Summary of water quality monitoring data for Shing Mun River (Main Channel and Siu Lek

Yuen Nullah) in 2005

r uen Nunan) in 2		Shing Mun Main Channel	Siu Lek Yu	en Nullah
Parameter	Unit	TR19I	TR23L	TR23A
Dissolved oxygen	mg/L	7.7 (5.6 – 9.2)	9.5 (8.0 – 10.8)	7.8 (5.1 – 8.9)
рН		7.9 (7.4 – 8.3)	8.5 (7.7 – 9.0)	7.8 (7.6 – 8.3)
Suspended solids	mg/L	3 (1 – 23)	2 (1 – 6)	4 (1 – 16)
5-day Biochemical Oxygen Demand	mg/L	3 (1 – 7)	1 (1 – 3)	3 (2 – 7)
Chemical Oxygen Demand	mg/L	15 (11 – 33)	5 (2 – 13)	14 (7 – 22)
Oil & grease	mg/L	0.5 (0.5 – 0.6)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	21,000 (840 – 350,000)	20,000 (1,100 – 170,000)	89,000 (8,600 – 300,000)
E. coli	cfu/ 100mL	2,100 (120 – 19,000)	570 (120 – 4,000)	9,700 (2,500 – 38,000)
Ammonia-nitrogen	mg/L	0.19 (0.06 – 0.73)	0.02 (0.01 - 0.07)	0.21 (0.01 – 0.73)
Nitrate-nitrogen	mg/L	0.57 (0.18 – 2.00)	0.16 (0.06 – 0.58)	0.51 (0.17 – 1.50)
Total Kjeldahl nitrogen, SP	mg/L	0.51 (0.34 – 1.20)	0.13 (0.05 – 0.24)	0.47 (0.30 – 1.10)
Ortho-phosphate	mg/L	0.01 (0.01 – 0.06)	0.01 (0.01 – 0.05)	0.03 (0.01 – 0.08)
Total phosphorus, SP	mg/L	0.05 (0.02 – 0.14)	0.02 (0.02 – 0.06)	0.08 (0.04 – 0.14)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)
Aluminium	μg/L	90 (50 – 470)	65 (50 – 140)	120 (60 – 320)
Cadmium	μg/L	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.2)
Chromium	μg/L	2 (1 – 3)	1 (1 – 1)	1 (1 – 2)
Copper	μg/L	4 (3 – 7)	2 (1 – 3)	3 (1 – 11)
Lead	μg/L	1 (1 – 2)	1 (1 – 1)	1 (1 – 2)
Zinc	μg/L	20 (10 – 60)	10 (10 – 30)	20 (10 – 50)
Flow	L/s	NM	26 (11 – 121)	NM

- 2. Figures in brackets are annual ranges.
- 3. NM indicates no measurement taken.
- 4. cfu colony forming unit.
- 5. SP soluble and particulate fractions i.e. total value.
- 6. Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).
- 7. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

Summary of water quality monitoring data for Shing Mun River (Fo Tan Nullah and Kwun Yam Shan Stream) in 2005

Shan Stream) in 2		<u>Fo Tan</u>	Nullah_	Kwun Yam Shan Stream
Parameter	Unit	TR17	TR17L	KY1
Dissolved oxygen	mg/L	8.1 (5.1 – 10.0)	6.9 (4.5 – 8.5)	8.6 (7.7 – 9.6)
рН		7.8 (7.2 – 8.6)	7.5 (7.1 – 8.0)	7.9 (7.4 – 8.4)
Suspended solids	mg/L	7 (2 – 66)	3 (1 – 12)	3 (1 – 10)
5-day Biochemical Oxygen Demand	mg/L	30 (2 – 42)	3 (2 – 10)	1 (1 – 5)
Chemical Oxygen Demand	mg/L	29 (5 – 160)	15 (6 – 36)	5 (2 – 28)
Oil & grease	mg/L	0.7 (0.5 – 22.0)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	550,000 (68,000 – 2,400,000)	93,000 (6,700 – 250,000)	3,500 (370 – 19,000)
E. coli	cfu/ 100mL	130,000 (10,000 – 900,000)	7,500 (1,000 – 48,000)	920 (40 – 18,000)
Ammonia-nitrogen	mg/L	0.62 (0.01 – 2.20)	0.33 (0.05 – 0.57)	0.02 (0.01 – 0.43)
Nitrate-nitrogen	mg/L	0.50 (0.01 – 1.10)	0.51 (0.26 – 1.50)	0.56 (0.36 – 4.90)
Total Kjeldahl nitrogen, SP	mg/L	2.55 (0.32 – 5.10)	0.57 (0.28 – 1.20)	0.12 (0.05 – 1.40)
Ortho-phosphate	mg/L	0.04 (0.01 – 1.60)	0.02 (0.01 – 0.04)	0.12 (0.08 – 0.49)
Total phosphorus, SP	mg/L	0.28 (0.05 – 3.40)	0.06 (0.03 - 0.14)	0.12 (0.09 – 0.51)
Sulphide, SP	mg/L	0.10 (0.02 – 0.40)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)
Aluminium	μg/L	205 (70 – 480)	70 (50 – 250)	50 (50 – 110)
Cadmium	μg/L	0.4 (0.1 – 1.1)	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.1)
Chromium	μg/L	1 (1 – 4)	2 (1 – 2)	1 (1 – 1)
Copper	μg/L	8 (3 – 17)	4 (3 – 10)	1 (1 – 4)
Lead	μg/L	3 (1 – 14)	1 (1 – 8)	1 (1 – 2)
Zinc	μg/L	65 (30 – 260)	20 (20 – 130)	10 (10 – 20)
Flow	L/s	69 (17 – 124)	NM	2 (1 – 72)

- 2. Figures in brackets are annual ranges.
- 3. NM indicates no measurement taken.
- 4. cfu colony forming unit.
- 5. SP soluble and particulate fractions i.e. total value.
- 6. Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).
- 7. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

Summary of water quality monitoring data for Shing Mun River (Tai Wai Nullah and Tin Sum Nullah) in 2005

Nullail) ili 2003			<u>Tai Wai Nullah</u>		Tin Sum Nullah
Parameter	Unit	TR19A	TR19C	TR19	TR20B
Dissolved oxygen	mg/L	8.5 (7.2 – 9.8)	8.1 (6.9 – 9.6)	8.6 (7.2 – 9.7)	8.6 (7.3 – 9.9)
рН		7.5 (6.6 – 9.3)	7.2 (7.0 – 8.4)	7.3 (7.2 – 9.0)	7.8 (7.2 – 8.3)
Suspended solids	mg/L	43 (6 – 450)	26 (5 – 130)	14 (4 – 54)	2 (1 – 4)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 6)	3 (1 – 7)	5 (1 – 9)	1 (1 – 1)
Chemical Oxygen Demand	mg/L	9 (2 – 25)	15 (6 – 53)	14 (4 – 36)	5 (2 – 10)
Oil & grease	mg/L	0.5 (0.5 – 0.6)	0.5 (0.5 – 0.7)	0.5 $(0.5 - 3.0)$	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	47 (1 – 38,000)	3,400 (120 – 52,000)	5,300 (390 – 83,000)	1 (1 – 56)
E. coli	cfu/ 100mL	21 (1 – 28,000)	380 (6 – 25,000)	920 (55 – 28,000)	1 (1 – 1)
Ammonia-nitrogen	mg/L	0.17 (0.05 – 0.46)	0.10 (0.03 – 0.40)	0.13 (0.02 – 0.31)	0.06 (0.02 – 0.12)
Nitrate-nitrogen	mg/L	1.80 (0.94 – 2.30)	1.10 (0.97 – 1.30)	1.10 (0.89 – 1.50)	1.35 (0.69 – 2.30)
Total Kjeldahl nitrogen, SP	mg/L	0.45 (0.18 – 1.10)	0.63 (0.20 – 1.40)	0.39 (0.22 – 1.00)	0.15 (0.11 – 0.31)
Ortho-phosphate	mg/L	0.01 (0.01 – 0.02)	0.01 (0.01 – 0.01)	0.01 (0.01 – 0.01)	0.02 (0.01 – 0.04)
Total phosphorus, SP	mg/L	0.06 (0.02 – 0.21)	0.08 (0.04 – 0.26)	0.06 (0.03 – 0.17)	0.02 (0.02 – 0.05)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 1.20)
Aluminium	μg/L	425 (140 – 1,700)	260 (100 – 850)	195 (120 – 860)	90 (70 – 360)
Cadmium	μg/L	3.8 (0.2 – 14.0)	1.3 (0.6 – 2.6)	1.2 (0.4 – 2.1)	0.1 (0.1 – 0.4)
Chromium	μg/L	2 (1 – 9)	1 (1 – 7)	1 (1 – 5)	1 (1 – 2)
Copper	μg/L	4 (1 – 8)	16 (7 – 33)	16 (6 – 37)	3 (1 – 5)
Lead	μg/L	17 (1 – 59)	5 (1 – 13)	4 (2 – 6)	1 (1 – 1)
Zinc	μg/L	205 (20 – 690)	80 (50 – 150)	80 (40 – 200)	15 (10 – 60)
Flow	L/s	39 (19 – 206)	85 (34 – 374)	72 (24 – 620)	56 (43 – 211)

- 2. Figures in brackets are annual ranges.
- 3. NM indicates no measurement taken.
- 4. cfu colony forming unit.
- 5. SP soluble and particulate fractions i.e. total value.
- 6. Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).
- 7. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Lam Tsuen River in 2005 (Part 1 of 3)

