.3E-05	2.6E-05	3.7E-06	
Muted Tidal	Aquatic	Bird	Stilt	Chlordane-gamma	4.9E-05	--	--	--	--	--	--	--	--	4.9E-05	2.4E-05	3.4E-06	
Muted Tidal	Aquatic	Bird	Heron	Chlordane-gamma	9.9E-06	--	--	--	--	--	--	--	--	9.9E-06	3.6E-06	5.0E-07	
Muted Tidal	Aquatic	Bird	Tern	Chlordane-gamma	8.5E-06	--	--	--	--	--	--	--	--	8.5E-06	5.7E-06	8.0E-07	
Muted Tidal	Aquatic	Bird	Tern	Chrysene	0.0002	--	--	--	--	--	--	--	0.01684	1.7E-02	1.9E-05	--	
Muted Tidal	Aquatic	Bird	Heron	Chrysene	0.00024	--	--	0.0000495	--	--	--	--	0.00408	4.4E-03	2.7E-06	--	
Muted Tidal	Aquatic	Bird	Stilt	Chrysene	0.00116	--	--	--	--	--	--	--	--	1.2E-03	1.0E-06	--	
Muted Tidal	Aquatic	Bird	Heron	Dibenz(a,h)anthracene	--	--	--	0.0000495	--	--	--	--	--	5.0E-05	3.0E-06	--	
Muted Tidal	Aquatic	Bird	Stilt	Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Muted Tidal	Aquatic	Bird	Tern	Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Muted Tidal	Aquatic	Bird	Heron	Dibenzothiophene	--	--	--	0.0000013	--	--	--	--	--	--	1.3E-06	--	--
Muted Tidal	Aquatic	Bird	Stilt	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	Dieldrin	4.5E-06	--	--	--	--	--	--	--	0.00672	6.7E-03	1.4E-01	--	
Muted Tidal	Aquatic	Bird	Heron	Dieldrin	5.3E-06	--	--	0.0000155	--	--	--	--	0.00163	1.6E-03	1.9E-02	--	
Muted Tidal	Aquatic	Bird	Stilt	Dieldrin	2.6E-05	--	--	--	--	--	--	--	--	--	2.6E-05	4.0E-04	--
Muted Tidal	Aquatic	Bird	Stilt	Diethylphthalate	0.00098	--	--	--	--	--	--	--	--	--	9.8E-04	--	--
Muted Tidal	Aquatic	Bird	Heron	Diethylphthalate	0.0002	--	--	--	--	--	--	--	--	--	2.0E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	Diethylphthalate	0.00017	--	--	--	--	--	--	--	--	--	1.7E-04	--	--
Muted Tidal	Aquatic	Bird	Stilt	Dimethylphthalate	0.00087	--	--	--	--	--	--	--	--	--	8.7E-04	--	--
Muted Tidal	Aquatic	Bird	Heron	Dimethylphthalate	0.00018	--	--	--	--	--	--	--	--	--	1.8E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	Dimethylphthalate	0.00015	--	--	--	--	--	--	--	--	--	1.5E-04	--	--
Muted Tidal	Aquatic	Bird	Stilt	Di-n-butylphthalate	0.00123	--	--	--	--	--	--	--	--	--	1.2E-03	--	1.0E-03
Muted Tidal	Aquatic	Bird	Heron	Di-n-butylphthalate	0.00025	--	--	--	--	--	--	--	--	--	2.5E-04	--	1.5E-04
Muted Tidal	Aquatic	Bird	Tern	Di-n-butylphthalate	0.00021	--	--	--	--	--	--	--	--	--	2.1E-04	--	2.4E-04
Muted Tidal	Aquatic	Bird	Stilt	Di-n-octylphthalate	0.00112	--	--	--	--	--	--	--	--	--	1.1E-03	--	6.1E-06
Muted Tidal	Aquatic	Bird	Heron	Di-n-octylphthalate	0.00023	--	--	--	--	--	--	--	--	--	2.3E-04	--	9.0E-07
Muted Tidal	Aquatic	Bird	Tern	Di-n-octylphthalate	0.0002	--	--	--	--	--	--	--	--	--	2.0E-04	--	1.4E-06
Muted Tidal	Aquatic	Bird	Stilt	Endosulfan I	6.8E-05	--	--	--	--	--	--	--	--	--	6.8E-05	7.8E-06	--
Muted Tidal	Aquatic	Bird	Heron	Endosulfan I	1.4E-05	--	--	--	--	--	--	--	--	--	1.4E-05	1.2E-06	--
Muted Tidal	Aquatic	Bird	Tern	Endosulfan I	1.2E-05	--	--	--	--	--	--	--	--	--	1.2E-05	1.8E-06	--
Muted Tidal	Aquatic	Bird	Heron	Endosulfan II	4.1E-06	--	--	0.0000248	--	--	--	--	--	--	2.9E-05	2.5E-06	--
Muted Tidal	Aquatic	Bird	Stilt	Endosulfan II	2E-05	--	--	--	--	--	--	--	--	--	2.0E-05	2.3E-06	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Muted Tidal	Aquatic	Bird	Tern	Endosulfan II	3.5E-06	--	--	--	--	--	--	--	--	3.5E-06	5.0E-07	--	
Muted Tidal	Aquatic	Bird	Stilt	Endrin	2.8E-05	--	--	--	--	--	--	--	--	2.8E-05	1.3E-04	--	
Muted Tidal	Aquatic	Bird	Heron	Endrin	5.6E-06	--	--	0.000014	--	--	--	--	--	2.0E-05	6.9E-05	--	
Muted Tidal	Aquatic	Bird	Tern	Endrin	4.8E-06	--	--	--	--	--	--	--	--	4.8E-06	3.1E-05	--	
Muted Tidal	Aquatic	Bird	Tern	Endrin aldehyde	1.2E-05	--	--	--	--	--	--	--	0.00099	1.0E-03	6.4E-03	--	
Muted Tidal	Aquatic	Bird	Heron	Endrin aldehyde	1.4E-05	--	--	0.0000057	--	--	--	--	0.00024	2.6E-04	9.1E-04	--	
Muted Tidal	Aquatic	Bird	Stilt	Endrin aldehyde	7.1E-05	--	--	--	--	--	--	--	--	7.1E-05	3.3E-04	--	
Muted Tidal	Aquatic	Bird	Stilt	Endrin ketone	7.8E-05	--	--	--	--	--	--	--	--	7.8E-05	3.7E-04	--	
Muted Tidal	Aquatic	Bird	Heron	Endrin ketone	1.6E-05	--	--	0.0000144	--	--	--	--	--	3.0E-05	1.1E-04	--	
Muted Tidal	Aquatic	Bird	Tern	Endrin ketone	1.4E-05	--	--	--	--	--	--	--	--	1.4E-05	8.7E-05	--	
Muted Tidal	Aquatic	Bird	Tern	Fluoranthene	0.00018	--	--	--	--	--	--	--	0.01477	1.5E-02	--	--	
Muted Tidal	Aquatic	Bird	Heron	Fluoranthene	0.00021	--	--	0.0000495	--	--	--	--	0.00358	3.8E-03	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Fluoranthene	0.00102	--	--	--	--	--	--	--	--	1.0E-03	--	--	
Muted Tidal	Aquatic	Bird	Tern	Fluorene	0.00017	--	--	--	--	--	--	--	0.0057	5.9E-03	--	--	
Muted Tidal	Aquatic	Bird	Heron	Fluorene	0.0002	--	--	0.0000495	--	--	--	--	0.00138	1.6E-03	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Fluorene	0.00099	--	--	--	--	--	--	--	--	9.9E-04	--	--	
Muted Tidal	Aquatic	Bird	Tern	Indeno(1,2,3-c,d)pyrene	0.00019	--	--	--	--	--	--	--	0.01781	1.8E-02	2.0E-04	--	
Muted Tidal	Aquatic	Bird	Heron	Indeno(1,2,3-c,d)pyrene	0.00022	--	--	0.0000495	--	--	--	--	0.00432	4.6E-03	2.8E-05	--	
Muted Tidal	Aquatic	Bird	Stilt	Indeno(1,2,3-c,d)pyrene	0.00108	--	--	--	--	--	--	--	--	1.1E-03	8.9E-06	--	
Muted Tidal	Aquatic	Bird	Stilt	MCPP	0.00099	--	--	--	--	--	--	--	--	9.9E-04	--	--	
Muted Tidal	Aquatic	Bird	Heron	MCPP	0.0002	--	--	--	--	--	--	--	--	2.0E-04	--	--	
Muted Tidal	Aquatic	Bird	Tern	MCPP	0.00017	--	--	--	--	--	--	--	--	1.7E-04	--	--	
Muted Tidal	Aquatic	Bird	Tern	Methylene chloride	4.1E-06	--	--	--	--	--	--	--	0.14618	1.5E-01	--	--	
Muted Tidal	Aquatic	Bird	Heron	Methylene chloride	4.7E-06	--	--	--	--	--	--	--	0.03543	3.5E-02	--	--	
Muted Tidal	Aquatic	Bird	Stilt	Methylene chloride	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	--	--	
Muted Tidal	Aquatic	Bird	Tern	Naphthalene	0.00017	--	--	--	--	--	--	--	0.00277	2.9E-03	--	2.7E-05	
Muted Tidal	Aquatic	Bird	Stilt	Naphthalene	0.00098	--	--	--	--	--	--	--	--	9.8E-04	--	6.7E-06	
Muted Tidal	Aquatic	Bird	Heron	Naphthalene	0.0002	--	--	0.0000815	--	--	--	--	0.00067	9.5E-04	--	4.8E-06	
Muted Tidal	Aquatic	Bird	Stilt	Oil and Grease	72.39	--	--	--	--	--	--	--	--	7.2E+01	--	--	
Muted Tidal	Aquatic	Bird	Heron	Oil and Grease	14.6377	--	--	--	--	--	--	--	--	1.5E+01	--	--	
Muted Tidal	Aquatic	Bird	Tern	Oil and Grease	12.5618	--	--	--	--	--	--	--	--	1.3E+01	--	--	
Muted Tidal	Aquatic	Bird	Tern	PCB 1254	3.8E-05	--	--	--	--	--	--	--	0.02185	2.2E-02	--	2.3E-02	
Muted Tidal	Aquatic	Bird	Heron	PCB 1254	4.4E-05	--	0.0000052	--	--	0.000068	--	--	0.0053	5.4E-03	--	3.1E-03	
Muted Tidal	Aquatic	Bird	Stilt	PCB 1254	0.00022	--	--	--	--	0.0006085	--	--	--	8.3E-04	--	6.3E-04	
Muted Tidal	Aquatic	Bird	Tern	PCB 1260	0.00024	--	--	--	--	--	--	--	0.01961	2.0E-02	--	1.5E-04	
Muted Tidal	Aquatic	Bird	Heron	PCB 1260	0.00027	--	--	--	--	--	--	--	0.00475	5.0E-03	--	2.1E-05	
Muted Tidal	Aquatic	Bird	Stilt	PCB 1260	0.00136	--	--	--	--	--	--	--	--	1.4E-03	--	7.5E-06	
Muted Tidal	Aquatic	Bird	Heron	PCB-008	--	--	--	0.0001081	--	--	--	--	--	1.1E-04	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Muted Tidal	Aquatic	Bird	Stilt	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Heron	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Heron	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-101	0.00014	--	--	--	--	--	--	--	--	1.4E-04	--	--
Muted Tidal	Aquatic	Bird	Heron	PCB-101	2.9E-05	--	--	--	--	--	--	--	--	2.9E-05	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-101	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	--	--
Muted Tidal	Aquatic	Bird	Heron	PCB-105	--	--	--	--	0.0000555	--	--	--	--	5.6E-05	--	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Heron	PCB-118	--	--	--	--	0.0000554	--	--	--	--	5.5E-05	--	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Heron	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-138	7.1E-05	--	--	--	--	--	--	--	--	0.00467	4.7E-03	--
Muted Tidal	Aquatic	Bird	Heron	PCB-138	8.3E-05	--	--	--	0.0000566	--	--	--	--	0.00113	1.3E-03	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-138	0.00041	--	--	--	--	--	--	--	--	--	4.1E-04	--
Muted Tidal	Aquatic	Bird	Tern	PCB-153	7.7E-05	--	--	--	--	--	--	--	--	0.0079	8.0E-03	--
Muted Tidal	Aquatic	Bird	Heron	PCB-153	8.9E-05	--	--	--	0.0000665	--	--	--	--	0.00192	2.1E-03	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-153	0.00044	--	--	--	--	--	--	--	--	--	4.4E-04	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-170	0.0003	--	--	--	--	--	--	--	--	--	3.0E-04	--
Muted Tidal	Aquatic	Bird	Heron	PCB-170	6.2E-05	--	--	--	0.0000299	--	--	--	--	--	9.2E-05	--
Muted Tidal	Aquatic	Bird	Tern	PCB-170	5.3E-05	--	--	--	--	--	--	--	--	--	5.3E-05	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-180	0.00062	--	--	--	--	--	--	--	--	--	6.2E-04	--
Muted Tidal	Aquatic	Bird	Heron	PCB-180	0.00013	--	--	--	0.0000427	--	--	--	--	--	1.7E-04	--
Muted Tidal	Aquatic	Bird	Tern	PCB-180	0.00011	--	--	--	--	--	--	--	--	--	1.1E-04	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-187	0.00018	--	--	--	--	--	--	--	--	--	1.8E-04	--
Muted Tidal	Aquatic	Bird	Heron	PCB-187	3.7E-05	--	--	--	0.0000556	--	--	--	--	--	9.2E-05	--
Muted Tidal	Aquatic	Bird	Tern	PCB-187	3.2E-05	--	--	--	--	--	--	--	--	--	3.2E-05	--
Muted Tidal	Aquatic	Bird	Heron	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Stilt	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Muted Tidal	Aquatic	Bird	Stilt	PCB-206	3.7E-05	--	--	--	--	--	--	--	--	3.7E-05	--	--
Muted Tidal	Aquatic	Bird	Heron	PCB-206	7.4E-06	--	--	--	--	--	--	--	--	7.4E-06	--	--
Muted Tidal	Aquatic	Bird	Tern	PCB-206	6.3E-06	--	--	--	--	--	--	--	--	6.3E-06	--	--
Muted Tidal	Aquatic	Bird	Heron	Perylene	--	--	--	0.000001	--	--	--	--	--	1.0E-06	--	--
Muted Tidal	Aquatic	Bird	Stilt	Perylene	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	Perylene	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Aquatic	Bird	Tern	Phenanthrene	0.00018	--	--	--	--	--	--	--	0.0176	1.8E-02	--	1.6E-04
Muted Tidal	Aquatic	Bird	Heron	Phenanthrene	0.00022	--	--	0.0000495	--	--	--	--	0.00427	4.5E-03	--	2.3E-05
Muted Tidal	Aquatic	Bird	Stilt	Phenanthrene	0.00107	--	--	--	--	--	--	--	--	1.1E-03	--	7.2E-06
Muted Tidal	Aquatic	Bird	Stilt	Phenol	0.00328	--	--	--	--	--	--	--	--	3.3E-03	--	--
Muted Tidal	Aquatic	Bird	Heron	Phenol	0.00066	--	--	--	--	--	--	--	--	6.6E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	Phenol	0.00057	--	--	--	--	--	--	--	--	5.7E-04	--	--
Muted Tidal	Aquatic	Bird	Tern	Pyrene	0.00018	--	--	--	--	--	--	--	0.01504	1.5E-02	--	--
Muted Tidal	Aquatic	Bird	Heron	Pyrene	0.00021	--	--	0.0001028	--	--	--	--	0.00365	4.0E-03	--	--
Muted Tidal	Aquatic	Bird	Stilt	Pyrene	0.00104	--	--	--	--	--	--	--	--	1.0E-03	--	--
Muted Tidal	Aquatic	Bird	Stilt	Tetrachloroethene	2.7E-05	--	--	--	--	--	--	--	--	2.7E-05	--	--
Muted Tidal	Aquatic	Bird	Heron	Tetrachloroethene	5.4E-06	--	--	--	--	--	--	--	--	5.4E-06	--	--
Muted Tidal	Aquatic	Bird	Tern	Tetrachloroethene	4.6E-06	--	--	--	--	--	--	--	--	4.6E-06	--	--
Muted Tidal	Aquatic	Bird	Stilt	Toluene	2.8E-05	--	--	--	--	--	--	--	--	2.8E-05	--	--
Muted Tidal	Aquatic	Bird	Heron	Toluene	5.7E-06	--	--	--	--	--	--	--	--	5.7E-06	--	--
Muted Tidal	Aquatic	Bird	Tern	Toluene	4.9E-06	--	--	--	--	--	--	--	--	4.9E-06	--	--
Muted Tidal	Aquatic	Bird	Stilt	TPH-Diesel	3.27468	--	--	--	--	--	--	--	--	3.3E+00	--	--
Muted Tidal	Aquatic	Bird	Heron	TPH-Diesel	0.66216	--	--	--	--	--	--	--	--	6.6E-01	--	--
Muted Tidal	Aquatic	Bird	Tern	TPH-Diesel	0.56825	--	--	--	--	--	--	--	--	5.7E-01	--	--
Muted Tidal	Aquatic	Bird	Stilt	Waste oil	20.8184	--	--	--	--	--	--	--	--	2.1E+01	--	--
Muted Tidal	Aquatic	Bird	Heron	Waste oil	4.20959	--	--	--	--	--	--	--	--	4.2E+00	--	--
Muted Tidal	Aquatic	Bird	Tern	Waste oil	3.6126	--	--	--	--	--	--	--	--	3.6E+00	--	--
Muted Tidal	Aquatic	Bird	Stilt	Xylene (total)	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	1.0E-07	--
Muted Tidal	Aquatic	Bird	Heron	Xylene (total)	4.9E-06	--	--	--	--	--	--	--	--	4.9E-06	0.0E+00	--
Muted Tidal	Aquatic	Bird	Tern	Xylene (total)	4.2E-06	--	--	--	--	--	--	--	--	4.2E-06	0.0E+00	--
Muted Tidal	Terrestrial	Bird	Sparrow	Antimony	0.00063	--	--	--	--	--	--	--	--	6.3E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Antimony	0.00028	--	--	--	--	--	--	--	--	2.8E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Arsenic	0.04681	0.03129	0.8049815	--	--	--	--	--	--	8.8E-01	3.9E-01	1.6E-01
Muted Tidal	Terrestrial	Bird	Kestrel	Arsenic	0.02105	--	0.1809648	--	--	--	--	--	--	2.0E-01	6.2E-02	2.5E-02
Muted Tidal	Terrestrial	Bird	Sparrow	Barium	1.03373	0.67762	27.36334	--	--	--	--	--	--	2.9E+01	3.5E-01	--
Muted Tidal	Terrestrial	Bird	Kestrel	Barium	0.46478	--	6.151449	0.3361527	--	--	--	--	--	7.0E+00	5.8E-02	--
Muted Tidal	Terrestrial	Bird	Sparrow	Beryllium	0.00349	0.00779	0.147612	--	--	--	--	--	--	1.6E-01	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Beryllium	0.00157	--	0.0331841	--	--	--	--	--	--	3.5E-02	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Muted Tidal	Terrestrial	Bird	Sparrow	Cadmium	0.00196	0.01502	--	--	--	--	--	--	--	1.7E-02	2.7E-02	1.9E-03
Muted Tidal	Terrestrial	Bird	Kestrel	Cadmium	0.00088	--	--	0.0088146	--	--	--	--	--	9.7E-03	1.1E-02	7.6E-04
Muted Tidal	Terrestrial	Bird	Sparrow	Chromium	0.11428	0.13367	1.002191	--	--	--	--	--	--	1.3E+00	2.9E+00	--
Muted Tidal	Terrestrial	Bird	Kestrel	Chromium	0.05138	--	0.2252987	0.1065383	--	--	--	--	--	3.8E-01	6.2E-01	--
Muted Tidal	Terrestrial	Bird	Sparrow	Cobalt	0.0361	0.01734	0.149712	--	--	--	--	--	--	2.0E-01	2.1E+00	2.2E-01
Muted Tidal	Terrestrial	Bird	Kestrel	Cobalt	0.01623	--	0.0336562	0.0105651	--	--	--	--	--	6.0E-02	4.4E-01	4.5E-02
Muted Tidal	Terrestrial	Bird	Sparrow	Copper	0.09045	0.29347	1.294419	--	--	--	--	--	--	1.7E+00	9.0E-02	6.8E-02
Muted Tidal	Terrestrial	Bird	Kestrel	Copper	0.04067	--	0.2909934	0.5311028	--	--	--	--	--	8.6E-01	3.2E-02	2.4E-02
Muted Tidal	Terrestrial	Bird	Sparrow	Lead	0.70552	0.10894	6.173286	--	--	--	--	--	--	7.0E+00	1.4E+01	1.4E+00
Muted Tidal	Terrestrial	Bird	Kestrel	Lead	0.31721	--	1.387793	0.2255522	--	--	--	--	--	1.9E+00	2.6E+00	2.6E-01
Muted Tidal	Terrestrial	Bird	Kestrel	Mercury	0.00027	--	--	0.0017464	--	--	--	--	--	2.0E-03	8.6E-04	--
Muted Tidal	Terrestrial	Bird	Sparrow	Mercury	0.0006	0.00114	--	--	--	--	--	--	--	1.7E-03	1.1E-03	--
Muted Tidal	Terrestrial	Bird	Sparrow	Molybdenum	0.0093	--	--	--	--	--	--	--	--	9.3E-03	--	6.6E-04
Muted Tidal	Terrestrial	Bird	Kestrel	Molybdenum	0.00418	--	--	--	--	--	--	--	--	4.2E-03	--	2.1E-04
Muted Tidal	Terrestrial	Bird	Sparrow	Nickel	0.08	0.15468	1.329208	--	--	--	--	--	--	1.6E+00	4.6E-02	--
Muted Tidal	Terrestrial	Bird	Kestrel	Nickel	0.03597	--	0.2988141	0.1404637	--	--	--	--	--	4.8E-01	9.7E-03	--
Muted Tidal	Terrestrial	Bird	Sparrow	Selenium	0.00726	0.02883	--	--	--	--	--	--	--	3.6E-02	2.1E-01	--
Muted Tidal	Terrestrial	Bird	Kestrel	Selenium	0.00326	--	--	0.0174072	--	--	--	--	--	2.1E-02	8.2E-02	--
Muted Tidal	Terrestrial	Bird	Sparrow	Silver	0.00151	0.0053	--	--	--	--	--	--	--	6.8E-03	--	4.0E-04
Muted Tidal	Terrestrial	Bird	Kestrel	Silver	0.00068	--	--	--	--	--	--	--	--	6.8E-04	--	2.8E-05
Muted Tidal	Terrestrial	Bird	Sparrow	Sulfate	29.1613	--	--	--	--	--	--	--	--	2.9E+01	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Sulfate	13.1113	--	--	--	--	--	--	--	--	1.3E+01	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Sulfide	0.07269	--	--	--	--	--	--	--	--	7.3E-02	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Sulfide	0.03268	--	--	--	--	--	--	--	--	3.3E-02	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Thallium	0.00309	--	--	--	--	--	--	--	--	3.1E-03	--	1.9E-04
Muted Tidal	Terrestrial	Bird	Kestrel	Thallium	0.00139	--	--	--	--	--	--	--	--	1.4E-03	--	6.0E-05
Muted Tidal	Terrestrial	Bird	Sparrow	Vanadium	0.23766	0.11997	1.200531	--	--	--	--	--	--	1.6E+00	3.1E-01	--
Muted Tidal	Terrestrial	Bird	Kestrel	Vanadium	0.10685	--	0.2698869	0.0209719	--	--	--	--	--	4.0E-01	5.5E-02	--
Muted Tidal	Terrestrial	Bird	Sparrow	Zinc	0.31119	2.63365	8.20418	--	--	--	--	--	--	1.1E+01	1.9E+00	2.1E-01
Muted Tidal	Terrestrial	Bird	Kestrel	Zinc	0.13992	--	1.84435	9.016829	--	--	--	--	--	1.1E+01	1.3E+00	1.5E-01
Muted Tidal	Terrestrial	Bird	Sparrow	Ammonia as Nitrogen	0.24939	--	--	--	--	--	--	--	--	2.5E-01	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Ammonia as Nitrogen	0.11213	--	--	--	--	--	--	--	--	1.1E-01	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Chloride	82.1951	--	--	--	--	--	--	--	--	8.2E+01	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Chloride	36.956	--	--	--	--	--	--	--	--	3.7E+01	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Phosphorus, Total as P	0.0252	--	--	--	--	--	--	--	--	2.5E-02	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Phosphorus, Total as P	0.01133	--	--	--	--	--	--	--	--	1.1E-02	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Phosphorus, Total as PO4	0.07796	--	--	--	--	--	--	--	--	7.8E-02	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Phosphorus, Total as PO4	0.03505	--	--	--	--	--	--	--	--	3.5E-02	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Muted Tidal	Terrestrial	Bird	Sparrow	1,2-Dichlorobenzene	8.7E-06	--	--	--	--	--	--	--	--	8.7E-06	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	1,2-Dichlorobenzene	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	1,2-Dichloroethane	8.9E-06	--	--	--	--	--	--	--	--	8.9E-06	1.3E-06	--	
Muted Tidal	Terrestrial	Bird	Kestrel	1,2-Dichloroethane	4E-06	--	--	--	--	--	--	--	--	4.0E-06	4.0E-07	--	
Muted Tidal	Terrestrial	Bird	Sparrow	1,3-Dichlorobenzene	8.8E-06	--	--	--	--	--	--	--	--	8.8E-06	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	1,3-Dichlorobenzene	4E-06	--	--	--	--	--	--	--	--	4.0E-06	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	1,4-Dichlorobenzene	8.8E-06	--	--	--	--	--	--	--	--	8.8E-06	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	1,4-Dichlorobenzene	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	2-Butanone	8.9E-05	--	--	--	--	--	--	--	--	8.9E-05	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	2-Butanone	4E-05	--	--	--	--	--	--	--	--	4.0E-05	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	4,4'-DDD	2.7E-05	--	0.0003937	0.0016709	--	--	--	--	--	2.1E-03	6.3E-03	--	
Muted Tidal	Terrestrial	Bird	Sparrow	4,4'-DDD	6E-05	--	0.0017514	--	--	--	--	--	--	1.8E-03	8.0E-03	--	
Muted Tidal	Terrestrial	Bird	Sparrow	4,4'-DDE	2.8E-05	--	0.0025173	--	--	--	--	--	--	2.5E-03	--	1.2E-02	
Muted Tidal	Terrestrial	Bird	Kestrel	4,4'-DDE	1.2E-05	--	0.0005659	0.0003064	--	--	--	--	--	8.8E-04	--	2.8E-03	
Muted Tidal	Terrestrial	Bird	Kestrel	4,4'-DDT	1.1E-05	--	--	0.000397	--	--	--	--	--	4.1E-04	6.4E-03	--	
Muted Tidal	Terrestrial	Bird	Sparrow	4,4'-DDT	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	5.6E-04	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Acenaphthene	--	--	--	0.000812	--	--	--	--	--	8.1E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Acenaphthylene	0.00077	--	--	--	--	--	--	--	--	7.7E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Acenaphthylene	0.00035	--	--	--	--	--	--	--	--	3.5E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Acetone	8E-05	--	--	0.0649295	--	--	--	--	--	6.5E-02	2.2E-05	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Acetone	0.00018	--	--	--	--	--	--	--	--	1.8E-04	1.0E-07	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Aldrin	--	--	--	0.0039098	--	--	--	--	--	3.9E-03	--	1.2E-03	
Muted Tidal	Terrestrial	Bird	Sparrow	Aldrin	--	4.9E-05	--	--	--	--	--	--	--	4.9E-05	--	2.2E-05	
Muted Tidal	Terrestrial	Bird	Kestrel	Anthracene	0.00017	--	--	0.000812	--	--	--	--	--	9.8E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Anthracene	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Benzene	8.7E-06	--	--	--	--	--	--	--	--	8.7E-06	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Benzene	3.9E-06	--	--	--	--	--	--	--	--	3.9E-06	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Benzo(a)anthracene	0.00017	--	--	0.000812	--	--	--	--	--	9.8E-04	9.1E-06	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Benzo(a)anthracene	0.00038	--	--	--	--	--	--	--	--	3.8E-04	5.1E-06	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Benzo(a)pyrene	0.00017	--	--	0.000812	--	--	--	--	--	9.8E-04	9.1E-05	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Benzo(a)pyrene	0.00038	--	--	--	--	--	--	--	--	3.8E-04	5.1E-05	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Benzo(b)fluoranthene	0.00021	--	--	0.000812	--	--	--	--	--	1.0E-03	9.4E-06	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Benzo(b)fluoranthene	0.00046	--	--	--	--	--	--	--	--	4.6E-04	6.1E-06	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Benzo(e)pyrene	0.00014	--	--	0.000812	--	--	--	--	--	9.5E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Benzo(e)pyrene	0.0003	--	--	--	--	--	--	--	--	3.0E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Benzo(g,h,i)perylene	0.00018	--	--	0.000812	--	--	--	--	--	1.0E-03	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Benzo(g,h,i)perylene	0.00041	--	--	--	--	--	--	--	--	4.1E-04	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Muted Tidal	Terrestrial	Bird	Kestrel	Benzo(k)fluoranthene	0.00017	--	--	0.000812	--	--	--	--	--	9.8E-04	9.1E-06	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Benzo(k)fluoranthene	0.00038	--	--	--	--	--	--	--	--	3.8E-04	5.1E-06	--	
Muted Tidal	Terrestrial	Bird	Kestrel	BHC-alpha	9E-07	--	0.000019	0.000256	--	--	--	--	--	2.8E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	BHC-alpha	2E-06	7.3E-05	0.0000845	--	--	--	--	--	--	1.6E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	BHC-beta	1.6E-06	--	0.0001466	0.0021212	--	--	--	--	--	2.3E-03	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	BHC-beta	3.5E-06	7.3E-05	0.0006522	--	--	--	--	--	--	7.3E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	BHC-delta	1E-06	--	--	0.0004722	--	--	--	--	--	4.7E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	BHC-delta	2.3E-06	9E-05	--	--	--	--	--	--	--	9.3E-05	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	BHC-gamma	9E-07	--	--	0.0000932	--	--	--	--	--	9.4E-05	--	7.4E-06	
Muted Tidal	Terrestrial	Bird	Sparrow	BHC-gamma	1.9E-06	7E-05	--	--	--	--	--	--	--	7.2E-05	--	8.2E-06	
Muted Tidal	Terrestrial	Bird	Kestrel	Biphenyl	--	--	--	0.0000893	--	--	--	--	--	8.9E-05	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Butylbenzylphthalate	0.00039	--	--	--	--	--	--	--	--	3.9E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Butylbenzylphthalate	0.00017	--	--	--	--	--	--	--	--	1.7E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Chlordane (technical)	3.7E-05	--	--	--	--	--	--	--	--	3.7E-05	2.9E-05	4.2E-06	
Muted Tidal	Terrestrial	Bird	Kestrel	Chlordane (technical)	1.6E-05	--	--	--	--	--	--	--	--	1.6E-05	8.9E-06	1.3E-06	
Muted Tidal	Terrestrial	Bird	Kestrel	Chlordane-alpha	9E-06	--	--	0.0008978	--	--	--	--	--	9.1E-04	4.9E-04	7.1E-05	
Muted Tidal	Terrestrial	Bird	Sparrow	Chlordane-alpha	2E-05	--	--	--	--	--	--	--	--	2.0E-05	1.6E-05	2.3E-06	
Muted Tidal	Terrestrial	Bird	Sparrow	Chlordane-gamma	1.9E-05	--	--	--	--	--	--	--	--	1.9E-05	1.5E-05	2.1E-06	
Muted Tidal	Terrestrial	Bird	Kestrel	Chlordane-gamma	8.4E-06	--	--	--	--	--	--	--	--	8.4E-06	4.6E-06	7.0E-07	
Muted Tidal	Terrestrial	Bird	Kestrel	Chrysene	0.0002	--	--	0.000812	--	--	--	--	--	1.0E-03	9.0E-07	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Chrysene	0.00044	--	--	--	--	--	--	--	--	4.4E-04	6.0E-07	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Dibenz(a,h)anthracene	--	--	--	0.000812	--	--	--	--	--	8.1E-04	7.5E-05	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Dibenzothiophene	--	--	--	0.0000211	--	--	--	--	--	2.1E-05	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Dieldrin	4.5E-06	--	--	0.0002545	--	--	--	--	--	2.6E-04	4.4E-03	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Dieldrin	9.9E-06	--	--	--	--	--	--	--	--	9.9E-06	2.5E-04	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Diethylphthalate	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Diethylphthalate	0.00017	--	--	--	--	--	--	--	--	1.7E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Dimethylphthalate	0.00033	--	--	--	--	--	--	--	--	3.3E-04	--	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Dimethylphthalate	0.00015	--	--	--	--	--	--	--	--	1.5E-04	--	--	
Muted Tidal	Terrestrial	Bird	Sparrow	Di-n-butylphthalate	0.00046	--	--	--	--	--	--	--	--	4.6E-04	--	6.2E-04	
Muted Tidal	Terrestrial	Bird	Kestrel	Di-n-butylphthalate	0.00021	--	--	--	--	--	--	--	--	2.1E-04	--	1.9E-04	
Muted Tidal	Terrestrial	Bird	Sparrow	Di-n-octylphthalate	0.00043	--	--	--	--	--	--	--	--	4.3E-04	--	3.8E-06	
Muted Tidal	Terrestrial	Bird	Kestrel	Di-n-octylphthalate	0.00019	--	--	--	--	--	--	--	--	1.9E-04	--	1.2E-06	
Muted Tidal	Terrestrial	Bird	Sparrow	Endosulfan I	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	4.8E-06	--	
Muted Tidal	Terrestrial	Bird	Kestrel	Endosulfan I	1.2E-05	--	--	--	--	--	--	--	--	1.2E-05	1.5E-06	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Muted Tidal	Terrestrial	Bird	Kestrel	Endosulfan II	3.5E-06	--	--	0.0004062	--	--	--	--	--	4.1E-04	5.3E-05	--
Muted Tidal	Terrestrial	Bird	Sparrow	Endosulfan II	7.7E-06	--	--	--	--	--	--	--	--	7.7E-06	1.4E-06	--
Muted Tidal	Terrestrial	Bird	Kestrel	Endrin	4.8E-06	--	--	0.0002299	--	--	--	--	--	2.3E-04	1.2E-03	--
Muted Tidal	Terrestrial	Bird	Sparrow	Endrin	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	8.1E-05	--
Muted Tidal	Terrestrial	Bird	Kestrel	Endrin aldehyde	1.2E-05	--	--	0.0000932	--	--	--	--	--	1.1E-04	5.5E-04	--
Muted Tidal	Terrestrial	Bird	Sparrow	Endrin aldehyde	2.7E-05	--	--	--	--	--	--	--	--	2.7E-05	2.0E-04	--
Muted Tidal	Terrestrial	Bird	Kestrel	Endrin ketone	1.3E-05	--	--	0.000236	--	--	--	--	--	2.5E-04	1.3E-03	--
Muted Tidal	Terrestrial	Bird	Sparrow	Endrin ketone	3E-05	--	--	--	--	--	--	--	--	3.0E-05	2.3E-04	--
Muted Tidal	Terrestrial	Bird	Kestrel	Fluoranthene	0.00017	--	--	0.000812	--	--	--	--	--	9.9E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Fluoranthene	0.00039	--	--	--	--	--	--	--	--	3.9E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Fluorene	0.00017	--	--	0.000812	--	--	--	--	--	9.8E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Fluorene	0.00038	--	--	--	--	--	--	--	--	3.8E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Indeno(1,2,3-c,d)pyrene	0.00018	--	--	0.000812	--	--	--	--	--	1.0E-03	9.2E-06	--
Muted Tidal	Terrestrial	Bird	Sparrow	Indeno(1,2,3-c,d)pyrene	0.00041	--	--	--	--	--	--	--	--	4.1E-04	5.5E-06	--
Muted Tidal	Terrestrial	Bird	Sparrow	CPP	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	CPP	0.00017	--	--	--	--	--	--	--	--	1.7E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Methylene chloride	8.9E-06	--	--	--	--	--	--	--	--	8.9E-06	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Methylene chloride	4E-06	--	--	--	--	--	--	--	--	4.0E-06	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Naphthalene	0.00017	--	--	0.0013377	--	--	--	--	--	1.5E-03	--	1.1E-05
Muted Tidal	Terrestrial	Bird	Sparrow	Naphthalene	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	4.1E-06
Muted Tidal	Terrestrial	Bird	Sparrow	Oil and Grease	27.4656	--	--	--	--	--	--	--	--	2.7E+01	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Oil and Grease	12.3489	--	--	--	--	--	--	--	--	1.2E+01	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB 1254	8.3E-05	--	0.0014719	--	--	--	--	--	--	1.6E-03	--	1.9E-03
Muted Tidal	Terrestrial	Bird	Kestrel	PCB 1254	3.7E-05	--	0.0003309	--	--	--	--	--	--	3.7E-04	--	3.1E-04
Muted Tidal	Terrestrial	Bird	Sparrow	PCB 1260	0.00051	--	--	--	--	--	--	--	--	5.1E-04	--	4.6E-06
Muted Tidal	Terrestrial	Bird	Kestrel	PCB 1260	0.00023	--	--	--	--	--	--	--	--	2.3E-04	--	1.4E-06
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-008	--	--	--	0.0017734	--	--	--	--	--	1.8E-03	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-101	5.5E-05	--	--	--	--	--	--	--	--	5.5E-05	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-101	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-105	--	--	--	0.0009099	--	--	--	--	--	9.1E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-118	--	--	--	0.0009081	--	--	--	--	--	9.1E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-138	7E-05	--	--	0.0009292	--	--	--	--	--	1.0E-03	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-138	0.00015	--	--	--	--	--	--	--	--	1.5E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-153	7.5E-05	--	--	0.0010913	--	--	--	--	--	1.2E-03	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-153	0.00017	--	--	--	--	--	--	--	--	1.7E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-170	5.2E-05	--	--	0.0004905	--	--	--	--	--	5.4E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-170	0.00012	--	--	--	--	--	--	--	--	1.2E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-180	0.00011	--	--	0.0006997	--	--	--	--	--	8.1E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-180	0.00024	--	--	--	--	--	--	--	--	2.4E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-187	3.1E-05	--	--	0.0009113	--	--	--	--	--	9.4E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-187	6.9E-05	--	--	--	--	--	--	--	--	6.9E-05	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-195	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	PCB-206	1.4E-05	--	--	--	--	--	--	--	--	1.4E-05	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	PCB-206	6.2E-06	--	--	--	--	--	--	--	--	6.2E-06	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Perylene	--	--	--	0.0000171	--	--	--	--	--	1.7E-05	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Perylene	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Phenanthrene	0.00018	--	--	0.000812	--	--	--	--	--	9.9E-04	--	7.5E-06
Muted Tidal	Terrestrial	Bird	Sparrow	Phenanthrene	0.0004	--	--	--	--	--	--	--	--	4.0E-04	--	4.4E-06
Muted Tidal	Terrestrial	Bird	Sparrow	Phenol	0.00124	--	--	--	--	--	--	--	--	1.2E-03	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Phenol	0.00056	--	--	--	--	--	--	--	--	5.6E-04	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Pyrene	0.00018	--	--	0.0016864	--	--	--	--	--	1.9E-03	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Pyrene	0.00039	--	--	--	--	--	--	--	--	3.9E-04	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Tetrachloroethene	1E-05	--	--	--	--	--	--	--	--	1.0E-05	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Tetrachloroethene	4.5E-06	--	--	--	--	--	--	--	--	4.5E-06	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Toluene	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Toluene	4.8E-06	--	--	--	--	--	--	--	--	4.8E-06	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	TPH-Diesel	1.24245	--	--	--	--	--	--	--	--	1.2E+00	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	TPH-Diesel	0.55862	--	--	--	--	--	--	--	--	5.6E-01	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Waste oil	7.89873	--	--	--	--	--	--	--	--	7.9E+00	--	--
Muted Tidal	Terrestrial	Bird	Kestrel	Waste oil	3.55137	--	--	--	--	--	--	--	--	3.6E+00	--	--
Muted Tidal	Terrestrial	Bird	Sparrow	Xylene (total)	9.3E-06	--	--	--	--	--	--	--	--	9.3E-06	0.0E+00	--
Muted Tidal	Terrestrial	Bird	Kestrel	Xylene (total)	4.2E-06	--	--	--	--	--	--	--	--	4.2E-06	0.0E+00	--
Muted Tidal	Terrestrial	Mammal	Mouse	Antimony	0.00056	--	--	--	--	--	--	--	--	5.6E-04	--	1.1E-03
Muted Tidal	Terrestrial	Mammal	Coyote	Antimony	4.8E-05	--	--	--	--	--	--	--	--	4.8E-05	--	1.5E-04
Muted Tidal	Terrestrial	Mammal	Mouse	Arsenic	0.04118	0.05575	0.224282	--	--	--	--	--	--	3.2E-01	--	2.4E-01
Muted Tidal	Terrestrial	Mammal	Coyote	Arsenic	0.00354	0.00024	--	--	--	--	--	--	--	3.8E-03	--	4.5E-03

