

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	FOOD WEB (PRG) MODEL REQUIRED INPUTS																	
2	PARAMETER DESCRIPTION	Symbol	Units	General	PHY (2)	ZOO (3)	BIF (4)	BIC (5)	EIC (6)	SCL (7)	LSS (8)	CAR (9)	SMB (10)	NPM (11)				
3	Physical / Chemical Parameters																	
4	Octanol-water partition coefficient	KOW	kg/L	5.26	Kow - chemical specific													
5	Organic carbon content of sediment	OCSS	unitless	0.017137207	Windward 2005													
6	Henry's Law constant	H	Pa.m3/mol	1	Value cancels out													
7	Mean water temperature	TW	C	13.69418928	ODEQ data - year round													
8	Concentration of suspended solids	CPW	kg/L	1.40E-05	Windward 2005 Peristaltic pump data near bottom only													
9	Concentration in water (filtered water)	CWT	ng/L	0.0052	Windward 2005- column data only - chemical specific													
10	Bioavailable concentration in water	CWB	ng/g	5.10E-06	model calculation- based on column water data and DOC													
11	Concentration in sediment solids	CST	ng/g	40.5486563	SWAC -Windward - chemical specific													
12	Concentration in sediment porewater	CSD	ng/g	3.72E-02	model calculation													
13	Density of sediment OC	DOCS	kg/L	1	Previous model used value of 0.9- Susie says we should elimin													
14																		
39																		
40	Organism-Specific Rate Constants																	
41	Growth rate constant	KG	1/d	0.093635253														
42	Metabolic rate constant	KM	1/d		0													
43																		
44																		
45	Tissue Concentration Outputs	CB	ug/kg		PHY (2)	ZOO (3)	BIF (4)	BIC (5)	EIC (6)	SCL (7)	LSS (8)	CAR (9)	SMB (10)	NPM (11)				
46	Measured tissue concentration		ug/kg		0.017	0.016	11.186	13.441	6.985	27.744	41.829	52.322	43.949	38.095				
47	SPAF						0.82			4.9		2.3	2.4					
47							13.6			5.7		22.7	18.3		15.1			
48	Percent difference						1264.1			466.2		2174.9	1731.2					

Cell: E45
Comment: Forecast: CB phy

Cell: F45
Comment: Forecast: CB zoo

Cell: G45
Comment: Forecast: CB BIF

Cell: H45
Comment: Forecast: CB BIC

Cell: I45
Comment: Forecast: CB EIC

Cell: J45
Comment: Forecast: CB scl

Cell: K45
Comment: Forecast: CB Iss

Cell: L45
Comment: Forecast: CB car

Cell: M45
Comment: Forecast: CB smb

Cell: N45
Comment: Forecast: CB npm

	A	B	C	D	E	F	G	H	I	J	K	L
1	PREY > PREDATOR	(1) Sediment solids (particles)	(2) Phytoplankton	(3) Zooplankton	(4) Benthic invertebrate (filter feeder)	(5) Benthic invertebrate (consumer)	(6) Epibenthic invertebrate (consumer)	(7) Sculpin (forage)	(8) Largescale sucker (benthivore)	(9) Carp (omnivore)	(10) Smallmouth bass (sml piscv)	(11) Northern pikeminnow (lrg piscv)
2	(1) Sediment solids (particles)											
3	(2) Phytoplankton											
4	(3) Zooplankton		1.00									
5	(4) Benthic invertebrate (filter feeder)	0.779	0.221									
6	(5) Benthic invertebrate (consumer)	0.909	0.091									
7	(6) Epibenthic invertebrate (consumer)	0.0241	0.1137	0.175	0.219	0.467						
8	(7) Sculpin (forage)	0.03324	0	0.02738	0.3249	0.528	0.0866					
9	(8) Largescale sucker (benthivore)	0.1486	0.150	0.1960	0.073	0.268	0.165	0				
10	(9) Carp (omnivore)	0.0417	0.335	0	0.142	0.481	0	0	0			
11	(10) Smallmouth bass (sml piscv)	0	0	0	0	0.2439	0.170	0.586	0	0		
12	(11) Northern pikeminnow (lrg piscv)	0	0.0847	0	0.0558	0.355	0.295	0.209	0	0	0	

