Table 1. This template is Table 6.0-2 from the R2R *"COPCs and iCOCs Identified Based on Ecological and/or Human Health Risk Evaluations, and Analytes Selected as Indicator Chemicals for Nature and Extent Discussions."*

	Detection Frequncey by Media in Current Project Database				Round 2 Report iCOC Status				Round 2 Report				Proposed for Draft RI				
									Selected Indicator Chemicals				Selected Indicator Chemicals: X = mapped in R2R; X = EPA requested addition AND > 20% FOD; X = added based on upland COI review				
COPC	Percent_Detected in Surface Area Samples (RM 1-12) through Round 3A	Percent_Detected in all LWG RI Surface Water Samples through Round 3	Percent_Detected in all Biota Samples through Round 3A	Percent_Detected in Sediment Traps	Human Health iCOC	Ecological iCOC	Human Health Potential iCOC[a]	Ecological Potential iCOC[b]	Sediment	Surface Water	Biota	TZW	Sediment	Surface Water	Sediment Traps (same as sediments	Biota	TZW
Conventionals																	
Ammonia	98.9		0					X									
Cyanide	85.7		0					X				X					X
Perchlorate	23.1		0					X				X					X
Sulfides	0		0					X									
Metals																	
Aluminum	100	100.0	96.3	100								X					X
Antimony	71.4	49.2	34.4	98													
Arsenic	90.5	90.5	100	100	X			X	X	X	X	X	X	X	X	X	X
Barium	100		80	100								X					X
Cadmium	91.1	17.3	94.8	100		X						X					X
Chromium	99.6	65.9	76.4	100									X	X	X	X	
Copper	99.7	100.0	100	100		X							X	X	X		
Iron	100	100	100														
Lead	98.9	100	85.8	100				X		X		X	X	X	X	X	X
Magnesium	100		100														
Manganese	100		100														
Mercury	91.1	5.1	99.6	98	X	X		X	X		X	X	X		X	X	X
Nickel	98.7	93.3	88.9	100									X	X	X		
Potassium	100		100														
Selenium	44.5	52.0	59.7	80													
Silver	93	2.2	61.5	100				X									
Sodium	100		100														
Thallium	77.5	30.4	93.3									X					X
Vanadium	100		0														
Zinc	100	77.1	100	100		X			X		X	X	X	X	X	X	X
Butyltins																	
Tributyltin ion	94.5	7.1	57.1	64		X		X	X		X		X		X	X	
Total PCBs[c]													X	X	X	X	
Total PCB Aroclors	73.8		90.3	11.5	X	X			X	X	X						
Total PCB Congeners	94.2	100.0	100	100.0	X	X			X	X	X						
Total PCB TEQ	100		99.5			X			X	X	X		X	X	X	X	
Dioxins/Furans																	
Dioxin TEQ	100	100	100	2	X	X			X	X	X		X	X	X	X	
Herbicides																	
Dalapon	0	1.2	0	3.8													
Silvex	0.4	0	0	5.7													
Organochlorine Pesticides																	
2,4'-DDD	67.3	66.4	59	47.2		X		X									
2,4'-DDE	28.4	55.7	47	5.6													
2,4'-DDT	52.9	59.9	66.7	54.7		X		X									
4,4'-DDD	80.6	69.5	87.7	92.5		X		X									
4,4'-DDE	79.6	71.4	97.7	77.4		X		X									
4,4'-DDT	70.8	72.9	80.3	69.8		X		X									
Total of 2,4' and 4,4'-DDD (Sum DDD)	82.1	56.8	87.7		X	X	X	X	X	X	X	X	X	X	X	X	X
Total of 2,4' and 4,4'-DDE (Sum DDE)	80.1	55.7	97.7		X	X		X	X	X	X	X	X	X	X	X	X
Total of 2,4' and 4,4'-DDT (Sum DDT)	75.7	55.7	85.7		X		X	X	X	X	X	X	X	X	X	X	X
Total of 2,4' and 4,4'-DDD, -DDE, -DDT	88	86.0	100			X			X	X	X	X	X	X	X	X	X
Total of 4,4'-DDD, -DDE, -DDT	87.5	59.1	100														
Aldrin	23.9	48.9	40.3	9.4	X	X			X	X	X		X	X	X	X	
alpha-Hexachlorocyclohexane	20.9	48.1	26	0.0	X			X									
beta-Hexachlorocyclohexane	43.1	29.8	13.4	9.4	X			X	X	X							
delta-Hexachlorocyclohexane	15.2	16.4	7.3	3.7				X									
gamma-Hexachlorocyclohexane	16.7	52.3	35.3	3.7	X												
Total Chlordanes	59.8	62.9	73.7		X			X	X	X	X		X	X	X	X	
Dieldrin	18.1	59.5	56	9.4	X			X									
