

Water quality of Sha Chau & Lung Kwu Chau Marine Park in Year 2000*

	N Lung Kwu Chau			N Sha Chau			SE Sha Chau			Pak Chau		
No. of sample	5			5			5			5		
Depth	Surface	Middle	Bottom	Surface	Middle	Bottom	Surface	Middle	Bottom	Surface	Middle	Bottom
Temperature (°C)	25.45 (19.3-29.5)	24.03 (19.4-26.7)	23.68 (19.6-26.2)	25.41 (19.4-29.6)	24.79 (19.4-28.5)	24.32 (19.4-27.3)	25.37 (19.4-29.5)	24.70 (19.4-28.1)	24.21 (19.4-27.0)	25.33 (19.5-29.1)	24.90 (19.4-28.3)	24.55 (19.4-27.2)
Salinity (ppt)	18.54 (4.90-30.0)	25.80 (22.2-30.0)	28.30 (26.6-31.3)	19.62 (4.60-30.2)	22.02 (7.70-30.2)	26.00 (18.9-30.9)	20.60 (7.20-31.0)	24.20 (18.1-31.0)	27.92 (24.3-31.1)	19.58 (2.50-30.6)	21.72 (10.1-30.6)	25.54 (18.7-30.7)
Dissolved Oxygen (mg/L)	5.85 (4.52-6.51)	4.33 (2.34-6.10)	4.03 (1.91-6.34)	6.19 (5.92-6.87)	5.67 (4.16-6.82)	5.25 (3.49-6.89)	6.17 (5.32-7.10)	5.57 (4.82-6.56)	5.07 (3.12-6.94)	5.72 (4.54-6.97)	5.30 (3.19-6.63)	4.83 (2.41-6.67)
pH	8.06 (8.0-8.1)	8.10 (8.0-8.3)	8.08 (8.0-8.2)	8.12 (8.0-8.5)	8.12 (8.0-8.3)	8.14 (8.0-8.3)	8.14 (8.0-8.3)	8.16 (8.0-8.3)	8.14 (8.0-8.3)	8.12 (8.0-8.3)	8.12 (8.0-8.3)	8.10 (8.0-8.3)
Secchi Depth (m)	1.05 (1.0-1.2)			1.05 (0.75-1.3)			1.33 (0.75-1.5)			0.96 (0.5-1.5)		
Turbidity (NTU)	9.72 (4.9-14.6)	17.03 (11.1-28.2)	63.03 (20.1-146)	7.10 (3.1-10.5)	11.48 (5.5-18.0)	24.28 (11.2-42.1)	8.64 (3.7-11.1)	1056.00 (4.0-16.5)	38.50 (12.3-58.7)	15.46 (3.8-23.2)	16.22 (3.4-33.2)	31.36 (20.1-36.9)
Suspended Solids (mg/L)	7.94 (4.17-13.0)	10.74 (4.68-28.6)	22.33 (10.1-47.9)	7.73 (3.52-11.6)	8.43 (3.19-14.6)	10.85 (3.27-19.8)	7.81 (3.24-17.8)	9.19 (3.25-17.4)	12.20 (3.50-21.9)	9.03 (3.54-14.3)	14.49 (3.22-39.6)	18.95 (4.17-30.6)
BOD (mg/L)	1.06 (0.43-2.23)	0.93 (0.58-1.92)	0.59 (0.18-2.06)	0.90 (0.41-2.54)	0.77 (0.43-2.56)	0.64 (0.26-2.21)	0.83 (0.40-2.47)	0.75 (0.46-2.98)	0.66 (0.49-2.64)	0.72 (0.52-2.96)	0.71 (0.46-3.34)	0.66 (0.55-3.93)
Ammoniacal Nitrogen (µg/L)	191.94 (54.1-1860)	203.81 (123-2002)	241.55 (161-1812)	204.27 (74.2-1814)	223.50 (77.2-1516)	312.30 (21.3-1496)	227.82 (75.7-1620)	228.68 (58.0-1610)	217.13 (102-992)	213.40 (51.2-1189)	217.64 (87.1-1144)	218.84 (80.9-746)
Unionized Ammonia (µg/L)	25.18 (6.51-231)	27.07 (12.1-249)	29.68 (20.0-225)	26.22 (8.48-226)	28.45 (9.60-189)	33.40 (2.44-150)	31.17 (6.29-201)	31.53 (5.83-200)	28.02 (10.2-123)	28.54 (6.36-148)	28.57 (10.8-142)	28.73 (8.12-106)
Nitrite Nitrogen (µg/L)	496.04 (355-785)	361.50 (172-664)	255.25 (147-381)	451.80 (361-622)	421.14 (284-558)	362.40 (195-548)	443.54 (309-568)	414.62 (277-556)	355.66 (145-563)	450.20 (329-592)	395.88 (290-510)	365.54 (279-410)
