

Water quality trends for the Shing Mun River (Main Channel, Siu Lek Yuen Nullah and Fo Tan Nullah), as analysed by the Seasonal Kendall Test

Watercourse		Shing Mun River				
		Main Channel	Siu Lek Yuen Nullah		Fo Tan Nullah	
Monitoring station		TR19I	TR23L	TR23A	TR17	TR17L
Monitoring period*		86-05	86-05	86-05	86-05	86-05
Parameter	Unit	Results of the Seasonal Kendall Test				
Dissolved oxygen	mg/L	↗	↗	↗	–	↗
pH		↗	↗	–	–	↗
Suspended solids	mg/L	↘	↘	↘	↘	↘
BOD ₅	mg/L	↘	↘	↘	↘	↘
COD	mg/L	↘	↘	↘	↘	↘
Oil & grease	mg/L	–	–	–	–	↘
<i>E. coli</i>	cfu/100mL	↘	↘	↘	–	↘
Faecal coliforms	cfu/100mL	–	–	–	–	–
Ammonia-nitrogen	mg/L	↘	↘	↘	–	↘
Nitrate-nitrogen	mg/L	↗	↘	–	–	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	–	–	–	↗	–
Aluminium	µg/L	↘	↘	–	–	–
Cadmium	µg/L	–	–	–	–	–
Chromium	µg/L	–	–	–	↘	–
Copper	µg/L	–	–	–	↘	↘
Lead	µg/L	–	↘	–	↘	–
Zinc	µg/L	–	↘	–	↘	–
Flow	L/s	×	–	×	–	×

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Shing Mun River (Kwun Yam Shan Stream, Tai Wai Nullah and Tin Sum Nullah), as analysed by the Seasonal Kendall Test

Watercourse		Shing Mun River				Tin Sum Nullah
		Kwun Yam Shan Stream	Tai Wai Nullah			
Monitoring station	KY1		TR19A	TR19C	TR19	TR20B
Monitoring period*		88-05	86-05	86-05	86-05	86-05
Parameter	Unit	Results of the Seasonal Kendall Test				
Dissolved oxygen	mg/L	–	–	↗	↗	–
pH		↗	–	–	–	↗
Suspended solids	mg/L	–	–	↘	↘	↘
BOD ₅	mg/L	↘	↘	↘	↘	↘
COD	mg/L	↘	↘	↘	↘	↘
Oil & grease	mg/L	–	–	–	↘	–
<i>E. coli</i>	cfu/100mL	–	↘	–	↘	–
Faecal coliforms	cfu/100mL	–	↘	–	↘	–
Ammonia-nitrogen	mg/L	↘	↘	↘	↘	↘
Nitrate-nitrogen	mg/L	↘	↗	–	–	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	–
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	–	–	–	–	–
Aluminium	µg/L	–	–	–	–	↘
Cadmium	µg/L	–	↗	↗	↗	–
Chromium	µg/L	–	–	–	–	↘
Copper	µg/L	–	↘	–	–	↘
Lead	µg/L	–	–	↘	↘	↘
Zinc	µg/L	–	–	–	–	↘
Flow	L/s	–	–	–	↘	–

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Lam Tsuen River and Tai Po River, as analysed by the Seasonal Kendall Test

