APPENDIX C ERA MODEL INPUTS AND OUTPUTS

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Snowy Owl

Intake Param Receptor Name	Snowy Owl	T
Name of Area	CAM-F	
Receptor Type	1	(1-Bird, 2-Mammal)
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(1 bild, 2 Walling)
		(1-General, 2- Herbivore, 3-Insectivore)
Small Mammal Type	1	Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
General Parameters	640mmin	
Body weight	2.05	kg
Food intake rate	0.290218284	kg wet-wt/day
Water intake rate	0.095439268	L/day
Ingestion of Soil		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction diet that is dry solid	0.32	
Fraction of food intake rate	0.028	
Ingestion rate	0.002600356	kg dry-wt/day
Fraction from site	1	5 80 est
Intake factor (IFing-sl)	0.001268466	kg/kg-day
Ingestion of Terrestrial Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	272
Intake factor (IFing-tp)	0	kg/kg-day
Ingestion of Terrestrial Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	100
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	457
Intake factor (IFing-ti)	0	kg/kg-day
Ingestion of Terrestrial Mammals/Birds		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	1	
Ingestion rate	0.290218284	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-tm)	0.141569895	kg/kg-day
Ingestion of Surface Water		
Applicable pathway?	1	(0 = no, 1 = yes)
Ingestion rate	0.095439268	L/day
Fraction from site	1	1 100
Intake factor (IFing-sw)	0.04655574	L/kg-day
Ingestion of Sediment		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction diet that is dry solid	0	
Fraction of food intake rate	0	
Ingestion rate	0	kg dry-wt/day
Fraction from site	0	5 4 5
Intake factor (IFing-sed)	0	kg/kg-day
Ingestion of Aquatic Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	2000 00 2000
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ap)	0	kg/kg-day
Ingestion of Benthic Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	10, 1 100)
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	ng wet-would
	0	ka/ka day
Intake factor (IFing-ai)	U	kg/kg-day
Ingestion of Fish	0	(0 = no 1 = voo)
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	ka wat wt/day
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	Leg/Leg story
Intake factor (IFing-fsh)	0	kg/kg-day

CAM-F ERA Appendix 3/9/2005

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Ptarmigan

Receptor Name	Ptarmigan	le Flaiiligaii
Name of Area	CAM-F	
Receptor Type	1	(1-Bird, 2-Mammal)
receptor Type		(1-General, 2-Herbivore, 3-Insectivore)
Small Mammal Type	1	Default value should be 1
Benthic invertebrates, fish and aquatic		Dolada value olivala 20)
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
Train opinio		
General Parameters		
Body weight	0.5	kg
Food intake rate	0.124	kg wet-wt/day
Water intake rate	0.037	L/day
Ingestion of Soil		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction diet that is dry solid	0.3	
Fraction of food intake rate	0.02	
Ingestion rate	0.000744	kg dry-wt/day
Fraction from site	1	
Intake factor (IFing-sl)	0.001488	kg/kg-day
Ingestion of Terrestrial Plants		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	1	8 8 E 252
Ingestion rate	0.124	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-tp)	0.248	kg/kg-day
Ingestion of Terrestrial Invertebrates		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	0.1	
Ingestion rate	0.0124	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-ti)	0.0248	kg/kg-day
Ingestion of Terrestrial Mammals/Birds		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	500 25
Intake factor (IFing-tm)	0	kg/kg-day
Ingestion of Surface Water	1007	
Applicable pathway?	1	(0 = no, 1 = yes)
Ingestion rate	0.037	L/day
Fraction from site	1	
Intake factor (IFing-sw)	0.074	L/kg-day
Ingestion of Sediment	138	
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction diet that is dry solid	0	
Fraction of food intake rate	0	
Ingestion rate	0	kg dry-wt/day
Fraction from site	0	

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Ptarmigan

Receptor Name	Ptarmigan	
Name of Area	CAM-F	
Receptor Type	1	(1-Bird, 2-Mammal)
Small Mammal Type	1	(1-General, 2- Herbivore, 3-Insectivore) Default value should be 1
Benthic invertebrates, fish and aquatic		Dollar Fara Strong Do 1
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
Intake factor (IFing-sed)	0	kg/kg-day
Ingestion of Aquatic Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ap)	0	kg/kg-day
Ingestion of Benthic Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ai)	0	kg/kg-day
Ingestion of Fish		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-fsh)	0	kg/kg-day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Lemming