Damanatan	Lam Tsuen River			
Parameter	Unit	TR12H	TR12D	TR12C
Dissolved oxygen	mg/L	8.9 (7.5 – 10.9)	8.7 (7.6 – 10.8)	7.8 (6.7 – 9.2)
рН		7.4 (6.9 – 7.8)	7.4 (6.9 – 7.6)	7.3 (6.9 – 7.7)
Suspended solids	mg/L	2 (1 – 3)	1 (1 – 1)	4 (1 – 37)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 1)	1 (1 – 1)	3 (1 – 8)
Chemical Oxygen Demand	mg/L	4 (2 – 9)	2 (2 – 5)	9 (5 – 20)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.9)
Faecal coliforms	cfu/ 100mL	3,500 (470 – 17,000)	1,300 (420 – 4,300)	62,000 (31,000 – 220,000)
E. coli	cfu/ 100mL	990 (240 – 4,800)	170 (46 – 1,200)	24,000 (7,000 – 90,000)
Ammonia-nitrogen	mg/L	0.02 (0.01 – 0.04)	0.02 (0.01 – 0.04)	0.43 (0.14 – 1.70)
Nitrate-nitrogen	mg/L	0.70 (0.44 – 1.10)	0.29 (0.10 – 0.74)	1.25 (0.62 – 1.90)
Total Kjeldahl nitrogen, SP	mg/L	0.09 (0.05 – 0.16)	0.05 (0.05 – 0.12)	0.62 (0.37 – 2.30)
Ortho-phosphate	mg/L	0.03 (0.02 – 0.05)	0.01 (0.01 – 0.02)	0.17 (0.07 – 0.32)
Total phosphorus, SP	mg/L	0.04 (0.02 – 0.06)	0.02 (0.02 – 0.03)	0.24 (0.11 – 0.58)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)
Aluminium	μg/L	50 (50 – 90)	50 (50 – 50)	75 (50 – 130)
Cadmium	μg/L	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.2)
Chromium	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Copper	μg/L	1 (1 – 3)	1 (1 – 2)	2 (1 – 5)
Lead	μg/L	1 (1 – 1)	1 (1 – 2)	1 (1 – 2)
Zinc	μg/L	20 (10 – 50)	20 (10 – 50)	20 (10 – 40)
Flow  Notes: 1. Data presen	L/s	115 (1 – 3,660)	148 (4 – 2,468)	249 (8 – 2,145) ns and <i>E. coli</i> which are in annual

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Lam Tsuen River in 2005 (Part 2 of 3)

Darameter	Lloit		Lam Tsuen River	
Parameter	Unit	TR12G	TR12F	TR12B
Dissolved oxygen	mg/L	8.1 (6.8 – 10.7)	8.2 (7.2 – 10.6)	9.1 (7.5 – 11.1)
рН		7.2 (6.6 – 7.3)	7.3 (6.9 – 7.7)	7.4 (6.8 – 7.8)
Suspended solids	mg/L	1 (1 – 5)	1 (1 – 3)	1 (1 – 3)
5-day Biochemical Oxygen Demand	mg/L	1 ( 1 – 1)	1 (1 – 1)	1 (1 – 3)
Chemical Oxygen Demand	mg/L	6 (2 – 9)	6 (2 – 13)	4 (2 – 13)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	2,200 (220 – 12,000)	6,100 (910 – 29,000)	5,600 (810 – 29,000)
E. coli	cfu/ 100mL	200 (63 – 5,200)	850 (350 – 2,200)	860 (150 – 4,200)
Ammonia-nitrogen	mg/L	0.02 (0.01 – 0.04)	0.06 (0.03 – 0.17)	0.06 (0.03 – 0.23)
Nitrate-nitrogen	mg/L	0.05 (0.02 – 0.08)	0.61 (0.27 – 1.00)	0.85 (0.51 – 2.10)
Total Kjeldahl nitrogen, SP	mg/L	0.09 (0.05 – 0.25)	0.18 (0.09 – 0.31)	0.14 (0.06 – 0.33)
Ortho-phosphate	mg/L	0.02 (0.02 – 0.03)	0.06 (0.03 – 0.08)	0.05 (0.03 – 0.10)
Total phosphorus, SP	mg/L	0.05 (0.03 – 0.11)	0.08 (0.04 – 0.12)	0.06 (0.03 – 0.11)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)
Aluminium	μg/L	50 (50 – 50)	50 (50 – 50)	50 (50 – 100)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)
Chromium	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Copper	μg/L	1 (1 – 1)	1 (1 – 2)	2 (1 – 2)
Lead	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Zinc	μg/L	10 (10 – 100)	10 (10 – 60)	10 (10 – 80)
Flow Notes: 1. Data presen	L/s	23 (1 – 178)	31 (7 – 108)	336 (74 – 1,112)

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

Summary of water quality monitoring data for Lam Tsuen River (Part 3 of 3) and Tai Po River in 2005

2003	Llast		Lam Tsuen River		<u>Tai Po River</u>
Parameter	Unit	TR12E	TR12	TR12I	TR13
Dissolved oxygen	mg/L	8.9 (7.6 – 9.9)	9.3 (6.7 – 10.6)	5.7 (2.5 – 8.1)	8.3 (5.3 – 9.2)
рН		7.8 (7.5 – 8.1)	7.5 (6.9 – 8.4)	7.4 (6.9 – 8.0)	7.0 (6.7 – 7.2)
Suspended solids	mg/L	2 (1 – 3)	4 (2 – 50)	4 (1 – 19)	3 (2 – 200)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 2)	7 (1 – 17)	3 (1 – 9)	2 (1 – 6)
Chemical Oxygen Demand	mg/L	4 (2 – 7)	16 (3 – 29)	16 (9 – 35)	8 (3 – 110)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 1.1)	0.5 (0.5 – 0.9)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	5,300 (890 – 51,000)	16,000 (1,500 – 120,000)	97,000 (7,300 – 1,900,000)	100,000 (19,000 – 300,000)
E. coli	cfu/ 100mL	1,900 (670 – 39,000)	1,900 (500 – 19,000)	15,000 (1,900 – 310,000)	60,000 (12,000 – 140,000)
Ammonia-nitrogen	mg/L	0.03 (0.02 – 0.23)	0.51 (0.03 – 3.40)	0.43 (0.05 – 1.10)	0.65 (0.10 – 2.70)
Nitrate-nitrogen	mg/L	0.54 (0.24 – 0.85)	3.85 (1.00 – 7.00)	0.39 (0.21 – 1.50)	0.69 (0.60 – 1.60)
Total Kjeldahl nitrogen, SP	mg/L	0.07 (0.05 – 0.32)	1.45 (0.13 – 4.00)	0.81 (0.19 – 2.00)	1.26 (0.26 – 3.70)
Ortho-phosphate	mg/L	0.03 (0.02 – 0.05)	1.10 (0.05 – 1.80)	0.09 (0.04 – 0.23)	0.18 (0.05 – 0.56)
Total phosphorus, SP	mg/L	0.03 (0.02 – 0.07)	1.30 (0.07 – 2.00)	0.15 (0.06 – 0.38)	0.30 (0.07 – 0.77)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.03)	0.02 (0.02 – 0.02)
Aluminium	μg/L	70 (50 – 210)	60 (50 – 540)	65 (50 – 280)	70 (50 – 550)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.2)
Chromium	μg/L	1 (1 – 1)	1 (1 – 3)	2 (1 – 4)	1 (1 – 1)
Copper	μg/L	1 (1 – 2)	3 (1 – 38)	3 (2 – 6)	5 (1 – 9)
Lead	μg/L	1 (1 – 1)	1 (1 – 16)	1 (1 – 2)	1 (1 – 38)
Zinc	μg/L	10 (10 – 40)	20 (10 – 220)	25 (10 – 80)	30 (10 – 300)
Flow	L/s	62 (4 – 228)	46 (17 – 2,550)	NM	102 (45 – 551)

- 2. Figures in brackets are annual ranges.
- 3. NM indicates no measurement taken.
- 4. cfu colony forming unit.
- $5.\ SP$  soluble and particulate fractions i.e. total value.
- 6. Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).
- 7. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Tai Po Kau Stream, Shan Liu Stream and Tung Tze Stream in 2005

Davamatar	Lloit	Tai Po Kau Stream	Shan Liu Stream	Tung Tze Stream
Parameter	Unit	TR14	TR4	TR6
Dissolved oxygen	mg/L	8.3 (7.1 – 10.0)	7.5 (5.6 – 9.3)	5.8 (5.1 – 8.2)
рН		7.3 (7.0 – 7.5)	7.2 (6.9 – 7.7)	7.3 (7.1 – 7.5)
Suspended solids	mg/L	2 (1 – 15)	3 (1 – 9)	5 (1 – 16)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 2)	1 (1 – 5)	2 (1 – 7)
Chemical Oxygen Demand	mg/L	6 (2 – 12)	7 (4 – 12)	16 (14 – 27)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	3,100 (170 – 130,000)	13,000 (2,000 – 60,000)	16,000 (5,500 – 68,000)
E. coli	cfu/ 100mL	370 (51 – 3,900)	2,700 (900 – 6,900)	6,700 (1,700 – 23,000)
Ammonia-nitrogen	mg/L	0.05 (0.02 - 0.14)	0.30 (0.07 – 1.10)	0.65 (0.20 - 1.80)
Nitrate-nitrogen	mg/L	0.33 (0.11 – 0.56)	1.15 (0.17 – 2.60)	0.44 (0.12 – 0.69)
Total Kjeldahl nitrogen, SP	mg/L	0.15 (0.09 - 0.46)	0.50 (0.22 – 1.20)	0.83 (0.40 - 2.00)
Ortho-phosphate	mg/L	0.02 (0.01 – 0.04)	0.11 (0.04 – 0.27)	0.08 (0.04 - 0.13)
Total phosphorus, SP	mg/L	0.04 (0.03 – 0.07)	0.14 (0.04 - 0.33)	0.14 (0.06 – 0.17)
Sulphide, SP	mg/L	0.02 (0.02 – 0.03)	0.02 (0.02 - 0.02)	0.02 (0.02 - 0.02)
Aluminium	μg/L	50 (50 – 130)	55 (50 – 90)	60 (50 – 120)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)
Chromium	μg/L	1 (1 – 1)	1 (1 – 1)	2 (1 – 3)
Copper	μg/L	2 (1 – 2)	2 (1 – 6)	3 (2 – 4)
Lead	μg/L	1 (1 – 2)	1 (1 – 1)	1 (1 – 2)
Zinc	μg/L	10 (10 – 20)	10 (10 – 20)	10 (10 – 40)
Flow	L/s	29 (4 – 120)	10 (1 – 408)	NM