Watercourse		Lam Tsuen River									Tai Po River
Monitoring station		TR12H	TR12D	TR12G	TR12F	TR12C	TR12B	TR12E	TR12	TR12I	TR13
Monitoring period*		88-05	86-05	86-05	86-05	86-05	86-05	86-05	86-05	89-05	86-05
Parameter	Unit	Results of the Seasonal Kendall Test									
Dissolved oxygen	mg/L	↗	↗	↗	↗	–	↗	↗	–	↗	↗
pH		–	↗	–	↗	–	–	↗	↘	↗	–
Suspended solids	mg/L	↘	↘	↘	↘	↘	↘	–	–	↘	↘
BOD ₅	mg/L	↘	↘	↘	↘	↘	↘	↘	–	↘	↘
COD	mg/L	↘	↘	↘	↘	↘	↘	↘	–	↘	↘
Oil & grease	mg/L	–	–	–	–	–	–	–	–	–	–
<i>E. coli</i>	cfu/100mL	–	–	–	–	–	–	–	–	↘	–
Faecal coliforms	cfu/100mL	–	–	–	–	↗	–	–	–	↘	–
Ammonia-nitrogen	mg/L	↘	–	↘	↘	–	↘	↘	–	↘	↘
Nitrate-nitrogen	mg/L	↘	↘	↘	–	–	↘	–	↗	↗	–
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	–	↘	↘	–	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	–	–	–	–	–	–	–	–	–	–
Aluminium	µg/L	–	–	–	–	↘	–	↗	–	–	–
Cadmium	µg/L	–	–	–	–	–	–	–	–	–	–
Chromium	µg/L	–	–	–	–	–	–	–	–	–	–
Copper	µg/L	–	–	–	–	↘	↘	–	–	–	–
Lead	µg/L	–	–	–	–	↘	–	–	↘	–	↘
Zinc	µg/L	–	–	–	–	–	–	–	–	–	–
Flow	L/s	–	↘	–	↗	–	–	↗	–	×	–

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Tai Po Kau, Shan Liu and Tung Tze Streams, as analysed by the Seasonal Kendall Test

Watercourse		Tai Po Kau Stream	Shan Liu Stream	Tung Tze Stream
Monitoring station		TR14	TR4	TR6
Monitoring period*		86-05	86-05	86-05
Parameter	Unit	Results of the Seasonal Kendall Test		
Dissolved oxygen	mg/L	↗	–	–
pH		↗	↗	–
Suspended solids	mg/L	↘	–	–
BOD ₅	mg/L	↘	–	↘
COD	mg/L	↘	–	↘
Oil & grease	mg/L	–	–	–
<i>E. coli</i>	cfu/100mL	–	–	↗
Faecal coliforms	cfu/100mL	–	–	–
Ammonia-nitrogen	mg/L	↘	↗	–
Nitrate-nitrogen	mg/L	–	–	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	–	↘
Ortho-phosphate	mg/L	↘	–	–
Total phosphorus (SP)	mg/L	↘	–	↘
Sulphide (SP)	mg/L	–	–	–
Aluminium	µg/L	–	–	–
Cadmium	µg/L	–	–	–
Chromium	µg/L	–	–	–
Copper	µg/L	–	–	–
Lead	µg/L	–	–	–
Zinc	µg/L	–	–	–
Flow	L/s	–	↗	×

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Ho Chung River, Sha Kok Mei Stream and Tai Chung Hau Stream, as analysed by the Seasonal Kendall Test

Watercourse		Ho Chung River		Sha Kok Mei Stream		Tai Chung Hau Stream	
Monitoring station		PR1	PR2	PR5	PR6	PR7	PR8
Monitoring period*		86-05	86-05	89-05	89-05	89-05	89-05
Parameter	Unit	Results of the Seasonal Kendall Test					
Dissolved oxygen	mg/L	↗	↗	↗	↗	↗	↗
pH		–	↗	↗	↗	↗	–
Suspended solids	mg/L	↘	↘	↘	–	↘	↘
BOD ₅	mg/L	↘	↘	↘	–	↘	↘
COD	mg/L	↘	↘	↘	–	↘	↘
Oil & grease	mg/L	–	–	–	–	–	–
<i>E. coli</i>	cfu/100mL	↘	–	–	–	–	–
Faecal coliforms	cfu/100mL	↘	–	–	–	–	–
Ammonia-nitrogen	mg/L	↘	↘	↘	↗	↘	↘
Nitrate-nitrogen	mg/L	↗	–	↗	–	↗	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	–	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	–	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	–	↘	↘
Sulphide (SP)	mg/L	–	–	–	–	–	–
Aluminium	µg/L	–	–	–	↗	↘	↘
Cadmium	µg/L	–	–	–	–	–	–
Chromium	µg/L	↘	–	–	–	–	–
Copper	µg/L	–	–	–	–	↘	↘
Lead	µg/L	↘	–	–	–	–	–
Zinc	µg/L	↘	–	–	–	–	–
Flow	L/s	×	↗	–	×	↗	×