Endrin	10.1	2.4	20.7	1.8				X									
Endrin aldehyde	3.9	1.9	1	7.5													
Endrin ketone	16.4	19.1	8	0.0				X									
Heptachlor	5.5	9.5	23	15.1	X												
Heptachlor epoxide	7.4	43.9	50.7	28.3	X												
Total Endosulfan	22.7	54.8	50.3														
Polycyclic Aromatic Hydrocarbons																	
LPAHs																	
2-Methylnaphthalene	76.3	26.6	43.7	100.0				X					X		X		
Acenaphthene	80	39.8	62.7	92.6				X									
Anthracene	84.6	15.3	57	96.0				X									
Fluorene	80.2	33.2	58.6	91.0				X									
Naphthalene	62.4	8.7	15.6	64.0				X									
Phenanthrene	93.9	32.3	60.5	100.0				X	X				X		X		
HPAHs																	
Benzo(a)anthracene	94.6	39.2	52.1	100.0	X			X	X	X	X						
Benzo(a)pyrene	94.2	31.7	48.7	100.0	X	X		X	X	X	X	X	X	X	X	X	X
Benzo(b)fluoranthene	96.2	30.8	50.6	100.0	X			X									
Benzo(g,h,i)perylene	91.7	29.3	42.6	100.0				X									
Benzo(k)fluoranthene	94.4	22.2	46.5	100.0	X			X									
Chrysene	96.2	48.2	52.5	100.0		X		X									
Dibenzo(a,h)anthracene	78.4	9.9	23.6	100.0	X			X									
Fluoranthene	97.5	61.4	58.9	100.0				X									
Indeno(1,2,3-cd)pyrene	91.2	18.6	34.6	100.0	X			X									
Pyrene	97.8	49.1	57	100.0		X		X									
Total LPAHs			62.7										X	X	X		
Total HPAHs	98.6		58.9						X			X	X	X	X		X
Total PAHs	98.6	92.8	73			X			X	X	X	X	X	X	X	X	X
Phthalates																	
Bis(2-ethylhexyl) phthalate	58.8	14.2	33.9	100.0	X	X		X	X		X		X		X	X	
Dibutyl phthalate	31.1	4.3	11.8	37.0				X					X		X		
Semivolatile Organic Compounds																	
1,2-Dichlorobenzene	1.5	0.0	0	3.6								X					X
1,4-Dichlorobenzene	2	0.6	0	8.1								X					X
Dibenzofuran	73.5	0.6	54.9	81.5													
Hexachlorobenzene	29.7	49.3	52.2	21.1	X			X	X	X			X	X	X		
Hexachlorobutadiene	4.6	47.2	8.4	4.2													
Phenols																	
4-Chloro-3-methylphenol	1.4	5.9	0	3.7													
Pentachlorophenol	15	0.0	1.1	62.0	X												
Phenol	28.1	6.5	16.4	42.6									X		X		
Volatile Organic Compounds																	
1,1,2-Trichloroethane	0		0	3.8								X					X
1,1-Dichloroethane	1		0	3.8								X					X
1,2,3-Trichloropropane	0.7		0	3.8													
1,2,4-Trimethylbenzene	0		0														
1,2-Dichloroethane	1.3		0	3.8								X					X
1,2-Dichloropropane	0		0	3.8													
1,3,5-Trimethylbenzene	0		0														
Acrolein	0		0	1.7													
Benzene	13.8		0	3.8								X					X
Bromodichloromethane	0		0	3.8													
Carbon disulfide	7.2		0	3.8													
Chlorobenzene	17.4		0	5.7								X					X
Chloroethane	0.7		0	3.8								X					X
Chloroform	6.8		0	3.8			X					X					X
cis-1,2-Dichloroethene	1.8		0	3.8								X					X
Ethylbenzene	10.8		0	9.6								X					X
Isopropylbenzene	17.3		0	3.8													
m,p-Xylene	11		0	5.7								X					X
Methyl tert-butyl ether	3.6		0	3.8													
Methylene chloride	0.7		0	3.8								X					X
o-Xylene	15.6		0	3.8								X					X
Tetrachlorothene	0		0	3.8								X					X
Toluene	4.3		0	44.2								X					X
Total Xylenes	15.5		0									X					X
trans-1,2-Dichloroethene	0.3		0	3.8								X					X
Trichloroethene	1.7		0	3.8			X					X					X
Vinyl chloride	0.7		0	3.8								X					X
Petroleum (TPH)																	
Diesel Range Hydrocarbons	90.1		0	100				X				X	X		X		X
Gasoline Range Hydrocarbons	15.3		0	37								X					X
Residual Range Hydrocarbons	95.5		0	100				X				X	X		X		X
Total Petroleum Hydrocarbons	96.8		0						X				X		X		
Notes:									23	17	18	40	30	20	30	18	40

