Air Quality Monitoring Results

Air Quality Monitoring Results for

Contract No. SPW 07/2020

Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

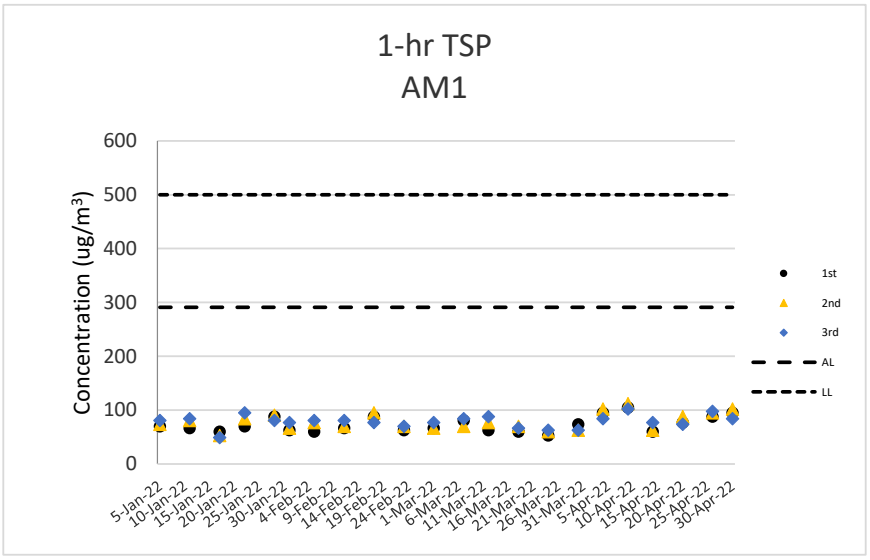
AM1 - Topfine Machinery (China) Co. Ltd.

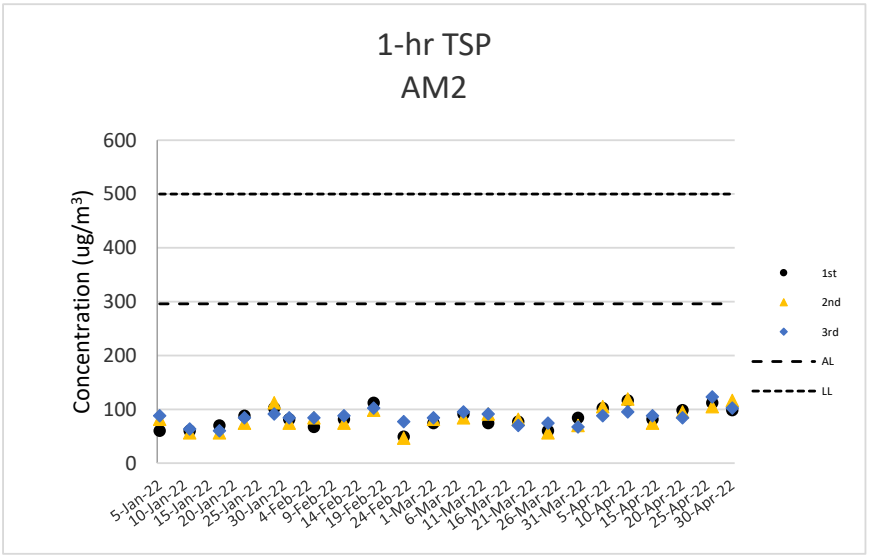
Date	Weather Condition	Start Time	1-hour TSP (µg/m³) 1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
4-Apr-22	Cloudy	8:31	95	102	84	291	500
9-Apr-22	Fine	8:46	105	112	102		
14-Apr-22	Fine	8:30	60	63	77		
20-Apr-22	Fine	8:34	77	88	74		
26-Apr-22	Cloudy	8:30	88	95	98		
30-Apr-22	Fine	8:49	95	102	84		
		Min	60				
		Max	112				
		Average	89				

AM2 - Squatter house at the west of Yuen Long STW

Date	Weather Condition	Start Time	1-hour TSP (µg/m³) 1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
4-Apr-22	Cloudy	8:41	102	105	88	296	500
9-Apr-22	Fine	8:35	116	119	95		
14-Apr-22	Fine	8:39	81	74	88		
20-Apr-22	Fine	8:43	98	95	84		
26-Apr-22	Cloudy	8:39	112	105	123		
30-Apr-22	Fine	8:37	98	116	102		
		Min	74				
		Max	123				
		Average	100				

Note:
Underline: Exceedance of Action Level
Underline and Bold: Exceedance of Limit Level





Air Quality Monitoring Results

Noise Monitoring Results

Noise Monitoring Results for
Contract No. SPW 07/2020
Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

CM1 - Squatter house to the north of YLSTW

Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
4-Apr-22	10:05	55	57	52	0.3	Cloudy	75
14-Apr-22	10:01	56	59	52	0.2	Fine	75
20-Apr-22	10:05	55	59	51	0.2	Fine	75
26-Apr-22	10:02	57	60	52	0.1	Cloudy	75
	Max	57					
	Min	55					

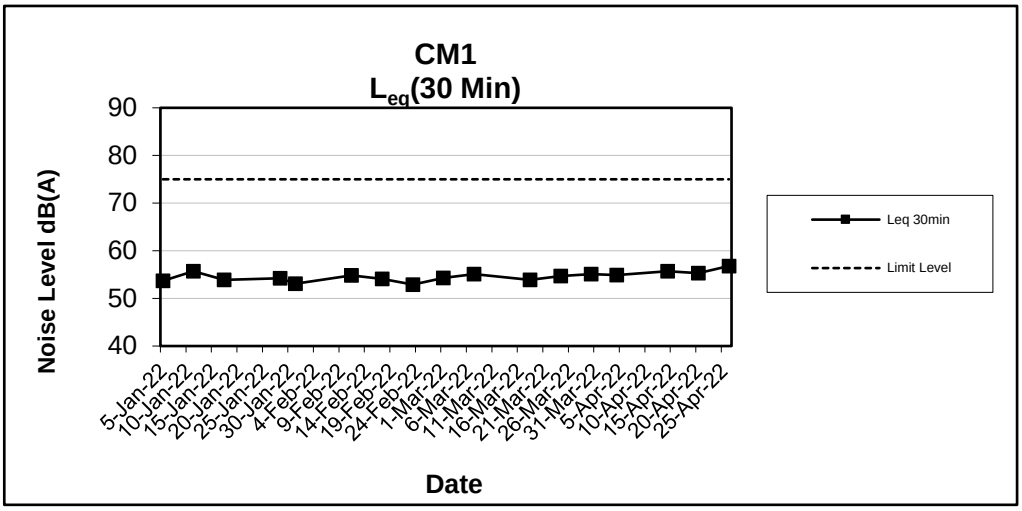
CM2 - Squatter house to the west of YLSTW

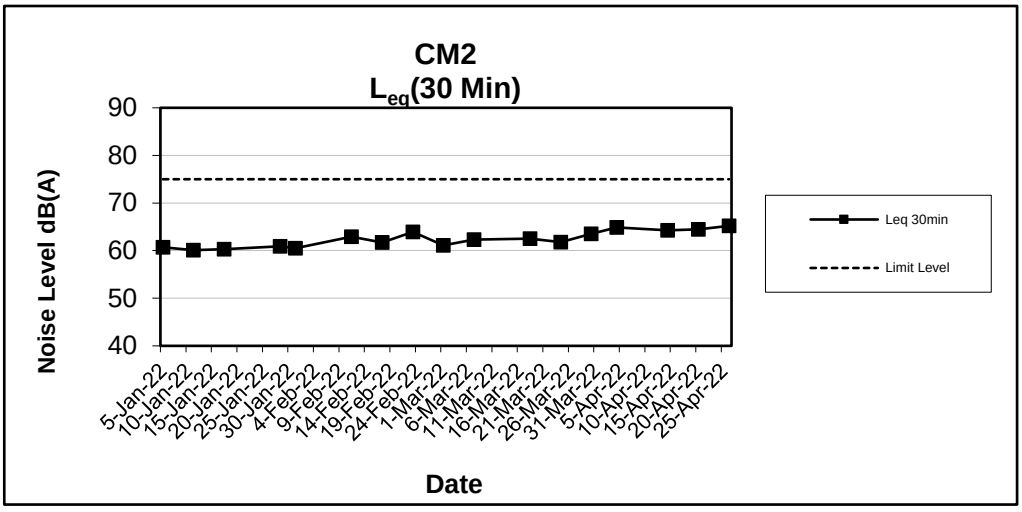
Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
4-Apr-22	8:45	65	68	57	0.4	Cloudy	75
14-Apr-22	8:43	64	67	56	0.3	Fine	75
20-Apr-22	8:49	65	67	56	0.4	Fine	75
26-Apr-22	8:45	65	68	57	0.2	Cloudy	75
	Max	65					
	Min	64					

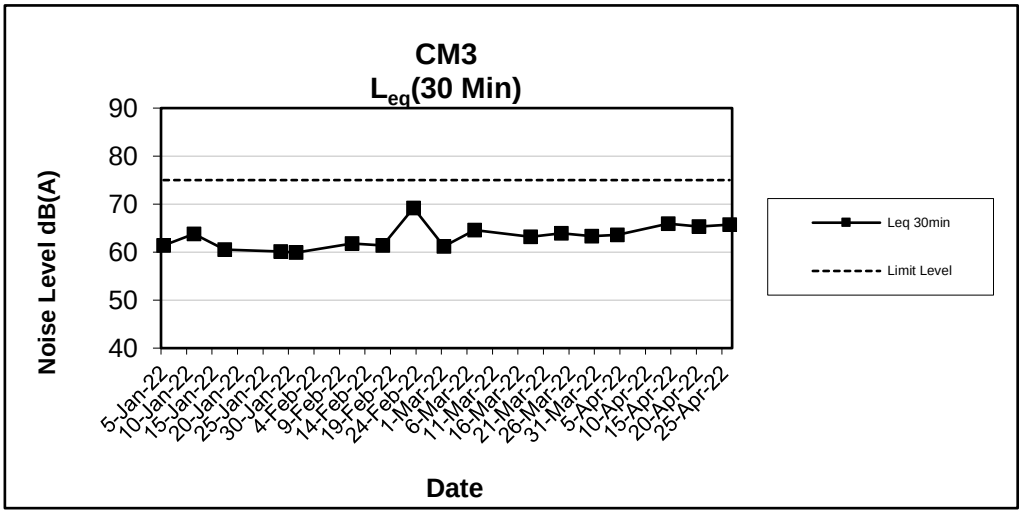
CM3 - Squatter house to the east of YLSTW

Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
4-Apr-22	11:28	64	67	56	0.4	Cloudy	75
14-Apr-22	11:19	66	69	57	0.4	Fine	75
20-Apr-22	11:25	65	69	57	0.4	Fine	75
26-Apr-22	13:03	66	70	56	0.2	Cloudy	75
	Max	66					
	Min	64					

Note:
CM1, CM2 and CM3: Free-field measurement (+3dB(A) correction has been applied).
No raining or wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.







Noise Monitoring Results

Water Quality Monitoring Results

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	2/4/2022	Mid-Flood	Fine	Moderate	8:55	0.9	M	0.45	1	0.05	123	7.17	7.18	6.63	6.64	20.43	20.43	50.9	50.9	4.40	4.39	36.5	36.5	43	45
M1	2/4/2022	Mid-Flood	Fine	Moderate	8:55	0.9	M	0.45	2			7.19		6.64		20.43		50.8		4.38		36.4		47	
M2	2/4/2022	Mid-Flood	Fine	Moderate	9:10	0.7	M	0.35	1	0.108	46	7.26	7.24	6.97	6.95	20.58	20.58	53.4	53.3	4.43	4.42	32.9	33.0	52	51
M2	2/4/2022	Mid-Flood	Fine	Moderate	9:10	0.7	M	0.35	2			7.22		6.92		20.58		53.2		4.41		33.0		49	
M3	2/4/2022	Mid-Flood	Cloudy	Smooth	8:40	0.6	M	0.3	1	0.245	85	7.21	7.22	4.08	4.08	19.90	19.91	60.2	60.9	5.35	5.42	35.4	35.8	47	49
M3	2/4/2022	Mid-Flood	Cloudy	Smooth	8:40	0.6	M	0.3	2			7.22		4.07		19.91		61.6		5.48		36.2		50	
M1	2/4/2022	Mid-Ebb	Fine	Moderate	14:59	0.8	M	0.4	1	0.085	312	7.64	7.65	6.24	6.23	19.33	19.33	60.8	60.8	4.86	4.85	30.7	30.7	33	32
M1	2/4/2022	Mid-Ebb	Fine	Moderate	14:59	0.8	M	0.4	2			7.66		6.22		19.33		60.7		4.83		30.6		31	
M2	2/4/2022	Mid-Ebb	Fine	Moderate	14:41	0.6	M	0.3	1	0.096	70	7.80	7.81	4.37	4.37	18.71	18.71	64.3	64.2	5.03	5.02	27.6	27.5	18	20
M2	2/4/2022	Mid-Ebb	Fine	Moderate	14:41	0.6	M	0.3	2			7.81		4.36		18.71		64.1		5.01		27.4		21	
M3	2/4/2022	Mid-Ebb	Cloudy	Smooth	14:41	0.6	M	0.3	1	0.256	250	7.10	7.10	5.05	5.06	20.48	20.49	50.6	50.8	4.42	4.44	39.8	40.1	48	48
M3	2/4/2022	Mid-Ebb	Cloudy	Smooth	14:41	0.6	M	0.3	2			7.09		5.06		20.49		50.9		4.45		40.4		48	

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)
2. Red and Bold: Limit Level Exceedance (For Impact Station Only)
3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.
4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.
5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.
6. Limit Level for SS: 99%-ile of baseline data or 130% of upstream control station's SS recorded on the same day.

For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.7	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	5/4/2022	Mid-Flood	Fine	Moderate	9:41	1.2	M	0.6	1	0.042	146	7.36	7.37	10.19	10.21	21.20	21.21	62.5	62.4	5.23	5.22	26.8	26.7	32	31
M1	5/4/2022	Mid-Flood	Fine	Moderate	9:41	1.2	M	0.6	2			7.38		10.22		21.21		62.3		5.21		26.7		30	
M2	5/4/2022	Mid-Flood	Fine	Moderate	9:58	0.9	M	0.45	1	0.088	74	7.38	7.38	10.04	10.06	21.30	21.32	61.6	61.4	5.15	5.12	25.4	25.4	24	23
M2	5/4/2022	Mid-Flood	Fine	Moderate	9:58	0.9	M	0.45	2			7.37		10.07		21.34		61.2		5.09		25.5		21	
M3	5/4/2022	Mid-Flood	Fine	Smooth	9:29	0.6	M	0.3	1	0.25	79	7.41	7.42	10.29	10.29	18.11	18.12	59.6	59.8	4.98	5.00	26.2	25.7	23	25
M3	5/4/2022	Mid-Flood	Fine	Smooth	9:29	0.6	M	0.3	2			7.42		10.28		18.12		59.9		5.01		25.3		26	
M1	5/4/2022	Mid-Ebb	Fine	Moderate	16:19	0.9	M	0.45	1	0.072	19	7.52	7.53	12.64	12.65	20.91	20.91	67.7	67.5	5.62	5.61	29.4	29.5	40	38
M1	5/4/2022	Mid-Ebb	Fine	Moderate	16:19	0.9	M	0.45	2			7.53		12.66		20.90		67.3		5.59		29.5		36	
M2	5/4/2022	Mid-Ebb	Fine	Moderate	16:01	0.8	M	0.4	1	0.108	334	7.60	7.66	12.86	12.88	20.82	20.82	74.3	74.0	6.16	6.10	27.1	27.2	16	17
M2	5/4/2022	Mid-Ebb	Fine	Moderate	16:01	0.8	M	0.4	2			7.71		12.89		20.82		73.7		6.04		27.2		18	
M3	5/4/2022	Mid-Ebb	Fine	Smooth	16:03	0.8	M	0.4	1	0.266	266	7.24	7.24	9.78	9.77	24.04	24.04	63.6	63.2	5.29	5.26	32.0	32.3	31	32
M3	5/4/2022	Mid-Ebb	Fine	Smooth	16:03	0.8	M	0.4	2			7.23		9.76		24.04		62.7		5.22		32.7		33	

Remark

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5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.
6. Limit Level for SS: 99%-ile of baseline data or 130% of upstream control station's SS recorded on the same day.

