

Table 1: Toxicity Data
PFOS - Potassium Salt
Frog - *Xenopus laevis*, *Rana pipiens* and *Pseudacris crucifer*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>X. laevis</i>	LC50	13.8	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	LC50	17.6	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	LC50	15.3	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	EC50	12.1	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	EC50	17.6	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	EC50	16.8	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	MCIG	7.97	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	MCIG	8.26	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	TI	1.1	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species

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PFOS - Potassium Salt
Frog - *Xenopus laevis*, *Rana pipiens* and *Pseudacris crucifer*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>X. laevis</i>	TI	1	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>X. laevis</i>	TI	0.9	Embryo	4	RM	FW	NR	NR	FETAX. South African Clawed Frog. Good test.	STS-113	No Non-native species
<i>R. pipiens</i>	EC50	>12.5	Tadpoles	Week 1	RM	FW	20	NR	Elev. Mortality of control animals noted after 6 weeks.	STS-114	No Method issues
<i>R. pipiens</i>	EC50	11	Tadpoles	Week 2	RM	FW	20	NR	Elev. Mortality of control animals noted after 6 weeks.	STS-114	No Method issues
<i>R. pipiens</i>	EC50	7.71	Tadpoles	Week 3	RM	FW	20	NR	Elev. Mortality of control animals noted after 6 weeks.	STS-114	No Method issues
<i>R. pipiens</i>	EC50	6.59	Tadpoles	Week 4	RM	FW	20	NR	Elev. Mortality of control animals noted after 6 weeks.	STS-114	No Method issues
<i>R. pipiens</i>	EC50	6.21	Tadpoles	Week 5	RM	FW	20	NR	Elev. Mortality of control animals noted after 6 weeks.	STS-114	No Method issues
<i>P. crucifer</i>	LC50	>51	Tadpoles 0.030 g	1	RM	FW	21.2-22.7	124-128	GLP test	STS-333	No Too short exposure duration
<i>P. crucifer</i>	LC50	>27	Tadpoles 0.030 g	2	RM	FW	21.2-22.7	124-128	GLP test	STS-333	No Too short exposure duration
<i>P. crucifer</i>	LC50	47	Tadpoles 0.030 g	3	RM	FW	21.2-22.7	124-128	GLP test	STS-333	No Too short exposure duration
<i>P. crucifer</i>	LC50	38	Tadpoles 0.030 g	4	RM	FW	21.2-22.7	124-128	GLP test	STS-333	Yes
<i>P. crucifer</i>	NOEC	3.6	Tadpoles 0.030 g	4	RM	FW	21.2-22.7	124-128	GLP test	STS-333	Yes

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Table 1: Toxicity Data
PFOS - Potassium Salt
Eastern Oyster - *Crassostrea virginica*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>C. virginica</i>	EC50	>2.9	33.8 mm	4	SM	SW	21.8-22.7	NR	Saltwater	AR226-0088, AR2260089, AR2261763	No Non-native species
<i>C. virginica</i>	NOEC	1.8	33.8 mm	4	SM	SW	21.8-22.7	NR	Saltwater	AR226-0088, AR2260089, AR2261763	No Non-native species
<i>C. virginica</i>	LOEC	2.9	33.8 mm	4	SM	SW	21.8-22.7	NR	Saltwater	AR226-0088, AR2260089, AR2261763	No Non-native species

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Table 1: Toxicity Data
PFOS - Potassium Salt
Amphipod - *Hyalella azteca*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>H. azteca</i>	LC50	161	12 days-old at initiation	1	RM	FW	22.2-23.8	132-136	GLP study	STS-332	No Too short exposure duration
<i>H. azteca</i>	LC50	93	12 days-old at initiation	2	RM	FW	22.2-23.8	132-136	GLP study	STS-332	No Too short exposure duration
<i>H. azteca</i>	LC50	29	12 days-old at initiation	3	RM	FW	22.2-23.8	132-136	GLP study	STS-332	No Too short exposure duration
<i>H. azteca</i>	LC50	15	12 days-old at initiation	4	RM	FW	22.2-23.8	132-136	GLP study	STS-332	Yes
<i>H. azteca</i>	NOEC	<13	12 days-old at initiation	4	RM	FW	22.2-23.8	132-136	GLP study	STS-332	Yes

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Table 1: Toxicity Data
PFOS - Potassium Salt
Oligochaete - *Lumbriculus variegatus*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>L. variegatus</i>	LC50	11	Adult	1	RM	FW	22.4-24	128-138	GLP Study	STS-334	No Too short exposure duration
<i>L. variegatus</i>	LC50	7.9	Adult	2	RM	FW	22.4-24	128-138	GLP Study	STS-334	No Too short exposure duration
<i>L. variegatus</i>	LC50	6.5	Adult	3	RM	FW	22.4-24	128-138	GLP Study	STS-334	No Too short exposure duration
<i>L. variegatus</i>	LC50	5.6	Adult	4	RM	FW	22.4-24	128-138	GLP Study	STS-334	Yes
<i>L. variegatus</i>	NOEC	2.8	Adult	4	RM	FW	22.4-24	128-138	GLP Study	STS-334	Yes

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Table 1: Toxicity Data
PFOS - Potassium Salt
Rainbow trout - *Onchorhynchus mykiss* (*Salma gairdneri*)

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>O. mykiss</i>	LC50	2500	Juveniles	4	SU	FW	10	NR	Mixture concerns. Few water qual. Parameters noted.	STS-320	No Method issues
<i>O. mykiss</i>	LC50	11	Juveniles	4	SU	FW	14-15	NR	Questionable methodology and details lacked.	AR226-0123	No Method issues
<i>O. mykiss</i>	LC50	>50	Juveniles 3.6cm, 0.34g	1	SM	FW	11.3-12.9	130	pH slightly out of range	STS-321	No Too short exposure duration
<i>O. mykiss</i>	LC50	>50	Juveniles 3.6cm, 0.34g	2	SM	FW	11.3-12.9	130	pH slightly out of range	STS-321	No Too short exposure duration
<i>O. mykiss</i>	LC50	>50	Juveniles 3.6cm, 0.34g	3	SM	FW	11.3-12.9	130	pH slightly out of range	STS-321	No Too short exposure duration
<i>O. mykiss</i>	LC50	22	Juveniles 3.6cm, 0.34g	4	SM	FW	11.3-12.9	130	pH slightly out of range	STS-321	Yes
<i>O. mykiss</i>	NOEC	6.3	Juveniles 3.6cm, 0.34g	4	SM	FW	11.3-12.9	130	pH slightly out of range	STS-321	Yes

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Table 1: Toxicity Data
PFOS - DEA Salt
Bluegill sunfish - *Lepomis macrochirus*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>L. macrochirus</i>	NOEC	18	Juveniles	4	SU	FW	22	255	Cation salt may be toxic. Only 1 replicate performed. Data between LOEC and NOEC large.	AR226-0115	No Method issues
<i>L. macrochirus</i>	LC50	31	Juveniles	4	SU	FW	22	255	Cation salt may be toxic. Only 1 replicate performed. Data between LOEC and NOEC large.	AR226-0115	No Method issues
<i>L. macrochirus</i>	LC50	370	Juveniles	2	SU	FW	22	255	Cation salt may be toxic. Only 1 replicate performed. Data between LOEC and NOEC large.	AR226-0115	No Method issues
<i>L. macrochirus</i>	LC50	460	Juveniles	1	SU	FW	22	255	Cation salt may be toxic. Only 1 replicate performed. Data between LOEC and NOEC large.	AR226-0115	No Method issues