[a] Human Health Potential iCOCs include potential human health iCOCs in surface water and TZW for drinking water scenarios and in TZW for consumption of fish/shellfish. Potential iCOCs are differentiated from other iCOCs because they were identified through less certain and/or less rigorous evaluations based on fewer lines of evidence.

[b] Potential ecological iCOCs for benthic inverebrates were identified as those chemicals with potential risk estimates from the TZW LOE, benthic invertebrate floating percentile method (FPM) LOE that were not supported by any other LOEs (i.e., in tissue or surface water LOEs), or based on high uncertainty. Potential ecological iCOCs for fish were identified as those chemicals with potential risk estimates from the TZW LOE that were not supported by any other LOEs (i.e., in tissue, surface water, or dietary LOEs).

[C] Total PCBs concnetrations will be mapped based on congener data if available and Aroclor data if not.

COPC - Chemical of Potential Concern.
iCOC - intial Chemical of Concern.
TZW - Transition zone water.
TEQ - Toxic Equivalent (2,3,7,8- TCDD).

Table 2 - Target Analyte Lists for Loading, Fate, and Transport Calculations

	RI Nature and Extent		Loading, Fate, and Transport			
COPC	Combined Sediment, SW, Biota, Indicator Chemical List (N&E)	Selected Indicator Chemicals for TZW (N&E)	Target List for Loading Calcs (all but TZW)	Target List TZW Loading Calcs	Target List Equilibrium Partitioning Calculations[a]	Chemical List for Hybrid Model
Conventionals						
Ammonia						
Cyanide		X		X		
Perchlorate		X		X		
Sulfides						
Metals						
Aluminum		X		X		
Antimony						
Arsenic	X	X	X	X	X[b]	X[c]
Barium		X		X		
Cadmium		X		X		
Chromium	X		X			
Copper	X		X			
Iron						
Lead	X	X	X	X		X[c]
Magnesium						
Manganese						
Mercury	X	X	X	X		
Nickel	X		X			
Potassium						
Selenium						
Silver						
Sodium						
Thallium		X		X		
Vanadium						
Zinc	X	X	X	X		
Butyltins						
Tributyltin ion	X		X			
Total PCBs						
Total PCB Aroclors	X		X			
Total PCB Congeners	X		X			
Total PCBs	X		X		X	
Total PCB TEQ	X		X			
Modeled PCB Congener #1			X[c]		X[c]	X[c]
Modeled PCB Congener #2			X[c]		X[c]	X[c]
Dioxins/Furans						
Dioxin TEQ	X		X		X	
Total Dioxins/Furans						
Herbicides						
Dalapon						
Silvex						
Organochlorine Pesticides						
2,4'-DDD				X		
2,4'-DDE				X		
2,4'-DDT				X		
4,4'-DDD			X[c]	X	X[c]	X[c]
4,4'-DDE				X		
4,4'-DDT			X[c]	X	X[c]	X[c]
Total of 2,4' and 4,4'-DDD (Sum DDD)	X	X	X	X	X	
Total of 2,4' and 4,4'-DDE (Sum DDE)	X	X	X	X	X	
Total of 2,4' and 4,4'-DDT (Sum DDT)	X	X	X	X	X	
Total of 2,4' and 4,4'-DDD, -DDE, -DDT	X	X	X	X	X	
Total of 4,4'-DDD, -DDE, -DDT						
Aldrin	X		X		X	
alpha-Hexachlorocyclohexane						
beta-Hexachlorocyclohexane						
delta-Hexachlorocyclohexane						
gamma-Hexachlorocyclohexane						
Total Chlordanes	X		X		X	
Dieldrin						
Endrin						
Endrin aldehyde						
Endrin ketone						
Heptachlor						
Heptachlor epoxide						
Total Endosulfan						
Polycyclic Aromatic Hydrocarbons						
LPAHs						
2-Methylnaphthalene	X		X	X		X[c]
Acenaphthene				X		
Anthracene				X		
Fluorene				X		
Naphthalene				X		
Phenanthrene	X		X	X		
Total LPAHs	X	X	X	X		
HPAHs						
Benzo(a)anthracene				X		
Benzo(a)pyrene	X	X	X	X	X	X[c]
Benzo(b)fluoranthene				X		
Benzo(g,h,i)perylene				X		
Benzo(k)fluoranthene				X		
Chrysene				X		
Dibenzo(a,h)anthracene				X		
Fluoranthene				X		
Indeno(1,2,3-cd)pyrene				X		
Pyrene				X		
Total HPAHs	X	X	X	X		
Total PAHs	X	X	X	X	X	
Phthalates						
Bis(2-ethylhexyl) phthalate	X		X		X	X[c]
Dibutyl phthalate	X		X			
Semivolatile Organic Compounds						
1,2-Dichlorobenzene		X		X		
1,4-Dichlorobenzene		X		X		
Dibenzofuran						