Parameter Type	Parameter Description	Symbol	Units	Dieldrin
Chemical-specific	Octanol-water partition coefficient	KOW	kg/L	5.37
Chemical-specific	Concentration in water (filtered water)	CWT	ng/L	0.067
Chemical-specific	Concentration in sediment solids	CST	ng/g	0.536
Org. rate constants	BIF - Metabolic rate constant	BIF-KM	1/d	0
Org. rate constants	BIC - Metabolic rate constant	BIC-KM	1/d	0
Org. rate constants	EIC - Metabolic rate constant	EIC-KM	1/d	0
Org. rate constants	SCL - Metabolic rate constant	SCL-KM	1/d	0
Org. rate constants	LSS - Metabolic rate constant	LSS-KM	1/d	0
Org. rate constants	CAR - Metabolic rate constant	CAR-KM	1/d	0
Org. rate constants	SMB - Metabolic rate constant	SMB-KM	1/d	0
Org. rate constants	NPM - Metabolic rate constant	NPM-KM	1/d	0
Selected values	BIF concentration (clam)	BIF	µg/kg ww	0.82
Selected values	EIC concentration (crayfish)	EIC	µg/kg ww	0.02
Selected values	SCL concentration (sculpin)	SCL	µg/kg ww	4.9
Selected values	LSS concentration (largescale sucker)	LSS	µg/kg ww	
Selected values	CAR concentration (carp)	CAR	µg/kg ww	2.3
Selected values	SMB concentration (smallmouth bass)	SMB	µg/kg ww	2.4
Selected values	NPM concentration (northern pikeminnow)	NPM	µg/kg ww	
Detects only	BIF concentration (clam)	BIF	µg/kg ww	0.84
Detects only	EIC concentration (crayfish)	EIC	µg/kg ww	0.02
Detects only	SCL concentration (sculpin)	SCL	µg/kg ww	5.1
Detects only	LSS concentration (largescale sucker)	LSS	µg/kg ww	
Detects only	CAR concentration (carp)	CAR	µg/kg ww	2.3
Detects only	SMB concentration (smallmouth bass)	SMB	µg/kg ww	2.4
Detects only	NPM concentration (northern pikeminnow)	NPM	µg/kg ww	
all empirical data	BIF concentration (clam)	BIF	µg/kg ww	0.82
all empirical data	EIC concentration (crayfish)	EIC	µg/kg ww	0.44
all empirical data	SCL concentration (sculpin)	SCL	µg/kg ww	4.9
all empirical data	LSS concentration (largescale sucker)	LSS	µg/kg ww	3.8
all empirical data	CAR concentration (carp)	CAR	µg/kg ww	2.7
all empirical data	SMB concentration (smallmouth bass)	SMB	µg/kg ww	4
all empirical data	NPM concentration (northern pikeminnow)	NPM	µg/kg ww	5.2