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Table 1: Toxicity Data
PFOS - Potassium Salt
Bluegill sunfish - *Lepomis macrochirus*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>L. macrochirus</i>	NOEC	<56	Juveniles	4	SU	FW	19-20	NR	Study lacks documentation. Some water qual. Parameters out of range. Loading exceeded test standard.	AR226-1755, AR226-1756	No Method issues
<i>L. macrochirus</i>	LC50	68	Juveniles	4	SU	FW	19-20	NR	Study lacks documentation. Some water qual. Parameters out of range. Loading exceeded test standard.	AR226-1755, AR226-1756	No Method issues
<i>L. macrochirus</i>	LC50	68	Juveniles	4	SU	FW	17-19	NR	Study lacks documentation. Some water qual. Parameters out of range. Loading exceeded test standard.	AR-226-0123	No Method issues

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Table 1: Toxicity Data
PFOS - Potassium Salt
Sheepshead minnow - *Cyprinodon variegatus*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
C. <i>variegatus</i>	LC50	>15	Juveniles	1	RU	SW	21.9-23.1	NR	Saltwater Species	STS-327	No Non-native species
C. <i>variegatus</i>	LC50	>15	Juveniles	2	RU	SW	21.9-23.1	NR	Saltwater Species	STS-327	No Non-native species
C. <i>variegatus</i>	LC50	>15	Juveniles	3	RU	SW	21.9-23.1	NR	Saltwater Species	STS-327	No Non-native species
C. <i>variegatus</i>	LC50	>15	Juveniles	4	RU	SW	21.9-23.1	NR	Saltwater Species	STS-327	No Non-native species
C. <i>variegatus</i>	NOEC	>15	Juveniles	4	RU	SW	21.9-23.1	NR	Saltwater Species	STS-327	No Non-native species

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Table 1: Toxicity Data
PFOS - Unknown Salt
Fathead minnow - *Pimephales promelas*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>P. promelas</i>	MTC	>20	Eggs at initiation	30	FU	FW	23.5-26.5	31-38	Water quality parameters out of range. Not enough detail on test methodology.	AR226-0358	No Method issues

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Table 1: Toxicity Data
PFOS - Lithium Salt
Fathead minnow - *Pimephales promelas*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>P. promelas</i>	LC50	4.7 (adjusted)	Juveniles	4	SU	FW	19.2-19.5	NR	Temp. and pH out of range. Tox. value adjusted based on actual conc. of 24.5% PFOS	AR226-0111	No Method issues
<i>P. promelas</i>	LC50	8.8 (adjusted)	Juveniles	3	SU	FW	19.2-19.5	NR	Temp. and pH out of range. Tox. value adjusted based on actual conc. of 24.5% PFOS	AR226-0111	No Method issues
<i>P. promelas</i>	LC50	>13.7 (adjusted)	Juveniles	2	SU	FW	19.2-19.5	NR	Temp. and pH out of range. Tox. value adjusted based on actual conc. of 24.5% PFOS	AR226-0111	No Method issues
<i>P. promelas</i>	LC50	>13.7 (adjusted)	Juveniles	1	SU	FW	19.2-19.5	NR	Temp. and pH out of range. Tox. value adjusted based on actual conc. of 24.5% PFOS	AR226-0111	No Method issues

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Table 1: Toxicity Data
PFOS - Potassium Salt
Fathead minnow - *Pimephales promelas*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>P. promelas</i>	LC10	3.5	Juveniles	28	SU	FW	22.7	89.9-148.8	Some water qual. Parameters out of range.	STS-112	No Method issues
<i>P. promelas</i>	LC50	7.2	Juveniles	28	SU	FW	22.7	89.9-148.8	Some water qual. Parameters out of range.	STS-112	No Method issues
<i>P. promelas</i>	LC50	37.6	NR	4	SU	FW	17-19	NR	Summary report of old data.	AR226-0123	No Summary only
<i>P. promelas</i>	LC50	51	NR	4	SU	FW	17-19	NR	Summary report of old data.	AR226-0123	No Summary only
<i>P. promelas</i>	LC50	9.1	Juveniles 0.36g, 25mm	4	SM	FW	20.4-22.3	131	GLP Study	AR226-0082, AR226-0083, AR226-1759 (all 3 studies variations of same study)	Yes
<i>P. promelas</i>	NOEC	3.2	Juveniles 0.36g, 25mm	4	SM	FW	20.4-22.3	131	GLP Study	AR226-0082, AR226-0083, AR226-1759 (all 3 studies variations of same study)	Yes
<i>P. promelas</i>	NOEC	0.29	Eggs <24 hours old at test initiation	47 (42 days post hatch)	FM	FW	24.3-24.7	136-144	GLP Study	AR226-0082, AR226-0083, AR226-1759 (all 3 studies variations of same study)	Yes
<i>P. promelas</i>	LOEC	0.58	Eggs <24 hours old at test initiation	47 (42 days post hatch)	FM	FW	24.3-24.7	136-144	GLP Study	AR226-0082, AR226-0083, AR226-1759 (all 3 studies variations of same study)	No Datapoint not used in criteria calculation
<i>P. promelas</i>	MATC	0.41	Eggs <24 hours old at test initiation	47 (42 days post hatch)	FM	FW	24.3-24.7	136-144	GLP Study	AR226-0082, AR226-0083, AR226-1759 (all 3 studies variations of same study)	No Datapoint not used in criteria calculation
<i>P. promelas</i>	NOEC	1	Eggs at initiation	30	FM	FW	22-26	NR	Questionable methodology. Superceded by more recent test.	AR226-0107, AR226-0108	No Method issues
<i>P. promelas</i>	LOEC	1.9	Eggs at initiation	30	FM	FW	22-26	NR	Questionable methodology. Superceded by more recent test.	AR226-0107, AR226-0108	No Method issues
<i>P. promelas</i>	MATC	>1 and <1.9	Eggs at initiation	30	FM	FW	22-26	NR	Questionable methodology. Superceded by more recent test.	AR226-0107, AR226-0108	No Method issues
<i>P. promelas</i>	EC50 (fecundity)	0.23	Sexually mature adults and eggs	21	FU	FW	25	NR	Unknown methodology	STS-326	No Method issues

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Table 1: Toxicity Data
PFOS - Didecylidimethylammonium Salt
Fathead minnow - *Pimephales promelas*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>P. promelas</i>	LC50	618	Juveniles	1	SU	FW	20.8-20.9	48	Dilution water source questionable. Some water qual. Parameters out of range. Only 4 test conc. Used. Cation salt may be toxic. Data based on mixture.	AR226-0534	No Method issues
<i>P. promelas</i>	LC50	607	Juveniles	2	SU	FW	20.8-20.9	48	Dilution water source questionable. Some water qual. Parameters out of range. Only 4 test conc. Used. Cation salt may be toxic. Data based on mixture.	AR226-0534	No Method issues
<i>P. promelas</i>	LC50	595	Juveniles	3	SU	FW	20.8-20.9	48	Dilution water source questionable. Some water qual. Parameters out of range. Only 4 test conc. Used. Cation salt may be toxic. Data based on mixture.	AR226-0534	No Method issues
<i>P. promelas</i>	LC50	562	Juveniles	4	SU	FW	20.8-20.9	48	Dilution water source questionable. Some water qual. Parameters out of range. Only 4 test conc. Used. Cation salt may be toxic. Data based on mixture.	AR226-0534	No Method issues
<i>P. promelas</i>	LC50	<490	Juveniles	4	SU	FW	20.8-20.9	48	Dilution water source questionable. Some water qual. Parameters out of range. Only 4 test conc. Used. Cation salt may be toxic. Data based on mixture.	AR226-0534	No Method issues

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Table 1: Toxicity Data
PFOS - Unknown Salt
Fiddler crab - *Uca pugilator*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>U. pugilator</i>	TL50	>10,000	Mean width = 20mm	1	SU	SW	20	NR	Saltwater species	STS-325	No Non-native species
<i>U. pugilator</i>	TL50	3260	Mean width = 20mm	4	SU	SW	20	NR	Saltwater species	STS-325	No Non-native species
<i>U. pugilator</i>	NOEL	2400	Mean width = 20mm	4	SU	SW	20	NR	Saltwater species	STS-325	No Non-native species