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for Ho Chung River in 2005

Davamatan	l lais	<u>Ho Chu</u>	ng River
Parameter	Unit	PR1	PR2
Dissolved oxygen	mg/L	7.9 (6.8 – 9.5)	8.4 (8.1 – 9.1)
рН		7.3 (7.1 – 7.6)	7.5 (7.2 – 7.7)
Suspended solids	mg/L	3 (2 – 6)	3 (1 – 6)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 1)	1 (1 – 1)
Chemical Oxygen Demand	mg/L	8 (2 – 20)	3 (2 – 8)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	11,000 (940 – 57,000)	4,000 (890 – 57,000)
E. coli	cfu/ 100mL	2,100 (310 – 14,000)	1,200 (74 – 24,000)
Ammonia-nitrogen	mg/L	0.20 (0.02 – 0.30)	0.06 (0.02 – 0.13)
Nitrate-nitrogen	mg/L	0.25 (0.15 – 0.63)	0.26 (0.17 – 0.73)
Total Kjeldahl nitrogen, SP	mg/L	0. 31 (0.07 – 0.51)	0.12 (0.05 – 0.30)
Ortho-phosphate	mg/L	0.04 (0.01 – 0.05)	0.02 (0.02 – 0.05)
Total phosphorus, SP	mg/L	0.05 (0.02 – 0.09)	0.03 (0.02 – 0.07)
Sulphide, SP	mg/L	0.02 (0.02 - 0.02)	0.02 (0.02 – 0.02)
Aluminium	μg/L	50 (50 – 130)	50 (50 – 140)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)
Chromium	μg/L	1 (1 – 2)	1 (1 – 1)
Copper	μg/L	3 (1 – 3)	1 (1 – 3)
Lead	μg/L	1 (1 – 1)	1 (1 – 1)
Zinc	μg/L	10 (10 – 30)	10 (10 – 20)
Flow Notes: 1. Data presen	L/s	NM	1,086 (60 – 7,410) or faecal coliforms and <i>E. coli</i> which are in annual

- 2. Figures in brackets are annual ranges.
- 3. NM indicates no measurement taken.
- 4. cfu colony forming unit.
- 5. SP soluble and particulate fractions i.e. total value.
- 6. Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).
- 7. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for Sha Kok Mei Stream in 2005

Parameter	Unit	Sha Kok Mei Stream			
Parameter	Unit	PR5	PR6		
Dissolved oxygen	mg/L	7.7 (5.5 – 8.5)	8.3 (7.2 – 8.9)		
рН		7.4 (7.1 – 7.9)	7.4 (7.2 – 7.8)		
Suspended solids	mg/L	3 (1 – 12)	4 (1 – 13)		
5-day Biochemical Oxygen Demand	mg/L	2 (1 – 4)	2 (1 – 7)		
Chemical Oxygen Demand	mg/L	7 (3 – 15)	7 (2 – 15)		
Oil & grease	mg/L	0.5 (0.5 – 0.9)	0.5 (0.5 – 0.6)		
Faecal coliforms	cfu/ 100mL	22,000 (3,700 – 54,000)	45,000 (4,300 – 230,000)		
E. coli	cfu/ 100mL	6,400 (2,500 – 15,000)	8,400 (340 – 100,000)		
Ammonia-nitrogen	mg/L	0.08 (0.04 – 0.75)	0.10 (0.01 – 0.90)		
Nitrate-nitrogen	mg/L	0.55 (0.26 – 1.40)	1.75 (1.40 – 3.20)		
Total Kjeldahl nitrogen, SP	mg/L	0.37 (0.11 – 1.10)	0.42 (0.05 – 1.40)		
Ortho-phosphate	mg/L	0.07 (0.04 – 0.14)	0.07 (0.05 – 0.18)		
Total phosphorus, SP	mg/L	0.11 (0.05 – 0.25)	0.10 (0.05 – 0.31)		
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)		
Aluminium	μg/L	70 (50 – 130)	65 (50 – 140)		
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)		
Chromium	μg/L	1 (1 – 2)	1 (1 – 1)		
Copper	μg/L	1 (1 – 3)	2 (1 – 3)		
Lead	μg/L	1 (1 – 1)	1 (1 – 5)		
Zinc	μg/L	15 (10 – 40)	20 (10 – 160)		
Flow	L/s	49 (8 – 273)	NM		

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Tai Chung Hau Stream in 2005

Doromotor	Unit	<u>Tai Chung Hau Stream</u>			
Parameter	Unit	PR7	PR8		
Dissolved oxygen	mg/L	8.7 (7.9 – 9.4)	8.0 (7.2 – 8.8)		
рН		7.5 (7.3 – 7.8)	7.4 (7.2 – 7.5)		
Suspended solids	mg/L	2 (1 – 9)	2 (1 – 8)		
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 1)	1 (1 – 1)		
Chemical Oxygen Demand	mg/L	6 (2 – 11)	7 (2 – 12)		
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)		
Faecal coliforms	cfu/ 100mL	29,000 (18,000 – 54,000)	16,000 (2,100 – 43,000)		
E. coli	cfu/ 100mL	13,000 (5,100 – 42,000)	6,800 (1,700 – 22,000)		
Ammonia-nitrogen	mg/L	0.05 (0.03 – 0.12)	0.05 (0.01 – 0.07)		
Nitrate-nitrogen	mg/L	0.76 (0.41 – 2.10)	1.04 (0.58 – 2.40)		
Total Kjeldahl nitrogen, SP	mg/L	0.23 (0.07 – 0.39)	0.18 (0.05 – 0.39)		
Ortho-phosphate	mg/L	0.05 (0.01 – 0.07)	0.06 (0.02 – 0.07)		
Total phosphorus, SP	mg/L	0.06 (0.04 – 0.11)	0.07 (0.04 – 0.09)		
Sulphide, SP	mg/L	0.02 (0.02 - 0.02)	0.02 (0.02 – 0.02)		
Aluminium	μg/L	70 (50 – 780)	90 (50 – 450)		
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)		
Chromium	μg/L	1 (1 – 1)	1 (1 – 2)		
Copper	μg/L	2 (1 – 2)	2 (1 – 3)		
Lead	μg/L	1 (1 – 1)	1 (1 – 4)		
Zinc	μg/L	10 (10 – 40)	10 (10 – 20)		
Flow	L/s	208 (65 – 945)	NM		

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Tseng Lan Shue Stream in 2005

Parameter	Unit	<u>Tseng Lan Shue Stream</u>		
<u>r arameter</u>		JR3	JR6	JR11
Dissolved oxygen	mg/L	5.5 (4.0 – 7.5)	7.0 (6.4 – 7.9)	8.4 (7.8 – 9.6)
рН		7.1 (6.9 – 7.3)	7.6 (7.4 – 7.8)	7.8 (7.7 – 8.0)
Suspended solids	mg/L	4 (3 – 11)	6 (4 – 39)	2 (1 – 5)
5-day Biochemical Oxygen Demand	mg/L	9 (3 – 33)	4 (2 – 26)	1 (1 – 4)
Chemical Oxygen Demand	mg/L	24 (3 – 73)	20 (7 – 41)	7 (2 – 18)
Oil & grease	mg/L	0.7 (0.5 – 2.6)	0.6 (0.5 – 4.0)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	240,000 (110,000 – 650,000)	63,000 (26,000 – 190,000)	5,100 (920 – 55,000)
E. coli	cfu/ 100mL	130,000 (51,000 – 390,000)	27,000 (9,000 – 130,000)	1,000 (130 – 26,000)
Ammonia-nitrogen	mg/L	5.20 (1.10 – 12.00)	0.22 (0.02 – 1.00)	0.06 (0.03 – 0.19)
Nitrate-nitrogen	mg/L	0.97 (0.43 – 1.90)	3.30 (2.10 – 6.40)	4.10 (1.60 – 7.70)
Total Kjeldahl nitrogen, SP	mg/L	5.95 (1.10 – 14.00)	1.20 (0.37 – 3.50)	0.35 (0.20 – 1.00)
Ortho-phosphate	mg/L	0.67 (0.18 – 1.30)	1.20 (0.54 – 1.70)	0.60 (0.18 – 1.30)
Total phosphorus, SP	mg/L	0.85 (0.26 – 1.70)	1.40 (0.64 – 2.30)	0.64 (0.21 – 1.40)
Sulphide, SP	mg/L	0.02 (0.02 – 0.09)	0.02 (0.02 - 0.03)	0.02 (0.02 – 0.02)
Aluminium	μg/L	115 (90 – 180)	125 (50 – 280)	50 (50 – 210)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1. (0.1 – 0.2)
Chromium	μg/L	1 (1 – 1)	1 (1 – 3)	1 (1 – 1)
Copper	μg/L	4 (2 – 6)	6 (3 – 16)	3 (2 – 4)
Lead	μg/L	1 (1 – 4)	2 (1 – 4)	1 (1 – 1)
Zinc	μg/L	20 (10 – 40)	60 (20 – 90)	20 (10 – 30)
Flow	L/s	NM	NM	189 (16 – 580)