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Tseng Lan Shue Stream, as analysed by the Seasonal Kendall Test

Watercourse		Tseng Lan Shue Stream		
Monitoring station		JR3	JR6	JR11
Monitoring period*		86-05	86-05	86-05
Parameter	Unit	Results of the Seasonal Kendall Test		
Dissolved oxygen	mg/L	↗	↗	↗
pH		↗	↗	↗
Suspended solids	mg/L	↘	↘	↘
BOD ₅	mg/L	↘	↘	↘
COD	mg/L	↘	↘	↘
Oil & grease	mg/L	–	–	–
<i>E. coli</i>	cfu/100mL	–	↘	↘
Faecal coliforms	cfu/100mL	–	↘	↘
Ammonia-nitrogen	mg/L	↘	↘	↘
Nitrate-nitrogen	mg/L	↗	↗	–
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘
Sulphide (SP)	mg/L	–	–	–
Aluminium	µg/L	–	–	–
Cadmium	µg/L	–	–	–
Chromium	µg/L	–	–	–
Copper	µg/L	↘	–	↘
Lead	µg/L	–	↘	–
Zinc	µg/L	↘	–	–
Flow	L/s	×	×	–

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Rivers Indus, Beas and Ganges, as analysed by the Seasonal Kendall Test

Watercourse		River Indus			River Beas			River Ganges		
Monitoring station		IN1	IN2	IN3	RB1	RB2	RB3	GR1	GR2	GR3
Monitoring period*		87-05	87-05	87-05	86-05	86-05	86-05	87-05	87-05	90-05
Parameter	Unit	Results of the Seasonal Kendall Test								
Dissolved oxygen	mg/L	↗	↗	↗	↗	↗	↗	↗	↗	–
pH		↗	↗	↗	↗	↗	↗	↗	↗	–
Suspended solids	mg/L	–	↘	↘	↘	↘	↘	–	↘	↘
BOD ₅	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	–
COD	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	–
Oil & grease	mg/L	–	–	–	↘	↘	↘	–	–	–
<i>E. coli</i>	cfu/100mL	↘	↘	↘	↘	↘	↘	↘	↘	–
Faecal coliforms	cfu/100mL	–	↘	↘	↘	↘	↘	↘	↘	↗
Ammonia-nitrogen	mg/L	↘	↘	↘	↘	↘	↘	–	↘	–
Nitrate-nitrogen	mg/L	↗	↗	↗	↗	↗	↗	↗	↗	–
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	↘	↘	–	↘	↘	↘	↘	↘	–
Aluminium	µg/L	–	–	↘	↘	↘	↘	–	↘	–
Cadmium	µg/L	–	–	–	–	–	–	–	–	–
Chromium	µg/L	–	–	–	–	–	–	–	↘	–
Copper	µg/L	↘	↘	↘	↘	↘	↘	–	↘	–
Lead	µg/L	↘	–	↘	↘	↘	↘	↘	↘	–
Zinc	µg/L	↘	↗	↘	↘	↘	↘	–	↘	–
Flow	L/s	–	×	–	–	–	–	–	↗	↗

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Water quality trends for the Yuen Long Creek, Kam Tin River, Tin Shui Wai Nullah and Fairview Park Nullah, as analysed by the Seasonal Kendall Test