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Table 1: Toxicity Data
PFOS - Potassium Salt
Midge - *Chironomus tentans*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>C. tentans</i>	EC50 (survival)	>0.150	Larval	10	RM	FW	23	NR	Good study	STS-110	No Non-specific data point
<i>C. tentans</i>	EC10 (survival)	0.1079	Larval	10	RM	FW	23	NR	Good study	STS-110	No Datapoint not used in criteria calculations
<i>C. tentans</i>	EC50 (growth)	0.0872	Larval	10	RM	FW	23	NR	Good study	STS-110	No Endpoint not used
<i>C. tentans</i>	EC10 (growth)	0.0492	Larval	10	RM	FW	23	NR	Good study	STS-110	No Datapoint not used in criteria calculations
<i>C. tentans</i>	NOEC (survival)	0.0491	Larval	10	RM	FW	23	NR	Good study	STS-110	No Endpoint not used
<i>C. tentans</i>	NOEC (growth)	0.0491	Larval	10	RM	FW	23	NR	Good study	STS-110	No Endpoint not used
<i>C. tentans</i>	EC50 (survival)	0.0922	Larval	20	RM	FW	23	NR	Good study	STS-110	No Endpoint not used
<i>C. tentans</i>	EC10 (survival)	0.0864	Larval	20	RM	FW	23	NR	Good study	STS-110	No Datapoint not used in criteria calculations
<i>C. tentans</i>	EC50 (growth)	0.0938	Larval	20	RM	FW	23	NR	Good study	STS-110	Yes
<i>C. tentans</i>	EC10 (growth)	0.0882	Larval	20	RM	FW	23	NR	Good study	STS-110	No Datapoint not used in criteria calculations
<i>C. tentans</i>	NOEC (survival)	0.0949	Larval	20	RM	FW	23	NR	Good study	STS-110	No Not lowest value
<i>C. tentans</i>	NOEC (growth)	0.0217	Larval	20	RM	FW	23	NR	Good study	STS-110	Yes
<i>C. tentans</i>	MATC (survival)	0.11891	Larval	20	RM	FW	23	NR	Good study	STS-110	No Not lowest value
<i>C. tentans</i>	LOEC (growth)	0.0949	Larval	20	RM	FW	23	NR	Good study	STS-110	No Not lowest value
<i>C. tentans</i>	MATC (growth)	0.04537	Larval	20	RM	FW	23	NR	Good study	STS-110	Yes
<i>C. tentans</i>	LOEC (survival)	0.149	Larval	20	RM	FW	23	NR	Good study	STS-110	No Not lowest value
<i>C. tentans</i>	EC50 (total emergence)	0.0945			RM	FW	23	NR	Good study	STS-110	No Not lowest value
<i>C. tentans</i>	EC10 (total emergence)	0.0893			RM	FW	23	NR	Good study	STS-110	No Datapoint not used in criteria calculations
<i>C. tentans</i>	NOEC (total emergence)	<0.0023			RM	FW	23	NR	Good study	STS-110	No Datapoint not used in criteria calculations
<i>C. tentans</i>	EC50 (eggs-female)	no effect			RM	FW	23	NR	Good study	STS-110	No Non-specific data point
<i>C. tentans</i>	EC10 (eggs-female)	no effect			RM	FW	23	NR	Good study	STS-110	No Non-specific data point
<i>C. tentans</i>	NOEC (eggs-female)	not calculated			RM	FW	23	NR	Good study	STS-110	No Non-specific data point

NR - Not Recorded
FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Unknown Salt
Mummichog - *Fundulus heteroclitus*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>F. heteroclitus</i>	TL50	>1800	Juveniles	1	SU	SW	20	NR	Saltwater species	STS-325	No Non-native species
<i>F. heteroclitus</i>	TL50	1820	Juveniles	4	SU	SW	20	NR	Saltwater species	STS-325	No Non-native species
<i>F. heteroclitus</i>	NOEL	1400	Juveniles	4	SU	SW	20	NR	Saltwater species	STS-325	No Non-native species

NR - Not Recorded
FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Unknown Salt
Grass shrimp - *Palaemonetes vulgaris*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>P. vulgaris</i>	TL50	>1000	Juveniles	1	SU	SW	20	NR	Saltwater Species	STS-325	No Non-native species
<i>P. vulgaris</i>	TL50	280	Juveniles	4	SU	SW	20	NR	Saltwater Species	STS-325	No Non-native species
<i>P. vulgaris</i>	NOEL	180	Juveniles	4	SU	SW	20	NR	Saltwater Species	STS-325	No Non-native species

NR - Not Recorded
FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Potassium Salt
Brine shrimp - *Artemia*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>Artemia</i>	EC50	9.4	<24 hours	2	SU	SW	21	NR	Saltwater Species	STS-109	No Non-native species
<i>Artemia</i>	EC50	9.4	<24 hours	2	SU	SW	21	NR	Saltwater Species	STS-109	No Non-native species
<i>Artemia</i>	EC50	8.9	<24 hours	2	SU	SW	21	NR	Saltwater Species	STS-109	No Non-native species

NR - Not Recorded
FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Potassium Salt
Mussel - *Unio complamatus*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>U. complamatus</i>	LC50	57	48.7mm/ 76.5g	4	RM	FW	21.4-23.7	132-144	Water quality parameters slightly out of range.	AR226-0090, AR226-0091, AR226-1762 (all3 studies variations of same study)	Yes
<i>U. complamatus</i>	NOEC	19	48.7mm/ 76.5g	4	RM	FW	21.4-23.7	132-144	Water quality parameters slightly out of range.	AR226-0090, AR226-0091, AR226-1762 (all3 studies variations of same study)	Yes

NR - Not Recorded
FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Lithium Salt
Cladoceran - *Daphnia* spp.

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>D. magna</i>	EC50	80.9 (adjusted)	<24 hours	1	SU	FW	20.1-21.0	NR	Adjusted based on a sample conc. of 24.5% PFOS.	AR226-0112	No Too short exposure duration
<i>D. magna</i>	EC50	51.4 (adjusted)	<24 hours	2	SU	FW	20.1-21.0	NR	Adjusted based on a sample conc. of 24.5% PFOS.	AR226-0112	Yes
<i>D. magna</i>	NOEC	24.5 (adjusted)	<24 hours	2	SU	FW	20.1-21.0	NR	Adjusted based on a sample conc. of 24.5% PFOS.	AR226-0112	Yes

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FW - Freshwater
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SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Didecyldimethylammonium Salt
Cladoceran - *Daphnia* spp.

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>D. magna</i>	EL50	27	<24 hours	1	SU	FW	20.9-21	41-44	Cation salt may be toxic. Sample was liquid and no info regarding purity available.	STS-324	No Large cation salt moiety
<i>D. magna</i>	EL50	11.3	<24 hours	2	SU	FW	20.9-21	41-44	Cation salt may be toxic. Sample was liquid and no info regarding purity available.	STS-324	No Large cation salt moiety
<i>D. magna</i>	NOEL	6.25	<24 hours	2	SU	FW	20.9-21	41-44	Cation salt may be toxic. Sample was liquid and no info regarding purity available.	STS-324	No Large cation salt moiety

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SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Potassium Salt
Cladoceran - *Daphnia* spp.