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for River Indus in 2005

Parameter	Unit	IN1	River Indus	IN3
Dissolved oxygen	mg/L	3.6 (1.6 – 9.8)	8.0 (5.7 – 13.4)	7.8 (6.5 – 10.2)
рН		7.1 (6.8 – 7.6)	7.1 (6.5 – 7.5)	7.3 (7.1 – 7.6)
Suspended solids	mg/L	34 (12 – 63)	13 (2 – 48)	5 (1 – 170)
5-day Biochemical Oxygen Demand	mg/L	11 (4 – 37)	3 (1 – 7)	3 (1 – 12)
Chemical Oxygen Demand	mg/L	31 (15 – 58)	12 (6 – 23)	8 (4 – 45)
Oil & grease	mg/L	0.5 (0.5 – 1.2)	0.5 (0.5 – 0.6)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	700,000 (93,000 – 5,600,000)	31,000 (2,700 – 420,000)	15,000 (680 – 670,000)
E. coli	cfu/ 100mL	320,000 (18,000 – 4,200,000)	5,000 (340 – 120,000)	5,000 (380 – 130,000)
Ammonia-nitrogen	mg/L	5.80 (1.10 – 17.00)	1.01 (0.43 – 2.20)	0.79 (0.07 – 4.90)
Nitrate-nitrogen	mg/L	1.00 (0.01 – 2.40)	0.98 (0.67 – 2.60)	0.90 (0.39 – 5.10)
Total Kjeldahl nitrogen, SP	mg/L	6.80 (1.80 – 21.00)	1.55 (0.78 – 4.00)	1.56 (0.32 – 5.20)
Ortho-phosphate	mg/L	0.63 (0.22 – 1.40)	0.04 (0.01 – 0.15)	0.47 (0.11 – 1.30)
Total phosphorus, SP	mg/L	1.15 (0.44 – 2.00)	0.26 (0.16 – 0.45)	0.70 (0.20 – 1.80)
Sulphide, SP	mg/L	0.03 (0.02 – 0.56)	0.02 (0.02 – 0.03)	0.02 (0.02 – 0.02)
Aluminium	μg/L	290 (70 – 640)	85 (50 – 280)	55 (50 – 370)
Cadmium	μg/L	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.3)
Chromium	μg/L	4 (1 – 19)	1 (1 – 4)	1 (1 – 1)
Copper	μg/L	8 (3 – 16)	3 (2 –7)	5 (3 – 16)
Lead	μg/L	3 (1 – 10)	6 (1 – 16)	1 (1 – 7)
Zinc	μg/L	100 (50 – 1,400)	1,450 (190 – 11,000)	30 (10 – 100)
Flow	L/s	NM	NM	23 (10 – 520)

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for River Beas in 2005

Parameter	Unit		River Beas	
raiailletei	Offic	RB1	RB2	RB3
Dissolved oxygen	mg/L	8.8 (5.3 – 10.1)	7.9 (4.1 – 11.6)	6.8 (2.9 – 10.4)
рН		7.7 (7.2 – 8.2)	7.2 (6.9 – 8.2)	7.2 (6.9 – 7.6)
Suspended solids	mg/L	6 (3 – 23)	11 (3 – 44)	15 (3 – 42)
5-day Biochemical Oxygen Demand	mg/L	4 (2 – 14)	5 (3 – 19)	7 (3 – 17)
Chemical Oxygen Demand	mg/L	14 (5 – 46)	18 (8 – 35)	18 (7 – 88)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.6)	0.5 (0.5 – 0.7)
Faecal coliforms	cfu/ 100mL	65,000 (7,300 – 610,000)	52,000 (860 – 1,800,000)	110,000 (2,700 – 1,700,000)
E. coli	cfu/ 100mL	25,000 (2,500 – 250,000)	23,000 (120 – 1,600,000)	33,000 (900 – 1,200,000)
Ammonia-nitrogen	mg/L	0.62 (0.20 - 5.20)	2.75 (0.82 - 9.90)	4.85 (0.64 – 9.80)
Nitrate-nitrogen	mg/L	0.52 (0.17 – 0.83)	0.70 (0.04 – 1.10)	0.69 (0.11 – 2.00)
Total Kjeldahl nitrogen, SP	mg/L	1.10 (0.51 – 7.00)	3.65 (1.40 – 11.00)	6.00 (1.40 – 12.00)
Ortho-phosphate	mg/L	0.29 (0.14 – 0.91)	0.46 (0.22 – 1.80)	0.60 (0.19 – 1.90)
Total phosphorus, SP	mg/L	0.46 (0.21 – 1.50)	1.01 (0.42 – 2.50)	0.98 (0.48 – 2.60)
Sulphide, SP	mg/L	0.02 (0.02 – 0.15)	0.02 (0.02 - 0.02)	0.02 (0.02 – 0.08)
Aluminium	μg/L	65 (50 – 240)	55 (50 – 360)	85 (50 – 990)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.2)
Chromium	μg/L	1 (1 – 1)	1 (1 – 4)	1 (1 – 17)
Copper	μg/L	2 (1 – 4)	4 (1 – 15)	5 (3 – 32)
Lead	μg/L	1 (1 – 1)	1 (1 – 4)	2 (1 – 12)
Zinc	μg/L	20 (10 – 70)	30 (10 – 80)	55 (20 – 300)
Flow Notes: 1. Data presen	L/s	131 (33 – 440)	30 (1 – 3,030)	NM

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for River Ganges in 2005

Doromotor	Linit		River Ganges	
Parameter	Unit	GR1	GR2	GR3
Dissolved oxygen	mg/L	4.8 (2.2 – 8.0)	5.1 (1.3 – 6.9)	7.8 (5.9 – 8.6)
рН		7.4 (7.3 – 8.0)	7.1 (6.7 – 7.3)	7.1 (6.8 – 7.7)
Suspended solids	mg/L	29 (17 – 720)	14 (7 – 440)	9 (3 – 460)
5-day Biochemical Oxygen Demand	mg/L	32 (8 – 74)	15 (9 – 79)	1 (1 – 5)
Chemical Oxygen Demand	mg/L	78 (16 – 170)	40 (19 – 100)	5 (2 – 24)
Oil & grease	mg/L	1.0 (0.5 – 15.0)	2.5 (0.5 – 6.8)	0.5 (0.5 – 0.6)
Faecal coliforms	cfu/ 100mL	200,000 (25,000 – 2,500,000)	230,000 (28,000 – 850,000)	9,100 (340 – 230,000)
E. coli	cfu/ 100mL	120,000 (9,000 – 1,600,000)	53,000 (2,600 – 410,000)	490 (28 – 17,000)
Ammonia-nitrogen	mg/L	20.50 (4.20 –61.00)	9.95 (0.90 – 25.00)	0.09 (0.02 – 0.22)
Nitrate-nitrogen	mg/L	0.25 (0.01 – 1.60)	0.25 (0.01 – 5.30)	0.18 (0.09 – 0.32)
Total Kjeldahl nitrogen, SP	mg/L	27.00 (5.20 – 69.00)	11.85 (2.30 – 31.00)	0.16 (0.07 – 0.78)
Ortho-phosphate	mg/L	5.20 (0.94 – 12.00)	1.65 (0.43 – 6.40)	0.01 (0.01 – 0.03)
Total phosphorus, SP	mg/L	6.90 (1.50 – 15.00)	2.60 (1.20 – 7.50)	0.02 (0.02 – 0.18)
Sulphide, SP	mg/L	0.03 (0.02 – 2.10)	0.02 (0.02 – 1.90)	0.02 (0.02 – 0.02)
Aluminium	μg/L	165 (70 – 1,300)	95 (60 – 1,500)	50 (50 – 890)
Cadmium	μg/L	0.1 (0.1 – 0.5)	0.1 (0.1 – 0.6)	0.1 (0.1 – 0.6)
Chromium	μg/L	1 (1 – 4)	1 (1 – 4)	1 (1 – 1)
Copper	μg/L	8 (4 – 73)	4 (2 – 31)	1 (1 – 6)
Lead	μg/L	3 (1 – 31)	1 (1 – 39)	1 (1 – 22)
Zinc	μg/L	50 (30 – 900)	40 (20 – 440)	10 (10 – 70)
Flow Notes: 1. Data presen	L/s	25 (6 – 1,456)	37 (13 – 2,304)	90 (6 – 846)

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Yuen Long Creek in 2005 (Part 1 of 2)

