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

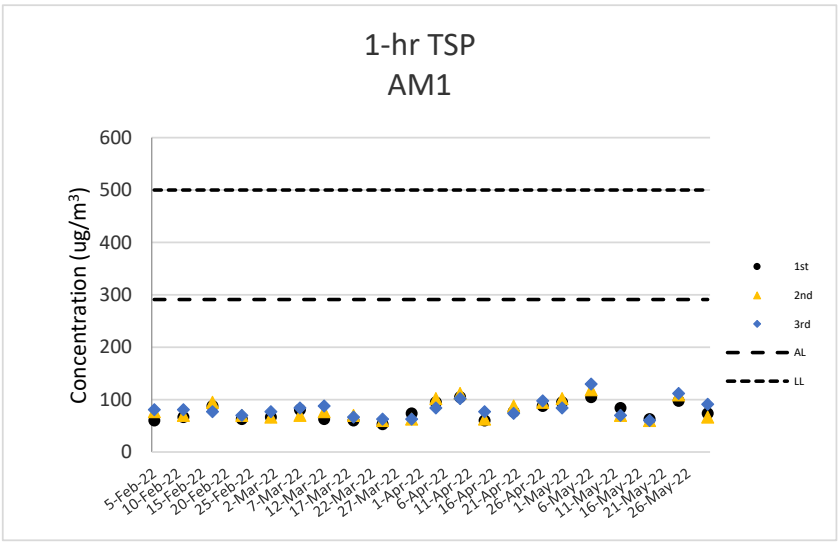
AM1 - Topfine Machinery (China) Co. Ltd.

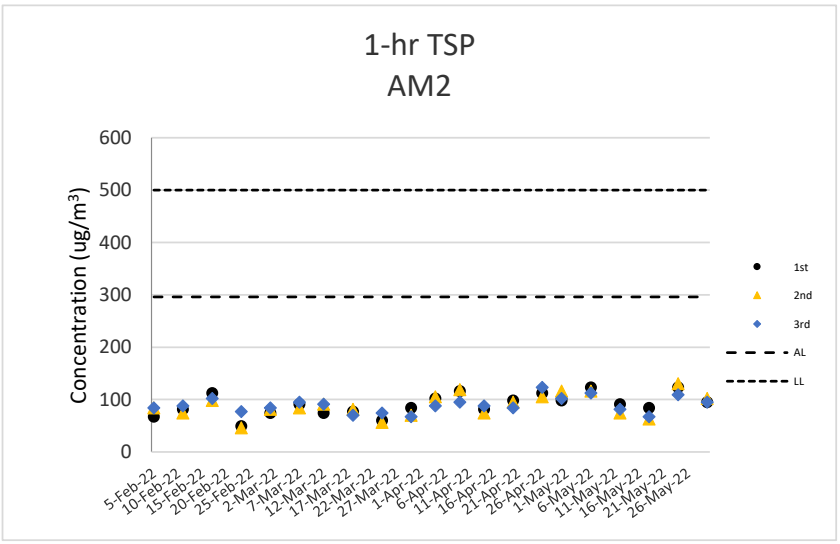
Date	Weather Condition	Start Time	1-hour TSP (µg/m³) 1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
6-May-22	Fine	8:27	105	119	130	291	500
12-May-22	Fine	8:47	84	70	70		
18-May-22	Fine	8:49	63	60	60		
24-May-22	Cloudy	8:32	98	109	112		
30-May-22	Cloudy	8:34	74	67	91		
		Min	60				
		Max	130				
		Average	87				

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)
6-May-22	Fine	8:36	123	116	112	296	500
12-May-22	Fine	8:31	91	74	81		
18-May-22	Fine	8:34	84	63	67		
24-May-22	Cloudy	8:43	123	130	109		
30-May-22	Cloudy	8:45	95	102	95		
		Min	63				
		Max	130				
		Average	98				

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)
6-May-22	13:16	57	60	53	0.6	Fine	75
12-May-22	10:09	62	67	60	0.6	Fine	75
18-May-22	9:59	64	67	62	0.7	Fine	75
24-May-22	11:27	57	61	52	0.1	Cloudy	75
30-May-22	10:11	56	59	51	0.2	Cloudy	75
	Max	64					
	Min	56					