Receptor Name	Lemming	ne Lemming
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
		(1-General, 2- Herbivore, 3-Insectivore)
Small Mammal Type	1	Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
General Parameters		
Body weight	0.04	kg
Food intake rate	0.023	kg wet-wt/day
Water intake rate	0.009	L/day
Ingestion of Soil	0.009	Loudy
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction diet that is dry solid	0.3	(0 - 110, 1 - yes)
Fraction diet that is dry solid Fraction of food intake rate	0.02	
	0.000138	ka day ut/day
Ingestion rate		kg dry-wt/day
Fraction from site	1	ka/ka day
Intake factor (IFing-sl)	0.00345	kg/kg-day
Ingestion of Terrestrial Plants	4	(0 = 22 1 = 222)
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	1	les wet ut/day
Ingestion rate	0.023	kg wet-wt/day
Fraction from site	1	leaffer day
Intake factor (IFing-tp)	0.575	kg/kg-day
Ingestion of Terrestrial Invertebrates	^	(0 = == 1 = ===)
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	les cost cot/days
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	leafter day
Intake factor (IFing-ti)	0	kg/kg-day
Ingestion of Terrestrial Mammals/Birds	0	(0 4
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	lie wet whiden
Ingestion rate	0	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-tm)	0	kg/kg-day
Ingestion of Surface Water		
Applicable pathway?	1	(0 = no, 1 = yes)
Ingestion rate	0.009	L/day
Fraction from site	1	
Intake factor (IFing-sw)	0.225	L/kg-day
Ingestion of Sediment	1020	
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction diet that is dry solid	0.1	
Fraction of food intake rate	0.01	
Ingestion rate	0.000023	kg dry-wt/day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Lemming

Receptor Name	Lemming	
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
Small Mammal Type	1	(1-General, 2- Herbivore, 3-Insectivore) Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
Fraction from site	1	
Intake factor (IFing-sed)	0	kg/kg-day
Ingestion of Aquatic Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-ap)	0	kg/kg-day
Ingestion of Benthic Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0.25	
Ingestion rate	0.00575	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-ai)	0	kg/kg-day
Ingestion of Fish		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0.25	
Ingestion rate	0.00575	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-fsh)	0	kg/kg-day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Ermine

Receptor Name	Ermine	
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
		(1-General, 2- Herbivore, 3-Insectivore)
Small Mammal Type	1	Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
General Parameters		
Body weight	0.128	kg
Food intake rate	0.026336787	kg wet-wt/day
Water intake rate	0.009273303	L/day
	0.009273303	L/day
Ingestion of Soil	1	(0 = no, 1 = yes)
Applicable pathway?	0.3	(0 - 110, 1 - yes)
Fraction diet that is dry solid Fraction of food intake rate		
	0.028	ka day ut/day
Ingestion rate	0.000221229	kg dry-wt/day
Fraction from site	1	to floriday.
Intake factor (IFing-sl)	0.001728352	kg/kg-day
Ingestion of Terrestrial Plants		(0 1)
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	0.05	
Ingestion rate	0.001316839	kg wet-wt/day
Fraction from site	1	1777 W. 14 140000
Intake factor (IFing-tp)	0.010287807	kg/kg-day
Ingestion of Terrestrial Invertebrates		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	0.1	
Ingestion rate	0.002633679	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-ti)	0.020575615	kg/kg-day
Ingestion of Terrestrial Mammals/Birds	7.0	
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	0.85	32 593
Ingestion rate	0.022386269	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-tm)	0.174892727	kg/kg-day
Ingestion of Surface Water		
Applicable pathway?	1	(0 = no, 1 = yes)
Ingestion rate	0.009273303	L/day
Fraction from site	1	
Intake factor (IFing-sw)	0.072447678	L/kg-day
Ingestion of Sediment		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction diet that is dry solid	0	
Fraction of food intake rate	0	
Ingestion rate	0	kg dry-wt/day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Ermine

Receptor Name	Ermine	
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
Small Mammal Type	1	(1-General, 2- Herbivore, 3-Insectivore) Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
Fraction from site	0	
Intake factor (IFing-sed)	0	kg/kg-day
Ingestion of Aquatic Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	75
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ap)	0	kg/kg-day
Ingestion of Benthic Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ai)	0	kg/kg-day
Ingestion of Fish		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-fsh)	0	kg/kg-day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Caribou

