

**Table G-1. Statistical summary of contaminant concentrations by parameter and media**

Table G-1. Statistical summary of contaminant concentrations by parameter and media.																																				
Parameter	Matrix	Case	Data summary						Kaplan - Meier test (Case A parameters)								Regression on statistics (Case B parameters)						Peto Prentice test (Land use significance)													
			% non-detect	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM 95UL	KM 95UL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	Peto Prentice p-value	Peto Prentice chiq	Peto Prentice df	PPCC test	Seasonal Wilcoxon p-value							
									-	-	-	-	-	-	-	-	102.9	2.1423	5.52688	45.5500	431.0000	215.1	0.9	-	-	-	-	reject Ho	0.4713							
1-Methylnaphthalene	sediment (ug/L)	B	59.6	52	21	31	1.07	870	0.1	690	-	-	-	-	-	-	-	102.9	2.1423	5.52688	45.5500	431.0000	215.1	0.9	-	-	-	-	-	0.096						
1-Methylnaphthalene	water (ug/L)	C	96.3	200	11	278	0.1	1.5	0.1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
2-Methylnaphthalene	sediment (ug/kg)	B	52.6	76	37	41	1.12	1500	0.1	690	-	-	-	-	-	-	-	102.9	4.7192	13.2771	72.2500	285.0000	231.4	1.0	-	-	-	-	-	0.5746						
2-Methylnaphthalene	water (ug/L)	C	82.8	634	100	525	0.003	2.5	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0343								
2-Nitrophenol	sediment (ug/kg)	A	100	23	6	23	-	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000								
2-Nitrophenol	sediment (ug/kg)	C	91.7	12	1	11	340	340	10	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5554									
2,4-D	sediment (ug/kg)	C	83.1	504	102	502	0.02	28.4	0.05	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0000								
2,4-Dichlorophenol	sediment (ug/kg)	C	100	24	0	24	-	1	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000								
2,4-Dimethylphenol	sediment (ug/kg)	C	99.9	42	3	39	6.1	17.4	1	2700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4556									
2,4-Trichlorophenol	sediment (ug/kg)	C	100	24	0	24	-	1	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000									
4-Chloro-3-Methylphenol	sediment (ug/kg)	C	95.2	21	1	20	83.6	83.6	1	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.683									
4-Nitrophenol	sediment (ug/kg)	C	95.2	21	1	20	4.64	4.64	1	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000									
Acenaphthene	sediment (ug/kg)	A	45.6	79	43	36	8.7	8900	0.1	530	921.3	210.1	509.5	1333.0	-	33.8	1000	3400	1867.2	-	-	-	-	-	1.0	8.36E-06	26.27380597	3	reject Ho	0.4211						
Acenaphthene	water (ug/L)	C	90.2	634	62	572	0.003	1.5	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4211								
Acenaphthylene	sediment (ug/kg)	B	67.1	79	26	53	15.8	3600	0.1	530	-	-	-	-	-	-	-	-	243.5	20.2227	27.7562	230.0000	772.0000	515.5	0.9	-	-	-	-	reject Ho	0.4211					
Acenaphthylene	water (ug/L)	C	93.5	634	41	593	0.003	1.5	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4211								
Ammonia	water (ug/L)	A	0	2	0	0	1.6	1260	-	-	179.0	21.3	137.3	220.6	80	136	225	296	179.1	-	-	-	-	-	1.0	0.00017445	17.30773761	2	do not reject Ho	0.0939						
Anthracene	sediment (ug/kg)	A	26.6	79	58	21	17	33000	0.1	530	3833.3	810.3	2454.0	5421.5	-	21	6000	17000	7202.4	-	-	-	-	-	1.0	1.22E-05	25.48566109	3	reject Ho	0.4211						
Anthracene	water (ug/L)	C	88.8	634	71	563	0.004	5.4	0.004	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0798									
As(III)	water dissolved (ug/L)	A	0	16	16	0	0.17	1.04	-	-	0.3	0.1	0.2	0.4	0.2	0.25	0.4	0.46	0.2	-	-	-	-	-	0.9	-	-	reject Ho	0.0798							
As(III)	water dissolved (ug/L)	B	11.6	69	61	8	9.4	210000	1	500	21557.2	4818.2	12113.7	31000.7	110	800	28000	82000	40022.9	-	-	-	-	-	1.0	0.00010872	19.93264235	3	reject Ho	0.4211						
Benzo(a)anthracene	sediment (ug/kg)	B	65.6	511	176	335	0.004	1.1	0.002	1.1	-	-	-	-	-	-	-	-	0.2	0.0009	0.0060	0.0335	0.1900	1.1	1.0	-	-	-	do not reject Ho	0.4211						
Benzo(a)anthracene	water (ug/L)	C	99.2	120	1	118	2.6	2.6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5545									
Benzo(a)pyrene	sediment (ug/kg)	A	17.7	79	65	14	16.2	260000	0.1	500	22986.5	5193.2	12808.0	33165.0	120	720	31000	77000	46158.2	-	-	-	-	-	1.0	1.31E-05	25.3441293	3	reject Ho	0.4211						
Benzo(a)pyrene	water (ug/L)	B	71.6	634	179	452	0.004	15	0.004	1.1	-	179.0	21.3	137.3	220.6	80	136	225	296	179.1	-	-	-	-	-	1.0	0.0001217	15.76465594	3	reject Ho	0.4211					
Benzo(b)fluoranthene	sediment (ug/kg)	A	20	45	45	36	9	1.07	240000	0.1	220	18471.6	6451.2	5827.5	31115.7	82.4	240	17000	49000	43275.9	-	-	-	-	-	1.0	0.0004098	18.14897872	3	reject Ho	0.518					
Benzo(b)fluoranthene	water (ug/L)	B	69.6	359	109	250	0.02	13	0.004	0.5	-	1294.4	303.8	699.0	1889.9	370	1400	1700	911.4	-	-	-	-	-	1.0	0.00027	0.0140	0.1000	0.3144	1.4	1.0	-	-	-	do not reject Ho	0.345
Benzo(b)fluoranthene	water (ug/L)	C	0	9	0	9	110	2900	-	-	1294.4	303.8	699.0	1889.9	370	1400	1700	911.4	-	-	-	-	-	1.0	0.0002	0.0140	0.1000	0.3144	1.4	1.0	-	-	-	do not reject Ho	NA	
Benzo(b)fluoranthene	water (ug/L)	B	50.3	126	62	64	0.005	1.3	0.003	0.21	-	17140.3	3755.7	9779.3	24501.2	180	800	24000	52000	31645.7	-	-	-	-	-	1.0	0.00018355	19.83603973	3	reject Ho	0.018					
Benzo(h,j)perylene	sediment (ug/kg)	A	11.3	71	63	8	16	160000	1	500	17140.3	3755.7	9779.3	24501.2	180	800	24000	52000	31645.7	-	-	-	-	-	1.0	0.0002	0.0132	0.0750	0.2800	0.9	1.0	-	-	-	do not reject Ho	0.672
Benzo(h,j)perylene	water (ug/L)	B	60	633	235	380	0.004	12	0.003	1.1	-	17011.7	6084.8	5085.8	28937.6	10.2	131	13000	49000	40817.7	-	-	-	-	-	1.0	0.00126717	15.76465594	3	reject Ho	0.312					
Benzo(k)fluoranthene	water (ug/L)	B	75	273	6	273	0.014	13	0.004	0.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0000								
Benzo(a,h)fluoranthene	sediment (ug/kg)	A	0	34	34	1	34	340000	-	-	83220.6	15731.5	5287.5	114053.7	2070	57000	220000	91729.4	-	-	-	-	-	1.0	0.03226637	8.78663775	3	reject Ho	0.443							
Benzo(a,h)fluoranthene	water (ug/L)	B	54.4	149	68	81	0.066	5.7	0.004	2.3	-	-	-	-	-	-	-	0.3	0.0301	0.0907	0.2800	1.0220	0.7	1.0	-	-	-	1.0	0.0001217	7.79177761	3	reject Ho	0.443			
biochemical Oxygen Demand	water (ug/L)	A	21.6	538	422	116	1100	68000	1000	15000	6228.4	328.6	5584.3	6872.4	2200	3900	7200	13100	7621.6	-	-	-	-	-	1.0	1.35E-23	10.57585158	3	do not reject Ho	0.0000						
bio(2-ethyl)phthalate	sediment (ug/kg)	A	7.3	55	51	41	21.6	34000	20	2200	6855.9	1006.6	4883.0	8827.8	1760	4800	11000	15000	7465.0	-	-	-	-	-	1.0	6.51E-11	15.61408199	3	reject Ho	0.974-21						
bio(2-ethyl)hexyl phthalate	sediment (ug/kg)	A	38.1	622	622	237	15.6	41.4	0.024	10.1	-	2070.0	430.0	1227.2	2912.8	1640	-	5710	10000	20839.2	-	-	-	-	-	1.0	8.974-21	12.70217027	3	do not reject Ho	0.716					
BTX	water (ug/L)	A	97.5	120	3	117	11	6.4	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.312									
Butyl benzyl phthalate	sediment (ug/kg)	A	43.9	57	34	25	21.5	60000	100	100	948.1	97.2	757.7	1138.4	322	819	1300	1860	868.6	-	-	-	-	-	1.0	8.01E-06	26.3622008	3	reject Ho	0.676						
Butyl benzyl phthalate	sediment (ug/kg)	B	10	80	78	8	0.78	17000	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0000										
Butyl benzyl phthalate	water (ug/L)	C	26.6	639	46	170	0.011	0.1	0.025	1	-	0.2	0.0	0.2	0.3	0.05	0.114	0.219	0.383	0.8	-	-	-	-	-	1.0	1.26E-37	17.34768517	3	reject Ho	0.4211					
Butyl benzyl phthalate	water (ug/L)	A	14	78	78	9	156	126000	-	-	151801.7	24026.8	104363.5	199240.0	23900	-	31000	39500	213760.7	-	-	-	-	-	1.0	1.15E-32	15.61762442	3	do not reject Ho	0.2616						
Butyl benzyl phthalate	water (ug/L)	C	98.1	52	51	54	17	0.1	1100	-	-	0.4	0.1	0.1	0.1	0.021	0.039	0.114	0.1	-	-	-	-	-	1.0	1.03E-69	32.33036398	3	do not reject Ho	0.3055						
CaPAB	sediment (ug/kg)	A	6.1	82	77	5	1.07	1453000	-	-	244000.0	38833.1	167887.3	320112.87	1.00E+06	2.00E+06	3500000	4400000	1821467.2	-	-	-	-	-	1.0	1.37E-05	25.24450279	3	reject Ho	0.7070						
CaPAB	water (ug/L)	B	74.4	564	327	309	0.004	8.9	0.024	3	-	0.009	0.044	0.2331	1.3	6.6	-	-	570.5	18.4721	31.0369	260000	1150000	1839.2	1.0	-	-	-	-	1.0	7.92E-22	101.36042025	3	reject Ho	0.355	
CaPAB	water (ug/L)	C	74	56	46																															

Parameter	Matrix	Case	Data summary							Kaplan - Meier test (Case A parameters)										Regression on statistics (Case B parameters)							Peto Prentice test (Land use significance)						
			% non-detect	n	# detects	# nondetects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean	KM mean	KM mean	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	Peto Prentice p-value	Peto Prentice chisq	Peto Prentice df	PPCC test	Seasonal Wilcoxon p-value		
HPAH	water (ug/L)	A	32.7	633	426	207	0.012	154.3	0.0094	2.2	2.4	0.5	1.4	3.3	0.034	0.11	0.712	2.505	12.3	-	-	-	-	-	-	1.0	2.66E-29	136.0685129	3	reject Ho	0.135		
Indeno[1,2,3-cd]pyrene	sediment (ug/kg)	A	13.9	79	68	11	19.4	160000	1	500	14900.3	3291.5	8449.0	21351.6	130	540	18000	52000	29255.8	-	-	-	-	-	-	1.0	5.49E-05	22.35859445	3	reject Ho	0.023		
Indeno[1,2,3-cd]pyrene	water (ug/L)	B	71.3	634	182	452	0.004	10	0.003	1.1	-	-	-	-	-	-	-	-	0.2	0.0008	0.0050	0.0322	0.2100	0.8	1.0	-	-	-	do not reject Ho	0.166			
Lead	sediment (ug/kg)	A	2.5	80	78	2	360	1790000	10	10	188329.5	28179.5	13098.7	243560.2	20500	114000	248000	486000	252044.9	-	-	-	-	-	-	0.9	5.33E-08	36.69892158	3	reject Ho	0.778		
Lead	water (ug/L)	A	0.9	638	632	6	0.1	294	0.05	0.1	15.2	1.1	13.2	17.3	1.4	6.12	16.9	40.1	26.7	-	-	-	-	-	-	1.0	1.51E-53	248.3169933	3	do not reject Ho	0.213		
Lead	water dissolved (ug/L)	A	19.4	628	506	122	0.016	21.8	0.02	1.8	0.8	0.1	0.6	0.9	0.086	0.2	0.43	1.61	2.2	-	-	-	-	-	-	1.0	4.52E-31	142.2757197	3	do not reject Ho	0.000		
LPAH	sediment (ug/kg)	A	5.8	86	81	5	1.94	307500	0.1	500	28429.9	6464.6	15759.6	41100.2	200	1200	35850	97250	59949.8	-	-	-	-	-	-	1.0	2.01E-05	24.45133572	3	reject Ho	0.092		
LPAH	water (ug/L)	A	38.6	634	389	245	0.006	24.3	0.0094	1.1	0.4	0.1	0.2	0.5	0.0268	0.053	0.12	0.32	1.8	-	-	-	-	-	-	1.0	3.58E-23	107.61479	3	reject Ho	0.324		
Lube Oil	water (ug/L)	B	58.4	89	37	52	194	1550	190	570	-	-	-	-	-	-	-	-	348.9	126.6109	207.3068	460.0000	846.6000	334.4	1.0	-	-	-	reject Ho	0.139			
Magnesium	water (ug/L)	A	0	353	353	0	90	96500	-	-	2121.2	284.2	1564.2	2678.2	610	1500	2440	4040	5339.3	-	-	-	-	-	-	1.0	5.04E-48	222.7779207	3	reject Ho	0.727		
Magnesium	water dissolved (ug/L)	A	0	2	2	0	210	310	-	-	260.0	50.0	162.0	358.0	210	-	-	-	-	70.7	-	-	-	-	-	-	-	-	-	NA	0.453		
Malathion	sediment (ug/kg)	C	98.1	53	1	52	16	0.1	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.117			
Malathion	water (ug/L)	C	98.9	643	7	636	0.027	0.2	0.008	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.083			
Mecoprop	sediment (ug/kg)	C	91.7	12	1	11	6500	10	5000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000			
Mecoprop	water (ug/L)	C	89.6	616	64	552	0.02	28	0.02	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000			
Mercury	sediment (ug/kg)	A	17.6	68	56	12	10	442	5	61	108.6	10.6	87.8	129.4	35.7	80	170	210	87.6	-	-	-	-	-	-	1.0	0.00429866	13.16219513	3	reject Ho	0.822		
Mercury	water (ug/L)	B	77.4	455	103	352	0.002	0.4	0.02	0.2	-	-	-	-	-	-	-	-	0.0	0.0055	0.0112	0.0233	0.0454	0.0	1.0	-	-	-	do not reject Ho	0.000			
Motor Oil	sediment (ug/kg)	A	0	22	22	0	82000	1.70E+07	-	-	763727.2	862692.1	5946427.3	932811.8	3	4600000	8100000	1.00E+07	1.20E+07	4046384.8	-	-	-	-	-	-	0.9	-	-	-	-	reject Ho	0.659
Motor Oil	water (ug/L)	A	18.1	105	86	19	200	5800	200	500	1195.1	97.3	1004.1	1386.2	490	930	1600	2500	998.9	-	-	-	-	-	-	1.0	0.00022137	16.831344	2	do not reject Ho	0.146		
Naphthalene	sediment (ug/kg)	C	40.5	79	47	32	1.02	6900	0.1	530	436.5	108.7	223.5	649.6	1.56	23.5	520	1200	966.2	-	-	-	-	-	-	1.0	1.70E-07	34.3153255	3	reject Ho	0.177		
Naphthalene	water (ug/L)	B	62.9	628	233	395	0.004	2.2	0.005	2.1	-	-	-	-	-	-	-	-	0.1	0.0074	0.0166	0.0410	0.1023	0.2	1.0	-	-	-	reject Ho	0.112			
Nitrite-Nitrate	water dissolved (ug/L)	A	3.9	584	561	23	12	58000	10	770	548.2	101.0	350.2	746.2	129	245	543	1090	2441.4	-	-	-	-	-	-	1.0	5.84E-14	64.69238153	3	do not reject Ho	0.000		
p-Cresol	sediment (ug/kg)	C	81.4	43	8	35	5.66	67	1	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.402					
p-Cresol	water (ug/L)	C	94.3	35	2	33	500	670	-	-	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.401					
Ortho-phosphate	water dissolved (ug/L)	A	7.8	590	544	46	4	270	3	22.3	32.2	1.4	29.5	35.0	11	21.6	38.6	70	33.8	-	-	-	-	-	-	1.0	1.03E-14	68.20924385	3	do not reject Ho	0.002		
p-Cresol	sediment (ug/kg)	A	23.3	43	33	10	2.46	24100	1	440	1467.7	686.8	121.7	2813.7	13.3	180	605	2380	4503.4	-	-	-	-	-	-	1.0	0.00790293	11.85331109	3	do not reject Ho	0.136		
p-Cresol	water (ug/L)	C	92.3	26	2	24	0.354	0.362	0.047	0.095	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.485					
PCB-aroclor 1016	sediment (ug/kg)	C	100	33	0	33	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000					
PCB-aroclor 1016	water (ug/L)	C	100	27	0	27	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000					
PCB-aroclor 1221	sediment (ug/kg)	C	100	33	0	33	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000						
PCB-aroclor 1221	water (ug/L)	C	100	27	0	27	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000						
PCB-aroclor 1232	sediment (ug/kg)	C	100	33	0	33	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000						
PCB-aroclor 1232	water (ug/L)	C	100	27	0	27	-	-	-	-	0.01	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000						
PCB-aroclor 1242	sediment (ug/kg)	C	100	33	0	33	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000						
PCB-aroclor 1242	water (ug/L)	C	100	27	0	27	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000						
PCB-aroclor 1248	sediment (ug/kg)	C	93.9	33	2	31	38	45	0.05	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.453							
PCB-aroclor 1248	water (ug/L)	C	96.3	27	1	26	0.014	0.014	0.01	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.552							
PCB-aroclor 1254	sediment (ug/kg)	B	48.1	27	14	13	0.01	0.058	0.005	0.05	0.0	0.0	0.0	0.0	0.011	0.022	0.032	0.0	-	-	-	-	-	-	1.0	1.36E-07	31.6175913	2	do not reject Ho	0.799			
PCB-aroclor 1260	sediment (ug/kg)	B	72.7	33	9	24	7.2	120	0.05	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.299							
PCB-aroclor 1260	water (ug/L)	B	74.1	27	7	20	0.01	0.038	0.01	0.02	-	-	-	-	-	-	-	-	287.2	4.2220	11.1807	35.0348	203.0000	2026.7	1.0	-	-	-	do not reject Ho	0.439			
Pentachlorophenol	sediment (ug/kg)	B	75.3	77	19	58	7.8	17800	1	3500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.509						
Pentachlorophenol	water (ug/L)	B	74.6	591	150	441	0.02	5.1	0.02	5.6	-	-	-	-	-	-	-	-	0.2	0.0225	0.0607	0.1502	0.3764	0.3	1.0	-	-	-	do not reject Ho	0.807			
pH	water (pH)	A	0	224	224	0	5.6	8.26	-	-	6.9	0.0	6.8	7.0	6.6	7	7.21	7.4	0.4	-	-	-	-	-	-	1.0	0.00016844	17.37782953	2	reject Ho	0.856		
Phenanthrene	sediment (ug/kg)	A	6.4	78	73	5	216	250000	0.1	500	24296.9	5575.1	13369.9	35223.8	200	950	30000	79000	49237.8	-	-	-	-	-	-	1.0	1.92E-05	24.54661725	3	reject Ho	0.091		
Phenanthrene	water (ug/L)	A	48.2	633	328	305	0.006	16	0.003	1.1	0.2	0.1	0.3	0.015	0.026	0.0767	0.21	1.3	-	-	-	-	-	-	1.0	1.33E-25	118.9085045	3	reject Ho				