Parameter	Unit	Yuen Long Creek		
Farameter	Offic	YL1	YL2	
Dissolved oxygen	mg/L	3.9 (1.8 – 7.8)	6.6 (3.2 – 9.9)	
рН		7.4 (7.1 – 7.8)	7.4 (7.1 – 8.1)	
Suspended solids	mg/L	25 (2 – 200)	15 (3 – 53)	
5-day Biochemical Oxygen Demand	mg/L	38 (6 – 130)	8 (5 – 20)	
Chemical Oxygen Demand	mg/L	46 (6 – 360)	19 (11 – 59)	
Oil & grease	mg/L	0.9 (0.5 – 15.0)	0.5 (0.5 – 0.9)	
Faecal coliforms	cfu/ 100mL	740,000 (84,000 – 4,700,000)	100,000 (29,000 – 330,000)	
E. coli	cfu/ 100mL	510,000 (38,000 – 3,900,000)	42,000 (8,000 – 180,000)	
Ammonia-nitrogen	mg/L	24.50 (0.62 – 59.00)	7.30 (1.50 – 16.00)	
Nitrate-nitrogen	mg/L	0.12 (0.01 – 1.30)	1.50 (0.47 – 3.00)	
Total Kjeldahl nitrogen, SP	mg/L	29.50 (1.40 – 72.00)	8.45 (2.50 – 19.00)	
Ortho-phosphate	mg/L	3.10 (0.23 – 7.50)	1.65 (0.52 – 4.90)	
Total phosphorus, SP	mg/L	3.65 (0.37 – 11.00)	2.00 (0.74 – 5.90)	
Sulphide, SP	mg/L	0.04 (0.02 - 0.75)	0.02 (0.02 – 0.10)	
Aluminium	μg/L	200 (90 – 280)	230 (80 – 580)	
Cadmium	μg/L	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.2)	
Chromium	μg/L	1 (1 – 3)	1 (1 – 2)	
Copper	μg/L	19 (2 – 73)	7 (4 – 29)	
Lead	μg/L	4 (2 – 6)	4 (1 – 8)	
Zinc	μg/L	100 (20 – 240)	55 (20 – 110)	
Flow	L/s	166 (32 – 990)	120 (68 – 255)	

- 2. Figures in brackets are annual ranges.
- 3. NM indicates no measurement taken.
- 4. cfu colony forming unit.
- 5. SP soluble and particulate fractions i.e. total value.
- 6. Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).
- 7. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Yuen Long Creek in 2005 (Part 2 of 2)

Doromotor	Unit	Yuen Long Creek		
Parameter	Offic	YL3	YL4	
Dissolved oxygen	mg/L	3.1 (1.5 – 7.8)	3.6 (1.6 – 6.9)	
рН		7.4 (7.1 – 7.7)	7.2 (7.0 – 7.5)	
Suspended solids	mg/L	58 (10 – 130)	47 (25 – 220)	
5-day Biochemical Oxygen Demand	mg/L	80 (18 – 150)	74 (24 – 120)	
Chemical Oxygen Demand	mg/L	88 (24 – 410)	93 (30 – 180)	
Oil & grease	mg/L	4.9 (0.5 – 15.0)	6.4 (0.7 – 23.0)	
Faecal coliforms	cfu/ 100mL	3,100,000 (1,200,000 - 9,000,000)	3,900,000 (1,400,000 – 26,000,000)	
E. coli	cfu/ 100mL	1,900,000 (660,000 – 6,500,000)	1,300,000 (360,000 – 4,700,000)	
Ammonia-nitrogen	mg/L	12.50 (4.20 – 40.00)	4.20 (2.30 – 24.00)	
Nitrate-nitrogen	mg/L	0.01 (0.01 – 1.30)	0.01 (0.01 – 0.03)	
Total Kjeldahl nitrogen, SP	mg/L	18.00 (5.80 – 61.00)	7.85 (3.80 – 33.00)	
Ortho-phosphate	mg/L	2.05 (0.85 – 6.90)	0.58 (0.25 – 3.80)	
Total phosphorus, SP	mg/L	3.05 (1.20 – 11.00)	1.25 (0.56 – 5.10)	
Sulphide, SP	mg/L	0.06 (0.02 – 0.19)	0.05 (0.02 – 0.09)	
Aluminium	μg/L	260 (100 – 540)	295 (100 – 1,200)	
Cadmium	μg/L	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.3)	
Chromium	μg/L	2 (1 – 5)	1 (1 – 5)	
Copper	μg/L	23 (7 – 59)	5 (2 – 32)	
Lead	μg/L	5 (2 – 16)	6 (2 – 24)	
Zinc	μg/L	75 (30 – 340)	60 (20 – 360)	
Flow	L/s	615 (250 – 1,523)	230 (64 – 518)	

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for Kam Tin River in 2005

Parameter	Unit	Kam Tir	n River
rafametei	Offic	KT1	KT2
Dissolved oxygen	mg/L	4.3 (1.2 – 7.1)	3.8 (1.7 – 7.2)
рН		7.3 (7.1 – 7.4)	7.3 (7.1 – 7.5)
Suspended solids	mg/L	18 (5 – 750)	36 (3 – 200)
5-day Biochemical Oxygen Demand	mg/L	14 (6 – 740)	52 (5 – 150)
Chemical Oxygen Demand	mg/L	22 (12 – 1,600)	74 (8 – 210)
Oil & grease	mg/L	0.5 (0.5 – 140.0)	3.6 (0.5 – 40.0)
Faecal coliforms	cfu/ 100mL	550,000 (54,000 – 3,200,000)	970,000 (150,000 – 5,000,000)
E. coli	cfu/ 100mL	150,000 (24,000 – 1,700,000)	730,000 (80,000 – 3,700,000)
Ammonia-nitrogen	mg/L	9.65 (1.00 – 27.00)	15.00 (0.98 – 43.00)
Nitrate-nitrogen	mg/L	0.59 (0.01 – 1.00)	0.01 (0.01 – 0.72)
Total Kjeldahl nitrogen, SP	mg/L	11.40 (1.70 – 84.00)	20.00 (1.50 – 58.00)
Ortho-phosphate	mg/L	1.85 (0.47 – 8.30)	3.05 (0.36 – 8.60)
Total phosphorus, SP	mg/L	2.45 (0.63 – 26.00)	4.15 (0.48 – 11.00)
Sulphide, SP	mg/L	0.03 (0.02 – 2.40)	0.06 (0.02 – 0.43)
Aluminium	μg/L	110 (50 – 230)	110 (50 – 450)
Cadmium	μg/L	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.3)
Chromium	μg/L	1 (1 – 3)	1 (1 – 5)
Copper	μg/L	8 (3 – 47)	11 (3 – 65)
Lead	μg/L	2 (1 – 4)	2 (1 – 19)
Zinc	μg/L	45 (20 – 180)	85 (20 – 510)
Flow Notes: 1. Data presen	L/s	474 (75 – 2,000)	158 (8 – 1,323)

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

Summary of water quality monitoring data for Tin Shui Wai Nullah and Fairview Park Nullah in 2005

Doromotor		<u>Tin Shui V</u>	Vai Nullah	Fairview Park Nullah
Parameter	Unit	TSR1	TSR2	FVR1
Dissolved oxygen	mg/L	7.6 (1.6 – 10.6)	10.1 (8.0 – 12.4)	5.5 (1.9 – 13.6)
рН		7.5 (7.1 – 8.4)	8.7 (7.6 – 9.3)	7.4 (7.0 – 8.8)
Suspended solids	mg/L	13 (2 – 46)	13 (4 – 820)	37 (10 – 170)
5-day Biochemical Oxygen Demand	mg/L	12 (5 – 27)	1 (1 – 5)	10 (4 – 28)
Chemical Oxygen Demand	mg/L	13 (8 – 60)	7 (2 – 12)	33 (10 – 85)
Oil & grease	mg/L	0.5 (0.5 – 3.1)	0.5 (0.5 - 1.0)	0.5 (0.5 – 3.2)
Faecal coliforms	cfu/ 100mL	630,000 (100,000 – 7,900,000)	41,000 (3,600 – 350,000)	300,000 (53,000 – 1,700,000)
E. coli	cfu/ 100mL	250,000 (39,000 – 4,100,000)	15,000 (600 – 110,000)	62,000 (14,000 – 150,000)
Ammonia-nitrogen	mg/L	2.20 (0.73 – 7.50)	0.15 (0.04 - 2.00)	4.10 (0.72 – 16.00)
Nitrate-nitrogen	mg/L	0.96 (0.01 – 2.40)	1.25 (0.69 – 2.00)	0.46 (0.09 – 2.00)
Total Kjeldahl nitrogen, SP	mg/L	3.00 (1.50 – 12.00)	0.45 (0.13 – 2.50)	6.35 (1.60 – 22.00)
Ortho-phosphate	mg/L	0.15 (0.06 – 0.70)	0.03 (0.02 – 0.28)	0.95 (0.34 – 3.30)
Total phosphorus, SP	mg/L	0.36 (0.22 – 1.30)	0.05 (0.02 - 0.39)	1.40 (0.68 – 4.40)
Sulphide, SP	mg/L	0.02 (0.02 – 0.18)	0.02 (0.02 - 0.02)	0.02 (0.02 – 0.03)
Aluminium	μg/L	155 (50 – 430)	170 (90 – 980)	215 (90 – 460)
Cadmium	μg/L	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.3)
Chromium	μg/L	1 (1 – 14)	1 (1 – 1)	1 (1 – 2)
Copper	μg/L	5 (2 – 21)	2 (1 – 11)	5 (2 – 25)
Lead	μg/L	3 (1 – 15)	2 (1 – 97)	3 (2 – 11)
Zinc	μg/L	75 (20 – 1,500)	20 (10 – 120)	30 (10 – 80)
Flow	L/s	NM	84 (20 – 1,575)	NM

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

Summary of water quality monitoring data for Ha Pak Nai Stream, Pak Nai Stream and Sheung Pak Nai Stream in 2005