Receptor Name	Caribou	
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
		(1-General, 2- Herbivore, 3-Insectivore)
Small Mammal Type	1	Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
General Parameters		
Body weight	117.5	kg
Food intake rate	18.6639	kg wet-wt/day
Water intake rate	7.222196069	L/day
Ingestion of Soil		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction diet that is dry solid	0.15	
Fraction of food intake rate	0.082	
Ingestion rate	0.22956597	kg dry-wt/day
Fraction from site	1	, , , , , , , , , , , , , , , , , , , ,
Intake factor (IFing-sl)	0.001953753	kg/kg-day
Ingestion of Terrestrial Plants		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	1	(, , , , , , , , , , , , , , , , , , ,
Ingestion rate	18.6639	kg wet-wt/day
Fraction from site	1	1.5
Intake factor (IFing-tp)	0.158841702	kg/kg-day
Ingestion of Terrestrial Invertebrates		ng.ng any
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	(
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ti)	0	kg/kg-day
Ingestion of Terrestrial Mammals/Birds		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	Name along the second second
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-tm)	0	kg/kg-day
Ingestion of Surface Water		
Applicable pathway?	1	(0 = no, 1 = yes)
Ingestion rate	7.222196069	L/day
Fraction from site	1	
Intake factor (IFing-sw)	0.061465498	L/kg-day
Ingestion of Sediment		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction diet that is dry solid	0	
Fraction of food intake rate	0	
Ingestion rate	0	kg dry-wt/day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Caribou

Receptor Name	Caribou	
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
Small Mammal Type	1	(1-General, 2- Herbivore, 3-Insectivore) Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
Fraction from site	0	
Intake factor (IFing-sed)	0	kg/kg-day
Ingestion of Aquatic Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	The state of the s
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	- F
Intake factor (IFing-ap)	0	kg/kg-day
Ingestion of Benthic Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ai)	0	kg/kg-day
Ingestion of Fish		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	12/02
Intake factor (IFing-fsh)	0	kg/kg-day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Arctic Fox

Receptor Name	Arctic Fox	T
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
Traceptor Type		(1 bits, 2 Marinis)
		(1-General, 2- Herbivore, 3-Insectivore)
Small Mammal Type	1	Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
General Parameters		
Body weight	5.75	kg
Food intake rate	0.933	kg wet-wt/day
Water intake rate	0.478	L/day
Ingestion of Soil		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction diet that is dry solid	0.31	
Fraction of food intake rate	0.03	
Ingestion rate	0.0086769	kg dry-wt/day
Fraction from site	1	
Intake factor (IFing-sl)	0.001509026	kg/kg-day
Ingestion of Terrestrial Plants		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	0.05	
Ingestion rate	0.04665	kg wet-wt/day
Fraction from site	1	1 450
Intake factor (IFing-tp)	0.008113043	kg/kg-day
Ingestion of Terrestrial Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ti)	0	kg/kg-day
Ingestion of Terrestrial Mammals/Birds		
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	0.95	
Ingestion rate	0.88635	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-tm)	0.154147826	kg/kg-day
Ingestion of Surface Water		
Applicable pathway?	1	(0 = no, 1 = yes)
Ingestion rate	0.478	L/day
Fraction from site	1	
Intake factor (IFing-sw)	0.083130435	L/kg-day
Ingestion of Sediment		20 000
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction diet that is dry solid	0	
Fraction of food intake rate	0	
Ingestion rate	0	kg dry-wt/day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Arctic Fox

Receptor Name	Arctic Fox	
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
Small Mammal Type	1	(1-General, 2- Herbivore, 3-Insectivore) Default value should be 1
Benthic invertebrates, fish and aquatic		
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
Fraction from site	0	
Intake factor (IFing-sed)	0	kg/kg-day
Ingestion of Aquatic Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	N 1980 9350
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ap)	0	kg/kg-day
Ingestion of Benthic Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	1997
Intake factor (IFing-ai)	0	kg/kg-day
Ingestion of Fish		1000
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-fsh)	0	kg/kg-day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Arctic Hare

