

characteristic name	method speciation	sample fraction	unit	Environmental quality guidelines for Alberta surface waters (2018) - Agricultural Uses	Environmental quality guidelines for Alberta surface waters (2018) - Protection of Aquatic Life	Canadian Water Quality Guidelines for the Protection of Agricultural Water Uses	Canadian Water Quality Guidelines for the Protection of Aquatic Life	Wildlife Health Benchmarks for Piscivores (Sample. B. et., al. 1996)	Federal Environmental Quality Guidelines	Guidelines for Canadian Drinking Water Quality - Chemical and Physical Parameters (2021)	Drinking Water Regulations (US EPA)	Water Quality Criteria - Organoleptic Effects (US EPA)	Water Quality Criteria - Human Health Drinking Water and Organism (US EPA)	Water Quality Criteria - Human Health Drinking Water (US EPA)	Water Quality Criteria - Aquatic Life Criteria (US EPA)	Guidelines for drinking-water quality (WHO)
.alpha.-Endosulfan			ug/L													0.056
.beta.-Endosulfan			ug/L													0.056
1,1,1-Trichloroethane			ug/L								200		10000	200000		
1,1,2,2-Tetrachloroethane			ug/L										2	30		
1,1,2-Trichloroethane			ug/L				21				3		5.5	89		
1,1-Dichloroethylene			ug/L					929		14	7		300	20000		
1,2,3,4-Tetrachlorobenzene			ug/L		1.8		1.8						0.03	0.03		
1,2,3-Trichlorobenzene			ug/L		8		8									
1,2,4-Trichlorobenzene			ug/L		24		24				70		0.071	0.76		
1,2-Dibromo-3-chloropropane			ug/L								0.2					1
1,2-Dibromoethane			ug/L													0.4
1,2-Dichlorobenzene			ug/L		0.7								1000	3000		1000
1,2-Dichloroethane			ug/L	5	100	5	100	4284		5	5		99	6500		30
1,2-Dichloroethene			ug/L													50
1,2-Dichloropropane			ug/L								5		9	310		40
1,2-Diphenylhydrazine			ug/L										0.3	2		
1,3-Dichlorobenzene			ug/L		150								7	10		
1,3-Dichloropropene			ug/L										2.7	120		20
1,4-Dichlorobenzene			ug/L		26								300	900		300
1,4-Dioxane			ug/L													50
2,3,4,6-Tetrachlorophenol			ug/L							100		1				
2,3-Dichlorophenol			ug/L									0.04				
2,4,5-Trichlorophenol			ug/L									1	300	600		9
2,4,6-Trichlorophenol			ug/L							5		2	15	28		200
2,4-D			ug/L		4		4			100	70		1300	12000		30
2,4-DB			ug/L		25											90
2,4-Dichlorophenol			ug/L							900		0.3	10	60		
2,4-Dimethylphenol			ug/L									400	100	3000		
2,4-Dinitrophenol			ug/L										10	300		
2,4-Dinitrotoluene			ug/L										0.49	17		
2,5-Dichlorophenol			ug/L									0.5				
2,6-Dichlorophenol			ug/L									0.2				
2-Chloronaphthalene			ug/L										800	1000		
2-Chlorophenol			ug/L									0.1	30	800		
2-Methyl-4,6-Dinitrophenol			ug/L										2	30		
2-Methyl-4-Chlorophenol			ug/L									1800				
3,3'-Dichlorobenzidine			ug/L										0.49	1.5		
3,4-Dichlorophenol			ug/L									0.3				
3-Chlorophenol			ug/L									0.1				
carbamate			ug/L		1.9		1.9									
3-Methyl-4-Chlorophenol			ug/L									3000	500	2000		
3-Methyl-6-Chlorophenol			ug/L									20				
4-Chlorophenol			ug/L									0.1				
Acenaphthene			ug/L		5.8		5.8					20	70	90		
