Table 3. Acute-to-chronic ratios

Species	Hardness (mg/L)	Acute Value (µg/L)	Chronic Value (µg/L)	Chronic Endpoint	Chronic NOEC (µg/l)
Ceriodaphnia dubia (water flea)	26	8,757	3,314	EC_{20}	1,980
Ceriodaphnia dubia (water flea)	50	12,513	4,885	EC_{20}	2,010
Ceriodaphnia dubia (water flea)	100	20,495	6,052	EC_{20}	4,460
Ceriodaphnia dubia (water flea)	200	25,480	7,809	EC_{20}	7,540
Ceriodaphnia dubia (water flea)	48	15,641	3,317	EC_{20}	2,900
Ceriodaphnia dubia (water flea)	92	14,500	5,200	IC_{25}	NA
Daphnia magna (water flea)	45.3	9,800	4,100	EC_{16}	NA
Daphnia magna (water flea)	100	28,700	6,900	LOEC	3,600
Daphnia magna (water flea)	267	76,300	13,400	LOEC	7,300
Pimephales promelas (fathead minnow)	"HARD"	33,603	2,480	LOEC	1,270
Salmo trutta (brown trout)	48	15,973	7,380	LOEC	3,940
Salvelinus fontinalis (brook trout)	31.3	5,120	2,104	EC_{20}	550
Salvelinus fontinalis (brook trout)	148.1	27,500	3,695	EC_{20}	3,530
Oncorhynchus mykiss (rainbow trout)	27.6	3,170	1,398	EC_{20}	760
Oncorhynchus mykiss (rainbow trout)	147.8	16,200	4,259	EC_{20}	3,390
Geometric mean ACR					

NA - not available

Chronic MATC (maximum acceptable toxicant concentration) - geometric mean of chronic value and ch

ACR (acute-chronic ratio) - calculated as the acute value divided by the chronic MATC

Chronic MATC (µg/l)	ACR	Species Mean ACR	Reference
2,562	3.419	3.688	Stubblefield and Hockett (2000)
3,134	3.993	--	Stubblefield and Hockett (2000)
5,195	3.945	--	Stubblefield and Hockett (2000)
7,673	3.321	--	Stubblefield and Hockett (2000)
3,101	5.043	--	Stubblefield and Hockett (2000)
5,200	2.788	--	Lasier et al. (2000)
4,100	2.390	4.735	Biesinger and Christensen (1972)
4,984	5.758	--	Reimer (1999)
9,890	7.715	--	Reimer (1999)
1,775	18.93	18.93	Kimball (1978)
5,392	2.962	2.962	Stubblefield and Hockett (2000) (acute) Stubblefield et al. (1997) (chronic)
1,076	4.758	6.019	Stubblefield and Hockett (2000)
3,612	7.614	--	Stubblefield and Hockett (2000)
1,031	3.075	3.621	Stubblefield and Hockett (2000)
3,800	4.263	--	Stubblefield and Hockett (2000)
		5.267	

ronic NOEC