Nitrate Nitrogen (µg/L)	4374.80 (1976-7880)	3578.00 (1543-5520)	2787.75 (1302-4280)	4130.20 (1874-8430)	3843.80 (1768-8080)	3323.00 (1763-5770)	4096.80 (1908-7290)	3857.80 (1761-6890)	3081.60 (1267-4860)	4261.80 (1659-8490)	3749.00 (1398-6960)	3489.60 (1045-5920)
Total Inorganic Nitrogen (µg/L)	1017.91 (2714-8289)	503.82 (1966-5990)	426.82 (1659-4904)	789.50 (6276-8865)	623.27 (2565-8512)	456.38 (2227-6794)	812.09 (2716-7675)	763.81 (2549-7276)	328.04 (1584-5238)	858.37 (2516-8870)	619.85 (2069-7337)	808.97 (1536-6314)
Total Kjeldahl Nitrogen (mg/L)	3.60 (0.10-15.2)	4.31 (0.25-15.5)	5.22 (0.18-18.7)	4.18 (0.27-17.8)	3.81 (0.26-16.3)	3.95 (0.31-16.7)	3.36 (0.18-14.9)	4.34 (0.41-19.2)	3.73 (0.18-16.5)	6.21 (0.22-28.7)	4.26 (0.10-18.8)	3.89 (0.25-17.9)
Total Nitrogen (mg/L)	15.04 (3.83-18.9)	16.44 (1.97-19.1)	16.72 (1.63-22.5)	15.16 (3.73-21.4)	14.57 (3.08-19.9)	14.73 (2.27-20.6)	16.78 (3.02-19.5)	16.59 (2.82-23.6)	15.27 (1.59-20.7)	18.38 (2.73-32.8)	16.07 (1.92-23.1)	15.40 (1.86-22.2)
Orthophosphate Phosphorus (µg/L)	62.45 (30.8-108)	95.90 (24.0-190)	67.90 (23.5-130)	54.04 (37.4-66.1)	61.40 (33.0-87.7)	53.03 (23.7-87.6)	64.57 (42.8-91.9)	49.37 (37.6-61.6)	50.23 (19.3-65.2)	57.24 (19.3-80.3)	55.58 (13.0-110)	44.02 (6.77-72.2)
Total Phosphorus (mg/L)	0.12 (0.02-0.19)	0.09 (0.02-0.19)	0.09 (0.02-0.22)	0.08 (0.02-0.31)	0.08 (0.02-0.16)	0.08 (0.02-0.18)	0.08 (0.02-0.19)	0.09 (0.02-0.22)	0.07 (0.02-0.17)	0.07 (0.02-0.17)	0.33 (0.02-1.27)	0.07 (0.02-0.21)
Silica (mg/L)	1.34 (0.55-2.12)	1.06 (0.55-1.65)	0.79 (0.42-1.26)	1.28 (0.57-2.15)	1.21 (0.60-2.14)	1.00 (0.60-1.55)	1.25 (0.57-1.97)	1.15 (0.64-1.68)	0.90 (0.44-1.37)	1.31 (0.59-2.33)	1.11 (0.44-1.74)	1.07 (0.30-1.72)
Chlorophyll-a (µg/L)	4.01 (0.90-7.68)	3.33 (0.60-10.6)	1.58 (0.21-3.26)	3.17 (0.88-6.20)	2.63 (0.82-8.82)	2.45 (0.56-8.51)	3.73 (0.96-9.57)	3.07 (0.42-9.08)	1.77 (0.56-11.2)	2.91 (0.70-9.50)	2.61 (0.49-13.0)	1.83 (0.49-23.0)
Phaeopigment (µg/L)	1.05 (0.42-2.68)	1.68 (0.51-2.77)	1.71 (0.67-3.75)	0.98 (0.44-1.64)	0.95 (0.27-1.86)	1.29 (0.63-1.99)	0.97 (0.64-1.59)	1.01 (0.79-1.69)	1.30 (0.75-1.93)	1.00 (0.73-1.64)	1.20 (1.04-1.66)	1.64 (0.80-2.46)
<i>E. coli</i> (CFU/100 mL)	30.3 (0-79.5)	77.3 (0-200)	150.0 (0-200)	36.0 (0-75.4)	34.1 (0-55.5)	91.0 (0-200)	49.5 (0.5-113)	43.5 (1-105)	81.3 (0-200)	32.3 (0-85)	42.9 (0-82.5)	46.5 (0-97.5)
Faecal Coliforms (CFU/100 mL)	99.7 (10-200)	77.9 (3.5-200)	150.0 (0-200)	99.7 (12.5-200)	109.0 (32-200)	141.8 (43.5-200)	106.5 (18.5-200)	109.5 (33.5-200)	126.9 (5-200)	103.9 (22-200)	107.0 (22-200)	111.2 (16.5-200)

* Data presented in mean value (range)