Acridine			ug/L		4.4		4.4									
Acrolein			ug/L		3								3	400	3	
Acrylamide			ug/L								0.5					0.5
Acrylonitrile			ug/L										0.61	70		
Alachlor			ug/L								2					20
Alcohol ethoxylates			ug/L						70							
Aldicarb			ug/L	11	1	11	1									10
Aldrin			ug/L		0.004		0.004	0.001					0.0000077	0.0000077		
Aldrin and dieldrin			ug/L													0.03
Alkalinity, total	as CaCO3		mg/L		20										20	
alpha-Endosulfan			ug/L										20	30		
alpha-Hexachlorocyclohexane			ug/L										0.0036	0.0039		
Aluminum		Total	ug/L	5000		5000	100	18								200
Aluminum		Dissolved	ug/L		50											
Ammonia			mg/L		0.794											35
Ammonia, unionized			mg/L		0.016		0.019									
Aniline			ug/L		2.2		2.2									

Anthracene		ug/L		0.012		0.012				300	400		
Antimony	Total	ug/L				161		6	6	5.6	640		20
Arsenic	Total	ug/L	25	5	25	5	16	10	10	0.18	1.4		10
Arsenic	Dissolved	ug/L										150	
Asbestos		ug/L							7	7			
Atrazine		ug/L	5	1.8	5	1.8		5	3				
metabolites		ug/L											100
Azinphos-methyl		ug/L		0.01				20				0.01	
Barium	Total	ug/L						1000	2000	1000			1300
Benzene		ug/L		40		370	2293	5	5	5.8	160		10
Benzidine		ug/L								0.0014	0.11		
Benzo(a)anthracene		ug/L		0.018		0.018				0.012	0.013		
Benzo(a)pyrene		ug/L		0.015		0.015	0.00672	0.04	0.2	0.001	0.0013		0.7
Benzo(b)fluoranthene		ug/L								0.012	0.013		
Benzo(k)fluoranthene		ug/L								0.12	0.13		
Beryllium	Total	ug/L	100		100		136		4				
beta-Endosulfan		ug/L								20	40		
beta-Hexachlorocyclohexane		ug/L								0.08	0.14		
Bis(2-Chloro-1-methylethyl) Ether		ug/L								200	4000		
Bis(2-Chloroethyl) Ether		ug/L								0.3	22		
Bis(2-Ethylhexyl) Phthalate		ug/L								0.32	0.37		
Bis(Chloromethyl) Ether		ug/L								0.002	0.17		
Bisphenol A-d6		ug/L						3.5					
Boron	Total	ug/L	5000	1500	5000	1500		5000					2400
Bromacil		ug/L	1100	5	1100	5							
Bromate		ug/L						10	10				10
Bromodichloromethane		ug/L	100										60
Bromoform		ug/L	100							7	120		100
Bromoxynil		ug/L	11	5	11	5		5					
Butylbenzyl Phthalate		ug/L								1	1		
Cadmium	Total	ug/L	80	0.184	80	0.184	0.231		5				3
Cadmium	Dissolved	ug/L										0.824	
Calcium		mg/L	1000		1000								
Captan		ug/L	13	1.3		1.3							
Carbamazepine		ug/L		10		10							
Carbaryl		ug/L	1100	0.2	110	0.2		90				2.1	
Carbofuran		ug/L	45	1.8	45	1.8		90	40				7
Carbon tetrachloride		ug/L	5	13.3	5	13.3	913	2	5	4	50		4
Chloramines		ug/L				0.5		3000	4000				
Chlorate		ug/L						1000					700
Chlordane		ug/L	7	0.006	7	0.006	0.00889		2	0.003	0.0032	0.0043	0.2
Chloride		mg/L		120		120		250				230	250
C18-C20		ug/L		2.4									
chain, C14-C17		ug/L		2.4				2.4					
C10-C13		ug/L		2.4				2.4					
Chlorine		ug/L		0.5								11	5000
Chlorine dioxide		ug/L											
Chlorite		ug/L						1000	800				700
Chlorobenzene		ug/L		1.3				80	100	100	800		
Chlorodibromomethane		ug/L								8	210		
Chloroform		ug/L	100	1.8	100	1.8	3439			60	2000		300
Chlorophenol		ug/L		7		7							
TP) [Silvex]		ug/L	100		100				50	100	400		
Chlorothalonil		ug/L	170	0.18	170	0.18							