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Parameter Type	Parameter Description	Symbol	Units	47940
Physical / Chemical	Organic carbon content of sediment	OCSS	unitless	0.0171
Physical / Chemical	Mean water temperature	TW	C	13.69418928
Physical / Chemical	Concentration of suspended solids	CPW	kg/L	1.40E-05
Bioavailable Fraction	Dissolved OC concentration in water	XDOC	kg/L	1.31E-06
PHY-specific biological	Lipid fraction of organism	PHY-VLB	fraction	0.001225109
PHY-specific biological	Water content fraction of organism	PHY-VWB	fraction	0.947163613
PHY-specific biological	Growth rate constant	PHY-KG	1/d	0.093635253
ZOO-specific biological	Weight	ZOO-WB	kg	1.7E-07
ZOO-specific biological	Lipid fraction of organism	ZOO-VLB	fraction	0.010725222
ZOO-specific biological	Water content fraction of organism	ZOO-VWB	fraction	0.820237252
BIF-specific biological	Weight	BIF-WB	kg	0.001257289
BIF-specific biological	Lipid fraction of organism	BIF-VLB	fraction	0.022248037
BIF-specific biological	Water content fraction of organism	BIF-VWB	fraction	0.863274083
BIF-specific biological	Fraction of pore water ventilated	BIF-FPW	unitless	0.052688338
BIC-Specific Biological	Weight	BIC-WB	kg	4.80E-06
BIC-Specific Biological	Lipid fraction of organism	BIC-VLB	fraction	0.014234069
BIC-Specific Biological	Water content fraction of organism	BIC-VWB	fraction	0.803522652
BIC-Specific Biological	Fraction of pore water ventilated	BIC-FPW	unitless	0.069502945
EIC-Specific Biological	Weight	EIC-WB	kg	0.043831184
EIC-Specific Biological	Lipid fraction of organism	EIC-VLB	fraction	0.007624181
EIC-Specific Biological	Water content fraction of organism	EIC-VWB	fraction	0.737757493
EIC-Specific Biological	Fraction of pore water ventilated	EIC-FPW	unitless	0.027600468
SCL-Specific Biological	Weight	SCL-WB	kg	0.019973073
SCL-Specific Biological	Lipid fraction of organism	SCL-VLB	fraction	0.041589067
SCL-Specific Biological	Water content fraction of organism	SCL-VWB	fraction	0.751342484
SCL-Specific Biological	Fraction of pore water ventilated	SCL-FPW	unitless	0.044743776
LSS-Specific Biological	Weight	LSS-WB	kg	0.803933281
LSS-Specific Biological	Lipid fraction of organism	LSS-VLB	fraction	0.073320748
LSS-Specific Biological	Water content fraction of organism	LSS-VWB	fraction	0.71364571
CAR-Specific Biological	Weight	CAR-WB	kg	2.504577005
CAR-Specific Biological	Lipid fraction of organism	CAR-VLB	fraction	0.093503651
CAR-Specific Biological	Water content fraction of organism	CAR-VWB	fraction	0.684286952
SMB-Specific Biological	Weight	SMB-WB	kg	0.352442399
SMB-Specific Biological	Lipid fraction of organism	SMB-VLB	fraction	0.050655622
SMB-Specific Biological	Water content fraction of organism	SMB-VWB	fraction	0.71357333
NPM-Specific Biological	Weight	NPM-WB	kg	0.598644014
NPM-Specific Biological	Lipid fraction of organism	NPM-VLB	fraction	0.063093672
NPM-Specific Biological	Water content fraction of organism	NPM-VWB	fraction	0.712772706
BIF prey (lower grid)	BIF consumption of SED	BIF-SED	fraction	0.779283649
BIC prey (lower grid)	BIC consumption of SED	BIC-SED	fraction	0.909489056
EIC prey (lower grid)	EIC consumption of SED	EIC-SED	fraction	0.026865433
EIC prey (lower grid)	EIC consumption of PHY	EIC-PHY	fraction	0.126584093
EIC prey (lower grid)	EIC consumption of ZOO	EIC-ZOO	fraction	0.195417815
EIC prey (lower grid)	EIC consumption of BIF	EIC-BIF	fraction	0.244261263
EIC prey (lower grid)	EIC consumption of BIC	EIC-BIC	fraction	0.520593241
SCL prey (lower grid)	SCL consumption of SED	SCL-SED	fraction	0.031245268
SCL prey (lower grid)	SCL consumption of ZOO	SCL-ZOO	fraction	0.025735855
SCL prey (lower grid)	SCL consumption of BIF	SCL-BIF	fraction	0.305400163
SCL prey (lower grid)	SCL consumption of BIC	SCL-BIC	fraction	0.496355823
SCL prey (lower grid)	SCL consumption of EIC	SCL-EIC	fraction	0.081368699
LSS prey (lower grid)	LSS consumption of SED	LSS-SED	fraction	0.141938177
LSS prey (lower grid)	LSS consumption of PHY	LSS-PHY	fraction	0.143035269
LSS prey (lower grid)	LSS consumption of ZOO	LSS-ZOO	fraction	0.187168984