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Muted Tidal	Terrestrial	Mammal	Mouse	Barium	0.90952	1.20732	7.623908	--	--	--	--	--	--	9.7E+00	2.0E+01	2.6E-02
Muted Tidal	Terrestrial	Mammal	Coyote	Barium	0.07813	0.00512	--	0.1598381	--	--	--	--	--	2.4E-01	7.8E-01	1.0E-03
Muted Tidal	Terrestrial	Mammal	Mouse	Beryllium	0.00307	0.01387	0.0411273	--	--	--	--	--	--	5.8E-02	8.7E-02	--
Muted Tidal	Terrestrial	Mammal	Coyote	Beryllium	0.00026	5.9E-05	--	--	--	--	--	--	--	3.2E-04	7.7E-04	--
Muted Tidal	Terrestrial	Mammal	Mouse	Cadmium	0.00172	0.02677	--	--	--	--	--	--	--	2.8E-02	2.3E-02	2.3E-03
Muted Tidal	Terrestrial	Mammal	Coyote	Cadmium	0.00015	0.00011	--	0.0041913	--	--	--	--	--	4.5E-03	5.7E-03	5.7E-04
Muted Tidal	Terrestrial	Mammal	Mouse	Chromium	0.10055	0.23816	0.279228	--	--	--	--	--	--	6.2E-01	1.8E-04	--
Muted Tidal	Terrestrial	Mammal	Coyote	Chromium	0.00864	0.00101	--	0.0506582	--	--	--	--	--	6.0E-02	2.8E-05	--
Muted Tidal	Terrestrial	Mammal	Mouse	Cobalt	0.03176	0.0309	0.0417124	--	--	--	--	--	--	1.0E-01	1.7E+00	--
Muted Tidal	Terrestrial	Mammal	Coyote	Cobalt	0.00273	0.00013	--	0.0050236	--	--	--	--	--	7.9E-03	2.0E-01	--
Muted Tidal	Terrestrial	Mammal	Mouse	Copper	0.07959	0.52287	0.3606479	--	--	--	--	--	--	9.6E-01	6.2E-02	4.8E-02
Muted Tidal	Terrestrial	Mammal	Coyote	Copper	0.00684	0.00222	--	0.2525354	--	--	--	--	--	2.6E-01	2.7E-02	2.1E-02
Muted Tidal	Terrestrial	Mammal	Mouse	Lead	0.62075	0.19409	1.719986	--	--	--	--	--	--	2.5E+00	5.1E+00	2.6E-02
Muted Tidal	Terrestrial	Mammal	Coyote	Lead	0.05332	0.00082	--	0.1072484	--	--	--	--	--	1.6E-01	5.2E-01	2.6E-03
Muted Tidal	Terrestrial	Mammal	Mouse	Mercury	0.00053	0.00203	--	--	--	--	--	--	--	2.6E-03	6.4E-02	1.3E-02
Muted Tidal	Terrestrial	Mammal	Coyote	Mercury	4.5E-05	8.6E-06	--	0.0008304	--	--	--	--	--	8.8E-04	3.6E-02	7.1E-03
Muted Tidal	Terrestrial	Mammal	Mouse	Molybdenum	0.00818	--	--	--	--	--	--	--	--	8.2E-03	3.4E-04	--
Muted Tidal	Terrestrial	Mammal	Coyote	Molybdenum	0.0007	--	--	--	--	--	--	--	--	7.0E-04	4.6E-05	--
Muted Tidal	Terrestrial	Mammal	Mouse	Nickel	0.07039	0.2756	0.3703406	--	--	--	--	--	--	7.2E-01	7.2E-02	7.2E-03
Muted Tidal	Terrestrial	Mammal	Coyote	Nickel	0.00605	0.00117	--	0.0667895	--	--	--	--	--	7.4E-02	1.2E-02	1.2E-03
Muted Tidal	Terrestrial	Mammal	Mouse	Selenium	0.00639	0.05136	--	--	--	--	--	--	--	5.8E-02	1.4E-01	--
Muted Tidal	Terrestrial	Mammal	Coyote	Selenium	0.00055	0.00022	--	0.008277	--	--	--	--	--	9.0E-03	3.4E-02	--
Muted Tidal	Terrestrial	Mammal	Mouse	Silver	0.00133	0.00945	--	--	--	--	--	--	--	1.1E-02	--	3.7E-04
Muted Tidal	Terrestrial	Mammal	Coyote	Silver	0.00011	4E-05	--	--	--	--	--	--	--	1.5E-04	--	8.5E-06
Muted Tidal	Terrestrial	Mammal	Mouse	Sulfate	25.6574	--	--	--	--	--	--	--	--	2.6E+01	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Sulfate	2.20405	--	--	--	--	--	--	--	--	2.2E+00	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	Sulfide	0.06396	--	--	--	--	--	--	--	--	6.4E-02	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Sulfide	0.00549	--	--	--	--	--	--	--	--	5.5E-03	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	Thallium	0.00272	--	--	--	--	--	--	--	--	2.7E-03	9.6E-03	--
Muted Tidal	Terrestrial	Mammal	Coyote	Thallium	0.00023	--	--	--	--	--	--	--	--	2.3E-04	1.3E-03	--
Muted Tidal	Terrestrial	Mammal	Mouse	Vanadium	0.2091	0.21374	0.3344891	--	--	--	--	--	--	7.6E-01	1.5E+00	--
Muted Tidal	Terrestrial	Mammal	Coyote	Vanadium	0.01796	0.00091	--	0.009972	--	--	--	--	--	2.9E-02	9.3E-02	--
Muted Tidal	Terrestrial	Mammal	Mouse	Zinc	0.2738	4.69233	2.285829	--	--	--	--	--	--	7.3E+00	2.4E-01	1.8E-02
Muted Tidal	Terrestrial	Mammal	Coyote	Zinc	0.02352	0.01991	--	4.287436	--	--	--	--	--	4.3E+00	2.3E-01	1.7E-02
Muted Tidal	Terrestrial	Mammal	Mouse	Ammonia as Nitrogen	0.21943	--	--	--	--	--	--	--	--	2.2E-01	9.2E-02	--
Muted Tidal	Terrestrial	Mammal	Coyote	Ammonia as Nitrogen	0.01885	--	--	--	--	--	--	--	--	1.9E-02	1.3E-02	--
Muted Tidal	Terrestrial	Mammal	Mouse	Chloride	72.319	--	--	--	--	--	--	--	--	7.2E+01	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Chloride	6.21242	--	--	--	--	--	--	--	--	6.2E+00	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Muted Tidal	Terrestrial	Mammal	Mouse	Phosphorus, Total as P	0.02217	--	--	--	--	--	--	--	--	2.2E-02	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Phosphorus, Total as P	0.0019	--	--	--	--	--	--	--	--	1.9E-03	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Phosphorus, Total as PO4	0.06859	--	--	--	--	--	--	--	--	6.9E-02	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Phosphorus, Total as PO4	0.00589	--	--	--	--	--	--	--	--	5.9E-03	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	1,2-Dichlorobenzene	7.7E-06	--	--	--	--	--	--	--	--	7.7E-06	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	1,2-Dichlorobenzene	7E-07	--	--	--	--	--	--	--	--	7.0E-07	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	1,2-Dichloroethane	7.8E-06	--	--	--	--	--	--	--	--	7.8E-06	1.0E-07	--	
Muted Tidal	Terrestrial	Mammal	Coyote	1,2-Dichloroethane	7E-07	--	--	--	--	--	--	--	--	7.0E-07	0.0E+00	--	
Muted Tidal	Terrestrial	Mammal	Mouse	1,3-Dichlorobenzene	7.7E-06	--	--	--	--	--	--	--	--	7.7E-06	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	1,3-Dichlorobenzene	7E-07	--	--	--	--	--	--	--	--	7.0E-07	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	1,4-Dichlorobenzene	7.7E-06	--	--	--	--	--	--	--	--	7.7E-06	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	1,4-Dichlorobenzene	7E-07	--	--	--	--	--	--	--	--	7.0E-07	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	2-Butanone	7.8E-05	--	--	--	--	--	--	--	--	7.8E-05	4.0E-07	--	
Muted Tidal	Terrestrial	Mammal	Coyote	2-Butanone	6.7E-06	--	--	--	--	--	--	--	--	6.7E-06	0.0E+00	--	
Muted Tidal	Terrestrial	Mammal	Coyote	4,4'-DDD	4.5E-06	--	--	0.0007945	--	--	--	--	--	8.0E-04	--	8.5E-06	
Muted Tidal	Terrestrial	Mammal	Mouse	4,4'-DDD	5.3E-05	--	0.000488	--	--	--	--	--	--	5.4E-04	--	3.6E-06	
Muted Tidal	Terrestrial	Mammal	Mouse	4,4'-DDE	2.4E-05	--	0.0007014	--	--	--	--	--	--	7.3E-04	--	2.7E-05	
Muted Tidal	Terrestrial	Mammal	Coyote	4,4'-DDE	2.1E-06	--	--	0.0001457	--	--	--	--	--	1.5E-04	--	8.7E-06	
Muted Tidal	Terrestrial	Mammal	Coyote	4,4'-DDT	1.9E-06	--	--	0.0001888	--	--	--	--	--	1.9E-04	3.1E-04	--	
Muted Tidal	Terrestrial	Mammal	Mouse	4,4'-DDT	2.2E-05	--	--	--	--	--	--	--	--	2.2E-05	2.2E-05	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Acenaphthene	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	3.3E-06	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Acenaphthene	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	Acenaphthylene	0.00068	--	--	--	--	--	--	--	--	6.8E-04	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Acenaphthylene	5.8E-05	--	--	--	--	--	--	--	--	5.8E-05	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Acetone	1.3E-05	--	--	0.0308735	--	--	--	--	--	3.1E-02	4.0E-04	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Acetone	0.00016	--	--	--	--	--	--	--	--	1.6E-04	1.3E-06	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Aldrin	--	4E-07	--	0.0018591	--	--	--	--	--	1.9E-03	1.2E-02	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Aldrin	--	8.7E-05	--	--	--	--	--	--	--	8.7E-05	3.5E-04	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Anthracene	2.8E-05	--	--	0.0003861	--	--	--	--	--	4.1E-04	--	2.0E-07	
Muted Tidal	Terrestrial	Mammal	Mouse	Anthracene	0.00033	--	--	--	--	--	--	--	--	3.3E-04	--	1.0E-07	
Muted Tidal	Terrestrial	Mammal	Mouse	Benzene	7.7E-06	--	--	--	--	--	--	--	--	7.7E-06	2.6E-06	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Benzene	7E-07	--	--	--	--	--	--	--	--	7.0E-07	4.0E-07	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Benzo(a)anthracene	2.9E-05	--	--	0.0003861	--	--	--	--	--	4.1E-04	--	2.7E-04	
Muted Tidal	Terrestrial	Mammal	Mouse	Benzo(a)anthracene	0.00033	--	--	--	--	--	--	--	--	3.3E-04	--	1.4E-04	
Muted Tidal	Terrestrial	Mammal	Coyote	Benzo(a)pyrene	2.9E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	6.2E-04	
Muted Tidal	Terrestrial	Mammal	Mouse	Benzo(a)pyrene	0.00034	--	--	--	--	--	--	--	--	3.4E-04	--	3.2E-04	
Muted Tidal	Terrestrial	Mammal	Coyote	Benzo(b)fluoranthene	3.5E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	1.4E-05	
Muted Tidal	Terrestrial	Mammal	Mouse	Benzo(b)fluoranthene	0.0004	--	--	--	--	--	--	--	--	4.0E-04	--	8.1E-06	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Muted Tidal	Terrestrial	Mammal	Coyote	Benzo(e)pyrene	2.3E-05	--	--	0.0003861	--	--	--	--	--	4.1E-04	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Benzo(e)pyrene	0.00027	--	--	--	--	--	--	--	--	2.7E-04	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Benzo(g,h,i)perylene	3.1E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Benzo(g,h,i)perylene	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Benzo(k)fluoranthene	2.9E-05	--	--	0.0003861	--	--	--	--	--	4.1E-04	--	7.4E-06	
Muted Tidal	Terrestrial	Mammal	Mouse	Benzo(k)fluoranthene	0.00033	--	--	--	--	--	--	--	--	3.3E-04	--	3.7E-06	
Muted Tidal	Terrestrial	Mammal	Mouse	BHC-alpha	1.8E-06	0.00013	0.0000235	--	--	--	--	--	--	1.6E-04	1.1E-05	--	
Muted Tidal	Terrestrial	Mammal	Coyote	BHC-alpha	2E-07	6E-07	--	0.0001217	--	--	--	--	--	1.2E-04	1.4E-05	--	
Muted Tidal	Terrestrial	Mammal	Coyote	BHC-beta	3E-07	6E-07	--	0.0010086	--	--	--	--	--	1.0E-03	3.2E-04	--	
Muted Tidal	Terrestrial	Mammal	Mouse	BHC-beta	3.1E-06	0.00013	0.0001817	--	--	--	--	--	--	3.2E-04	6.4E-05	--	
Muted Tidal	Terrestrial	Mammal	Coyote	BHC-delta	2E-07	7E-07	--	0.0002245	--	--	--	--	--	2.3E-04	1.0E-05	--	
Muted Tidal	Terrestrial	Mammal	Mouse	BHC-delta	2E-06	0.00016	--	--	--	--	--	--	--	1.6E-04	4.7E-06	--	
Muted Tidal	Terrestrial	Mammal	Mouse	BHC-gamma	1.7E-06	0.00012	--	--	--	--	--	--	--	1.3E-04	1.3E-05	--	
Muted Tidal	Terrestrial	Mammal	Coyote	BHC-gamma	1E-07	5E-07	--	0.0000443	--	--	--	--	--	4.5E-05	7.2E-06	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Biphenyl	--	--	--	0.0000425	--	--	--	--	--	4.3E-05	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	Butylbenzylphthalate	0.00034	--	--	--	--	--	--	--	--	3.4E-04	1.7E-06	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Butylbenzylphthalate	2.9E-05	--	--	--	--	--	--	--	--	2.9E-05	2.0E-07	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Chlordane (technical)	3.2E-05	--	--	--	--	--	--	--	--	3.2E-05	1.1E-04	2.2E-05	
Muted Tidal	Terrestrial	Mammal	Coyote	Chlordane (technical)	2.8E-06	--	--	--	--	--	--	--	--	2.8E-06	1.6E-05	3.0E-06	
Muted Tidal	Terrestrial	Mammal	Coyote	Chlordane-alpha	1.5E-06	--	--	0.0004269	--	--	--	--	--	4.3E-04	2.4E-03	4.7E-04	
Muted Tidal	Terrestrial	Mammal	Mouse	Chlordane-alpha	1.8E-05	--	--	--	--	--	--	--	--	1.8E-05	6.2E-05	1.2E-05	
Muted Tidal	Terrestrial	Mammal	Mouse	Chlordane-gamma	1.6E-05	--	--	--	--	--	--	--	--	1.6E-05	5.8E-05	1.1E-05	
Muted Tidal	Terrestrial	Mammal	Coyote	Chlordane-gamma	1.4E-06	--	--	--	--	--	--	--	--	1.4E-06	7.9E-06	1.5E-06	
Muted Tidal	Terrestrial	Mammal	Coyote	Chrysene	3.3E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	5.4E-06	
Muted Tidal	Terrestrial	Mammal	Mouse	Chrysene	0.00039	--	--	--	--	--	--	--	--	3.9E-04	--	3.2E-06	
Muted Tidal	Terrestrial	Mammal	Coyote	Dibenz(a,h)anthracene	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	--	8.3E-02	
Muted Tidal	Terrestrial	Mammal	Mouse	Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Muted Tidal	Terrestrial	Mammal	Coyote	Dibenzothiophene	--	--	--	0.00001	--	--	--	--	--	1.0E-05	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Dieldrin	7E-07	--	--	0.000121	--	--	--	--	--	1.2E-04	3.1E-02	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Dieldrin	8.7E-06	--	--	--	--	--	--	--	--	8.7E-06	1.4E-03	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Diethylphthalate	0.00033	--	--	--	--	--	--	--	--	3.3E-04	1.0E-07	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Diethylphthalate	2.8E-05	--	--	--	--	--	--	--	--	2.8E-05	0.0E+00	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Dimethylphthalate	0.00029	--	--	--	--	--	--	--	--	2.9E-04	--	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Dimethylphthalate	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	--	--	
Muted Tidal	Terrestrial	Mammal	Mouse	Di-n-butylphthalate	0.00041	--	--	--	--	--	--	--	--	4.1E-04	7.0E-07	--	
Muted Tidal	Terrestrial	Mammal	Coyote	Di-n-butylphthalate	3.5E-05	--	--	--	--	--	--	--	--	3.5E-05	1.0E-07	--	