Watercourse		Yuen Long Creek				Kam Tin River		Tin Shui Wai Nullah		Fairview Park Nullah
Monitoring station		YL1	YL2	YL3	YL4	KT1	KT2	TSR1	TSR2	FVR1
Monitoring period*		86-05	86-05	86-05	86-05	86-05	86-05	93-05	93-05	93-05
Parameter	Unit	Results of the Seasonal Kendall Test								
Dissolved oxygen	mg/L	↗	↗	↗	↗	↗	↗	↗	↗	↗
pH		↗	↗	↗	↗	↗	↗	–	↗	↗
Suspended solids	mg/L	↘	↘	–	–	↘	–	–	↘	↗
BOD ₅	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘
COD	mg/L	↘	↘	↘	↘	↘	↘	–	↘	–
Oil & grease	mg/L	↘	↘	–	↗	↘	–	–	–	–
<i>E. coli</i>	cfu/100mL	↘	–	↘	–	–	–	↘	↘	↘
Faecal coliforms	cfu/100mL	↘	↘	↘	–	–	–	↘	↘	↘
Ammonia-nitrogen	mg/L	↘	↘	↘	↘	↘	↘	–	↘	↘
Nitrate-nitrogen	mg/L	↗	↗	–	–	↗	–	–	–	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	↘	↘	↘	↘	↘	↘	↘	–	↘
Aluminium	µg/L	–	–	–	–	–	–	–	–	↗
Cadmium	µg/L	↘	–	–	–	–	–	–	–	–
Chromium	µg/L	↘	–	↘	↘	↘	–	–	–	–
Copper	µg/L	↘	–	–	–	–	–	↘	↘	–
Lead	µg/L	↘	↘	–	–	–	–	–	–	–
Zinc	µg/L	↘	↘	–	–	–	–	–	↘	–
Flow	L/s	–	↗	–	–	–	–	×	–	×

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 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
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Water quality trends for the Ha Pak Nai, Pak Nai, Sheung Pak Nai, Ngau Hom Sha, Tai Shui Hang and Tsang Kok Streams, as analysed by the Seasonal Kendall Test

Watercourse		Ha Pak Nai Stream	Pak Nai Stream	Sheung Pak Nai Stream	Ngau Hom Sha Stream	Tai Shui Hang Stream	Tsang Kok Stream
Monitoring station		DB1	DB3	DB5	DB6	DB2	DB8
Monitoring period*		89-05	89-05	89-05	89-05	89-05	90-05
Parameter	Unit	Results of the Seasonal Kendall Test					
Dissolved oxygen	mg/L	↗	↗	↗	↗	↗	↗
pH		↗	–	↗	↗	–	↘
Suspended solids	mg/L	↘	↘	↘	↘	–	↘
BOD ₅	mg/L	↘	↘	↘	↘	↘	↘
COD	mg/L	↘	↘	↘	↘	↘	–
Oil & grease	mg/L	–	–	–	–	–	–
<i>E. coli</i>	cfu/100mL	–	–	–	↗	–	–
Faecal coliforms	cfu/100mL	–	–	–	↗	–	–
Ammonia-nitrogen	mg/L	–	↘	↘	↘	–	–
Nitrate-nitrogen	mg/L	↗	–	↘	↗	↗	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	–	–	–	↘	–	–
Aluminium	µg/L	–	–	–	↘	↗	–
Cadmium	µg/L	–	–	–	↘	–	–
Chromium	µg/L	–	–	–	–	–	–
Copper	µg/L	–	–	–	–	–	–
Lead	µg/L	–	↘	↘	↘	–	↘
Zinc	µg/L	–	–	–	↘	–	–
Flow	L/s	–	–	–	–	↘	–

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 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
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 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends of Mui Wo River, as analysed by the Seasonal Kendall Test