Pak Nai Sueaili ii	1 2003		5	
Parameter	Unit	Ha Pak Nai Stream	Pak Nai Stream	Sheung Pak Nai Stream
		DB1	DB3	DB5
Dissolved oxygen	mg/L	8.5 (7.3 – 10.9)	7.9 (6.9 – 10.2)	9.0 (7.6 – 11.1)
рН		7.4 (6.5 – 7.9)	7.0 (6.2 – 7.4)	7.1 (6.3 – 7.4)
Suspended solids	mg/L	2 (1 – 75)	9 (2 – 61)	6 (2 – 51)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 1)	1 (1 – 3)	1 (1 – 3)
Chemical Oxygen Demand	mg/L	2 (2 – 12)	3 (2 – 20)	4 (2 – 38)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	810 (79 – 7,000)	5,300 (2,200 – 19,000)	2,000 (350 – 39,000)
E. coli	cfu/ 100mL	46 (1 – 1,300)	750 (160 – 4,300)	72 (19 – 3,000)
Ammonia-nitrogen	mg/L	0.01 (0.01 – 1.30)	0.03 (0.01 – 0.91)	0.02 (0.01 – 5.60)
Nitrate-nitrogen	mg/L	0.43 (0.18 – 1.50)	0.44 (0.26 – 1.40)	0.23 (0.10 – 2.20)
Total Kjeldahl nitrogen, SP	mg/L	0.05 (0.05 – 1.60)	0.25 (0.12 – 1.40)	0.06 (0.05 – 6.90)
Ortho-phosphate	mg/L	0.01 (0.01 – 0.02)	0.03 (0.01 – 0.11)	0.01 (0.01 – 2.00)
Total phosphorus, SP	mg/L	0.02 (0.02 - 0.03)	0.07 (0.02 – 0.13)	0.02 (0.02 – 2.60)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 - 0.02)
Aluminium	μg/L	60 (50 – 310)	50 (50 – 230)	75 (50 – 400)
Cadmium	μg/L	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.2)
Chromium	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Copper	μg/L	1 (1 – 2)	1 (1 – 6)	1 (1 – 23)
Lead	μg/L	1 (1 – 8)	1 (1 – 5)	1 (1 – 11)
Zinc	μg/L	10 (10 – 40)	10 (10 – 40)	10 (10 – 80)
Flow	L/s	16 (1 – 150)	17 (2 – 231)	61 (8 – 176)

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

Summary of water quality monitoring data for Ngau Hom Sha Stream, Tai Shui Hang Stream and

Tsang Kok Stream in 2005

rsang Kok Stream in 2005				
Parameter	Unit	Ngau Hom Sha Stream	Tai Shui Hang Stream	Tsang Kok Stream
	J	DB6	DB2	DB8
Dissolved oxygen	mg/L	8.0 (6.4 – 9.9)	8.4 (7.2 – 10.2)	9.1 (7.1 – 11.5)
pH		7.2 (6.7 – 7.5)	7.1 (6.9 – 7.8)	7.6 (7.2 – 8.7)
Suspended solids	mg/L	6 (3 – 98)	5 (1 – 180)	3 (1 – 97)
5-day Biochemical Oxygen Demand	mg/L	3 (1 – 8)	1 (1 – 5)	1 (1 – 6)
Chemical Oxygen Demand	mg/L	9 (2 – 29)	3 (2 – 34)	5 (2 – 31)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	29,000 (6,600 – 110,000)	910 (90 – 12,000)	3,300 (720 – 50,000)
E. coli	cfu/ 100mL	14,000 (3,800 – 110,000)	120 (24 – 4,800)	120 (16 – 31,000)
Ammonia-nitrogen	mg/L	3.10 (0.74 – 13.00)	0.03 (0.02 – 0.98)	0.05 (0.01 - 2.60)
Nitrate-nitrogen	mg/L	1.09 (0.52 – 2.50)	0.27 (0.07 – 1.30)	0.44 (0.09 – 2.60)
Total Kjeldahl nitrogen, SP	mg/L	3.35 (0.88 – 18.00)	0.10 (0.05 – 2.00)	0.14 (0.05 – 3.10)
Ortho-phosphate	mg/L	0.96 (0.02 – 4.70)	0.01 (0.01 – 0.02)	0.01 (0.01 – 0.03)
Total phosphorus, SP	mg/L	1.05 (0.02 – 7.10)	0.02 (0.02 - 0.08)	0.02 (0.02 - 0.09)
Sulphide, SP	mg/L	0.02 (0.02 - 0.05)	0.02 (0.02 – 0.02)	0.02 (0.02 - 0.02)
Aluminium	μg/L	75 (50 – 320)	105 (50 – 630)	110 (50 – 420)
Cadmium	μg/L	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.2)
Chromium	μg/L	1 (1 – 6)	1 (1 – 1)	1 (1 – 1)
Copper	μg/L	4 (1 – 34)	1 (1 – 5)	1 (1 – 4)
Lead	μg/L	2 (1 – 9)	2 (1 – 24)	1 (1 – 16)
Zinc	μg/L	20 (10 – 80)	10 (10 – 50)	10 (10 – 60)
Flow	L/s	10 (2 – 66)	130 (7 – 610)	NM

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Mui Wo River in 2005 (Part 1 of 2)

Davamatar	Linia		<u>Mui Wo River</u>	
Parameter	Unit	MW1	MW2	MW3
Dissolved oxygen	mg/L	8.1 (7.1 – 11.0)	8.2 (6.7 – 11.0)	8.2 (7.2 – 10.5)
рН		7.1 (6.7 – 7.5)	7.4 (6.9 – 7.8)	7.1 (6.9 – 7.6)
Suspended solids	mg/L	2 (1 – 4)	4 (1 – 9)	1 (1 – 3)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 1)	1 (1 – 4)	1 (1 – 1)
Chemical Oxygen Demand	mg/L	7 (2 – 9)	12 (3 – 24)	3 (2 – 7)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	4,200 (420 – 85,000)	21,000 (6,600 – 100,000)	2,300 (260 – 27,000)
E. coli	cfu/ 100mL	420 (110 – 11,000)	3,500 (900 – 34,000)	270 (37 – 3,500)
Ammonia-nitrogen	mg/L	0.04 (0.01 - 0.24)	0.26 (0.02 – 1.20)	0.02 (0.01 - 0.03)
Nitrate-nitrogen	mg/L	0.33 (0.15 – 1.60)	0.17 (0.07 – 0.41)	0.36 (0.16 –1.50)
Total Kjeldahl nitrogen, SP	mg/L	0.19 (0.10 – 0.39)	0.50 (0.17 – 1.50)	0.09 (0.05 - 0.15)
Ortho-phosphate	mg/L	0.13 (0.03 – 0.22)	0.08 (0.04 – 0.16)	0.06 (0.02 – 0.09)
Total phosphorus, SP	mg/L	0.14 (0.04 – 0.23)	0.12 (0.09 – 0.28)	0.07 (0.02 – 0.09)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)
Aluminium	μg/L	60 (50 – 80)	55 (50 – 80)	50 (50 – 70)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)
Chromium	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Copper	μg/L	2 (1 – 3)	2 (1 – 3)	1 (1 – 2)
Lead	μg/L	1 (1 – 2)	1 (1 – 2)	1 (1 – 1)
Zinc	μg/L	10 (10 – 40)	20 (10 – 40)	20 (10 – 40)
Flow Notes: 1. Data presen	L/s	77 (8 – 1,625)	NM les: except those for faecal coliforn	23 (4 – 672)

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Mui Wo River in 2005 (Part 2 of 2)

Davamatar	Llait	<u>Mui Wo River</u>		
Parameter	Unit	MW4	MW5	
Dissolved oxygen	mg/L	7.9 (5.9 – 9.5)	7.5 (6.0 – 10.3)	
рН		7.1 (6.7 – 7.8)	7.0 (6.8 – 7.5)	
Suspended solids	mg/L	7 (1 – 26)	6 (2 – 29)	
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 2)	2 (2 – 3)	
Chemical Oxygen Demand	mg/L	12 (5 – 17)	14 (4 – 23)	
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	
Faecal coliforms	cfu/ 100mL	6,200 (730 – 110,000)	33,000 (5,100 – 310,000)	
E. coli	cfu/ 100mL	1,300 (250 – 28,000)	5,800 (1,600 – 24,000)	
Ammonia-nitrogen	mg/L	0.24 (0.10 – 1.10)	0.46 (0.12 – 2.20)	
Nitrate-nitrogen	mg/L	0.26 (0.12 – 0.54)	0.20 (0.14 – 0.46)	
Total Kjeldahl nitrogen, SP	mg/L	0.45 (0.34 – 1.30)	0.79 (0.41 – 2.50)	
Ortho-phosphate	mg/L	0.05 (0.02 – 0.19)	0.07 (0.03 – 0.12)	
Total phosphorus, SP	mg/L	0.12 (0.06 – 0.25)	0.15 (0.10 – 0.30)	
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	
Aluminium	μg/L	65 (50 – 100)	60 (50 – 120)	
Cadmium	μg/L	0.1 (0.1 – 0.3)	0.1 (0.1 – 0.1)	
Chromium	μg/L	1 (1 – 2)	1 (1 – 1)	
Copper	μg/L	2 (1 – 4)	1 (1 – 2)	
Lead	μg/L	1 (1 – 2)	1 (1 – 5)	
Zinc	μg/L	10 (10 – 20)	20 (10 – 30)	
Flow	L/s	100 (40 – 1,050)	30 (4 – 189)	

- 2. Figures in brackets are annual ranges.
- 3. NM indicates no measurement taken.
- 4. cfu colony forming unit.
- 5. SP soluble and particulate fractions i.e. total value.
- 6. Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).
- 7. Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for Tung Chung River in 2005