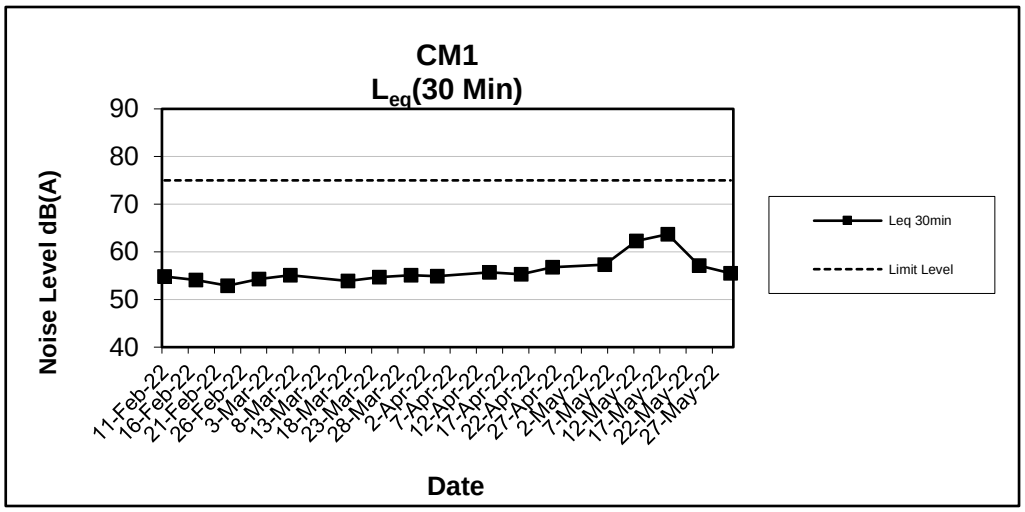
CM2 - Squatter house to the west of YLSTW

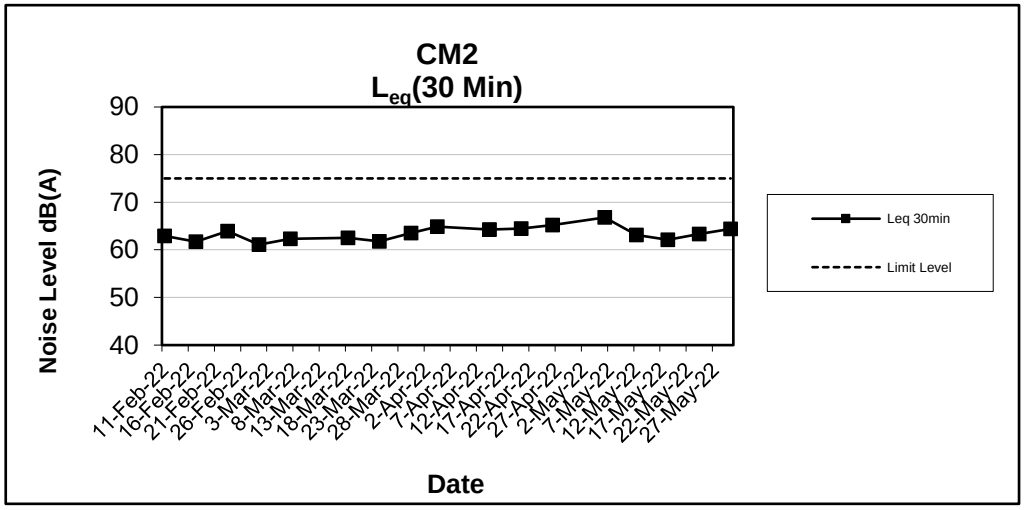
Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
6-May-22	8:42	67	69	60	0.5	Fine	75
12-May-22	9:28	63	67	61	0.6	Fine	75
18-May-22	9:10	62	67	62	0.8	Fine	75
24-May-22	8:51	63	66	56	0.3	Cloudy	75
30-May-22	8:52	64	67	56	0.2	Cloudy	75
	Max	67					
	Min	62					

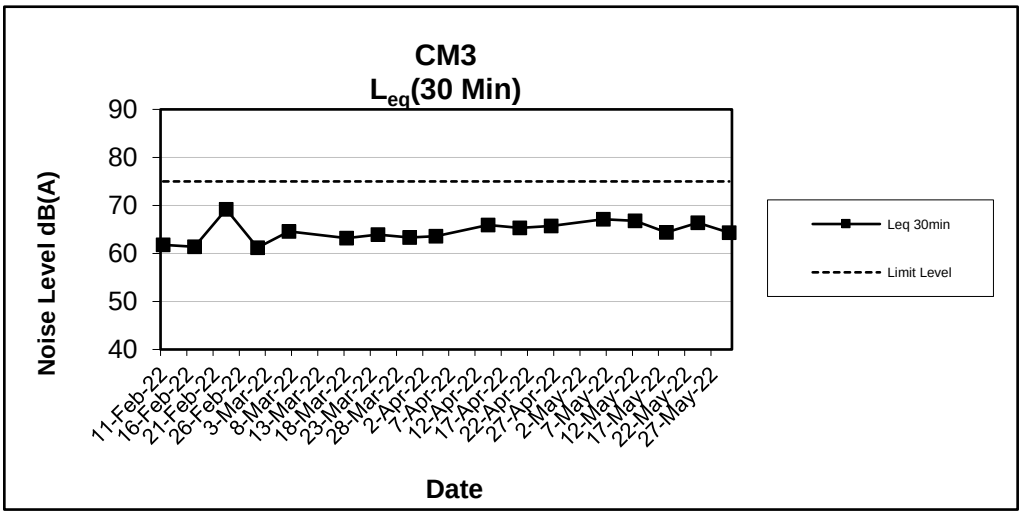
CM3 - Squatter house to the east of YLSTW