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>D. magna</i>	LC50	50	<24 hours	2	SU	FW	NR	NR	Sample purity unknown. Methodology questions and lack of details.	AR226-0123	No Method issues
<i>D. magna</i>	LC50	49.2	<24 hours	2	SU	FW	NR	NR	Sample purity unknown. Methodology questions and lack of details.	AR226-0123	No Method issues
<i>D. magna</i>	EC50	58	<24 hours	2	SU	FW	NR	NR	Test summary - abbreviated due to a more recent test.	STS-101	No Method issues
<i>D. magna</i>	EC50	67	<24 hours	2	SU	FW	NR	NR	Test summary - abbreviated due to a more recent test.	STS-101	No Method issues
<i>D. magna</i>	EC50	59	<24 hours	2	SM	FW	19.3-20.2	132	GLP Study	AR226-0086, AR226-0087, AR226-1761 (all 3 studies variations of the same study)	Yes
<i>D. magna</i>	NOEC	32	<24 hours	2	SM	FW	19.3-20.2	132	GLP Study	AR226-0086, AR226-0087, AR226-1761 (all 3 studies variations of the same study)	Yes
<i>D. magna</i>	LOEC	23	<24 hours	21	RM	FW	19.4-20.1	124	GLP Study	AR226-0098, AR226-0099, AR226-1766 (all 3 studies variations of the same study)	No Data point not used in criteria calculation
<i>D. magna</i>	NOEC	12	<24 hours	21	RM	FW	19.4-20.1	124	GLP Study	AR226-0098, AR226-0099, AR226-1766 (all 3 studies variations of the same study)	Yes
<i>D. magna</i>	MATC	17	<24 hours	21	RM	FW	19.4-20.1	124	GLP Study	AR226-0098, AR226-0099, AR226-1766 (all 3 studies variations of the same study)	No Data point not used in criteria calculation
<i>D. magna</i>	EC50	27	<24 hours	2	RM	FW	19.4-20.1	124	Temps out of range	AR226-0110	No Method issues
<i>D. magna</i>	EC50	14.7	<24 hours	14	RM	FW	19.4-20.1	124	Temps out of range	AR226-0110	No Method issues
<i>D. magna</i>	EC50	12.4	<24 hours	21	RM	FW	19.4-20.1	124	Temps out of range	AR226-0110	No Method issues
<i>D. magna</i>	EC50	11.4	<24 hours	28	RM	FW	19.4-20.1	124	Temps out of range	AR226-0110	No Method issues
<i>D. magna</i>	NOEC	7	<24 hours	28	RM	FW	19.4-20.1	124	Temps out of range	AR226-0110	No Method issues
<i>D. magna</i>	MATC	11.2	<24 hours	14, 21 & 28	RM	FW	19.4-20.1	124	Temps out of range	AR226-0110	No Method issues
<i>D. magna</i>	EC50	67.2	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	Yes

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SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Potassium Salt
Cladoceran - *Daphnia* spp.

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>D. magna</i>	LC50	130	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	No Not lowest value
Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>D. magna</i>	NOEC (survival)	33.1	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	No Not lowest value
<i>D. magna</i>	NOEC (immobility)	0.8	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	Yes
<i>D. magna</i>	LC50	42.3	adult (initiated with neonates <24 hrs. old)	21	SU	FW	21	200-225	Good Study	STS-104	Yes
<i>D. magna</i>	NOEC (survival)	5.3	adult (initiated with neonates <24 hrs. old)	21	SU	FW	21	200-225	Good Study	STS-104	Yes
<i>D. pulicaria</i>	EC50	134	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	Yes
<i>D. pulicaria</i>	LC50	169	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	No Not lowest value
<i>D. pulicaria</i>	NOEC (survival)	46.9	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	No Not lowest value
<i>D. pulicaria</i>	NOEC (immobility)	13.6	<24 hours	2	SU	FW	21	200-225	Good Study	STS-104	Yes
<i>D. magna</i>	NOEC	25	adult (initiated with neonates <24 hrs. old)	21	RU	FW	21	NR	Neonates too old at test initiation	STS-201	No Method issues
<i>D. magna</i>	LOEC	50	adult (initiated with neonates <24 hrs. old)	21	RU	FW	21	NR	Neonates too old at test initiation	STS-201	No Method issues
<i>D. pulicaria</i>	NOEC	6	adult (initiated with neonates <24 hrs. old)	21	RU	FW	21	NR	Neonates too old at test initiation	STS-201	No Method issues
<i>D. pulicaria</i>	LOEC	13	adult (initiated with neonates <24 hrs. old)	21	RU	FW	21	NR	Neonates too old at test initiation	STS-201	No Method issues
<i>D. magna</i>	EC50	>150	<24 hours	1	SU	FW	21	NR	Reported tox. values due to mixture.	STS-322	No Method issues
<i>D. magna</i>	EC50	49	<24 hours	2	SU	FW	21	NR	Reported tox. values due to mixture.	STS-322	No Method issues
<i>D. magna</i>	EC50	>42 (adjusted)	<24 hours	1	SU	FW	21	NR	Reported tox. values due to mixture.	STS-322	No Method issues
<i>D. magna</i>	EC50	14 (adjusted)	<24 hours	2	SU	FW	21	NR	Reported tox. values due to mixture.	STS-322	No Method issues
<i>D. magna</i>	LC50	76	<24 hours	2	SU	FW	21	NR	Reported tox. values due to mixture.	STS-323	No Method issues
<i>D. magna</i>	LC50	73	<24 hours	2	SU	FW	21	NR	Reported tox. values due to mixture.	STS-323	No Method issues

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RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 1: Toxicity Data
PFOS - Potassium Salt
Saltwater Mysid - *Mysidopsis bahia*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. bahia</i>	EC50 (cell dry weight)	3.5	<24 hrs. at test initiation	4	SM	SW	238-254	NR	Good test. Saltwater species.	AR226-0094, AR226-0095, AR226-1758	No Non-native species
<i>M. bahia</i>	EC50 (cell dry weight)	1.1	<24 hrs. at test initiation	4	SM	SW	238-254	NR	Good test. Saltwater species.	AR226-0094, AR226-0095, AR226-1758	No Non-native species
<i>M. bahia</i>	NOEC survival (pre-pairing)	0.55	<24 hrs. at test initiation	20	FM	SW	24.4-25.2	NR	Good test. Saltwater species.	AR226-0100, AR226-0101	No Non-native species
<i>M. bahia</i>	NOEC survival (post-pairing)	0.55	<24 hrs. at test initiation	35	FM	SW	24.4-25.2	NR	Good test. Saltwater species.	AR226-0100, AR226-0101	No Non-native species
<i>M. bahia</i>	NOEC reproduction	0.25	<24 hrs. at test initiation	35	FM	SW	24.4-25.2	NR	Good test. Saltwater species.	AR226-0100, AR226-0101	No Non-native species
<i>M. bahia</i>	NOEC growth	0.25	<24 hrs. at test initiation	35	FM	SW	24.4-25.2	NR	Good test. Saltwater species.	AR226-0100, AR226-0101	No Non-native species
<i>M. bahia</i>	LOEC reproduction & growth	0.55	<24 hrs. at test initiation	35	FM	SW	24.4-25.2	NR	Good test. Saltwater species.	AR226-0100, AR226-0101	No Non-native species
<i>M. bahia</i>	NOEC 2nd generation acute survival	0.55	<24 hrs. at test initiation	35	FM	SW	24.4-25.2	NR	Good test. Saltwater species.	AR226-0100, AR226-0101	No Non-native species

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SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 2a: Acceptable Chronic Data
PFOS - All Salts

