

# Water Quality Guidelines

## Contact Recreation

Indicator	Unit	Water quality categories			
		Very good	Good	Poor	Very Poor
E. coli (median)	n/100 mL	≤70	≤126 <sup>1</sup>	>126	>410

## Aquatic Ecosystems<sup>2</sup>

Indicator	Unit	Guideline
pH	unit	6.5-9.0
Dissolved oxygen <sup>3</sup>	% saturation	>80
Dissolved reactive phosphorous (DRP)	g/m <sup>3</sup> -P	<0.03
Dissolved inorganic nitrogen (DIN)	g/m <sup>3</sup> -N	<0.1
Ammonia <sup>4</sup>	g/m <sup>3</sup> -N	
Temperature	°C	<25
Turbidity <sup>5</sup>	NTU	<5

## Stock Water and Irrigation

Indicator	Unit	Guideline
Faecal coliforms (median)	n/100 mL	<600
Nitrate	g/m <sup>3</sup> -N	<0.5

## Stream Macroinvertebrates

Indicator	Habitat quality categories			
	Very Good	Good	Poor	Very Poor
MCI	>120	≥100	<100	<80

<sup>1</sup> Ministry for the Environment and Ministry of Health (1998). Bacteriological water quality guidelines for marine and fresh water, Wellington.

<sup>2</sup> Unless otherwise specified, guidelines are sourced from the Revised Proposed Regional Water and Soil Plan for Northland.

<sup>3</sup> Australian and New Zealand Environment and Conservation Council (1992). Australian water quality guidelines for fresh and marine waters.

<sup>4</sup> Total ammonia is more toxic at warmer temperatures and higher pH. The guideline value was calculated for each site with respect to the 95<sup>th</sup> percentile value as determined by both temperature and pH at each specific site.

<sup>5</sup> There are no published guidelines for turbidity, but it can be taken that turbidity should be less than 5 NTU to support plant life.