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)
6-May-22	14:08	67	70	58	0.6	Fine	75
12-May-22	10:48	67	69	64	0.8	Fine	75
18-May-22	10:51	64	67	62	0.7	Fine	75
24-May-22	13:02	66	71	57	0.3	Cloudy	75
30-May-22	11:29	64	68	56	0.3	Cloudy	75
	Max	67					
	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	3/5/2022	Mid-Flood	Fine	Smooth	8:25	2.2	M	1.1	1	0.29	181	7.63	7.63	8.02	8.03	21.02	21.03	63.3	63.5	5.23	5.25	24.3	24.2	35	35
M1	3/5/2022	Mid-Flood	Fine	Smooth	8:25	2.2	M	1.1	2			7.62		8.04		21.04		63.7		5.26		24.1		34	
M2	3/5/2022	Mid-Flood	Fine	Smooth	8:43	1.2	M	0.6	1	0.313	229	7.75	7.75	7.21	7.22	21.53	21.54	60.4	60.3	4.99	4.98	26.8	27.0	32	33
M2	3/5/2022	Mid-Flood	Fine	Smooth	8:43	1.2	M	0.6	2			7.74		7.23		21.54		60.1		4.97		27.1		33	
M3	3/5/2022	Mid-Flood	Fine	Moderate	8:20	1.1	M	0.55	1	0.038	168	7.70	7.71	7.30	7.29	22.11	22.10	73.1	73.4	6.12	6.15	27.3	27.1	47	46
M3	3/5/2022	Mid-Flood	Fine	Moderate	8:20	1.1	M	0.55	2			7.71		7.28		22.08		73.7		6.18		26.9		44	
M1	3/5/2022	Mid-Ebb	Fine	Smooth	15:19	2	M	1	1	0.336	265	7.70	7.70	6.82	6.82	26.11	26.11	67.3	67.6	5.32	5.35	31.4	31.2	21	20
M1	3/5/2022	Mid-Ebb	Fine	Smooth	15:19	2	M	1	2			7.69		6.81		26.10		67.9		5.37		30.9		19	
M2	3/5/2022	Mid-Ebb	Fine	Smooth	15:04	1.2	M	0.6	1	0.325	293	7.58	7.59	6.58	6.59	26.49	26.50	69.3	69.7	5.81	5.85	29.0	28.8	37	36
M2	3/5/2022	Mid-Ebb	Fine	Smooth	15:04	1.2	M	0.6	2			7.60		6.59		26.50		70.1		5.88		28.6		35	
M3	3/5/2022	Mid-Ebb	Fine	Moderate	15:10	0.9	M	0.45	1	0.052	71	7.64	7.66	7.92	7.93	22.19	22.22	68.3	68.2	5.84	5.83	40.7	40.4	56	53
M3	3/5/2022	Mid-Ebb	Fine	Moderate	15:10	0.9	M	0.45	2			7.68		7.93		22.24		68.1		5.81		40.1		50	

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	43.0	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	5/5/2022	Mid-Flood	Fine	Moderate	9:03	0.9	M	0.45	1	0.058	143	7.60	7.61	7.53	7.54	24.52	24.52	66.4	66.3	5.31	5.30	27.4	27.3	46	47
M1	5/5/2022	Mid-Flood	Fine	Moderate	9:03	0.9	M	0.45	2			7.61		7.54		24.53		66.2		5.29		27.3		47	
M2	5/5/2022	Mid-Flood	Fine	Moderate	9:21	0.8	M	0.4	1	0.04	91	7.57	7.56	7.38	7.39	24.77	24.77	63.4	63.6	4.97	5.00	27.9	27.9	47	45
M2	5/5/2022	Mid-Flood	Fine	Moderate	9:21	0.8	M	0.4	2			7.54		7.39		24.77		63.7		5.02		27.9		43	
M3	5/5/2022	Mid-Flood	Fine	Calm	8:58	0.8	M	0.4	1	0.291	86	7.54	7.55	7.19	7.19	22.04	22.05	58.7	59.1	4.71	4.75	33.4	33.7	42	42
M3	5/5/2022	Mid-Flood	Fine	Calm	8:58	0.8	M	0.4	2			7.56		7.19		22.05		59.5		4.78		34.1		41	
M1	5/5/2022	Mid-Ebb	Fine	Moderate	16:38	0.8	M	0.4	1	0.068	243	7.60	7.61	9.44	9.46	24.89	24.89	66.9	66.7	5.24	5.23	23.2	23.2	42	43
M1	5/5/2022	Mid-Ebb	Fine	Moderate	16:38	0.8	M	0.4	2			7.61		9.47		24.88		66.4		5.21		23.1		44	
M2	5/5/2022	Mid-Ebb	Fine	Moderate	16:21	0.7	M	0.35	1	0.104	76	7.58	7.56	9.29	9.29	24.76	24.76	61.4	61.5	4.91	4.93	24.9	24.9	39	38
M2	5/5/2022	Mid-Ebb	Fine	Moderate	16:21	0.7	M	0.35	2			7.54		9.28		24.76		61.6		4.94		24.9		36	
M3	5/5/2022	Mid-Ebb	Fine	Calm	16:13	0.6	M	0.3	1	0.306	264	7.47	7.48	8.32	8.33	27.13	27.14	68.4	68.3	5.44	5.43	37.0	36.6	44	43
M3	5/5/2022	Mid-Ebb	Fine	Calm	16:13	0.6	M	0.3	2			7.48		8.33		27.14		68.1		5.41		36.3		41	