Data Requirement Category	Species	Effect	Concentration (mg/L)	Life Stage	PFOS Salt	Ex Ty	Ref. No.	Used for Criteria Database/Comments
Osteichthyes	<i>P. promelas</i>	MATC	0.41	Eggs <24 hours old at test initiation	Potassium salt	FM	AR226-0096, AR226-0097, AR226-1765	Yes / however, acute test reference for acute/chronic ratio not from same chronic test. Based on a NOEC of 0.29 mg/L and a LOEC of 0.58 mg/L (42-day larval survival)
Planktonic crustacean	<i>D. magna</i>	NOEC	12	<24 hours	Potassium salt	RM	AR226-0098, AR226-0099, AR226-1766	No / Based on a NOEC of 12 mg/L (based on survival)
	<i>D. magna</i>	LC50	42.3	adult (initiated with neonates <24 hrs. old)	Potassium salt	SU	STS-104	No / data point not used for acute/chronic ratio
	<i>D. magna</i>	MATC (reproduction)	35.35	adult (initiated with neonates <24 hrs. old)	Potassium salt	SU	STS-104	Yes / Based on a NOEC of 50 mg/L and a LOEC of 25 mg/L (based on reproductive endpoint)
	<i>D. magna</i>	NOEC (survival)	5.3	adult (initiated with neonates <24 hrs. old)	Potassium salt	SU	STS-104	No / Based on IC 10
Aquatic insect	<i>C. tentans</i>	EC50 (growth)	93.8	Larval	Potassium salt	RM	STS-110	No
	<i>C. tentans</i>	NOEC (survival)	94.9	Larval	Potassium salt	RM	STS-110	No
	<i>C. tentans</i>	LOEC (survival)	149	Larval	Potassium salt	RM	STS-110	No
	<i>C. tentans</i>	MATC (survival)	118.91	Larval	Potassium salt	RM	STS-110	No
	<i>C. tentans</i>	NOEC (growth)	21.7	Larval	Potassium salt	RM	STS-110	No
	<i>C. tentans</i>	LOEC (growth)	94.9	Larval	Potassium salt	RM	STS-110	No
	<i>C. tentans</i>	MATC (growth)	45.37	Larval	Potassium salt	RM	STS-110	No

NR - Not Recorded
FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 2b: Acceptable Acute-to-Chronic Ratio (ACR) Data

Species	Acute Value (mg/L)	Chronic Value (mg/L)	ACR
Osteichthyes	9.1 (LC ₅₀)	0.41 (MATC)	22.19
<i>D. magna</i>	67.2 (EC ₅₀)	35.35 (MATC)	1.90
Generic ACR			18

Geometric Mean = 9.12

Final ACR = 9.12

**Table 3a: Acceptable Acute Data
PFOS - All Salts**

Data Requirement Category	Species	Effect	Concentration (mg/L)	Life Stage	PFOS Salt	Ex Ty	Ref. No.	SMAV	GMAV	Used for Criteria Database/Comments
Chordata (amphibian)	<i>P. crucifer</i>	LC50	38	Tadpoles (0.030 g)	Potassium salt	RM	STS-333	38	38	Yes
Benthic crustacean	<i>H. azteca</i>	LC50	15	12 days-old at initiation	Potassium salt	RM	STS-332	15	15	Yes
Second insect or phylum not already represented	<i>L. variegatus</i>	LC50	5.6	Adult	Potassium salt	RM	STS-334	5.6	5.6	Yes
Salmonid	<i>O. mykiss</i>	LC50	22	Juveniles (0.36 g, 3.6 cm)	Potassium salt	SM	STS-321	22	22	Yes
Osteichthyes	<i>P. promelas</i>	LC50	9.1	Juveniles (0.36 g, 35 mm)	Potassium salt	SM	AR226-0082, AR226-0083, AR226-1759	9.1	9.1	Yes (all three studies are variations of the same study)
Phylum other than Arthropoda or Chordata	<i>U. complanatus</i>	LC50	57	48.7 mm/ 76.5 g	Potassium salt	SM	AR226-0090, AR226-0091, AR226-1762	57	57	Yes (all three studies are variations of the same study)
Planktonic crustacean	<i>D. magna</i>	EC50	51.4 (adjusted)	<24 hours	Lithium salt	SU	AR226-0112	58.8	88.7	Yes
	<i>D. magna</i>	EC50	59	<24 hours	Potassium salt	SM	AR226-0086, AR226-0087, AR226-1761			Yes (all three studies are variations of the same study)
	<i>D. magna</i>	EC50	67.2	<24 hours	Potassium salt	SU	STS-104			Yes
	<i>D. pulicaria</i>	EC50	134	<24 hours	Potassium salt	SU	STS-104	134		Yes

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FW - Freshwater
SW - Saltwater

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SU - Static Unmeasured
RM - Renewal Measured
RU - Renewal Unmeasured

FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 3b: GMAV Ranking of Acute Data and Final Acute Value

Species	GMAV (mg/L)
<i>C. tentans</i> (extrapolated)	0.170
<i>Daphnia</i> spp.	88.7
<i>U. complamatus</i>	57.0
<i>P. Crucifer</i>	38.0
<i>O. mykiss</i>	22.0
<i>H. azteca</i>	15.0
<i>P. promelas</i>	9.1
<i>L. variegatus</i>	5.6

Final Acute Value = 0.170 mg/L (lowered from 1.302 mg/L, see Section 5.1.1 and Page 3 of Summary Sheets)

Table 4a: Toxicity Data
PFOS - Potassium Salt
Diatom - *Skeletonoma costatum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>S. costatum</i>	EC50	>3.20		3	SM	SW	20.2-21.4	NR	Saltwater species	STS-117	No Non-native species
<i>S. costatum</i>	EC50	>3.20		4	SM	SW	20.2-21.4	NR	Saltwater species	STS-117	No Non-native species
<i>S. costatum</i>	EC10	>3.20		4	SM	SW	20.2-21.4	NR	Saltwater species	STS-117	No Non-native species
<i>S. costatum</i>	EC90	>3.20		4	SM	SW	20.2-21.4	NR	Saltwater species	STS-117	No Non-native species
<i>S. costatum</i>	NOAEC	3.2		3	SM	SW	20.2-21.4	NR	Saltwater species	STS-117	No Non-native species
<i>S. costatum</i>	NOAEC	3.2		4	SM	SW	20.2-21.4	NR	Saltwater species	STS-117	No Non-native species

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SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Didecyldimethylammonium Salt
Alga - *Selenastrum capricornutum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>S. capricornutum</i>	EC50 (cell density)	55.8		1	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	EC50 (cell density)	<51.8		2	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	EC50 (cell density)	<51.8		3	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	EC50 (cell density)	<51.8		4	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	NOEL (cell density)	7.7		4	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	ErL50 (growth rate)	57.7		1	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	ErL50 (growth rate)	54.8		2	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	ErL50 (growth rate)	61.4		3	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	ErL50 (growth rate)	64.6		4	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues
<i>S. capricornutum</i>	NOEL (growth rate)	29.3		4	SU	FW	24.6-25.6	NR	Water quality parameters out of range. Toxicity may be due to mixture.	AR226-0536	No Method issues

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SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Alga - *Selenastrum capricornutum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>S. capricornutum</i>	EC50 (cell dry weight)	115	7-day old culture	4	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (cell dry weight)	122	7-day old culture	7	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (cell dry weight)	128	7-day old culture	10	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (cell dry weight)	146	7-day old culture	14	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (cell count)	82	7-day old culture	4	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (cell count)	99	7-day old culture	7	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (cell count)	98	7-day old culture	10	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (cell count)	95	7-day old culture	14	SU	FW	NR	NR	pH out of range	AR226-0106	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	<62.5 (reported)	NR	1	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	707 (reported)	NR	2	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	284 (reported)	NR	3	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	255 (reported)	NR	4	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	NOEC (growth rate)	125 (reported)	NR	4	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	<17.5 (adjusted)	NR	1	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	198 (adjusted)	NR	2	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	80 (adjusted)	NR	3	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (growth rate)	71 (adjusted)	NR	4	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	NOEC (growth rate)	35 (adjusted)	NR	4	SU	FW	23	NR	Water quality parameters out of range. Toxicity may be due to mixture.	STS-319	No Method issues
<i>S. capricornutum</i>	EC50 (cell density)	67	NR	3	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Not lowest value
<i>S. capricornutum</i>	EC10 (cell density)	47	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation

