

## Supplementary File

Table S1 Primer set used for *Cryptosporidium* (Elsafi et al., 2013)

Primer	Primer sequence	Prediction (amplicon size)
Forward CSF	AGTGCTTAAAGCAGGCAACTG	556 bp
Reverse CSF	CGTTAACGGAATTAACCAGAC	

Table S2. Characteristics of prominent water bodies sampled in Dhaka City.

Name of lakes	Geographic location	Surface area (ha)	Length (km)	Width (m)	Depth (m)	Prominent water quality status	Also reported by
Dhanmondi Lake	23°43' N and 90° 26' E	37	3	35–100		<ul style="list-style-type: none"> <li>The water's color had turned green.</li> <li>A foul smell due to the presence of excess nutrients and toxic metals from domestic and industrial wastes in the water body was observed.</li> </ul>	(Sabit, 2011)
Gulshan Lake	23°48' N and 90° 25' E	100	0.0160	3.8	2.5	<ul style="list-style-type: none"> <li>The levels of some toxic metals in lake water had exceeded allowable limits.</li> <li>The deep green color of the water revealed the presence of algal blooms.</li> <li>The levels of essential minerals in the lake water did not meet the requirements for drinking water.</li> <li>The BOD level of the lake considerably exceeded the critical values for aquatic organisms and fishes.</li> </ul>	(S. S. Rahman & Hossain, 2019)
Banani Lake	23.048' N and 90.025'	32.7	3.43	2.89	2.0	<ul style="list-style-type: none"> <li>The levels of Cd, As, Ni, and Pb in lake water exceeded normal fishing, industrial, and irrigation water standard values.</li> <li>The disposal of several types of waste had substantially reduced the oxygen level of the lake water.</li> </ul>	(Rahaman et al., 2017)

Ramna Lake	E 23.7365° N,	75	0.81	9-94	2.19	<ul style="list-style-type: none"> <li>• The EC, DO, BOD, and toxic metal levels of lake water exceeded drinking and irrigation standard limits.</li> </ul> <p>Toxic metals (Cd, Pb, Zn, and Mn) were found in Ramna Lake at levels that were</p> <p>far higher than the standard limit for drinking and irrigation purposes.</p> <p>Ramna Lake had a high BOD value.</p>	(J. B. Islam et al., 2015)
Crescent Lake	23°45'53" N, 90°22'43" E	50	0.65	NA	1.98	<ul style="list-style-type: none"> <li>• The water of the lake was greenish due to the presence of</li> <li>• several types of wastes and human feces.</li> </ul> <p>A considerable number of heavy metals and other pollutants contaminated the lake water.</p>	(S. S. Rahman & Hossain, 2019)

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