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	7/5/2022	Mid-Flood	Fine	Moderate	9:47	0.8	M	0.4	1	0.058	117	7.63	7.64	5.88	5.88	26.19	26.20	80.5	80.6	6.31	6.32	29.3	29.3	28	27
M1	7/5/2022	Mid-Flood	Fine	Moderate	9:47	0.8	M	0.4	2			7.64		5.87		26.21		80.6		6.32		29.3		26	
M2	7/5/2022	Mid-Flood	Fine	Moderate	9:59	0.7	M	0.35	1	0.055	73	7.68	7.69	5.83	5.84	26.34	26.34	79.7	79.7	6.22	6.22	28.8	28.8	28	27
M2	7/5/2022	Mid-Flood	Fine	Moderate	9:59	0.7	M	0.35	2			7.69		5.84		26.33		79.6		6.21		28.8		26	
M3	7/5/2022	Mid-Flood	Cloudy	Calm	9:49	0.8	M	0.4	1	0.238	76	7.01	7.02	4.20	4.20	27.03	27.04	53.4	53.3	4.15	4.14	30.8	30.6	40	39
M3	7/5/2022	Mid-Flood	Cloudy	Calm	9:49	0.8	M	0.4	2			7.03		4.19		27.05		53.1		4.13		30.4		38	
M1	7/5/2022	Mid-Ebb	Fine	Moderate	18:06	0.7	M	0.35	1	0.084	31	7.81	7.82	5.89	5.89	25.41	25.42	88.8	88.6	6.95	6.95	24.3	24.3	26	25
M1	7/5/2022	Mid-Ebb	Fine	Moderate	18:06	0.7	M	0.35	2			7.83		5.88		25.43		88.4		6.94		24.3		24	
M2	7/5/2022	Mid-Ebb	Fine	Moderate	17:48	0.6	M	0.3	1	0.037	47	7.77	7.76	5.91	5.92	26.00	25.92	87.9	87.7	6.90	6.89	25.7	25.7	20	20
M2	7/5/2022	Mid-Ebb	Fine	Moderate	17:48	0.6	M	0.3	2			7.74		5.93		25.84		87.4		6.87		25.7		20	
M3	7/5/2022	Mid-Ebb	Cloudy	Calm	17:36	0.6	M	0.3	1	0.311	257	7.22	7.21	4.83	4.83	26.84	26.84	61.3	61.6	4.77	4.80	40.8	40.4	39	41
M3	7/5/2022	Mid-Ebb	Cloudy	Calm	17:36	0.6	M	0.3	2			7.20		4.82		26.83		61.9		4.82		39.9		43	

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	10/5/2022	Mid-Flood	Fine	Moderate	14:31	0.9	M	0.45	1	0.042	193	7.21	7.22	4.32	4.33	26.14	26.14	55.3	55.6	4.89	4.90	31.2	31.3	21	21
M1	10/5/2022	Mid-Flood	Fine	Moderate	14:31	0.9	M	0.45	2			7.23		4.33		26.13		55.8		4.91		31.3		21	
M2	10/5/2022	Mid-Flood	Fine	Moderate	14:16	0.8	M	0.4	1	0.063	220	7.31	7.32	4.13	4.14	25.87	25.88	59.1	59.3	5.03	5.06	28.1	28.2	22	21
M2	10/5/2022	Mid-Flood	Fine	Moderate	14:16	0.8	M	0.4	2			7.33		4.14		25.88		59.4		5.09		28.2		19	
M3	10/5/2022	Mid-Flood	Fine	Moderate	14:38	1.4	M	0.7	1	0.052	71	7.21	7.23	4.23	4.23	26.29	26.27	64.8	64.8	5.11	5.09	38.1	38.1	25	24
M3	10/5/2022	Mid-Flood	Fine	Moderate	14:38	1.4	M	0.7	2			7.24		4.22		26.24		64.7		5.07		38.1		22	
M1	10/5/2022	Mid-Ebb	Fine	Moderate	9:55	0.7	M	0.35	1	0.105	71	7.13	7.14	5.03	5.04	27.11	27.15	68.3	68.4	5.24	5.25	29.9	30.0	47	46
M1	10/5/2022	Mid-Ebb	Fine	Moderate	9:55	0.7	M	0.35	2			7.14		5.04		27.19		68.4		5.25		30.0		44	
M2	10/5/2022	Mid-Ebb	Fine	Moderate	10:15	0.6	M	0.3	1	0.082	56	7.12	7.13	4.41	4.42	27.28	27.29	77.0	76.7	6.05	6.05	25.3	25.3	46	45
M2	10/5/2022	Mid-Ebb	Fine	Moderate	10:15	0.6	M	0.3	2			7.13		4.42		27.29		76.4		6.04		25.3		43	
M3	10/5/2022	Mid-Ebb	Fine	Moderate	10:03	1.3	M	0.65	1	0.042	145	7.27	7.28	4.05	4.06	26.15	26.15	61.3	61.5	4.85	4.87	35.1	35.1	23	23
M3	10/5/2022	Mid-Ebb	Fine	Moderate	10:03	1.3	M	0.65	2			7.28		4.07		26.14		61.7		4.89		35.1		22	