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RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Alga - *Selenastrum capricornutum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>S. capricornutum</i>	EC50 (cell density)	68	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	EC90 (cell density)	132	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	NOAEC (cell density)	42	NR	3	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	NOAEC (cell density)	42	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	EC50 (area under the growth curve)	71	NR	3	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	EC10 (area under the growth curve)	47	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	EC50 (area under the growth curve)	68	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	EC90 (area under the growth curve)	139	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	NOAEC (area under the growth curve)	42	NR	3	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	NOAEC (area under the growth curve)	42	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	EC50 (growth rate)	115	NR	3	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	EC10 (growth rate)	57	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation
<i>S. capricornutum</i>	EC50 (growth rate)	121	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Not lowest value
<i>S. capricornutum</i>	EC90 (growth rate)	>172	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation

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SU - Static Unmeasured
RU - Renewal Unmeasured
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FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Alga - *Selenastrum capricornutum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>S. capricornutum</i>	NOAEC (growth rate)	42	NR	3	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	No Data point not used in criteria calculation

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FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Alga - *Selenastrum capricornutum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>S. capricornutum</i>	NOAEC (growth rate)	42	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	IC50 (cell density)	48.2	NR	4	SU	FW	23	NR	Temp. out of range	STS-104	Yes
<i>S. capricornutum</i>	NOEC (cell density)	5	NR	4	SU	FW	23	NR	Temp. out of range	STS-104	Yes
<i>S. capricornutum</i>	IC50 (chlorophyll)	59.2	NR	4	SU	FW	23	NR	Temp. out of range	STS-104	No Not lowest value
<i>S. capricornutum</i>	NOEC (chlorophyll)	16.6	NR	4	SU	FW	23	NR	Temp. out of range	STS-104	No

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RU - Renewal Unmeasured
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Table 4a: Toxicity Data
PFOS - Potassium Salt
Diatom - *Navicula pelliculosa*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>N. pelliculosa</i>	EC50 (cell density)	242	NR	3	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	EC10 (cell density)	<62.3	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	EC50 (cell density)	263	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Not lowest value
<i>N. pelliculosa</i>	EC90 (cell density)	322	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	NOAEC (cell density)	<62.3	NR	3	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	NOAEC (cell density)	150	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Not lowest value
<i>N. pelliculosa</i>	EC50 (area under the growth curve)	246	NR	3	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	EC10 (area under the growth curve)	<62.3	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Unspecified data point
<i>N. pelliculosa</i>	EC50 (area under the growth curve)	252	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Unspecified data point
<i>N. pelliculosa</i>	EC90 (area under the growth curve)	319	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	NOAEC (area under the growth curve)	<62.3	NR	3	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Unspecified data point
<i>N. pelliculosa</i>	NOAEC (area under the growth curve)	<62.3	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Unspecified data point
<i>N. pelliculosa</i>	EC50 (growth rate)	295	NR	3	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	EC10 (growth rate)	243	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	EC50 (growth rate)	305	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Not lowest value
<i>N. pelliculosa</i>	EC90 (growth rate)	>335	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	NOAEC (growth rate)	206	NR	3	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Data point not used in criteria calculation
<i>N. pelliculosa</i>	NOAEC (growth rate)	206	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	No Not lowest value

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Table 4a: Toxicity Data
PFOS - Potassium Salt
Alga - *Chlorella vulgaris*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>C. vulgaris</i>	IC50 (cell density)	81.6		4	SU	FW	23	NR	Good study	STS-104	Yes
<i>C. vulgaris</i>	NOEC (cell density)	8.2		4	SU	FW	23	NR	Good study	STS-104	Yes
<i>C. vulgaris</i>	IC50 (chlorophyll)	88.1		4	SU	FW	23	NR	Good study	STS-104	No Not lowest value
<i>C. vulgaris</i>	NOEC (chlorophyll)	9.6		4	SU	FW	23	NR	Good study	STS-104	No Not lowest value

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FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum sibiricum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. sibiricum</i>	EC10 (plant length)	4.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (plant length)	6.5	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (plant length)	1.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (plant length)	21.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (plant length)	9.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (plant length)	6.6	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC (plant length)	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (plant length)	2.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (plant length)	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	EC10 (root number)	0.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (root number)	2.5	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (root number)	1.2	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (root number)	3.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (root number)	6.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (root number)	5.2	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC (root number)	2.9	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation

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FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum sibiricum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. sibiricum</i>	NOEC (root number)	2.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (root number)	2.9	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	EC10 (root length)	0.6	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (root length)	2.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (root length)	0.7	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (root length)	2.7	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (root length)	14.1	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (root length)	2.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC (root length)	2.9	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (root length)	0.3	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (root length)	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	EC10 (longest root)	0.5	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (longest root)	1.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (longest root)	0.1	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (longest root)	4.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (longest root)	10.2	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation

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FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum sibiricum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. sibiricum</i>	EC50 (longest root)	1.6	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	NOEC (longest root)	2.9	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (longest root)	0.3	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (longest root)	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	EC10 (Node number)	1.7	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (Node number)	4.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (Node number)	1.2	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Node number)	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Node number)	11.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Node number)	7.1	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC (Node number)	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (Node number)	2.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (Node number)	2.9	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	EC10 (Wet mass)	0.7	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (Wet mass)	1.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (Wet mass)	0.6	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation

NR - Not Recorded
FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum sibiricum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. sibiricum</i>	EC50 (Wet mass)	2.9	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Wet mass)	4.6	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Wet mass)	2.2	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC (Wet mass)	2.9	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (Wet mass)	2.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (Wet mass)	2.9	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	EC10 (Dry mass)	2.7	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (Dry mass)	2.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 (Dry mass)	1.5	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Dry mass)	13.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Dry mass)	13.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 (Dry mass)	3.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC (Dry mass)	2.9	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (Dry mass)	2.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC (Dry mass)	2.9	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	EC10 Chlorophyll-a	4.2	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation

NR - Not Recorded
FW - Freshwater
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SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum sibiricum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. sibiricum</i>	EC10 Chlorophyll-a	4.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 Chlorophyll-a	3.5	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Chlorophyll-a	21	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Chlorophyll-a	18.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Chlorophyll-a	17.7	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC Chlorophyll-a	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC Chlorophyll-a	2.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC Chlorophyll-a	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	EC10 Chlorophyll-b	4.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 Chlorophyll-b	5.6	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 Chlorophyll-b	3.6	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Chlorophyll-b	22.2	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Chlorophyll-b	22.2	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Chlorophyll-b	17.8	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC Chlorophyll-b	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC Chlorophyll-b	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation

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FW - Freshwater
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RU - Renewal Unmeasured
FM - Flow-through Measured
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Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum sibiricum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. sibiricum</i>	NOEC Chlorophyll-b	2.9	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	EC10 Carotenoids	4.8	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 Carotenoids	5.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC10 Carotenoids	6.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Carotenoids	24.2	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Carotenoids	28.5	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	EC50 Carotenoids	32.1	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Not lowest value
<i>M. sibiricum</i>	NOEC Carotenoids	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC Carotenoids	2.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Outdoor Microcosms	STS-108	No Data point not used in criteria calculation
<i>M. sibiricum</i>	NOEC Carotenoids	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes

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SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Duckweed - *Lemna gibba*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (Days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>L. gibba</i>	IC50 (frond number)	59.1	NR	4	SU	FW	25	NR	Good Study	STS-104	No Not lowest value
<i>L. gibba</i>	NOEC (frond number)	29.2	NR	4	SU	FW	25	NR	Good Study	STS-104	No Not lowest value
<i>L. gibba</i>	IC50 (wet weight)	31.1	NR	4	SU	FW	25	NR	Good Study	STS-104	Yes
<i>L. gibba</i>	NOEC (wet weight)	6.6	NR	4	SU	FW	25	NR	Good Study	STS-104	Yes