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Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Muted Tidal	Terrestrial	Mammal	Mouse	Di-n-octylphthalate	0.00038	--	--	--	--	--	--	--	--	3.8E-04	--	1.7E-06
Muted Tidal	Terrestrial	Mammal	Coyote	Di-n-octylphthalate	3.2E-05	--	--	--	--	--	--	--	--	3.2E-05	--	2.0E-07
Muted Tidal	Terrestrial	Mammal	Mouse	Endosulfan I	2.3E-05	--	--	--	--	--	--	--	--	2.3E-05	1.8E-05	--
Muted Tidal	Terrestrial	Mammal	Coyote	Endosulfan I	2E-06	--	--	--	--	--	--	--	--	2.0E-06	2.5E-06	--
Muted Tidal	Terrestrial	Mammal	Coyote	Endosulfan II	6E-07	--	--	0.0001931	--	--	--	--	--	1.9E-04	2.5E-04	--
Muted Tidal	Terrestrial	Mammal	Mouse	Endosulfan II	6.8E-06	--	--	--	--	--	--	--	--	6.8E-06	5.5E-06	--
Muted Tidal	Terrestrial	Mammal	Coyote	Endrin	8E-07	--	--	0.0001093	--	--	--	--	--	1.1E-04	--	1.8E-04
Muted Tidal	Terrestrial	Mammal	Mouse	Endrin	9.3E-06	--	--	--	--	--	--	--	--	9.3E-06	--	9.5E-06
Muted Tidal	Terrestrial	Mammal	Coyote	Endrin aldehyde	2E-06	--	--	0.0000443	--	--	--	--	--	4.6E-05	--	7.5E-05
Muted Tidal	Terrestrial	Mammal	Mouse	Endrin aldehyde	2.4E-05	--	--	--	--	--	--	--	--	2.4E-05	--	2.4E-05
Muted Tidal	Terrestrial	Mammal	Coyote	Endrin ketone	2.2E-06	--	--	0.0001122	--	--	--	--	--	1.1E-04	--	1.9E-04
Muted Tidal	Terrestrial	Mammal	Mouse	Endrin ketone	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	--	2.6E-05
Muted Tidal	Terrestrial	Mammal	Coyote	Fluoranthene	2.9E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	5.0E-06	2.5E-06
Muted Tidal	Terrestrial	Mammal	Mouse	Fluoranthene	0.00034	--	--	--	--	--	--	--	--	3.4E-04	2.6E-06	1.3E-06
Muted Tidal	Terrestrial	Mammal	Coyote	Fluorene	2.8E-05	--	--	0.0003861	--	--	--	--	--	4.1E-04	4.9E-06	--
Muted Tidal	Terrestrial	Mammal	Mouse	Fluorene	0.00033	--	--	--	--	--	--	--	--	3.3E-04	2.5E-06	--
Muted Tidal	Terrestrial	Mammal	Coyote	Indeno(1,2,3-c,d)pyrene	3.1E-05	--	--	0.0003861	--	--	--	--	--	4.2E-04	--	7.4E-06
Muted Tidal	Terrestrial	Mammal	Mouse	Indeno(1,2,3-c,d)pyrene	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	4.0E-06
Muted Tidal	Terrestrial	Mammal	Mouse	CPP	0.00033	--	--	--	--	--	--	--	--	3.3E-04	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	CPP	2.8E-05	--	--	--	--	--	--	--	--	2.8E-05	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	Methylene chloride	7.8E-06	--	--	--	--	--	--	--	--	7.8E-06	1.1E-06	--
Muted Tidal	Terrestrial	Mammal	Coyote	Methylene chloride	7E-07	--	--	--	--	--	--	--	--	7.0E-07	1.0E-07	--
Muted Tidal	Terrestrial	Mammal	Coyote	Naphthalene	2.8E-05	--	--	0.0006361	--	--	--	--	--	6.6E-04	2.1E-05	--
Muted Tidal	Terrestrial	Mammal	Mouse	Naphthalene	0.00033	--	--	--	--	--	--	--	--	3.3E-04	6.5E-06	--
Muted Tidal	Terrestrial	Mammal	Mouse	Oil and Grease	24.1655	--	--	--	--	--	--	--	--	2.4E+01	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Oil and Grease	2.07589	--	--	--	--	--	--	--	--	2.1E+00	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB 1254	7.3E-05	--	0.0004101	--	--	--	--	--	--	4.8E-04	1.2E-03	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB 1254	6.3E-06	--	--	--	--	--	--	--	--	6.3E-06	2.5E-05	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB 1260	0.00045	--	--	--	--	--	--	--	--	4.5E-04	5.3E-05	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB 1260	3.9E-05	--	--	--	--	--	--	--	--	3.9E-05	7.2E-06	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-008	--	--	--	0.0008432	--	--	--	--	--	8.4E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-052	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-066	--	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-101	4.8E-05	--	--	--	--	--	--	--	--	4.8E-05	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-101	4.1E-06	--	--	--	--	--	--	--	--	4.1E-06	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)															
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-105	--	--	--	0.0004326	--	--	--	--	4.3E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-105	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-118	--	--	--	0.0004318	--	--	--	--	4.3E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-118	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-126	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-126	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-138	1.2E-05	--	--	0.0004418	--	--	--	--	4.5E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-138	0.00014	--	--	--	--	--	--	--	1.4E-04	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-153	1.3E-05	--	--	0.0005189	--	--	--	--	5.3E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-153	0.00015	--	--	--	--	--	--	--	1.5E-04	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-170	8.7E-06	--	--	0.0002332	--	--	--	--	2.4E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-170	0.0001	--	--	--	--	--	--	--	1.0E-04	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-180	1.8E-05	--	--	0.0003327	--	--	--	--	3.5E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-180	0.00021	--	--	--	--	--	--	--	2.1E-04	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-187	5.2E-06	--	--	0.0004333	--	--	--	--	4.4E-04	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-187	6.1E-05	--	--	--	--	--	--	--	6.1E-05	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-195	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-195	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	PCB-206	1.2E-05	--	--	--	--	--	--	--	1.2E-05	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	PCB-206	1E-06	--	--	--	--	--	--	--	1.0E-06	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Perylene	--	--	--	0.0000081	--	--	--	--	8.1E-06	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	Perylene	--	--	--	--	--	--	--	--	--	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Phenanthrene	3.1E-05	--	--	0.0003861	--	--	--	--	4.2E-04	--	8.0E-07
Muted Tidal	Terrestrial	Mammal	Mouse	Phenanthrene	0.00036	--	--	--	--	--	--	--	3.6E-04	--	4.0E-07
Muted Tidal	Terrestrial	Mammal	Mouse	Phenol	0.00109	--	--	--	--	--	--	--	1.1E-03	1.1E-06	--
Muted Tidal	Terrestrial	Mammal	Coyote	Phenol	9.4E-05	--	--	--	--	--	--	--	9.4E-05	1.0E-07	--
Muted Tidal	Terrestrial	Mammal	Coyote	Pyrene	3E-05	--	--	0.0008019	--	--	--	--	8.3E-04	9.9E-06	--
Muted Tidal	Terrestrial	Mammal	Mouse	Pyrene	0.00035	--	--	--	--	--	--	--	3.5E-04	2.6E-06	--
Muted Tidal	Terrestrial	Mammal	Mouse	Tetrachloroethene	8.9E-06	--	--	--	--	--	--	--	8.9E-06	6.0E-07	--
Muted Tidal	Terrestrial	Mammal	Coyote	Tetrachloroethene	8E-07	--	--	--	--	--	--	--	8.0E-07	1.0E-07	--
Muted Tidal	Terrestrial	Mammal	Mouse	Toluene	9.4E-06	--	--	--	--	--	--	--	9.4E-06	--	0.0E+00
Muted Tidal	Terrestrial	Mammal	Coyote	Toluene	8E-07	--	--	--	--	--	--	--	8.0E-07	--	0.0E+00
Muted Tidal	Terrestrial	Mammal	Mouse	TPH-Diesel	1.09317	--	--	--	--	--	--	--	1.1E+00	--	1.7E-04
Muted Tidal	Terrestrial	Mammal	Coyote	TPH-Diesel	0.09391	--	--	--	--	--	--	--	9.4E-02	--	2.4E-05
Muted Tidal	Terrestrial	Mammal	Mouse	Waste oil	6.94965	--	--	--	--	--	--	--	6.9E+00	--	--
Muted Tidal	Terrestrial	Mammal	Coyote	Waste oil	0.597	--	--	--	--	--	--	--	6.0E-01	--	--
Muted Tidal	Terrestrial	Mammal	Mouse	Xylene (total)	8.2E-06	--	--	--	--	--	--	--	8.2E-06	0.0E+00	--
Muted Tidal	Terrestrial	Mammal	Coyote	Xylene (total)	7E-07	--	--	--	--	--	--	--	7.0E-07	0.0E+00	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Seasonal Ponds	Aquatic	Bird	Stilt	Arsenic	0.42336	--	--	--	--	1.142081	--	--	--	1.6E+00	4.3E-01	1.7E-01
Seasonal Ponds	Aquatic	Bird	Heron	Arsenic	0.08561	--	0.0098148	--	--	0.1275919	--	--	--	2.2E-01	4.6E-02	1.8E-02
Seasonal Ponds	Aquatic	Bird	Tern	Arsenic	0.07347	--	--	--	--	--	--	--	--	7.3E-02	2.7E-02	1.1E-02
Seasonal Ponds	Aquatic	Bird	Stilt	Barium	7.01401	--	--	--	0.00774	29.12393	--	1.004565	--	3.7E+01	2.8E-01	--
Seasonal Ponds	Aquatic	Bird	Tern	Barium	1.21714	--	--	--	0.01306	--	--	--	10.3192	1.2E+01	1.2E-01	--
Seasonal Ponds	Aquatic	Bird	Heron	Barium	1.41828	--	0.2502838	0.01287	0.00477	3.253689	0.513046	0.448915	2.5011	8.4E+00	4.7E-02	--
Seasonal Ponds	Aquatic	Bird	Stilt	Beryllium	0.0114	--	--	--	--	0.075665	--	--	--	8.7E-02	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Beryllium	0.00198	--	--	--	--	--	--	--	0.02686	2.9E-02	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Beryllium	0.00231	--	0.0006502	--	--	0.0084532	0.001509	--	0.00651	1.9E-02	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Cadmium	0.00107	--	--	0.0094665	--	--	0.000477	--	0.00145	1.2E-02	9.0E-03	6.6E-04
Seasonal Ponds	Aquatic	Bird	Tern	Cadmium	0.00092	--	--	--	--	--	--	--	0.00598	6.9E-03	9.2E-03	6.6E-04
Seasonal Ponds	Aquatic	Bird	Stilt	Cadmium	0.00531	--	--	--	--	--	--	--	--	5.3E-03	5.2E-03	3.7E-04
Seasonal Ponds	Aquatic	Bird	Stilt	Chromium	0.52017	--	--	--	--	0.7155231	--	0.026147	--	1.3E+00	1.8E+00	--
Seasonal Ponds	Aquatic	Bird	Tern	Chromium	0.09026	--	--	--	--	--	--	--	0.32626	4.2E-01	8.2E-01	--
Seasonal Ponds	Aquatic	Bird	Heron	Chromium	0.10518	--	0.006149	0.005445	--	0.0799373	0.038017	0.011685	0.07908	3.3E-01	3.5E-01	--
Seasonal Ponds	Aquatic	Bird	Stilt	Cobalt	0.1021	--	--	--	--	0.0664172	--	0.002597	--	1.7E-01	1.1E+00	1.1E-01
Seasonal Ponds	Aquatic	Bird	Tern	Cobalt	0.01772	--	--	--	--	--	--	--	0.0423	6.0E-02	5.3E-01	5.4E-02
Seasonal Ponds	Aquatic	Bird	Heron	Cobalt	0.02065	--	0.0005708	0.000693	--	0.0074201	0.007137	0.001161	0.01025	4.8E-02	2.3E-01	2.3E-02
Seasonal Ponds	Aquatic	Bird	Stilt	Copper	0.2604	--	--	--	0.00015	0.5845313	--	0.31967	--	1.2E+00	3.8E-02	2.9E-02
Seasonal Ponds	Aquatic	Bird	Tern	Copper	0.04519	--	--	--	0.00025	--	--	--	0.84415	8.9E-01	4.0E-02	3.0E-02
Seasonal Ponds	Aquatic	Bird	Heron	Copper	0.05265	--	0.0050233	0.033165	9.2E-05	0.0653031	0.088181	0.142853	0.2046	5.9E-01	1.5E-02	1.1E-02
Seasonal Ponds	Aquatic	Bird	Stilt	Lead	0.3562	--	--	--	--	0.4888998	--	0.003868	--	8.5E-01	1.0E+00	1.0E-01
Seasonal Ponds	Aquatic	Bird	Tern	Lead	0.06181	--	--	--	--	--	--	--	0.31374	3.8E-01	6.2E-01	6.2E-02
Seasonal Ponds	Aquatic	Bird	Heron	Lead	0.07203	--	0.0042015	0.002772	--	0.0546193	0.007092	0.001729	0.07604	2.2E-01	2.0E-01	2.0E-02
Seasonal Ponds	Aquatic	Bird	Tern	Mercury	0.00061	--	--	--	--	--	--	--	0.00678	7.4E-03	3.8E-03	--
Seasonal Ponds	Aquatic	Bird	Stilt	Mercury	0.00349	--	--	--	--	--	--	--	--	3.5E-03	1.3E-03	--
Seasonal Ponds	Aquatic	Bird	Heron	Mercury	0.00071	--	--	0.0004802	--	--	--	--	0.00164	2.8E-03	8.0E-04	--
Seasonal Ponds	Aquatic	Bird	Stilt	Molybdenum	0.03873	--	--	--	--	--	--	--	--	3.9E-02	--	1.7E-03
Seasonal Ponds	Aquatic	Bird	Heron	Molybdenum	0.00783	--	--	--	--	--	--	--	--	7.8E-03	--	2.6E-04
Seasonal Ponds	Aquatic	Bird	Tern	Molybdenum	0.00672	--	--	--	--	--	--	--	--	6.7E-03	--	4.0E-04
Seasonal Ponds	Aquatic	Bird	Stilt	Nickel	0.33721	--	--	--	--	0.8788921	--	0.030955	--	1.2E+00	2.3E-02	--
Seasonal Ponds	Aquatic	Bird	Heron	Nickel	0.06819	--	0.007553	0.008415	--	0.0981887	0.197506	0.013833	0.10596	5.0E-01	6.8E-03	--
Seasonal Ponds	Aquatic	Bird	Tern	Nickel	0.05852	--	--	--	--	--	--	--	0.43719	5.0E-01	1.2E-02	--
Seasonal Ponds	Aquatic	Bird	Tern	Selenium	0.0045	--	--	--	--	--	--	--	0.6853	6.9E-01	3.3E+00	--
Seasonal Ponds	Aquatic	Bird	Heron	Selenium	0.00524	--	--	0.0010395	--	--	0.001905	0.041857	0.1661	2.2E-01	5.7E-01	--
Seasonal Ponds	Aquatic	Bird	Stilt	Selenium	0.02591	--	--	--	--	--	--	0.093666	--	1.2E-01	4.2E-01	--
Seasonal Ponds	Aquatic	Bird	Stilt	Silver	0.00434	--	--	--	--	--	--	0.011236	--	1.6E-02	--	5.7E-04
Seasonal Ponds	Aquatic	Bird	Heron	Silver	0.00088	--	--	--	--	--	--	0.005021	--	5.9E-03	--	1.6E-04