Remark

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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	43.0	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	12/5/2022	Mid-Flood	Cloudy	Moderate	17:28	1	M	0.5	1	0.135	69	7.71	7.72	9.07	9.08	24.91	24.92	76.1	76.2	6.34	6.35	9.2	9.3	9	9
M1	12/5/2022	Mid-Flood	Cloudy	Moderate	17:28	1	M	0.5	2			7.72		9.08		24.92		76.2		6.35		9.3		8	
M2	12/5/2022	Mid-Flood	Cloudy	Moderate	17:05	0.8	M	0.4	1	0.106	73	7.66	7.65	9.14	9.16	25.03	25.01	74.3	74.6	6.21	6.25	9.1	9.1	9	10
M2	12/5/2022	Mid-Flood	Cloudy	Moderate	17:05	0.8	M	0.4	2			7.64		9.18		24.98		74.8		6.28		9.1		10	
M3	12/5/2022	Mid-Flood	Cloudy	Moderate	17:11	1	M	0.5	1	0.103	91	8.06	8.07	8.03	8.04	24.13	24.14	93.7	93.7	7.31	7.30	42.8	43.3	20	21
M3	12/5/2022	Mid-Flood	Cloudy	Moderate	17:11	1	M	0.5	2			8.07		8.04		24.14		93.6		7.29		43.9		21	
M1	12/5/2022	Mid-Ebb	Cloudy	Moderate	11:19	1.1	M	0.55	1	0.056	121	7.68	7.66	8.11	8.12	25.41	25.41	87.3	87.4	6.58	6.59	13.1	13.1	7	7
M1	12/5/2022	Mid-Ebb	Cloudy	Moderate	11:19	1.1	M	0.55	2			7.64		8.13		25.41		87.4		6.59		13.1		7	
M2	12/5/2022	Mid-Ebb	Cloudy	Moderate	11:38	1	M	0.5	1	0.097	134	7.61	7.62	8.57	8.58	25.87	25.88	90.2	90.3	6.84	6.85	12.1	12.1	7	7
M2	12/5/2022	Mid-Ebb	Cloudy	Moderate	11:38	1	M	0.5	2			7.62		8.58		25.89		90.3		6.85		12.0		7	
M3	12/5/2022	Mid-Ebb	Cloudy	Moderate	11:20	0.8	M	0.4	1	0.135	69	7.77	7.78	10.18	10.18	24.85	24.86	91.3	91.4	7.06	7.08	37.4	37.4	20	19
M3	12/5/2022	Mid-Ebb	Cloudy	Moderate	11:20	0.8	M	0.4	2			7.78		10.17		24.86		91.5		7.09		37.5		18	

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	14/5/2022	Mid-Flood	Fine	Moderate	19:06	1.1	M	0.55	1	0.039	57	7.03	7.04	2.54	2.55	26.12	26.13	82.8	82.9	6.81	6.82	24.1	24.2	8	9
M1	14/5/2022	Mid-Flood	Fine	Moderate	19:06	1.1	M	0.55	2			7.04		2.56		26.14		82.9		6.83		24.2		9	
M2	14/5/2022	Mid-Flood	Fine	Moderate	18:48	1	M	0.5	1	0.049	71	7.11	7.12	2.94	2.96	24.55	24.52	80.0	79.9	6.66	6.62	25.5	25.6	10	10
M2	14/5/2022	Mid-Flood	Fine	Moderate	18:48	1	M	0.5	2			7.12		2.98		24.49		79.7		6.58		25.6		9	
M3	14/5/2022	Mid-Flood	Fine	Moderate	18:59	1.2	M	0.6	1	0.042	72	7.09	7.09	3.82	3.83	25.26	25.25	50.8	50.8	4.13	4.12	40.8	41.3	8	9
M3	14/5/2022	Mid-Flood	Fine	Moderate	18:59	1.2	M	0.6	2			7.08		3.84		25.24		50.7		4.11		41.7		9	
M1	14/5/2022	Mid-Ebb	Fine	Moderate	12:29	0.7	M	0.35	1	0.072	123	6.93	6.95	3.03	3.04	24.40	24.40	56.0	55.9	4.67	4.63	31.5	31.7	10	10
M1	14/5/2022	Mid-Ebb	Fine	Moderate	12:29	0.7	M	0.35	2			6.97		3.04		24.40		55.8		4.58		31.9		9	
M2	14/5/2022	Mid-Ebb	Fine	Moderate	12:47	0.6	M	0.3	1	0.102	311	7.15	7.15	3.27	3.27	24.97	24.98	70.1	70.2	5.82	5.83	30.3	30.3	8	9
M2	14/5/2022	Mid-Ebb	Fine	Moderate	12:47	0.6	M	0.3	2			7.14		3.26		24.98		70.3		5.84		30.3		9	
M3	14/5/2022	Mid-Ebb	Fine	Moderate	12:51	0.9	M	0.45	1	0.062	175	7.04	7.05	4.11	4.12	24.88	24.88	52.5	52.5	4.34	4.33	44.2	44.2	26	27
M3	14/5/2022	Mid-Ebb	Fine	Moderate	12:51	0.9	M	0.45	2			7.05		4.13		24.88		52.4		4.31		44.3		28	