For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	7/4/2022	Mid-Flood	Fine	Smooth	10:15	2.4	M	1.2	1	0.302	231	7.35	7.35	7.82	7.81	23.30	23.31	67.7	67.4	5.46	5.43	32.9	32.5	32	33
M1	7/4/2022	Mid-Flood	Fine	Smooth	10:15	2.4	M	1.2	2			7.34		7.80		23.32		67.0		5.39		32.1		34	
M2	7/4/2022	Mid-Flood	Fine	Smooth	10:33	1.2	M	0.6	1	0.316	203	7.29	7.30	7.77	7.76	23.99	23.99	64.4	64.3	5.19	5.18	29.3	29.4	33	30
M2	7/4/2022	Mid-Flood	Fine	Smooth	10:33	1.2	M	0.6	2			7.30		7.75		23.99		64.1		5.16		29.5		26	
M3	7/4/2022	Mid-Flood	Fine	Moderate	9:58	1.1	M	0.55	1	0.063	123	7.39	7.38	7.53	7.55	23.72	23.73	69.7	69.3	5.65	5.60	33.9	34.0	29	30
M3	7/4/2022	Mid-Flood	Fine	Moderate	9:58	1.1	M	0.55	2			7.37		7.57		23.74		68.8		5.54		34.2		30	
M1	7/4/2022	Mid-Ebb	Fine	Smooth	17:27	2.2	M	1.1	1	0.339	270	7.59	7.58	6.97	6.97	26.67	26.67	72.9	73.1	5.92	5.94	29.7	29.9	28	27
M1	7/4/2022	Mid-Ebb	Fine	Smooth	17:27	2.2	M	1.1	2			7.57		6.96		26.66		73.3		5.96		30.0		26	
M2	7/4/2022	Mid-Ebb	Fine	Smooth	17:12	1.2	M	0.6	1	0.372	297	7.55	7.55	6.43	6.43	26.48	26.49	71.1	71.3	5.77	5.78	28.2	27.8	25	26
M2	7/4/2022	Mid-Ebb	Fine	Smooth	17:12	1.2	M	0.6	2			7.54		6.42		26.49		71.4		5.79		27.5		26	
M3	7/4/2022	Mid-Ebb	Fine	Moderate	17:23	0.9	M	0.45	1	0.087	72	7.43	7.44	8.09	8.09	23.77	23.74	66.5	66.1	5.36	5.37	31.1	31.1	33	34
M3	7/4/2022	Mid-Ebb	Fine	Moderate	17:23	0.9	M	0.45	2			7.44		8.08		23.71		65.7		5.38		31.1		34	

Remark

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4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.
5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.
6. Limit Level for SS: 99%-ile of baseline data or 130% of upstream control station's SS recorded on the same day.

For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	9/4/2022	Mid-Flood	Fine	Moderate	6:51	1.3	M	0.65	1	0.081	146	7.51	7.52	6.02	6.03	23.91	23.92	87.6	87.8	7.14	7.16	21.3	21.4	22	22
M1	9/4/2022	Mid-Flood	Fine	Moderate	6:51	1.3	M	0.65	2			7.53		6.04		23.94		87.9		7.18		21.4		21	
M2	9/4/2022	Mid-Flood	Fine	Moderate	7:13	0.9	M	0.45	1	0.106	71	7.58	7.59	6.00	6.01	24.18	24.19	89.2	89.3	7.33	7.34	21.2	21.1	24	22
M2	9/4/2022	Mid-Flood	Fine	Moderate	7:13	0.9	M	0.45	2			7.59		6.01		24.19		89.3		7.35		21.0		20	
M3	9/4/2022	Mid-Flood	Fine	Calm	6:32	0.4	M	0.2	1	0.214	89	7.15	7.16	6.23	6.24	19.54	19.55	80.1	79.7	6.31	6.28	36.0	36.1	45	44
M3	9/4/2022	Mid-Flood	Fine	Calm	6:32	0.4	M	0.2	2			7.17		6.24		19.55		79.3		6.25		36.2		43	
M1	9/4/2022	Mid-Ebb	Fine	Moderate	19:19	0.9	M	0.45	1	0.082	92	7.41	7.42	6.83	6.84	24.81	24.82	73.4	73.4	5.89	5.88	17.1	17.1	21	22
M1	9/4/2022	Mid-Ebb	Fine	Moderate	19:19	0.9	M	0.45	2			7.42		6.84		24.83		73.3		5.87		17.1		23	
M2	9/4/2022	Mid-Ebb	Fine	Moderate	19:00	0.7	M	0.35	1	0.046	70	7.38	7.36	6.91	6.92	24.36	24.36	69.9	69.4	5.64	5.69	17.8	17.8	14	15
M2	9/4/2022	Mid-Ebb	Fine	Moderate	19:00	0.7	M	0.35	2			7.34		6.93		24.37		68.9		5.73		17.8		15	
M3	9/4/2022	Mid-Ebb	Fine	Calm	19:02	0.6	M	0.3	1	0.277	253	7.28	7.29	4.93	4.92	25.71	25.71	85.5	85.7	6.80	6.82	27.5	27.8	27	27
M3	9/4/2022	Mid-Ebb	Fine	Calm	19:02	0.6	M	0.3	2			7.29		4.91		25.70		85.9		6.84		28.2		26	

Remark

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4. Limit Level for Turbidity: 99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day.
5. Action Level for SS: 95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day.
6. Limit Level for SS: 99%-ile of baseline data or 130% of upstream control station's SS recorded on the same day.

For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	12/4/2022	Mid-Flood	Cloudy	Calm	6:08	2	M	1	1	0.283	250	7.59	7.59	7.98	7.98	21.87	21.87	90.2	90.4	7.07	7.09	25.2	25.5	35	34
M1	12/4/2022	Mid-Flood	Cloudy	Calm	6:08	2	M	1	2			7.58		7.97		21.86		90.6		7.11		25.9		33	
M2	12/4/2022	Mid-Flood	Cloudy	Calm	6:23	1	M	0.5	1	0.271	274	7.65	7.65	7.60	7.61	21.99	22.00	88.9	88.5	6.90	6.87	22.5	22.6	27	28
M2	12/4/2022	Mid-Flood	Cloudy	Calm	6:23	1	M	0.5	2			7.64		7.61		22.01		88.1		6.83		22.6		28	
M3	12/4/2022	Mid-Flood	Fine	Moderate	5:58	0.9	M	0.45	1	0.045	310	7.83	7.84	7.71	7.72	25.59	25.65	91.8	91.6	7.19	7.17	27.2	27.6	33	34
M3	12/4/2022	Mid-Flood	Fine	Moderate	5:58	0.9	M	0.45	2			7.84		7.72		25.71		91.4		7.14		27.9		34	
M1	12/4/2022	Mid-Ebb	Cloudy	Calm	11:49	2.2	M	1.1	1	0.209	291	7.53	7.54	7.12	7.13	27.97	27.98	82.8	82.7	6.42	6.41	26.7	26.8	36	36
M1	12/4/2022	Mid-Ebb	Cloudy	Calm	11:49	2.2	M	1.1	2			7.54		7.14		27.98		82.5		6.40		26.9		35	
M2	12/4/2022	Mid-Ebb	Cloudy	Calm	11:30	1.2	M	0.6	1	0.236	328	7.49	7.49	6.99	7.00	27.57	27.58	78.1	78.3	6.08	6.10	29.2	28.7	29	28
M2	12/4/2022	Mid-Ebb	Cloudy	Calm	11:30	1.2	M	0.6	2			7.48		7.00		27.59		78.5		6.12		28.3		27	
M3	12/4/2022	Mid-Ebb	Fine	Moderate	11:57	1.1	M	0.55	1	0.12	71	7.41	7.40	7.19	7.30	25.75	25.57	86.2	84.7	6.83	6.65	31.6	31.4	43	42
M3	12/4/2022	Mid-Ebb	Fine	Moderate	11:57	1.1	M	0.55	2			7.39		7.40		25.39		83.1		6.47		31.2		41	

Remark

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	14/4/2022	Mid-Flood	Fine	Calm	6:56	2.2	M	1.1	1	0.303	268	7.47	7.47	6.75	6.74	22.17	22.18	68.6	68.9	5.38	5.40	27.9	27.5	40	42
M1	14/4/2022	Mid-Flood	Fine	Calm	6:56	2.2	M	1.1	2			7.46		6.73		22.18		69.1		5.42		27.1		43	
M2	14/4/2022	Mid-Flood	Fine	Calm	7:14	1.2	M	0.6	1	0.323	294	7.54	7.54	6.37	6.38	22.46	22.47	66.1	66.4	5.18	5.21	31.9	31.8	47	45
M2	14/4/2022	Mid-Flood	Fine	Calm	7:14	1.2	M	0.6	2			7.53		6.38		22.48		66.7		5.23		31.6		43	
M3	14/4/2022	Mid-Flood	Fine	Calm	6:58	0.6	M	0.3	1	0.281	96	7.57	7.57	6.49	6.48	21.83	21.84	74.1	74.3	5.78	5.80	26.7	26.1	49	47
M3	14/4/2022	Mid-Flood	Fine	Calm	6:58	0.6	M	0.3	2			7.57		6.47		21.84		74.5		5.81		25.6		45	
M1	14/4/2022	Mid-Ebb	Fine	Calm	12:56	2.2	M	1.1	1	0.278	256	7.64	7.65	5.91	5.91	28.11	28.11	73.0	73.2	5.77	5.79	34.0	33.6	58	55
M1	14/4/2022	Mid-Ebb	Fine	Calm	12:56	2.2	M	1.1	2			7.65		5.91		28.10		73.4		5.81		33.2		52	
M2	14/4/2022	Mid-Ebb	Fine	Calm	12:37	1.2	M	0.6	1	0.289	305	7.59	7.60	5.49	5.50	27.84	27.85	71.1	71.3	5.62	5.64	28.6	28.5	37	36
M2	14/4/2022	Mid-Ebb	Fine	Calm	12:37	1.2	M	0.6	2			7.60		5.50		27.85		71.5		5.65		28.4		35	
M3	14/4/2022	Mid-Ebb	Fine	Calm	12:38	0.6	M	0.3	1	0.256	272	7.69	7.70	6.22	6.23	27.21	27.22	78.6	78.8	6.13	6.14	32.6	32.8	37	38
M3	14/4/2022	Mid-Ebb	Fine	Calm	12:38	0.6	M	0.3	2			7.70		6.23		27.23		78.9		6.15		33.0		38	

Remark

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	16/4/2022	Mid-Flood	Cloudy	Moderate	7:41	1.2	M	0.6	1	0.072	186	7.77	7.78	11.59	11.62	24.06	24.07	80.7	80.7	6.35	6.35	31.7	31.8	39	41
M1	16/4/2022	Mid-Flood	Cloudy	Moderate	7:41	1.2	M	0.6	2			7.78		11.64		24.09		80.6		6.34		31.8		42	
M2	16/4/2022	Mid-Flood	Cloudy	Moderate	7:58	0.9	M	0.45	1	0.135	71	7.76	7.77	11.61	11.62	24.31	24.35	79.5	79.5	6.25	6.25	30.1	30.1	38	40
M2	16/4/2022	Mid-Flood	Cloudy	Moderate	7:58	0.9	M	0.45	2			7.78		11.63		24.39		79.4		6.24		30.0		41	
M3	16/4/2022	Mid-Flood	Cloudy	Smooth	7:45	0.6	M	0.3	1	0.303	87	7.68	7.68	10.68	10.69	21.26	21.25	77.1	76.9	6.06	6.04	34.0	34.2	65	65
M3	16/4/2022	Mid-Flood	Cloudy	Smooth	7:45	0.6	M	0.3	2			7.67		10.69		21.24		76.7		6.02		34.4		64	
M1	16/4/2022	Mid-Ebb	Cloudy	Moderate	13:56	1	M	0.5	1	0.053	341	7.78	7.79	8.88	8.86	25.08	25.09	85.7	85.7	6.68	6.68	30.4	30.4	31	32
M1	16/4/2022	Mid-Ebb	Cloudy	Moderate	13:56	1	M	0.5	2			7.79		8.84		25.09		85.6		6.67		30.5		33	
M2	16/4/2022	Mid-Ebb	Cloudy	Moderate	13:37	0.7	M	0.35	1	0.046	312	7.75	7.77	10.55	10.57	24.09	24.09	83.2	83.5	6.51	6.55	29.8	29.8	41	42
M2	16/4/2022	Mid-Ebb	Cloudy	Moderate	13:37	0.7	M	0.35	2			7.79		10.58		24.09		83.7		6.58		29.7		42	
M3	16/4/2022	Mid-Ebb	Cloudy	Smooth	13:39	0.6	M	0.3	1	0.285	262	7.47	7.47	8.96	8.97	25.66	25.67	79.9	80.2	6.23	6.26	27.0	26.7	50	51
M3	16/4/2022	Mid-Ebb	Cloudy	Smooth	13:39	0.6	M	0.3	2			7.46		8.98		25.67		80.5		6.28		26.4		51	

Remark

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	19/4/2022	Mid-Flood	Cloudy	Smooth	9:04	2.4	M	1.2	1	0.358	279	7.62	7.63	13.07	13.08	20.58	20.58	55.9	56.2	4.72	4.74	32.8	33.0	38	40
M1	19/4/2022	Mid-Flood	Cloudy	Smooth	9:04	2.4	M	1.2	2			7.63		13.08		20.57		56.4		4.76		33.3		41	
M2	19/4/2022	Mid-Flood	Cloudy	Smooth	9:23	1.4	M	0.7	1	0.35	258	7.55	7.55	12.77	12.78	20.81	20.82	57.7	58.0	4.87	4.90	29.4	29.5	46	45
M2	19/4/2022	Mid-Flood	Cloudy	Smooth	9:23	1.4	M	0.7	2			7.54		12.79		20.83		58.3		4.92		29.6		43	
M3	19/4/2022	Mid-Flood	Fine	Moderate	9:00	1.2	M	0.6	1	0.062	172	7.58	7.59	12.20	12.24	20.91	20.91	61.4	61.0	5.10	5.07	31.7	31.8	34	36
M3	19/4/2022	Mid-Flood	Fine	Moderate	9:00	1.2	M	0.6	2			7.59		12.28		20.92		60.6		5.03		31.8		37	
M1	19/4/2022	Mid-Ebb	Cloudy	Smooth	15:47	2.2	M	1.1	1	0.375	235	7.65	7.65	10.37	10.38	22.31	22.32	67.1	67.3	5.63	5.65	25.6	26.0	34	35
M1	19/4/2022	Mid-Ebb	Cloudy	Smooth	15:47	2.2	M	1.1	2			7.64		10.38		22.32		67.5		5.67		26.5		36	
M2	19/4/2022	Mid-Ebb	Cloudy	Smooth	15:24	1.2	M	0.6	1	0.388	320	7.70	7.71	10.67	10.66	22.68	22.68	70.4	70.3	5.90	5.89	29.0	28.6	34	32
M2	19/4/2022	Mid-Ebb	Cloudy	Smooth	15:24	1.2	M	0.6	2			7.71		10.65		22.67		70.1		5.87		28.3		30	
M3	19/4/2022	Mid-Ebb	Fine	Moderate	15:30	1	M	0.5	1	0.085	70	7.57	7.57	11.96	11.94	21.00	20.86	64.6	64.5	5.32	5.34	30.4	30.4	34	33
M3	19/4/2022	Mid-Ebb	Fine	Moderate	15:30	1	M	0.5	2			7.56		11.92		20.73		64.3		5.35		30.3		32	