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure		Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish			NOAEL	LOAEL
Seasonal Ponds	Aquatic	Bird	Tern	Silver	0.00075	--	--	--	--	--	--	--	--	7.5E-04	--	3.8E-05	
Seasonal Ponds	Aquatic	Bird	Stilt	Sulfate	131.816	--	--	--	146.589	--	--	--	--	2.8E+02	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	Sulfate	22.8739	--	--	--	247.276	--	--	--	--	2.7E+02	--	--	
Seasonal Ponds	Aquatic	Bird	Heron	Sulfate	26.6539	--	--	--	90.3223	--	--	--	--	1.2E+02	--	--	
Seasonal Ponds	Aquatic	Bird	Stilt	Sulfide	42.1072	--	--	--	--	--	--	--	--	4.2E+01	--	--	
Seasonal Ponds	Aquatic	Bird	Heron	Sulfide	8.51432	--	--	--	--	--	--	--	--	8.5E+00	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	Sulfide	7.30683	--	--	--	--	--	--	--	--	7.3E+00	--	--	
Seasonal Ponds	Aquatic	Bird	Stilt	Thallium	0.00923	--	--	--	--	--	--	--	--	9.2E-03	--	3.5E-04	
Seasonal Ponds	Aquatic	Bird	Heron	Thallium	0.00187	--	--	--	--	--	--	--	--	1.9E-03	--	5.3E-05	
Seasonal Ponds	Aquatic	Bird	Tern	Thallium	0.0016	--	--	--	--	--	--	--	--	1.6E-03	--	8.4E-05	
Seasonal Ponds	Aquatic	Bird	Stilt	Vanadium	0.78396	--	--	--	--	0.6212087	--	0.005389	--	1.4E+00	1.7E-01	--	
Seasonal Ponds	Aquatic	Bird	Tern	Vanadium	0.13604	--	--	--	--	--	--	--	0.19107	3.3E-01	5.5E-02	--	
Seasonal Ponds	Aquatic	Bird	Heron	Vanadium	0.15852	--	0.0053385	0.000594	--	0.0694007	0.007096	0.002408	0.04631	2.9E-01	2.7E-02	--	
Seasonal Ponds	Aquatic	Bird	Tern	Zinc	0.19223	--	--	--	0.02271	--	--	--	15.104	1.5E+01	2.2E+00	2.5E-01	
Seasonal Ponds	Aquatic	Bird	Stilt	Zinc	1.10778	--	--	--	0.01346	4.581199	--	0.322157	--	6.0E+00	6.4E-01	7.1E-02	
Seasonal Ponds	Aquatic	Bird	Heron	Zinc	0.224	--	0.0393697	0.6435	0.0083	0.5118059	0.50688	0.143964	3.6608	5.7E+00	4.6E-01	5.1E-02	
Seasonal Ponds	Aquatic	Bird	Stilt	Ammonia as Nitrogen	1.78795	--	--	--	--	--	--	--	--	1.8E+00	--	--	
Seasonal Ponds	Aquatic	Bird	Heron	Ammonia as Nitrogen	0.36153	--	--	--	--	--	--	--	--	3.6E-01	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	Ammonia as Nitrogen	0.31026	--	--	--	--	--	--	--	--	3.1E-01	--	--	
Seasonal Ponds	Aquatic	Bird	Stilt	2,4,5-TP (Silvex)	0.00258	--	--	--	--	--	--	--	--	2.6E-03	--	1.4E-05	
Seasonal Ponds	Aquatic	Bird	Heron	2,4,5-TP (Silvex)	0.00052	--	--	--	--	--	--	--	--	5.2E-04	--	2.1E-06	
Seasonal Ponds	Aquatic	Bird	Tern	2,4,5-TP (Silvex)	0.00045	--	--	--	--	--	--	--	--	4.5E-04	--	3.3E-06	
Seasonal Ponds	Aquatic	Bird	Stilt	2-Butanone	0.00046	--	--	--	--	--	--	--	--	4.6E-04	--	--	
Seasonal Ponds	Aquatic	Bird	Heron	2-Butanone	9.2E-05	--	--	--	--	--	--	--	--	9.2E-05	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	2-Butanone	7.9E-05	--	--	--	--	--	--	--	--	7.9E-05	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	4,4'-DDD	1.2E-05	--	--	--	--	--	--	--	0.02668	2.7E-02	9.9E-02	--	
Seasonal Ponds	Aquatic	Bird	Heron	4,4'-DDD	1.4E-05	--	0.0000028	0.0000453	--	0.000036	0.000216	--	0.00647	6.8E-03	1.4E-02	--	
Seasonal Ponds	Aquatic	Bird	Stilt	4,4'-DDD	0.00007	--	--	--	--	0.0003219	--	--	--	3.9E-04	1.1E-03	--	
Seasonal Ponds	Aquatic	Bird	Tern	4,4'-DDE	1.4E-05	--	--	--	--	--	--	--	0.23699	2.4E-01	--	9.1E-01	
Seasonal Ponds	Aquatic	Bird	Heron	4,4'-DDE	1.7E-05	--	0.0000102	0.0000495	--	0.0001326	0.000222	4.34E-05	0.05744	5.8E-02	--	1.2E-01	
Seasonal Ponds	Aquatic	Bird	Stilt	4,4'-DDE	8.3E-05	--	--	--	--	0.0011867	--	9.71E-05	--	1.4E-03	--	3.9E-03	
Seasonal Ponds	Aquatic	Bird	Tern	4,4'-DDT	3E-06	--	--	--	--	--	--	--	0.00034	3.4E-04	6.6E-03	--	
Seasonal Ponds	Aquatic	Bird	Heron	4,4'-DDT	3.5E-06	--	--	0.0000397	--	--	--	--	8.2E-05	1.3E-04	1.3E-03	--	
Seasonal Ponds	Aquatic	Bird	Stilt	4,4'-DDT	1.7E-05	--	--	--	--	--	--	--	--	1.7E-05	2.4E-04	--	
Seasonal Ponds	Aquatic	Bird	Stilt	4-Nitrophenol	0.02282	--	--	--	--	--	--	--	--	2.3E-02	--	--	
Seasonal Ponds	Aquatic	Bird	Heron	4-Nitrophenol	0.00461	--	--	--	--	--	--	--	--	4.6E-03	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	4-Nitrophenol	0.00396	--	--	--	--	--	--	--	--	4.0E-03	--	--	
Seasonal Ponds	Aquatic	Bird	Heron	Acenaphthene	--	--	--	0.0000495	--	--	--	--	--	5.0E-05	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Seasonal Ponds	Aquatic	Bird	Stilt	Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Acetone	0.00011	--	--	--	--	--	--	--	0.5859	5.9E-01	2.4E-04	--
Seasonal Ponds	Aquatic	Bird	Heron	Acetone	0.00013	--	--	0.0052937	--	--	--	--	0.14201	1.5E-01	3.4E-05	--
Seasonal Ponds	Aquatic	Bird	Stilt	Acetone	0.00062	--	--	--	--	--	--	--	--	6.2E-04	2.0E-07	--
Seasonal Ponds	Aquatic	Bird	Heron	Aldrin	--	--	--	0.0000257	--	--	--	--	--	2.6E-05	--	5.4E-06
Seasonal Ponds	Aquatic	Bird	Stilt	Aldrin	--	--	--	--	--	--	--	--	--	--	--	0.0E+00
Seasonal Ponds	Aquatic	Bird	Tern	Aldrin	--	--	--	--	--	--	--	--	--	--	--	0.0E+00
Seasonal Ponds	Aquatic	Bird	Tern	Anthracene	0.00036	--	--	--	--	--	--	--	0.01146	1.2E-02	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Anthracene	0.00042	--	--	0.0000495	--	--	--	--	0.00278	3.2E-03	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Anthracene	0.00207	--	--	--	--	--	--	--	--	2.1E-03	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Benzo(a)anthracene	0.00036	--	--	--	--	--	--	--	0.03414	3.4E-02	3.9E-04	--
Seasonal Ponds	Aquatic	Bird	Heron	Benzo(a)anthracene	0.00042	--	--	0.0000495	--	--	--	--	0.00827	8.7E-03	5.4E-05	--
Seasonal Ponds	Aquatic	Bird	Stilt	Benzo(a)anthracene	0.00207	--	--	--	--	--	--	--	--	2.1E-03	1.7E-05	--
Seasonal Ponds	Aquatic	Bird	Tern	Benzo(a)pyrene	0.00036	--	--	--	--	--	--	--	0.03431	3.5E-02	3.9E-03	--
Seasonal Ponds	Aquatic	Bird	Heron	Benzo(a)pyrene	0.00042	--	--	0.0000495	--	--	--	--	0.00832	8.8E-03	5.4E-04	--
Seasonal Ponds	Aquatic	Bird	Stilt	Benzo(a)pyrene	0.00208	--	--	--	--	--	--	--	--	2.1E-03	1.7E-04	--
Seasonal Ponds	Aquatic	Bird	Tern	Benzo(b)fluoranthene	0.00036	--	--	--	--	--	--	--	0.03448	3.5E-02	3.9E-04	--
Seasonal Ponds	Aquatic	Bird	Heron	Benzo(b)fluoranthene	0.00042	--	--	0.0000495	--	--	--	--	0.00836	8.8E-03	5.4E-05	--
Seasonal Ponds	Aquatic	Bird	Stilt	Benzo(b)fluoranthene	0.00209	--	--	--	--	--	--	--	--	2.1E-03	1.7E-05	--
Seasonal Ponds	Aquatic	Bird	Tern	Benzo(e)pyrene	0.00047	--	--	--	--	--	--	--	0.04472	4.5E-02	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Benzo(e)pyrene	0.00055	--	--	0.0000495	--	--	--	--	0.01084	1.1E-02	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Benzo(e)pyrene	0.00271	--	--	--	--	--	--	--	--	2.7E-03	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Benzo(g,h,i)perylene	--	--	--	0.0000495	--	--	--	--	--	5.0E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Benzo(k)fluoranthene	0.00036	--	--	--	--	--	--	--	0.03422	3.5E-02	3.9E-04	--
Seasonal Ponds	Aquatic	Bird	Heron	Benzo(k)fluoranthene	0.00042	--	--	0.0000495	--	--	--	--	0.00829	8.8E-03	5.4E-05	--
Seasonal Ponds	Aquatic	Bird	Stilt	Benzo(k)fluoranthene	0.00207	--	--	--	--	--	--	--	--	2.1E-03	1.7E-05	--
Seasonal Ponds	Aquatic	Bird	Tern	BHC-alpha	1.2E-06	--	--	--	--	--	--	--	0.00198	2.0E-03	--	--
Seasonal Ponds	Aquatic	Bird	Heron	BHC-alpha	1.4E-06	--	0.0000004	0.0000014	--	0.0000049	2.5E-06	5E-07	0.00048	4.9E-04	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	BHC-alpha	6.7E-06	--	--	--	--	0.0000438	--	1.1E-06	--	5.2E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	BHC-beta	1.9E-05	--	--	--	--	8.6E-06	0.0005517	--	4.28E-05	--	6.2E-04	--
Seasonal Ponds	Aquatic	Bird	Tern	BHC-beta	3.3E-06	--	--	--	--	1.5E-05	--	--	0.00039	4.1E-04	--	--
Seasonal Ponds	Aquatic	Bird	Heron	BHC-beta	3.8E-06	--	0.0000047	0.0000012	5.3E-06	0.0000616	7.94E-05	1.91E-05	9.4E-05	2.7E-04	--	--
Seasonal Ponds	Aquatic	Bird	Heron	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Seasonal Ponds	Aquatic	Bird	Heron	BHC-gamma	9E-07	--	--	0.0000046	--	--	--	--	--	5.5E-06	--	3.0E-07
Seasonal Ponds	Aquatic	Bird	Stilt	BHC-gamma	4.4E-06	--	--	--	--	--	--	--	--	4.4E-06	--	3.0E-07
Seasonal Ponds	Aquatic	Bird	Tern	BHC-gamma	8E-07	--	--	--	--	--	--	--	--	8.0E-07	--	1.0E-07
Seasonal Ponds	Aquatic	Bird	Heron	Biphenyl	--	--	--	0.0000003	--	--	--	--	--	3.0E-06	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Butylbenzylphthalate	0.00208	--	--	--	--	--	--	--	--	2.1E-03	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Butylbenzylphthalate	0.00042	--	--	--	--	--	--	--	--	4.2E-04	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Butylbenzylphthalate	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Carbon disulfide	0.00012	--	--	--	--	--	--	--	--	1.2E-04	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Carbon disulfide	2.5E-05	--	--	--	--	--	--	--	--	2.5E-05	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Carbon disulfide	2.1E-05	--	--	--	--	--	--	--	--	2.1E-05	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Chrysene	0.00037	--	--	--	--	--	--	--	0.03053	3.1E-02	3.5E-05	--
Seasonal Ponds	Aquatic	Bird	Heron	Chrysene	0.00043	--	--	0.0000495	--	--	--	--	0.0074	7.9E-03	4.8E-06	--
Seasonal Ponds	Aquatic	Bird	Stilt	Chrysene	0.00211	--	--	--	--	--	--	--	--	2.1E-03	1.7E-06	--
Seasonal Ponds	Aquatic	Bird	Stilt	Dalapon	0.00337	--	--	--	--	--	--	--	--	3.4E-03	--	1.2E-05
Seasonal Ponds	Aquatic	Bird	Heron	Dalapon	0.00068	--	--	--	--	--	--	--	--	6.8E-04	--	1.8E-06
Seasonal Ponds	Aquatic	Bird	Tern	Dalapon	0.00058	--	--	--	--	--	--	--	--	5.8E-04	--	2.8E-06
Seasonal Ponds	Aquatic	Bird	Tern	Diazinon	--	--	--	--	0.00024	--	--	--	--	2.4E-04	--	2.4E-05
Seasonal Ponds	Aquatic	Bird	Stilt	Diazinon	--	--	--	--	0.00014	--	--	--	--	1.4E-04	--	1.0E-05
Seasonal Ponds	Aquatic	Bird	Heron	Diazinon	--	--	--	--	8.9E-05	--	--	--	--	8.9E-05	--	4.7E-06
Seasonal Ponds	Aquatic	Bird	Tern	Dibenz(a,h)anthracene	0.00042	--	--	--	--	--	--	--	0.0404	4.1E-02	4.6E-03	--
Seasonal Ponds	Aquatic	Bird	Heron	Dibenz(a,h)anthracene	0.00049	--	--	0.0000083	--	--	--	--	0.00979	1.0E-02	6.3E-04	--
Seasonal Ponds	Aquatic	Bird	Stilt	Dibenz(a,h)anthracene	0.00244	--	--	--	--	--	--	--	--	2.4E-03	2.0E-04	--
Seasonal Ponds	Aquatic	Bird	Heron	Dibenzothiophene	--	--	--	0.000001	--	--	--	--	--	1.0E-06	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Dieldrin	1.3E-06	--	--	--	--	--	--	--	0.002	2.0E-03	4.2E-02	--
Seasonal Ponds	Aquatic	Bird	Heron	Dieldrin	1.6E-06	--	--	0.0002327	--	--	--	--	0.00049	7.2E-04	8.2E-03	--
Seasonal Ponds	Aquatic	Bird	Stilt	Dieldrin	7.8E-06	--	--	--	--	--	--	--	--	7.8E-06	1.2E-04	--
Seasonal Ponds	Aquatic	Bird	Stilt	Diethylphthalate	0.002	--	--	--	--	--	--	--	--	2.0E-03	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Diethylphthalate	0.00041	--	--	--	--	--	--	--	--	4.1E-04	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Diethylphthalate	0.00035	--	--	--	--	--	--	--	--	3.5E-04	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Di-n-butylphthalate	0.00219	--	--	--	--	--	--	--	--	2.2E-03	--	1.8E-03
Seasonal Ponds	Aquatic	Bird	Heron	Di-n-butylphthalate	0.00044	--	--	--	--	--	--	--	--	4.4E-04	--	2.7E-04
Seasonal Ponds	Aquatic	Bird	Tern	Di-n-butylphthalate	0.00038	--	--	--	--	--	--	--	--	3.8E-04	--	4.2E-04
Seasonal Ponds	Aquatic	Bird	Stilt	Di-n-octylphthalate	0.0022	--	--	--	--	--	--	--	--	2.2E-03	--	1.2E-05
Seasonal Ponds	Aquatic	Bird	Heron	Di-n-octylphthalate	0.00044	--	--	--	--	--	--	--	--	4.4E-04	--	1.8E-06