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	17/5/2022	Mid-Flood	Fine	Moderate	7:47	1.1	M	0.55	1	0.063	144	7.21	7.23	1.38	1.36	24.32	24.33	48.5	48.7	4.02	4.04	25.1	25.1	16	17
M1	17/5/2022	Mid-Flood	Fine	Moderate	7:47	1.1	M	0.55	2			7.24		1.33		24.33		48.9		4.06		25.0		17	
M2	17/5/2022	Mid-Flood	Fine	Moderate	8:05	0.8	M	0.4	1	0.078	76	7.30	7.31	1.49	1.48	25.17	25.18	46.9	46.9	2.97	2.97	23.7	23.7	19	19
M2	17/5/2022	Mid-Flood	Fine	Moderate	8:05	0.8	M	0.4	2			7.31		1.46		25.18		46.8		2.96		23.7		19	
M3	17/5/2022	Mid-Flood	Fine	Smooth	7:56	1.3	M	0.65	1	0.06	92	6.99	7.00	0.93	0.93	24.62	24.63	47.7	47.6	3.95	3.95	22.6	23.0	25	26
M3	17/5/2022	Mid-Flood	Fine	Smooth	7:56	1.3	M	0.65	2			7.00		0.93		24.63		47.5		3.94		23.5		27	
M1	17/5/2022	Mid-Ebb	Fine	Moderate	15:01	0.9	M	0.45	1	0.065	55	7.41	7.42	2.91	2.92	24.19	24.19	50.1	50.2	3.26	3.25	26.2	26.2	16	16
M1	17/5/2022	Mid-Ebb	Fine	Moderate	15:01	0.9	M	0.45	2			7.42		2.92		24.18		50.2		3.24		26.2		16	
M2	17/5/2022	Mid-Ebb	Fine	Moderate	14:36	0.7	M	0.35	1	0.072	76	7.34	7.35	2.44	2.43	23.29	23.29	48.1	48.2	3.09	3.07	26.1	26.1	20	21
M2	17/5/2022	Mid-Ebb	Fine	Moderate	14:36	0.7	M	0.35	2			7.36		2.41		23.28		48.3		3.04		26.1		22	
M3	17/5/2022	Mid-Ebb	Fine	Calm	14:32	0.9	M	0.45	1	0.04	73	7.12	7.12	0.91	0.91	24.31	24.31	48.8	48.8	4.06	4.06	24.2	24.8	12	12
M3	17/5/2022	Mid-Ebb	Fine	Calm	14:32	0.9	M	0.45	2			7.12		0.91		24.31		48.7		4.05		25.3		12	

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	19/5/2022	Mid-Flood	Fine	Moderate	8:46	1.1	M	0.55	1	0.105	55	7.10	7.11	4.58	4.57	23.44	23.44	49.1	49.2	3.97	3.98	28.5	28.5	12	12
M1	19/5/2022	Mid-Flood	Fine	Moderate	8:46	1.1	M	0.55	2			7.11		4.55		23.43		49.3		3.99		28.5		12	
M2	19/5/2022	Mid-Flood	Fine	Moderate	9:04	1	M	0.5	1	0.082	45	7.13	7.14	4.61	4.62	23.91	23.93	50.8	50.9	4.02	4.03	27.1	27.1	19	18
M2	19/5/2022	Mid-Flood	Fine	Moderate	9:04	1	M	0.5	2			7.14		4.62		23.94		50.9		4.03		27.1		17	
M3	19/5/2022	Mid-Flood	Fine	Moderate	8:51	1.1	M	0.55	1	0.062	128	7.07	7.06	2.25	2.26	24.24	24.27	42.3	42.5	3.50	3.52	44.4	44.4	57	55
M3	19/5/2022	Mid-Flood	Fine	Moderate	8:51	1.1	M	0.55	2			7.05		2.26		24.29		42.6		3.54		44.4		52	
M1	19/5/2022	Mid-Ebb	Fine	Moderate	16:29	0.9	M	0.45	1	0.093	214	7.41	7.44	5.44	5.44	22.49	22.49	56.1	56.5	4.67	4.68	31.3	31.3	38	38
M1	19/5/2022	Mid-Ebb	Fine	Moderate	16:29	0.9	M	0.45	2			7.46		5.43		22.49		56.8		4.69		31.3		37	
M2	19/5/2022	Mid-Ebb	Fine	Moderate	16:10	0.7	M	0.35	1	0.06	203	7.33	7.34	5.28	5.29	22.97	22.97	53.4	53.6	4.51	4.53	30.1	30.1	50	48
M2	19/5/2022	Mid-Ebb	Fine	Moderate	16:10	0.7	M	0.35	2			7.34		5.29		22.96		53.7		4.54		30.2		46	
M3	19/5/2022	Mid-Ebb	Fine	Moderate	16:10	0.9	M	0.45	1	0.092	71	7.18	7.16	2.38	2.38	24.44	24.46	44.1	44.2	3.61	3.63	42.6	42.6	51	54
M3	19/5/2022	Mid-Ebb	Fine	Moderate	16:10	0.9	M	0.45	2			7.14		2.37		24.48		44.3		3.64		42.6		56	