Parameter and matrix		Land use	Case	Data summary										Kaplan - Meier test (Case A parameters)										Regression on statistics (Case B parameters)			
% non-detects	n	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM 95CL	KM mean	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	Seasonal Wilcoxon p-value				
1-Methylnaphthalene sediment (ug/Kg)	COM	A	48.6	37	19	18	5.3	870	0.1	690	161.5558	40.9059	81.38229	241.7292	10.2	41.4	220	570	248.819	-	-	-	-	-	0.508322738		
1-Methylnaphthalene water (ug/L)	COM	C	95.8	155	5	150	0.14	1.6	0.1	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22318227		
2-Methylnaphthalene sediment (ug/Kg)	COM	A	37.8	45	28	17	8.7	1500	0.1	690	188.81	42.89598	104.7355	272.8846	36.2	74	260	540	287.755	-	-	-	-	-	0.82588309		
2-Methylnaphthalene water (ug/L)	COM	B	79.1	278	58	220	0.004	2.5	0.003	2.1	-	-	-	-	-	-	-	-	-	0.060051	0.001728416	0.006727	0.023859378	0.082366999	0.229618	0.665662919	
2-Nitrophenol sediment (ug/Kg)	COM	C	100	12	0	12	NA	NA	5	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
2,4-D sediment (ug/Kg)	COM	C	100	4	0	4	NA	NA	10	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
2,4-D water (ug/L)	COM	C	87.7	260	32	228	0.05	3.54	0.05	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000742328		
2,4-Dichlorophenol sediment (ug/Kg)	COM	C	100	13	0	13	NA	NA	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
2,4-Dimethylphenol sediment (ug/Kg)	COM	C	84.2	19	3	16	6.1	17.4	5	2700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.186851707		
2,4,5-Trichlorophenol sediment (ug/Kg)	COM	C	100	13	0	13	NA	NA	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
2,4,6-Trichlorophenol sediment (ug/Kg)	COM	C	100	12	0	12	NA	NA	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
4-Chloro-3-Methylphenol sediment (ug/Kg)	COM	C	91.7	12	1	11	83.6	83.6	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.527089257		
4-Nitrophenol sediment (ug/Kg)	COM	C	100	12	0	12	NA	NA	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
Acenaphthene sediment (ug/Kg)	COM	A	23.9	46	35	11	8.7	8900	0.1	530	1563.616	329.7705	917.2777	2209.954	17.3	590	2100	5400	2236.612	-	-	-	-	-	0.168996844		
Acenaphthene water (ug/L)	COM	C	88.1	278	33	245	0.003	1.5	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.688673384	
Acenaphthylene sediment (ug/Kg)	COM	A	43.5	46	26	20	15.8	3600	0.1	530	402.7859	94.15908	218.2375	587.3343	-	210	570	1100	638.618	-	-	-	-	-	0.108363293		
Acenaphthylene water (ug/L)	COM	C	92.8	278	20	258	0.003	1.5	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.501620042	
Ammonia water (ug/L)	COM	A	0	24	0	10	1260	NA	NA	192.4167	49.9772	94.46315	290.3702	80	123	194	324	244.8373	-	-	-	-	-	0.125122387			
Anthracene sediment (ug/Kg)	COM	A	10.9	46	41	5	17	33000	0.1	530	6500.311	1253.145	4044.193	8956.43	85	2600	8200	19000	8499.241	-	-	-	-	-	0.169242323		
Anthracene water (ug/L)	COM	C	82	278	50	228	0.004	5.4	0.004	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.014171657		
Arsenic water dissolved (ug/L)	COM	A	0	1	1	0	0.42	0.42	NA	NA	0.42	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
Benz[al]anthracene sediment (ug/Kg)	COM	A	0	42	42	0	9.4	21000	NA	NA	35083.11	7191.462	20988.1	49178.12	520	24000	42000	110000	46606	-	-	-	-	-	0.325524075		
Benz[al]anthracene water (ug/L)	COM	B	61.5	239	92	147	0.006	41	0.002	0.5	-	-	-	-	-	-	-	-	0.417237	0.001594614	0.009315	0.11	0.728	1.546769	0.055943402		
Benzene water (ug/L)	COM	C	97.2	36	1	35	2.6	2.6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.169280098	
Benz(a)pyrene sediment (ug/Kg)	COM	A	2.2	46	45	1	16.2	26000	0.1	0.3	39089.83	8141.3	23133.18	55046.49	316	20000	45000	120000	55216.98	-	-	-	-	-	0.168545745		
Benz(a)pyrene water (ug/L)	COM	B	60.6	277	109	168	0.004	35	0.004	0.99	-	-	-	-	-	-	-	-	0.452407	0.002960029	0.012784	0.14	0.958	1.712295	0.047571021		
Benz(b)fluoranthene sediment (ug/Kg)	COM	A	3.8	26	25	1	88.9	24000	0.1	0.3	31530.84	10486.75	10977.18	52084.49	174	1300	40000	100000	53472.15	-	-	-	-	-	0.37506213		
Benz(b)fluoranthene water (ug/L)	COM	B	53.7	164	76	88	0.0227	33	0.0094	0.5	-	-	-	-	-	-	-	-	0.68876	0.014010981	0.062468	0.275	1.434	1.992365	0.082458728		
Benz(b,k)fluoranthene sediment (ug/Kg)	COM	A	0	3	3	0	1400	1700	NA	NA	1566.667	88.19171	1393.814	1739.519	1400	1600	-	-	152.7525	-	-	-	-	-	NA		
Benz(b,k)fluoranthene water (ug/L)	COM	C	35.7	42	27	15	0.011	0.315	0.003	0.021	0.034018	0.00837	0.01738	0.050399	0.011	0.016	0.027	0.096	0.054163	-	-	-	-	-	0.182493483		
Benz(g,h)perylene sediment (ug/Kg)	COM	A	0	44	44	0	16000	NA	NA	27363.32	5530.539	16523.67	3820.828	540	12000	36685.44	-	-	-	-	-	-	-	-	0.127089226		
Benz(g,h)perylene water (ug/L)	COM	A	46.6	277	148	129	0.006	12	0.006	0.5	0.393745	0.081037	0.234915	0.552575	0.008	0.037	0.2	0.69	1.348727	-	-	-	-	-	0.169024156		
Benz(k)fluoranthene sediment (ug/Kg)	COM	A	7.7	26	24	2	10.2	23000	0.1	530	29152.08	9902.883	9742.789	48561.38	117	1100	40000	88000	50499.49	-	-	-	-	-	0.879749304		
Benz(k)fluoranthene water (ug/L)	COM	B	64.6	164	58	106	0.018	13	0.0094	0.99	-	-	-	-	-	-	-	-	0.630813	0.004940989	0.023023	0.15675	1.17	1.981958	0.046733468		
Benzofluoranthenes, Total sediment (ug/Kg)	COM	A	0	26	26	0	177	34000	NA	NA	107719.2	18025.85	72389.21	143049.2	50000	73000	160000	260000	91914.16	-	-	-	-	-	0.427264572		
Benzofluoranthenes, Total water (ug/L)	COM	A	41.7	72	42	30	0.0666	5.7	0.0094	1	0.556592	0.112601	0.33588	0.777286	0.0666	0.14	0.46	1.6	0.955452	-	-	-	-	-	0.115918534		
Biochemical Oxygen Demand (ug/L)	COM	A	9.5	242	219	23	1100	68000	1000	15000	8478.551	606.7585	7289.326	9667.776	3300	5600	9700	17000	9348.947	-	-	-	-	-	2.85331-06		
Bis(2-ethylhexyl) phthalate sediment (ug/Kg)	COM	A	0	23	23	0	1960	19200	NA	NA	9444.348	1121.042	7247.146	11641.55	4900	8220	13000	19000	5376.328	-	-	-	-	-	0.31466439		
Bis(2-ethylhexyl) phthalate water (ug/L)	COM	A	22.8	267	206	61	0.43	41.4	0.642	7.42	3.289786	0.283491	2.743155	3.845417	1.19	1.86	3.9	6.59	4.632275	-	-	-	-	-	0.90396278		
BTEX water (ug/L)	COM	C	97.2	36	1	35	6.4	6.4	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.592690098		
Butyl benzyl phthalate sediment (ug/Kg)	COM	A	37.5	24	15	9	80	2600	1	1300	543.1825	136.0881	267.4548	809.9102	80	260	740	1200	666.6926	-	-	-	-	-	0.387621819		
Butyl benzyl phthalate water (ug/L)	COM	B	74.4	277	71	206	0.069	2.82	0.047	2.1	-	-	-	-	-	-	-	-	0.31907	0.149645648	0.247218	0.41	0.613287573	0.269145	0.4745-04758		
Cadmium sediment (ug/Kg)	COM	A	4.3	46	44	2	0.781	4900	300	401	1247.634	142.8808	967.5929	1527.675	651	1070	1480	2540	969.0649	-	-	-	-	-	0.592702255		
Cadmium water (ug/L)	COM	A	16.5	278	232	46	0.026	10.1	0.025	1	0.381203	0.066523	0.25135	0.511055	0.09	0.17	0.27	0.425	1.10465	-	-	-	-	-	7.517407-14		
Cadmium water dissolved (ug/L)	COM	A	39.3	275	167	108	0.015	0.968	0.02	0.4	0.407285	0.005377	0.01783	0.02856	0.03	0.05	0.08	0.142	0.088006	-	-	-	-	-	7.792012-07		
Calcium water (ug/L)	COM	A	0	152	152	0	620	146000	NA	NA	7767.895	1025.677	5757.604	9778.185	2680	5880	9230	14800	12645.4	-	-	-	-	-	0.207277882		
Chloride water (ug/L)	COM	A	0.9	227	225	2	200	108000	100	250	1806.22	6045.262	6157.724	29854.72	1500	3200	7200	19000	8108.106	-	-	-	-	-	0.772771214		
Chlorpyrifos sediment (ug/Kg)	COM	C	95.2	21	1	20	15	15	0.1	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	0.317310508			
Chlorpyrifos water (ug/L)	COM	C	100	273	0	273	NA	NA	0.006	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
Chrysene sediment (ug/Kg)	COM	A	0	46</td																							