Intake Paran		AICUC Hale
Receptor Name	Arctic Hare	
Name of Area	CAM-F	M Died O Mercero D
Receptor Type	2	(1-Bird, 2-Mammal)
		(1-General, 2- Herbivore, 3-Insectivore)
Small Mammal Type	4	Default value should be 1
Small Mammal Type Benthic invertebrates, fish and aquatic	1	Default value should be 1
plants based on Sediment or Surface		(1 Sodiment 2 Surface Water)
Water Uptake	4	(1-Sediment, 2-Surface Water) Default value should be 1
vvater optake	1	Default value should be 1
General Parameters		
Body weight	4.3	kg
Food intake rate	1.149	kg wet-wt/day
Water intake rate	0.368	L/day
Ingestion of Soil	0.000	Livay
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction diet that is dry solid	0.22	(0 - 110, 1 - yes)
Fraction of food intake rate	0.024	
Ingestion rate	0.00606672	kg dry-wt/day
Fraction from site	1	kg dry-wi/day
	0.001410865	leaffer day
Intake factor (IFing-sl)	0.001410865	kg/kg-day
Ingestion of Terrestrial Plants	4	(0 = 20 1 = 100)
Applicable pathway?	1 0.95	(0 = no, 1 = yes)
Fraction of food intake rate	20222	ka wat ut/day
Ingestion rate	1.09155	kg wet-wt/day
Fraction from site	1	Les flore and and
Intake factor (IFing-tp)	0.253848837	kg/kg-day
Ingestion of Terrestrial Invertebrates		(0 1)
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	I'm wash wated as a
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	1 - 0 - 1
Intake factor (IFing-ti)	0	kg/kg-day
Ingestion of Terrestrial Mammals/Birds	133	10
Applicable pathway?	1	(0 = no, 1 = yes)
Fraction of food intake rate	0.05	
Ingestion rate	0.05745	kg wet-wt/day
Fraction from site	1	
Intake factor (IFing-tm)	0.013360465	kg/kg-day
Ingestion of Surface Water	171	10 10 10 10 10 10 10 10 10 10 10 10 10 1
Applicable pathway?	1	(0 = no, 1 = yes)
Ingestion rate	0.368	L/day
Fraction from site	1	
Intake factor (IFing-sw)	0.085581395	L/kg-day
Ingestion of Sediment	2.50	(4.2) (6) (6)
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction diet that is dry solid	0	
Fraction of food intake rate	0	
Ingestion rate	0	kg dry-wt/day

Jacques Whitford's Ecological Risk Assessment Model (Version 1.21) Intake Parameters for the Arctic Hare

Receptor Name	Arctic Hare	
Name of Area	CAM-F	
Receptor Type	2	(1-Bird, 2-Mammal)
Small Mammal Type	1	(1-General, 2- Herbivore, 3-Insectivore) Default value should be 1
Benthic invertebrates, fish and aquatic	20	
plants based on Sediment or Surface		(1-Sediment, 2-Surface Water)
Water Uptake	1	Default value should be 1
Fraction from site	0	
Intake factor (IFing-sed)	0	kg/kg-day
Ingestion of Aquatic Plants		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	200 W1 17910 SUCC
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	
Intake factor (IFing-ap)	0	kg/kg-day
Ingestion of Benthic Invertebrates		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	C 500.2
Intake factor (IFing-ai)	0	kg/kg-day
Ingestion of Fish		
Applicable pathway?	0	(0 = no, 1 = yes)
Fraction of food intake rate	0	
Ingestion rate	0	kg wet-wt/day
Fraction from site	0	74 AS VALE
Intake factor (IFing-fsh)	0	kg/kg-day