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	60.9	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	21/5/2022	Mid-Flood	Fine	Moderate	10:29	1	M	0.5	1	0.065	196	7.14	7.14	2.09	2.09	24.51	24.52	63.9	63.9	5.44	5.44	28.1	28.1	40	42
M1	21/5/2022	Mid-Flood	Fine	Moderate	10:29	1	M	0.5	2			7.13		2.08		24.53		63.8		5.43		28.1		43	
M2	21/5/2022	Mid-Flood	Fine	Moderate	10:11	0.9	M	0.45	1	0.062	243	7.19	7.17	2.04	2.05	24.18	24.18	64.9	64.9	5.61	5.59	27.2	27.2	49	50
M2	21/5/2022	Mid-Flood	Fine	Moderate	10:11	0.9	M	0.45	2			7.14		2.06		24.17		64.8		5.57		27.2		51	
M3	21/5/2022	Mid-Flood	Fine	Moderate	10:24	1.1	M	0.55	1	0.072	94	7.17	7.16	2.11	2.12	27.63	27.64	51.5	51.7	4.27	4.28	40.7	40.8	49	51
M3	21/5/2022	Mid-Flood	Fine	Moderate	10:24	1.1	M	0.55	2			7.14		2.13		27.64		51.8		4.28		40.8		52	
M1	21/5/2022	Mid-Ebb	Fine	Moderate	5:47	0.7	M	0.35	1	0.093	77	7.31	7.33	2.51	2.52	26.31	26.31	73.5	73.7	5.85	5.87	29.8	29.8	39	39
M1	21/5/2022	Mid-Ebb	Fine	Moderate	5:47	0.7	M	0.35	2			7.34		2.53		26.31		73.8		5.89		29.8		39	
M2	21/5/2022	Mid-Ebb	Fine	Moderate	6:06	0.6	M	0.3	1	0.084	104	7.29	7.29	2.44	2.46	25.14	25.14	73.1	73.2	5.74	5.74	28.6	28.6	44	43
M2	21/5/2022	Mid-Ebb	Fine	Moderate	6:06	0.6	M	0.3	2			7.28		2.48		25.13		73.2		5.73		28.6		41	
M3	21/5/2022	Mid-Ebb	Fine	Moderate	5:40	0.9	M	0.45	1	0.062	165	7.15	7.16	2.08	2.09	27.65	27.67	50.5	50.7	4.11	4.13	41.9	41.8	59	58
M3	21/5/2022	Mid-Ebb	Fine	Moderate	5:40	0.9	M	0.45	2			7.16		2.09		27.69		50.8		4.14		41.7		56	

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	60	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	24/5/2022	Mid-Flood	Cloudy	Smooth	15:18	2.2	M	1.1	1	0.228	210	7.16	7.17	3.35	3.36	24.54	24.54	58.4	58.7	4.64	4.66	30.5	30.1	47	46
M1	24/5/2022	Mid-Flood	Cloudy	Smooth	15:18	2.2	M	1.1	2			7.18		3.36		24.53		58.9		4.68		29.6		44	
M2	24/5/2022	Mid-Flood	Cloudy	Smooth	15:01	1.2	M	0.6	1	0.249	266	7.13	7.13	3.04	3.04	24.81	24.81	55.3	55.1	4.39	4.37	24.8	24.8	35	35
M2	24/5/2022	Mid-Flood	Cloudy	Smooth	15:01	1.2	M	0.6	2			7.13		3.03		24.81		54.8		4.34		24.9		35	
M3	24/5/2022	Mid-Flood	Fine	Moderate	15:05	1.3	M	0.65	1	0.048	71	7.29	7.29	1.64	1.65	26.91	26.92	72.7	72.9	5.75	5.77	31.4	31.4	51	49
M3	24/5/2022	Mid-Flood	Fine	Moderate	15:05	1.3	M	0.65	2			7.28		1.66		26.93		73.1		5.79		31.4		46	
M1	24/5/2022	Mid-Ebb	Cloudy	Smooth	10:10	2	M	1	1	0.218	287	7.20	7.20	2.10	2.11	26.07	26.08	74.7	74.5	5.90	5.88	25.5	25.2	42	43
M1	24/5/2022	Mid-Ebb	Cloudy	Smooth	10:10	2	M	1	2			7.19		2.12		26.08		74.2		5.86		25.0		43	
M2	24/5/2022	Mid-Ebb	Cloudy	Smooth	10:30	1	M	0.5	1	0.225	302	7.27	7.27	2.48	2.48	26.61	26.62	69.1	69.5	5.46	5.49	27.4	27.3	44	43
M2	24/5/2022	Mid-Ebb	Cloudy	Smooth	10:30	1	M	0.5	2			7.26		2.47		26.62		69.8		5.52		27.3		41	
M3	24/5/2022	Mid-Ebb	Fine	Moderate	10:10	1	M	0.5	1	0.066	145	7.98	7.98	2.12	2.13	26.70	26.71	81.4	81.2	7.34	7.33	26.4	26.2	53	51
M3	24/5/2022	Mid-Ebb	Fine	Moderate	10:10	1	M	0.5	2			7.97		2.14		26.72		80.9		7.31		26.1		49	