Parameter and matrix	Land use	Case	Data summary								Kaplan - Meier test (Case A parameters)								Regression on statistics (Case B parameters)								
			% non-detects	n	# detectes	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95CL	KM mean 95UCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	Seasonal Wilcoxon p-value
Gasoline Range Organics water (ug/l)	COM	C	90.4	187	18	169	11.5	135	10	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.112561387	
Gravel sediment (%)	COM	A	4.7	43	41	2	0	42.5	0.1	0.1	6.774419	1.19167	4.438788	9.110049	1.9	5.6	7.6	17.5	7.814304	-	-	-	-	-	-	-	0.01728004
Hardness as CaCO <sub>3</sub> water (ug/L)	COM	A	0.7	281	279	2	1900	1030000	10000	10000	34467.76	4662.639	5239.16	43606.37	10000	22400	33000	49000	78160.08	-	-	-	-	-	-	-	0.164768851
Heavy Fuel Oil sediment (ug/Kg)	COM	A	0	6	6	0	2100000	5040000	NA	NA	3683333	4144444	2871037	4495630	3390000	3470000	4500000	1015178	-	-	-	-	-	-	-	0.83117041	
Heavy Fuel Oil water (ug/L)	COM	A	6.1	99	93	6	62	9000	100	500	1625.655	162.5284	1307.105	1944.205	650	980	2000	3800	1617.137	-	-	-	-	-	-	-	0.385510696
HPAH sediment (ug/Kg)	COM	A	0	50	50	0	370.9	2683000	NA	NA	403191.8	84269.19	238027.2	568356.3	3370	137000	588000	1273000	595873.2	-	-	-	-	-	-	-	0.31498159
HPAH water (ug/L)	COM	A	21.7	277	217	60	0.034	154.3	0.0094	1	5.01292	1.096919	2.863018	7.162823	0.094	0.372	1.83	8.39	18.25621	-	-	-	-	-	-	-	0.867202641
Indeno(1,2,3-cd)pyrene sediment (ug/Kg)	COM	A	2.2	46	45	1	19.4	160000	40	40	25078.59	5160.82	14963.57	35193.61	400	11000	36000	77000	35002.39	-	-	-	-	-	-	-	0.163066976
Indeno(1,2,3-cd)pyrene water (ug/L)	COM	B	60.8	278	109	169	0.004	10	0.004	0.99	-	-	-	-	-	-	-	-	0.338755	0.002603832	0.012	0.12975	0.718	1.178547	-	0.017203825	
Lead sediment (ug/kg)	COM	A	0	46	46	0	416	1790000	NA	NA	289490.1	42421.31	20679.95	373084.4	131000	214000	418000	540000	287715.3	-	-	-	-	-	-	-	0.756567444
Lead water (ug/L)	COM	A	0	279	279	0	0.1	294	NA	NA	26.32331	21.40061	22.2887	30.51775	5.53	14.4	33	58.9	55.74606	-	-	-	-	-	-	-	0.006517382
Lead water dissolved (ug/L)	COM	A	7.3	274	254	20	0.0311	21.8	0.037	1	1.472341	0.187543	1.104764	1.839919	0.146	0.32	1.1	3.81	3.104389	-	-	-	-	-	-	-	6.459887-00
LPAH sediment (ug/kg)	COM	A	2.1	48	47	1	50.5	307500	0.1	0.1	50258.44	10601.64	29479.6	71037.28	428	11590	55070	177190	73450.35	-	-	-	-	-	-	-	0.257942893
LPAH water (ug/L)	COM	A	28.4	278	199	79	0.009	24.3	0.0094	0.99	0.778683	0.157589	0.469835	1.087551	0.0372	0.11	0.2493	1.2	2.627529	-	-	-	-	-	-	-	0.302023535
Lube Oil water (ug/L)	COM	A	5.6	36	34	2	194	1550	190	570	565.6003	56.14588	54.55664	766.6442	419	554	841	1080	336.8753	-	-	-	-	-	-	-	0.796517846
Magnesium water (ug/L)	COM	A	0	152	152	0	90	15000	NA	NA	1891.961	159.4045	1579.533	2204.388	510	1510	2680	3560	1965.27	-	-	-	-	-	-	-	0.741040652
Magnesium water dissolved (ug/L)	COM	A	0	2	2	0	210	310	NA	NA	260	50	162.0018	357.9982	210	-	-	70.71068	-	-	-	-	-	-	-	NA	
Malathion sediment (ug/Kg)	COM	C	95.2	23	1	20	16	36	0.1	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37109337		
Malathion water (ug/L)	COM	C	98.2	272	5	267	0.042	0.2	0.008	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.179494918		
Mecoprop sediment (ug/kg)	COM	C	100	4	0	4	NA	NA	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
Mecoprop water (ug/L)	COM	C	94.5	271	15	256	0.04	26.8	0.02	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.047415484		
Mercury sediment (ug/kg)	COM	A	13	46	40	6	10	290	5	61	127.8293	11.75656	104.7869	150.8718	50	130	200	220	79.73688	-	-	-	-	-	-	-	0.70112454
Mercury water (ug/L)	COM	B	69	277	86	191	0.002	0.4	0.02	0.2	-	-	-	-	-	-	-	-	0.020664	0.006	0.011524	0.023831988	0.043203926	0.03261	-	0.000614659	
Mercury water dissolved (ug/L)	COM	C	86.8	266	35	231	0.001	0.4	0.001	0.2	-	-	-	-	-	-	-	-	0.020664	0.006	0.011524	0.023831988	0.043203926	0.03261	-	0.001093446	
Motor Oil sediment (ug/kg)	COM	A	0	22	22	0	820000	1.70E+07	NA	NA	7637273	682692.1	5946427	9328118	4600000	8100000	1000000	1200000	4046385	-	-	-	-	-	-	-	0.659350299
Motor Oil water (ug/L)	COM	A	25	64	48	16	200	5800	200	500	1100.268	141.8548	822.2386	1378.297	300	620	1600	2500	1134.834	-	-	-	-	-	-	-	0.034034209
Naphthalene sediment (ug/kg)	COM	A	17.4	46	38	8	5.4	6900	0.1	530	739.6687	173.5136	399.5883	107.749	21	390	1200	2100	1176.826	-	-	-	-	-	-	-	0.109529111
Naphthalene water (ug/L)	COM	B	63.8	276	100	176	0.004	2.2	0.006	2.1	-	-	-	-	-	-	-	-	0.078593	0.008607741	0.021387	0.060153185	0.15	0.216267	-	0.88889965	
Nitrite-Nitrate water dissolved (ug/L)	COM	A	9.2	250	227	23	26	58000	10	770	501.7795	231.606	47.84004	955.7189	107	200	334	664	3662.012	-	-	-	-	-	-	-	1.738311-11
o-Cresol sediment (ug/kg)	COM	B	70	20	6	14	5.66	67	4	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39410769		
Oil and grease water (ug/L)	COM	C	94.3	35	2	33	500	670	500	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.400814169		
Ortho-phosphate water dissolved (ug/L)	COM	A	9.6	250	226	24	4	270	4	20.6	27.2213	2.046199	23.21082	31.23178	9	19.6	32	58	32.35325	-	-	-	-	-	-	-	0.073521125
p-Cresol sediment (ug/kg)	COM	A	10	20	18	2	7.47	17000	4	440	1284.486	83.854	357.641	2926.613	140	380	670	860	3746.914	-	-	-	-	-	-	-	0.118973736
p-Cresol water (ug/L)	COM	B	75	8	2	6	0.354	0.362	0.047	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.57909742		
PCB-ardoc 1016 sediment (ug/Kg)	COM	C	100	19	0	19	NA	NA	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-ardoc 1016 water (ug/L)	COM	C	100	8	0	8	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-ardoc 1221 sediment (ug/Kg)	COM	C	100	19	0	19	NA	NA	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
PCB-ardoc 1221 water (ug/L)	COM	C	100	8	0	8	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
PCB-ardoc 1232 sediment (ug/kg)	COM	C	100	19	0	19	NA	NA	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
PCB-ardoc 1232 water (ug/L)	COM	C	100	8	0	8	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
PCB-ardoc 1242 sediment (ug/kg)	COM	C	100	19	0	19	NA	NA	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
PCB-ardoc 1242 water (ug/L)	COM	C	100	8	0	8	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
PCB-ardoc 1248 sediment (ug/kg)	COM	C	94.7	19	1	18	45	45	45	0.005	200	-	-	-	-	-	-	-	-	-	-	-	-	0.157292907			
PCB-ardoc 1248 water (ug/L)	COM	C	87.5	8	1	7	0.014	0.024	0.018	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	0.317310508			
PCB-ardoc 154 sediment (ug/kg)	COM	A	36.8	19	12	7	5.9	650	0.05	27	91.02039	36.31953	19.83542	162.2054	9.6	160	230	158.3132	-	-	-	-	-	-	-	0.252097196	
PCB-ardoc 154 water (ug/L)	COM	A	0	8	8	0	0.017	0.058	NA	NA	0.02975	0.004482	0.020962	0.038537	0.022	0.024	0.032	0.01268	-	-	-	-	-	-	-	0.360196132	
PCB-ardoc 1660 sediment (ug/Kg)	COM	B	63.2	19	7	12	7.2	120	0.05	75	-	-	-	-	-	-	-	-	-	-	-	-	-	0.794500846			
PCB-ardoc 1660 water (ug/L)	COM	A	50	8	4	4	0.013	0.038	0.01	0.02	0.0188	0.00388	0.01196	0.026404	0.013	0.015	0.015	0.010973	-	-	-	-	-	-	-	0.144679145	
Pentachlorophenol sediment (ug/Kg)	COM	B	69.6	46	14	32	7.8	17800	1	3500	-	-	-	-	-	-	-	-	-	-	-	-	-	0.863101016			
Pentachlorophenol water (ug/L)	COM	B	59																								

Parameter and matrix	Land use	Case	Data summary							Kaplan - Meier test (Case A parameters)								Regression on statistics (Case B parameters)									
			% non-detects	n	# detect	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95CL	KM mean 95UCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	Seasonal Wilcoxon p-value
Tricloro water (ug/l)	COM	C	93.6	250	16	234	0.02	0.625	0.05	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001970211
Turbidity water (NTU)	COM	A	0	245	245	0	1.36	500	NA	NA	39.64333	3.777601	32.24036	47.04829	7.3	19	41.1	102	59.12881	-	-	-	-	-	-	-	0.028888481
Zinc sediment (ug/Kg)	COM	A	0	46	46	0	0.366	9250000	NA	NA	765871	1991715.5	3755021.1	1156240	331000	508000	765000	1060000	1350847	-	-	-	-	-	-	-	0.043929114
Zinc water (ug/L)	COM	A	0	275	275	0	0.8	1250	NA	NA	144.5495	9.220248	126.4781	162.6208	68.1	102	167	255	152.9005	-	-	-	-	-	-	-	9.56899E-08
Zinc water dissolved (ug/L)	COM	A	0	271	271	0	0.219	1030	NA	NA	74.23128	7.76726	59.00773	89.45483	24.3	37.4	63.8	133	127.8652	-	-	-	-	-	-	-	9.51405E-13
1-Methylnaphthalene sediment (ug/Kg)	HDR	C	100	7	0	7	NA	NA	0.1	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1-Methylnaphthalene water (ug/L)	HDR	C	100	61	0	61	NA	NA	0.1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2-Methylnaphthalene sediment (ug/Kg)	HDR	B	62.5	16	6	10	1.12	52	0.1	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.386627614
2-Methylnaphthalene water (ug/L)	HDR	C	85	180	27	153	0.003	0.25	0.003	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.276009443
2-Nitrophenol sediment (ug/Kg)	HDR	C	100	5	0	5	NA	NA	1	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2,4-D sediment (ug/Kg)	HDR	C	100	3	0	3	NA	NA	10	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2,4-D water (ug/L)	HDR	B	66.3	169	57	112	0.04	4.8	0.05	1.2	-	-	-	-	-	-	-	-	-	0.313796	0.017106993	0.05	0.21	0.804	0.749463	-	8.73623E-05
2,4-Dichlorophenol sediment (ug/Kg)	HDR	C	100	5	0	5	NA	NA	1	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2,4-Dimethylphenol sediment (ug/Kg)	HDR	C	100	11	0	11	NA	NA	1	2500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2,4,5-Trichlorophenol sediment (ug/Kg)	HDR	C	100	5	0	5	NA	NA	1	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2,4,6-Trichlorophenol sediment (ug/Kg)	HDR	C	100	5	0	5	NA	NA	1	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
4-Chloro-3-Methylphenol sediment (ug/Kg)	HDR	C	100	4	0	4	NA	NA	1	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
4-Nitrophenol sediment (ug/Kg)	HDR	C	100	4	0	4	NA	NA	1	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
Acenaphthene sediment (ug/Kg)	HDR	B	68.8	16	5	11	12.2	210	0.1	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.590746825
Acenaphthene water (ug/L)	HDR	C	95.6	180	8	172	0.003	0.1	0.003	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.293254013
Acenaphthylene sediment (ug/Kg)	HDR	C	100	16	0	16	NA	NA	0.1	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Acenaphthylene water (ug/L)	HDR	C	93.9	180	11	169	0.005	0.022	0.003	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.445232668
Ammonia water (ug/L)	HDR	A	0	23	23	0	28	420	NA	NA	111.6957	19.11091	74.23895	149.1524	50	85	130	181	91.65272	-	-	-	-	-	-	-	0.15185674
Anthracene sediment (ug/Kg)	HDR	A	37.5	16	10	6	35	150	1	500	183.7132	94.862	2.21293	369.6393	-	71	151	270	379.448	-	-	-	-	-	-	-	0.1159959504
Anthracene water (ug/L)	HDR	C	95	180	9	171	0.004	0.0577	0.004	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.203695738
Benz(a)anthracene sediment (ug/Kg)	HDR	A	23.1	13	10	3	81	110	1	500	469.7253	103.0476	267.7557	671.6948	81	330	820	870	371.5434	-	-	-	-	-	-	-	0.068397727
Benz(a)anthracene water (ug/L)	HDR	B	70.4	142	42	100	0.005	0.397	0.002	1.1	-	-	-	-	-	-	-	-	0.01704	0.001498724	0.004277	0.012235576	0.03605	0.043611	-	0.402452455	
Benzene water (ug/L)	HDR	C	100	38	0	38	NA	NA	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Benz(a)pyrene sediment (ug/Kg)	HDR	A	31.2	16	11	5	120	1520	0.1	500	470.975	103.7081	267.7108	674.2392	120	381	730	1010	414.8325	-	-	-	-	-	-	-	0.179213188
Benz(a)pyrene water (ug/L)	HDR	C	83.2	179	30	149	0.004	0.586	0.004	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.191523268
Benz(b)fluoranthene sediment (ug/Kg)	HDR	A	22.3	9	7	2	170	8440	1	1	1205.667	923.5282	604.415	3015.749	170	205	536	2770.585	-	-	-	-	-	-	-	0.310926058	
Benz(b)fluoranthene water (ug/L)	HDR	C	81.7	93	17	76	0.002	0.27	0.0094	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.596673591
Benz(b,k)fluoranthene sediment (ug/Kg)	HDR	A	0	3	0	1100	2900	NA	NA	2033.333	520.6833	1012.813	3053.854	1100	2100	1	901.85	-	-	-	-	-	-	-	-	NA	
Benz(b,k)fluoranthene water (ug/L)	HDR	B	53.8	52	24	28	0.005	0.145	0.003	0.016	-	-	-	-	-	-	-	0.017905	0.004129598	0.008897	0.001825	0.0479	0.02506	-	0.709852542		
Benz(g,h,i)perylene sediment (ug/Kg)	HDR	A	23.1	13	10	3	180	980	1	500	451.5865	82.53788	289.8153	613.3578	180	317	640	934	297.5945	-	-	-	-	-	-	-	0.061112742
Benz(g,h,i)perylene water (ug/L)	HDR	B	69.4	180	55	125	0.004	0.67	0.003	1.1	-	-	-	-	-	-	-	0.028623	0.002956568	0.007769	0.023801765	0.067539698	0.07068	-	0.557431736		
Benz(k)fluoranthene sediment (ug/Kg)	HDR	A	44.4	9	5	4	67	5050	1	500	743.0794	571.5819	-377.201	1863.359	67	477	1714.746	-	-	-	-	-	-	-	-	0.484561604	
Benz(k)fluoranthene water (ug/L)	HDR	C	88.2	93	11	82	0.014	0.3	0.0094	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.30852287
Benzofluoranthenes, Total sediment (ug/kg)	HDR	A	0	4	4	0	450	3060	NA	NA	1820	539.3798	762.7997	2877.2	450	1700	-	1078.796	-	-	-	-	-	-	-	0.226071362	
Benzofluoranthenes, Total water (ug/L)	HDR	B	77.1	35	8	27	0.11	1.11	0.094	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.107174951	
Biochemical Oxygen Demand water (ug/L)	HDR	A	18	150	123	27	1800	34300	1000	10000	517.0602	395.4806	4400.278	5950.533	2240	3500	6700	9900	4843.628	-	-	-	-	-	-	-	0.000117558
Bis(2-ethylhexyl) phthalate sediment (ug/Kg)	HDR	A	6.2	16	15	1	41	8800	20	20	275.625	60.4857	1563.64	3948.86	800	2000	3600	6390	2433.943	-	-	-	-	-	-	-	0.070935192
Bis(2-ethylhexyl) phthalate water (ug/L)	HDR	C	41.1	180	106	74	0.35	27.8	0.353	3	1549818	0.237677	10.03898	2.015657	0.516	0.7	1.2	2.6	3.188774	-	-	-	-	-	-	-	0.369669363
BTEX water (ug/L)	HDR	C	94.7	38	2	36	1.1	1.28	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.426776737	
Butyl benzyl phthalate sediment (ug/Kg)	HDR	A	50	16	8	8	50	5880	19	230	499.533	372.9895	-236.051	126.041	50	290	380	1491.958	-	0.124165	0.050459921	0.086297	0.158690029	0.242	0.115535	-	0.034808874
Butyl benzyl phthalate water (ug/L)	HDR	B	76.7	180	42	128	0.044	0.68	0.018	3	-	-	-	-	-	-	-	0.029888	0.003034963	0.008	0.025543739	0.07792	0.069658	-	0.046498057		
Cadmium sediment (ug/Kg)	HDR	A	29.4	17	12	5	30	130	2.5	500	417.9671	23.6862	598.1307	30	394	580	990	379.9931	-	-	-	-	-	-	-	0.656939255	
Cadmium water (ug/L)	HDR	A	30.6	180	125	55	0.017	0.979	0.025	1	0.132348	0.010826	0.110929	0.153368	0.043	0.09	0.18	0.28	0.14525	-	-	-	-	-	-	-	0.19705892
Cadmium water dissolved (ug/L)	HDR	B	51.4	179	87	92	0.011	0.284	0.02	0.2	-	-	-	-	-	-	-	0.0403	0.020997765	0.032703	0.049652375	0.076	0.030101	-	0.417902426		
Calcium water (ug/L)	HDR	A	0	93	93	0	827	18000	NA	NA	4125.452	230.1769	3674.31														