Watercourse		Mui Wo River				
Monitoring station		MW1	MW2	MW3	MW4	MW5
Monitoring period*		86-05	86-05	86-05	88-05	88-05
Parameter	Unit	Results of the Seasonal Kendal Test				
Dissolved oxygen	mg/L	↗	↗	↗	↗	↗
pH		–	↗	↗	–	–
Suspended solids	mg/L	↘	↘	↘	–	–
BOD ₅	mg/L	↘	↘	↘	↘	–
COD	mg/L	↘	↘	↘	↘	↘
Oil & grease	mg/L	–	–	–	–	–
<i>E. coli</i>	cfu/100mL	↘	–	↘	–	–
Faecal coliforms	cfu/100mL	–	↗	–	↗	↗
Ammonia-nitrogen	mg/L	↘	–	↘	↗	↗
Nitrate-nitrogen	mg/L	–	↘	↘	–	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	–	↘	–	↗
Ortho-phosphate	mg/L	↘	–	↘	↘	–
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	–
Sulphide (SP)	mg/L	–	–	–	–	–
Aluminium	µg/L	–	–	–	–	–
Cadmium	µg/L	–	–	–	–	–
Chromium	µg/L	–	–	–	–	–
Copper	µg/L	–	–	–	–	–
Lead	µg/L	–	↘	–	–	–
Zinc	µg/L	–	–	–	–	–
Flow	L/s	–	×	–	↗	–

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends of Tung Chung River, as analysed by the Seasonal Kendall Test

Watercourse		Tung Chung River		
Monitoring station		TC1	TC2	TC3
Monitoring period*		93-05	93-05	93-05
Parameter	Unit	Results of the Seasonal Kendall Test		
Dissolved oxygen	mg/L	↘	–	–
pH		↘	↗	–
Suspended solids	mg/L	↘	–	↘
BOD ₅	mg/L	↘	–	–
COD	mg/L	↘	↘	↘
Oil & grease	mg/L	–	–	–
<i>E. coli</i>	cfu/100mL	–	–	↗
Faecal coliforms	cfu/100mL	↗	↗	↗
Ammonia-nitrogen	mg/L	↘	↘	↗
Nitrate-nitrogen	mg/L	–	–	–
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↗
Ortho-phosphate	mg/L	↘	↘	–
Total phosphorus (SP)	mg/L	–	–	–
Sulphide (SP)	mg/L	–	–	–
Aluminium	µg/L	–	–	–
Cadmium	µg/L	–	–	–
Chromium	µg/L	–	–	–
Copper	µg/L	–	–	–
Lead	µg/L	–	–	–
Zinc	µg/L	–	–	–
Flow	L/s	–	–	×

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Tuen Mun River, as analysed by the Seasonal Kendall Test

Watercourse		Tuen Mun River					
Monitoring station		TN1	TN2	TN3	TN4	TN5	TN6
Monitoring period*		86-05	86-05	86-05	86-05	86-05	86-05
Parameter	Unit	Results of the Seasonal Kendall Test					
Dissolved oxygen	mg/L	↗	↗	↗	↗	↗	↗
pH		–	–	–	–	↗	–
Suspended solids	mg/L	↘	↘	–	–	–	↘
BOD ₅	mg/L	↘	↘	↘	↘	↘	↘
COD	mg/L	↘	↘	↘	↘	↘	↘
Oil & grease	mg/L	–	↘	↘	–	–	–
<i>E. coli</i>	cfu/100mL	↘	↘	↘	↘	↘	↘
Faecal coliforms	cfu/100mL	↘	↘	↘	↘	↘	↘
Ammonia-nitrogen	mg/L	↘	↘	↘	↘	↘	↘
Nitrate-nitrogen	mg/L	↗	↗	↗	↗	↗	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	↘	–	↘	–	↘	–
Aluminium	µg/L	↘	–	–	–	–	–
Cadmium	µg/L	↘	–	–	–	–	–
Chromium	µg/L	↘	↘	↘	↘	↘	↘
Copper	µg/L	↘	↘	↘	↘	↘	↘
Lead	µg/L	↘	↘	↘	–	–	↘
Zinc	µg/L	↘	–	–	–	–	–
Flow	L/s	↘	–	×	×	×	×

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Pai Min Kok, Sam Dip Tam and Kau Wa Keng Streams, as analysed by the Seasonal Kendall Test