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																			
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients				
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL			
Seasonal Ponds	Aquatic	Bird	Tern	Di-n-octylphthalate	0.00038	--	--	--	--	--	--	--	--	3.8E-04	--	2.8E-06			
Seasonal Ponds	Aquatic	Bird	Stilt	Endosulfan I	3.3E-05	--	--	--	--	--	--	--	--	3.3E-05	3.8E-06	--			
Seasonal Ponds	Aquatic	Bird	Heron	Endosulfan I	6.6E-06	--	--	--	--	--	--	--	--	6.6E-06	6.0E-07	--			
Seasonal Ponds	Aquatic	Bird	Tern	Endosulfan I	5.7E-06	--	--	--	--	--	--	--	--	5.7E-06	9.0E-07	--			
Seasonal Ponds	Aquatic	Bird	Heron	Endosulfan II	--	--	--	0.0000079	--	--	--	--	--	7.9E-06	7.0E-07	--			
Seasonal Ponds	Aquatic	Bird	Stilt	Endosulfan II	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--		
Seasonal Ponds	Aquatic	Bird	Tern	Endosulfan II	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--		
Seasonal Ponds	Aquatic	Bird	Stilt	Endosulfan Sulfate	0.00015	--	--	--	--	--	--	--	--	1.5E-04	1.7E-05	--	--		
Seasonal Ponds	Aquatic	Bird	Heron	Endosulfan Sulfate	3E-05	--	--	--	--	--	--	--	--	3.0E-05	2.6E-06	--	--		
Seasonal Ponds	Aquatic	Bird	Tern	Endosulfan Sulfate	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	4.1E-06	--	--		
Seasonal Ponds	Aquatic	Bird	Heron	Endrin	6E-06	--	--	0.0000441	--	--	--	--	--	5.0E-05	1.8E-04	--	--		
Seasonal Ponds	Aquatic	Bird	Stilt	Endrin	3E-05	--	--	--	--	--	--	--	--	3.0E-05	1.4E-04	--	--		
Seasonal Ponds	Aquatic	Bird	Tern	Endrin	5.2E-06	--	--	--	--	--	--	--	--	5.2E-06	3.3E-05	--	--		
Seasonal Ponds	Aquatic	Bird	Tern	Endrin aldehyde	4.7E-06	--	--	--	--	--	--	--	0.00038	3.8E-04	2.5E-03	--	--		
Seasonal Ponds	Aquatic	Bird	Heron	Endrin aldehyde	5.5E-06	--	--	--	--	--	--	--	9.2E-05	9.7E-05	3.4E-04	--	--		
Seasonal Ponds	Aquatic	Bird	Stilt	Endrin aldehyde	2.7E-05	--	--	--	--	--	--	--	--	2.7E-05	1.3E-04	--	--		
Seasonal Ponds	Aquatic	Bird	Tern	Fluoranthene	0.00036	--	--	--	--	--	--	--	0.02995	3.0E-02	--	--	--		
Seasonal Ponds	Aquatic	Bird	Heron	Fluoranthene	0.00042	--	--	0.0000495	--	--	--	--	0.00726	7.7E-03	--	--	--		
Seasonal Ponds	Aquatic	Bird	Stilt	Fluoranthene	0.00207	--	--	--	--	--	--	--	--	2.1E-03	--	--	--		
Seasonal Ponds	Aquatic	Bird	Heron	Fluorene	--	--	--	0.0000495	--	--	--	--	--	5.0E-05	--	--	--		
Seasonal Ponds	Aquatic	Bird	Stilt	Fluorene	--	--	--	--	--	--	--	--	--	--	--	--	--		
Seasonal Ponds	Aquatic	Bird	Tern	Fluorene	--	--	--	--	--	--	--	--	--	--	--	--	--		
Seasonal Ponds	Aquatic	Bird	Tern	Methylene chloride	9.3E-06	--	--	--	--	--	--	--	0.33398	3.3E-01	--	--	--		
Seasonal Ponds	Aquatic	Bird	Heron	Methylene chloride	1.1E-05	--	--	--	--	--	--	--	0.08095	8.1E-02	--	--	--		
Seasonal Ponds	Aquatic	Bird	Stilt	Methylene chloride	5.4E-05	--	--	--	--	--	--	--	--	5.4E-05	--	--	--		
Seasonal Ponds	Aquatic	Bird	Heron	Naphthalene	--	--	--	0.0000495	--	--	--	--	--	5.0E-05	--	3.0E-07	--		
Seasonal Ponds	Aquatic	Bird	Stilt	Naphthalene	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	0.0E+00	--	
Seasonal Ponds	Aquatic	Bird	Tern	Naphthalene	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	0.0E+00	--
Seasonal Ponds	Aquatic	Bird	Stilt	Oil and Grease	31.757	--	--	--	--	--	--	--	--	3.2E+01	--	--	--	--	
Seasonal Ponds	Aquatic	Bird	Heron	Oil and Grease	6.42145	--	--	--	--	--	--	--	--	6.4E+00	--	--	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	Oil and Grease	5.51077	--	--	--	--	--	--	--	--	5.5E+00	--	--	--	--	
Seasonal Ponds	Aquatic	Bird	Tern	PCB 1254	3.9E-05	--	--	--	--	--	--	--	0.02242	2.2E-02	--	2.3E-02	--		
Seasonal Ponds	Aquatic	Bird	Heron	PCB 1254	4.5E-05	--	0.0000054	--	--	0.0000698	--	--	0.00543	5.6E-03	--	3.2E-03	--		
Seasonal Ponds	Aquatic	Bird	Stilt	PCB 1254	0.00022	--	--	--	--	0.0006245	--	--	--	8.5E-04	--	6.5E-04	--		
Seasonal Ponds	Aquatic	Bird	Heron	PCB 1260	--	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Seasonal Ponds	Aquatic	Bird	Stilt	PCB 1260	--	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Seasonal Ponds	Aquatic	Bird	Tern	PCB 1260	--	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Seasonal Ponds	Aquatic	Bird	Heron	PCB-008	--	--	--	--	0.0000495	--	--	--	--	5.0E-05	--	--	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-101	--	--	--	0.0000495	--	--	--	--	--	5.0E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-101	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-101	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-105	--	--	--	0.0000248	--	--	--	--	--	2.5E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-118	--	--	--	0.0000248	--	--	--	--	--	2.5E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-128	--	--	--	0.0000248	--	--	--	--	--	2.5E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-138	--	--	--	0.0000297	--	--	--	--	--	3.0E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-138	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-138	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-153	--	--	--	0.0000426	--	--	--	--	--	4.3E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-153	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-153	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-170	--	--	--	0.0000124	--	--	--	--	--	1.2E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-180	--	--	--	0.0000213	--	--	--	--	--	2.1E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-180	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-180	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-187	--	--	--	0.0000248	--	--	--	--	--	2.5E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-206	--	--	--	0.0000124	--	--	--	--	--	1.2E-05	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Heron	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)															
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp		NOAEL	LOAEL
Seasonal Ponds	Aquatic	Bird	Heron	Perylene	--	--	--	0.0000003	--	--	--	--	3.0E-07	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Perylene	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Perylene	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Phenanthrene	0.00112	--	--	--	--	--	--	0.10626	1.1E-01	--	9.9E-04
Seasonal Ponds	Aquatic	Bird	Heron	Phenanthrene	0.0013	--	--	0.0000495	--	--	--	0.02576	2.7E-02	--	1.4E-04
Seasonal Ponds	Aquatic	Bird	Stilt	Phenanthrene	0.00643	--	--	--	--	--	--	--	6.4E-03	--	4.4E-05
Seasonal Ponds	Aquatic	Bird	Tern	Pyrene	0.00037	--	--	--	--	--	--	0.03099	3.1E-02	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Pyrene	0.00043	--	--	0.0000495	--	--	--	0.00751	8.0E-03	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Pyrene	0.00214	--	--	--	--	--	--	--	2.1E-03	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	TPH-Diesel	2.2321	--	--	--	0.0594	--	--	--	2.3E+00	--	--
Seasonal Ponds	Aquatic	Bird	Heron	TPH-Diesel	0.45134	--	--	--	0.0366	--	--	--	4.9E-01	--	--
Seasonal Ponds	Aquatic	Bird	Tern	TPH-Diesel	0.38734	--	--	--	0.1002	--	--	--	4.9E-01	--	--
Seasonal Ponds	Aquatic	Bird	Stilt	Waste oil	13.5714	--	--	--	0.1683	--	--	--	1.4E+01	--	--
Seasonal Ponds	Aquatic	Bird	Heron	Waste oil	2.74422	--	--	--	0.1037	--	--	--	2.8E+00	--	--
Seasonal Ponds	Aquatic	Bird	Tern	Waste oil	2.35504	--	--	--	0.2839	--	--	--	2.6E+00	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Arsenic	0.16063	0.0129	2.762408	--	--	--	--	--	2.9E+00	1.3E+00	5.3E-01
Seasonal Ponds	Terrestrial	Bird	Kestrel	Arsenic	0.07222	--	0.6210066	--	--	--	--	--	6.9E-01	2.1E-01	8.5E-02
Seasonal Ponds	Terrestrial	Bird	Sparrow	Barium	2.6612	1.6512	70.4435	--	0.01736	--	--	--	7.5E+01	9.0E-01	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Barium	1.19651	--	15.83614	0.21112	0.00938	--	--	--	1.7E+01	1.4E-01	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Beryllium	0.00433	0.02786	0.1830146	--	--	--	--	--	2.2E-01	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Beryllium	0.00195	--	0.0411428	--	--	--	--	--	4.3E-02	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Cadmium	0.00091	--	--	0.155288	--	--	--	--	1.6E-01	1.7E-01	1.2E-02
Seasonal Ponds	Terrestrial	Bird	Sparrow	Cadmium	0.00201	0.00863	--	--	--	--	--	--	1.1E-02	1.7E-02	1.2E-03
Seasonal Ponds	Terrestrial	Bird	Sparrow	Chromium	0.19736	0.11468	1.730671	--	--	--	--	--	2.0E+00	4.8E+00	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Chromium	0.08873	--	0.3890657	0.08932	--	--	--	--	5.7E-01	9.1E-01	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Cobalt	0.03874	0.01342	0.1606467	--	--	--	--	--	2.1E-01	2.2E+00	2.3E-01
Seasonal Ponds	Terrestrial	Bird	Kestrel	Cobalt	0.01742	--	0.0361144	0.011368	--	--	--	--	6.5E-02	4.7E-01	4.8E-02
Seasonal Ponds	Terrestrial	Bird	Sparrow	Copper	0.0988	0.37396	1.413835	--	0.00033	--	--	--	1.9E+00	1.0E-01	7.7E-02
Seasonal Ponds	Terrestrial	Bird	Kestrel	Copper	0.04442	--	0.3178389	0.54404	0.00018	--	--	--	9.1E-01	3.3E-02	2.5E-02
Seasonal Ponds	Terrestrial	Bird	Sparrow	Lead	0.13515	0.07973	1.182526	--	--	--	--	--	1.4E+00	2.8E+00	2.8E-01
Seasonal Ponds	Terrestrial	Bird	Kestrel	Lead	0.06076	--	0.2658392	0.045472	--	--	--	--	3.7E-01	5.1E-01	5.1E-02
Seasonal Ponds	Terrestrial	Bird	Kestrel	Mercury	0.0006	--	--	0.0078764	--	--	--	--	8.5E-03	3.6E-03	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Mercury	0.00132	0.00099	--	--	--	--	--	--	2.3E-03	1.4E-03	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Molybdenum	0.0147	--	--	--	--	--	--	--	1.5E-02	--	1.0E-03
Seasonal Ponds	Terrestrial	Bird	Kestrel	Molybdenum	0.00661	--	--	--	--	--	--	--	6.6E-03	--	3.2E-04
Seasonal Ponds	Terrestrial	Bird	Sparrow	Nickel	0.12794	0.12466	2.12582	--	--	--	--	--	2.4E+00	7.0E-02	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Nickel	0.05752	--	0.4778976	0.13804	--	--	--	--	6.7E-01	1.4E-02	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Selenium	0.00983	0.02064	--	--	--	--	--	--	3.0E-02	1.7E-01	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Selenium	0.00442	--	--	0.017052	--	--	--	--	--	2.1E-02	8.5E-02	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Silver	0.00165	0.03953	--	--	--	--	--	--	--	4.1E-02	--	2.4E-03
Seasonal Ponds	Terrestrial	Bird	Kestrel	Silver	0.00074	--	--	--	--	--	--	--	--	7.4E-04	--	3.0E-05
Seasonal Ponds	Terrestrial	Bird	Sparrow	Sulfate	50.0125	--	--	--	328.714	--	--	--	--	3.8E+02	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Sulfate	22.4862	--	--	--	177.683	--	--	--	--	2.0E+02	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Sulfide	15.976	--	--	--	--	--	--	--	--	1.6E+01	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Sulfide	7.18299	--	--	--	--	--	--	--	--	7.2E+00	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Thallium	0.0035	--	--	--	--	--	--	--	--	3.5E-03	--	2.2E-04
Seasonal Ponds	Terrestrial	Bird	Kestrel	Thallium	0.00157	--	--	--	--	--	--	--	--	1.6E-03	--	6.8E-05
Seasonal Ponds	Terrestrial	Bird	Sparrow	Vanadium	0.29744	0.12384	1.502549	--	--	--	--	--	--	1.9E+00	3.9E-01	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Vanadium	0.13373	--	0.3377822	0.009744	--	--	--	--	--	4.8E-01	6.7E-02	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Zinc	0.42031	2.47968	11.08078	--	0.03019	--	--	--	--	1.4E+01	2.4E+00	2.7E-01
Seasonal Ponds	Terrestrial	Bird	Kestrel	Zinc	0.18897	--	2.491027	10.556	0.01632	--	--	--	--	1.3E+01	1.6E+00	1.8E-01
Seasonal Ponds	Terrestrial	Bird	Sparrow	Ammonia as Nitrogen	0.67837	--	--	--	--	--	--	--	--	6.8E-01	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Ammonia as Nitrogen	0.305	--	--	--	--	--	--	--	--	3.1E-01	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	2,4,5-TP (Silvex)	0.00098	--	--	--	--	--	--	--	--	9.8E-04	--	8.6E-06
Seasonal Ponds	Terrestrial	Bird	Kestrel	2,4,5-TP (Silvex)	0.00044	--	--	--	--	--	--	--	--	4.4E-04	--	2.7E-06
Seasonal Ponds	Terrestrial	Bird	Sparrow	2-Butanone	0.00017	--	--	--	--	--	--	--	--	1.7E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	2-Butanone	7.8E-05	--	--	--	--	--	--	--	--	7.8E-05	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	4,4'-DDD	1.2E-05	--	0.000175	0.0007428	--	--	--	--	--	9.3E-04	2.8E-03	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	4,4'-DDD	2.7E-05	--	0.0007786	--	--	--	--	--	--	8.1E-04	3.5E-03	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	4,4'-DDE	3.1E-05	--	0.0028703	--	--	--	--	--	--	2.9E-03	--	1.3E-02
Seasonal Ponds	Terrestrial	Bird	Kestrel	4,4'-DDE	1.4E-05	--	0.0006453	0.000812	--	--	--	--	--	1.5E-03	--	4.6E-03
Seasonal Ponds	Terrestrial	Bird	Kestrel	4,4'-DDT	3E-06	--	--	0.0006513	--	--	--	--	--	6.5E-04	1.0E-02	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	4,4'-DDT	6.6E-06	--	--	--	--	--	--	--	--	6.6E-06	1.5E-04	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	4-Nitrophenol	0.00866	--	--	--	--	--	--	--	--	8.7E-03	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	4-Nitrophenol	0.00389	--	--	--	--	--	--	--	--	3.9E-03	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Acenaphthene	--	--	--	0.000812	--	--	--	--	--	8.1E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Acetone	0.00011	--	--	0.0868383	--	--	--	--	--	8.7E-02	3.0E-05	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Acetone	0.00024	--	--	--	--	--	--	--	--	2.4E-04	1.0E-07	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Aldrin	--	--	--	0.0004222	--	--	--	--	--	4.2E-04	--	1.3E-04
Seasonal Ponds	Terrestrial	Bird	Sparrow	Aldrin	--	--	--	--	--	--	--	--	--	--	--	0.0E+00
Seasonal Ponds	Terrestrial	Bird	Kestrel	Anthracene	0.00035	--	--	0.000812	--	--	--	--	--	1.2E-03	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Anthracene	0.00078	--	--	--	--	--	--	--	--	7.8E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Benzo(a)anthracene	0.00035	--	--	0.000812	--	--	--	--	--	1.2E-03	1.1E-05	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Benzo(a)anthracene	0.00078	--	--	--	--	--	--	--	--	7.8E-04	1.1E-05	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Benzo(a)pyrene	0.00035	--	--	0.000812	--	--	--	--	--	1.2E-03	1.1E-04	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Seasonal Ponds	Terrestrial	Bird	Sparrow	Benzo(a)pyrene	0.00079	--	--	--	--	--	--	--	--	7.9E-04	1.1E-04	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Benzo(b)fluoranthene	0.00036	--	--	0.000812	--	--	--	--	--	1.2E-03	1.1E-05	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Benzo(b)fluoranthene	0.00079	--	--	--	--	--	--	--	--	7.9E-04	1.1E-05	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Benzo(e)pyrene	0.00046	--	--	0.000812	--	--	--	--	--	1.3E-03	1.1E-05	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Benzo(e)pyrene	0.00103	--	--	--	--	--	--	--	--	1.0E-03	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Benzo(g,h,i)perylene	--	--	--	0.000812	--	--	--	--	--	8.1E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Benzo(k)fluoranthene	0.00035	--	--	0.000812	--	--	--	--	--	1.2E-03	1.1E-05	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Benzo(k)fluoranthene	0.00079	--	--	--	--	--	--	--	--	7.9E-04	1.1E-05	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	BHC-alpha	2.6E-06	--	0.000106	--	--	--	--	--	--	1.1E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	BHC-alpha	1.2E-06	--	0.0000238	0.0000227	--	--	--	--	--	4.8E-05	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	BHC-beta	7.2E-06	0.00014	0.0013343	--	1.9E-05	--	--	--	--	1.5E-03	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	BHC-beta	3.2E-06	--	0.0003	0.0000203	1E-05	--	--	--	--	3.3E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	BHC-delta	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	BHC-gamma	8E-07	--	--	0.0000755	--	--	--	--	--	7.6E-05	--	6.0E-06	
Seasonal Ponds	Terrestrial	Bird	Sparrow	BHC-gamma	1.7E-06	--	--	--	--	--	--	--	--	1.7E-06	--	2.0E-07	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Biphenyl	--	--	--	0.000495	--	--	--	--	--	5.0E-05	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Butylbenzylphthalate	0.00079	--	--	--	--	--	--	--	--	7.9E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Butylbenzylphthalate	0.00036	--	--	--	--	--	--	--	--	3.6E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Carbon disulfide	4.7E-05	--	--	--	--	--	--	--	--	4.7E-05	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Carbon disulfide	2.1E-05	--	--	--	--	--	--	--	--	2.1E-05	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Chrysene	0.00036	--	--	0.000812	--	--	--	--	--	1.2E-03	1.1E-06	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Chrysene	0.0008	--	--	--	--	--	--	--	--	8.0E-04	1.1E-06	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Dalapon	0.00128	--	--	--	--	--	--	--	--	1.3E-03	--	7.3E-06	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Dalapon	0.00057	--	--	--	--	--	--	--	--	5.7E-04	--	2.3E-06	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Diazinon	--	--	--	--	0.00032	--	--	--	--	3.2E-04	--	3.7E-05	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Diazinon	--	--	--	--	0.00018	--	--	--	--	1.8E-04	--	1.4E-05	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Dibenz(a,h)anthracene	0.00093	--	--	--	--	--	--	--	--	9.3E-04	1.2E-04	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Dibenz(a,h)anthracene	0.00042	--	--	0.0001362	--	--	--	--	--	5.5E-04	5.1E-05	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Dibenzothiophene	--	--	--	0.0000162	--	--	--	--	--	1.6E-05	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Dieldrin	1.3E-06	--	--	0.0038164	--	--	--	--	--	3.8E-03	6.5E-02	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Dieldrin	2.9E-06	--	--	--	--	--	--	--	--	2.9E-06	7.3E-05	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Diethylphthalate	0.00076	--	--	--	--	--	--	--	--	7.6E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Diethylphthalate	0.00034	--	--	--	--	--	--	--	--	3.4E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Di-n-butylphthalate	0.00083	--	--	--	--	--	--	--	--	8.3E-04	--	1.1E-03	

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Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																	
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients			
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL		
Seasonal Ponds	Terrestrial	Bird	Kestrel	Di-n-butylphthalate	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	3.4E-04	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Di-n-octylphthalate	0.00083	--	--	--	--	--	--	--	--	8.3E-04	--	7.3E-06	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Di-n-octylphthalate	0.00037	--	--	--	--	--	--	--	--	3.7E-04	--	2.3E-06	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Endosulfan I	1.3E-05	--	--	--	--	--	--	--	--	1.3E-05	2.3E-06	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Endosulfan I	5.6E-06	--	--	--	--	--	--	--	--	5.6E-06	7.0E-07	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Endosulfan II	--	--	--	0.0001299	--	--	--	--	--	1.3E-04	1.7E-05	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Endosulfan II	--	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Endosulfan Sulfate	5.7E-05	--	--	--	--	--	--	--	--	5.7E-05	1.1E-05	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Endosulfan Sulfate	2.6E-05	--	--	--	--	--	--	--	--	2.6E-05	3.3E-06	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Endrin	5.1E-06	--	--	0.0007234	--	--	--	--	--	7.3E-04	3.8E-03	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Endrin	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	8.6E-05	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Endrin aldehyde	1E-05	--	--	--	--	--	--	--	--	1.0E-05	7.9E-05	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Endrin aldehyde	4.6E-06	--	--	--	--	--	--	--	--	4.6E-06	2.4E-05	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Fluoranthene	0.00035	--	--	0.000812	--	--	--	--	--	1.2E-03	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Fluoranthene	0.00079	--	--	--	--	--	--	--	--	7.9E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Fluorene	--	--	--	0.000812	--	--	--	--	--	8.1E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Fluorene	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Methylene chloride	2E-05	--	--	--	--	--	--	--	--	2.0E-05	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Methylene chloride	9.1E-06	--	--	--	--	--	--	--	--	9.1E-06	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Naphthalene	--	--	--	0.000812	--	--	--	--	--	8.1E-04	--	6.2E-06	
Seasonal Ponds	Terrestrial	Bird	Sparrow	Naphthalene	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Oil and Grease	12.049	--	--	--	--	--	--	--	--	1.2E+01	--	--	
Seasonal Ponds	Terrestrial	Bird	Kestrel	Oil and Grease	5.41737	--	--	--	--	--	--	--	--	5.4E+00	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB 1254	8.5E-05	--	0.0015104	--	--	--	--	--	--	1.6E-03	--	2.0E-03	
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB 1254	3.8E-05	--	0.0003396	--	--	--	--	--	--	3.8E-04	--	3.2E-04	
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB 1260	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB 1260	--	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-008	--	--	--	0.000812	--	--	--	--	--	8.1E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-101	--	--	--	0.000812	--	--	--	--	--	8.1E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-101	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-105	--	--	--	0.000406	--	--	--	--	--	4.1E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-118	--	--	--	0.000406	--	--	--	--	--	4.1E-04	--	--	
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-128	--	--	--	0.000406	--	--	--	--	--	4.1E-04	--	--	

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-138	--	--	--	0.0004872	--	--	--	--	--	4.9E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-138	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-153	--	--	--	0.0006983	--	--	--	--	--	7.0E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-153	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-170	--	--	--	0.000203	--	--	--	--	--	2.0E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-180	--	--	--	0.0003492	--	--	--	--	--	3.5E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-180	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-187	--	--	--	0.000406	--	--	--	--	--	4.1E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-206	--	--	--	0.000203	--	--	--	--	--	2.0E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Perylene	--	--	--	0.0000057	--	--	--	--	--	5.7E-06	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Perylene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Phenanthrene	0.00244	--	--	--	--	--	--	--	--	2.4E-03	--	2.7E-05
Seasonal Ponds	Terrestrial	Bird	Kestrel	Phenanthrene	0.0011	--	--	0.000812	--	--	--	--	--	1.9E-03	--	1.5E-05
Seasonal Ponds	Terrestrial	Bird	Kestrel	Pyrene	0.00037	--	--	0.000812	--	--	--	--	--	1.2E-03	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Pyrene	0.00081	--	--	--	--	--	--	--	--	8.1E-04	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	TPH-Diesel	0.84689	--	--	--	0.1332	--	--	--	--	9.8E-01	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	TPH-Diesel	0.38077	--	--	--	0.072	--	--	--	--	4.5E-01	--	--
Seasonal Ponds	Terrestrial	Bird	Sparrow	Waste oil	5.14915	--	--	--	0.3774	--	--	--	--	5.5E+00	--	--
Seasonal Ponds	Terrestrial	Bird	Kestrel	Waste oil	2.31512	--	--	--	0.204	--	--	--	--	2.5E+00	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Arsenic	0.14133	0.02298	0.7696555	--	--	--	--	--	--	9.3E-01	--	6.9E-01
Seasonal Ponds	Terrestrial	Mammal	Coyote	Arsenic	0.01214	9.8E-05	--	--	--	--	--	--	--	1.2E-02	--	1.4E-02
Seasonal Ponds	Terrestrial	Mammal	Mouse	Barium	2.34144	2.94192	19.6268	--	0.01228	--	--	--	--	2.5E+01	5.0E+01	6.7E-02
Seasonal Ponds	Terrestrial	Mammal	Coyote	Barium	0.20114	0.01248	--	0.100386	0.00563	--	--	--	--	3.2E-01	1.0E+00	1.4E-03
Seasonal Ponds	Terrestrial	Mammal	Mouse	Beryllium	0.00381	0.04964	0.0509911	--	--	--	--	--	--	1.0E-01	1.6E-01	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Beryllium	0.00033	0.00021	--	--	--	--	--	--	--	5.4E-04	1.3E-03	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Cadmium	0.00015	6.5E-05	--	0.0738383	--	--	--	--	--	7.4E-02	9.5E-02	9.5E-03
Seasonal Ponds	Terrestrial	Mammal	Mouse	Cadmium	0.00177	0.01538	--	--	--	--	--	--	--	1.7E-02	1.4E-02	1.4E-03
Seasonal Ponds	Terrestrial	Mammal	Mouse	Chromium	0.17364	0.20433	0.4821955	--	--	--	--	--	--	8.6E-01	2.5E-04	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Chromium	0.01492	0.00087	--	0.042471	--	--	--	--	--	5.8E-02	2.7E-05	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Cobalt	0.03408	0.0239	0.044759	--	--	--	--	--	--	1.0E-01	1.7E+00	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Cobalt	0.00293	0.0001	--	0.0054054	--	--	--	--	--	8.4E-03	2.2E-01	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Copper	0.08693	0.66628	0.3939193	--	0.00024	--	--	--	--	1.1E+00	7.4E-02	5.7E-02

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Seasonal Ponds	Terrestrial	Mammal	Coyote	Copper	0.00747	0.00283	--	0.258687	0.00011	--	--	--	--	2.7E-01	2.8E-02	2.1E-02
Seasonal Ponds	Terrestrial	Mammal	Mouse	Lead	0.11891	0.14205	0.3294726	--	--	--	--	--	--	5.9E-01	1.2E+00	6.0E-03
Seasonal Ponds	Terrestrial	Mammal	Coyote	Lead	0.01021	0.0006	--	0.0216216	--	--	--	--	--	3.2E-02	1.0E-01	5.2E-04
Seasonal Ponds	Terrestrial	Mammal	Coyote	Mercury	0.0001	7.5E-06	--	0.0037452	--	--	--	--	--	3.9E-03	1.5E-01	3.1E-02
Seasonal Ponds	Terrestrial	Mammal	Mouse	Mercury	0.00117	0.00176	--	--	--	--	--	--	--	2.9E-03	7.4E-02	1.5E-02
Seasonal Ponds	Terrestrial	Mammal	Mouse	Molybdenum	0.01293	--	--	--	--	--	--	--	--	1.3E-02	5.3E-04	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Molybdenum	0.00111	--	--	--	--	--	--	--	--	1.1E-03	7.3E-05	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Nickel	0.11257	0.2221	0.5922909	--	--	--	--	--	--	9.3E-01	9.4E-02	9.4E-03
Seasonal Ponds	Terrestrial	Mammal	Coyote	Nickel	0.00967	0.00094	--	0.065637	--	--	--	--	--	7.6E-02	1.2E-02	1.2E-03
Seasonal Ponds	Terrestrial	Mammal	Mouse	Selenium	0.00865	0.03677	--	--	--	--	--	--	--	4.5E-02	1.1E-01	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Selenium	0.00074	0.00016	--	0.0081081	--	--	--	--	--	9.0E-03	3.4E-02	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Silver	0.00145	0.07043	--	--	--	--	--	--	--	7.2E-02	--	2.5E-03
Seasonal Ponds	Terrestrial	Mammal	Coyote	Silver	0.00012	0.0003	--	--	--	--	--	--	--	4.2E-04	--	2.3E-05
Seasonal Ponds	Terrestrial	Mammal	Mouse	Sulfate	44.0032	--	--	--	232.469	--	--	--	--	2.8E+02	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Sulfate	3.78001	--	--	--	106.61	--	--	--	--	1.1E+02	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Sulfide	14.0564	--	--	--	--	--	--	--	--	1.4E+01	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Sulfide	1.20749	--	--	--	--	--	--	--	--	1.2E+00	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Thallium	0.00308	--	--	--	--	--	--	--	--	3.1E-03	1.1E-02	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Thallium	0.00026	--	--	--	--	--	--	--	--	2.6E-04	1.5E-03	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Vanadium	0.2617	0.22064	0.4186364	--	--	--	--	--	--	9.0E-01	1.8E+00	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Vanadium	0.02248	0.00094	--	0.0046332	--	--	--	--	--	2.8E-02	9.0E-02	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Zinc	0.3698	4.41801	3.087299	--	0.02135	--	--	--	--	7.9E+00	2.6E-01	2.0E-02
Seasonal Ponds	Terrestrial	Mammal	Coyote	Zinc	0.03177	0.01874	--	5.0193	0.00979	--	--	--	--	5.1E+00	2.7E-01	2.0E-02
Seasonal Ponds	Terrestrial	Mammal	Mouse	Ammonia as Nitrogen	0.59686	--	--	--	--	--	--	--	--	6.0E-01	2.5E-01	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Ammonia as Nitrogen	0.05127	--	--	--	--	--	--	--	--	5.1E-02	3.4E-02	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	2,4,5-TP (Silvex)	0.00086	--	--	--	--	--	--	--	--	8.6E-04	5.6E-04	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	2,4,5-TP (Silvex)	7.4E-05	--	--	--	--	--	--	--	--	7.4E-05	7.7E-05	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	2-Butanone	0.00015	--	--	--	--	--	--	--	--	1.5E-04	7.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	2-Butanone	1.3E-05	--	--	--	--	--	--	--	--	1.3E-05	1.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	4,4'-DDD	2E-06	--	--	0.0003532	--	--	--	--	--	3.6E-04	--	3.8E-06
Seasonal Ponds	Terrestrial	Mammal	Mouse	4,4'-DDD	2.3E-05	--	0.0002169	--	--	--	--	--	--	2.4E-04	--	1.6E-06
Seasonal Ponds	Terrestrial	Mammal	Mouse	4,4'-DDE	2.8E-05	--	0.0007997	--	--	--	--	--	--	8.3E-04	--	3.1E-05
Seasonal Ponds	Terrestrial	Mammal	Coyote	4,4'-DDE	2.4E-06	--	--	0.0003861	--	--	--	--	--	3.9E-04	--	2.3E-05
Seasonal Ponds	Terrestrial	Mammal	Coyote	4,4'-DDT	5E-07	--	--	0.0003097	--	--	--	--	--	3.1E-04	5.0E-04	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	4,4'-DDT	5.8E-06	--	--	--	--	--	--	--	--	5.8E-06	5.8E-06	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	4-Nitrophenol	0.00762	--	--	--	--	--	--	--	--	7.6E-03	--	1.9E-05
Seasonal Ponds	Terrestrial	Mammal	Coyote	4-Nitrophenol	0.00065	--	--	--	--	--	--	--	--	6.5E-04	--	2.6E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Acenaphthene	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	3.3E-06	--