Parameter and matrix	Land use	Case	Data summary							Kaplan - Meier test (Case A parameters)								Regression on statistics (Case B parameters)									
			% non-detects	n	# detect	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95LCL	KM mean 95UCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	Seasonal Wilcoxon p-value
Gasoline Range Organics water (ug/l)	HDR	C	87.7	155	19	136	13	395	10	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.377081434
Gravel sediment (%)	HDR	A	13.3	15	13	2	0	46.8	0.1	0.1	9.572	3.50327	2.70524	16.43879	0.3	3.4	17.3	24.2	13.5691	-	-	-	-	-	-	-	0.665821763
Hardness as CaCO3 water (ug/L)	HDR	A	0	181	181	0	2880	76100	NA	NA	25065.69	1346.612	22427.16	27704.22	12000	17400	38300	52300	18111.43	-	-	-	-	-	-	-	0.07709707
Heavy Fuel Oil sediment (ug/Kg)	HDR	A	0	3	3	0	820000	1200000	NA	NA	97666.69	114649.2	75195.3	1201375	820000	910000	-	-	198578.3	-	-	-	-	-	-	-	NA
Heavy Fuel Oil water (ug/L)	HDR	A	21.2	99	78	21	28	2800	100	500	448.8934	48.41603	353.9998	543.7871	180	310	520	990	481.7334	-	-	-	-	-	-	-	0.085425562
HPAH sediment (ug/Kg)	HDR	A	5.3	19	18	1	4.74	53510	1	1	8615.552	2778.038	3170.697	14060.41	1130	4883	11336	15200	12109.19	-	-	-	-	-	-	-	0.083478063
HPAH water (ug/L)	HDR	A	37.8	180	112	68	0.016	5.671	0.0094	2.2	0.23324	0.042919	0.149122	0.317359	0.03	0.063	0.18	0.549	0.575812	-	-	-	-	-	-	-	0.073398712
Indeno(1,2,3-cd)pyrene sediment (ug/Kg)	HDR	A	18.8	16	13	3	140	10400	1	500	990.9688	35.0927	-253.79	225.728	140	360	540	865	2540.371	-	-	-	-	-	-	-	0.060051705
Indeno(1,2,3-cd)pyrene water (ug/L)	HDR	C	80.6	180	35	145	0.005	0.76	0.003	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.788654672
Lead sediment (ug/Kg)	HDR	A	5.9	17	16	1	360	360000	10	10	72074.12	23090.43	26817.71	11730.5	5900	29400	110000	186000	95204.28	-	-	-	-	-	-	-	1
Lead water (ug/L)	HDR	A	2.2	179	175	4	0.14	89.2	0.1	0.1	8.97369	0.893497	7.246148	10.47859	0.93	4.05	13.3	23.8	11.95417	-	-	-	-	-	-	-	0.44630558
Lead water dissolved (ug/L)	HDR	A	25.1	179	134	45	0.031	2.6	0.02	1	0.262884	0.026602	0.210746	0.315023	0.07	0.171	0.313	0.6	0.355908	-	-	-	-	-	-	-	0.20031563
LPAH sediment (ug/Kg)	HDR	A	5.6	18	17	1	1.94	6300	500	500	1173.491	354.7304	478.2327	1868.75	200	564	1530	2940	1504.993	-	-	-	-	-	-	-	0.079149347
LPAH water (ug/L)	HDR	A	46.7	180	96	84	0.006	0.5888	0.0094	1.1	0.054103	0.005278	0.043758	0.064448	0.019	0.033	0.0679	0.11	0.070813	-	-	-	-	-	-	-	0.140580257
Lube Oil water (ug/L)	HDR	C	90	30	3	27	218	257	190	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.548506236	
Magnesium water (ug/L)	HDR	A	0	93	93	0	140	3350	NA	NA	830.4946	71.22111	690.9038	970.0854	290	670	1100	1760	686.8315	-	-	-	-	-	-	-	0.992432542
Malathion sediment (ug/Kg)	HDR	C	100	15	0	15	NA	NA	0.1	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Malathion water (ug/L)	HDR	C	100	187	0	187	NA	NA	0.008	0.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Mecoprop sediment (ug/Kg)	HDR	C	100	3	0	3	NA	NA	1	10	5000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Mecoprop water (ug/L)	HDR	B	75.3	170	42	128	0.02	28	0.02	250	-	-	-	-	-	-	-	-	-	0.704112	0.008901238	0.034916	0.14	0.329829181	3.376404	-	8.21878e-07
Mercury sediment (ug/Kg)	HDR	A	33.3	9	6	3	18	442	90	50	79.89167	47.07663	-12.3768	172.1602	31	31.1	38.2	141.2299	-	-	-	-	-	-	-	0.432767581	
Mercury water (ug/L)	HDR	C	89.3	75	8	67	0.0278	0.3	0.02	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.411912939	
Mercury water dissolved (ug/L)	HDR	C	96	75	3	72	0.05	0.3	0.02	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.570571373	
Motor Oil water (ug/L)	HDR	A	15.8	19	16	3	670	3200	500	500	1132.632	152.494	833.7488	1431.514	700	950	1300	2500	664.706	-	-	-	-	-	-	-	0.23948077
Naphthalene sediment (ug/Kg)	HDR	B	75	16	4	12	1.02	100	0.1	500	-	-	-	-	-	-	-	-	-	0.023064	0.00734058	0.013	0.02885	0.046	0.028604	-	0.176800984
Naphthalene water (ug/L)	HDR	B	62.4	178	67	111	0.006	0.19	0.005	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000129767	
Nitrite-Nitrate water dissolved (ug/L)	HDR	A	0	168	168	0	12	3090	NA	NA	516.3244	40.28298	437.3712	595.2776	129	320	779	1180	522.1271	-	-	-	-	-	-	-	0.72903449
o-Cresol sediment (ug/Kg)	HDR	C	81.8	11	2	9	39.3	58.3	1	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.083894747	
Ortho-phosphate water dissolved (ug/L)	HDR	A	9.9	172	155	17	5	257	3	22.3	28.41648	2.467052	23.581513	33.25182	10	19	32	56	32.35508	-	-	-	-	-	-	-	0.575818563
p-Cresol sediment (ug/Kg)	HDR	A	18.2	14	9	2	282	24100	1	1	3414.182	2181.475	-861.961	7690.324	282	380	2690	7000	7236.031	-	-	-	-	-	-	-	1
p-Cresol water (ug/L)	HDR	C	100	7	0	7	NA	NA	0.047	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
pCB-aroclo 1016 sediment (ug/Kg)	HDR	C	100	6	0	6	NA	NA	0.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
pCB-aroclo 1016 water (ug/L)	HDR	C	100	10	0	10	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
pCB-aroclo 1221 sediment (ug/Kg)	HDR	C	100	6	0	6	NA	NA	3	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
pCB-aroclo 1221 water (ug/L)	HDR	C	100	10	0	10	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1232 sediment (ug/Kg)	HDR	C	100	6	0	6	NA	NA	3	32	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1232 water (ug/L)	HDR	C	100	10	0	10	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1242 sediment (ug/Kg)	HDR	C	100	10	0	10	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1248 sediment (ug/Kg)	HDR	C	83.3	6	1	5	38	38	4.4	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.617070577		
pCB-aroclo 1248 water (ug/L)	HDR	C	100	10	0	10	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1254 sediment (ug/Kg)	HDR	C	100	6	0	6	NA	NA	4.4	35	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1254 water (ug/L)	HDR	C	100	10	0	10	NA	NA	0.01	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1260 sediment (ug/Kg)	HDR	C	100	6	0	6	NA	NA	4.4	37	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
pCB-aroclo 1260 water (ug/L)	HDR	C	90	10	1	9	0.011	0.011	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	0.617070577			
Pentachlorophenol sediment (ug/Kg)	HDR	B	87.1	21	142	0.02	0.21	0.02	5.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5219671787		
Pentachlorophenol water (ug/L)	HDR	C	87.1	163	21	142	0.02	0.21	0.02	5.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65452776		
pH water (pH)	HDR	A	0	86	86	0	5	7.61	NA	NA	6.766395	0.043405	6.681324	6.851467	6.5	6.8	7.09	7.23	4.02518	-	-	-	-	-	-	-	0.213210944
Phenanthrene sediment (ug/Kg)	HDR	A	6.7	15	14	1	3.08	4750	500	500	974.2347	311.3855	363.9303	1584.539	310	470	1290	2100	1205.991	-	-	-	-	-	-	-	0.416529931
Phenanthrene water (ug/L)	HDR	B	53.3	180	84	96	0.006	0.493	0.003	1.3	-	-	-	-	-	-	-	-	0.032175	0.011	0.018	0.031735491	0.062161536	0.05063	-	0.416529931	
Phenol sediment (ug/Kg)	HDR	B	69.2	13	4	9	160	636	1	1500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.388603043		
Phenol water (ug/L)	HDR	B	57.1	7	3	4	0.203	0.439	0.047	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.220671362		
Precipitation water (in)	HDR	A	0	125	125	0	0.14	3.63	NA	NA	0.65952	0.046834	0.56772														



Parameter and matrix	Land use	Case	Data summary							Kaplan - Meier test (Case A parameters)							Regression on statistics (Case B parameters)							Seasonal Wilcoxon p-value			
			% non-detects	n	# detectes	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean	KM mean	KM mean	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	
Lead water (ug/L)	IND	A	0	66	66	0	2	60	NA	NA	9.714242	1.153059	7.454288	11.9742	4.8	7.94	11	14.4	9.367496	-	-	-	-	-	-	-	0.30782536
Lead water dissolved (ug/L)	IND	A	33.3	66	44	22	0.08	3.2	0.245	1.8	0.366613	0.056557	0.255763	0.477463	0.2	0.25	0.313	0.52	0.459473	-	-	-	-	-	-	-	0.000424103
LPAH sediment (ug/Kg)	IND	A	14.3	7	6	1	48	1030	66	66	407.1429	152.3857	108.4724	705.8133	48	234	890	403.1746	-	-	-	-	-	-	-	0.423710797	
LPAH water (ug/L)	IND	A	29.7	64	45	19	0.009	2.23	0.1	0.3	0.119867	0.037283	0.046794	0.192941	0.029	0.052	0.1	0.18	0.298266	-	-	-	-	-	-	-	0.059753858
Magnesium water (ug/L)	IND	A	0	32	32	0	1330	96500	NA	NA	7262.813	289.002	1594.593	12931.03	3390	4100	5660	6780	16359.63	-	-	-	-	-	-	-	0.385569857
Malathion sediment (ug/Kg)	IND	C	100	6	0	6	NA	NA	11	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Malathion water (ug/L)	IND	C	98.4	64	1	63	0.027	0.027	0.008	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.037372988	
Mecoprop water (ug/L)	IND	C	98.2	55	1	54	0.16	0.16	0.048	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.592980098		
Mercury sediment (ug/Kg)	IND	A	0	6	6	0	35.7	140	NA	NA	94.46667	16.91724	61.30948	127.6239	70.1	71	130	41.43861	-	-	-	-	-	-	-	0.12133525	
Mercury water (ug/L)	IND	C	87.9	66	8	58	0.0219	0.062	0.02	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.61538119	
Motor Oil water (ug/L)	IND	A	100	66	0	66	NA	NA	0.02	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Naphthalene sediment (ug/Kg)	IND	B	66.7	6	2	4	97	130	34	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.285049407	
Naphthalene water (ug/L)	IND	B	54	63	29	34	0.006	2.1	0.005	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.267183942	
Nitrite-Nitrate water dissolved (ug/L)	IND	A	0	52	52	0	79	1010	NA	NA	271.9096	25.00915	222.8926	320.9267	147	232	330	430	180.3436	-	-	-	-	-	-	-	0.180704356
o-Cresol sediment (ug/Kg)	IND	C	100	4	0	4	NA	NA	10	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Ortho-phosphate water dissolved (ug/L)	IND	A	5.6	54	51	3	6	121	3	3	38.6	4.240104	30.28955	46.91045	15.5	22.3	69	89	31.15827	-	-	-	-	-	-	-	0.38070397
p-Cresol sediment (ug/Kg)	IND	A	50	4	2	2	22.5	170	38	50	59.375	45.16247	-29.1438	147.8918	22.5	22.5	-	-	90.32493	-	-	-	-	-	-	-	0.317310508
PCB-acrolic 1016 sediment (ug/Kg)	IND	C	100	6	0	6	NA	NA	3	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
PCB-acrolic 1016 water (ug/L)	IND	C	100	9	0	9	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
PCB-acrolic 1221 sediment (ug/Kg)	IND	C	100	6	0	6	NA	NA	3	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1221 water (ug/L)	IND	C	100	9	0	9	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1232 sediment (ug/Kg)	IND	C	100	6	0	6	NA	NA	3	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1232 water (ug/L)	IND	C	100	9	0	9	NA	NA	0.01	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1242 sediment (ug/Kg)	IND	C	100	6	0	6	NA	NA	4.4	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1242 water (ug/L)	IND	C	100	9	0	9	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1248 sediment (ug/Kg)	IND	C	100	6	0	6	NA	NA	4.4	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1248 water (ug/L)	IND	C	100	9	0	9	NA	NA	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
PCB-acrolic 1254 sediment (ug/Kg)	IND	A	50	6	3	3	41	87	4.4	18	50.5	8.405108	34.02629	66.97371	-	-	52	20.58822	-	-	-	-	-	-	-	0.12133525	
PCB-acrolic 1254 water (ug/L)	IND	A	33.3	9	6	3	0.01	0.005	0.001333	0.001075	0.010236	0.01444	-	0.013	0.014	-	0.003225	-	-	-	-	-	-	-	-	0.336668368	
PCB-acrolic 1260 sediment (ug/Kg)	IND	B	66.7	6	2	4	41	80	4.4	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.157292027		
PCB-acrolic 1260 water (ug/L)	IND	B	77.8	9	2	7	0.01	0.01	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.312422211	
Pentachlorophenol sediment (ug/Kg)	IND	B	80	5	1	4	50	50	52	900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Pentachlorophenol water (ug/L)	IND	C	90.9	55	5	50	0.054	0.088	0.05	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.181926223	
pH water (pH)	IND	A	0	65	65	0	5.6	768	NA	NA	7.003692	0.054965	6.895963	7.111421	6.73	7.18	7.3	7.47	0.443141	-	-	-	-	-	-	-	0.753840356
Phenanthrene sediment (ug/Kg)	IND	A	16.7	6	5	1	190	740	17	17	363.3333	102.3226	162.7848	563.8819	190	210	610	250.6381	-	-	-	-	-	-	-	1	
Phenanthrene water (ug/L)	IND	A	31.2	64	44	20	0.009	0.33	0.08	0.1	0.050066	0.008365	0.036371	0.066461	0.015	0.024	0.055	0.13	0.06692	-	-	-	-	-	-	-	0.016197258
Phenol sediment (ug/Kg)	IND	B	80	5	1	4	192	192	10	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.414216178	
Precipitation water (in)	IND	A	0	33	33	0	0.19	1.72	NA	NA	0.746667	0.069962	0.610092	0.883241	0.4	0.72	1.01	1.31	0.400294	-	-	-	-	-	-	-	0.412526653
Prometeon water (ug/L)	IND	C	90	60	6	54	0.148	3.21	0.019	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.208412804	
Pyrene sediment (ug/Kg)	IND	A	0	6	6	0	130	1600	NA	NA	748.3333	233.7736	309.3876	116.928	370	580	1200	548.1393	-	-	-	-	-	-	-	0.637351888	
Pyrene water (ug/L)	IND	A	18.8	64	52	12	0.007	0.74	0.1	0.1	0.080538	0.0147	0.052176	0.108899	0.017	0.027	0.11	0.19	0.115764	-	-	-	-	-	-	-	0.02023726
Sampled-Event Flow Volume water (m3)	IND	A	0	66	66	0	126.8106	5591.152	NA	NA	1392.006	164.0516	107.07	171.541	535.499048	939.052	1570.387431	3862.41152	1332.761	-	-	-	-	-	-	-	0.18421613
Sand sediment (%)	IND	A	0	5	5	0	10.6	87.8	NA	NA	50.4	16.46812	127.1308	82.6762	10.9	71	72.6	36.82384	-	-	-	-	-	-	-	0.527089257	
Solids sediment (%)	IND	A	0	7	7	0	39.5	80.6	NA	NA	54.37143	7.474979	43.0574	65.63712	41.7	46.7	65.3	15.20753	-	-	-	-	-	-	-	0.16373454	
Storm Event Flow Volume water (m3)	IND	A	0	66	66	0	126.8106	5591.152	NA	NA	1592.023	16.0327	126.68	192.326	597.48448	1029.875	2066.842322	3862.41152	1365.112	-	-	-	-	-	-	-	0.132324382
Surfactants water (ug/L)	IND	A	25	56	42	14	27	830	20	50	99.9533	16.51756	67.57947	132.3271	32	63	111	180	123.6061	-	-	-	-	-	-	-	0.054973957
Total Benzofluoranthenes sediment (ug/Kg)	IND	A	0	6	6	0	110	1610	NA	NA	705	257.730	195.0957	1210.142	370	370	1400	631.3082	-	-	-	-	-	-	-	0.301699562	
Total Benzofluoranthenes water (ug/L)	IND	B	70.3	64	19	45	0.008	0.72	0.003	0.2	-	-	-	-	-	-	-	-	0.043056	0.001729228	0.006543	0.021750638	0.152	0.109866	-	0.040887696	
Total Kjeldahl Nitrogen water (ug/L)	IND	A	1.9	53	52	1	150	3230	30	30	1027.736	84.8232	861.4894	1193.986	623	920	1220	1630	617.5224	-	-	-	-	-	-	-	0.074740357
Total Organic Carbon sediment (%)	IND	A	0	6	6	0	3.04	9.32	NA	NA	6.231667	1.05263	4.168681	8.294653	4	4.93	8.73	-	-	-	-	-	-	-	0.331975467		
Total PAH water (ug/L)	IND	A	0	9	9	0	210	2020	NA	NA	2962.444	127.1584	470.2046	5454.704	523	1625	2348	3814.753	-	-	-	-	-	-	-	0.020921355	
Total PAH sediment (ug/Kg)	IND																										