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FW - Freshwater
SW - Saltwater
SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Ammonium Salt
Photobacterium phosphoreum

Species	Effect	Concentration (mg/L)	Life Stage	Duration	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>P. phosphoreum</i>	EC50	600	NR	5 minutes	SU	SW	15	NR	Microtox Procedure	AR226-0538	No Non-native species
<i>P. phosphoreum</i>	EC50	510	NR	15 minutes	SU	SW	15	NR	Microtox Procedure	AR226-0538	No Non-native species
<i>P. phosphoreum</i>	EC50	350	NR	30 minutes	SU	SW	15	NR	Microtox Procedure	AR226-0538	No Non-native species

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FW - Freshwater
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SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Lithium Salt
Photobacterium phosphoreum

Species	Effect	Concentration (mg/L)	Life Stage	Duration	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>P. phosphoreum</i>	EC10	564	NR	15 minutes	SU	SW	NR	NR	Microtox Procedure	AR226-0113	No Non-native species
<i>P. phosphoreum</i>	EC50	>1000	NR	15 minutes	SU	SW	NR	NR	Microtox Procedure	AR226-0113	No Non-native species
<i>P. phosphoreum</i>	EC10	487	NR	30 minutes	SU	SW	NR	NR	Microtox Procedure	AR226-0113	No Non-native species
<i>P. phosphoreum</i>	EC50	>1000	NR	30 minutes	SU	SW	NR	NR	Microtox Procedure	AR226-0113	No Non-native species

NR - Not Recorded
FW - Freshwater
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SM - Static Measured
RM - Renewal Measured
SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum spicatum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. spicatum</i>	EC10 (plant length)	4.8	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (plant length)	13.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (plant length)	9.9	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (plant length)	24	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (plant length)	22.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (plant length)	20.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (plant length)	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (plant length)	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (plant length)	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (root number)	4.9	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (root number)	4.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (root number)	14.8	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (root number)	24.5	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (root number)	23.6	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (root number)	23	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species

NR - Not Recorded
FW - Freshwater
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SU - Static Unmeasured
RU - Renewal Unmeasured
FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum spicatum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. spicatum</i>	NOEC (root number)	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (root number)	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (root number)	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (root length)	10.2	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (root length)	10	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (root length)	10	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (root length)	17.6	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (root length)	17.3	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (root length)	16.7	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (root length)	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (root length)	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (root length)	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (longest root)	14.6	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (longest root)	4.6	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (longest root)	9.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species

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FM - Flow-through Measured
FU - Flow-through Unmeasured

Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum spicatum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. spicatum</i>	EC50 (longest root)	24.5	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (longest root)	22.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (longest root)	19.9	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (longest root)	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (longest root)	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (longest root)	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Node number)	4.1	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Node number)	9.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Node number)	11.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Node number)	20.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Node number)	20.6	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Node number)	20.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Node number)	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Node number)	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Node number)	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species

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Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum spicatum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. spicatum</i>	EC10 (Wet mass)	8.2	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Wet mass)	3.6	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Wet mass)	3.5	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Wet mass)	15	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Wet mass)	17.8	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Wet mass)	17.5	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Wet mass)	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Wet mass)	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Wet mass)	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Dry mass)	8.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Dry mass)	3.3	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 (Dry mass)	4.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Dry mass)	14	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Dry mass)	16.6	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 (Dry mass)	12.5	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species

NR - Not Recorded
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FM - Flow-through Measured
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Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum spicatum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. spicatum</i>	NOEC (Dry mass)	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Dry mass)	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC (Dry mass)	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Chlorophyll-a	7.7	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Chlorophyll-a	6.1	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Chlorophyll-a	5.1	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Chlorophyll-a	38.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Chlorophyll-a	30.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Chlorophyll-a	25.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Chlorophyll-a	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Chlorophyll-a	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Chlorophyll-a	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Chlorophyll-b	nc	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Chlorophyll-b	6.7	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Chlorophyll-b	5	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species

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Table 4a: Toxicity Data
PFOS - Potassium Salt
Milfoil - *Myriophyllum spicatum*

Species	Effect	Concentration (mg/L)	Life Stage	Duration (days)	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>M. spicatum</i>	EC50 Chlorophyll-b	nc	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Chlorophyll-b	33.3	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Chlorophyll-b	25	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Chlorophyll-b	32.3	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Chlorophyll-b	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Chlorophyll-b	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Carotenoids	8.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Carotenoids	7.9	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC10 Carotenoids	8.6	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Carotenoids	42	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Carotenoids	39.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	EC50 Carotenoids	43.2	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Carotenoids	11.4	Apical shoots (5 cm)	14	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Carotenoids	11.4	Apical shoots (5 cm)	28	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species
<i>M. spicatum</i>	NOEC Carotenoids	11.4	Apical shoots (5 cm)	42	SM	FW	NR	NR	Eurasian milfoil	STS-108	No Non-native species

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**Table 4b: Usable Plant Toxicity Data
PFOS - All Salts**

Species	Effect	Concentration (mg/L)	Life Stage	Duration	Ex Ty	Salt/Fresh	Temperature (C)	Hardness (mg/L)	Comments	Ref. No.	Used for Criteria Calculation/Reason
<i>S. capricornutum</i>	EC50 (cell density)	68	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	NOAEC (cell density)	42	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	EC50 (area under the growth curve)	68	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	NOAEC (area under the growth curve)	42	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	NOAEC (growth rate)	42	NR	4	SM	FW	23.6-25.8	NR	pH slightly out of range in control	AR226-0084, AR226-0085, AR226-1760	Yes
<i>S. capricornutum</i>	IC50 (cell density)	48.2	NR	4	SU	FW	23	NR	Temp. out of range	STS-104	Yes
<i>S. capricornutum</i>	NOEC (cell density)	5	NR	4	SU	FW	23	NR	Temp. out of range	STS-104	Yes
<i>N. pelliculosa</i>	EC50 (area under the growth curve)	252	NR	4	SM	FW	23.1-24.6	NR	GLP Study	STS-118	Yes
<i>C. vulgaris</i>	IC50 (cell density)	81.6		4	SU	FW	23	NR	Good study	STS-104	Yes
<i>C. vulgaris</i>	NOEC (cell density)	8.2		4	SU	FW	23	NR	Good study	STS-104	Yes
<i>M. sibiricum</i>	NOEC (plant length)	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	NOEC (root length)	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	EC50 (longest root)	1.6	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	NOEC (longest root)	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	NOEC Chlorophyll-a	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>M. sibiricum</i>	NOEC Carotenoids	0.3	Apical shoots (5 cm)	42	SM	FW	NR	NR	Outdoor Microcosms	STS-108	Yes
<i>L. gibba</i>	IC50 (wet weight)	31.1	NR	4	SU	FW	25	NR	Good Study	STS-104	Yes
<i>L. gibba</i>	NOEC (wet weight)	6.6	NR	4	SU	FW	25	NR	Good Study	STS-104	Yes

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RU - Renewal Unmeasured
FM - Flow-through Measured
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Table 5a: Bioconcentration/Bioaccumulation Data
PFOS

