

## Epsom Spring Gully Recycled Water Project

### Spring Gully Reservoir Water Quality Monitoring Program

Type	Parameter(s)	Units	Samples/ Year	Sample Location (refer plan)	Sample Depth (below water surface)
Standard Potable Raw Water Reservoir <sup>1</sup>	Bacto 1		12	Outlet	~
	Physchem + T		12	Outlet	~
	Alk/Hard		4	Outlet	~
	Inorg 1 + Corro		4	Outlet	~
	Chl-a (see Note 2)		36	Outlet	~
Water Level	Water level AMSL (see Note 3)	m	36		
Light Penetration/Clarity	Secchi Disk	m	12	A	~
	Turbidity	NTU	12	A	
Nutrients	Dissolved inorganic nitrogen (NH <sub>3</sub> , NO <sub>2</sub> + NO <sub>3</sub> )	mg/L	12	A	0.5m, 0.5m above bed (only if water depth is greater than 2m)
	Organic nitrogen	mg/L	12	A	0.5m, 0.5m above bed (only if water depth is greater than 2m)
	Dissolved reactive phosphorus (DRP)	mg/L	12	A	0.5m, 0.5m above bed (only if water depth is greater than 2m)
	Total phosphorus	mg/L	12	A	0.5m, 0.5m above bed (only if water depth is greater than 2m)
Temp/DO Profile	Temperature	°C	See Note 4	A	
	Dissolved oxygen	mg/L	See Note 4	A	0.5m, and then in 1m increments to bottom
Salinity		tds	See Note 4	A	
E-Coli		mpn/100ml	See Note 4	A	
Blue-Green Algae	As per current version Coliban Water Blue Green Algae Management and Response Plan		36 approx Note 5	A	
Cyanotoxins	Microcystins or saxitoxins (ELISA screening test or other recognised test method)	µg/L	Only if cell counts exceed 50,000/mL for M. aeruginosa or A. circinalis, or BGA biovolume > 10 mm <sup>3</sup> /L, or BGA Biovolume > 4 mm <sup>3</sup> /L and a known toxic producer is present, or BGA scums are persistently present (Alert Level 3).		

#### Notes:

- 1 Coliban Water's Potable Water Quality Monitoring Program for raw water reservoirs, but:
  - ~ excludes pesticides
  - ~ excludes BGA (refer to separately specified BGA requirements)
  - ~ greater sampling of Chl a (36/year rather than 12)
- 2 Approx weekly between 1 October and 31 May, fortnightly for the remainder of the year
- 3 Only required to be recorded if not done so already
- 4 Fortnightly between 1 October and 31 May, monthly for the remainder of the year.
- 5 Increase monitoring if Alert Level 2 reached.