Parameter and matrix	Land use	Case	Data summary							Kaplan - Meier test (Case A parameters)								Regression on statistics (Case B parameters)									
			% non-detects	n	# detect	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95CL	KM mean 95UCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	ROS r-statistic	Seasonal Wilcoxon p-value
Anthracene water (ug/L)	LDR	C	95.5	112	5	107	0.0097	0.25	0.0094	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.092067678	
Arsenic water dissolved (ug/L)	LDR	A	0	15	15	0	0.17	1.04	NA	NA	0.322667	0.056522	0.211886	0.433448	0.2	0.25	0.4	0.46	0.218909	-	-	-	-	-	-	-	0.048182342
Benz(a)anthracene sediment (ug/Kg)	LDR	A	50	8	4	4	22	4350	1	220	822.165	609.036	-371.524	2015.854	-	22	43.1	1722.614	-	-	-	-	-	-	-	0.036784523	
Benz(a)anthracene water (ug/L)	LDR	B	56.1	66	29	37	0.019	0.364	0.0094	0.5	-	-	-	-	-	-	-	-	0.045399	0.010096756	0.022291	0.047743803	0.12227	0.062122	-	0.789193958	
Benzene water (ug/L)	LDR	C	100	46	0	46	NA	NA	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Benz(a)pyrene sediment (ug/Kg)	LDR	B	63.6	11	4	7	55.2	5540	0.1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.047406508
Benz(a)pyrene water (ug/L)	LDR	B	73.9	111	29	82	0.017	0.87	0.0094	0.5	-	-	-	-	-	-	-	-	0.058541	0.009420131	0.02389	0.057220075	0.151	0.108325	-	0.953408341	
Benz(b)fluoranthene sediment (ug/Kg)	LDR	B	66.7	9	3	6	1.07	82.4	0.1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.174299554
Benz(b)fluoranthene water (ug/L)	LDR	C	85	100	15	85	0.0381	1.01	0.0094	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.773487471
Benz(g,h,i)perylene sediment (ug/Kg)	LDR	B	62.5	8	3	5	36.8	2810	1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.070701145
Benz(g,h,i)perylene water (ug/L)	LDR	B	76.8	112	26	86	0.0234	1.28	0.0094	0.5	-	-	-	-	-	-	-	-	0.053719	0.006732627	0.015707	0.047434825	0.1177	0.135933	-	0.284240618	
Benz(k)fluoranthene sediment (ug/Kg)	LDR	B	77.8	9	2	7	68.3	79.2	0.1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07363827
Benz(k)fluoranthene water (ug/L)	LDR	C	84	100	16	84	0.02	1.28	0.0094	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.726529659
Benzofluoranthenes, Total sediment (ug/Kg)	LDR	A	0	2	2	0	5650	14100	NA	NA	9875	4225	1594.152	18155.85	5650	-	-	-	5975.052	-	-	-	-	-	-	-	NA
Benzofluoranthenes, Total water (ug/L)	LDR	A	8.3	12	11	1	0.0993	1.16	0.094	0.094	0.2973	0.085101	0.130506	0.464094	0.122	0.18	0.352	0.419	0.294798	-	-	-	-	-	-	-	0.817361331
Biochemical Oxygen Demand water (ug/L)	LDR	B	62.4	101	38	63	1200	40500	1000	10000	-	-	-	-	-	-	-	-	2470.765	556.00843	1178.548	2600	4600	5072.723	-	0.000160825	
Bis(2-ethylhexyl) phthalate sediment (ug/Kg)	LDR	A	27.3	11	8	3	21.6	5390	20	2200	1110.889	585.7108	-37.0833	2258.861	21.6	159	881	4400	1942.583	-	-	-	-	-	-	-	0.575750174
Bis(2-ethylhexyl) phthalate water (ug/L)	LDR	B	70.5	112	33	79	0.15	16.1	0.024	10.1	-	-	-	-	-	-	-	-	0.725205	0.063787992	0.134611	0.442563919	1.596	2.028953	-	0.187907121	
BTEX water (ug/L)	LDR	C	100	46	0	46	NA	NA	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Butyl benzyl phthalate sediment (ug/Kg)	LDR	B	84.1	11	5	6	21.5	5600	0.1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.454170343	
Butyl benzyl phthalate water (ug/L)	LDR	C	70.9	102	99	3	0.62	12.7	0.1	3.33	2.402604	0.174055	0.201461	2.743746	1.3	1.84	3	4.55	1.757874	-	-	-	-	-	-	-	0.708938124
Cadmium sediment (ug/Kg)	LDR	A	9.1	11	10	1	100	900	2.5	2.5	351.6364	78.14837	198.4684	504.8044	150	256	520	700	259.1888	-	-	-	-	-	-	-	0.852683684
Cadmium water (ug/L)	LDR	B	50.4	115	57	58	0.011	0.64	0.025	1	-	-	-	-	-	-	-	-	0.060747	0.019385716	0.033411	0.0635	0.136	0.086484	-	0.608305393	
Cadmium water dissolved (ug/L)	LDR	B	57.4	115	49	66	0.003	0.87	0.007	0.05	-	-	-	-	-	-	-	-	0.032607	0.009685508	0.017	0.032671255	0.050002249	0.082323	-	0.247273077	
Calcium water (ug/L)	LDR	A	0	76	76	0	2200	18000	NA	NA	8711.842	472.382	7785.99	9637.694	5270	8500	12000	15000	4118.131	-	-	-	-	-	-	-	0.060507562
Chloride water (ug/L)	LDR	A	0.9	112	111	1	658	45600	250	250	6385.295	599.0921	5211.096	7559.494	2800	4800	8000	11000	6340.195	-	-	-	-	-	-	-	0.083053174
Chloropyflos sediment (ug/Kg)	LDR	C	100	11	0	11	NA	NA	0.1	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Chloropyflos water (ug/L)	LDR	C	100	120	0	120	NA	NA	0.024	0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Chrysene sediment (ug/Kg)	LDR	A	45.5	11	6	5	23	7460	1	220	1079.831	731.8564	-354.581	2514.243	-	23	809	3240	2427.293	-	-	-	-	-	-	-	0.011424229
Chrysene water (ug/L)	LDR	B	74.1	112	29	83	0.026	1.41	0.0094	0.5	-	-	-	-	-	-	-	-	0.072355	0.011514118	0.027427	0.071436587	0.1781	0.154414	-	0.602334203	
Conductivity water (uS/cm)	LDR	A	0	115	115	0	26	581	NA	NA	111.373	6.186243	99.24823	123.4979	67.9	99	139	190	66.34007	-	-	-	-	-	-	-	0.09357069
Copper sediment (ug/Kg)	LDR	A	0	14	14	0	190	30200	NA	NA	14846.36	2907.306	9148.149	20544.58	7200	15000	23900	26000	9642.442	-	-	-	-	-	-	-	0.065599692
Copper water (ug/L)	LDR	A	3.3	120	116	4	0.38	12.6	0.5	0.5	3.345	0.200667	2.961201	3.747199	1.8	2.82	4.69	6.13	2.198192	-	-	-	-	-	-	-	0.013939579
Copper water dissolved (ug/L)	LDR	A	2.9	102	99	3	0.62	12.7	0.1	3.33	2.402604	0.174055	0.201461	2.743746	1.3	1.84	3	4.55	1.757874	-	-	-	-	-	-	-	1.93121606
CPAH sediment (ug/Kg)	LDR	A	36.4	11	7	4	1.07	20719	1	220	3166.849	2068.083	-886.519	7292.216	-	45	2249	10916	6859.055	-	-	-	-	-	-	-	0.015886158
CPAH water (ug/L)	LDR	B	66.1	112	38	74	0.019	7.35	0.0094	0.5	-	-	-	-	-	-	-	-	0.251698	0.011409343	0.036022	0.1704	0.64324	0.739346	-	0.73077303	
Di-N-Octyl Phthalate sediment (ug/Kg)	LDR	C	100	11	0	11	NA	NA	1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Di-N-Octyl Phthalate water (ug/L)	LDR	C	98.2	112	2	110	0.018	1.5	0.018	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.520710694	
Diazinon sediment (ug/Kg)	LDR	C	100	11	0	11	NA	NA	0.1	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
Diazinon water (ug/L)	LDR	C	100	120	0	120	NA	NA	0.024	0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.047406508		
Dibenzo(a)anthracene sediment (ug/Kg)	LDR	B	63.6	11	4	7	14.8	786	0.1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.185876732		
Dibenzo(a)anthracene water (ug/L)	LDR	C	85.7	112	16	96	0.015	1.36	0.0094	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.069236269		
Dimethyl phthalate sediment (ug/Kg)	LDR	C	81.8	11	2	9	16	1800	1	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.185876732		
Dimethyl phthalate water (ug/L)	LDR	B	69.6	112	34	78	0.025	1.73	0.024	1	-	-	-	-	-	-	-	0.062472	0.026391197	0.0381	0.057153656	0.097214185	0.162399	-	0.888308713		
Dichlophenil sediment (ug/Kg)	LDR	C	83.3	6	1	5	18	18	0.1	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.479501222		
Dichlophenil water (ug/L)	LDR	C	98.2	112	2	111	0.026	0.037	0.007	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.576202543		
Diesel Range Organics water (ug/L)	LDR	B	50.5	105	52	53	13	1200	50	210	-	-	-	-	-	-	-	108.4948	28	57.15623	110	206	167.3678	-	0.005727574		
Diethyl phthalate sediment (ug/Kg)	LDR	C	100	11	0	11	NA	NA	1	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
Diethyl phthalate water (ug/L)	LDR	B	58	112	47	65	0.033	1.09	0.479	2.9	-	-	-	-	-	-	-	0.21144	0.054939393	0.12267	0.2965	0.567506881	0.21719	-	0.886444256		
Dimethyl phthalate sediment (ug/Kg)	LDR	C	90.9	11	3	10	28	28	1	220	-</td																



Table G-3. Statistical summary of contaminant concentrations by parameter, media and season

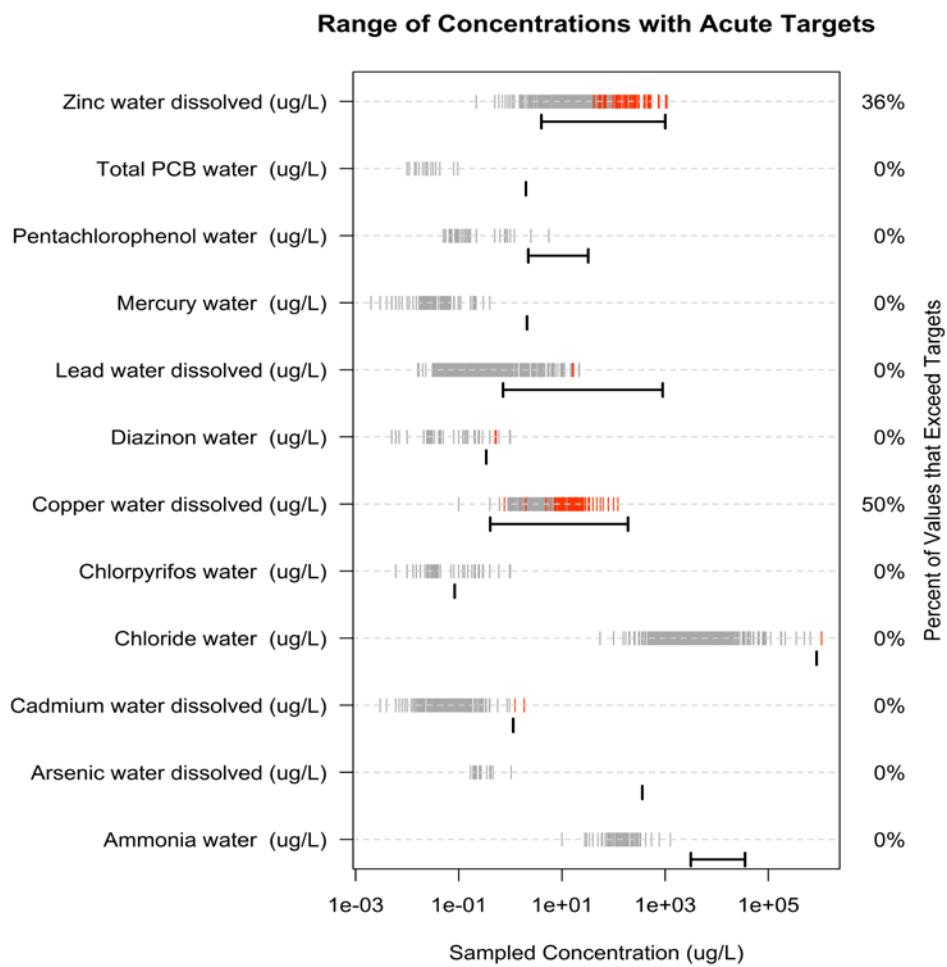
Table G-3. Statistical summary of contaminant concentrations by parameter, media and season.									Kaplan - Meier test (Case A parameters)										Regression on statistics (Case B parameters)							Peto Prentice test (Land use significance)						
Parameter and matrix	Season	Case	Data summary							Kaplan - Meier test (Case A parameters)										Regression on statistics (Case B parameters)							Peto Prentice p-value	Peto Prentice chisq	Peto Prentice df			
			% non-detects	n	# detectes	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95LCL	KM mean 95UCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD							
1-Methylnaphthalene sediment (ug/Kg)	Dry	B	64.5	31	11	20	5.3	870	0.1	690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1-Methylnaphthalene water (ug/L)	Dry	C	100	62	0	62	-	-	0.1	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2-Methylnaphthalene sediment (ug/Kg)	Dry	B	64.3	56	20	36	8.7	1500	0.1	690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2-Methylnaphthalene water (ug/L)	Dry	C	91.5	130	11	119	0.008	1.5	0.004	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2-Nitrophenol sediment (ug/Kg)	Dry	C	100	7	0	7	-	-	5	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2,4-D sediment (ug/Kg)	Dry	C	100	3	0	3	-	-	50	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2,4-D water (ug/L)	Dry	B	71.9	128	36	92	0.07	4.8	0.05	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2,4-Dichlorophenol sediment (ug/Kg)	Dry	C	100	8	0	8	-	-	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2,4-Dimethylphenol sediment (ug/Kg)	Dry	C	100	26	0	26	-	-	3.1	2700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2,4,5-Trichlorophenol sediment (ug/Kg)	Dry	C	100	8	0	8	-	-	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2,4,6-Trichlorophenol sediment (ug/Kg)	Dry	C	100	7	0	7	-	-	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
4-Chloro-3-Methylphenol sediment (ug/Kg)	Dry	C	100	5	0	5	-	-	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
4-Nitrophenol sediment (ug/Kg)	Dry	C	100	5	0	5	-	-	5	6400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Acenaphthene sediment (ug/kg)	Dry	A	44.6	56	31	25	8.7	8900	0.1	530	1039.5	258.2	533.5	1545.6	-	37.4	1200.0	3400.0	1932.1	-	-	-	-	-	-	-	-	-	0.000202	19.6	3	
Acenaphthene water (ug/L)	Dry	C	94.6	130	7	123	0.016	1.5	0.004	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Acenaphthylene sediment (ug/kg)	Dry	B	62.5	56	21	35	57	1600	0.1	530	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Acenaphthylene water (ug/L)	Dry	C	95.4	130	6	124	0.022	1.5	0.005	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Ammonia water (ug/L)	Dry	A	0	18	18	0	30	1260	-	-	300.4	72.0	159.4	441.5	120.0	163.0	333.0	774.0	305.3	-	-	-	-	-	-	-	-	0.449659	1.6	2		
Anthracene sediment (ug/kg)	Dry	A	25	56	42	14	17	30000	0.1	530	4262.3	938.2	2423.5	6101.1	48.0	170.0	7000.0	17000.0	7020.8	-	-	-	-	-	-	-	-	0.000566	17.5	3		
Anthracene water (ug/L)	Dry	C	86.9	130	17	113	0.011	1.5	0.006	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Arsenic water dissolved (ug/L)	Dry	A	0	2	2	0	0.35	0.46	-	-	0.4	0.1	0.3	0.4	0.5	0.4	-	-	0.1	-	-	-	-	-	-	-	-	-				
Benz(a)anthracene sediment (ug/kg)	Dry	A	6	50	47	3	9.4	140000	41	500	22811.2	5071.2	12871.9	32750.5	193.0	823.0	36000.0	54000.0	35858.6	-	-	-	-	-	-	-	-	0.006421	12.3	3		
Benz(a)anthracene water (ug/L)	Dry	B	67.4	95	31	64	0.006	8.4	0.005	0.5	-	-	-	-	-	-	-	-	-	0.396	0.001	0.005	0.040	0.984	1.332	-	-	-				
Benzene water (ug/L)	Dry	C	100	30	0	30	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Benz(a)pyrene sediment (ug/kg)	Dry	A	14.3	56	48	8	16.2	18000	0.1	500	24775.5	5545.3	13907.0	35644.0	120.0	800.0	36000.0	77000.0	41496.9	-	-	-	-	-	-	-	-	0.000926	16.4	3		
Benz(a)pyrene water (ug/L)	Dry	B	73.8	130	34	96	0.008	9.9	0.007	0.5	-	-	-	-	-	-	-	-	-	0.378	0.001	0.006	0.063	0.991	1.365	-	-	-				
Benz(b)fluoranthene sediment (ug/kg)	Dry	A	16	25	21	4	7.7	110000	0.1	220	17156.2	6181.6	5040.6	29271.9	111.0	240.0	28000.0	49000.0	30907.8	-	-	-	-	-	-	-	-	0.010353	9.1	2		
Benz(b)fluoranthene water (ug/L)	Dry	B	67.5	77	25	52	0.04	8.9	0.009	0.5	-	-	-	-	-	-	-	-	-	0.586	0.002	0.015	0.130	1.580	1.688	-	-	-				
Benz(b)fluoranthene sediment (ug/kg)	Dry	A	0	9	9	0	110	2900	-	-	1294.4	303.8	699.0	1889.9	370.0	1400.0	1700.0	-	911.4	-	-	-	-	-	-	-	-	-	-			
Benz(b)fluoranthene water (ug/L)	Dry	B	75	24	6	18	0.013	0.05	0.01	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Benz(g,h,i)perylene sediment (ug/kg)	Dry	A	6	50	47	3	23.8	120000	110	500	18839.8	4177.4	10652.2	27027.4	290.0	934.0	28000.0	52000.0	29538.8	-	-	-	-	-	-	-	-	0.003087	13.9	3		
Benz(g,h,i)perylene water (ug/L)	Dry	B	62.3	130	49	81	0.004	7.8	0.006	0.5	-	-	-	-	-	-	-	-	-	0.333	0.003	0.015	0.101	0.829	1.092	-	-	-				
Benz(k)fluoranthene sediment (ug/kg)	Dry	A	28	25	18	7	10.2	110000	0.1	530	15304.4	5473.2	4577.2	26031.7	48.5	198.0	28000.0	49000.0	27366.0	-	-	-	-	-	-	-	-	0.106811	4.5	2		
Benz(k)fluoranthene water (ug/L)	Dry	B	74	77	20	57	0.0366	8.9	0.009	0.5	-	-	-	-	-	-	-	-	-	0.525	0.002	0.008	0.083	1.260	1.592	-	-	-				
Benzofluoranthene, Total sediment, (ug/kg)	Dry	A	0	29	29	0	177	34000	-	-	90051.0	17344.7	56056.1	124045.9	5650.0	62000.0	130000.0	260000.0	93403.9	-	-	-	-	-	-	-	-	0.075513	6.9	3		
Benzofluoranthene, Total water (ug/L)	Dry	B	65.5	29	10	19	0.093	5.7	0.094	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Biochemical Oxygen Demand water (ug/L)	Dry	A	14.6	103	88	15	2100	59400	1000	10000	10399.9	1069.0	8285.7	12486.2	3400.0	7200.0	13100.0	21800.0	10849.4	-	-	-	-	-	-	-	-	0.001188	15.9	3		
Bis(2-ethylhexyl) phthalate sediment (ug/kg)	Dry	A	5.3	38	36	2	150	34000	61.8	2200	7830.7	1331.7	5202.5	10440.8	1800.0	4900.0	11600.0	19000.0	8209.4	-	-	-	-	-	-	-	-	2.64E-08	38.1	3		
Bis(2-ethylhexyl) phthalate water (ug/L)	Dry	A	44.2	129	72	57	0.44	41.4	0.13	5.8	-	1.2	0.5	1.5	3.3	0.4	0.9	2.0	4.9	5.2	-	-	-	-	-	-	-	-	5.84E-10	45.9	3	
BTEx water (ug/L)	Dry	C	100	30	0	30	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Butyl benzyl phthalate sediment (ug/kg)	Dry	A	34.2	38	25	13	21.5	60000	1	1300	2512.4	1620.8	664.3	5688.0	21.5	210.0	468.0	2660.0	9991.0	-	-	-	-	-	-	-	-	0.004814	12.9	3		
Butyl benzyl phthalate water (ug/L)	Dry	C	84.6	130	20	110	0.14	2.82	0.018	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Cadmium sediment (ug/kg)	Dry	A	8.8	57	52	5	30	3930	2.5	401	883.9	96.1	695.7	1072.2	364.0	720.0	1200.0	1610.0	725.2	-	-	-	-	-	-	-	-	7.09E-05	21.8	3		
Cadmium water (ug/L)	Dry	A	21.9	128	100	100	0.026	10.1	0.025	1	0.4	0.1	0.2	0.7	0.1	0.2	0.3	0.5	1.3	-	-	-	-	-	-	-	-	6.33E-09	41.1	3		
Cadmium water dissolved (ug/L)	Dry	A	42.9	126	72	54	0.008	1.23	0.02	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.4	0.2	0.1	-	-	-	-	-	-	-	-	1.26E-02	44.4	3	
Calcium water (ug/L)	Dry	A	0	77	77	0	1070	5	206	50400	100	250	8330.1	4476.4	443.6	17103.7	1500.0	3170.0	5200.0	8200.0	47374.0	-	-	-	-	-	-	-	-	2.06E-12	57.5	3
Chloroflyros sediment (ug/kg)	Dry	C	97.3	37	1	36	15	15	0.1	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.203518	4.6	3		
Chloroflyros water (ug/L)	Dry	C	99.3	136	1	135	0.022	0.02	0.01	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15E-05	21.8	3		
Chrysene sediment (ug/kg)	Dry	A	1.8	56	55	1	23	170000	22	220	27462.3	6155.6	15397.6	39527.0	310.0	1180.0	36000.0	77000.0	46064.2	-	-	-	-	-	-	-	-	0.000518	17.7	3		
Chrysene water (ug/L)	Dry	B	66.2	130	44	86	0.004	11	0.5	-	-	-	-	-	-	-	-	-	-	0.430	0.001	0.009	0.067	0.973	1.534	-	-	-				
Conductivity water (US/cm)	Dry	A	0	127	127	0	9.6	790	-	-	108.6	9.6	89.7	127.5	40.0	85.0</td																