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	21/4/2022	Mid-Flood	Fine	Moderate	9:53	0.9	M	0.45	1	0.066	88	7.85	7.83	13.44	13.46	23.79	23.75	72.4	72.5	5.47	5.48	22.2	22.2	30	31
M1	21/4/2022	Mid-Flood	Fine	Moderate	9:53	0.9	M	0.45	2			7.81		13.47		23.71		72.6		5.49		22.1		31	
M2	21/4/2022	Mid-Flood	Fine	Moderate	10:11	1.1	M	0.55	1	0.073	91	7.89	7.89	13.57	13.57	23.79	23.79	73.6	73.5	5.81	5.82	22.5	22.6	28	29
M2	21/4/2022	Mid-Flood	Fine	Moderate	10:11	1.1	M	0.55	2			7.89		13.56		23.78		73.4		5.82		22.6		30	
M3	21/4/2022	Mid-Flood	Fine	Calm	9:50	0.8	M	0.4	1	0.283	81	7.31	7.32	6.09	6.10	22.13	22.14	56.6	56.5	4.63	4.62	41.1	40.9	50	51
M3	21/4/2022	Mid-Flood	Fine	Calm	9:50	0.8	M	0.4	2			7.32		6.11		22.15		56.3		4.61		40.8		51	
M1	21/4/2022	Mid-Ebb	Fine	Moderate	17:13	0.6	M	0.3	1	0.064	72	7.41	7.42	10.46	10.45	23.56	23.55	58.1	58.2	4.91	4.92	27.1	27.1	15	16
M1	21/4/2022	Mid-Ebb	Fine	Moderate	17:13	0.6	M	0.3	2			7.42		10.44		23.54		58.2		4.93		27.1		16	
M2	21/4/2022	Mid-Ebb	Fine	Moderate	16:54	0.9	M	0.45	1	0.047	178	7.51	7.53	8.07	8.07	23.01	23.01	49.8	49.8	4.08	4.08	26.3	26.3	14	15
M2	21/4/2022	Mid-Ebb	Fine	Moderate	16:54	0.9	M	0.45	2			7.54		8.06		23.01		49.7		4.07		26.3		15	
M3	21/4/2022	Mid-Ebb	Fine	Calm	16:56	0.4	M	0.2	1	0.308	263	7.20	7.20	7.23	7.23	26.97	26.97	61.3	61.5	5.01	5.03	38.2	38.3	46	45
M3	21/4/2022	Mid-Ebb	Fine	Calm	16:56	0.4	M	0.2	2			7.20		7.22		26.96		61.7		5.05		38.4		43	

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	23/4/2022	Mid-Flood	Fine	Smooth	11:15	1	M	0.5	1	0.091	207	7.33	7.33	6.06	6.06	25.71	25.72	53.3	53.3	4.20	4.20	28.4	28.4	30	31
M1	23/4/2022	Mid-Flood	Fine	Smooth	11:15	1	M	0.5	2			7.33		6.06		25.72		53.2		4.20		28.4		31	
M2	23/4/2022	Mid-Flood	Fine	Smooth	11:33	1.1	M	0.55	1	0.126	210	7.42	7.43	6.09	6.09	26.19	26.19	71.7	71.6	5.60	5.59	21.6	21.6	27	28
M2	23/4/2022	Mid-Flood	Fine	Smooth	11:33	1.1	M	0.55	2			7.43		6.09		26.19		71.4		5.58		21.7		28	
M3	23/4/2022	Mid-Flood	Fine	Calm	11:10	0.8	M	0.4	1	0.262	87	7.41	7.42	6.64	6.65	26.28	26.29	65.7	65.4	5.14	5.12	27.3	26.9	33	33
M3	23/4/2022	Mid-Flood	Fine	Calm	11:10	0.8	M	0.4	2			7.42		6.66		26.29		65.1		5.09		26.6		33	
M1	23/4/2022	Mid-Ebb	Fine	Smooth	19:13	0.8	M	0.4	1	0.101	206	7.54	7.54	5.50	5.50	26.72	26.73	86.8	86.7	6.76	6.75	31.0	31.1	32	35
M1	23/4/2022	Mid-Ebb	Fine	Smooth	19:13	0.8	M	0.4	2			7.54		5.50		26.74		86.5		6.74		31.1		37	
M2	23/4/2022	Mid-Ebb	Fine	Smooth	18:53	0.9	M	0.45	1	0.138	107	7.52	7.52	5.90	5.90	26.45	26.45	73.2	73.1	5.73	5.72	28.9	29.0	39	39
M2	23/4/2022	Mid-Ebb	Fine	Smooth	18:53	0.9	M	0.45	2			7.52		5.90		26.46		73.0		5.71		29.0		38	
M3	23/4/2022	Mid-Ebb	Fine	Calm	18:55	0.6	M	0.3	1	0.319	254	7.35	7.35	5.86	5.86	27.87	27.87	59.8	59.5	4.69	4.66	33.2	33.7	42	42
M3	23/4/2022	Mid-Ebb	Fine	Calm	18:55	0.6	M	0.3	2			7.34		5.85		27.86		59.2		4.63		34.1		42	

Remark

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	26/4/2022	Mid-Flood	Fine	Moderate	5:44	1.2	M	0.6	1	0.063	196	7.53	7.53	5.71	5.71	28.10	28.18	78.0	77.8	5.91	5.88	30.7	30.6	32	33
M1	26/4/2022	Mid-Flood	Fine	Moderate	5:44	1.2	M	0.6	2			7.52		5.70		28.26		77.5		5.85		30.4		33	
M2	26/4/2022	Mid-Flood	Fine	Moderate	6:02	0.9	M	0.45	1	0.106	72	7.54	7.55	5.92	5.93	28.58	28.59	77.2	77.3	5.84	5.86	28.1	28.1	42	41
M2	26/4/2022	Mid-Flood	Fine	Moderate	6:02	0.9	M	0.45	2			7.55		5.93		28.59		77.3		5.87		28.1		39	
M3	26/4/2022	Mid-Flood	Cloudy	Calm	5:36	0.2	M	0.1	1	0.262	77	7.41	7.42	5.34	5.35	24.03	24.03	79.5	79.2	6.03	6.01	36.1	36.4	44	43
M3	26/4/2022	Mid-Flood	Cloudy	Calm	5:36	0.2	M	0.1	2			7.42		5.35		24.03		78.8		5.98		36.6		42	
M1	26/4/2022	Mid-Ebb	Fine	Moderate	11:53	1	M	0.5	1	0.121	54	7.84	7.83	5.30	5.29	28.40	28.40	83.6	83.7	6.31	6.35	27.8	27.8	32	32
M1	26/4/2022	Mid-Ebb	Fine	Moderate	11:53	1	M	0.5	2			7.81		5.27		28.41		83.8		6.38		27.7		32	
M2	26/4/2022	Mid-Ebb	Fine	Moderate	11:33	0.8	M	0.4	1	0.097	78	7.72	7.73	5.41	5.42	27.23	27.29	79.5	79.3	6.02	5.96	26.1	26.2	34	34
M2	26/4/2022	Mid-Ebb	Fine	Moderate	11:33	0.8	M	0.4	2			7.73		5.43		27.34		79.1		5.89		26.2		33	
M3	26/4/2022	Mid-Ebb	Cloudy	Calm	11:27	0.6	M	0.3	1	0.226	248	7.34	7.34	4.73	4.72	28.43	28.44	83.3	83.5	6.28	6.30	38.2	38.4	41	43
M3	26/4/2022	Mid-Ebb	Cloudy	Calm	11:27	0.6	M	0.3	2			7.33		4.71		28.45		83.7		6.31		38.5		44	

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	28/4/2022	Mid-Flood	Fine	Calm	6:56	2.2	M	1.1	1	0.282	255	7.73	7.73	7.22	7.23	25.87	25.87	66.5	66.8	4.95	4.98	25.0	25.2	24	24
M1	28/4/2022	Mid-Flood	Fine	Calm	6:56	2.2	M	1.1	2			7.72		7.24		25.87		67.1		5.01		25.4		24	
M2	28/4/2022	Mid-Flood	Fine	Calm	7:11	1.2	M	0.6	1	0.263	277	7.60	7.60	7.17	7.17	26.14	26.15	61.2	61.4	4.56	4.58	27.0	27.3	27	27
M2	28/4/2022	Mid-Flood	Fine	Calm	7:11	1.2	M	0.6	2			7.59		7.16		26.16		61.6		4.59		27.6		27	
M3	28/4/2022	Mid-Flood	Fine	Moderate	6:48	1.2	M	0.6	1	0.057	112	7.61	7.62	7.14	7.15	28.56	28.59	62.3	62.4	4.65	4.67	27.0	27.0	25	26
M3	28/4/2022	Mid-Flood	Fine	Moderate	6:48	1.2	M	0.6	2			7.62		7.15		28.61		62.5		4.69		27.0		27	
M1	28/4/2022	Mid-Ebb	Fine	Calm	13:01	2	M	1	1	0.237	214	7.48	7.48	6.22	6.23	29.97	29.98	70.6	71.0	5.26	5.29	32.6	32.0	34	35
M1	28/4/2022	Mid-Ebb	Fine	Calm	13:01	2	M	1	2			7.47		6.24		29.99		71.4		5.32		31.4		36	
M2	28/4/2022	Mid-Ebb	Fine	Calm	12:43	1	M	0.5	1	0.251	240	7.32	7.33	6.31	6.31	29.85	29.86	69.3	69.0	5.16	5.14	30.4	29.8	26	27
M2	28/4/2022	Mid-Ebb	Fine	Calm	12:43	1	M	0.5	2			7.33		6.30		29.86		68.7		5.11		29.3		28	
M3	28/4/2022	Mid-Ebb	Fine	Moderate	12:45	1.1	M	0.55	1	0.103	76	7.56	7.57	7.08	7.09	28.85	28.88	60.8	60.6	4.51	4.49	28.4	28.4	37	37
M3	28/4/2022	Mid-Ebb	Fine	Moderate	12:45	1.1	M	0.55	2			7.58		7.09		28.91		60.3		4.47		28.3		37	

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For Flood Tide

Monitoring Location	DO		NTU		SS	
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M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Water Quality Monitoring Results

Monitoring Location	Date	Tide Mode	Weather	Sea Condition	Time	Water Depth (m)	Monitoring Level	Monitoring Level (m)	Replicate	In-situ Measurement														Laboratory Analysis	
										Current Speed (m/s)	Current Direction (°)	pH		Salinity (ppt)		Temperature (degree C)		DO Saturation (%)		DO (mg/L)		Turbidity (NTU)		Total Suspended Solids (mg/L)	
										Value	Value	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	30/4/2022	Mid-Flood	Fine	Moderate	7:39	0.9	M	0.45	1	0.092	185	7.40	7.39	7.48	7.46	29.23	29.22	61.7	61.3	4.54	4.53	29.6	29.6	36	36
M1	30/4/2022	Mid-Flood	Fine	Moderate	7:39	0.9	M	0.45	2			7.38		7.44		29.21		60.8		4.51		29.6		35	
M2	30/4/2022	Mid-Flood	Fine	Moderate	7:54	0.8	M	0.4	1	0.053	91	7.50	7.52	6.91	6.93	29.81	29.82	70.1	70.2	5.18	5.19	30.3	30.3	36	37
M2	30/4/2022	Mid-Flood	Fine	Moderate	7:54	0.8	M	0.4	2			7.54		6.94		29.82		70.3		5.19		30.3		37	
M3	30/4/2022	Mid-Flood	Fine	Calm	7:33	0.6	M	0.3	1	0.251	92	7.22	7.23	7.18	7.18	26.03	26.04	62.9	62.6	4.68	4.65	31.9	31.8	45	46
M3	30/4/2022	Mid-Flood	Fine	Calm	7:33	0.6	M	0.3	2			7.24		7.18		26.04		62.2		4.62		31.6		46	
M1	30/4/2022	Mid-Ebb	Fine	Moderate	13:59	0.7	M	0.35	1	0.057	31	8.00	7.96	6.12	6.13	27.44	27.43	72.4	72.5	5.41	5.42	27.4	27.4	32	34
M1	30/4/2022	Mid-Ebb	Fine	Moderate	13:59	0.7	M	0.35	2			7.92		6.14		27.41		72.5		5.43		27.4		36	
M2	30/4/2022	Mid-Ebb	Fine	Moderate	13:41	0.6	M	0.3	1	0.042	54	7.61	7.62	7.15	7.20	28.80	28.80	67.5	67.0	5.01	4.97	29.1	29.0	32	34
M2	30/4/2022	Mid-Ebb	Fine	Moderate	13:41	0.6	M	0.3	2			7.62		7.24		28.79		66.4		4.92		28.9		36	
M3	30/4/2022	Mid-Ebb	Fine	Calm	13:38	0.6	M	0.3	1	0.266	274	7.35	7.36	6.13	6.12	30.62	30.63	67.2	67.0	4.97	4.96	35.1	35.3	35	35
M3	30/4/2022	Mid-Ebb	Fine	Calm	13:38	0.6	M	0.3	2			7.37		6.11		30.63		66.8		4.94		35.5		35	

Remark

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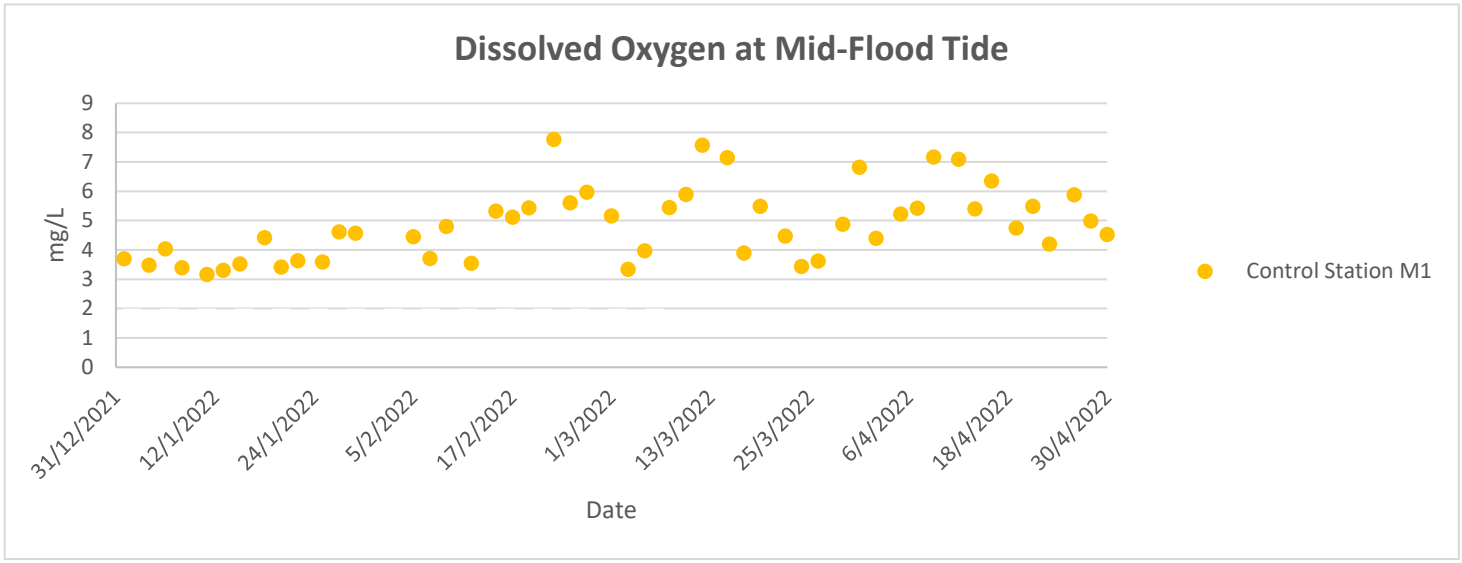
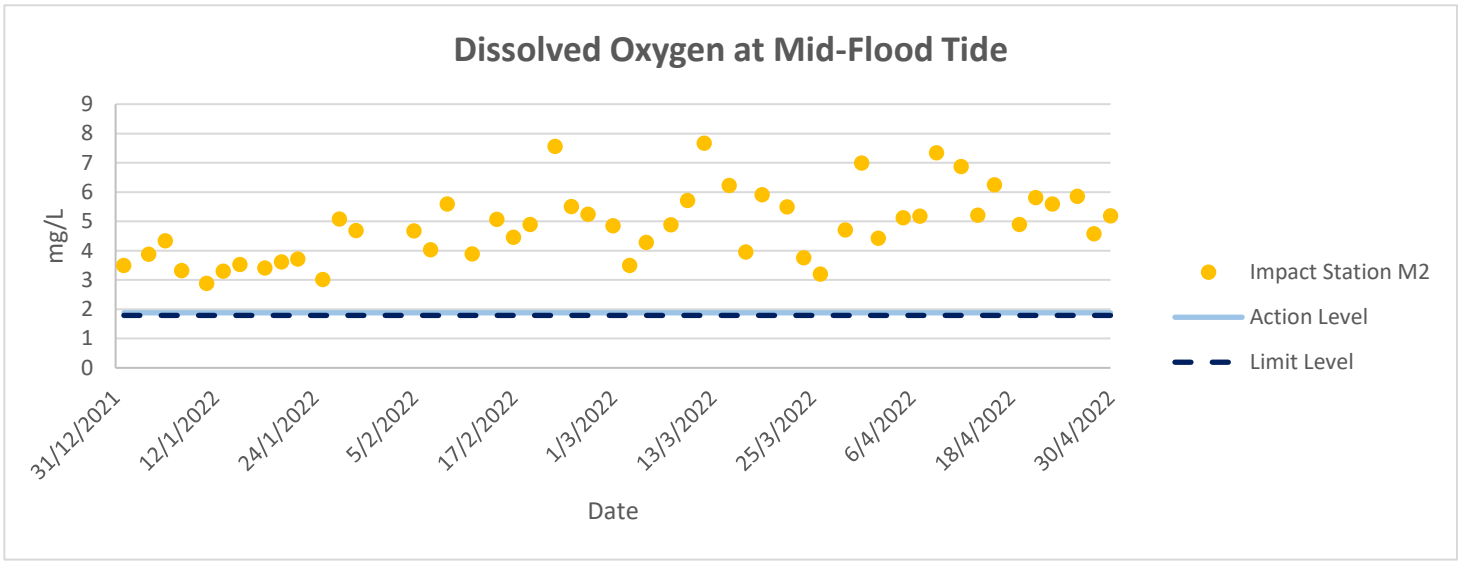
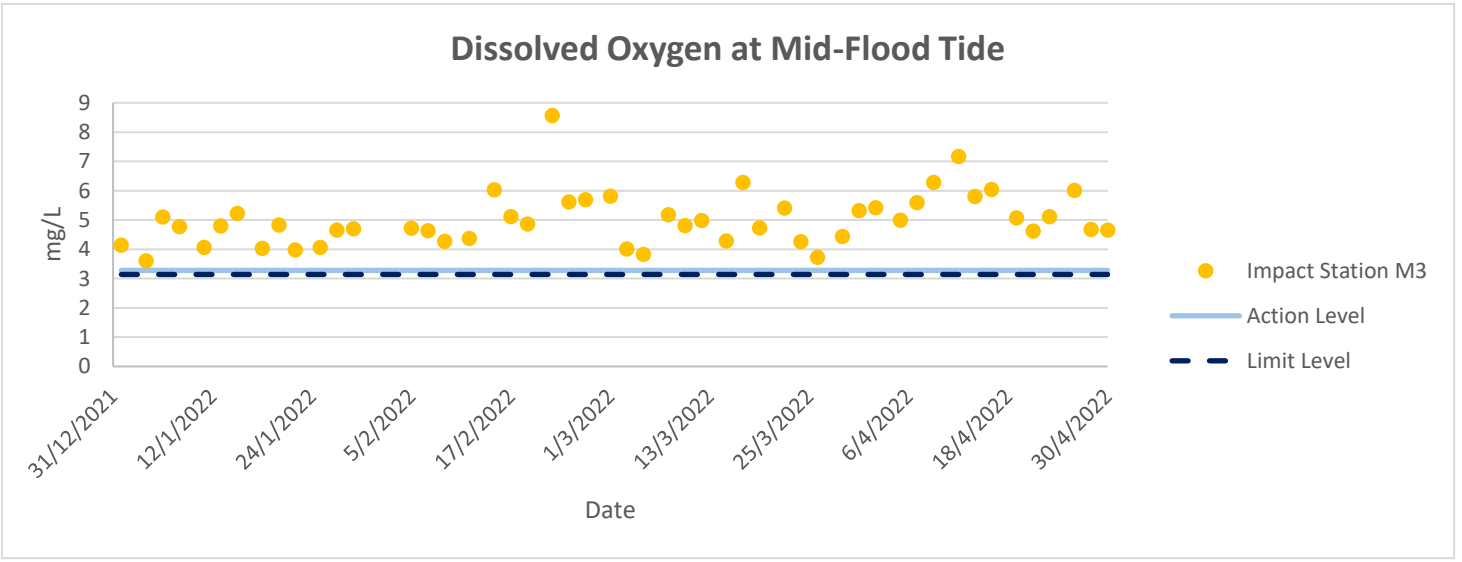
For Ebb Tide