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Releience Toxicity Doses for Bird Species Exposed to Constituents to Concern Holli CAM-F	es for Bird Species E	Rody Weight	Rody Weight	Cell Holl CAM-F			Daily Dose (mg/kg-	Total Uncertainty	Species (b) (mg/kg-		Body Weight	Reference Toxicity
Constituent	Test Species	(kg wet)	Reference	Effect	Reference	Endpoint	day)	Factor (a)	day)	Receptor Species	Scaling Factor	Dose (mg/kg-day)
BTEX												
Benzene	Mouse	0.03	USEPA (1988a)	reproduction	Nawrot & Staples (1979), Sample et al. (1996)	chronic LOAEL	2.64E+02	55	5.27E+01	Ptarmigan	1.76E+00	9.25E+01
Ethylbenzene	Rat	0.35	USEPA (1988a)	liver and kidney toxicity	Wolf et al. (1956)	subchronic NOAEL	9.71E+01	5	1.94E+01	Ptarmigan	1.07E+00	2.09E+01
Toluene	Mouse	0.03	USEPA (1988a)	reproduction	Nawrot & Staples (1979), Sample et al. (1996)	chronic LOAEL	2.60E+02	Si Si	5.20E+01	Ptarmigan	1.76E+00	9.13E+01
Xylenes	Mouse	0.03	USEPA (1988a)	reproduction	Marks et al. (1982), Sample et al. (1996)	chronic LOAEL	2.58E+00	O1	5.16E-01	Ptarmigan	1.76E+00	9.06E-01
TPH - CCME CWS												
Aliph>C06-C08 - F1	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	5.00E+02	1	5.00E+02	Ptarmigan	8.71E-01	4.35E+02
Aliph>C08-C10 -F1	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	5.00E+02	1	5.00E+02	Ptarmigan	8.71E-01	4.35E+02
Arom>C08-C10 -F1	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	5.00E+01	_	5.00E+01	Ptarmigan	8.71E-01	4.35E+01
F1 - Total							:		1			1355
Aliph>C10-C12 -F2	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	5.00E+02		5.00E+02	Ptarmigan	8.715-01	4.30E+02
Aliph>C12-C16-F2	Mallard Duck	_	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	5.00E+02		5.000+02	Plarmigan	8.71E-01	4.35F+01
Arom>C10-C12 -F2	Mallard Duck	4 -	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	5.00E+01	-	5.00E+01	Ptarmigan	8.71E-01	4.35E+01
F2 - Total	Maliaid Duck	-	Helik et al. 1909	cive Hybernophy and spienic adopty	Condition oral oral (1010)	CHICHE LOUIS	1 1		1			1
Aliph>C16-C21-F3	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	1.00E+03	1	1.00E+03	Ptarmigan	8.71E-01	8.71E+02
Aliph>C21-C34 -F3	Mallard Duck	_	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	1.50E+02	1	1.50E+02	Ptarmigan	8.71E-01	1.31E+02
Arom>C16-C21 -F3	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	1.00E+02	-	1.00E+02	Ptarmigan	8.71E-01	8.71E+01
Arom>C21-C34 -F3	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	1.50E+02	-	1.50E+02	Ptarmigan	8./1E-01	1.31E+02
F3 - Total							1			2	0 747 04	304
Aliph>C34-C50 -F4	Mallard Duck		Heinz et al. 1989	Liver hypertrophy and splenic atrophy	Adapted from Szaro et al. (1978)	chronic LOAEL	3.00E+03	-	3.00E+03	Ptarmigan	8.71E-01	1.31E+02
Arom>C34-C50 -F4	Mallard Duck	1	Heinz et al. 1989	Liver hypertrophy and spienic atrophy	Adapted from Szaro et al. (1978)	CHIONIC LUAEL	1.50=+02	-	1.000-02	- warringan	0.711-01	
Organics												
Aroclor 1254 (Total PCBs)	Ring-necked Pheasant	1	EPA 1993e	reproductive	Dahlgren et al 1972, Sample et al., 1996	chronic LOAEL	1.80E+00	1	1.80E+00	Ptarmigan	8.71E-01	1.5/E+00
Inorganics												
Antimony	Mouse	0.03	USEPA (1988a)	lifespan, longevity	Sample et al. (1996)	chronic LOAEL	1.25E+00	O1	2.50E-01	Ptarmigan	1.76E+00	4.39E-01
Barium	Chicken (chicks)	0.121	EPA 1988a	mortality	Johnson et al. 1960, Sample et al. (1996), ORNL ES/ER/TM-86/R3	chronic LOAEL	4.17E+01	1	4.17E+01	Ptarmigan	1.33E+00	5.54E+01
Bervlium	Rat	0.35	USEPA (1988a)	longevity, weight loss (sub lethal)	Sample et al. (1996), ORNL ES/ER/TM-86/R3	chronic NOAEL	6.60E-01	1	6.60E-01	Ptarmigan	1.07E+00	7.09E-01
Boron	Mallard duck	1	Heinz et al. 1989	reproduction	Smith & Anders (1989), Sample et al. (1996)	chronic LOAEL	1.00E+02	1	1.00E+02	Ptarmigan	8.71E-01	8.71E+01
Cadmium	Mallard duck	1	Heinz et al. 1989	reproduction	White & Finley (1978), Sample et al. (1996)	chronic LOAEL	2.00E+01	-	2.00E+01	Ptarmigan	8./1E-U1	1./45
Chromium (Total)	Black duck	1.25	Dunning 1984	reproduction	Sample et al. (1996)	chronic LOAEL	5.00E+00	1	5.00E+00	Ptarmigan	8.33E-01	4.16E+00
Copper	Chicken (chicks)	0.121	EPA 1988a	growth, mortality	Mehring et al. (1960), Sample et al. (1996)	chronic LOAEL	6.17E+01	1	6.17E+01	Ptarmigan	1.33E+00	8.19E+01
Lead	Japanese quail	0.15	Vos et al. 1971	reproduction	Sami	chronic LOAEL	1.13E+01	-	1.13E+01	Ptarmigan	1.27E+00	7.445
Tin	Japanese quail	0.15	Vos et al. 1971	reproduction	(1996), ORNL ES/ER/	chronic LOAEL	1.69E+01	-	1.69E+01	Ptarmigan	7 705 01	1 015
Zinc	White Leahorn hen		Sample et al. 1996	reproduction	Stahl et al. (1990), Sample et al. (1996)	chronic LOAEL	1.31E+02	1	1.31E+02	Ptarmigan	1.70E-01	1.01E+02