Parameter and matrix	Season	Case	Data summary							Kaplan - Meier test (Case A parameters)									Regression on statistics (Case B parameters)							Peto Prentice test (Land use significance)			
			% non-detects	n	# detect	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95CL	KM mean 95UCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	Peto Prentice p-value	Peto Prentice chisq	Peto Prentice df	
Fluorene water (ug/L)	Dry	C	92.3	130	10	120	0.009	1.5	0.005	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gasoline Range Organics water (ug/L)	Dry	C	95.5	88	4	84	12	16	10	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gravel sediment (%)	Dry	A	9.3	54	49	5	0	59.2	0.1	0.1	9.7	1.7	6.4	13.1	0.7	6.3	11.0	23.4	12.5	-	-	-	-	-	-	0.806497	1.0	3	
Hardness as CaCO <sub>3</sub> water (ug/L)	Dry	A	0	132	132	0	3600	170000	-	-	33364.3	2130.6	29188.4	37540.2	15200.0	27000.0	47200.0	65900.0	24478.7	-	-	-	-	-	-	-	1.92E-10	48.2	3
Heavy Fuel Oil sediment (ug/Kg)	Dry	A	0	9	9	0	820000	4500000	-	-	2236666.7	444040.8	1366362.7	3106970.6	1100000.0	2100000.0	3100000.0	1332122.4	-	-	-	-	-	-	-	-	-	-	
Heavy Fuel Oil water (ug/L)	Dry	A	11.1	54	48	6	39	9000	80	500	1094.4	231.0	641.7	1547.0	180.0	550.0	1300.0	2400.0	1697.2	-	-	-	-	-	-	-	0.000138	20.4	3
HPAH sediment (ug/Kg)	Dry	A	1.5	67	66	1	98	1975000	220	220	236145.0	53986.5	130333.4	341956.5	1590.0	10020.0	371000.0	781000.0	441898.5	-	-	-	-	-	-	-	0.00159	15.3	3
HPAH water (ug/L)	Dry	A	41.5	130	76	54	0.019	103.9	0.031	1	4.0	1.3	6.5	0.0	0.1	0.7	8.4	14.5	-	-	-	-	-	-	-	5.23E-07	32.0	3	
Indeno(1,2,3-cd)pyrene sediment (ug/Kg)	Dry	A	8.9	56	54	5	19.4	110000	40	500	16198.5	3600.2	9142.2	23254.8	147.0	712.0	21000.0	52000.0	26941.7	-	-	-	-	-	-	-	0.001983	14.8	3
Indeno(1,2,3-cd)pyrene water (ug/L)	Dry	B	70	130	39	91	0.005	7.3	0.003	0.5	-	-	-	-	-	-	-	-	-	0.319	0.001	0.006	0.067	0.934	1.023	-	-	-	
Lead sediment (ug/Kg)	Dry	A	3.5	57	55	2	360	711000	10	10	171983.0	23230.9	126274.8	217691.2	27100.0	124000.0	248000.0	455000.0	176069.1	-	-	-	-	-	-	-	2.70E-06	28.6	3
Lead water (ug/L)	Dry	A	3.1	130	126	4	0.1	294	0.05	0.1	23.1	3.9	15.5	30.7	1.7	7.3	23.8	50.8	44.0	-	-	-	-	-	-	-	5.19E-12	55.6	3
Lead water dissolved (ug/L)	Dry	A	9.5	126	114	12	0.031	21.3	0.02	4	1.4	0.3	0.8	2.0	0.1	0.3	1.1	2.6	3.3	-	-	-	-	-	-	-	3.80E-11	51.5	3
lPAH sediment (ug/Kg)	Dry	A	7.9	63	58	5	35.6	267100	0.1	500	30148.7	7147.0	16140.8	44156.5	304.8	1350.0	47200.0	97250.0	56727.5	-	-	-	-	-	-	-	0.000881	16.5	3
lPAH water (ug/L)	Dry	A	46.2	130	70	60	0.009	11.75	0.027	0.5	0.6	0.2	0.3	0.9	0.0	0.1	1.1	1.9	-	-	-	-	-	-	-	2.76E-07	33.3	3	
Lube Oil water (ug/L)	Dry	C	83.3	12	2	10	547	709	190	570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Magnesium water (ug/L)	Dry	A	0	77	77	0	140	6400	-	-	1868.4	181.3	1513.0	2223.8	610.0	1430.0	2500.0	4120.0	1591.2	-	-	-	-	-	-	-	7.23E-08	36.1	3
Magnesium water dissolved (ug/L)	Dry	A	0	2	2	0	210	310	-	-	260.0	50.0	162.0	358.0	210.0	-	-	-	70.7	-	-	-	-	-	-	-	-	-	-
Malathion sediment (ug/Kg)	Dry	C	97.3	37	1	36	16	16	0.1	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Malathion water (ug/L)	Dry	C	97.8	136	3	133	0.027	0.086	0.017	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mecoprop sediment (ug/Kg)	Dry	B	66.7	3	1	2	6500	6500	5000	5000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mecoprop water (ug/L)	Dry	C	82.2	129	23	106	0.083	24.9	0.02	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mercury sediment (ug/Kg)	Dry	A	8.3	48	44	4	12	442	5	61	109.9	12.9	84.6	135.2	36.0	80.0	160.0	220.0	89.4	-	-	-	-	-	-	-	0.030908	8.9	3
Mercury water (ug/L)	Dry	B	64.1	92	33	59	0.007	0.4	0.02	0.1	-	-	-	-	-	-	-	-	-	0.036	0.010	0.019	0.035	0.061	0.060	-	-	-	
Mercury water dissolved (ug/L)	Dry	C	86.7	90	12	78	0.005	0.4	0.02	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Motor Oil sediment (ug/Kg)	Dry	A	0	18	18	0	820000	1.40E+07	-	-	7306666.7	870559.9	5600400.6	9012932.7	4600000.0	7700000.0	10000000.0	12000000.0	3693472.8	-	-	-	-	-	-	-	-	-	-
Motor Oil water (ug/L)	Dry	A	4	25	24	1	400	3800	500	500	1422.0	217.5	995.8	1848.2	730	980.0	1700.0	3600.0	1087.3	-	-	-	-	-	-	-	0.299391	2.4	2
Naphthalene sediment (ug/Kg)	Dry	A	42.9	56	32	24	5.4	6900	0.1	530	514.5	142.6	235.1	793.9	-	80.0	750.0	1200.0	1066.8	-	-	-	-	-	-	-	1.25E-05	25.4	3
Naphthalene water (ug/L)	Dry	B	69.2	130	40	90	0.006	1.5	0.006	0.5	-	-	-	-	-	-	-	-	-	0.059	0.006	0.012	0.034	0.080	0.196	-	-	-	
Nitrite-Nitrate water dissolved (ug/L)	Dry	A	5.1	117	111	6	39	58000	98	770	1097.4	492.9	131.4	2063.4	245.0	462.0	820.0	1220.0	531.2	-	-	-	-	-	-	-	0.025327	9.3	3
o-Cresol sediment (ug/Kg)	Dry	A	9.6	115	104	11	5	270	4	5	44.4	4.2	36.2	52.7	13.0	26.0	60.5	115.0	45.1	-	-	-	-	-	-	-	3.60E-05	23.2	3
o-Cresol water (ug/L)	Dry	A	23.1	26	20	6	7.47	24100	13	220	2009.4	1102.6	-151.6	4170.4	7.5	300.0	670.0	2690.0	562.1	-	-	-	-	-	-	-	0.013086	10.8	3
p-Cresol sediment (ug/Kg)	Dry	A	100	5	0	5	-	-	-	-	0.047	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
p-Cresol water (ug/L)	Dry	C	100	5	0	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PCB-1016 sediment (ug/Kg)	Dry	C	100	24	0	24	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1016 water (ug/L)	Dry	C	100	6	0	6	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1021 sediment (ug/Kg)	Dry	C	100	24	0	24	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1021 water (ug/L)	Dry	C	100	6	0	6	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1221 sediment (ug/Kg)	Dry	C	100	24	0	24	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1221 water (ug/L)	Dry	C	100	6	0	6	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1232 sediment (ug/Kg)	Dry	C	100	24	0	24	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1232 water (ug/L)	Dry	C	100	6	0	6	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1242 sediment (ug/Kg)	Dry	C	100	24	0	24	-	-	-	-	0.05	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1242 water (ug/L)	Dry	C	100	6	0	6	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-1248 sediment (ug/Kg)	Dry	C	95.8	24	1	23	38	38	0.05	200	-	-	-	-	-	-	-	-	6.9	0.1	6.8	7.0	7.2	7.3	0.4	-	-		
PCB-1248 water (ug/L)	Dry	C	100	6	0	6	-	-	-	-	0.01	0.01	-	-	-	-	-	-	-	0.131	0.037	0.069	0.145	0.331	0.169	-	-	-	
PCB-1254 sediment (ug/Kg)	Dry	B	66.7	24	8	16	5.9	650	0.05	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PCB-1254 water (ug/L)	Dry	A	33.3	6	4	2	0.01	0.024	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PCB-1600 sediment (ug/Kg)	Dry	B	75	24	6	18	7.2	120	0.05	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PCB-1600 water (ug/L)	Dry	C																											

