

Water quality of Hoi Ha Wan Marine Park in Year 2000*

	Pak Sha O			Sam Po Shek			Ngan Chau			Tai Chek Mun		
No. of sample	5			5			5			5		
Depth	Surface	Middle	Bottom	Surface	Middle	Bottom	Surface	Middle	Bottom	Surface	Middle	Bottom
Temperature (°C)	24.85 (18.1-28.2)	24.42 (18.1-28.2)	23.21 (18.1-28.4)	24.98 (18.1-28.4)	24.35 (18.0-28.4)	23.07 (18.0-28.4)	24.82 (18.3-28.4)	23.52 (18.3-28.4)	22.94 (18.1-28.0)	25.01 (18.3-28.5)	23.30 (18.3-28.4)	22.53 (18.2-27.6)
Salinity (ppt)	30.32 (28.3-32.2)	31.02 (30.4-32.2)	31.88 (31.0-33.8)	30.36 (29.0-32.2)	31.20 (30.6-32.2)	31.98 (31.1-33.9)	30.60 (29.4-32.2)	31.70 (30.5-33.6)	32.06 (31.1-33.8)	30.26 (28.9-32.0)	31.84 (30.8-33.7)	32.50 (31.1-33.8)
Dissolved Oxygen (mg/L)	6.83 (5.93-8.51)	5.98 (3.45-8.48)	4.70 (1.30-8.45)	6.75 (5.90-8.28)	5.77 (2.86-8.14)	4.83 (2.17-7.97)	6.85 (6.00-7.73)	5.64 (5.52-7.68)	4.80 (2.54-8.02)	7.10 (5.91-7.73)	5.68 (2.65-7.74)	3.85 (2.36-7.57)
pH	8.38 (8.1-8.8)	8.34 (8.1-8.5)	8.30 (8.2-8.5)	8.42 (8.2-8.8)	8.42 (8.2-8.8)	8.30 (8.2-8.5)	8.42 (8.2-8.8)	8.42 (8.2-8.8)	8.28 (8.2-8.5)	8.42 (8.2-8.8)	8.30 (8.2-8.5)	8.24 (7.9-8.5)
Secchi Depth (m)	4.78 (2.4-6.5)			5.24 (2.5-7.8)			4.66 (2.3-7.5)			4.10 (2.1-7.3)		
Turbidity (NTU)	0.98 (0.0-2.1)	1.08 (0.4-2.3)	3.24 (0.8-6.2)	1.00 (0.0-2.5)	0.90 (0.3-1.7)	4.26 (1.3-6.9)	0.84 (0.0-1.7)	1.04 (0.0-1.7)	6.84 (1.1-14.9)	0.70 (0.0-1.4)	0.74 (0.0-1.8)	6.02 (0.4-17.1)
Suspended Solids (mg/L)	2.89 (0.70-7.40)	2.15 (0.70-4.80)	3.22 (0.99-8.30)	2.52 (1.17-5.50)	3.13 (0.86-8.60)	2.58 (1.56-3.80)	2.60 (0.36-6.70)	2.33 (0.44-5.20)	3.48 (0.55-10.0)	8.74 (0.39-35.8)	5.01 (0.39-19.4)	2.25 (0.62-54.0)
BOD (mg/L)	0.88 (0.08-2.24)	0.99 (0.07-1.69)	0.91 (0.12-1.58)	1.20 (0.10-2.30)	1.02 (0.01-2.14)	0.61 (0.10-1.63)	1.14 (0.01-2.57)	1.03 (0.01-2.32)	0.56 (0.00-1.55)	1.26 (0.10-2.81)	0.64 (0.00-1.49)	0.60 (0.02-1.53)
Ammoniacal Nitrogen (µg/L)	133.38 (50.2-346)	160.80 (38.9-526)	133.71 (55.8-456)	158.96 (6.67-653)	192.37 (4.80-862)	182.15 (23.2-752)	149.15 (4.64-686)	14.05 (4.29-490)	141.43 (36.2-548)	225.69 (11.0-990)	167.19 (18.3-734)	139.96 (21.8-592)
Unionized Ammonia (µg/L)	21.56 (1.78-41.6)	21.23 (2.11-63.3)	14.35 (3.70-44.3)	20.61 (0.82-63.5)	22.26 (0.59-83.8)	18.78 (4.40-73.1)	16.20 (0.25-66.6)	22.27 (0.52-47.6)	15.18 (2.86-53.3)	26.66 (1.94-96.2)	17.31 (0.83-71.3)	14.41 (1.19-57.6)
Nitrite Nitrogen (µg/L)	12.67 (4.56-29.0)	10.53 (4.33-23.4)	17.53 (2.21-42.9)	10.87 (3.63-26.4)	10.55 (1.40-28.4)	28.33 (6.51-88.7)	10.02 (3.38-39.5)	11.84 (4.16-30.6)	27.12 (10.4-63.5)	8.28 (3.2-28.0)	20.97 (10.4-54.2)	25.35 (8.44-83.4)