LSS prey (lower grid)	LSS consumption of BIF	LSS-BIF	fraction	0.069939898
LSS prey (lower grid)	LSS consumption of BIC	LSS-BIC	fraction	0.255575726
LSS prey (lower grid)	LSS consumption of EIC	LSS-EIC	fraction	0.157198082
CAR prey (lower grid)	CAR consumption of SED	CAR-SED	fraction	0.041259298
CAR prey (lower grid)	CAR consumption of PHY	CAR-PHY	fraction	0.331306263
CAR prey (lower grid)	CAR consumption of BIF	CAR-BIF	fraction	0.140932977
CAR prey (lower grid)	CAR consumption of BIC	CAR-BIC	fraction	0.475563289
SMB prey (lower grid)	SMB consumption of BIC	SMB-BIC	fraction	0.273523362
SMB prey (lower grid)	SMB consumption of EIC	SMB-EIC	fraction	0.190610894
SMB prey (lower grid)	SMB consumption of SCL	SMB-SCL	fraction	0.657263522
NPM prey (lower grid)	NPM consumption of PHY	NPM-PHY	fraction	0.094252314
NPM prey (lower grid)	NPM consumption of BIF	NPM-BIF	fraction	0.062163687
NPM prey (lower grid)	NPM consumption of BIC	NPM-BIC	fraction	0.394738166
NPM prey (lower grid)	NPM consumption of EIC	NPM-EIC	fraction	0.328819639
NPM prey (lower grid)	NPM consumption of SCL	NPM-SCL	fraction	0.23308087

Uncalibrated Values	Calibrated values (47940)
0.0171	0.0171
13.9	13.69418928
0.0000113	1.40E-05
0.00000138	1.31E-06
0.00123	0.001225109
0.955	0.947163613
0.08	0.093635253
0.00000014	1.7E-07
0.01	0.010725222
0.9	0.820237252
0.00125	0.001257289
0.022	0.022248037
0.86	0.863274083
0.05	0.052688338
0.00000533	4.80E-06
0.015	0.014234069
0.8	0.803522652
0.05	0.069502945
0.0435	0.043831184
0.0078	0.007624181
0.74	0.737757493
0.05	0.027600468
0.0196	0.019973073
0.041	0.041589067
0.75	0.751342484
0.05	0.044743776
0.794	0.803933281
0.076	0.073320748
0.71	0.71364571
2.48	2.504577005
0.088	0.093503651
0.69	0.684286952
0.395	0.352442399
0.054	0.050655622
0.71	0.71357333
0.558	0.598644014
0.053	0.063093672
0.719	0.712772706
0.7	0.779283649
0.95	0.909489056
0.02	0.026865433
0.1	0.126584093
0.1	0.195417815
0.18	0.244261263
0.6	0.520593241
0	0.031245268
0	0.025735855
0.15	0.305400163
0.8	0.496355823
0.05	0.081368699
0.05	0.141938177
0.25	0.143035269
0.15	0.187168984

0.1	0.069939898
0.25	0.255575726
0.2	0.157198082
0.05	0.041259298
0.45	0.331306263
0.1	0.140932977
0.4	0.475563289
0.05	0.273523362
0.05	0.190610894
0.9	0.657263522
0.04	0.094252314
0.05	0.062163687
0.26	0.394738166
0.4	0.328819639
0.25	0.23308087