Species Latin Name/Species Common Name	Effect Type	BCF/BAF Value (L/kg)	Tissue Type	Life Stage/Age	Duration (days)	Exp. Type	Salt/Fresh	Comments	Ref. No.
<i>Lepomis macrochirus</i> /bluegill sunfish	BCF	1124	Edible portion	Juveniles (7 mo.)	62	FM	FW	Laboratory test, kinetic extrapolation	STS-328
<i>Oncorhynchus mykiss</i> /rainbow trout	BCF	1100 ± 150	Edible portion	Juveniles	12	FM	FW	Laboratory test, kinetic extrapolation	Martin et al., 2003 (STS-160)
<i>Lepomis macrochirus</i> /bluegill sunfish	BAF	1645.455 - 3390.909 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
<i>Lepomis macrochirus</i> /bluegill sunfish	BAF	4060.15 - 16541.35 (geometric mean 6761)	Edible portion	3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
<i>Morone chrysops</i> / white bass	BAF	3259.398 - 5789.474 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
<i>Catostomus commersonii</i> / white sucker	BAF	446.3636	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
<i>Catostomus commersonii</i> / white sucker	BAF	14.81818-16.09091 (artificially derived)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun). Values artificially derived based on 1/2 detection level	MPCA, 2006
<i>Micropterus dolomieu</i> / smallmouth bass	BCF/BAF	1,000-3,000	Whole fish	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
<i>Apollonia melanostomus</i> / round goby	BCF/BAF	2,000-4,000	Whole fish	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
<i>Lepomis macrochirus</i> /bluegill sunfish	BCF	2796	Whole fish	Juveniles (7 mo.)	62	FM	FW	Laboratory test, kinetic extrapolation	STS-328
<i>Salvelinus namaycush</i> / lake trout	BAF	20,000	Whole fish	4 years	variable	Field Survey	FW	Lake Superior	Furdui et al., 2007 (STS-330)
	BAF	6,300	Whole fish	4 years	variable	Field Survey	FW	Lake Michigan	Furdui et al., 2007 (STS-330)
	BAF	16,000	Whole fish	4 years	variable	Field Survey	FW	Lake Huron	Furdui et al., 2007 (STS-330)
	BAF	25,000	Whole fish	4 years	variable	Field Survey	FW	Lake Erie	Furdui et al., 2007 (STS-330)
	BAF	8,000	Whole fish	4 years	variable	Field Survey	FW	Lake Ontario	Furdui et al., 2007 (STS-330)
Benthic algae	BCF/BAF	1,000	Whole organism	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
Amphipods	BCF/BAF	1,000	Whole organism	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
<i>Dreissena polymorpha</i> / zebra mussel	BCF/BAF	1,000	Whole organism	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
<i>Pimephales promelas</i> /fathead minnow	BCF	1167-1300 (males) 1600-1750 (females)	Plasma	Adults (6-7 mo.)	21	FM	FW	Laboratory test	Ankley et al., 2005 (STS-318)
	BCF	250-400 (males) 900-1333 (females)	Liver	Adults (6-7 mo.)	21	FM	FW	Laboratory test	Ankley et al., 2005 (STS-318)
	BCF	167-367 (males) 800-1000 (females)	Gonads	Adults (6-7 mo.)	21	FM	FW	Laboratory test	Ankley et al., 2005 (STS-318)
<i>Oncorhynchus mykiss</i> /rainbow trout	BCF	4300 ± 570	Blood	Juveniles	12	FM	FW	Laboratory test, kinetic extrapolation	Martin et al., 2003 (STS-160)
	BCF	5400 ± 860	Liver	Juveniles	12	FM	FW	Laboratory test, kinetic extrapolation	Martin et al., 2003 (STS-160)
Fishes	BCF	1400-21,100 (geometric mean = 5500)	Liver	variable	variable	Field Survey	SW	Tokyo Bay	STS-137
<i>Lepomis macrochirus</i> /bluegill sunfish	BCF	41,600	Liver	variable	variable	Field Survey	FW	Lake Biwa (highest BCF reported)	STS-137
Fishes	BCF	274-41,600 (geometric mean = 8540)	Liver	variable	variable	Field Survey	FW/SW	Japan	STS-137
<i>Trachemys scripta elegans</i> and <i>Chinemys reevesii</i> / turtles	BCF	10,000-38,000 (geometric mean = 10,964)	Serum	variable (average 8.3 yrs.)	variable	Field Survey	FW	Japan	STS-314

Table 5b: Usable Bioconcentration/Bioaccumulation Data
PFOS

Species Latin Name/Species Common Name	Effect Type	BCF/BAF Value (L/kg)	Tissue Type	Life Stage/Age	Duration (days)	Exp. Type	Salt/Fresh	Comments	Ref. No.
<i>Lepomis macrochirus</i> /bluegill sunfish	BCF	1124	Edible portion	Juveniles (7 mo.)	62	FM	FW	Laboratory test, kinetic extrapolation	STS-328
<i>Oncorhynchus mykiss</i> /rainbow trout	BCF	1100 ± 150	Edible portion	Juveniles	12	FM	FW	Laboratory test, kinetic extrapolation	Martin et al., 2003 (STS-160)
<i>Lepomis macrochirus</i> /bluegill sunfish	BAF	1645.455 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	2827.273 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	3236.364 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	3390.909 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	3390.909 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
<i>Lepomis macrochirus</i> /bluegill sunfish	BAF	4060.15 (geometric mean 6771)	Edible portion	3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	4624.06 (geometric mean 6771)	Edible portion	3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	16541.35 (geometric mean 6771)	Edible portion	3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
<i>Morone chrysops</i> / white bass	BAF	3259.398 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	4586.466 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	5563.91 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	5639.098 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	5789.474 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
<i>Micropterus dolomieu</i> / smallmouth bass	BCF/BAF	1,000-3,000	Whole fish	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
<i>Apollonia melanostomus</i> / round goby	BCF/BAF	2,000-4,000	Whole fish	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
<i>Lepomis macrochirus</i> /bluegill sunfish	BCF	2796	Whole fish	Juveniles (7 mo.)	62	FM	FW	Laboratory test, kinetic extrapolation	STS-328
<i>Salvelinus namaycush</i> / lake trout	BAF	20,000	Whole fish	4 years	variable	Field Survey	FW	Lake Superior	Furdui et al., 2007 (STS-330)
	BAF	6,300	Whole fish	4 years	variable	Field Survey	FW	Lake Michigan	Furdui et al., 2007 (STS-330)
	BAF	16,000	Whole fish	4 years	variable	Field Survey	FW	Lake Huron	Furdui et al., 2007 (STS-330)
	BAF	25,000	Whole fish	4 years	variable	Field Survey	FW	Lake Erie	Furdui et al., 2007 (STS-330)
	BAF	8,000	Whole fish	4 years	variable	Field Survey	FW	Lake Ontario	Furdui et al., 2007 (STS-330)
Benthic algae	BCF/BAF	1,000	Whole organism	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
Amphipods	BCF/BAF	1,000	Whole organism	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)
<i>Dreissena polymorpha</i> / zebra mussel	BCF/BAF	1,000	Whole organism	variable	variable	Field Survey	FW	Food Web Study	Kannan et al., 2005 (226-8000)

**Table 5c: Final Chosen Bioconcentration/Bioaccumulation Data
PFOS**

Species Latin Name/Species Common Name	Effect Type	BCF/BAF Value (L/kg)	Tissue Type	Life Stage/Age	Duration (days)	Exp. Type	Salt/Fresh	Comments	Ref. No.
<i>Lepomis macrochirus</i> /bluegill sunfish	BAF	1645.455 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	2827.273 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	3236.364 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	3390.909 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
	BAF	3390.909 (geometric mean 2802)	Edible portion	2-3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Lake Calhoun)	MPCA, 2006
<i>Lepomis macrochirus</i> /bluegill sunfish	BAF	4060.15 (geometric mean 6771)	Edible portion	3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	4624.06 (geometric mean 6771)	Edible portion	3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	16541.35 (geometric mean 6771)	Edible portion	3 yrs.	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
<i>Morone chrysops</i> / white bass	BAF	3259.398 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	4586.466 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	5563.91 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	5639.098 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006
	BAF	5789.474 (geometric mean 4861)	Edible portion	Juvenile (1 yr.)	variable	Field Survey	FW	Minnesota Site-Specific Study (Mississippi River Pool 3)	MPCA, 2006