Chlorotoluron		ug/L											30
Chlorpyrifos		ug/L	24	0.002	24	0.002		90				0.041	30
Chromium	Total	ug/L						50	100				50
Chromium (III)	Total	ug/L	50	8.9	50	8.9				100	100		
Chromium (III)	Dissolved	ug/L										100.919	
Chromium (VI)	Total	ug/L	50	1	50	1	3593			100	100		
Chromium (VI)	Dissolved	ug/L						5				11	
Chrysene		ug/L								1.2	1.3		
cis-1,2-Dichloroethylene		ug/L							70				
Cobalt	Total	ug/L	1000	1.1	1000			1.1					
Copper	Total	ug/L	500	7	500	2.763		2000	1300	1000	13000		2000
Copper	Dissolved	ug/L						0.53					

Cyanazine		ug/L	10	2	10	2							0.6
Cyanide	as free CN	ug/L		5.2		5	369092	200	200	4	400	5.2	
Cyanobacterial toxins		ug/L						1.5					
Dalapon		ug/L							200				
DDT and metabolites		ug/L	30	0.001		0.001	0.00000414			0.0003	0.0003	0.001	1
Deltamethrin		ug/L	2.5	0.0004	2.5	0.0004							
Demeton		ug/L		0.1								0.1	
Di(2-ethylhexyl) adipate		ug/L							400				
Di(2-ethylhexyl) phthalate		ug/L		16		16			6				8
Diazinon		ug/L		0.17				20				0.17	
Dibenzo(a,h)anthracene		ug/L								0.001	0.0013		
Dibromoacetonitrile		ug/L											70
Dibromochloromethane		ug/L	100		100								100
Dicamba		ug/L	122	10	122	10		120					
Dichloroacetate		ug/L											50
Dichloroacetonitrile		ug/L											20
Dichlorobromomethane		ug/L			100					9.5	270		
Dichloromethane		ug/L	50		50			50	5				20
Dichlorophenol		ug/L		0.2		0.2							
Dichloroprop		ug/L											100
Diclofop-methyl		ug/L	9	6.1	9	6.1		9					
chloride		ug/L		1.5		1.5							
Dieldrin		ug/L		0.004		0.004	0.00136			0.00001	0.000012	0.056	
Diethanolamine		ug/L		450									
Diethyl Phthalate		ug/L					210561			600	600		
Diethylene glycol		ug/L		150000									
Diisopropanolamine		ug/L		1600		1600							
Dimethoate		ug/L	3	6.2	3	6.2		20					6
Dimethyl Phthalate		ug/L								2000	2000		
Di-n-Butyl Phthalate		ug/L		19		19	0.15			20	30		
Dinitrophenols		ug/L								10	1000		
Dinoseb		ug/L	150	0.05	150	0.05			7				
Dioxin (2,3,7,8-TCDD)		ug/L					2.13E-08			0.00000005	0.000000051		
Diquat		ug/L						70	0.00003				
Diuron		ug/L						150	20				
Edetic acid		ug/L											600
Endosulfan		ug/L		0.003		0.003	1						
Endosulfan Sulfate		ug/L								20	40		
Endothall		ug/L							100				
Endrin		ug/L	0.2	0.0023	0.2	0.0023	0.00131		2	0.03	0.03	0.036	0.6
Endrin Aldehyde		ug/L								1	1		
Epichlorohydrin		ug/L							200				0.4
Ethanol		ug/L					123377						
Ethinyl estradiol		ng/L		0.5									
Ethyl acetate		ug/L					136465						
Ethylbenzene		ug/L	2.4	90	2.4	90		140	700	68	130		300
Ethylene dibromide		ug/L							0.05				
Ethylene glycol		ug/L		192000		192000							
Fenoprop		ug/L											9
Fluoranthene		ug/L		0.04		0.04				20	20		
Fluorene		ug/L		3		3				50	70		
Fluoride		mg/L	1		1	0.12		1.5	4				1.5
Formaldehyde		ug/L					73910						
[Lindane]		ug/L	4	0.01			9		0.2	4.2	4.4		2
Glyphosate		ug/L	280	800	280	800		280	700				
Haloacetic acids		ug/L						80	60				
heptaBDE		ng/L		17			14						
Heptachlor		ug/L	3		3	0.01	0.00108		0.4	0.00006	0.000059	0.0038	