Parameter	Unit		Tung Chung River	
raiametei	Offic	TC1	TC2	TC3
Dissolved oxygen	mg/L	7.1 (6.0 – 8.2)	8.2 (7.6 – 10.6)	8.4 (7.7 – 10.6)
рН		6.7 (6.4 – 7.4)	7.4 (7.0 – 8.1)	7.5 (7.1 – 7.8)
Suspended solids	mg/L	1 (1 – 3)	2 (1 – 14)	1 (1 – 4)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 6)
Chemical Oxygen Demand	mg/L	3 (2 – 12)	5 (2 – 12)	4 (2 – 9)
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	1,100 (100 – 56,000)	1,800 (90 – 35,000)	17,000 (4,200 – 71,000)
E. coli	cfu/ 100mL	31 (1 – 4,600)	65 (12 – 4,200)	4,500 (580 – 25,000)
Ammonia-nitrogen	mg/L	0.01 (0.01 – 0.02)	0.01 (0.01 – 0.04)	0.30 (0.03 – 1.30)
Nitrate-nitrogen	mg/L	0.04 (0.01 – 0.27)	0.01 (0.01 – 0.12)	0.09 (0.02 – 0.39)
Total Kjeldahl nitrogen, SP	mg/L	0.08 (0.05 – 0.30)	0.11 (0.05 – 0.26)	0.43 (0.12 – 1.60)
Ortho-phosphate	mg/L	0.01 (0.01 – 0.01)	0.01 (0.01 – 0. 01)	0.06 (0.01 – 0.16)
Total phosphorus, SP	mg/L	0.02 (0.02 – 0.03)	0.02 (0.02 – 0.03)	0.07 (0.02 – 0.18)
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.03)	0.02 (0.02 – 0.02)
Aluminium	μg/L	50 (50 – 50)	50 (50 – 80)	50 (50 – 130)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 1.1)
Chromium	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Copper	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 2)
Lead	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Zinc	μg/L	10 (10 – 30)	10 (10 – 20)	20 (10 – 30)
Flow Notes: 1. Data presen	L/s	19 (1 – 516)	75 (9 – 251)	NM

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits...

# Summary of water quality monitoring data for Tuen Mun River in 2005 (Part 1 of 2)

Parameter	Unit	TNA	Tuen Mun River	TNO
		TN1	TN2	TN3
Dissolved oxygen	mg/L	3.5 (2.3 – 5.9)	8.5 (7.7 – 9.9)	4.8 (3.1 – 6.0)
рН		7.5 (7.3 – 7.8)	7.3 (7.0 – 8.1)	7.7 (7.3 – 8.3)
Suspended solids	mg/L	32 (8 – 96)	15 (5 – 660)	4 (3 – 18)
5-day Biochemical Oxygen Demand	mg/L	48 (21 – 90)	1 (1 – 4)	3 (1 – 7)
Chemical Oxygen Demand	mg/L	57 (24 – 98)	5 (3 – 19)	15 (13 – 67)
Oil & grease	mg/L	2.2 (0.5 – 18.0)	0.5 (0.5 – 2.9)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	1,900,000 (370,000 – 21,000,000)	4,000 (1 – 210,000)	84,000 (6,700 – 1,100,000)
E. coli	cfu/ 100mL	240,000 (80,000 – 900,000)	1,700 (1 – 100,000)	9,100 (760 – 49,000)
Ammonia-nitrogen	mg/L	6.70 (2.90 – 9.50)	0.20 (0.12 – 1.70)	0.48 (0.22 – 1.60)
Nitrate-nitrogen	mg/L	0.29 (0.01 – 5.60)	1.70 (1.10 – 3.20)	0.50 (0.23 – 1.80)
Total Kjeldahl nitrogen, SP	mg/L	9.75 (5.40 – 14.00)	0.37 (0.17 – 2.30)	0.82 (0.59 – 2.10)
Ortho-phosphate	mg/L	0.83 (0.40 – 1.10)	0.06 (0.03 – 0.70)	0.05 (0.01 – 0.16)
Total phosphorus, SP	mg/L	1.45 (0.81 – 2.10)	0.09 (0.04 – 0.75)	0.10 (0.07 – 0.25)
Sulphide, SP	mg/L	0.04 (0.02 – 0.09)	0.02 (0.02 – 0.02)	0.02 (0.02 - 0.02)
Aluminium	μg/L	260 (90 – 650)	195 (50 – 1,300)	120 (60 – 250)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.1)
Chromium	μg/L	1 (1 – 5)	1 (1 – 2)	1 (1 – 2)
Copper	μg/L	5 (4 – 7)	3 (1 – 6)	4 (2 – 5)
Lead	μg/L	3 (1 – 11)	3 (1 – 53)	1 (1 – 2)
Zinc	μg/L	40 (20 – 80)	25 (10 – 90)	15 (10 – 40)
Flow	L/s	69 (33 – 304)	84 (14 – 465)	NM

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

# Summary of water quality monitoring data for Tuen Mun River in 2005 (Part 2 of 2)

Darameter	Linit	<u>Tuen Mun River</u>			
Parameter	Unit	TN4	TN5	TN6	
Dissolved oxygen	mg/L	5.3 (3.5 – 8.9)	5.1 (3.1 – 6.7)	5.3 (3.2 – 6.7)	
рН		7.7 (7.3 – 7.9)	7.7 (7.3 – 8.0)	7.6 (7.2 – 7.9)	
Suspended solids	mg/L	6 (3 – 16)	5 (3 – 34)	4 (3 – 16)	
5-day Biochemical Oxygen Demand	mg/L	3 (2 – 6)	3 (1 – 6)	3 (1 – 7)	
Chemical Oxygen Demand	mg/L	18 (5 – 25)	16 (8 – 24)	15 (8 – 25)	
Oil & grease	mg/L	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.9)	0.5 (0.5 – 0.5)	
Faecal coliforms	cfu/ 100mL	100,000 (22,000 – 1,100,000)	81,000 (11,000 – 2,000,000)	33,000 (4,500 – 380,000)	
E. coli	cfu/ 100mL	20,000 (2,800 – 80,000)	12,000 (1,100 – 66,000)	5,500 (320 – 46,000)	
Ammonia-nitrogen	mg/L	0.55 (0.28 – 1.80)	0.52 (0.20 – 1.80)	0.40 (0.16 – 1.20)	
Nitrate-nitrogen	mg/L	0.62 (0.23 – 1.90)	0.56 (0.21 – 1.80)	0.46 (0.18 – 1.20)	
Total Kjeldahl nitrogen, SP	mg/L	1.00 (0.58 – 2.10)	0.79 (0.64 – 2.20)	0.71 (0.56 – 1.50)	
Ortho-phosphate	mg/L	0.07 (0.02 – 0.19)	0.05 (0.02 – 0.18)	0.05 (0.01 – 0.13)	
Total phosphorus, SP	mg/L	0.10 (0.05 – 0.27)	0.11 (0.06 – 0.29)	0.10 (0.06 – 0.18)	
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.04)	
Aluminium	μg/L	115 (70 – 280)	120 (60 – 270)	80 (50 – 160)	
Cadmium	μg/L	0.1 (0.1 – 0.2)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	
Chromium	μg/L	1 (1 – 2)	2 (1 – 2)	1 (1 – 2)	
Copper	μg/L	4 (2 – 6)	4 (2 – 7)	4 (2 – 5)	
Lead	μg/L	1 (1 – 2)	1 (1 – 2)	1 (1 – 1)	
Zinc	μg/L	20 (10 – 30)	10 (10 – 20)	10 (10 – 20)	
Flow	L/s	NM	NM	NM	

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

Summary of water quality monitoring data for Pai Min Kok Stream and Kau Wa Keng Stream in 2005

Parameter	Unit	Pai Min Kok Stream		Kau Wa Keng Stream	
raiametei	Offic	AN1	AN2	KW3	
Dissolved oxygen	mg/L	8.0 (7.3 – 10.0)	8.2 (6.4 – 10.6)	8.0 (7.7 – 10.1)	
рН		8.0 (7.5 – 9.3)	7.9 (7.3 – 8.9)	7.5 (7.1 – 9.1)	
Suspended solids	mg/L	7 (3 – 430)	4 (1 – 24)	5 (3 – 13)	
5-day Biochemical Oxygen Demand	mg/L	5 (1 – 58)	2 (1– 9)	2 (1 – 8)	
Chemical Oxygen Demand	mg/L	14 (6 – 130)	11 (5 – 39)	12 (5 – 29)	
Oil & grease	mg/L	0.5 (0.5 – 1.4)	0.5 (0.5 – 1.4)	0.5 (0.5 – 0.7)	
Faecal coliforms	cfu/ 100mL	150,000 (22,000 – 2,600,000)	76,000 (15,000 – 780,000)	88,000 (12,000 – 470,000)	
E. coli	cfu/ 100mL	25,000 (6,800 – 190,000)	23,000 (2,400 – 520,000)	45,000 (8,900 – 340,000)	
Ammonia-nitrogen	mg/L	0.29 (0.10 – 4.10)	0.35 (0.05 – 12.00)	0.56 (0.09 – 3.70)	
Nitrate-nitrogen	mg/L	1.70 (0.91 – 5.00)	0.99 (0.40 – 5.20)	2.50 (1.90 – 3.60)	
Total Kjeldahl nitrogen, SP	mg/L	0.72 (0.36 – 12.0)	0.52 (0.20 – 15.00)	0.96 (0.26 – 5.20)	
Ortho-phosphate	mg/L	0.17 (0.08 – 0.89)	0.10 (0.05 – 1.60)	0.08 (0.01 – 0.22)	
Total phosphorus, SP	mg/L	0.22 (0.10 – 2.60)	0.13 (0.06 – 2.00)	0.25 (0.05 – 0.46)	
Sulphide, SP	mg/L	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.09)	0.02 (0.02 – 0.04)	
Aluminium	μg/L	135 (90 – 4,800)	80 (50 – 210)	115 (60 – 320)	
Cadmium	μg/L	0.1 (0.1 – 1.1)	0.1 (0.1 – 0.1)	1.2 (0.7 – 2.2)	
Chromium	μg/L	1 (1 – 11)	1 (1 – 1)	1 (1 – 1)	
Copper	μg/L	8 (3 – 140)	3 (1 – 6)	2 (2 – 5)	
Lead	μg/L	2 (1 – 65)	1 (1 – 2)	3 (2 – 4)	
Zinc	μg/L	50 (30 – 1,300)	35 (20 – 90)	110 (50 – 180)	
Flow	L/s	NM	7 (3 – 23)	27 (11 – 47)	

