

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 carbamate				ug/L									0.1				
3-Methyl-4-Chlorophenol				ug/L		1.9		1.9						800	1000		
3-Methyl-6-Chlorophenol				ug/L									3000	500	2000		
4-Chlorophenol				ug/L									20				
Acenaphthene				ug/L		5.8		5.8					20				
Acridine				ug/L		4.4		4.4						70	90		
Acrolein				ug/L		3											
Acrylamide				ug/L								0.5		3	400	3	
Acrylonitrile				ug/L										0.61	70		0.5
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													
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
Benzydine		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						0.1	
Demeton		ug/L		0.1									
Di(2-ethylhexyl) adipate		ug/L				16			400				
Di(2-ethylhexyl) phthalate		ug/L		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		

[illegible]

Pentachlorobenzene		ug/L		6		6					0.1	0.1		
Pentachloronitrobenzene		ug/L					4							
Pentachlorophenol		ug/L		0.5		0.5	0.275							
Perchlorate		ug/L											15	9
Perfluorooctanesulfonate		ug/L						6.8		0.6				70
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								
Phorate		ug/L							2		300	4000	300000	
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	Total	ug/L	50	2	50	1	0.236		50	50		170	4200	40
Silver	Total	ug/L		0.25		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	Total	ug/L							7000					
Styrene		ug/L		72		72				100				20
Sulfate	as SO4	mg/L	1000	309	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	Total	ug/L		0.8		0.8	1			0.5		0.24	0.47	
Toluene		ug/L		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	Total	ug/L	200	15	200	15			20	30				30
Vanadium	Total	ug/L	100		100									
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	50	30	50000		30				5000	7400	26000	
Zinc	Dissolved	ug/L				31.345								137.874