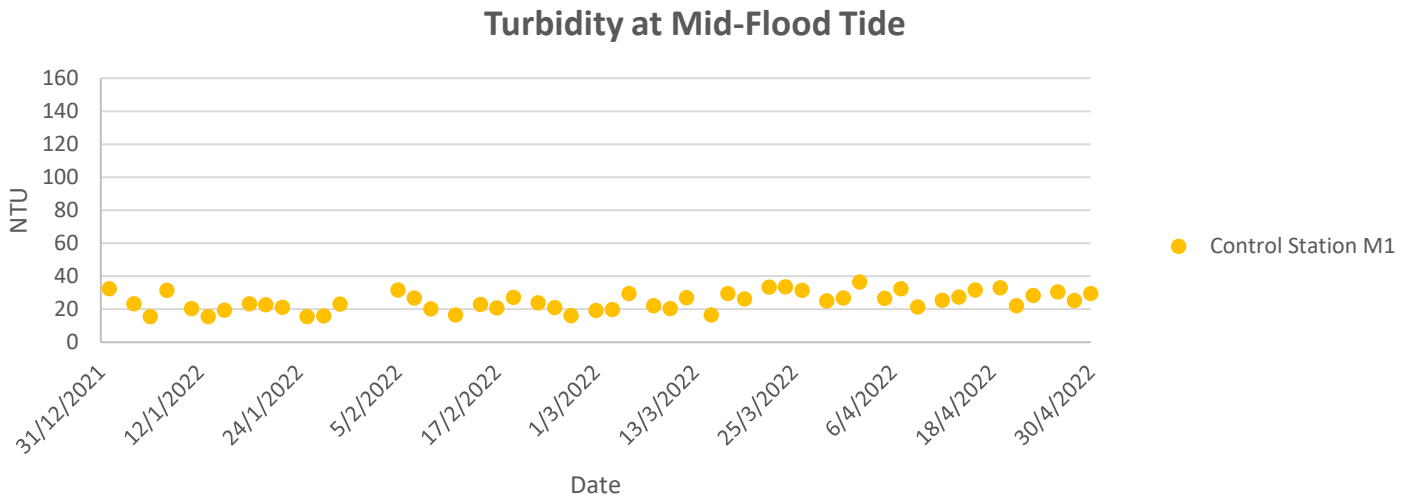
Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