Nitrate Nitrogen (µg/L)	335.85 (1.86-571)	238.75 (1.86-639)	284.49 (1.86-554)	319.57 (1.86-536)	291.01 (1.86-519)	357.61 (1.86-634)	288.73 (1.86-738)	480.56 (5.18-1160)	458.96 (26.1-668)	366.41 (1.86-651)	339.07 (1.86-624)	378.66 (69.9-703)
Total Inorganic Nitrogen (µg/L)	17.31 (79.2-766)	20.37 (94.1-845)	16.96 (77.7-758)	12.16 (76.3-1216)	21.04 (93.3-1410)	21.23 (92.3-1401)	21.34 (93.5-1446)	17.62 (69.8-1243)	42.25 (197-1243)	26.03 (114-1658)	24.99 (111-1368)	51.02 (243-1048)
Total Kjeldahl Nitrogen (mg/L)	0.67 (0.26-1.06)	0.57 (0.10-1.27)	65.32 (0.10-3.25)	0.72 (0.35-1.13)	0.57 (0.26-1.22)	0.55 (0.10-1.17)	0.43 (0.10-1.07)	0.53 (0.10-1.21)	1.24 (0.06-3.85)	0.45 (0.1-1.15)	1.67 (0.28-5.84)	0.56 (0.10-1.14)
Total Nitrogen (mg/L)	1.77 (0.27-1.47)	1.25 (0.16-1.61)	65.92 (0.19-1.56)	2.06 (0.36-3.21)	1.85 (0.26-2.44)	0.96 (0.31-6.29)	0.88 (0.31-10.0)	2.85 (0.23-1.76)	2.98 (0.34-4.54)	0.73 (0.34-7.08)	3.17 (0.29-6.47)	3.11 (0.36-16.3)
Orthophosphate Phosphorus (µg/L)	5.07 (0.93-16.7)	40.97 (0.93-84.4)	6.33 (0.93-11.2)	5.79 (0.93-11.9)	10.71 (0.93-26.1)	16.10 (0.93-47.6)	9.84 (0.37-39.5)	10.05 (0.93-25.4)	8.15 (0.93-13.9)	11.44 (1.29-30.6)	12.76 (4.27-34.8)	17.44 (0.29-55.0)
Total Phosphorus (mg/L)	0.35 (0.02-1.25)	0.08 (0.02-0.14)	0.36 (0.02-1.61)	0.06 (0.02-0.08)	0.17 (0.02-0.65)	0.36 (0.02-0.65)	0.09 (0.02-1.51)	0.06 (0.02-0.19)	2.07 (0.02-0.14)	0.72 (0.02-3.30)	1.94 (0.02-9.12)	0.21 (0.03-0.61)
Silica (mg/L)	0.21 (0.11-0.32)	0.23 (0.12-0.37)	0.28 (0.12-0.35)	0.20 (0.05-0.28)	0.20 (0.06-0.31)	0.23 (0.05-0.45)	0.19 (0.05-0.33)	0.18 (0.15-0.29)	0.31 (0.16-0.57)	0.18 (0.06-0.29)	0.24 (0.11-0.36)	0.31 (0.11-0.54)
Chlorophyll-a (µg/L)	2.98 (0.89-7.20)	3.91 (0.93-9.37)	2.08 (0.99-5.22)	3.63 (1.05-10.0)	4.97 (1.07-9.95)	2.98 (0.98-9.84)	4.32 (1.07-9.95)	4.71 (0.87-6.09)	2.48 (0.79-7.54)	5.18 (1.14-11.2)	3.48 (1.05-8.04)	3.07 (0.72-7.65)
Phaeopigment (µg/L)	0.55 (0.00-1.43)	0.65 (0.21-1.64)	0.57 (0.35-0.80)	0.62 (0.00-1.95)	0.74 (0.00-2.37)	0.49 (0.00-0.72)	0.66 (0.00-1.75)	0.74 (0.00-1.88)	0.51 (0.01-1.05)	0.68 (0.00-1.77)	0.58 (0.20-1.06)	0.58 (0.21-1.16)
<i>E. coli</i> (CFU/100 mL)	40.2 (0-200)	2.7 (0-15.5)	43.2 (0-200)	6.9 (0-34)	0.8 (0-7.5)	2.1 (0-10)	3.7 (0-10)	1.4 (0-7)	1.8 (0-9)	2.7 (0-10)	3.3 (0-16)	4.3 (0-21)
Faecal Coliforms (CFU/100 mL)	40.2 (0-200)	8.7 (0-165)	80.5 (0-200)	1.2 (0-5)	1.6 (0-70.5)	2.7 (0-103)	3.1 (0-23.5)	3.0 (0-200)	3.2 (0-72.5)	1.4 (0-71)	1.1 (0-43)	1.4 (0-33)

* Data presented in mean value (range)