Parameter and matrix	Season	Case	Data summary							Kaplan - Meier test (Case A parameters)								Regression on statistics (Case B parameters)						Peto Prentice test (Land use significance)				
			% non-detects	n	# detect	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95UL	KM mean 95CL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	Peto Prentice p-value	Peto Prentice chisq	Peto Prentice df
Triclopyr water (ug/L)	Dry	C	83.7	123	20	103	0.05	1.38	0.05	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Turbidity water (NTU)	Dry	A	0	107	107	0	1.4	189	-	-	26.0	3.1	19.9	32.1	6.6	15.0	33.0	55.4	32.2	-	-	-	-	-	-	0.014439	10.5	3
Zinc sediment (ug/Kg)	Dry	A	0	57	57	0	1390	9250000	-	-	53198.9	159869.4	218660.6	845337.3	146000.0	333000.0	561000.0	841000.0	1206987.8	-	-	-	-	-	-	7.06E-05	21.8	3
Zinc water (ug/L)	Dry	A	2.4	124	121	31	1.4	1290	1	1	171.4	20.8	130.7	212.2	39.2	87.8	212.0	409.0	231.4	-	-	-	-	-	-	1.08E-10	49.4	3
Zinc water dissolved (ug/L)	Dry	A	2.5	120	117	31	0.219	1090	1	1	105.4	17.3	71.5	139.3	17.3	42.7	97.0	244.0	189.6	-	-	-	-	-	-	3.05E-08	37.8	3
1-Methylnaphthalene sediment (ug/Kg)	Wet	B	52.4	21	10	11	1.07	460	1	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1-Methylnaphthalene water (ug/L)	Wet	C	95.2	228	11	217	0.1	1.6	0.1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2-Methylnaphthalene sediment (ug/Kg)	Wet	A	22.7	22	17	5	1.12	540	1	330	81.4	32.6	17.5	145.3	2.4	29.0	57.2	130.0	153.0	-	-	-	-	-	-	0.002514	14.3	3
2-Methylnaphthalene water (ug/L)	Wet	C	80.6	504	98	406	0.003	2.5	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2-Nitrophenol sediment (ug/Kg)	Wet	C	100	16	0	16	-	-	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2,4-D sediment (ug/Kg)	Wet	C	88.9	9	3	8	340	340	10	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2,4-D water (ug/L)	Wet	C	86.1	476	66	410	0.02	28.4	0.05	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2,4-Dichlorophenol sediment (ug/Kg)	Wet	C	100	16	0	16	-	-	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2,4-Dimethylphenol sediment (ug/Kg)	Wet	C	81.2	16	3	13	6.1	17.4	1	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2,4,5-Trichlorophenol sediment (ug/Kg)	Wet	C	100	16	0	16	-	-	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2,4,6-Trichlorophenol sediment (ug/Kg)	Wet	C	100	16	0	16	-	-	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4-Chloro-3-Methylphenol sediment (ug/Kg)	Wet	C	93.8	16	3	15	83.6	83.6	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4-Nitrophenol sediment (ug/Kg)	Wet	C	93.8	16	3	15	4.64	4.64	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Acenaphthene sediment (ug/Kg)	Wet	A	47.8	23	12	11	12.5	6500	1	59	635.0	363.3	-77.0	1346.9	-	12.5	106.0	930.0	1742.1	-	-	-	-	-	-	0.060022	7.4	3
Acenaphthene water (ug/L)	Wet	C	89.1	504	55	449	0.003	1.3	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Acenaphthylene sediment (ug/Kg)	Wet	B	78.3	23	5	18	15.8	3600	0.1	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Acenaphthylene water (ug/L)	Wet	C	93.1	504	35	469	0.003	0.95	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Ammonia water (ug/L)	Wet	A	0	53	53	0	10	324	-	-	137.7	10.5	117.1	158.3	80.0	130.0	190.0	250.0	76.5	-	-	-	-	-	8.09E-05	18.8	2	
Anthracene sediment (ug/kg)	Wet	A	30.4	23	16	7	21	33000	1	4.7	2791.2	1617.2	-378.5	5961.0	-	44.0	201.0	6800.0	7756.0	-	-	-	-	-	-	0.017577	10.1	3
Anthracene water (ug/L)	Wet	C	89.3	504	54	450	0.004	5.4	0.004	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Arsenic water dissolved (ug/L)	Wet	A	0	14	14	0	0.17	1.04	-	-	0.3	0.1	0.2	0.4	0.2	0.2	0.4	0.4	0.2	-	-	-	-	-	-	-	-	-
Benz(a)anthracene sediment (ug/Kg)	Wet	A	26.3	19	14	5	63.4	21000	1	1	18272.4	11649.8	-4560.8	41105.6	-	210.0	8700.0	82000.0	50780.4	-	-	-	-	-	-	0.021978	9.6	3
Benz(a)anthracene water (ug/L)	Wet	B	65.1	416	145	271	0.004	11	0.002	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzene water (ug/L)	Wet	C	98.9	90	3	89	2.6	2.6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benz(a)pyrene sediment (ug/Kg)	Wet	A	26.1	23	17	6	31.8	26000	1	1	18635.3	11915.1	-4717.8	41988.5	-	211.0	1420.0	33000.0	57142.8	-	-	-	-	-	-	0.017779	10.1	3
Benz(a)pyrene water (ug/L)	Wet	B	71.1	501	45	356	0.004	15	0.004	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benz(b)fluoranthene sediment (ug/Kg)	Wet	A	25	20	15	5	1.07	24000	1	2	20128.7	12580.0	-4527.6	44785.1	1.1	234.0	1300.0	35000.0	56259.5	-	-	-	-	-	-	0.020394	9.8	3
Benz(b)fluoranthene water (ug/L)	Wet	B	70.2	282	84	198	0.02	13	0.0094	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benz(b)furanone sediment (ug/L)	Wet	A	45.1	102	56	46	0.005	0.315	0.003	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-	-	-	-	-	-	0.03726	11.2	2
Benz(g,l)perylene sediment (ug/Kg)	Wet	A	23.8	21	16	5	4	160000	1	1	13097.8	8049.0	-2677.9	28873.6	4.0	190.0	1000.0	26000.0	36885.1	-	-	-	-	-	-	0.037235	8.5	3
Benz(g,l)perylene water (ug/L)	Wet	B	59.4	503	204	299	0.005	12	0.003	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benz(k)fluoranthene sediment (ug/Kg)	Wet	A	30	20	14	6	36.3	23000	1	2	19154.5	12144.1	-4647.5	42956.5	-	131.0	1100.0	32000.0	54310.1	-	-	-	-	-	-	0.016642	10.2	3
Benz(k)fluoranthene water (ug/L)	Wet	B	76.6	282	66	216	0.014	13	0.0094	0.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Benzofluoranthene, Total sediment (ug/Kg)	Wet	A	0	5	5	0	370	370	-	-	43604.0	34778.8	-24561.1	117169.1	450.0	1200.0	36000.0	-	77767.7	-	-	-	-	-	-	3.10E-22	103.3	3
Benzofluoranthene, Total water (ug/L)	Wet	B	51.7	120	58	62	0.0666	2.9	0.0094	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Biochemical Oxygen Demand water (ug/L)	Wet	A	23.2	435	334	101	1100	68000	1000	15000	5275.3	299.2	4688.7	5861.8	2000.0	3600.0	6500.0	10100.0	6241.3	-	-	-	-	-	-	1.93E-46	215.6	3
Bis(2-ethylhexyl) phthalate sediment (ug/Kg)	Wet	A	11.8	17	15	2	21.6	15000	20	20	4697.9	1210.4	2325.5	7070.3	418.0	3600.0	6100.0	14000.0	4990.7	-	-	-	-	-	-	0.004857	12.9	3
Bis(2-ethylhexyl) phthalate water (ug/L)	Wet	A	36.5	493	313	180	0.15	27.8	0.024	10.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.97E-33	152.7	3
BTEx water (ug/L)	Wet	C	96.7	90	3	87	1.1	6.4	1	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Butyl benzyl phthalate sediment (ug/L)	Wet	B	63.2	19	7	12	80	5600	20	890	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Butyl benzyl phthalate water (ug/L)	Wet	B	75.5	503	123	380	0.022	1.35	0.019	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Cadmium sediment (ug/Kg)	Wet	A	13	23	20	31	0.781	4900	100	500	1110.3	240.7	638.5	1582.1	200.0	974.0	1600.0	2540.0	1154.4	-	-	-	-	-	-	0.201267	4.6	3
Cadmium water (ug/L)	Wet	A	27.8	511	369	142	0.011	6.1	0.037	1	0.2	0.0	0.2	0.0	0.1	0.2	0.3	0.5	-	-	-	-	-	-	3.80E-31	144.6	3	
Cadmium water dissolved (ug/L)	Wet	A	48.7	509	261	248	0.003	1.85	0.007	0.4	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	-	-	-	-	-	-	2.88E-29	135.9	3	
Calcium water (ug/L)	Wet	A	0	276	276	0	620	357000	-	-	8959.5	1405.8	6240.5	11751.3	3240.0	5440.0	9700.0	16000.0	23355.7	-	-	-	-	-	-	9.95E-59	272.3	3
Chloride water (ug/L)	Wet	A	1.4	439	433	6	55	108000	100	100	13129.7	3095.6	7062.5	19197.0														

Parameter and matrix	Season	Case	Data summary						Kaplan - Meier test (Case A parameters)									Regression on statistics (Case B parameters)						Peto Prentice test (Land use significance)							
			% non-detects	n	# detect	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95LCL	KM mean 95UCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	Peto Prentice p-value	Peto Prentice chisq	Peto Prentice df			
Fluorene sediment (ug/Kg)	Wet	A	39.1	23	14	9	20.4	12000	1	34	1048.3	612.6	-152.4	2249.1	-	31.8	164.0	1600.0	2938.1	-	-	-	-	-	-	0.011492	11.0	-			
Fluorene water (ug/L)	Wet	C	86.1	504	70	434	0.003	1.6	0.003	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Gasoline Range Organics water (ug/L)	Wet	C	88.3	403	47	356	11	395	10	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.145702	5.4	-		
Gravel sediment (%)	Wet	A	0	19	19	0	0.2	15.2	-	-	2.9	0.8	1.3	4.5	0.6	2.2	3.7	7.0	3.5	-	-	-	-	-	-	-	-	-	-		
Hardness as CaCO <sub>3</sub> water (ug/L)	Wet	A	0.4	510	508	2	1900	1300000	10000	10000	36323.1	36285.5	29211.5	43434.8	13000.0	25000.0	38000.0	56400.0	81942.2	-	-	-	-	-	-	-	-	1.26E-44	207.0	-	
Heavy Fuel Oil sediment (ug/Kg)	Wet	A	0	3	3	0	0.399000	5040000	-	-	3966666.7	3971363.3	2913845.9	5019487.4	3390000.0	3470000.0	-	-	-	-	930394.2	-	-	-	-	-	-	-	8.34E-36	166.2	-
Heavy Fuel Oil water (ug/L)	Wet	A	23.8	244	186	58	21	6500	20	500	688.3	63.4	564.0	812.6	150.0	320.0	735.0	1900.0	990.6	-	-	-	-	-	-	-	-	0.013867	10.6	-	
HPAH sediment (ug/Kg)	Wet	A	8.7	23	21	2	3.46	2683000	1	1	205442.2	125608.7	-40746.3	451630.7	120.0	2659.0	12889.0	353100.0	602398.1	-	-	-	-	-	-	-	-	3.10E-23	107.9	-	
HPAH water (ug/L)	Wet	A	30.4	503	350	153	0.012	154.3	0.0094	2.2	1.9	0.5	0.9	3.0	0.0	0.1	0.7	2.2	11.7	-	-	-	-	-	-	-	-	-	-	-	
Indeno(1,2,3-cd)pyrene sediment (ug/Kg)	Wet	A	26.1	23	17	6	25.1	160000	1	4	11744.1	7287.9	-2539.9	26028.1	-	360.0	2040.0	23000.0	34951.5	-	-	-	-	-	-	-	-	0.013869	10.6	-	
Indeno(1,2,3-cd)pyrene water (ug/L)	Wet	B	71.6	504	143	361	0.004	10	0.003	1.1	-	-	-	-	-	-	-	-	-	0.124	0.001	0.005	0.028	0.170	0.724	-	-	-	-		
Lead sediment (ug/Kg)	Wet	A	0	23	23	0	416	1790000	-	-	228840.3	79885.1	72268.3	385412.2	5900.0	114000.0	254000.0	523000.0	383115.6	-	-	-	-	-	-	-	-	0.060759	7.4	-	
Lead water (ug/L)	Wet	A	0.4	508	506	2	0.1	137	0.05	0.1	13.2	0.9	11.5	14.9	1.3	6.0	15.2	37.4	19.5	-	-	-	-	-	-	-	-	4.03E-42	195.5	-	
Lead water dissolved (ug/L)	Wet	A	21.9	502	392	110	0.016	21.8	0.02	1.8	0.6	0.1	0.5	0.8	0.1	0.2	0.3	1.0	1.7	-	-	-	-	-	-	-	-	1.80E-21	99.7	-	
LPAH sediment (ug/Kg)	Wet	A	0	23	23	0	1.94	307500	-	-	23727.7	14427.5	-4549.7	52005.0	50.5	413.3	1562.0	37140.0	69191.8	-	-	-	-	-	-	-	-	0.008942	11.6	-	
LPAH water (ug/L)	Wet	A	36.7	504	319	185	0.006	24.3	0.0094	1.1	0.3	0.1	0.2	0.5	0.0	0.1	0.1	0.3	1.7	-	-	-	-	-	-	-	-	2.26E-16	76.0	-	
Lube Oil water (ug/L)	Wet	B	54.5	77	35	42	194	1550	190	210	-	-	-	-	-	-	-	-	-	366.127	128.017	218.000	460.000	907.000	348.851	-	-	-			
Magnesium water (ug/L)	Wet	A	0	276	276	0	90	96500	-	-	2191.7	360.0	1486.2	2897.3	600.0	1500.0	2400.0	4040.0	5980.7	-	-	-	-	-	-	-	-	5.00E-41	190.4	-	
Malathion sediment (ug/Kg)	Wet	C	100	16	0	16	-	-	0.1	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Malathion water (ug/L)	Wet	C	99.2	507	4	503	0.0539	0.2	0.008	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Mecoprop sediment (ug/Kg)	Wet	C	100	9	0	9	-	-	10	5000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Mecoprop water (ug/L)	Wet	C	91.6	487	41	446	0.02	28	0.02	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Mercury sediment (ug/Kg)	Wet	A	40	20	12	8	10	220	50	50	98.5	20.7	57.9	139.1	10.0	50.0	200.0	210.0	92.6	-	-	-	-	-	-	-	-	0.13049	5.6	-	
Mercury water (ug/L)	Wet	C	80.7	363	70	293	0.002	0.216	0.02	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0493	-	-	
Mercury water dissolved (ug/L)	Wet	C	92.4	354	27	327	0.001	0.075	0.001	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Motor Oil sediment (ug/Kg)	Wet	A	0	4	4	0	3.00E+06	1.70E+07	-	-	912500.0	2902692.7	3435826.8	14814173.2	3000000.0	8100000.0	-	-	-	-	5805385.4	-	-	-	-	-	-	-	-	-	-
Motor Oil water (ug/L)	Wet	A	22.5	80	62	18	200	5800	200	500	1124.3	108.0	912.5	1336.0	350.0	910.0	1600.0	2400.0	966.4	-	-	-	-	-	-	-	-	0.000322	16.1	-	
Naphthalene sediment (ug/Kg)	Wet	A	34.8	23	15	8	1.02	2400	2	330	249.8	136.8	-18.4	517.9	1.9	9.1	40.3	570.0	656.0	-	-	-	-	-	-	-	-	0.006575	12.2	-	
Naphthalene water (ug/L)	Wet	B	61.2	498	193	305	0.004	2.2	0.005	2.1	-	-	-	-	-	-	-	-	-	0.051	0.008	0.018	0.042	0.107	0.162	-	-	-	1.17E-12	58.6	-
Nitrite-Nitrate water dissolved (ug/L)	Wet	A	3.6	467	450	17	12	4000	10	216	411.2	24.9	362.4	460.1	111.0	213.0	434.0	1000.0	538.6	-	-	-	-	-	-	-	-	-	-	-	
o-Cresol sediment (ug/Kg)	Wet	B	76.5	17	4	13	14.1	40.2	1	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
o-Cresol water (ug/L)	Wet	C	92.3	26	2	24	500	670	500	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Ortho-phosphate water dissolved (ug/L)	Wet	A	7.4	475	440	35	4	257	3	223	29.3	1.4	26.6	32.0	10.0	20.7	36.0	67.0	29.7	-	-	-	-	-	-	-	-	6.12E-12	55.2	-	
p-Cresol sediment (ug/Kg)	Wet	A	23.5	17	13	4	2.46	7000	1	440	636.4	413.7	-174.6	1447.3	2.5	31.3	311.0	1560.0	1705.9	-	-	-	-	-	-	-	-	0.757953	1.2	-	
p-Cresol water (ug/L)	Wet	C	90.5	21	2	19	0.354	0.362	0.047	0.095	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PCB-arcoclor 1016 sediment (ug/Kg)	Wet	C	100	9	0	9	-	-	0.05	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
PCB-arcoclor 1016 water (ug/L)	Wet	C	100	21	0	21	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
PCB-arcoclor 1221 sediment (ug/Kg)	Wet	C	100	9	0	9	-	-	0.05	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1221 water (ug/L)	Wet	C	100	21	0	21	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1232 sediment (ug/Kg)	Wet	C	100	9	0	9	-	-	0.05	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1242 sediment (ug/Kg)	Wet	C	100	9	0	9	-	-	0.05	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1242 water (ug/L)	Wet	C	100	21	0	21	-	-	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1248 sediment (ug/Kg)	Wet	C	88.9	9	1	8	45	45	0.05	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1248 water (ug/L)	Wet	C	95.2	21	1	20	0.014	0.014	0.01	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1254 sediment (ug/Kg)	Wet	A	22.2	9	7	2	30	200	0.05	35	76.7	22.8	31.9	121.4	30.0	41.0	87.0	68.5	-	-	-	-	-	-	-	-	-	-	-		
PCB-arcoclor 1254 water (ug/L)	Wet	B	52.4	21	10	11	0.011	0.058	0.005	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
PCB-arcoclor 1260 sediment (ug/Kg)	Wet	B	66.7	9	3	6	80	100	0.05	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
PCB-arcoclor 1260 water (ug/L)	Wet	B	71.4	21	6	15	0.01	0.038	0.01	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Pentachlorophenol sediment (ug/Kg)	Wet	B	75	24	6	18	7.8	371	1	2200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Pentachlorophenol water (ug/L)	Wet	B	74.7	470	119	351	0.02	5.1	0.02	5.6	-	-	-	-	-	-	-	-	-	0.158	0.021	0.056	0.150	0.388	0.343	-	-	-			
pH water (pH)	Wet	A	0	183	183	0	5.6	8.26	-	-	6.9	0.0	6.8	7.0	6.6	7.0	7.2	7.4	0.4	-	-	-	-	-	-	-	-	0.00208	12.4	-	
Phenanthrene sediment (ug/Kg)	Wet	A	0	22	22	0	2.16	250000	-	-	19647.8	12111.7	-4098.0	43386.4	120.0	328.0	1200.0	29000.0	56809.1	-	-	-	-	-	-	-	-	0.019194	9.9	-	
Phenanthrene water (ug/L)	Wet	A	46.9	503	267	236	0.006	16	0.003	1.1	0.2																				