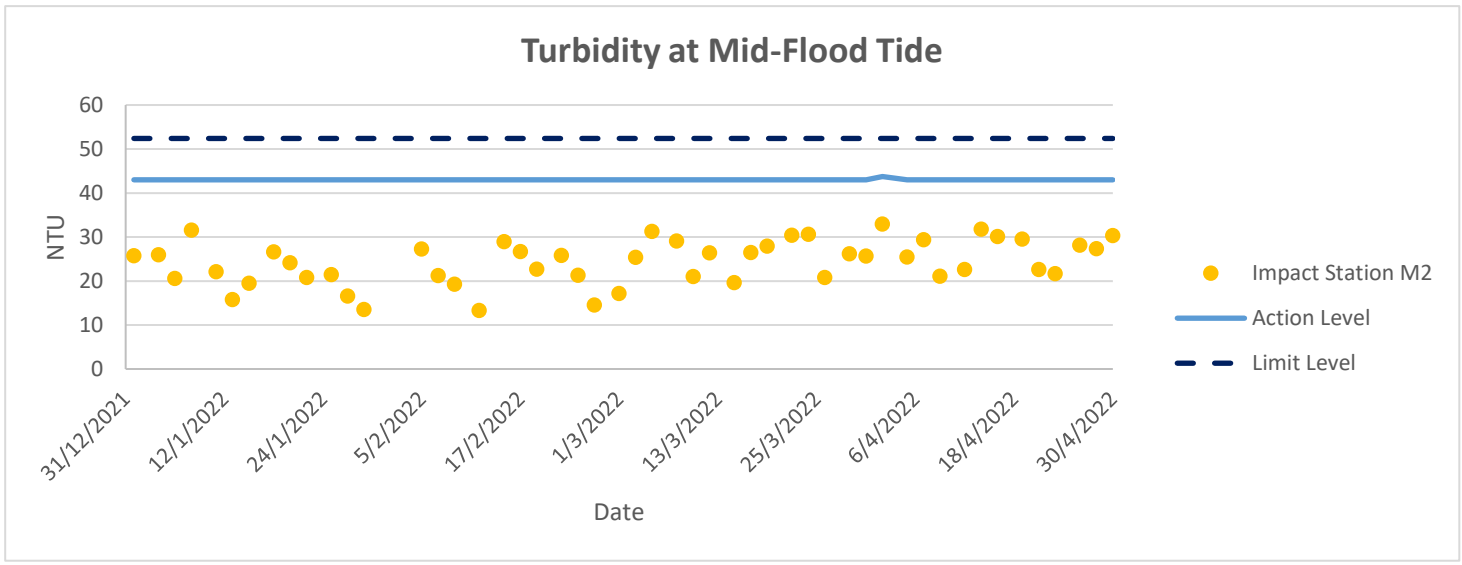


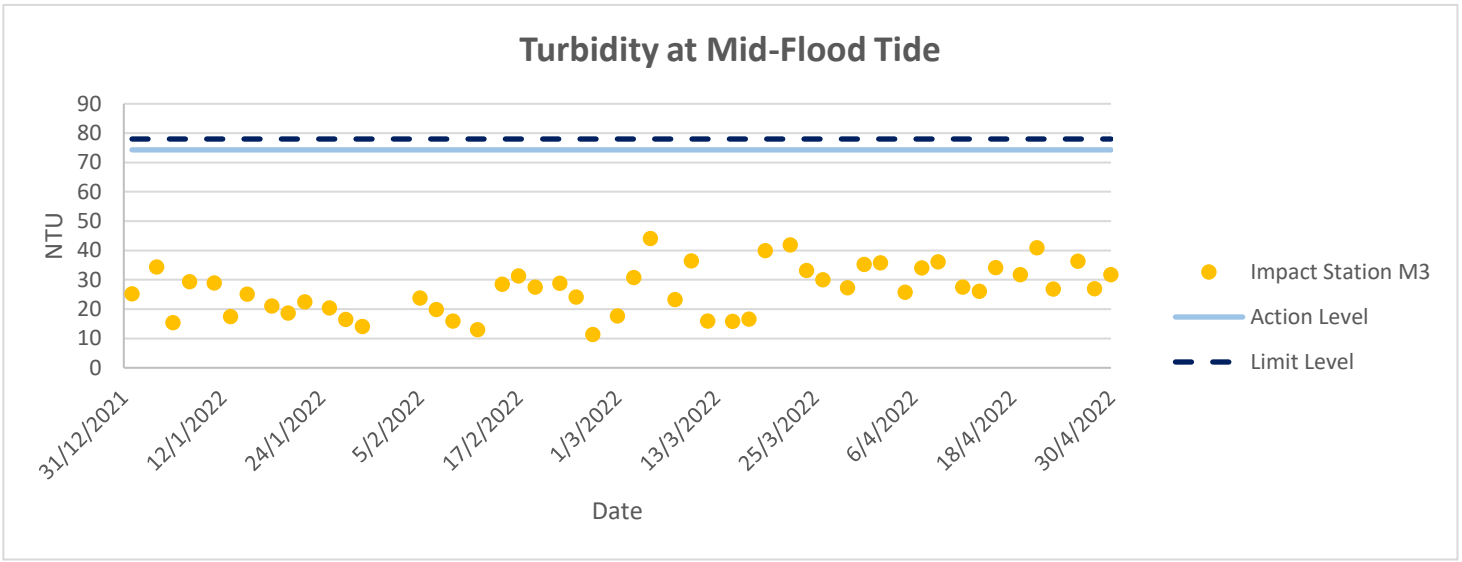




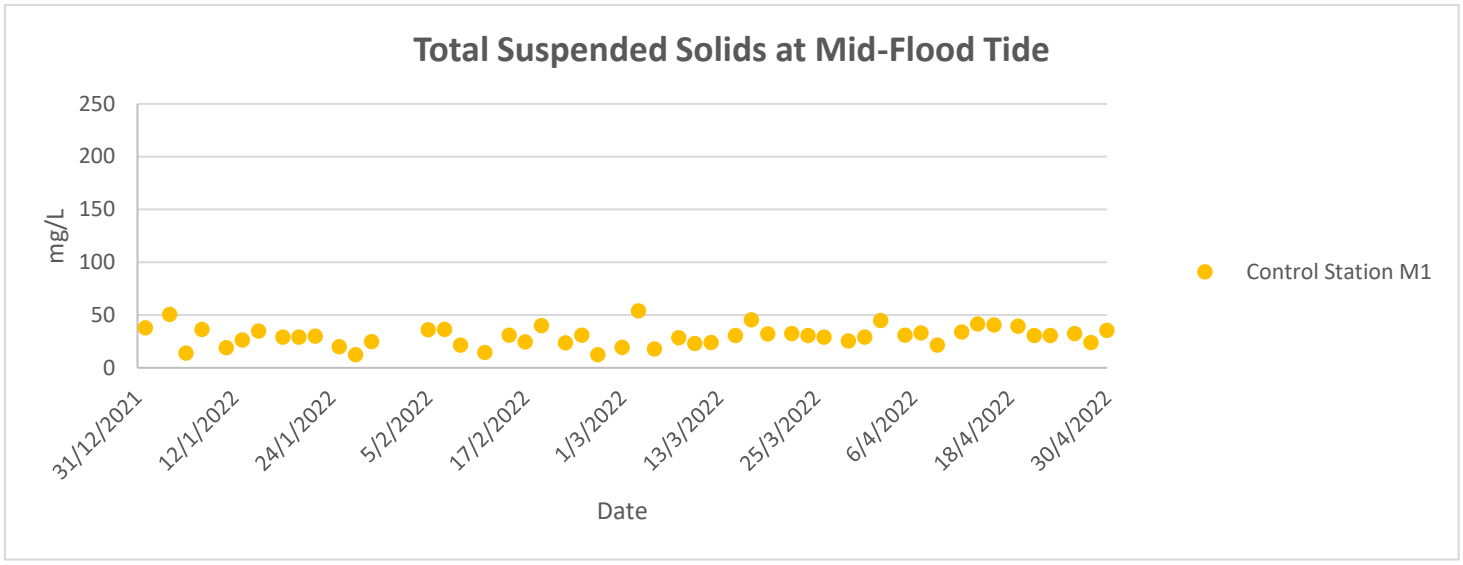
Water Quality Monitoring Results

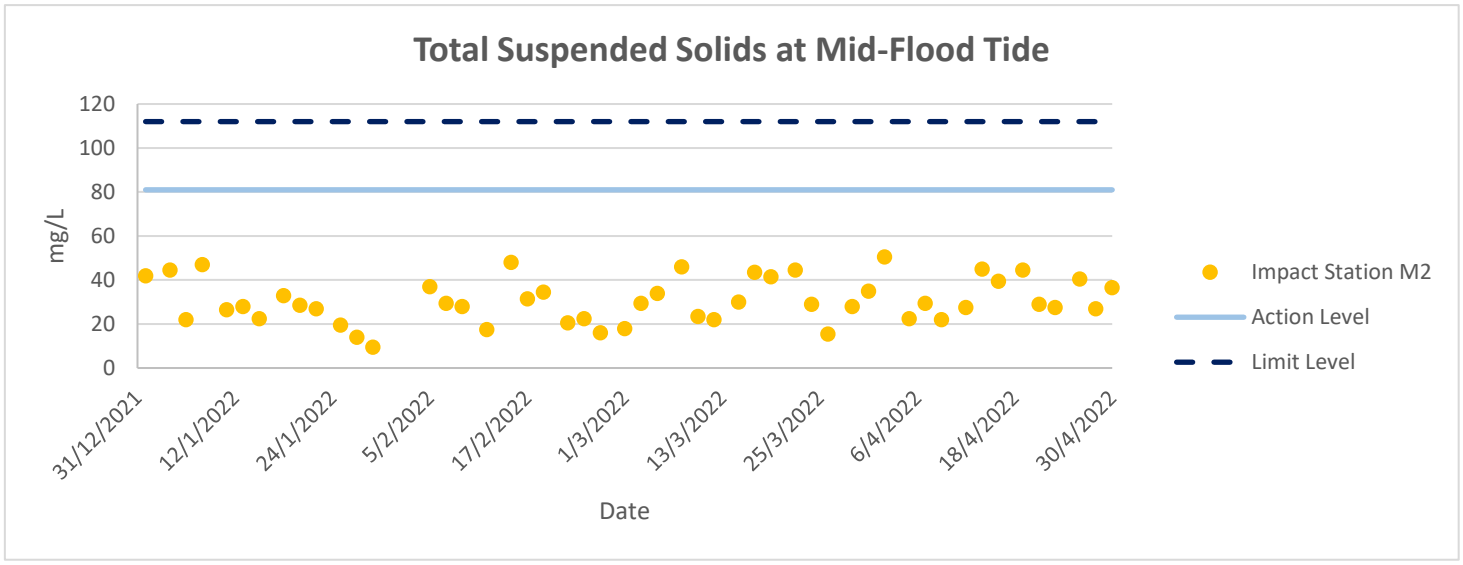


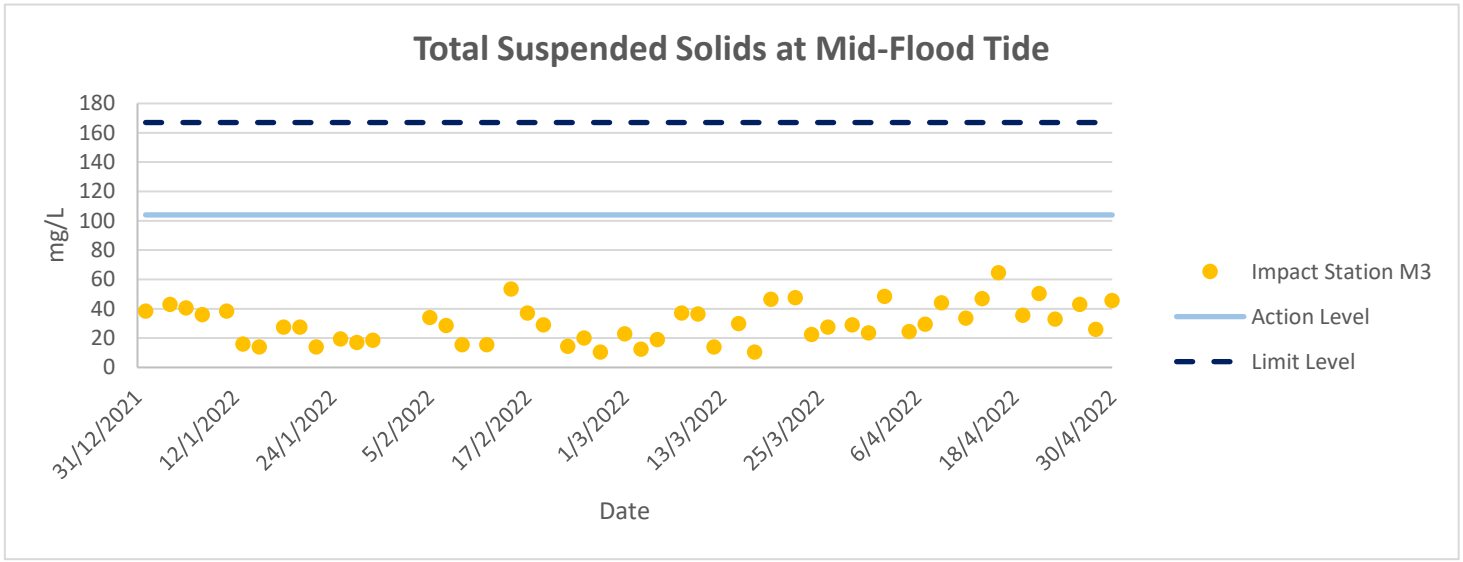




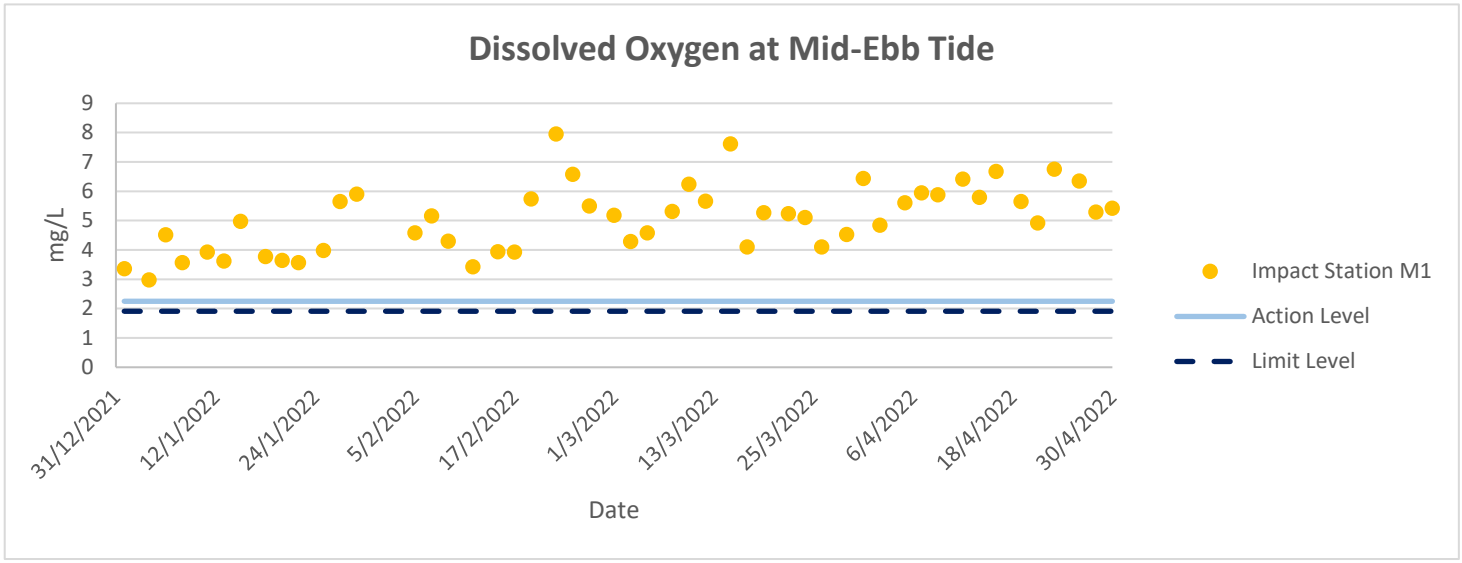
Water Quality Monitoring Results

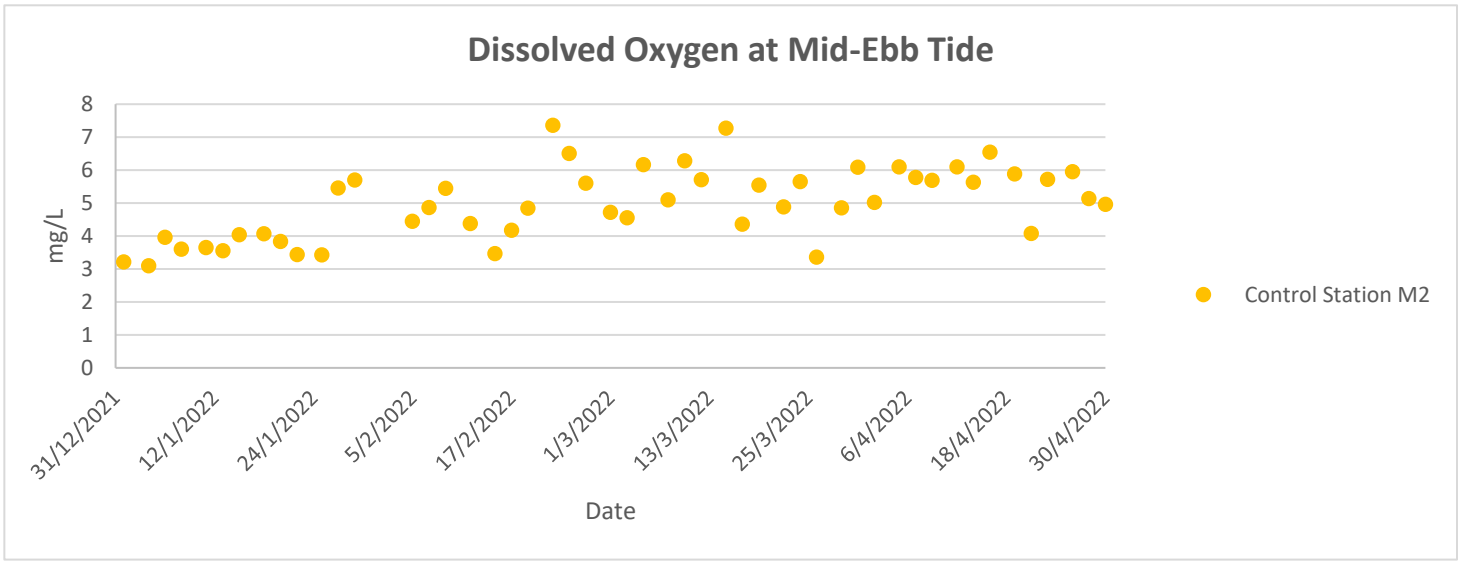


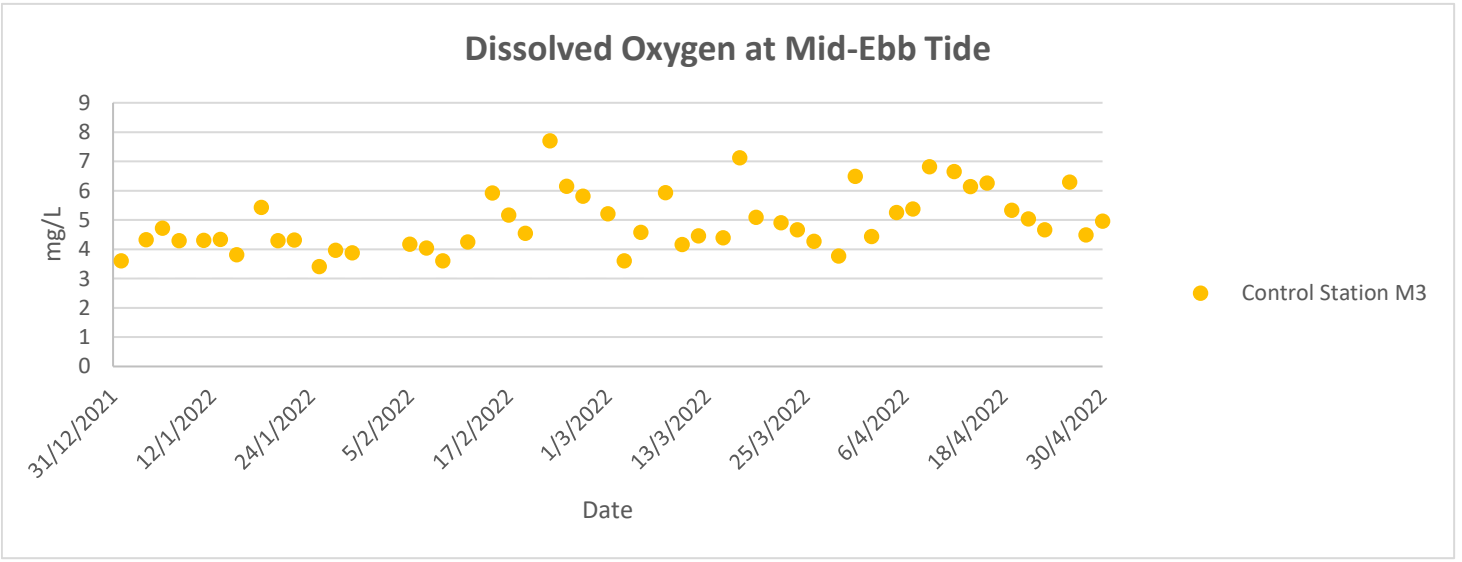




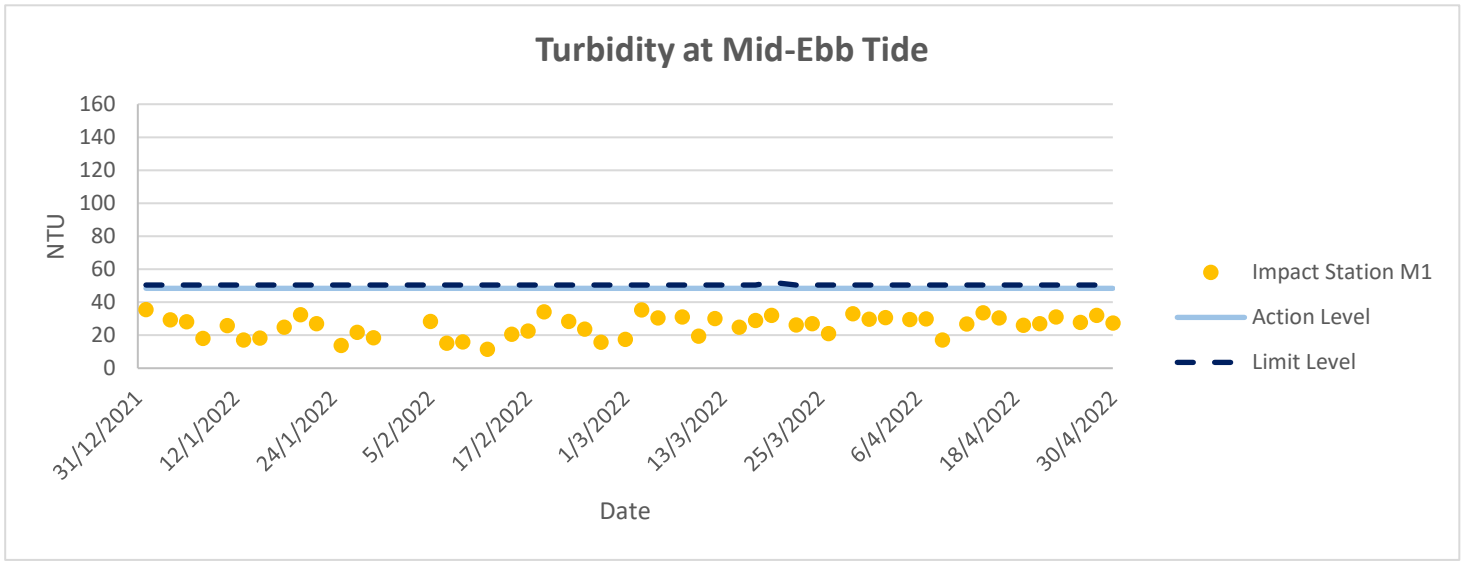
Water Quality Monitoring Results

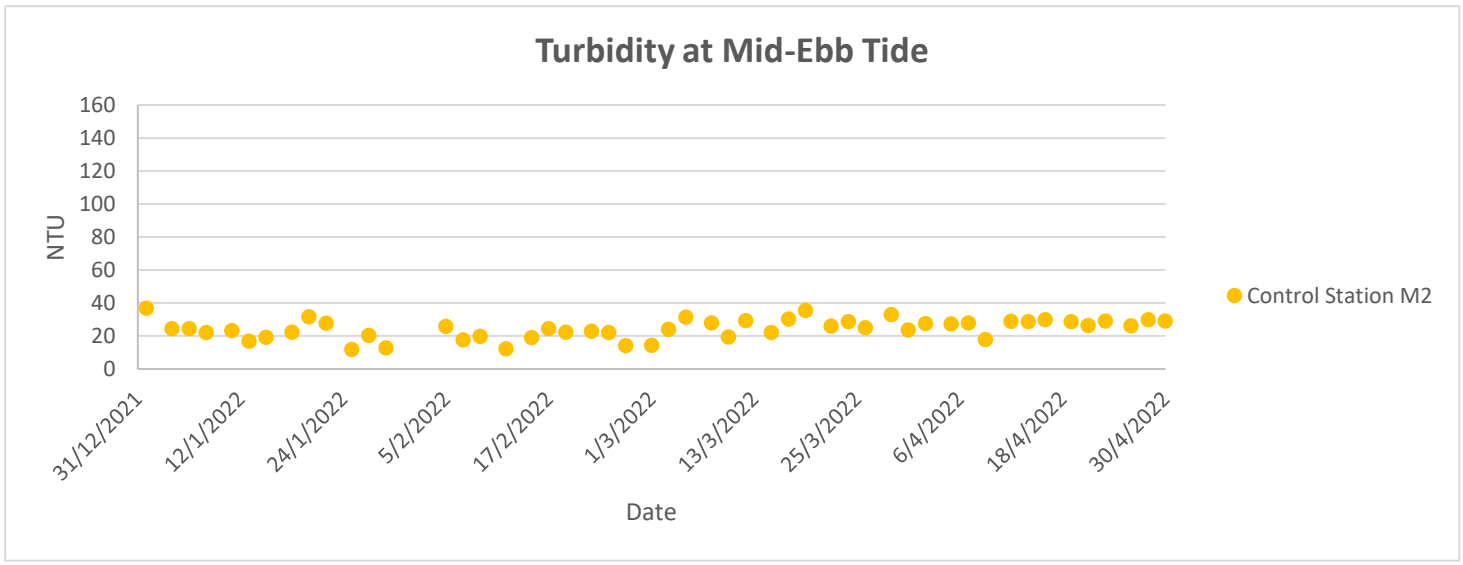


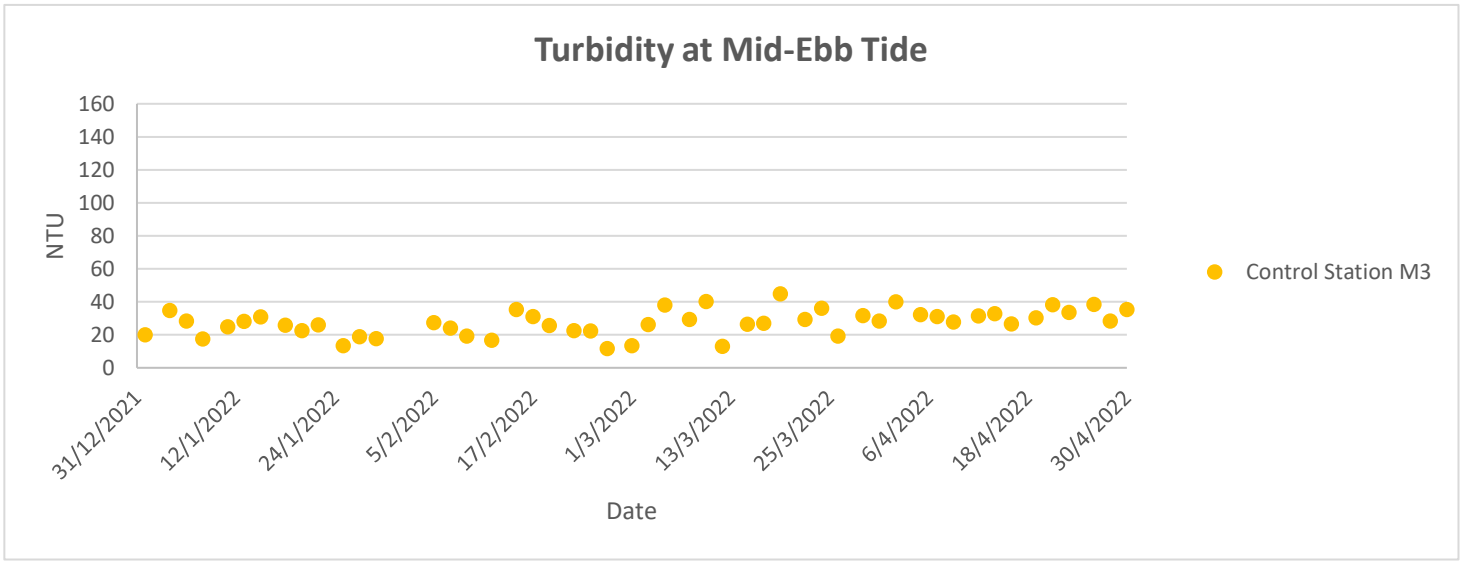




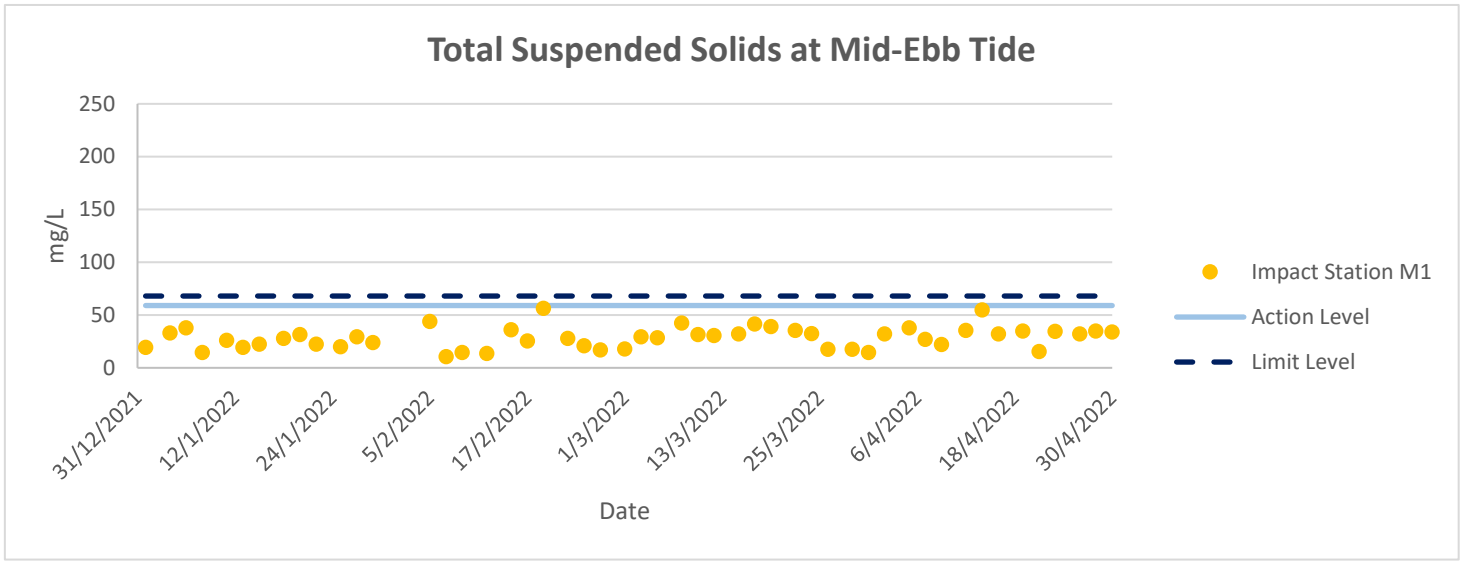
Water Quality Monitoring Results

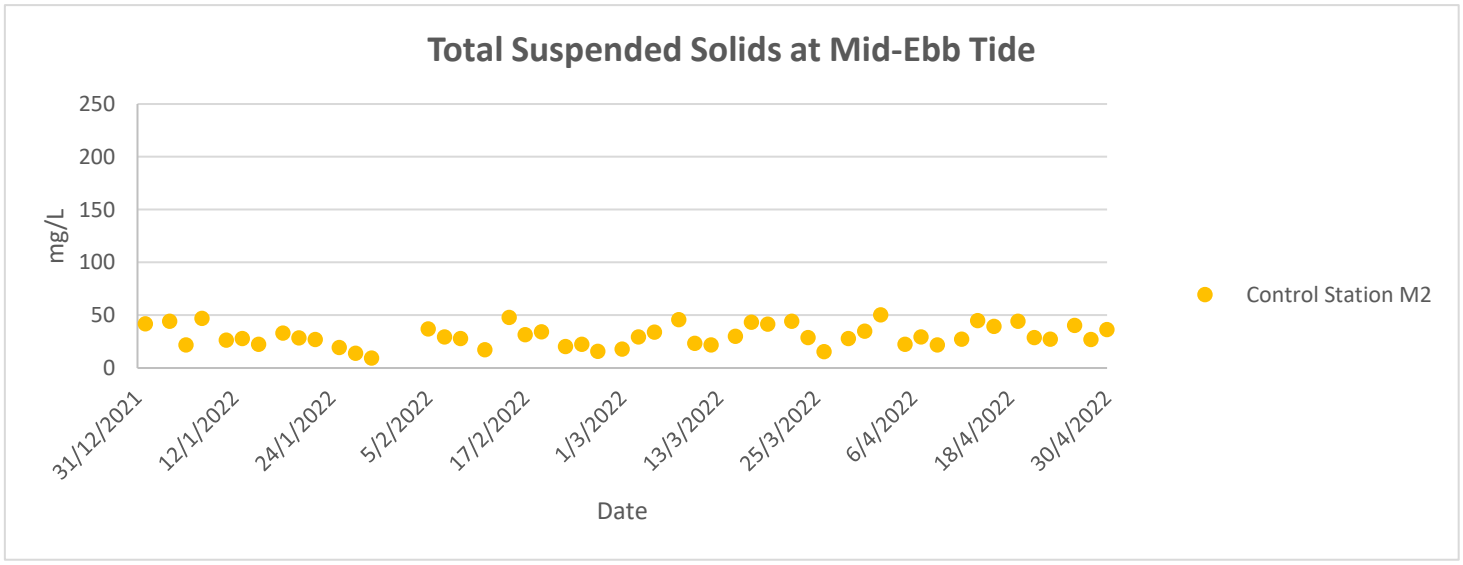


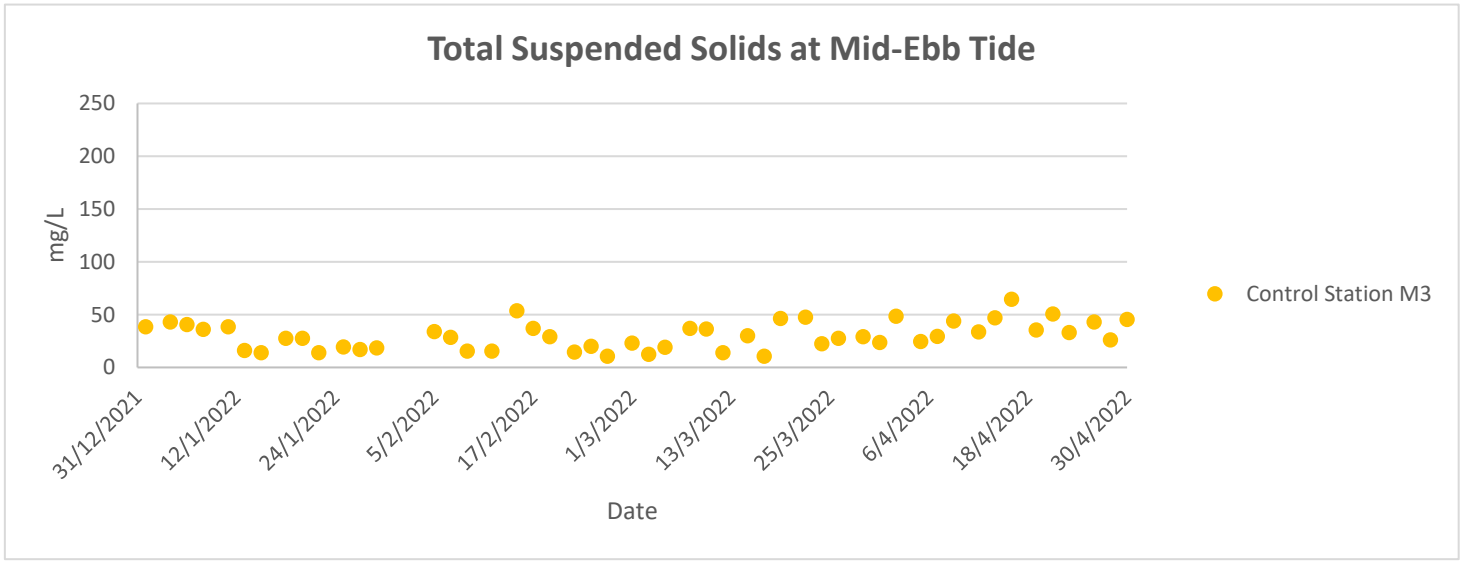




Water Quality Monitoring Results







Water Quality Monitoring Results

Ecology Monitoring Results

Appendix F.1 Supplemental Discussion

F.1.1 Ecological Monitoring of Birds

F.1.1.1 Abundance

F.1.1.1.1 All Avifauna Species

Point Count

Among the different species recorded, the Chinese Pond Heron *Ardeola bacchus* was noted with the highest abundance (33 individuals). On the other hand, species with the least abundance (1 individual each) were the Asian Koel *Eudynamys scolopaceus,* Black-collared Straling *Gracupica nigricollis,* Common Kingfisher *Alcedo atthis*, Scaly-breasted Munia *Lonchura punctulata*, and White-throated Kingfisher *Halcyon smyrnensis.*

Transect Walk

Among the different species recorded, the Crested Myna *Acridotheres cristatellus* was noted with the highest abundance (8 individuals); while the species Eurasian Collared Dove *Streptopelia decaocto,* Oriental Magpie Robin *Copsychus saularis*, and Spotted Dove *Spilopelia chinensis* had the least abundance (1 individual each).

F.1.1.1.2 Avifauna Species of Conservation Importance

Point Count

Among the different species recorded, the Chinese Pond Heron was recorded with the highest abundance (33 individuals). On the other hand, the Black Kite *Milvus migrans*, Black-faced Spoonbill *Platalea minor*, and Greater Coucal *Centropus sinensis* had the lowest abundance (1 individual each).

Transect Walk

Among the different species recorded, the Great Egret *Ardea alba* was noted with the highest abundance (7 ind.) while the Chinese Pond Heron and Little Egret *Egretta garzetta* had the lowest recorded abundance (1 individual each).

Appendix F.2 Ecological Bird Monitoring Result (20 and 22 April 2022)

Date (dd/mm/yyyy)	Daytime/Night time	Season	Area	Transect/Point Count	Point Count (Location)/Transect Impact	Habitat	Common Name	Scientific Name	Abundance	Distribution in Hong Kong[2]	Principal Status[3]	Level of Concern[4]	Protection Status in China[5]	China Red Data Book [6]	Red List of China's Vertebrates [10]	IUCN Red List [7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	5	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Barn Swallow	*Hirundo rustica*	4	Abundant	PM,SV	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Eastern Yellow Wagtail	*Motacilla tschutschensis*	2	Common	PM,WV	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Yellow-bellied Prinia	*Prinia flaviventris*	2	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Chinese Bulbul	*Pycnonotus sinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Great Egret	*Ardea alba*	5	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	5	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Greater Coucal	*Centropus sinensis*	1	Common	R	-	Class II	Vulnerable	LC	LC	Y	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Pied Kingfisher	*Ceryle rudis*	4	Uncommon	R	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Black-collared Starling	*Gracupica nigricollis*	1	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Chinese Bulbul	*Pycnonotus sinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	3	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Black Kite	*Milvus migrans*	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Chinese Bulbul	*Pycnonotus sinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW3	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N