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Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain				Total Exposure	Hazard Quotients		
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	NOAEL	LOAEL	
Seasonal Ponds	Terrestrial	Mammal	Mouse	Acenaphthene	--	--	--	--	--	--	--	--	--	0.0E+00	--	
Seasonal Ponds	Terrestrial	Mammal	Coyote	Acetone	1.8E-05	--	--	0.041291	--	--	--	--	--	4.1E-02	5.3E-04	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Acetone	0.00021	--	--	--	--	--	--	--	--	2.1E-04	1.7E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Aldrin	--	--	--	0.0002008	--	--	--	--	--	2.0E-04	1.3E-03	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Aldrin	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Anthracene	0.00069	--	--	--	--	--	--	--	--	6.9E-04	--	2.0E-07
Seasonal Ponds	Terrestrial	Mammal	Coyote	Anthracene	5.9E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	--	2.0E-07
Seasonal Ponds	Terrestrial	Mammal	Mouse	Benzo(a)anthracene	0.00069	--	--	--	--	--	--	--	--	6.9E-04	--	2.8E-04
Seasonal Ponds	Terrestrial	Mammal	Coyote	Benzo(a)anthracene	5.9E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	--	2.9E-04
Seasonal Ponds	Terrestrial	Mammal	Mouse	Benzo(a)pyrene	0.00069	--	--	--	--	--	--	--	--	6.9E-04	--	6.5E-04
Seasonal Ponds	Terrestrial	Mammal	Coyote	Benzo(a)pyrene	6E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	--	6.6E-04
Seasonal Ponds	Terrestrial	Mammal	Mouse	Benzo(b)fluoranthene	0.0007	--	--	--	--	--	--	--	--	7.0E-04	--	1.4E-05
Seasonal Ponds	Terrestrial	Mammal	Coyote	Benzo(b)fluoranthene	6E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	--	1.4E-05
Seasonal Ponds	Terrestrial	Mammal	Mouse	Benzo(e)pyrene	0.0009	--	--	--	--	--	--	--	--	9.0E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Benzo(e)pyrene	7.8E-05	--	--	0.0003861	--	--	--	--	--	4.6E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Benzo(g,h,i)perylene	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Benzo(k)fluoranthene	0.00069	--	--	--	--	--	--	--	--	6.9E-04	--	7.8E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Benzo(k)fluoranthene	5.9E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	--	8.0E-06
Seasonal Ponds	Terrestrial	Mammal	Mouse	BHC-alpha	2.3E-06	--	0.0000295	--	--	--	--	--	--	3.2E-05	2.3E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	BHC-alpha	2E-07	--	--	0.0000108	--	--	--	--	--	1.1E-05	1.3E-06	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	BHC-beta	6.3E-06	0.00024	0.0003718	--	1.4E-05	--	--	--	--	6.3E-04	1.3E-04	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	BHC-beta	5E-07	1E-06	--	0.0000097	6.3E-06	--	--	--	--	1.8E-05	5.6E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	BHC-delta	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	BHC-delta	--	--	--	--	--	--	--	--	--	0.0E+00	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	BHC-gamma	1E-07	--	--	0.0000359	--	--	--	--	--	3.6E-05	5.8E-06	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	BHC-gamma	1.5E-06	--	--	--	--	--	--	--	--	1.5E-06	1.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Biphenyl	--	--	--	0.0000236	--	--	--	--	--	2.4E-05	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Biphenyl	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Butylbenzylphthalate	0.0007	--	--	--	--	--	--	--	--	7.0E-04	3.5E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Butylbenzylphthalate	6E-05	--	--	--	--	--	--	--	--	6.0E-05	5.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Carbon disulfide	4.1E-05	--	--	--	--	--	--	--	--	4.1E-05	2.6E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Carbon disulfide	3.5E-06	--	--	--	--	--	--	--	--	3.5E-06	4.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Chrysene	0.0007	--	--	--	--	--	--	--	--	7.0E-04	--	5.8E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Chrysene	6.1E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	--	5.8E-06
Seasonal Ponds	Terrestrial	Mammal	Mouse	Dalapon	0.00112	--	--	--	--	--	--	--	--	1.1E-03	1.1E-04	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Dalapon	9.7E-05	--	--	--	--	--	--	--	--	9.7E-05	1.5E-05	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Diazinon	--	--	--	--	0.00023	--	--	--	--	2.3E-04	2.1E-03	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Area	Exposure Type	Class	Species	Analyte	Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)								Hazard Quotients			
					Terrestrial Food Chain				Aquatic Food Chain							
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish	Total Exposure	NOAEL	LOAEL
Seasonal Ponds	Terrestrial	Mammal	Coyote	Diazinon	--	--	--	--	0.00011	--	--	--	--	1.1E-04	1.5E-03	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Dibenz(a,h)anthracene	0.00082	--	--	--	--	--	--	--	--	8.2E-04	--	1.1E-01
Seasonal Ponds	Terrestrial	Mammal	Coyote	Dibenz(a,h)anthracene	7E-05	--	--	0.0000648	--	--	--	--	--	1.3E-04	--	2.9E-02
Seasonal Ponds	Terrestrial	Mammal	Coyote	Dibenzothiophene	--	--	--	0.0000077	--	--	--	--	--	7.7E-06	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Dibenzothiophene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Dieldrin	2E-07	--	--	0.0018147	--	--	--	--	--	1.8E-03	4.7E-01	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Dieldrin	2.6E-06	--	--	--	--	--	--	--	--	2.6E-06	4.2E-04	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Diethylphthalate	0.00067	--	--	--	--	--	--	--	--	6.7E-04	1.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Diethylphthalate	5.8E-05	--	--	--	--	--	--	--	--	5.8E-05	0.0E+00	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Di-n-butylphthalate	0.00073	--	--	--	--	--	--	--	--	7.3E-04	1.2E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Di-n-butylphthalate	6.3E-05	--	--	--	--	--	--	--	--	6.3E-05	2.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Di-n-octylphthalate	0.00073	--	--	--	--	--	--	--	--	7.3E-04	--	3.4E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Di-n-octylphthalate	6.3E-05	--	--	--	--	--	--	--	--	6.3E-05	--	5.0E-07
Seasonal Ponds	Terrestrial	Mammal	Mouse	Endosulfan I	1.1E-05	--	--	--	--	--	--	--	--	1.1E-05	8.9E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Endosulfan I	9E-07	--	--	--	--	--	--	--	--	9.0E-07	1.2E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Endosulfan II	--	--	--	0.0000618	--	--	--	--	--	6.2E-05	7.9E-05	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Endosulfan II	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Endosulfan Sulfate	0.00005	--	--	--	--	--	--	--	--	5.0E-05	4.0E-05	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Endosulfan Sulfate	4.3E-06	--	--	--	--	--	--	--	--	4.3E-06	5.5E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Endrin	9E-07	--	--	0.000344	--	--	--	--	--	3.4E-04	--	5.6E-04
Seasonal Ponds	Terrestrial	Mammal	Mouse	Endrin	0.00001	--	--	--	--	--	--	--	--	1.0E-05	--	1.0E-05
Seasonal Ponds	Terrestrial	Mammal	Mouse	Endrin aldehyde	9.1E-06	--	--	--	--	--	--	--	--	9.1E-06	--	9.2E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Endrin aldehyde	8E-07	--	--	--	--	--	--	--	--	8.0E-07	--	1.3E-06
Seasonal Ponds	Terrestrial	Mammal	Mouse	Fluoranthene	0.00069	--	--	--	--	--	--	--	--	6.9E-04	5.2E-06	2.6E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Fluoranthene	5.9E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	5.3E-06	2.7E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Fluorene	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	4.6E-06	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Fluorene	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Methylene chloride	1.8E-05	--	--	--	--	--	--	--	--	1.8E-05	2.5E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Methylene chloride	1.5E-06	--	--	--	--	--	--	--	--	1.5E-06	3.0E-07	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Naphthalene	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	1.2E-05	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Naphthalene	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Oil and Grease	10.6012	--	--	--	--	--	--	--	--	1.1E+01	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Oil and Grease	0.91068	--	--	--	--	--	--	--	--	9.1E-01	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB 1254	7.5E-05	--	0.0004208	--	--	--	--	--	--	5.0E-04	1.3E-03	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB 1254	6.4E-06	--	--	--	--	--	--	--	--	6.4E-06	2.6E-05	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB 1260	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB 1260	--	--	--	--	--	--	--	--	--	--	0.0E+00	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-008	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	--	--

Table I-2

Food Chain Uptake Risk Estimates for Birds and Mammals

Bolsa Chica Lowlands

Pathway-Specific and Total Exposure Estimates (mg/kgbw-d)																
Area	Exposure Type	Class	Species	Analyte	Terrestrial Food Chain				Aquatic Food Chain					Total Exposure	Hazard Quotients	
					Soil	Plants	Invertebrates	Vertebrates	Water	Corixids	Snails	Shrimp	Fish		NOAEL	LOAEL
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-008	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-101	--	--	--	0.0003861	--	--	--	--	--	3.9E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-101	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-105	--	--	--	0.0001931	--	--	--	--	--	1.9E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-105	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-118	--	--	--	0.0001931	--	--	--	--	--	1.9E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-118	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-126	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-128	--	--	--	0.0001931	--	--	--	--	--	1.9E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-128	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-138	--	--	--	0.0002317	--	--	--	--	--	2.3E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-138	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-153	--	--	--	0.000332	--	--	--	--	--	3.3E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-153	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-170	--	--	--	0.0000965	--	--	--	--	--	9.7E-05	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-170	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-180	--	--	--	0.000166	--	--	--	--	--	1.7E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-180	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-187	--	--	--	0.0001931	--	--	--	--	--	1.9E-04	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-187	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-206	--	--	--	0.0000965	--	--	--	--	--	9.7E-05	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-206	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	PCB-209	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Perylene	--	--	--	0.0000027	--	--	--	--	--	2.7E-06	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Perylene	--	--	--	--	--	--	--	--	--	--	--	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	Phenanthrene	0.00215	--	--	--	--	--	--	--	--	2.1E-03	--	2.5E-06
Seasonal Ponds	Terrestrial	Mammal	Coyote	Phenanthrene	0.00018	--	--	0.0003861	--	--	--	--	--	5.7E-04	--	1.0E-06
Seasonal Ponds	Terrestrial	Mammal	Mouse	Pyrene	0.00072	--	--	--	--	--	--	--	--	7.2E-04	5.4E-06	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Pyrene	6.2E-05	--	--	0.0003861	--	--	--	--	--	4.5E-04	5.3E-06	--
Seasonal Ponds	Terrestrial	Mammal	Mouse	TPH-Diesel	0.74513	--	--	--	0.0942	--	--	--	--	8.4E-01	--	1.3E-04
Seasonal Ponds	Terrestrial	Mammal	Coyote	TPH-Diesel	0.06401	--	--	--	0.0432	--	--	--	--	1.1E-01	--	2.7E-05
Seasonal Ponds	Terrestrial	Mammal	Mouse	Waste oil	4.53045	--	--	--	0.2669	--	--	--	--	4.8E+00	--	--
Seasonal Ponds	Terrestrial	Mammal	Coyote	Waste oil	0.38918	--	--	--	0.1224	--	--	--	--	5.1E-01	--	--

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients		
			ER-L	ER-M	Nereis NOEC
					LC20
Bolsa Bay	Arsenic	11	1.341	0.1571	0.69
Bolsa Bay	Barium	1200	.	.	27.27
Bolsa Bay	Beryllium	1.2	.	.	4.14
Bolsa Bay	Cadmium	1.3	1.08	0.135	24.07
Bolsa Bay	Chromium	67	0.827	0.1811	5.78
Bolsa Bay	Cobalt	15	.	.	9.32
Bolsa Bay	Copper	83	2.441	0.3074	15.37
Bolsa Bay	Lead	110	2.355	0.5046	8.27
Bolsa Bay	Mercury	0.14	0.93	0.197	2.37
Bolsa Bay	Nickel	140	6.699	2.713	8.05
Bolsa Bay	Selenium	3.2	.	.	34.78
Bolsa Bay	Silver	0.7	0.7	0.1892	22.58
Bolsa Bay	Sulfate	3200	.	.	.
Bolsa Bay	Sulfide	1100	.	.	.
Bolsa Bay	Thallium	1	.	.	14.49
Bolsa Bay	Vanadium	110	.	.	5.19
Bolsa Bay	Zinc	230	1.533	0.561	6.133
Bolsa Bay	Ammonia as Nitrogen	75	.	.	.
Bolsa Bay	4,4'-DDD	0.035	17.5	1.75	5.56
Bolsa Bay	4,4'-DDE	0.055	25	2.037	9.483
Bolsa Bay	4,4'-DDT	0.0059	5.9	0.8429	0.349
Bolsa Bay	Anthracene	0.024	0.281	0.0218	6.86
Bolsa Bay	Benzo(a)anthracene	0.051	0.195	0.0319	14.57
Bolsa Bay	Benzo(a)pyrene	0.059	0.13721	0.03688	9.22
Bolsa Bay	Benzo(b)fluoranthene	0.072	.	.	9.86
Bolsa Bay	Benzo(e)pyrene	0.053	.	.	10.52
Bolsa Bay	Benzo(g,h,i)perylene	0.069	.	.	20.91
Bolsa Bay	Benzo(k)fluoranthene	0.07	.	.	16.28
Bolsa Bay	BHC-alpha	0.008	.	.	19.05
Bolsa Bay	BHC-beta	0.025	.	.	2.87
Bolsa Bay	BHC-gamma	0.001	.	.	10
Bolsa Bay	Bis(2-ethylhexyl)phthalate	1.4	.	.	20.83
Bolsa Bay	Butylbenzylphthalate	0.17	.	.	8.85
Bolsa Bay	Chlordane (technical)	0.26	520	43.333	4.01
Bolsa Bay	Chlordane-alpha	0.054	108	9	5.4
Bolsa Bay	Chlordane-gamma	0.034	68	5.667	6.3
Bolsa Bay	Chrysene	0.12	0.313	0.0429	1.12
Bolsa Bay	Dibenz(a,h)anthracene	0.011	0.174	0.0423	.
Bolsa Bay	Dieldrin	0.0015	75	0.1875	2.632
Bolsa Bay	Diethylphthalate	0.066	.	.	.
Bolsa Bay	Dimethylphthalate	0.017	.	.	12.143
Bolsa Bay	Di-n-butylphthalate	0.14	.	.	18.421
Bolsa Bay	Di-n-octylphthalate	0.72	.	.	3.364
Bolsa Bay	Endosulfan II	0.0016	.	.	.
Bolsa Bay	Fluoranthene	0.21	0.35	0.04118	52.11
Bolsa Bay	Indeno(1,2,3-c,d)pyrene	0.065	.	.	26
Bolsa Bay	Oil and Grease	8600	.	.	1409.84
Bolsa Bay	Aroclor 1254	0.0405	.	.	4.655
Bolsa Bay	Phenanthrene	0.051	0.213	0.034	0.08
Bolsa Bay	Phenol	0.12	.	.	19.35
Bolsa Bay	Pyrene	0.21	0.316	0.0808	10.34
Bolsa Bay	TPH-Diesel	1800	.	.	865.38
Bolsa Bay	TPH-Diesel and Waste oil	11400	.	.	50.8
Bolsa Bay	Waste oil	9600	.	.	2000
Bolsa Bay	High MW PAHs	0.919	0.54	0.096	8.59
Bolsa Bay	Low MW PAHs	0.051	0.09	0.016	0.04
Bolsa Bay	Total DDT	0.09	56.962	1.95228	3.1
Bolsa Bay	Total PAHs	0.97	0.241	0.02166	0.71
Bolsa Bay	Total PCB	0.023	1.013	0.1278	2.64
Bolsa Bay	Total phenol	0.12	.	.	1.12
Bolsa Bay	Total phthalate esters	1.68	.	.	7.85
Bolsa Bay	Total volatile solids	5.7	.	.	.
Full Tidal	Antimony	1.4	.	.	.
Full Tidal	Arsenic	37	4.512	0.5286	2.31
Full Tidal	Barium	11400	.	.	259.09
Full Tidal	Beryllium	2	.	.	6.9
Full Tidal	Cadmium	1.3	1.08	0.135	24.07

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients			Amphipod	LC50
			ER-L	ER-M	Nereis NOEC		
Full Tidal	Chromium	244	3.012	0.6595	21.03	4.656	2.218
Full Tidal	Cobalt	41.7	.	.	25.9	4.17	1.94
Full Tidal	Copper	163	4.794	0.6037	30.19	.	.
Full Tidal	Lead	131	2.805	0.6009	9.85	.	.
Full Tidal	Mercury	3.4	22.67	4.789	57.63	.	.
Full Tidal	Molybdenum	10.8	.	.	.	.	.
Full Tidal	Nickel	160	7.656	3.101	9.2	8.163	2.754
Full Tidal	Selenium	5.65	.	.	61.41	20.179	3.4242
Full Tidal	Silver	1.15	1.15	0.3108	37.1	.	.
Full Tidal	Sulfate	17000	.	.	.	.	.
Full Tidal	Sulfide	350	.	.	.	.	.
Full Tidal	Thallium	3	.	.	43.48	8.824	5.172
Full Tidal	Vanadium	120	.	.	5.66	1.838	0.889
Full Tidal	Zinc	230	1.533	0.561	6.133	2.212	0.5011
Full Tidal	Ammonia as Nitrogen	110	.	.	.	.	.
Full Tidal	Chloride	23500	.	.	.	.	.
Full Tidal	Phosphorus, Total as P	0.45	.	.	.	.	.
Full Tidal	Phosphorus, Total as PO4	1.4	.	.	.	.	.
Full Tidal	1,2-Dichlorobenzene	0.019	.	.	.	.	.
Full Tidal	1,2-Dichloroethene (total)	0.019	.	.	.	.	.
Full Tidal	1,4-Dichlorobenzene	0.019	.	.	.	.	.
Full Tidal	2,4,5-TP (Silvex)	0.00093	.	.	.	.	.
Full Tidal	2,4-DB	0.049	.	.	.	.	.
Full Tidal	2-Butanone	0.39	.	.	.	.	.
Full Tidal	4,4'-DDD	0.077	38.5	3.85	12.22	.	.
Full Tidal	4,4'-DDE	0.045	20.45	1.6667	7.759	.	.
Full Tidal	4,4'-DDT	0.059	59	8.4286	3.491	.	.
Full Tidal	4-Nitrophenol	0.67	.	.	.	.	.
Full Tidal	Acenaphthene	0.96	60	1.92	8.42	.	.
Full Tidal	Acetone	1.2	.	.	.	.	.
Full Tidal	Anthracene	0.365	4.279	0.3318	104.29	.	.
Full Tidal	Benzene	0.86	.	.	.	.	.
Full Tidal	Benzo(a)anthracene	0.365	1.398	0.2281	104.29	.	.
Full Tidal	Benzo(a)pyrene	0.365	0.84884	0.22813	57.03	.	.
Full Tidal	Benzo(b)fluoranthene	0.365	.	.	50	6.282	0.108
Full Tidal	Benzo(e)pyrene	0.365	.	.	72.42	.	.
Full Tidal	Benzo(g,h,i)perylene	0.75	.	.	227.27	.	.
Full Tidal	Benzo(k)fluoranthene	0.365	.	.	84.88	.	.
Full Tidal	BHC-alpha	0.017	.	.	40.48	.	.
Full Tidal	BHC-beta	0.0096	.	.	1.1	.	0.25
Full Tidal	BHC-delta	0.0019	.	.	10	.	.
Full Tidal	BHC-gamma	0.035	.	.	350	.	.
Full Tidal	Bis(2-ethylhexyl)phthalate	0.88	.	.	13.1	.	.
Full Tidal	Butylbenzylphthalate	0.365	.	.	19.01	.	.
Full Tidal	Carbon disulfide	0.058	.	.	.	.	.
Full Tidal	Chlordane (technical)	0.023	46	3.833	0.35	.	.
Full Tidal	Chlordane-alpha	0.019	38	3.167	1.9	.	.
Full Tidal	Chlorobenzene	0.019	.	.	.	.	.
Full Tidal	Chloroform	0.00067	.	.	.	.	.
Full Tidal	Chrysene	0.96	2.5	0.3429	8.97	3.765	1.26
Full Tidal	Diazinon	0.00044	.	.	.	.	.
Full Tidal	Dibenz(a,h)anthracene	0.75	11.83	2.8846	.	.	.
Full Tidal	Dieldrin	0.0076	380	0.95	13.333	.	.
Full Tidal	Diethylphthalate	0.365	.	.	.	.	.
Full Tidal	Dimethylphthalate	0.365	.	.	260.714	.	.
Full Tidal	Di-n-butylphthalate	0.4	.	.	52.632	.	.
Full Tidal	Di-n-octylphthalate	0.81	.	.	3.785	15.6069	2.5552
Full Tidal	Disulfoton	0.00032	.	.	.	.	.
Full Tidal	Endosulfan I	0.012	.	.	14.12	.	.
Full Tidal	Endosulfan II	0.0043	.	.	.	.	.
Full Tidal	Endrin	0.016	.	.	20.51	23.53	2.263
Full Tidal	Endrin aldehyde	0.00305	.	.	46.92	1.52	0.296
Full Tidal	Endrin ketone	0.038	.	.	863.64	345.45	54.286
Full Tidal	Ethylbenzene	3.7	.	.	.	.	.
Full Tidal	Fluoranthene	0.37	0.617	0.07255	91.81	.	.
Full Tidal	Fluorene	1.4	73.684	2.59259	5.49	3043.48	142.566
Full Tidal	Indeno(1,2,3-c,d)pyrene	1	.	.	400	.	.