Notes.

(a) The following uncertainty factors are used: 5 for subchronic to chronic; 0.2 for NOAEL to LOAEL (5 for LOAEL to NOAEL); 6 for LD₅₀ or LD₁₀ to LOAEL; 5 for mammal to bird (b) The chronic LOAEL is calculated as the Daily Dose divided by the Total Uncertainty Factor

NA - Not Available

Arom>C34-C50 -F4 Aliph>C34-C50 -F4 Arom>C21-C34 -F3 Arom>C16-C21 -F3 Aliph>C21-C34 -F3 Aliph>C16-C21-F3 Arom>C12-C16 -F2 Arom>C10-C12 -F2 Aliph>C12-C16 -F2 Aliph>C10-C12 -F2 Arom>C08-C10 -F1 Aliph>C08-C10 -F1 Aliph>C06-C08 - F1 X318 =1 - Total Reference Toxicity Doses for Test Organisms - Mammals - Exposed to Constituents fo Concern from CAM-F 3 - Total IPH - CCME **Xylenes** Ethylbenzene Benzene Constituent oluene CWS Test Species Mouse Rat Test Species Body Weight (kg wet) 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.35 0.03 USEPA (1988a) JSEPA (1988a) USEPA (1988a) USEPA (1988a) USEPA (1988a) USEPA (1988a) USEPA (1988a) Body Weight Reference liver and kidney reproduction reproduction reproduction Various Effect Weight of Evidence from ATSDR (200X), TPHCWG (1997), Hutcheson et al. (1996) and Nawrot & Staples (1979), Sample et al. (1996) TPHCWG (1997), Hutcheson et al. (1996) and TPHCWG (1997), Hutcheson et al. (1996) and Weight of Evidence from ATSDR (200X), TPHCWG (1997), Hutcheson et al. (1996) and TPHCWG (1997), Hutcheson et al. (1996) and Nawrot & Staples (1979), Sample et al. (1996) TPHCWG (1997), Hutcheson et al. (1996) and Weight of Evidence from ATSDR (200X), TPHCWG (1997), Hutcheson et al. (1996) and Weight of Evidence from ATSDR (200X), Weight of Evidence from ATSDR (200X) Weight of Evidence from ATSDR (200X), Weight of Evidence from ATSDR (200X) Weight of Evidence from ATSDR (200X) Weight of Evidence from ATSDR (200X), Marks et al. (1982), Sample et al. (1996) Wolf et al. CWS (2001) CWS (2001) Reference subchronic NOAEL chronic LOAEL Endpoint Daily Dose (mg/kg-day) 9.71E+01 4.00E+02 4.00E+02 2.00E+02 2.00E+02 5.00E+01 2.60E+00 2.64E+02 1.00E+02 2.00E+02 2.00E+02 1.00E+02 2.60E+02 1.00E+02 .00E+02 .00E+02 00E+03 Uncertainty Factor (a) Total _ _ _ _ _ _ _ _ _ _ _ - \rightarrow Chronic LOAEL -Test Species (b) (mg/kg-day) 5.00E+01 2.00E+02 4.00E+02 2.00E+02 2.00E+02 2.60E+00 9.71E+01 2.64E+02 1.00E+02 4.00E+02 1.00E+02 2.00E+02 2.60E+02 1.00E+02 1.00E+03 1.00E+02 1.00E+02 Receptor Species Arctic Fox 7.30E-01 7.30E-01 0.00E+00 0.00E+00 0.00E+00 7.30E-01 7.30E-01 7.30E-01 7.30E-01 8.45E-01 7.30E-01 Scaling Factor 7.30E-01 7.30E-01 7.30E-01 Weight 7.30E-01 7.30E-01 .30E-01 .30E-01 .30E-01 .30E-01 Body Toxicity Dose (mg/kg-day) 7.30E+01 Reference 2.92E+02 2.92E+02 1.46E+02 8.21E+01 7.30E+02 3.65E+01 7.30E+01 .90E+00 .90E+02 .92E+02 .30E+01 .30E+01 .30E+01 .46E+02 .46E+02 46E+02