Table 2 - Target Analyte Lists for Loading, Fate, and Transport Calculations

	RI Nature and Extent		Loading, Fate, and Transport			
COPC	**Combined Sediment, SW, Biota, Indicator Chemical List (N&E)**	**Selected Indicator Chemicals for TZW (N&E)**	**Target List for Loading Calcs (all but TZW)**	**Target List TZW Loading Calcs**	**Target List Equilibrium Partitioning Calculations[a]**	**Chemical List for Hybrid Model**
Hexachlorobenzene	X		X		X	
Hexachlorobutadiene						
Phenols						
4-Chloro-3-methylphenol						
Pentachlorophenol						
Phenol	X		X			
Volatile Organic Compounds						
1,1,2-Trichloroethane		X		X		
1,1-Dichloroethane		X		X		
1,2,3-Trichloropropane						
1,2,4-Trimethylbenzene						
1,2-Dichloroethane		X		X		
1,2-Dichloropropane						
1,3,5-Trimethylbenzene						
Acrolein						
Benzene		X		X		
Bromodichloromethane						
Carbon disulfide						
Chlorobenzene		X		X		
Chloroethane		X		X		
Chloroform		X		X		
cis-1,2-Dichloroethene		X		X		
Ethylbenzene		X		X		
Isopropylbenzene						
m,p-Xylene		X		X		
Methyl tert-butyl ether						
Methylene chloride		X		X		
o-Xylene		X		X		
Tetrachlorothene		X		X		
Toluene		X		X		
Total Xylenes		X		X		
trans-1,2-Dichloroethene		X		X		
Trichloroethene		X		X		
Vinyl chloride		X		X		
Petroleum (TPH)						
Diesel Range Hydrocarbons	X	X	X	X		
Gasoline Range Hydrocarbons		X		X		
Residual Range Hydrocarbons	X	X	X	X		
Total Petroleum Hydrocarbons	X		X			
Notes:	32	41	36	62	17	9

TZW - Transition zone water.
TEQ - Toxic Equivalent (2,3,7,8- TCDD).

[a] This list refers to calculations of advective transport through surface sediment and loading via advective transport through subsurface sediment.

[b] As advective transport - we will not use equilibrium partitioning to estimate this term. Instead, we will apply our understanding of the geochemistry of the system to generate concentrations in pore water (same as R2 Report approach).

[c] These chemicals were selected based on the chemical list for the hybrid model. This list is preliminary and subject to change at this point.

Table 3 - Analyte Lists for Discussion in Site-Wide CSM

COPC	RI Chemical
Arsenic	??
Total PCBs	X
Total Dioxins/Furans	X
Total of 2,4' and 4,4'-DDD, -DDE, -DDT	X
Total PAHs	X
	5