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients			Amphipod LC50
			ER-L	ER-M	Nereis NOEC	
Full Tidal	Methylene chloride	0.019	.	.	.	.
Full Tidal	Naphthalene	1.8	11.25	0.857	6.1	.
Full Tidal	n-Propylbenzene	1.4	.	.	.	.
Full Tidal	Oil and Grease	47000	.	.	7704.92	136
Full Tidal	Aroclor 1254	0.14	.	.	16.092	.
Full Tidal	Aroclor 1260	0.075	.	.	21.429	.
Full Tidal	Pentachlorophenol	0.48	.	.	.	.
Full Tidal	Phenanthrene	2.4	10	1.6	3.98	54.92
Full Tidal	Pyrene	0.84	1.263	0.3231	41.38	.
Full Tidal	Toluene	0.17	.	.	.	.
Full Tidal	TPH-Diesel	12000	.	.	5769.23	339
Full Tidal	TPH-Diesel and Waste oil	53000	.	.	.	98.3
Full Tidal	Waste oil	41000	.	.	8541.67	145
Full Tidal	Xylene (total)	5	.	.	.	13.6
Full Tidal	High MW PAHs	2.42	1.42	0.252	22.62	.
Full Tidal	Low MW PAHs	4.76	8.62	1.506	3.76	96.16
Full Tidal	Total DDT	0.146	92.405	3.16703	5.03	.
Full Tidal	Total PAHs	6.56	1.631	0.14645	4.77	42.051
Full Tidal	Total PCB	0.14	6.167	0.7778	16.09	5.953
Full Tidal	Total phenol	0.48	.	.	4.49	.
Full Tidal	Total phthalate esters	1.901	.	.	8.88	.
Full Tidal	Total volatile solids	26	.	.	.	.
Future Full Tidal	Antimony	1.7	.	.	.	.
Future Full Tidal	Arsenic	700	85.366	10	43.75	.
Future Full Tidal	Barium	56000	.	.	1272.73	.
Future Full Tidal	Beryllium	590	.	.	2034.48	756.41
Future Full Tidal	Cadmium	190	158.33	19.792	3518.52	133.183
Future Full Tidal	Chromium	10000	123.457	27.027	862.07	190.84
Future Full Tidal	Cobalt	3900	.	.	2422.36	390
Future Full Tidal	Copper	6900	202.941	25.5556	1277.78	181.395
Future Full Tidal	Lead	17000	364.026	77.9817	1278.2	.
Future Full Tidal	Mercury	190	1266.67	267.606	3220.34	.
Future Full Tidal	Molybdenum	18.5	.	.	.	.
Future Full Tidal	Nickel	13000	622.01	251.938	747.13	663.265
Future Full Tidal	Selenium	5.5	.	.	59.78	19.643
Future Full Tidal	Silver	68	68	18.3784	2193.55	3.3333
Future Full Tidal	Sulfate	18500	.	.	.	.
Future Full Tidal	Sulfide	1400	.	.	.	.
Future Full Tidal	Thallium	160	.	.	2318.84	470.588
Future Full Tidal	Vanadium	26000	.	.	1226.42	398.162
Future Full Tidal	Zinc	37000	246.667	90.2439	986.667	355.769
Future Full Tidal	Ammonia as Nitrogen	110	.	.	.	80.61
Future Full Tidal	Chloride	112000	.	.	.	.
Future Full Tidal	Phosphorus, Total as P	1610	.	.	.	.
Future Full Tidal	Phosphorus, Total as PO4	4940	.	.	.	.
Future Full Tidal	2,4-D	0.00098	.	.	.	.
Future Full Tidal	2-Butanone	0.044	.	.	.	.
Future Full Tidal	4,4'-DDD	0.26	130	13	41.27	.
Future Full Tidal	4,4'-DDE	0.34	154.55	12.5926	58.621	.
Future Full Tidal	4,4'-DDT	0.088	88	12.5714	5.207	.
Future Full Tidal	4-Methylphenol	4.7	.	.	43.9252	.
Future Full Tidal	4-Nitrophenol	13	.	.	.	.
Future Full Tidal	Acenaphthene	1.7	106.25	3.4	14.91	.
Future Full Tidal	Acenaphthylene	7.7	.	.	.	.
Future Full Tidal	Acetone	0.18	.	.	.	.
Future Full Tidal	Aldrin	0.0065	.	.	16.67	29.5455
Future Full Tidal	Anthracene	0.7	8.206	0.6364	200	.
Future Full Tidal	Benzene	0.083	.	.	.	.
Future Full Tidal	Benzo(a)anthracene	0.7	2.682	0.4375	200	.
Future Full Tidal	Benzo(a)pyrene	0.7	1.62791	0.4375	109.38	.
Future Full Tidal	Benzo(b)fluoranthene	1.5	.	.	205.48	25.818
Future Full Tidal	Benzo(e)pyrene	0.7	.	.	138.89	0.442
Future Full Tidal	Benzo(g,h,i)perylene	1.35	.	.	409.09	.
Future Full Tidal	Benzo(k)fluoranthene	0.7	.	.	162.79	.
Future Full Tidal	BHC-alpha	0.028	.	.	66.67	.
Future Full Tidal	BHC-beta	0.13	.	.	14.94	3.38542
Future Full Tidal	BHC-delta	0.042	.	.	221.05	.

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients			Amphipod	
			ER-L	ER-M	Nereis NOEC	LC20	LC50
Future Full Tidal	BHC-gamma	0.023	.	.	230	.	.
Future Full Tidal	Bis(2-ethylhexyl)phthalate	3.7	.	.	55.06	.	.
Future Full Tidal	Butylbenzylphthalate	5.3	.	.	276.04	.	.
Future Full Tidal	Carbon disulfide	0.027	.	.	.	.	.
Future Full Tidal	Chlordane (technical)	3.8	7600	633.333	58.64	.	.
Future Full Tidal	Chlordane-alpha	0.52	1040	86.667	52	.	.
Future Full Tidal	Chlordane-gamma	0.28	560	46.667	51.85	.	.
Future Full Tidal	Chlorobenzene	0.0045	.	.	.	.	.
Future Full Tidal	Chrysene	5.6	14.583	2	52.34	21.961	7.349
Future Full Tidal	Diazinon	0.65	.	.	.	.	.
Future Full Tidal	Dibenz(a,h)anthracene	1.35	21.293	5.1923	.	.	.
Future Full Tidal	Dieldrin	0.041	2050	5.125	71.93	.	.
Future Full Tidal	Diethylphthalate	1	.	.	.	.	.
Future Full Tidal	Dimethylphthalate	0.7	.	.	500	.	.
Future Full Tidal	Di-n-butylphthalate	6.7	.	.	881.579	.	.
Future Full Tidal	Di-n-octylphthalate	3.2	.	.	14.953	61.657	10.0946
Future Full Tidal	Endosulfan I	0.055	.	.	64.71	.	.
Future Full Tidal	Endosulfan II	0.0135	.	.	.	.	.
Future Full Tidal	Endrin	0.035	.	.	44.87	51.47	4.95
Future Full Tidal	Endrin aldehyde	0.05	.	.	769.23	24.88	4.854
Future Full Tidal	Endrin ketone	0.054	.	.	1227.27	490.91	77.143
Future Full Tidal	Ethylbenzene	0.047	.	.	.	.	.
Future Full Tidal	Fluoranthene	0.6	1	0.11765	148.88	.	.
Future Full Tidal	Fluorene	3.8	200	7.03704	14.9	8260.87	386.965
Future Full Tidal	Indeno(1,2,3-c,d)pyrene	1.35	.	.	540	.	.
Future Full Tidal	Methylene chloride	0.032	.	.	.	.	.
Future Full Tidal	Naphthalene	5.7	35.63	2.714	19.32	.	.
Future Full Tidal	Oil and Grease	370000	.	.	60655737.7	1069	39.1
Future Full Tidal	Aroclor 1254	0.39	.	.	44.828	.	.
Future Full Tidal	Aroclor 1260	0.16	.	.	45.714	.	.
Future Full Tidal	PCB 008	0.41	.	.	.	.	.
Future Full Tidal	PCB 028	0.064	.	.	.	.	.
Future Full Tidal	PCB 044	0.027	.	.	.	.	.
Future Full Tidal	PCB 052	0.042	.	.	.	.	.
Future Full Tidal	PCB 066	0.03	.	.	.	.	.
Future Full Tidal	PCB 101	0.036	.	.	.	.	.
Future Full Tidal	PCB 105	0.0095	.	.	.	.	.
Future Full Tidal	PCB 118	0.012	.	.	.	.	.
Future Full Tidal	PCB 138	0.02	.	.	.	.	.
Future Full Tidal	PCB 153	0.018	.	.	.	.	.
Future Full Tidal	PCB 180	0.0071	.	.	.	.	.
Future Full Tidal	Pentachlorophenol	4.7	.	.	.	.	.
Future Full Tidal	Phenanthrene	9	37.5	6	14.93	205.95	36.5854
Future Full Tidal	Pyrene	1.5	2.256	0.5769	73.89	.	.
Future Full Tidal	Styrene	0.00076	.	.	.	.	.
Future Full Tidal	Tetrachloroethene	0.0045	.	.	.	.	.
Future Full Tidal	Toluene	0.0047	.	.	.	.	.
Future Full Tidal	TPH-Diesel	31000	.	.	14903.85	876	73.1
Future Full Tidal	TPH-Diesel and Waste oil	102000	.	.	.	189	31.1
Future Full Tidal	Trichloroethene	0.0045	.	.	.	.	.
Future Full Tidal	Waste oil	71000	.	.	14791.67	252	23.5
Future Full Tidal	Xylene (total)	0.024	.	.	.	.	.
Future Full Tidal	High MW PAHs	3.639	2.14	0.379	34.01	.	.
Future Full Tidal	Low MW PAHs	18.9	34.24	5.981	14.93	381.82	55.92
Future Full Tidal	Total DDT	0.385	243.671	8.35141	13.28	.	.
Future Full Tidal	Total PAHs	20.5	5.097	0.45767	14.92	131.41	18.603
Future Full Tidal	Total PCB	0.39	17.181	2.1667	44.83	.	.
Future Full Tidal	Total phenol	1.6	.	.	14.95	.	.
Future Full Tidal	Total phthalate esters	6.875	.	.	32.13	.	.
Future Full Tidal	Total volatile solids	20	.	.	.	.	.
Garden Grove	Arsenic	7.6	0.927	0.1086	0.48	.	.
Garden Grove	Barium	152	.	.	3.45	.	.
Garden Grove	Beryllium	1.1	.	.	3.79	1.41	0.248
Garden Grove	Cadmium	0.65	0.54	0.068	12.04	.	.
Garden Grove	Chromium	35.5	0.438	0.0959	3.06	0.677	0.323
Garden Grove	Cobalt	20.1	.	.	12.48	2.01	0.935
Garden Grove	Copper	34.8	1.024	0.1289	6.44	.	.

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients			Amphipod	LC50
			ER-L	ER-M	Nereis NOEC		
Garden Grove	Lead	96	2.056	0.4404	7.22	.	.
Garden Grove	Mercury	0.39	2.6	0.549	6.61	.	.
Garden Grove	Molybdenum	3.6	.	.	.	.	.
Garden Grove	Nickel	25	1.196	0.484	1.44	1.276	0.43
Garden Grove	Selenium	3.15	.	.	34.24	11.25	1.9091
Garden Grove	Silver	0.65	0.65	0.1757	20.97	.	.
Garden Grove	Sulfate	1300	.	.	.	.	.
Garden Grove	Sulfide	150	.	.	.	.	.
Garden Grove	Thallium	0.65	.	.	9.42	1.912	1.121
Garden Grove	Vanadium	79	.	.	3.73	1.21	0.585
Garden Grove	Zinc	140	0.933	0.3415	3.733	1.346	0.305
Garden Grove	4,4'-DDD	0.037	18.5	1.85	5.87	.	.
Garden Grove	4,4'-DDE	0.098	44.55	3.6296	16.897	.	.
Garden Grove	Acetone	0.05	.	.	.	.	.
Garden Grove	Benzo(a)anthracene	0.25	0.958	0.1563	71.43	.	.
Garden Grove	Benzo(a)pyrene	0.25	0.5814	0.15625	39.06	.	.
Garden Grove	Benzo(b)fluoranthene	0.25	.	.	34.25	4.303	0.074
Garden Grove	Benzo(e)pyrene	0.25	.	.	49.6	.	.
Garden Grove	Benzo(g,h,i)perylene	0.25	.	.	75.76	.	.
Garden Grove	Benzo(k)fluoranthene	0.25	.	.	58.14	.	.
Garden Grove	BHC-beta	0.0045	.	.	0.52	.	0.11719
Garden Grove	BHC-delta	0.0016	.	.	8.42	.	.
Garden Grove	Bis(2-ethylhexyl)phthalate	0.76	.	.	11.31	.	.
Garden Grove	Butylbenzylphthalate	0.25	.	.	13.02	.	.
Garden Grove	Chlordane (technical)	0.018	36	3	0.28	.	.
Garden Grove	Chlordane-alpha	0.0071	14.2	1.183	0.71	.	.
Garden Grove	Chlordane-gamma	0.0059	11.8	0.983	1.09	.	.
Garden Grove	Chrysene	0.25	0.651	0.0893	2.34	0.98	0.328
Garden Grove	Dieldrin	0.0012	60	0.15	2.105	.	.
Garden Grove	Diethylphthalate	0.25	.	.	.	.	.
Garden Grove	Di-n-butylphthalate	0.25	.	.	32.895	.	.
Garden Grove	Di-n-octylphthalate	0.25	.	.	1.168	4.817	0.7886
Garden Grove	Endosulfan II	0.0021	.	.	.	.	.
Garden Grove	Endrin aldehyde	0.003	.	.	46.15	1.49	0.291
Garden Grove	Fluoranthene	0.25	0.417	0.04902	62.03	.	.
Garden Grove	Indeno(1,2,3-c,d)pyrene	0.25	.	.	100	.	.
Garden Grove	Oil and Grease	750	.	.	122.95	2.17	0.0794
Garden Grove	Aroclor 1254	0.074	.	.	8.506	.	.
Garden Grove	Phenanthrene	0.25	1.042	0.1667	0.41	5.721	1.0163
Garden Grove	Pyrene	0.12	0.18	0.0462	5.91	.	.
Garden Grove	Toluene	0.003	.	.	.	.	.
Garden Grove	TPH-Diesel and Waste oil	730	.	.	.	1.35	0.223
Garden Grove	Waste oil	650	.	.	135.42	2.30	0.215
Garden Grove	High MW PAHs	0.475	0.28	0.049	4.44	.	.
Garden Grove	Low MW PAHs	0.039	0.07	0.012	0.03	0.79	0.12
Garden Grove	Total DDT	0.135	85.443	2.92842	4.66	.	.
Garden Grove	Total PAHs	0.514	0.128	0.01148	0.37	3.295	0.466
Garden Grove	Total PCB	0.074	3.26	0.4111	8.51	.	.
Garden Grove	Total phthalate esters	0.878	.	.	4.1	.	.
Garden Grove	Total volatile solids	3.8	.	.	.	.	.
Gas Plant	Arsenic	81	9.878	1.1571	5.06	.	.
Gas Plant	Barium	249	.	.	5.66	.	.
Gas Plant	Beryllium	2	.	.	6.9	2.564	0.451
Gas Plant	Cadmium	1.05	0.88	0.109	19.44	.	.
Gas Plant	Chromium	120	1.481	0.3243	10.34	2.29	1.091
Gas Plant	Cobalt	14	.	.	8.7	1.4	0.651
Gas Plant	Copper	110	3.235	0.4074	20.37	.	.
Gas Plant	Lead	91	1.949	0.4174	6.84	.	.
Gas Plant	Mercury	0.41	2.73	0.577	6.95	.	.
Gas Plant	Nickel	34	1.627	0.659	1.95	1.735	0.585
Gas Plant	Selenium	5.35	.	.	58.15	19.107	3.2424
Gas Plant	Silver	1.05	1.05	0.2838	33.87	.	.
Gas Plant	Sulfate	1200	.	.	.	.	.
Gas Plant	Sulfide	2800	.	.	.	.	.
Gas Plant	Thallium	4.4	.	.	63.77	12.941	7.586
Gas Plant	Vanadium	110	.	.	5.19	1.685	0.815
Gas Plant	Zinc	300	2	0.7317	8	2.885	0.6536

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients			Amphipod	
			ER-L	ER-M	Nereis NOEC	LC20	LC50
Gas Plant	Ammonia as Nitrogen	40	.	.	.	.	.
Gas Plant	4,4'-DDD	0.16	80	8	25.4	.	.
Gas Plant	4,4'-DDE	0.013	5.91	0.4815	2.241	.	.
Gas Plant	4,4'-DDT	0.00058	0.58	0.0829	0.034	.	.
Gas Plant	Acenaphthene	0.7	43.75	1.4	6.14	.	.
Gas Plant	Benzo(a)anthracene	0.41	1.57088	0.25625	117.14	.	.
Gas Plant	Benzo(a)pyrene	0.41	0.95349	0.25625	64.06	.	.
Gas Plant	Benzo(b)fluoranthene	0.41	.	.	56.16	7.057	0.121
Gas Plant	Benzo(g,h,i)perylene	0.55	.	.	166.67	.	.
Gas Plant	Benzo(k)fluoranthene	0.41	.	.	95.35	.	.
Gas Plant	BHC-alpha	0.00052	.	.	1.24	.	.
Gas Plant	BHC-beta	0.0012	.	.	0.14	.	0.03125
Gas Plant	Chlorobenzene	1.85	.	.	.	.	.
Gas Plant	Chrysene	0.41	1.068	0.1464	3.83	1.608	0.538
Gas Plant	Dieldrin	0.0021	105	0.2625	3.684	.	.
Gas Plant	Di-n-butylphthalate	0.15	.	.	19.737	.	.
Gas Plant	Di-n-octylphthalate	0.59	.	.	2.757	11.368	1.8612
Gas Plant	Ethylbenzene	1.85	.	.	.	.	.
Gas Plant	Fluoranthene	0.41	0.683	0.08039	101.74	.	.
Gas Plant	Fluorene	3.6	189.474	6.66667	14.12	7826.09	366.599
Gas Plant	Naphthalene	2.5	15.63	1.19	8.47	.	.
Gas Plant	n-Propylbenzene	1.3	.	.	.	.	.
Gas Plant	Oil and Grease	29000	.	.	4754.10	83.8	3.07
Gas Plant	Aroclor 1254	0.067	.	.	7.701	.	.
Gas Plant	Aroclor 1260	0.65	.	.	185.714	.	.
Gas Plant	PCB 138	0.048	.	.	.	.	.
Gas Plant	PCB 153	0.046	.	.	.	.	.
Gas Plant	PCB 180	0.08	.	.	.	.	.
Gas Plant	Phenanthrene	1.5	6.25	1	2.49	34.325	6.0976
Gas Plant	Pyrene	0.41	0.617	0.1577	20.2	.	.
Gas Plant	TPH-Diesel	1700	.	.	817.31	48.0	4.0
Gas Plant	TPH-Diesel and Waste oil	14700	.	.	.	27.3	4.5
Gas Plant	Waste oil	13000	.	.	2708.33	46.1	4.3
Gas Plant	High MW PAHs	0.249	0.15	0.026	2.33	.	.
Gas Plant	Low MW PAHs	6.75	12.23	2.136	5.33	136.36	19.97
Gas Plant	Total DDT	0.173	109.494	3.75271	5.97	.	.
Gas Plant	Total PAHs	6.91	1.718	0.15427	5.03	44.295	6.27
Gas Plant	Total PCB	0.65	28.634	3.6111	74.71	.	.
Gas Plant	Total phthalate esters	0.59	.	.	2.76	.	.
Gas Plant	Total volatile solids	16	.	.	.	.	.
Muted Tidal	Antimony	0.95	.	.	.	.	.
Muted Tidal	Arsenic	130	15.854	1.8571	8.13	.	.
Muted Tidal	Barium	9270	.	.	210.68	.	.
Muted Tidal	Beryllium	4.2	.	.	14.48	5.385	0.948
Muted Tidal	Cadmium	4.1	3.42	0.427	75.93	.	.
Muted Tidal	Chromium	120	1.481	0.3243	10.34	2.29	1.091
Muted Tidal	Cobalt	59	.	.	36.65	5.9	2.744
Muted Tidal	Copper	400	11.765	1.4815	74.07	.	.
Muted Tidal	Lead	9600	205.567	44.0367	721.8	.	.
Muted Tidal	Mercury	0.66	4.4	0.93	11.19	.	.
Muted Tidal	Molybdenum	8.1	.	.	.	.	.
Muted Tidal	Nickel	100	4.785	1.938	5.75	5.102	1.721
Muted Tidal	Selenium	4.2	.	.	45.65	15	2.5455
Muted Tidal	Silver	0.8	0.8	0.2162	25.81	.	.
Muted Tidal	Sulfate	10200	.	.	.	.	.
Muted Tidal	Sulfide	110	.	.	.	.	.
Muted Tidal	Thallium	4	.	.	57.97	11.765	6.897
Muted Tidal	Vanadium	130	.	.	6.13	1.991	0.963
Muted Tidal	Zinc	460	3.067	1.122	12.267	4.423	1.0022
Muted Tidal	Ammonia as Nitrogen	240	.	.	.	.	.
Muted Tidal	Chloride	17400	.	.	.	.	.
Muted Tidal	Phosphorus, Total as P	7.2	.	.	.	.	.
Muted Tidal	Phosphorus, Total as PO4	21.9	.	.	.	.	.
Muted Tidal	1,2-Dichlorobenzene	0.006	.	.	.	.	.
Muted Tidal	1,2-Dichloroethane	0.006	.	.	.	.	.
Muted Tidal	1,3-Dichlorobenzene	0.006	.	.	.	.	.
Muted Tidal	1,4-Dichlorobenzene	0.006	.	.	.	.	.