Watercourse		Pai Min Kok Stream		Sam Dip Tam Stream			Kau Wa Keng Stream
Monitoring station		AN1	AN2	TW1	TW2	TW3	KW3
Monitoring period*		88-05	88-05	86-05	86-05	86-05	88-05
Parameter	Unit	Results of the Seasonal Kendall Test					
Dissolved oxygen	mg/L	↗	↗	↗	↗	↗	↗
pH		–	↗	↗	↗	↗	↗
Suspended solids	mg/L	–	↘	↘	↘	–	↘
BOD ₅	mg/L	–	↘	↘	–	–	↘
COD	mg/L	–	↘	↘	–	↘	↘
Oil & grease	mg/L	–	–	–	–	–	–
<i>E. coli</i>	cfu/100mL	–	–	–	–	–	–
Faecal coliforms	cfu/100mL	–	–	–	–	–	↘
Ammonia-nitrogen	mg/L	–	↘	↘	↘	–	↘
Nitrate-nitrogen	mg/L	↘	↘	–	–	↘	–
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	↘	↘	↘	↘	↘	↘
Total phosphorus (SP)	mg/L	↘	↘	↘	↘	↘	↘
Sulphide (SP)	mg/L	–	–	–	–	–	–
Aluminium	µg/L	–	–	–	–	↗	–
Cadmium	µg/L	–	–	–	–	–	–
Chromium	µg/L	–	–	–	–	–	–
Copper	µg/L	↗	–	↘	–	–	–
Lead	µg/L	↘	↘	↘	↘	–	↘
Zinc	µg/L	–	↘	–	–	–	–
Flow	L/s	×	–	↘	–	×	–

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.

Water quality trends for the Kai Tak Nullah, as analysed by the Seasonal Kendall Test

Watercourse		Kai Tak Nullah					
Monitoring station		KN1	KN2	KN3	KN4	KN5	KN7
Monitoring period*		86-05	86-05	86-05	86-05	86-05	86-05
Parameter	Unit	Results of the Seasonal Kendall Test					
Dissolved oxygen	mg/L	↗	↗	↗	↗	–	↗
pH		↗	↗	↗	–	–	↘
Suspended solids	mg/L	↘	↘	↘	↘	↘	↘
BOD ₅	mg/L	↘	↘	↘	↘	↘	↘
COD	mg/L	↘	↘	↘	↘	↘	↘
Oil & grease	mg/L	↘	↘	↘	↘	–	–
<i>E. coli</i>	cfu/100mL	↘	↘	–	↘	–	↘
Faecal coliforms	cfu/100mL	↘	↘	–	↘	–	↘
Ammonia-nitrogen	mg/L	↘	↘	–	↘	–	↘
Nitrate-nitrogen	mg/L	↗	↗	↗	↗	↗	↗
Total Kjeldahl nitrogen (SP)	mg/L	↘	↘	↘	↘	↘	↘
Ortho-phosphate	mg/L	–	–	–	–	↗	–
Total phosphorus (SP)	mg/L	↘	–	↘	↘	–	–
Sulphide (SP)	mg/L	↘	↘	↘	–	–	–
Aluminium	µg/L	↘	↘	–	↘	↘	↘
Cadmium	µg/L	↘	↘	↘	↘	↘	↘
Chromium	µg/L	↘	↘	↘	↘	↘	↘
Copper	µg/L	↘	↘	↘	↘	↘	↘
Lead	µg/L	↘	↘	↘	↘	↘	↘
Zinc	µg/L	↘	–	–	↘	–	↘
Flow	L/s	×	×	×	×	×	×

- Notes:
1. (SP) soluble and particulate fractions (i.e. total) of the water quality parameter.
 2. – indicates no significant trend is detected at $p < 0.05$.
 3. ↗ represents an increasing trend significant at $p < 0.05$.
 4. ↘ represents a decreasing trend significant at $p < 0.05$.
 5. × indicates no measurement was taken.
 6. * indicates the monitoring period for most of the parameters, a few commenced in different years during the period.