Heptachlor epoxide		ug/L		0.01					0.2	0.00032	0.00032	0.0038	
hexaBDE		ng/L		120			120						
Hexabromocyclododecane		ug/L		0.56			0.56						
Hexachlorobenzene		ug/L	0.52		0.52				1	0.001	0.00079		
Hexachlorobutadiene		ug/L		1.3		1.3				0.1	0.1		0.6
Hexachlorocyclohexane		ug/L				0.01				0.066	0.1		
Hexachlorocyclopentadiene		ug/L						50	1	4	4		
Hexachloroethane		ug/L								1	1		

Pentachlorobenzene	ug/L		6		6					0.1	0.1			
Pentachloronitrobenzene	ug/L					4								
Pentachlorophenol	ug/L		0.5		0.5	0.275		60	1	30	0.3	0.4	15	9
Perchlorate	ug/L													70
Perfluorooctanesulfonate	ug/L						6.8	0.6						
Perfluorooctanoic acid	ug/L							0.2						
Permethrin	ug/L		0.004		0.004									
pH	pH units		9		9			7			9		6.5	
Phenanthrene	ug/L		0.4		0.4									
Phenol	ug/L	2	4	2	4					300	4000	300000		
Phorate	ug/L							2						
Picloram	ug/L	190	29	190	29			190	500					
Polychlorinated Biphenyls (PCBs)	ug/L		0.001		0.001				0.5		0.001	0.00064	0.014	
Propylene glycol	ug/L		500000		500000									
Pyrene	ug/L		0.025		0.025						20	30		
Quinoline	ug/L		3.4		3.4									
Selenium	ug/L	Total	50	50	1	0.236		50	50		170	4200		40
Silver	ug/L	Total			0.25									
Simazine	ug/L	10	10	10	10			10	4					2
Sodium dichloroisocyanurate	ug/L													50000
Solids Dissolved and Salinity	ug/L										250000			
Strontium	ug/L	Total						7000						
Styrene	ug/L		72		72				100					20
Sulfate	mg/L	as SO4	1000	1000										250
Sulfide	mg/L		0.0019											
Sulfolane	ug/L		50		50000									
Tebuthiuron	ug/L	130	1600	130	1.6									
Terbufos	ug/L							1						
Terbutylazine	ug/L													7
tetraBDE	ng/L		24				24							
Tetrabromobisphenol A	ug/L		3.1				3.1							
Tetrachloroethane	ug/L				13.3									
Tetrachloroethylene	ug/L		110		110	48		10	5		100	290		40
Tetrachlorophenol	ug/L		1		1									
Thallium	ug/L	Total	0.8		0.8	1			0.5		0.24	0.47		
Toluene	ug/L	24	0.5	24	2	764		60	1000		57	520		700
Total Dissolved solids	mg/L	3000		3000										
Toxaphene	ug/L	5	0.008	5	0.008	1			3		0.007	0.0071	0.0002	
Toxicity (chronic)	TU		0.3											
trans-1,2-Dichloroethylene	ug/L								100					
Triallate	ug/L	230	0.24	230	0.24									
triBDE	ng/L		46				46							
Tribromomethane	ug/L			100										
Tributyltin	ug/L	250	0.072	250	0.008								0.072	
Trichlorfon	ug/L		0.009		0.009									
Trichloroacetate	ug/L													200
Trichloroethylene	ug/L	50	21	50	21	49419		5	5		6	70		20
Trichlorophenol	ug/L		18		18									
Triclosan	ug/L						0.47							
Tricyclohexyltin	ug/L	250		250										
Triethylene glycol	ug/L		350000											
Trifluralin	ug/L	45	0.2	45	0.2			45						20
Trihalomethanes	ug/L							100	80					
Triphenyltin	ug/L	820	0.022	820	0.022									
Uranium	ug/L	Total	15	200	15			20	30					30
Vanadium	ug/L	Total	100	100			120							
Vinyl chloride	ug/L					78		2	2		0.22	16		0.3
Xylene	ug/L		30			28		90						500
Xylenes (total)	ug/L								10000					
Zinc	ug/L	Total	50	30	50000	30				5000	7400	26000		
Zinc	Dissolved				31.345								137.874	