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		Test Species						Total	Chronic LOAEL -		Weight	Reference
		Body Weight	Body Weight				Daily Dose	Uncertainty	Test Species (b)	Receptor	Scaling	Toxicity Dose
Constituent	Test Species	(kg wet)	Reference	Effect	Reference	Endpoint	(mg/kg-day)	Factor (a)	(mg/kg-day)	Species	Factor	(mg/kg-day)
Organics												
Aroclor 1254 (Total PCBs)	Mink	1	USEPA (1988a)	reproduction	Sample et al. (1996)	chronic LOAEL	6.85E-01	1	6.85E-01	Arctic Fox	9.00E-01	6.17E-01
Inorganics												
Antimony	Mouse	0.03	USEPA (1988a)	lifespan, longevity	Ondreicka et al. (1966), Sample et al. (1996)	chronic LOAEL	1.25E+00	_	1.25E+00	Arctic Fox	7.30E-01	9.12E-01
Barium	Rat	0.35	USEPA (1988a)	growth, hypertension	Schroeder & Mitchner (1971), Sample et al. (1996)	chronic NOAEL	5.10E+00	0.2	2.55E+01	Arctic Fox	8.45E-01	2.16E+01
Beryllium	Rat	0.35	USEPA (1988a)	longevity, weight loss	Schroeder & Mitchner (1971), Sample et al. (1996)	chronic NOAEL	6.60E-01	0.2	3.30E+00	Arctic Fox	8.45E-01	2.79E+00
Boron	Rat	0.35	USEPA (1988a)	reproduction	Weir & Fisher (1972), Sample et al. (1996)	chronic LOAEL	9.36E+01	_	9.36E+01	Arctic Fox	8.45E-01	7.91E+01
Cadmium	Rat	0.35	USEPA (1988a)	reproduction	Sutou et al. (1980), Sample et al. (1996)	chronic LOAEL	1.00E+01	1	1.00E+01	Arctic Fox	8.45E-01	8.45E+00
Chromium (Total)	Rat	0.35	USEPA (1988a)	reproduction	Ivankovic & Preussmann (1975), Sample et al. (1996)	chronic NOAEL	2.74E+03	0.2	1.37E+04	Arctic Fox	8.45E-01	1.16E+04
Copper	Mink	_	USEPA (1988a)	reproduction	Aulerich et al. (1982), Sample et al. (1996)	chronic LOAEL	1.51E+01	1	1.51E+01	Arctic Fox	9.00E-01	1.36E+01
Lead	Rat	0.35	USEPA (1988a)	reproduction	Azar et al. (1973), Sample et al. (1996)	chronic LOAEL	8.00E+01	_	8.00E+01	Arctic Fox	8.45E-01	6.76E+01
Tin	Mouse	0.03	USEPA (1988a)	reproduction	Davis et al. (1987), Sample et al. (1996)	chronic LOAEL	3.50E+01	1	3.50E+01	Arctic Fox	7.30E-01	2.55E+01
Zinc	Rat	0.35	USEPA (1988a)	reproduction	Schlicker & Cox (1968), Sample et al. (1996)	chronic LOAEL	3.20E+02	_	3.20E+02	Arctic Fox	8.45E-01	2.71E+02

Notes:
(a) The following uncertainty factors are used: 5 for subchronic to chronic; 0.2 for NOAEL to LOAEL (5 for LOAEL to NOAEL); 6 for LD₅₀ or LD_{LO} to LOAEL.
(b) The chronic LOAEL is calculated as the Daily Dose divided by the Total Uncertainty Factor.
NA - Not Available