20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW3	Pond-FLW	Little Ringed Plover	*Charadrius dubius*	2	Common	WV,PM	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW3	Pond-FLW	Yellow-browed Warbler	*Phylloscopus inornatus*	2	Common	WV,Sp	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Oriental Magpie Robin	*Copsychus saularis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Scaly-breasted Munia	*Lonchura punctulata*	1	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Chinese Bulbul	*Pycnonotus sinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Great Egret	*Ardea alba*	3	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	5	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Little Grebe	*Tachybaptus ruficollis*	4	Common	R	LC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Plain Prinia	*Prinia inornata*	1	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Eurasian Wigeon	*Anas penelope*	3	Common	WV	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Great Egret	*Ardea alba*	3	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	6	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Little Ringed Plover	*Charadrius dubius*	2	Common	WV,PM	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	White Wagtail	*Motacilla alba*	4	Common	PM,WV	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Great Egret	*Ardea alba*	2	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	7	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y

20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Barn Swallow	*Hirundo rustica*	3	Abundant	PM,SV	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Eastern Yellow Wagtail	*Motacilla tschutschensis*	3	Common	PM,WV	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Plantation-NSW	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Modified Watercourse	House Swift	*Apus nipalensis*	3	Abundant, Common	SpM,R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Modified Watercourse	Oriental Magpie Robin	*Copsychus saularis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Modified Watercourse	Eurasian Tree Sparrow	*Passer montanus*	2	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Modified Watercourse	Yellow-bellied Prinia	*Prinia flaviventris*	1	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Modified Watercourse	Red-whiskered Bulbul	*Pycnonotus jocosus*	7	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Plantation-NSW	Chinese Bulbul	*Pycnonotus sinensis*	4	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Plantation-NSW	Eurasian Collared Dove	*Streptopelia decaocto*	1	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Transect	NSW	Modified Watercourse	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Crested Myna	*Acridotheres cristatellus*	5	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	White-breasted Waterhen	*Amaurornis phoenicurus*	1	Common	R	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Reedbed	Greater Coucal	*Centropus sinensis*	1	Common	R	-	Class II	Vulnerable	LC	LC	Y	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Oriental Magpie Robin	*Copsychus saularis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Eurasian Collared Dove	*Streptopelia decaocto*	1	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	House Swift	*Apus nipalensis*	4	Abundant, Common	SpM,R	-	-	-	LC	LC	N	N