Parameter and matrix	Season	Case	Data summary						Kaplan - Meier test (Case A parameters)								Regression on statistics (Case B parameters)						Peto Prentice test (Land use significance)				
			% non-detects	n	# detects	# non-detects	minimum	maximum	minimum nondetect	maximum nondetect	KM mean	KM mean SE	KM mean 95UCL	KM mean 95LCL	KM 25th percentile	KM median	KM 75th percentile	KM 90th percentile	KM SD	ROS mean	ROS 25th percentile	ROS median	ROS 75th percentile	ROS 90th percentile	ROS SD	Peto p-value	Peto Prentice chisq
Triclopyr sediment (ug/Kg)	Wet	C	88.9	9	3	8	310	310	10	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triclopyr water (ug/L)	Wet	C	90.5	452	43	409	0.02	18.3	0.05	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turbidity water (NTU)	Wet	A	0	441	441	0	0.98	500	-	-	33.4	2.3	28.9	37.9	7.3	17.9	35.3	84.0	48.6	-	-	-	-	-	3.62E-13	61.0	3
Zinc sediment (ug/Kg)	Wet	A	0	23	23	0	366	2460000	-	-	590320.3	128748.4	337978.1	842662.5	55000.0	424000.0	860000.0	1110000.0	617455.5	-	-	-	-	-	0.033155	8.7	3
Zinc water (ug/L)	Wet	A	0.6	506	503	3	2.6	899	0.5	1	86.9	4.0	79.1	94.7	27.4	68.0	117.0	178.0	89.6	-	-	-	-	-	2.23E-53	247.5	3
Zinc water dissolved (ug/L)	Wet	A	2.7	488	475	13	0.5	740	0.5	36.5	40.6	2.9	34.9	46.3	12.7	24.8	41.5	86.0	64.3	-	-	-	-	-	4.55E-37	172.1	3

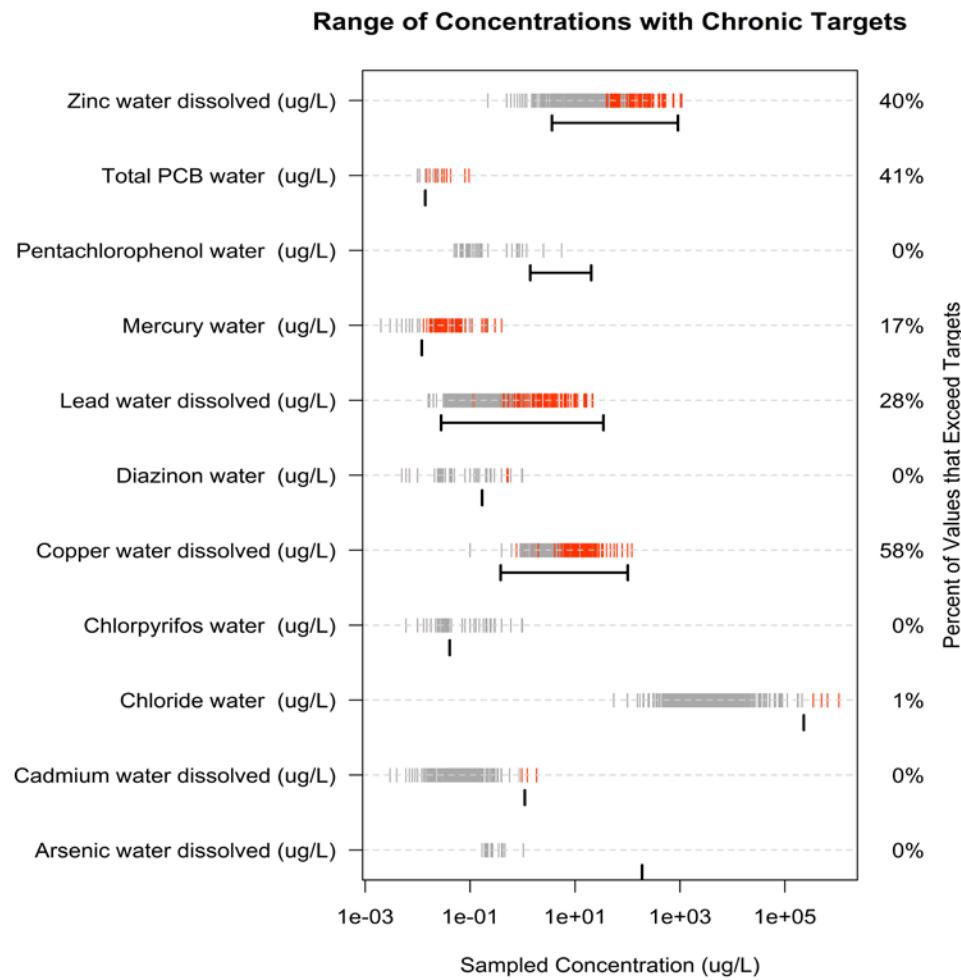


**Figure G-1. Range of concentrations compared with water quality standards for the protection of aquatic life (acute targets).**

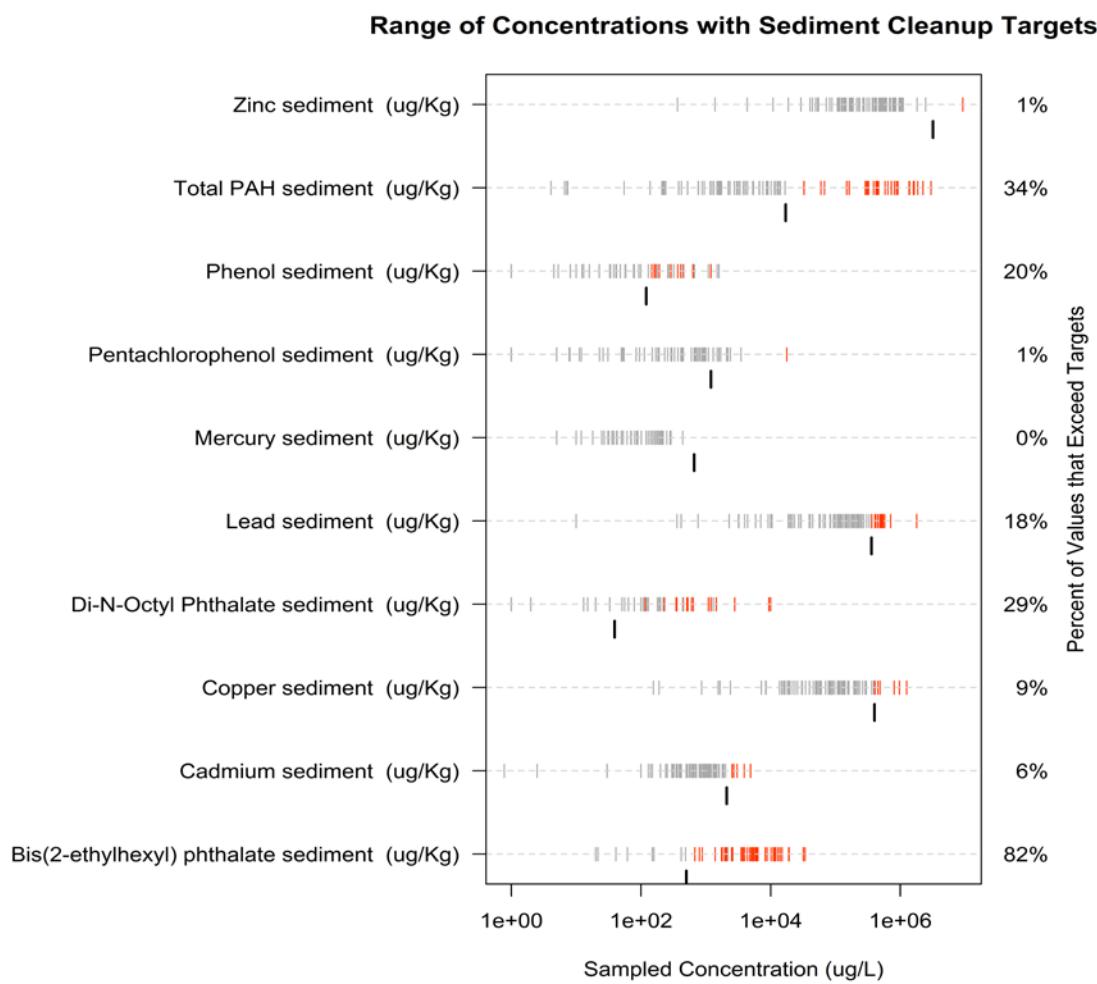
Vertical grey bars are concentrations that do not exceed targets and vertical red bars exceed the target.

The range of targets calculated for parameters with pH or hardness dependent criteria is highlighted by the black bar.

The percent of samples which exceed the target is documented on the secondary y-axis.



**Figure G-2. Range of concentrations compared with water quality standards for the protection of aquatic life (chronic targets).**  
 Vertical grey bars are concentrations that do not exceed targets and vertical red bars exceed the target.  
 The range of targets calculated for parameters with pH or hardness dependent criteria is highlighted by the black bar.  
 The percent of samples which exceed the target is documented on the secondary y-axis.



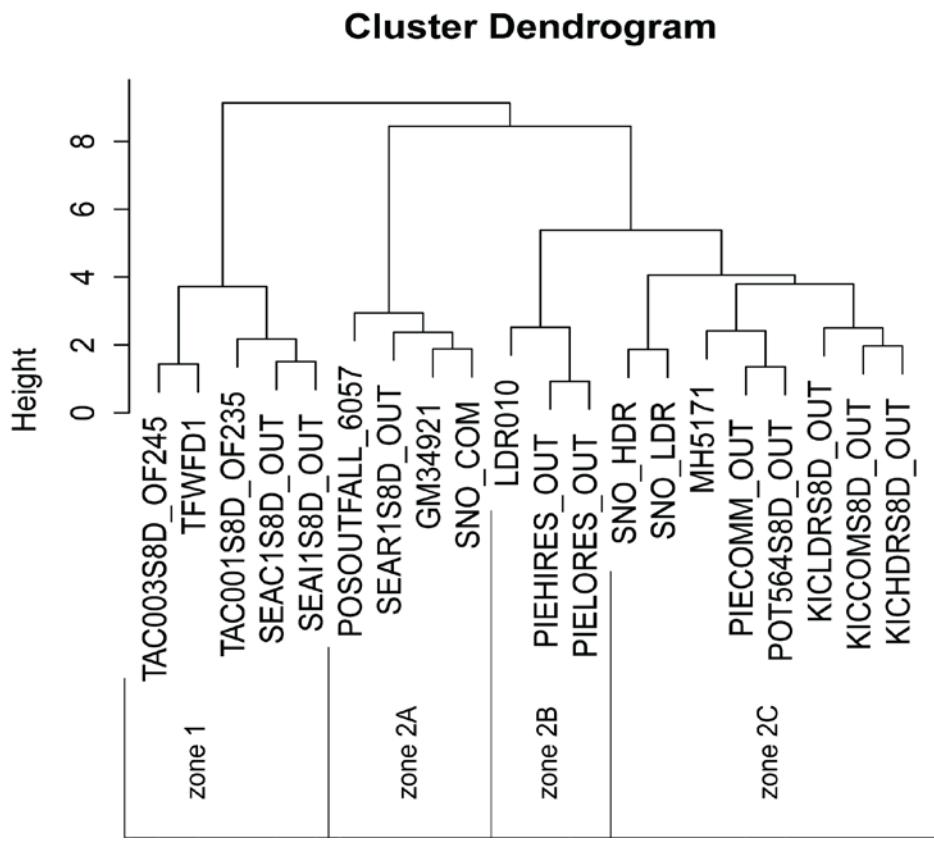
**Figure G-3. Range of concentrations compared with targets from the sediment cleanup objectives.**

Vertical grey bars are concentrations that do not exceed targets and vertical red bars exceed the targets.

Note: grey bars which appear to exceed the target (right of the vertical black line) had high detection limits and are therefore not considered in excess.

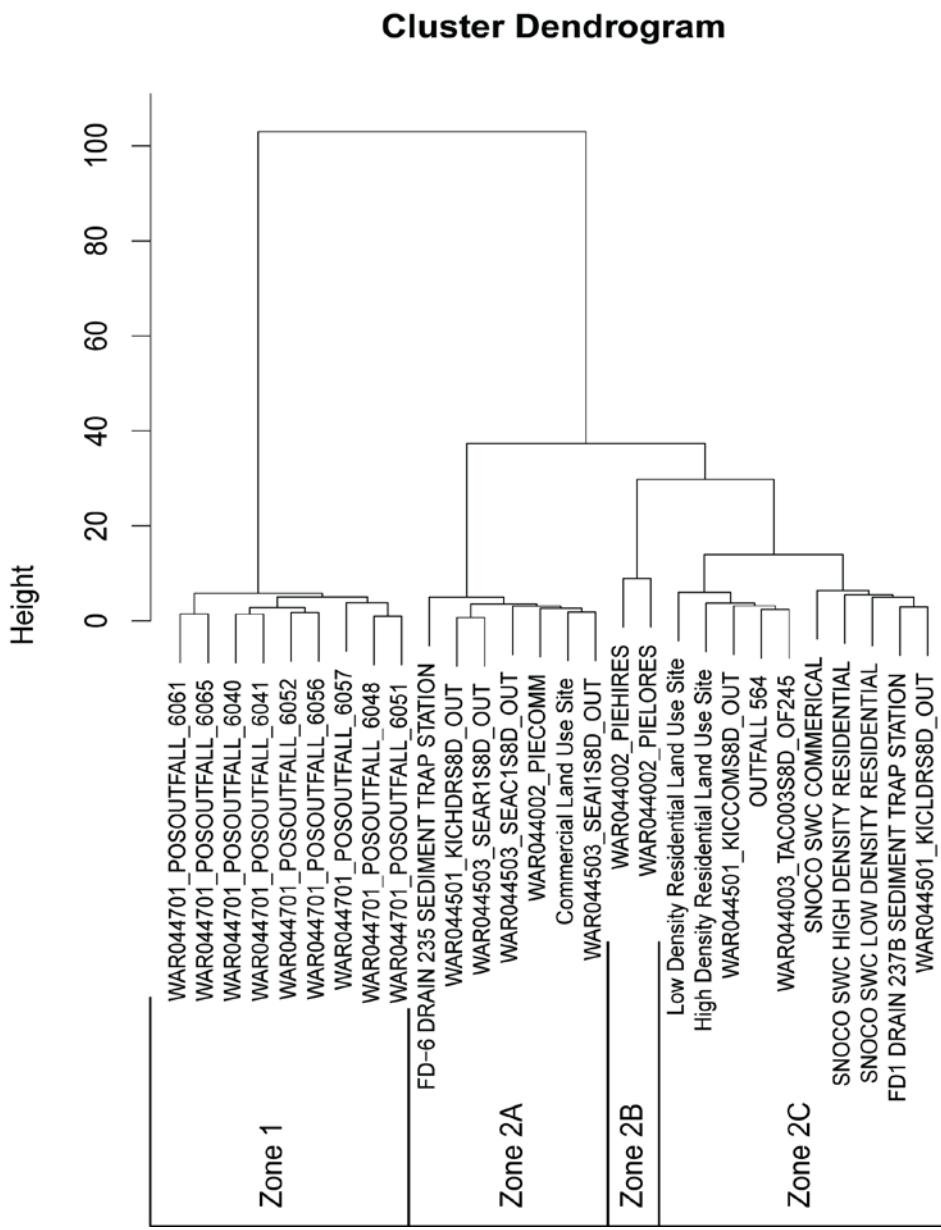
The target is highlighted by the black bar.

The percent of samples which exceed the targets is documented on the secondary y-axis.



**Figure G-4. Dendrogram of the cluster analysis using Ward's method.**

*Sample sites are grouped based on the water concentrations of the parameters used in the PCA.  
Zones are groups of similar sites.*



**Figure G-5. Dendrogram of the cluster analysis using Ward's method.**

*Sample sites are grouped based on the water concentrations of the parameters used in the PCA. Zones are groups of similar sites.*