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients			Amphipod	LC50
			ER-L	ER-M	Nereis NOEC		
Muted Tidal	2-Butanone	0.06	.	.	.	.	.
Muted Tidal	4,4'-DDD	0.13	65	6.5	20.635	.	.
Muted Tidal	4,4'-DDE	0.045	20.45	1.6667	7.759	.	.
Muted Tidal	4,4'-DDT	0.067	67	9.5714	3.964	.	.
Muted Tidal	Acenaphthylene	4.8	.	.	.	.	.
Muted Tidal	Acetone	0.39	.	.	.	.	.
Muted Tidal	Anthracene	0.315	3.693	0.2864	90	.	.
Muted Tidal	Benzene	0.006	.	.	.	.	.
Muted Tidal	Benzo(a)anthracene	0.315	1.2069	0.19688	90	.	.
Muted Tidal	Benzo(a)pyrene	0.315	0.73256	0.19688	49.22	.	.
Muted Tidal	Benzo(b)fluoranthene	0.73	.	.	100	12.565	0.215
Muted Tidal	Benzo(e)pyrene	0.315	.	.	62.5	.	.
Muted Tidal	Benzo(g,h,i)perylene	0.65	.	.	196.97	.	.
Muted Tidal	Benzo(k)fluoranthene	0.315	.	.	73.26	.	.
Muted Tidal	BHC-alpha	0.0025	.	.	5.95	.	.
Muted Tidal	BHC-beta	0.00695	.	.	0.8	.	0.18099
Muted Tidal	BHC-delta	0.0054	.	.	28.42	.	.
Muted Tidal	BHC-gamma	0.0018	.	.	18	.	.
Muted Tidal	Bis(2-ethylhexyl)phthalate	2.6	.	.	38.69	.	.
Muted Tidal	Butylbenzylphthalate	0.56	.	.	29.17	.	.
Muted Tidal	Chlordane (technical)	0.11	220	18.3333	1.7	.	.
Muted Tidal	Chlordane-alpha	0.027	54	4.5	2.7	.	.
Muted Tidal	Chlordane-gamma	0.015	30	2.5	2.78	.	.
Muted Tidal	Chrysene	0.62	1.615	0.2214	5.79	2.431	0.814
Muted Tidal	Dieldrin	0.026	1300	3.25	45.614	.	.
Muted Tidal	Diethylphthalate	0.5	.	.	.	.	.
Muted Tidal	Dimethylphthalate	0.315	.	.	225	.	.
Muted Tidal	Di-n-butylphthalate	0.65	.	.	85.526	.	.
Muted Tidal	Di-n-octylphthalate	0.69	.	.	3.224	13.2948	2.1767
Muted Tidal	Endosulfan I	0.105	.	.	123.53	.	.
Muted Tidal	Endosulfan II	0.026	.	.	.	.	.
Muted Tidal	Endrin	0.029	.	.	37.18	42.65	4.102
Muted Tidal	Endrin aldehyde	0.14	.	.	2153.85	69.65	13.592
Muted Tidal	Endrin ketone	0.14	.	.	3181.82	1272.73	200
Muted Tidal	Fluoranthene	0.315	0.525	0.06176	78.16	.	.
Muted Tidal	Fluorene	0.315	16.579	0.58333	1.24	684.78	32.077
Muted Tidal	Indeno(1,2,3-c,d)pyrene	0.65	.	.	260	.	.
Muted Tidal	MCPP	0.098	.	.	.	.	.
Muted Tidal	Methylene chloride	0.006	.	.	.	.	.
Muted Tidal	Naphthalene	0.315	1.97	0.15	1.07	.	.
Muted Tidal	Oil and Grease	77000	.	.	12622.95	223	8.15
Muted Tidal	Aroclor 1254	0.12	.	.	13.793	.	.
Muted Tidal	Aroclor 1260	2.8	.	.	800	.	.
Muted Tidal	PCB 101	0.039	.	.	.	.	.
Muted Tidal	PCB 138	0.22	.	.	.	.	.
Muted Tidal	PCB 153	0.24	.	.	.	.	.
Muted Tidal	PCB 170	0.17	.	.	.	.	.
Muted Tidal	PCB 180	0.36	.	.	.	.	.
Muted Tidal	PCB 187	0.085	.	.	.	.	.
Muted Tidal	PCB 206	0.01	.	.	.	.	.
Muted Tidal	Phenanthrene	0.63	2.625	0.42	1.04	14.416	2.561
Muted Tidal	Phenol	1.6	.	.	258.06	.	.
Muted Tidal	Pyrene	0.315	0.474	0.1212	15.52	.	.
Muted Tidal	Tetrachloroethene	0.01	.	.	.	.	.
Muted Tidal	Toluene	0.006	.	.	.	.	.
Muted Tidal	TPH-Diesel	7000	.	.	3365.38	198	16.5
Muted Tidal	TPH-Diesel and Waste oil	47000	.	.	.	87.2	14.4
Muted Tidal	Waste oil	40000	.	.	8333.33	142	13.2
Muted Tidal	Xylene (total)	0.006	.	.	.	.	.
Muted Tidal	High MW PAHs	0.62	0.36	0.065	5.79	.	.
Muted Tidal	Low MW PAHs	0.63	1.14	0.199	0.5	12.73	1.86
Muted Tidal	Total DDT	0.168	106.329	3.64425	5.79	.	.
Muted Tidal	Total PAHs	0.63	0.157	0.01407	0.46	4.038	0.572
Muted Tidal	Total PCB	2.8	123.348	15.5556	321.84	.	.
Muted Tidal	Total phenol	0.3	.	.	2.8	.	.
Muted Tidal	Total phthalate esters	3.11	.	.	14.53	.	.
Muted Tidal	Total volatile solids	39	.	.	.	.	.

Table I-3
Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area		Maximum (mg/Kg)	Hazard Quotients		
			ER-L	ER-M	Nereis NOEC
Seasonal Ponds	Arsenic	320	39.024	4.5714	20
Seasonal Ponds	Barium	12100	.	.	275
Seasonal Ponds	Beryllium	3.2	.	.	11.03
Seasonal Ponds	Cadmium	1.165	0.97	0.121	21.57
Seasonal Ponds	Chromium	250	3.086	0.6757	21.55
Seasonal Ponds	Cobalt	18	.	.	11.18
Seasonal Ponds	Copper	58	1.706	0.2148	10.74
Seasonal Ponds	Lead	220	4.711	1.0092	16.54
Seasonal Ponds	Mercury	1.11	7.4	1.563	18.81
Seasonal Ponds	Molybdenum	4.1	.	.	.
Seasonal Ponds	Nickel	202	9.665	3.915	11.61
Seasonal Ponds	Selenium	5.5	.	.	59.78
Seasonal Ponds	Silver	1.165	1.165	0.3149	37.58
Seasonal Ponds	Sulfate	20000	.	.	.
Seasonal Ponds	Sulfide	11000	.	.	.
Seasonal Ponds	Thallium	3.4	.	.	49.28
Seasonal Ponds	Vanadium	120	.	.	5.66
Seasonal Ponds	Zinc	351	2.34	0.8561	9.36
Seasonal Ponds	Ammonia as Nitrogen	420	.	.	.
Seasonal Ponds	2,4,5-TP (Silvex)	0.31	.	.	.
Seasonal Ponds	2-Butanone	0.07	.	.	.
Seasonal Ponds	4,4'-DDD	0.053	26.5	2.65	8.413
Seasonal Ponds	4,4'-DDE	0.074	33.64	2.7407	12.759
Seasonal Ponds	4,4'-DDT	0.0068	6.8	0.9714	0.402
Seasonal Ponds	4-Nitrophenol	4.4	.	.	.
Seasonal Ponds	Acetone	0.16	.	.	.
Seasonal Ponds	Anthracene	0.65	7.62	0.5909	185.71
Seasonal Ponds	Benzo(a)anthracene	0.65	2.49042	0.40625	185.71
Seasonal Ponds	Benzo(a)pyrene	0.65	1.51163	0.40625	101.56
Seasonal Ponds	Benzo(b)fluoranthene	0.65	.	.	89.04
Seasonal Ponds	Benzo(e)pyrene	0.65	.	.	128.97
Seasonal Ponds	Benzo(k)fluoranthene	0.65	.	.	151.16
Seasonal Ponds	BHC-alpha	0.0027	.	.	6.43
Seasonal Ponds	BHC-beta	0.012	.	.	1.38
Seasonal Ponds	BHC-gamma	0.0008	.	.	8
Seasonal Ponds	Bis(2-ethylhexyl)phthalate	0.65	.	.	9.67
Seasonal Ponds	Butylbenzylphthalate	0.65	.	.	33.85
Seasonal Ponds	Carbon disulfide	0.05	.	.	.
Seasonal Ponds	Chrysene	0.65	1.693	0.2321	6.07
Seasonal Ponds	Dalapon	0.31	.	.	.
Seasonal Ponds	Dibenz(a,h)anthracene	0.9	14.196	3.4615	.
Seasonal Ponds	Dieldrin	0.0032	160	0.4	5.614
Seasonal Ponds	Diethylphthalate	0.65	.	.	.
Seasonal Ponds	Di-n-butylphthalate	0.65	.	.	85.526
Seasonal Ponds	Di-n-octylphthalate	0.65	.	.	3.037
Seasonal Ponds	Endosulfan I	0.013	.	.	15.29
Seasonal Ponds	Endosulfan Sulfate	0.065	.	.	.
Seasonal Ponds	Endrin	0.019	.	.	24.36
Seasonal Ponds	Endrin aldehyde	0.017	.	.	261.54
Seasonal Ponds	Fluoranthene	0.65	1.083	0.12745	161.29
Seasonal Ponds	Methylene chloride	0.01	.	.	.
Seasonal Ponds	Oil and Grease	15000	.	.	2459.02
Seasonal Ponds	Aroclor 1254	0.083	.	.	9.54
Seasonal Ponds	Phenanthrene	4.8	20	3.2	7.96
Seasonal Ponds	Pyrene	0.65	0.977	0.25	32.02
Seasonal Ponds	TPH-Diesel	1650	.	.	793.27
Seasonal Ponds	TPH-Diesel and Waste oil	10150	.	.	.
Seasonal Ponds	Waste oil	8500	.	.	1770.83
Seasonal Ponds	High MW PAHs	0.463	0.27	0.048	4.33
Seasonal Ponds	Low MW PAHs	0.033	0.06	0.01	0.03
Seasonal Ponds	Total DDT	0.0812	51.392	1.76139	2.8
Seasonal Ponds	Total PAHs	0.496	0.123	0.01107	0.36
Seasonal Ponds	Total PCB	0.083	3.656	0.4611	9.54
Seasonal Ponds	Total phthalate esters	0.234	.	.	1.09
Seasonal Ponds	Total volatile solids	17	.	.	.

Notes:

Non-detects for Tetra Tech data were given a "0" value

Table I-3
 Sediment/Soil Risk Estimates for Aquatic Invertebrates
Bolsa Chica Lowlands

Area	Maximum (mg/Kg)	Hazard Quotients			Amphipod	
		ER-L	ER-M	<i>Nereis</i> NOEC	LC20	LC50

The sediment bioaccumulation studies using *Nereis* showed significantly increased levels of bioaccumulation, but they did not show any toxic response (e.g., no significant mortality). As such, the calculated NOECs used to estimate risks were the maximum chemical concentrations in the tested media. It is likely that toxic levels are at higher concentrations than those tested on *Nereis*, so the reported HQs are probably overestimated.

Table I-4

Surface Water Risk Estimates for Aquatic Plants, Invertebrates, and Fish
Bolsa Chica Lowlands

Area	Analyte	Maximum	Units	Hazard Quotients						
				California Water Quality Standards		Fish NOEC	Ceriodaphnia		Mysidopsis NOEC	Aquatic Plant Lowest Chronic Value
				Acute	Chronic		NOEC	LOEC		
Bolsa Bay	Arsenic, Dissolved	1.6	ug/L	0.02319	0.04444	0.16	1.0667	0.5333	0.0842	0.00069
Bolsa Bay	Beryllium, Dissolved	82	ug/L	.	.	1.09333	.	.	.	0.00082
Bolsa Bay	Cadmium, Dissolved	0.15	ug/L	0.00357	0.01613	0.625	2.7273	1.3636	1.0714	0.075
Bolsa Bay	Chromium, Dissolved	27	ug/L	.	.	1.08	16.36	8.18	4.43	0.068
Bolsa Bay	Copper, Dissolved	7.2	ug/L	1.5	2.3226	1.059	1.11	0.55	1.67	7.2
Bolsa Bay	Lead, Dissolved	0.46	ug/L	0.00219	0.05679	0.5	1.64	0.82	1.64	0.00092
Bolsa Bay	Silver, Dissolved	0.29	ug/L	0.15263	.	1.03571	6.5169	3.2584	3.4524	0.00967
Bolsa Bay	Sulfate	2300000	ug/L	.	.	.	63.01	31.51	7.19	.
Bolsa Bay	Zinc, Dissolved	14	ug/L	0.15556	0.17284	1.17	0.9	0.45	1.71	0.46667
Full Tidal	Arsenic, Dissolved	33	ug/L	0.47826	0.91667	3.3	22	11	1.7368	0.01422
Full Tidal	Barium, Dissolved	130	ug/L	.	.	1.08333	10.8333	5.4167	1.4773	.
Full Tidal	Beryllium, Dissolved	190	ug/L	.	.	2.53333	.	.	.	0.0019
Full Tidal	Cadmium, Dissolved	0.8	ug/L	0.01905	0.08602	3.33333	14.5455	7.2727	5.7143	0.4
Full Tidal	Chromium, Dissolved	37	ug/L	.	.	1.48	22.42	11.21	6.07	0.0932
Full Tidal	Cobalt, Dissolved	0.79	ug/L	.	.	1.362	5.85	2.93	1.25	.
Full Tidal	Copper, Dissolved	7.8	ug/L	1.625	2.5161	1.147	1.2	0.6	1.81	7.8
Full Tidal	Lead, Dissolved	1.8	ug/L	0.00857	0.22222	1.96	6.43	3.21	6.43	0.0036
Full Tidal	Mercury	0.11	ug/L	.	.	3.333	.	.	.	0.022
Full Tidal	Nickel, Dissolved	24	ug/L	0.32432	2.9268	3.288	.	.	3	4.8
Full Tidal	Silver, Dissolved	0.25	ug/L	0.13158	.	0.89286	5.618	2.809	2.9762	0.00833
Full Tidal	Sulfate	6300000	ug/L	.	.	.	172.6	86.3	19.69	.
Full Tidal	Zinc, Dissolved	12	ug/L	0.13333	0.14815	1	0.77	0.39	1.46	0.4
Full Tidal	Dieldrin	0.01	ug/L	0.01831	6.8421	3.333	2.17	1.08	.	.
Full Tidal	Endrin	0.05	ug/L	1.45946	23.4783	3.375	.	.	.	.
Full Tidal	TPH-Diesel	3100	ug/L	.	.	3.3	30	15	10	.
Full Tidal	Waste oil	14000	ug/L	.	.	3.3	31	16	12	.
Future Full Tidal	Arsenic	43	ug/L	0.62319	1.19444	4.3	30.7143	15.3571	1	0.01853
Future Full Tidal	Arsenic, Dissolved	19	ug/L	0.27536	0.52778	1.9	12.6667	6.3333	1	0.00819
Future Full Tidal	Barium	660	ug/L	.	.	5.5	45.5172	22.7586	1	.
Future Full Tidal	Barium, Dissolved	88	ug/L	.	.	0.73333	7.3333	3.6667	1	.
Future Full Tidal	Beryllium, Dissolved	23	ug/L	.	.	0.30667	.	.	.	0.00023
Future Full Tidal	Cadmium	0.59	ug/L	0.01405	0.06344	2.45833	2	1	21.8519	0.295
Future Full Tidal	Cadmium, Dissolved	0.47	ug/L	0.01119	0.05054	1.95833	8.5455	4.2727	3.3571	0.235
Future Full Tidal	Chromium	13	ug/L	.	.	0.52	2.63	1.31	1	0.0327
Future Full Tidal	Chromium, Dissolved	12.5	ug/L	.	.	0.5	7.58	3.79	2.05	0.0315
Future Full Tidal	Cobalt	3	ug/L	.	.	5.17241	9.2308	4.6154	1.7647	.
Future Full Tidal	Cobalt, Dissolved	0.63	ug/L	.	.	1.086	4.67	2.33	1	.
Future Full Tidal	Copper	15	ug/L	3.125	4.8387	2.206	1.76	0.88	0.88	15
Future Full Tidal	Copper, Dissolved	13	ug/L	2.70833	4.1935	1.912	2	1	3.02	13
Future Full Tidal	Lead	25	ug/L	0.11905	3.08642	27.17	16.67	8.33	1	0.05
Future Full Tidal	Lead, Dissolved	0.92	ug/L	0.00438	0.11358	1	3.29	1.64	3.29	0.00184
Future Full Tidal	Mercury	0.13	ug/L	.	.	3.939	.	.	.	0.026
Future Full Tidal	Nickel	13	ug/L	0.17568	1.5854	1.781	2.92	1.46	0.24	0.2364
Future Full Tidal	Nickel, Dissolved	8	ug/L	0.10811	0.9756	1.096	.	.	1	1.6
Future Full Tidal	Silver	1	ug/L	0.52632	.	3.57143	8.3333	4.1667	1	0.03333
Future Full Tidal	Silver, Dissolved	0.19	ug/L	0.1	.	0.67857	4.2697	2.1348	2.2619	0.00633
Future Full Tidal	Sulfate	1800000	ug/L	.	.	.	49	25	5.6	.
Future Full Tidal	Vanadium	84	ug/L	.	.	.	11.2	5.6	1	.
Future Full Tidal	Vanadium, Dissolved	6.8	ug/L	.	.	.	.	.	.	.
Future Full Tidal	Zinc	75	ug/L	0.83333	0.92593	6.25	2	1	1.07	2.5
Future Full Tidal	Zinc, Dissolved	31	ug/L	0.34444	0.38272	2.58	2	1	3.78	1.03333
Future Full Tidal	2,4-D	1.2	ug/L	.	.	.	2	1	.	.
Future Full Tidal	2,4-DB	5	ug/L	.	.	.	.	.	.	.
Future Full Tidal	4,4'-DDT	0.01	ug/L	0.1	13	.	.	.	1	0.0433
Future Full Tidal	4-Nitrophenol	25	ug/L	.	.	.	45.4545	22.7273	36.7647	.
Future Full Tidal	BHC-delta	0.082	ug/L	.	.	.	2	1	2.3429	.
Future Full Tidal	Chlorpyrifos	0.1	ug/L	.	.	.	2	1	.	.
Future Full Tidal	Diazinon	0.5	ug/L	.	.	.	3.03	1.52	2.5	.
Future Full Tidal	Dicamba	0.1	ug/L	.	.	.	2	1	.	.
Future Full Tidal	Dieldrin	0.01	ug/L	0.01972	7.3684	3.59	2.33	1.17	.	.
Future Full Tidal	Malathion	0.2	ug/L	.	.	.	2	1	.	.
Future Full Tidal	TPH-Diesel	370	ug/L	.	.	0.39	3.5	1.8	1.2	.
Future Full Tidal	Waste oil	1200	ug/L	.	.	0.28	2.7	1.3	1.0	.
Future Full Tidal	Total DDT	0.01	ug/L	.	.	.	.	.	1	.

Table I-4
Surface Water Risk Estimates for Aquatic Plants, Invertebrates, and Fish
Bolsa Chica Lowlands

Area	Analyte	Maximum	Units	Hazard Quotients							
				California Water Quality Standards		Fish NOEC	Ceriodaphnia		Mysidopsis NOEC	Aquatic Plant Lowest Chronic Value	
				Acute	Chronic		NOEC	LOEC			
Garden Grove	Arsenic	2.2	ug/L	0.03188	0.06111	0.22	1.5714	0.7857	0.0512	0.00095	
Garden Grove	Arsenic, Dissolved	2.1	ug/L	0.03043	0.05833	0.21	1.4	0.7	0.1105	0.00091	
Garden Grove	Barium	41	ug/L	.	.	0.34167	2.8276	1.4138	0.0621	.	
Garden Grove	Barium, Dissolved	39	ug/L	.	.	0.325	3.25	1.625	0.4432	.	
Garden Grove	Cadmium	0.7	ug/L	0.01667	0.07527	2.91667	2.3729	1.1864	25.9259	0.35	
Garden Grove	Cadmium, Dissolved	0.11	ug/L	0.00262	0.01183	0.45833	2	1	0.7857	0.055	
Garden Grove	Chromium	8	ug/L	.	.	0.32	1.62	0.81	0.62	0.0202	
Garden Grove	Chromium, Dissolved	6.1	ug/L	.	.	0.244	3.7	1.85	1	0.0154	
Garden Grove	Cobalt	1.3	ug/L	.	.	2.24138	4	2	0.7647	.	
Garden Grove	Copper	17	ug/L	3.54167	5.4839	2.5	2	1	1	17	
Garden Grove	Copper, Dissolved	4.7	ug/L	0.97917	1.5161	0.691	0.72	0.36	1.09	4.7	
Garden Grove	Lead	6.2	ug/L	0.02952	0.76543	6.74	4.13	2.07	0.25	0.0124	
Garden Grove	Lead, Dissolved	0.8	ug/L	0.00381	0.09877	0.87	2.86	1.43	2.86	0.0016	
Garden Grove	Mercury	0.1	ug/L	.	.	3.03	.	.	.	0.02	
Garden Grove	Nickel	54	ug/L	0.72973	6.5854	7.397	12.13	6.07	1	0.9818	
Garden Grove	Selenium	1.4	ug/L	0.00483	0.01972	.	.	.	.	0.014
Garden Grove	Sulfate	320000	ug/L	.	.	.	8.77	4.38	1	.	
Garden Grove	Vanadium	81	ug/L	.	.	.	10.8	5.4	0.96	.	
Garden Grove	Vanadium, Dissolved	6.6	ug/L	.	.	.	.	.	.	.
Garden Grove	Zinc	64	ug/L	0.71111	0.79012	5.33	1.71	0.85	0.91	2.13333	
Garden Grove	Zinc, Dissolved	11	ug/L	0.12222	0.1358	0.92	0.71	0.35	1.34	0.36667	
Garden Grove	2,4-DB	2.8	ug/L	.	.	.	.	.	.	.
Garden Grove	4-Nitrophenol	25	ug/L	.	.	.	45.4545	22.7273	36.7647	.	
Garden Grove	BHC-delta	0.035	ug/L	.	.	.	0.8537	0.4268	1	.	
Garden Grove	BHC-gamma	0.012	ug/L	0.075	.	.	.	.	1	0.00002
Garden Grove	Diazinon	0.5	ug/L	.	.	.	3.03	1.52	2.5	.	
Garden Grove	Dieldrin	0.1	ug/L	0.13803	51.5789	25.128	16.33	8.17	.	.	
Garden Grove	TPH-Diesel	330	ug/L	.	.	0.35	3.14	1.57	1.06	.	
Garden Grove	Waste oil	1900	ug/L	.	.	0.45	4.3	2.1	1.6	.	
Seasonal Ponds	Arsenic, Dissolved	10	ug/L	0.14493	0.27778	1	6.6667	3.3333	0.5263	0.00431	
Seasonal Ponds	Barium	78.2	ug/L	.	.	0.65167	5.3931	2.6966	0.1185	.	
Seasonal Ponds	Barium, Dissolved	120	ug/L	.	.	1	10	5	1.3636	.	
Seasonal Ponds	Beryllium, Dissolved	37	ug/L	.	.	0.49333	.	.	.	0.00037	
Seasonal Ponds	Cadmium, Dissolved	0.15	ug/L	0.00357	0.01613	0.625	2.7273	1.3636	1.0714	0.075	
Seasonal Ponds	Chromium, Dissolved	12.5	ug/L	.	.	0.5	7.58	3.79	2.05	0.0315	
Seasonal Ponds	Cobalt, Dissolved	0.42	ug/L	.	.	0.724	3.11	1.56	0.67	.	
Seasonal Ponds	Copper	1.5	ug/L	0.3125	0.4839	0.221	0.18	0.09	0.09	1.5	
Seasonal Ponds	Copper, Dissolved	6.7	ug/L	1.39583	2.1613	0.985	1.03	0.52	1.56	6.7	
Seasonal Ponds	Lead, Dissolved	1.6	ug/L	0.00762	0.19753	1.74	5.71	2.86	5.71	0.0032	
Seasonal Ponds	Silver, Dissolved	0.64	ug/L	0.33684	.	2.28571	14.382	7.191	7.619	0.02133	
Seasonal Ponds	Sulfate	1500000	ug/L	.	.	.	41	21	4.7	.	
Seasonal Ponds	Vanadium, Dissolved	7.6	ug/L	.	.	.	.	.	.	.
Seasonal Ponds	Zinc	136	ug/L	1.51111	1.67901	11.33	3.63	1.81	1.94	4.53333	
Seasonal Ponds	Zinc, Dissolved	85	ug/L	0.94444	1.04938	7.08	5.48	2.74	10.37	2.83333	
Seasonal Ponds	BHC-beta	0.088	ug/L	.	.	1	.	.	.	.
Seasonal Ponds	Diazinon	1.8	ug/L	.	.	.	10.91	5.45	9	.	
Seasonal Ponds	TPH-Diesel	600	ug/L	.	.	0.64	5.7	2.9	1.9	.	
Seasonal Ponds	Waste oil	1700	ug/L	.	.	0.4	3.8	1.9	1.4	.	

Notes:

Non-detects for Tetra Tech data were given a "0" value

The toxicity tests for fish and *Mysidopsis* did not show any toxic response (e.g., no significant mortality). As such, the calculated NOECs used to estimate risks were the maximum chemical concentrations in the tested media. It is likely that toxic levels are at higher concentrations than those tested, so the reported HQs are probably overestimated.