

Summary of water quality statistics for the Western Buffer WCZ in 2005

Parameter	Hong Kong Island (West)		Tsing Yi (South)	Tsing Yi (West)
	WM1	WM2	WM3	WM4
Number of samples	12	12	12	12
Temperature (°C)	22.7 (15.5 - 27.6)	23.0 (15.5 - 27.7)	22.9 (15.7 - 27.7)	22.9 (15.7 - 27.6)
Salinity	32.2 (29.3 - 33.4)	31.3 (27.9 - 33.2)	31.6 (29.3 - 33.1)	31.3 (27.7 - 33.1)
Dissolved Oxygen (mg/L)	6.0 (3.8 - 7.7)	6.0 (4.8 - 7.3)	5.7 (3.9 - 6.9)	5.6 (3.1 - 6.8)
Bottom	5.6 (2.2 - 7.7)	5.9 (3.3 - 7.1)	5.7 (2.8 - 7.1)	5.5 (2.3 - 6.7)
Dissolved Oxygen (% Saturation)	84 (54 - 98)	84 (68 - 108)	80 (55 - 104)	78 (43 - 100)
Bottom	78 (30 - 98)	82 (47 - 103)	79 (40 - 107)	76 (33 - 93)
pH	8.1 (7.8 - 8.3)	8.1 (7.8 - 8.3)	8.1 (7.8 - 8.3)	8.1 (7.7 - 8.3)
Secchi Disc Depth (m)	2.3 (1.5 - 4.5)	1.9 (1.4 - 2.8)	1.8 (1.2 - 2.5)	2.0 (1.3 - 2.8)
Turbidity (NTU)	11.2 (5.0 - 16.1)	10.8 (5.3 - 15.6)	11.5 (6.8 - 16.4)	12.6 (7.8 - 19.5)
Suspended Solids (mg/L)	4.0 (1.4 - 7.4)	3.8 (2.5 - 6.5)	4.7 (2.6 - 8.0)	5.0 (1.9 - 9.7)
5-day Biochemical Oxygen Demand (mg/L)	0.9 (0.3 - 2.9)	0.8 (0.4 - 1.7)	0.7 (0.4 - 1.3)	0.6 (0.4 - 1.1)
Ammonia Nitrogen (mg/L)	0.06 (0.01 - 0.10)	0.13 (0.02 - 0.26)	0.16 (0.09 - 0.29)	0.13 (0.05 - 0.24)
Unionised Ammonia (mg/L)	0.003 (0.001 - 0.006)	0.006 (0.001 - 0.011)	0.007 (0.004 - 0.011)	0.006 (0.002 - 0.010)
Nitrite Nitrogen (mg/L)	0.02 (0.01 - 0.06)	0.04 (0.01 - 0.08)	0.03 (0.01 - 0.08)	0.04 (0.01 - 0.09)
Nitrate Nitrogen (mg/L)	0.10 (0.02 - 0.25)	0.16 (0.04 - 0.43)	0.14 (0.08 - 0.32)	0.17 (0.08 - 0.36)
Total Inorganic Nitrogen (mg/L)	0.18 (0.07 - 0.36)	0.32 (0.14 - 0.67)	0.34 (0.26 - 0.56)	0.34 (0.22 - 0.56)
Total Kjeldahl Nitrogen (mg/L)	0.17 (0.08 - 0.21)	0.25 (0.09 - 0.39)	0.29 (0.20 - 0.48)	0.25 (0.18 - 0.35)
Total Nitrogen (mg/L)	0.29 (0.18 - 0.48)	0.45 (0.21 - 0.77)	0.46 (0.38 - 0.66)	0.47 (0.32 - 0.66)
Orthophosphate Phosphorus (mg/L)	0.01 (0.01 - 0.02)	0.02 (0.01 - 0.03)	0.03 (0.01 - 0.04)	0.02 (0.02 - 0.03)
Total Phosphorus (mg/L)	0.02 (0.02 - 0.03)	0.03 (0.02 - 0.05)	0.04 (0.03 - 0.05)	0.03 (0.02 - 0.04)
Silica (as SiO ₂) (mg/L)	0.8 (0.4 - 1.4)	1.0 (0.5 - 2.0)	0.9 (0.6 - 1.8)	1.0 (0.6 - 1.8)
Chlorophyll- <i>a</i> (µg/L)	2.5 (1.3 - 6.3)	2.5 (0.9 - 8.3)	2.0 (0.7 - 7.3)	1.9 (0.8 - 4.7)
<i>E. coli</i> (count/100mL)	160 (22 - 1400)	1500 (170 - 9700)	4500 (450 - 23000)	1500 (360 - 6800)
Faecal Coliforms (count/100mL)	320 (29 - 3300)	2900 (210 - 23000)	11000 (1200 - 46000)	3400 (820 - 13000)

Note : 1. Unless otherwise specified, data presented are depth-averaged (A) values calculated by taking the means of three depths: Surface (S), Mid-depth (M), Bottom (B).

2. Data presented are annual arithmetic means of the depth-averaged results except for *E. coli* and faecal coliforms which are annual geometric means.

3. Data in brackets indicate the ranges.