20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Great Egret	*Ardea alba*	5	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Grey Heron	*Ardea cinerea*	2	Common	WV	PRC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	6	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Asian Koel	*Eudynamys scolopaceus*	1	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Common Moorhen	*Gallinula chloropus*	2	Common	R	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Marsh Sandpiper	*Tringa stagnatilis*	5	Common	PM,WV	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Plain Prinia	*Prinia inornata*	3	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Red-whiskered Bulbul	*Pycnonotus jocosus*	4	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Chinese Bulbul	*Pycnonotus sinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Eurasian Collared Dove	*Streptopelia decaocto*	1	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Common Redshank	*Tringa totanus*	4	Common	PM	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Japanese White-eye	*Zosterops japonicus*	3	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	White-breasted Waterhen	*Amaurornis phoenicurus*	1	Common	R	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Great Egret	*Ardea alba*	3	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Grey Heron	*Ardea cinerea*	2	Common	WV	PRC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Black-faced Spoonbill	*Platalea minor*	2	Common	WV	PGC	Class II	EN	EN	EN	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	White-throated Kingfisher	*Halcyon smyrnensis*	1	Common	R	-	-	-	LC	LC	N	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Barn Swallow	*Hirundo rustica*	2	Abundant	PM,SV	-	-	-	LC	LC	N	N

20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Common Greenshank	*Tringa nebularia*	3	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	White Wagtail	*Motacilla alba*	2	Common	PM,WV	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Yellow-browed Warbler	*Phylloscopus inornatus*	1	Common	WV,Sp	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Chinese Bulbul	*Pycnonotus sinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Common Redshank	*Tringa totanus*	5	Common	PM	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Eurasian Wigeon	*Anas penelope*	4	Common	WV	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Great Egret	*Ardea alba*	2	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Black Kite	*Milvus migrans*	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Little Grebe	*Tachybaptus ruficollis*	5	Common	R	LC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Marsh Sandpiper	*Tringa stagnatilis*	7	Common	PM,WV	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Common Redshank	*Tringa totanus*	5	Common	PM	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
20/04/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Common Greenshank	*Tringa nebularia*	4	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Marsh Sandpiper	*Tringa stagnatilis*	4	Common	PM,WV	RC	-	-	LC	LC	Y	Y
20/04/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Common Redshank	*Tringa totanus*	6	Common	PM	RC	-	-	LC	LC	Y	Y
22/04/2022	Night-time	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
22/04/2022	Night-time	Wet Season	NSW	Point Count	SP/NSW1	In flight	Little Egret	*Egretta garzetta*	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
22/04/2022	Night-time	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	House Swift	*Apus nipalensis*	2	Abundant, Common	SpM,R	-	-	-	LC	LC	N	N

Notes:

(1) All wild birds are protected under Wild Animals Protection Ordinance (Cap. 170).
(2) AFCD (2021). Hong Kong Biodiversity Database.
(3) Carey et al. (2001): R=resident; WV=winter visitor; SV=summer visitor; PM=passage migrant; Sp=spring; A=autumn;
(4) Fellowes et al. (2002): GC=Global Concern; LC=Local Concern; RC=Regional Concern; PRC=Potential Regional Concern; PGC: Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in nesting and/or roosting sites rather than in general occurrence.
(5) List of Wild Animals under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).
(6) Zheng, G. M. and Wang, Q. S. (1998). China Red Data Book
(7) IUCN 2021. The IUCN Red List of Threatened Species. Version 2020-3.
(9) Wetland-dependent species (including wetland-dependent species and waterbirds).
(10) Jiang et al. (2016). Red List of China's Vertebrates

Appendix F.3.1 Ecological Bird Monitoring Diversity (All avifauna species in Point Count Method) in All Habitats (20 and 22 April 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Acridotheres cristatellus	17	0.07489	-2.59174	-0.19409	0.503043
Alcedo atthis	1	0.004405	-5.42495	-0.0239	0.129648
Amaurornis phoenicurus	2	0.008811	-4.7318	-0.04169	0.197268
Anas penelope	7	0.030837	-3.47904	-0.10728	0.373242
Apus nipalensis	6	0.026432	-3.63319	-0.09603	0.348901
Ardea alba	18	0.079295	-2.53458	-0.20098	0.509399
Ardea cinerea	4	0.017621	-4.03866	-0.07117	0.287414
Ardeola bacchus	33	0.145374	-1.92844	-0.28035	0.540632
Centropus sinensis	2	0.008811	-4.7318	-0.04169	0.197268
Ceryle rudis	4	0.017621	-4.03866	-0.07117	0.287414
Charadrius dubius	4	0.017621	-4.03866	-0.07117	0.287414
Copsychus saularis	2	0.008811	-4.7318	-0.04169	0.197268
Egretta garzetta	29	0.127753	-2.05765	-0.26287	0.5409
Eudynamys scolopaceus	1	0.004405	-5.42495	-0.0239	0.129648
Gallinula chloropus	2	0.008811	-4.7318	-0.04169	0.197268
Gracupica nigricollis	1	0.004405	-5.42495	-0.0239	0.129648
Halcyon smyrnensis	1	0.004405	-5.42495	-0.0239	0.129648
Hirundo rustica	5	0.022026	-3.81551	-0.08404	0.320664
Lonchura punctulata	1	0.004405	-5.42495	-0.0239	0.129648
Milvus migrans	2	0.008811	-4.7318	-0.04169	0.197268
Motacilla alba	6	0.026432	-3.63319	-0.09603	0.348901
Motacilla tschutschensis	3	0.013216	-4.32634	-0.05718	0.247364
Phylloscopus inornatus	3	0.013216	-4.32634	-0.05718	0.247364
Platalea minor	2	0.008811	-4.7318	-0.04169	0.197268
Prinia inornata	6	0.026432	-3.63319	-0.09603	0.348901
Pycnonotus jocosus	4	0.017621	-4.03866	-0.07117	0.287414
Pycnonotus sinensis	12	0.052863	-2.94004	-0.15542	0.456944
Spilopelia chinensis	6	0.026432	-3.63319	-0.09603	0.348901
Streptopelia decaocto	2	0.008811	-4.7318	-0.04169	0.197268
Tachybaptus ruficollis	9	0.039648	-3.22773	-0.12797	0.413057
Tringa nebularia	3	0.013216	-4.32634	-0.05718	0.247364
Tringa stagnatilis	12	0.052863	-2.94004	-0.15542	0.456944
Tringa totanus	14	0.061674	-2.78589	-0.17182	0.478664
Zosterops japonicus	3	0.013216	-4.32634	-0.05718	0.247364
Total	**227**	**1**	**-136.541**	**-3.04906**	**10.15732**
Richness	**34**				
SS	**10.2**				
SQ	**9.3**				
H	**3.05**				
S^2_H	**0**				

Appendix F.3.2 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Point Count Method) in All Habitats (20 and 22 April 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)^2
Anas penelope	7	0.051852	-2.95936	-0.15345	0.45411
Ardea alba	18	0.133333	-2.0149	-0.26865	0.541311
Ardea cinerea	4	0.02963	-3.51898	-0.10427	0.36691
Ardeola bacchus	33	0.244444	-1.40877	-0.34437	0.485131
Centropus sinensis	2	0.014815	-4.21213	-0.0624	0.262845
Egretta garzetta	29	0.214815	-1.53798	-0.33038	0.508119
Milvus migrans	2	0.014815	-4.21213	-0.0624	0.262845
Platalea minor	2	0.014815	-4.21213	-0.0624	0.262845
Tachybaptus ruficollis	9	0.066667	-2.70805	-0.18054	0.488902
Tringa nebularia	3	0.022222	-3.80666	-0.08459	0.322015
Tringa stagnatilis	12	0.088889	-2.42037	-0.21514	0.520727
Tringa totanus	14	0.103704	-2.26622	-0.23502	0.532595
Total	**135**	**1**	**-35.2777**	**-2.10361**	**5.008355**
Richness	**12**				
SS	**5.01**				
SQ	**4.43**				
H	**2.1**				
S^2_H	**0**				

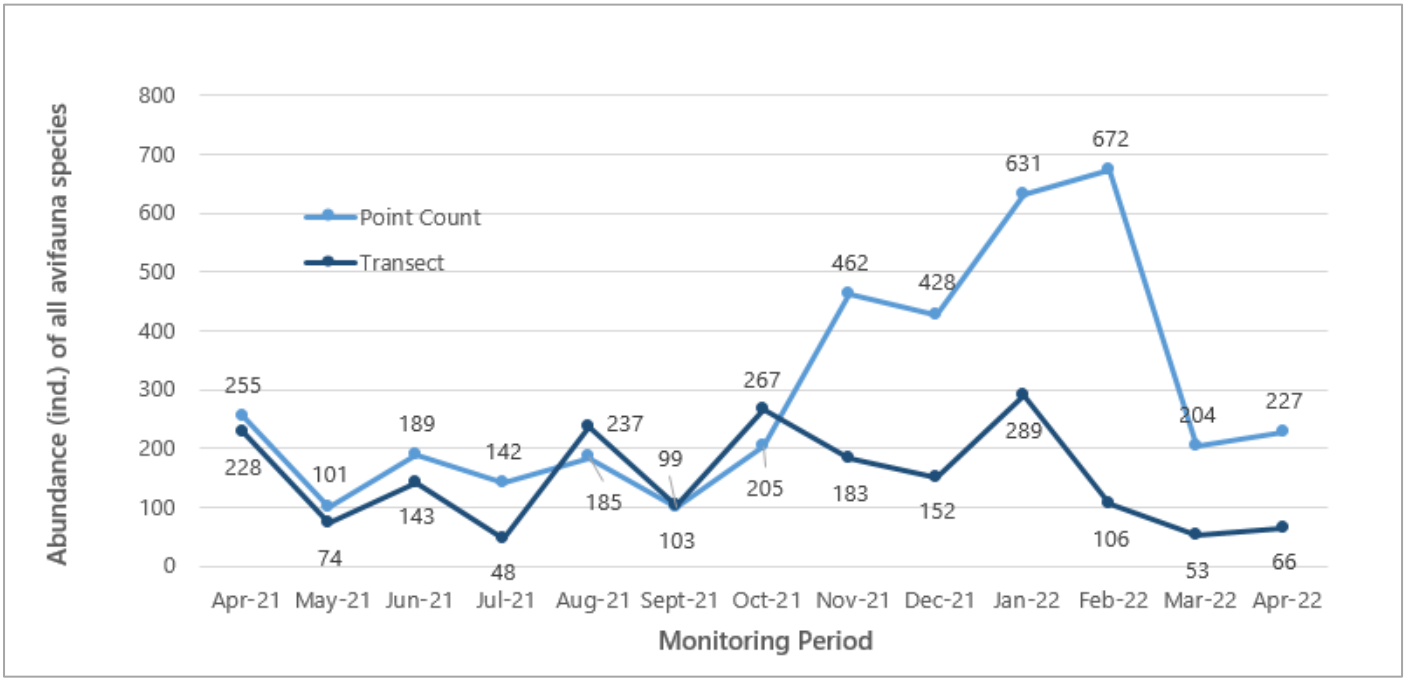
Appendix F.3.3 Ecological Bird Monitoring Diversity (All avifauna species in Transect Walk Method) in All Habitats (20 and 22 April 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)^2
Acridotheres cristatellus	8	0.121212	-2.11021	-0.25578	0.539758
Apus nipalensis	3	0.045455	-3.09104	-0.1405	0.434297
Ardea alba	7	0.106061	-2.24374	-0.23797	0.53395
Ardeola bacchus	3	0.045455	-3.09104	-0.1405	0.434297
Copsychus saularis	1	0.015152	-4.18965	-0.06348	0.265958
Egretta garzetta	3	0.045455	-3.09104	-0.1405	0.434297
Hirundo rustica	4	0.060606	-2.80336	-0.1699	0.476293
Motacilla tschutschensis	2	0.030303	-3.49651	-0.10595	0.370472
Passer montanus	2	0.030303	-3.49651	-0.10595	0.370472
Prinia flaviventris	3	0.045455	-3.09104	-0.1405	0.434297
Pycnonotus jocosus	7	0.106061	-2.24374	-0.23797	0.53395
Pycnonotus sinensis	7	0.106061	-2.24374	-0.23797	0.53395
Spilopelia chinensis	1	0.015152	-4.18965	-0.06348	0.265958
Streptopelia decaocto	1	0.015152	-4.18965	-0.06348	0.265958
Tringa nebularia	4	0.060606	-2.80336	-0.1699	0.476293
Tringa stagnatilis	4	0.060606	-2.80336	-0.1699	0.476293
Tringa totanus	6	0.090909	-2.3979	-0.21799	0.522718
Total	**66**	**1**	**-51.5756**	**-2.66175**	**7.369211**
Richness	**17**				
SS	**7.369211**				
SQ	**7.084916**				
H	**2.661751**				
S^2_H	**0.006144**				

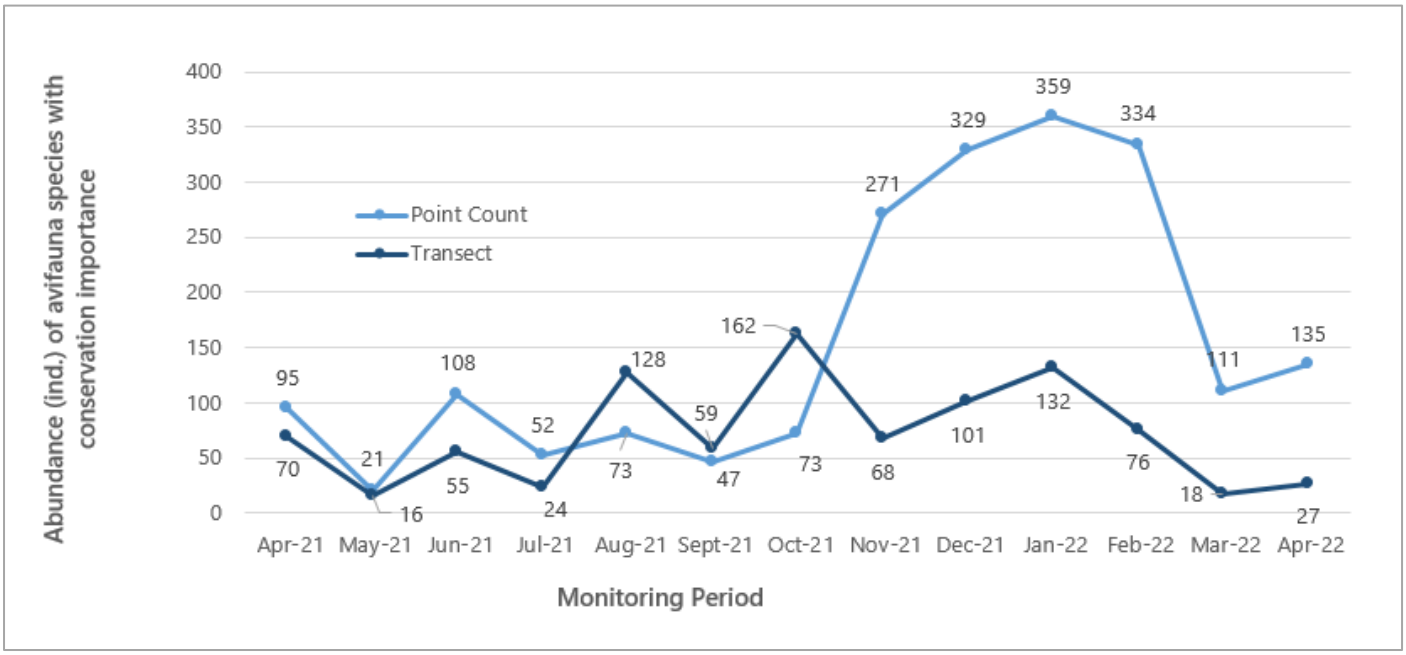
Appendix F.3.4 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Transect Walk Method) in All Habitats (20 and 22 April 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Ardea alba	7	0.259259	-1.34993	-0.34998	0.472449
Ardeola bacchus	3	0.111111	-2.19722	-0.24414	0.536422
Egretta garzetta	3	0.111111	-2.19722	-0.24414	0.536422
Tringa nebularia	4	0.148148	-1.90954	-0.2829	0.5402
Tringa stagnatilis	4	0.148148	-1.90954	-0.2829	0.5402
Tringa totanus	6	0.222222	-1.50408	-0.33424	0.502722
Total	**27**	**1**	**-11.0675**	**-1.73828**	**3.128415**
Richness	**6**				
SS	**3.128415**				
SQ	**3.021628**				
H	**1.738283**				
S^2_H	**0.007384**				