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for Sam Dip Tam Stream in 2005

Doromotor	Unit		Sam Dip Tam Stream	
Parameter	Unit	TW1	TW2	TW3
Dissolved oxygen	mg/L	7.6 (4.4 – 9.3)	8.2 (7.8 – 9.9)	8.2 (7.5 – 10.2)
рН		7.5 (6.9 – 7.8)	7.9 (7.4 – 8.0)	7.6 (7.2 – 8.0)
Suspended solids	mg/L	2 (1 – 7)	2 (1 – 5)	2 (1 – 9)
5-day Biochemical Oxygen Demand	mg/L	1 (1 – 22)	2 (1 – 5)	2 (1 – 5)
Chemical Oxygen Demand	mg/L	8 (3 – 27)	7 (3 – 14)	8 (4 – 14)
Oil & grease	mg/L	0.5 (0.5 – 0.8)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	250,000 (18,000 – 11,000,000)	120,000 (42,000 – 370,000)	53,000 (10,000 – 660,000)
E. coli	cfu/ 100mL	55,000 (3,800 – 3,600,000)	37,000 (11,000 – 140,000)	14,000 (1,100 – 80,000)
Ammonia-nitrogen	mg/L	0.04 (0.01 – 0.67)	0.13 (0.02 – 0.37)	0.12 (0.01 – 0.28)
Nitrate-nitrogen	mg/L	0.51 (0.23 – 2.90)	1.60 (0.41 – 3.00)	1.90 (0.54 – 3.20)
Total Kjeldahl nitrogen, SP	mg/L	0.21 (0.07 – 1.60)	0.30 (0.18 – 0.63)	0.28 (0.12 – 0.51)
Ortho-phosphate	mg/L	0.05 (0.02 – 0.07)	0.14 (0.05 – 0.30)	0.15 (0.05 – 0.28)
Total phosphorus, SP	mg/L	0.07 (0.02 – 0.20)	0.15 (0.07 – 0.37)	0.16 (0.06 – 0.36)
Sulphide, SP	mg/L	0.02 (0.02 – 0.05)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.04)
Aluminium	μg/L	50 (50 – 70)	50 (50 – 70)	50 (50 – 110)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)
Chromium	μg/L	1 (1 – 1)	1 (1 – 1)	1 (1 – 1)
Copper	μg/L	2 (1 – 4)	2 (1 – 2)	2 (1 – 5)
Lead	μg/L	2 (1 – 6)	1 (1 – 3)	1 (1 – 4)
Zinc	μg/L	40 (10 – 90)	30 (10 – 50)	20 (10 – 40)
Flow Notes: 1. Data presen	L/s	NM	81 (2 – 918)	NM ms and E. coli which are in annua

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for Kai Tak Nullah in 2005 (Part 1 of 2)

Parameter	Unit		<u>Kai Tak Nullah</u>	
T didinotor	Orm	KN1	KN2	KN3
Dissolved oxygen	mg/L	6.5 (4.4 – 7.3)	6.6 (5.4 – 7.3)	7.5 (6.5 – 8.0)
рН		7.3 (7.1 – 7.6)	7.2 (7.0 – 7.6)	7.4 (7.2 – 7.5)
Suspended solids	mg/L	5 (3 – 44)	35 (5 – 60)	24 (6 – 47)
5-day Biochemical Oxygen Demand	mg/L	6 (2 – 23)	8 (5 – 14)	6 (3 – 14)
Chemical Oxygen Demand	mg/L	32 (24 – 54)	29 (19 – 44)	25 (16 – 80)
Oil & grease	mg/L	0.5 (0.5 – 0.6)	0.5 (0.5 – 0.6)	0.5 (0.5 – 0.6)
Faecal coliforms	cfu/ 100mL	490,000 (95,000 – 18,000,000)	300,000 (61,000 – 1,200,000)	290,000 (100,000 – 840,000)
E. coli	cfu/ 100mL	210,000 (36,000 – 9,200,000)	130,000 (34,000 – 530,000)	95,000 (55,000 – 160,000)
Ammonia-nitrogen	mg/L	0.77 (0.20 – 3.90)	0.23 (0.05 – 1.50)	0.16 (0.09 – 0.52)
Nitrate-nitrogen	mg/L	4.65 (0.95 – 5.50)	4.95 (0.86 – 5.40)	5.15 (1.40 – 7.20)
Total Kjeldahl nitrogen, SP	mg/L	1.90 (1.00 – 5.80)	1.40 (1.20 – 2.80)	1.15 (1.10 – 3.10)
Ortho-phosphate	mg/L	1.65 (0.28 – 2.30)	1.55 (0.21– 1.80)	1.50 (0.39 – 1.80)
Total phosphorus, SP	mg/L	1.80 (0.49 – 2.40)	1.80 (0.40 - 2.00)	1.95 (0.56 – 2.00)
Sulphide, SP	mg/L	0.05 (0.02 – 0.27)	0.03 (0.02 – 0.07)	0.02 (0.02 – 0.02)
Aluminium	μg/L	50 (50 –150)	95 (50 – 200)	95 (50 – 410)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.2)
Chromium	μg/L	2 (1 – 5)	1 (1 – 3)	2 (1 – 7)
Copper	μg/L	8 (5 – 13)	9 (7 – 10)	10 (6 – 25)
Lead	μg/L	1 (1 – 3)	1 (1 – 5)	2 (1 – 9)
Zinc	μg/L	30 (20 – 70)	50 (30 – 70)	55 (20 – 120)
Flow	L/s	NM	NM	NM

Notes:

<sup>1.</sup> Data presented are in annual medians of monthly samples; except those for faecal coliforms and E. coli which are in annual geometric means.

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.

#### Summary of water quality monitoring data for Kai Tak Nullah in 2005 (Part 2 of 2)

Parameter	Unit		<u>Kai Tak Nullah</u>	
rarameter	Onn	KN4	KN5	KN7
Dissolved oxygen	mg/L	7.7 (7.1 – 8.7)	7.9 (6.5 – 8.9)	7.5 (6.7 – 8.0)
рН		7.3 (7.2 – 7.6)	7.3 (7.2 – 7.6)	7.2 (7.1 – 7.4)
Suspended solids	mg/L	8 (4 – 47)	8 (5 – 14)	6 (3 – 11)
5-day Biochemical Oxygen Demand	mg/L	4 (2 – 8)	4 (2 – 9)	4 (2 – 9)
Chemical Oxygen Demand	mg/L	33 (18 – 54)	31 (22 – 58)	32 (26 – 54)
Oil & grease	mg/L	0.5 (0.5 – 0.6)	0.5 (0.5 – 0.5)	0.5 (0.5 – 0.5)
Faecal coliforms	cfu/ 100mL	110,000 (21,000 – 450,000)	99,000 (30,000 – 370,000)	89,000 (22,000 – 270,000)
E. coli	cfu/ 100mL	39,000 (9,400 – 120,000)	39,000 (17,000 – 160,000)	36,000 (15,000 – 100,000)
Ammonia-nitrogen	mg/L	0.15 (0.06 – 1.40)	0.13 (0.07 – 1.20)	0.10 (0.07 – 1.20)
Nitrate-nitrogen	mg/L	5.55 (1.40 – 7.90)	5.25 (4.00 – 7.70)	5.25 (3.80 – 7.40)
Total Kjeldahl nitrogen, SP	mg/L	1.20 (0.73 – 2.30)	1.20 (0.88 – 2.30)	1.20 (0.86 – 2.20)
Ortho-phosphate	mg/L	1.70 (0.46 – 2.20)	1.75 (1.20 – 2.20)	1.75 (1.20 – 2.20)
Total phosphorus, SP	mg/L	1.90 (0.55 – 2.40)	1.90 (1.40 – 2.40)	1.90 (1.40 – 2.40)
Sulphide, SP	mg/L	0.02 (0.02 – 0.06)	0.02 (0.02 – 0.02)	0.02 (0.02 – 0.02)
Aluminium	μg/L	50 (50 – 130)	50 (50 – 100)	50 (50 – 70)
Cadmium	μg/L	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.1)	0.1 (0.1 – 0.2)
Chromium	μg/L	1 (1 – 6)	1 (1 – 3)	2 (1 – 3)
Copper	μg/L	11 (4 – 15)	10 (4 – 16)	12 (4 – 16)
Lead	μg/L	1 (1 – 3)	1 (1 – 2)	1 (1 – 1)
Zinc	μg/L	30 (20 – 70)	30 (20 – 60)	30 (20 – 50)
Flow	L/s	NM	NM	NM

<sup>2.</sup> Figures in brackets are annual ranges.

<sup>3.</sup> NM indicates no measurement taken.

<sup>4.</sup> cfu - colony forming unit.

<sup>5.</sup> SP - soluble and particulate fractions i.e. total value.

<sup>6.</sup> Values at or below laboratory reporting limits are presented as laboratory reporting limits (see Appendix B).

<sup>7.</sup> Equal values for annual medians (or geometric means) and ranges indicate that all data are the same as or below laboratory reporting limits.