

The information on BC water quality standards presented in this table has not been vetted by Canadian officials. Direct comparison of water quality standards is difficult, as the implementation of standards differs between BC and Alaska. More information and analysis might be needed to meaningfully interpret any differences between standards.

Survey of AK and BC Water Quality Standards (Fresh Water, Similar Conditions)

Constituent (units)	AK Standard*	BC Standard*	Description
Aluminum (µg/L)¹	87	50 (dissolved)	<ul style="list-style-type: none"> Aluminum occurs naturally in most rocks and soils. Aluminum can be toxic to aquatic life in some forms.
Antimony (µg/L)	6	9	<ul style="list-style-type: none"> Antimony is a metalloid commonly associated with ore deposits. Antimony can be toxic to humans.
Arsenic (µg/L)	10	5	<ul style="list-style-type: none"> Arsenic occurs naturally in rocks and soils. Arsenic can be toxic to humans and to aquatic life.
Cadmium (µg/L)	0.16 ²	0.13 ² (dissolved)	<ul style="list-style-type: none"> Cadmium is a metal commonly associated with ore deposits. Cadmium can be toxic to humans and to aquatic life.
Copper (µg/L)	5.2 ²	2.0 ²	<ul style="list-style-type: none"> Copper is a common contaminant in water draining from hard rock mines. Copper can be toxic to aquatic life and can have behavioral effects.
Cyanide (µg/L)	5.2	5.0	<ul style="list-style-type: none"> Cyanide is commonly used in mineral processing. Cyanide can be toxic to humans and to aquatic life in some forms.
Iron (µg/L)	1,000	1,000	<ul style="list-style-type: none"> Iron is ubiquitous throughout the earth's crust. Iron can be toxic to aquatic life and iron precipitates can impede spawning.
Lead (µg/L)	1.3 ²	4.6 ²	<ul style="list-style-type: none"> Lead occurs naturally in some ore deposits. Lead can be toxic to humans and to aquatic life.
Manganese (µg/L)	50	800 ²	<ul style="list-style-type: none"> Manganese is a metal that occurs naturally in rocks and soils. Manganese can be toxic to humans.
Mercury (µg/L)	0.012	0.010 ³	<ul style="list-style-type: none"> Mercury is a metal that can be associated with some ore deposits. Mercury is toxic and accumulates in the environment.
Molybdenum (µg/L)	10	10	<ul style="list-style-type: none"> Molybdenum is a metal that occurs naturally in rocks and soils. Molybdenum can be toxic to livestock.
Nickel (µg/L)	29 ²	25	<ul style="list-style-type: none"> Nickel is a metal that occurs naturally in rocks and soils. Nickel can be toxic to aquatic life and to humans.

* All water quality standards are expressed in terms of total concentration (solid and dissolved phases), unless otherwise noted.

¹ The aluminum limits are for pH ≥ 6.5 and < 7.

² Some limits depend on water hardness (calcium and magnesium content). A hardness of 50 mg/L was used for hardness dependent limits.

³ The BC limit for mercury is scaled based on percent of methylmercury present.

⁴ The turbidity standard is expressed in terms of the allowable increase above natural conditions.

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Nitrate as N (µg/L)	10,000	3,000	<ul style="list-style-type: none"> Nitrates are used in explosives and are commonly found in mine drainage. Nitrates can be toxic to humans and can cause algae blooms.
pH (s.u.)	6.5-8.5	6.5-8.5	<ul style="list-style-type: none"> Water draining from acid generating rock can be very acidic. Changes in pH can harm fish and shellfish and can impair waterbodies.
Selenium (µg/L)	5	2	<ul style="list-style-type: none"> Selenium is a metal that occurs naturally in rocks and soils. Selenium can be toxic to humans and to aquatic life.
Silver (µg/L)	1.2 ²	10.0 ²	<ul style="list-style-type: none"> Silver occurs naturally in some ore deposits. Silver can be toxic to aquatic life.
Total Dissolved Solids (TDS) (mg/L)	500	500	<ul style="list-style-type: none"> Runoff from development or the treatment of water can elevate TDS levels. High TDS levels can harm fish and are a nuisance in drinking water.
Turbidity (NTU)⁴	5 NTU over natural background	2 NTU over natural background	<ul style="list-style-type: none"> Stormwater runoff can increase the turbidity (cloudiness) of water. Increases in turbidity can harm fish and increase disease risks to humans.
Zinc (µg/L)	66.6 ²	7.5 ²	<ul style="list-style-type: none"> Zinc is a metal that can be associated with some ore deposits. Zinc can be toxic to aquatic life and to humans.

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