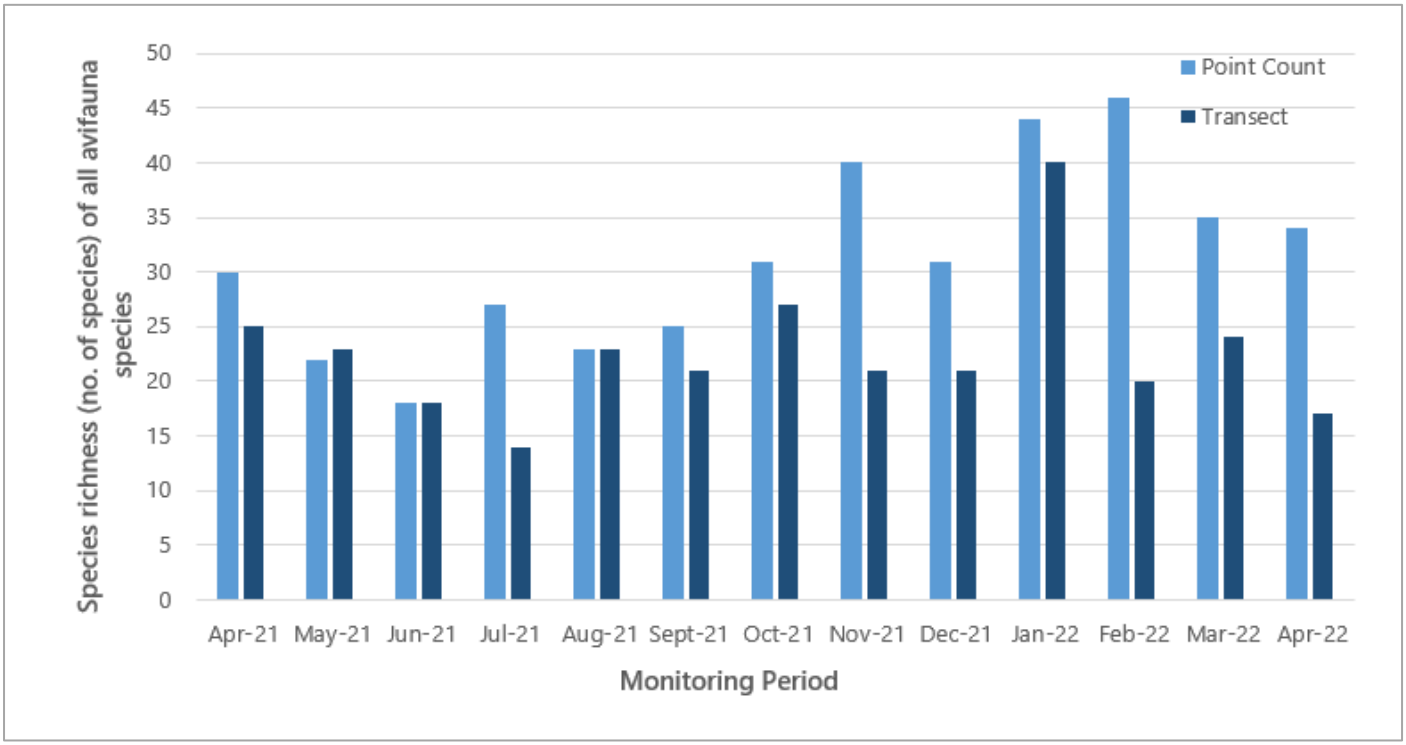
Appendix F.4.1 Abundance of all avifauna species throughout the monitoring period



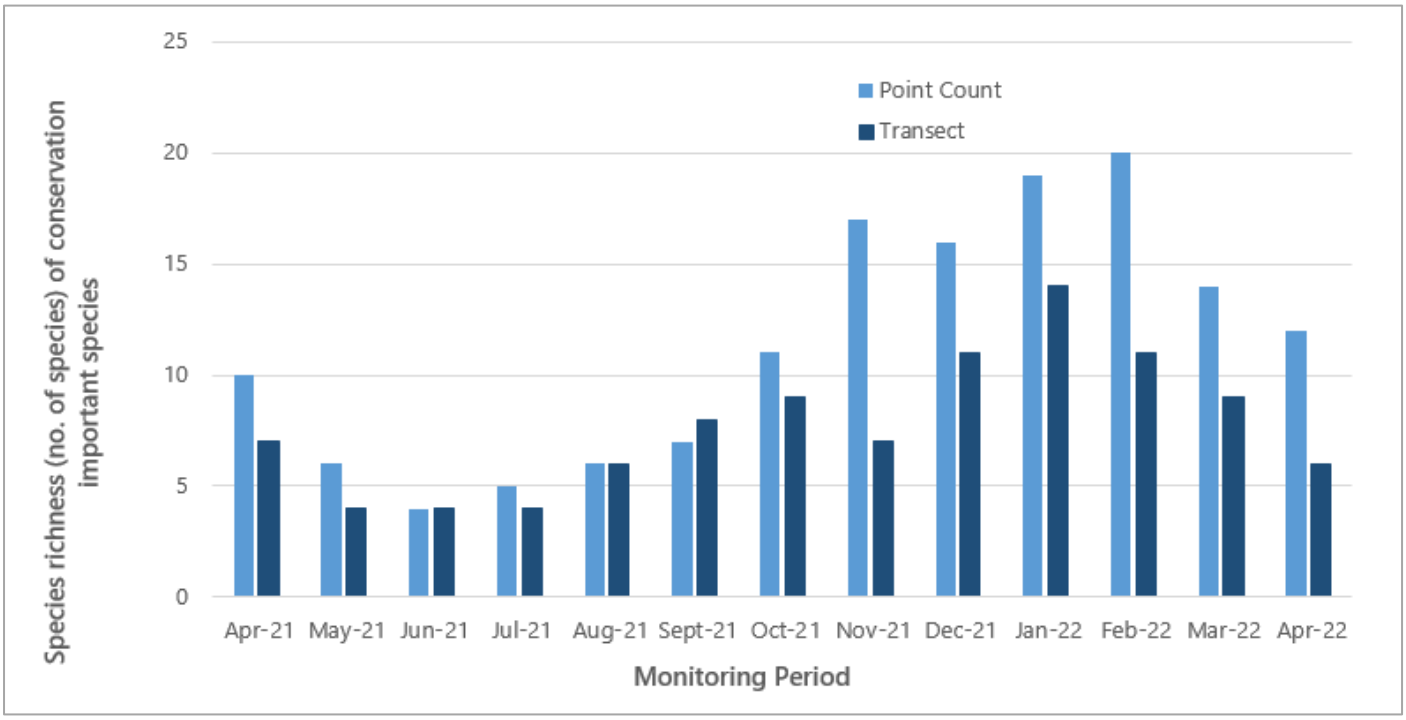
Appendix F.4.2 Abundance of avifauna species with conservation importance throughout the monitoring period



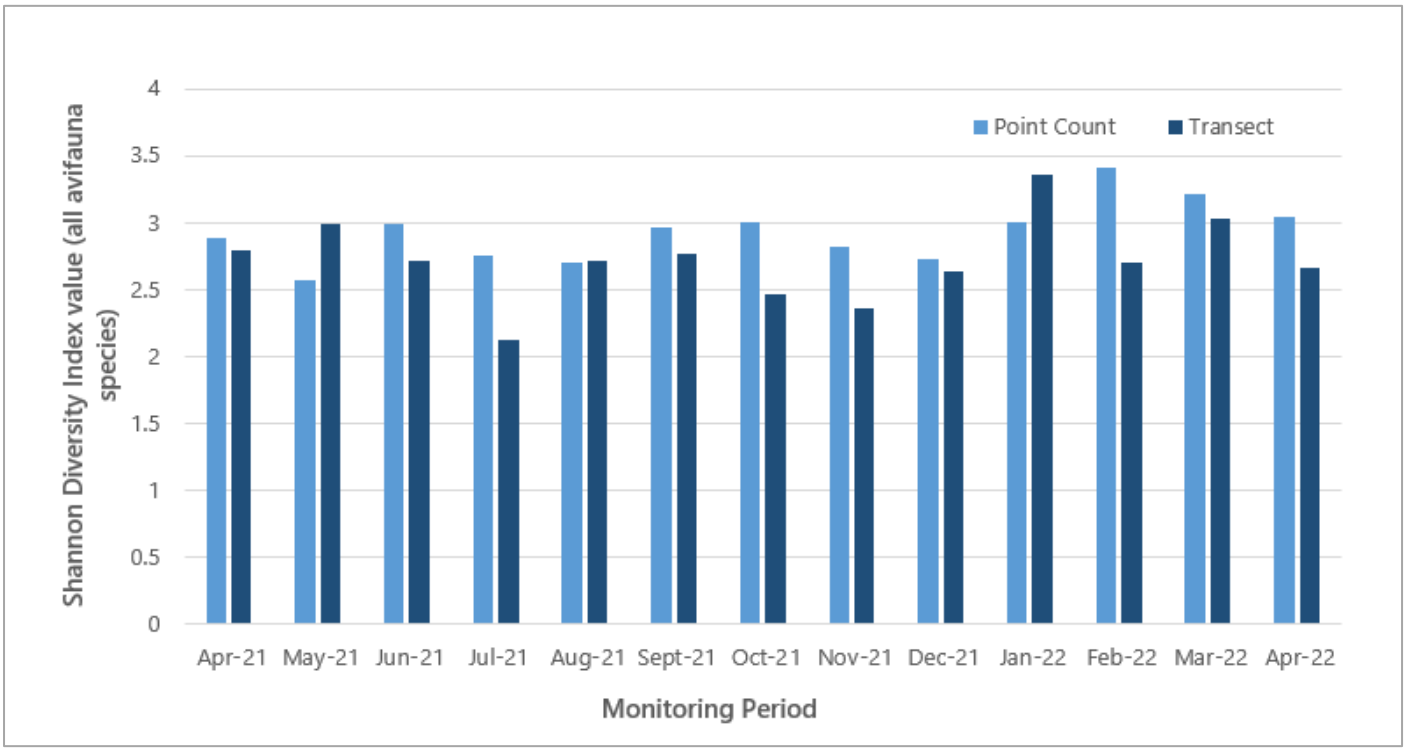
Appendix F.5.1 Species richness of all avifauna species throughout the monitoring period



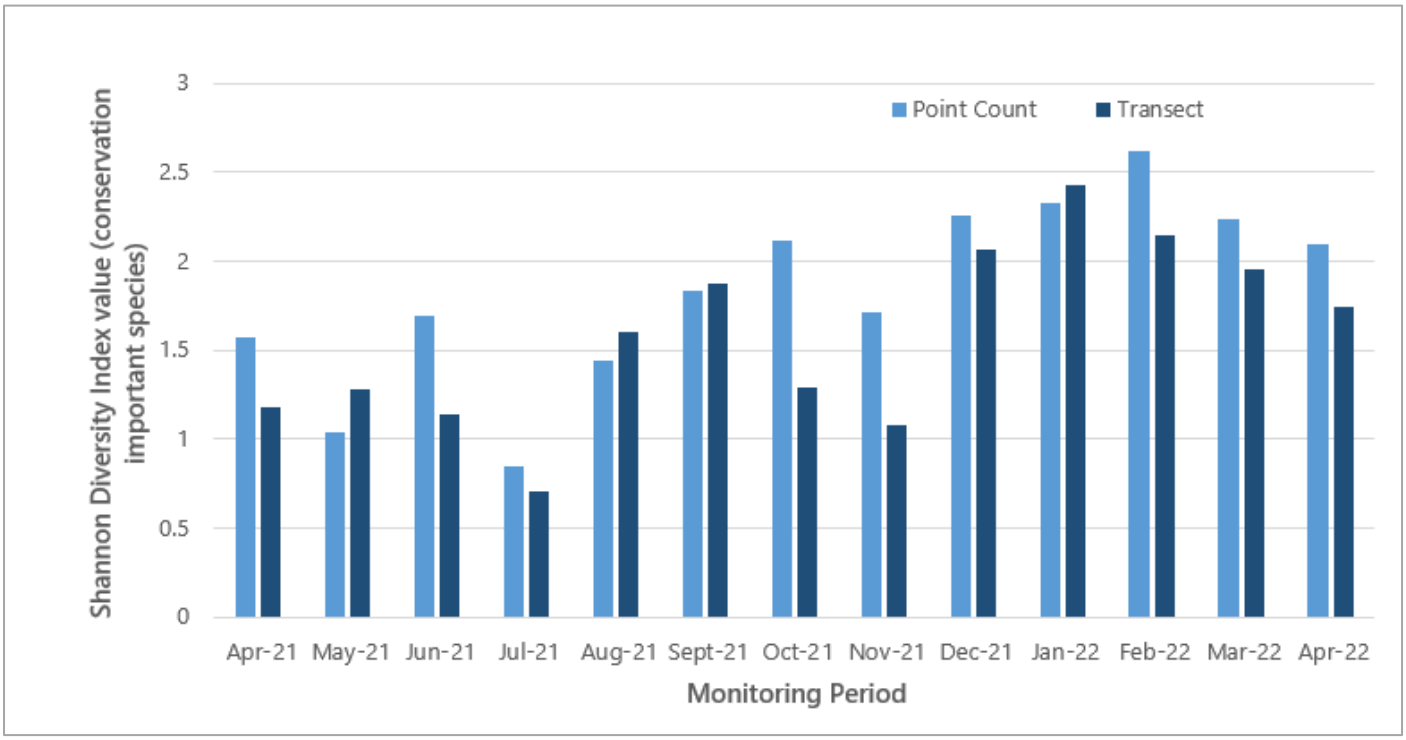
Appendix F.5.2 Species richness of avifauna species with conservation importance throughout the monitoring period



Appendix F.6.1 Shannon Diversity Index values of all avifauna species throughout the monitoring period



Appendix F.6.2 Shannon Diversity Index values of avifauna species with conservation importance throughout the monitoring period



Appendix F.7 Two-tailed Unpaired T-test

Formula:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\left(\frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}\right)\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

Appendix F.7.1 Abundance of all avifauna species – Point Count Method

Months	April 2017	April 2022
N	107	85
df	106	84
M	2.79	2.67
SS	1840.06	192.78
S^2	17.36	2.29
t-value	0.24	
p-value	0.81	

Notes:
N: Number of samples/observation
df: Degrees of freedom
M: Mean
SS: Sum of Squares
S^2: Measure on a random sample that is used to estimate the variance of the population

Appendix F.7.2 Abundance of avifauna species with conservation importance – Point Count Method

Months	April 2017	April 2022
N	37	40
df	36	39
M	5.41	3.38
SS	1414.92	103.38
S^2	39.3	2.65
t-value	1.98	
p-value	.05	

Notes:
N: Number of samples/observation
df: Degrees of freedom
M: Mean
SS: Sum of Squares
S^2: Measure on a random sample that is used to estimate the variance of the population

Appendix F.8. Hutcheson t-test testing method and output

Formula:

$$t = \frac{H_a - H_b}{\sqrt{s^2_{H_a} + s^2_{H_b}}}$$

Appendix F.8.1 Species diversity of all avifauna species – Point Count Method

Months	April 2017	April 2022
Total	298	227
N	41	34
H	3.16	3.05
S^2_H	0.003	0.004
t	1.32	
df	498.58	
Crit	1.97	
p	0.19	
CI	0.12	0.13

Notes:
Total: Total abundance
N: Number of species
H: Shannon Diversity Index
S^2_H: variance
t: t-value
df: degrees of freedom
Crit: critical value

Months	April 2017	April 2022
p: p-value Cl: confidence interval		

Appendix F.8.2 Species diversity of avifauna species with conservation importance – Point Count Method

Months	April 2017	April 2022
Total	200	135
N	13	12
H	2.24	2.10
S^2_H	0.002	0.005
t	1.67	
df	255.97	
Crit	1.97	
p	0.08	
Cl	0.09	0.14
Notes: Total: Total abundance N: Number of species H: Shannon Diversity Index S^2_H: variance t: t-value df: degrees of freedom Crit: critical value p: p-value Cl: confidence interval		