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	26/5/2022	Mid-Flood	Fine	Moderate	17:30	1.4	M	0.7	1	0.066	134	7.26	7.25	2.97	2.98	26.11	26.15	48.3	48.4	3.62	3.64	28.9	28.9	41	43
M1	26/5/2022	Mid-Flood	Fine	Moderate	17:30	1.4	M	0.7	2			7.24		2.99		26.18		48.4		3.65		28.9		44	
M2	26/5/2022	Mid-Flood	Fine	Moderate	17:10	1.2	M	0.6	1	0.106	92	7.13	7.14	2.85	2.87	27.06	27.05	49.7	49.8	3.86	3.88	29.3	29.3	26	26
M2	26/5/2022	Mid-Flood	Fine	Moderate	17:10	1.2	M	0.6	2			7.14		2.88		27.04		49.9		3.89		29.3		25	
M3	26/5/2022	Mid-Flood	Cloudy	Calm	17:13	0.4	M	0.2	1	0.23	90	7.20	7.20	3.60	3.61	28.32	28.32	63.1	63.5	4.93	4.96	40.2	40.0	39	39
M3	26/5/2022	Mid-Flood	Cloudy	Calm	17:13	0.4	M	0.2	2			7.19		3.61		28.31		63.8		4.99		39.9		39	
M1	26/5/2022	Mid-Ebb	Fine	Moderate	11:49	0.9	M	0.45	1	0.065	80	7.39	7.39	1.67	1.68	27.60	27.61	72.5	72.0	5.71	5.72	21.8	21.8	31	33
M1	26/5/2022	Mid-Ebb	Fine	Moderate	11:49	0.9	M	0.45	2			7.38		1.69		27.61		71.4		5.73		21.8		35	
M2	26/5/2022	Mid-Ebb	Fine	Moderate	12:08	0.8	M	0.4	1	0.117	49	7.44	7.45	1.78	1.79	27.99	27.97	68.3	68.4	5.24	5.27	26.3	26.4	25	25
M2	26/5/2022	Mid-Ebb	Fine	Moderate	12:08	0.8	M	0.4	2			7.45		1.79		27.94		68.5		5.29		26.4		25	
M3	26/5/2022	Mid-Ebb	Cloudy	Calm	11:36	0.4	M	0.2	1	0.239	270	7.29	7.29	2.08	2.09	28.77	28.78	80.5	80.2	6.30	6.27	31.5	32.0	42	43
M3	26/5/2022	Mid-Ebb	Cloudy	Calm	11:36	0.4	M	0.2	2			7.28		2.10		28.79		79.8		6.24		32.5		44	

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	28/5/2022	Mid-Flood	Cloudy	Smooth	19:15	2	M	1	1	0.272	191	7.48	7.48	4.22	4.23	27.09	27.10	68.9	69.2	5.41	5.43	32.2	31.8	33	32
M1	28/5/2022	Mid-Flood	Cloudy	Smooth	19:15	2	M	1	2			7.47		4.23		27.11		69.4		5.45		31.4		31	
M2	28/5/2022	Mid-Flood	Cloudy	Smooth	18:58	1	M	0.5	1	0.251	247	7.31	7.31	3.73	3.74	27.27	27.27	66.7	66.5	5.25	5.24	30.3	30.2	25	25
M2	28/5/2022	Mid-Flood	Cloudy	Smooth	18:58	1	M	0.5	2			7.31		3.75		27.26		66.3		5.22		30.1		25	
M3	28/5/2022	Mid-Flood	Fine	Moderate	19:00	1.3	M	0.65	1	0.093	79	7.04	7.05	1.66	1.68	27.30	27.30	52.6	52.7	4.34	4.37	43.4	43.6	43	46
M3	28/5/2022	Mid-Flood	Fine	Moderate	19:00	1.3	M	0.65	2			7.05		1.69		27.30		52.8		4.39		43.9		48	
M1	28/5/2022	Mid-Ebb	Cloudy	Smooth	12:38	2.2	M	1.1	1	0.296	254	7.03	7.03	2.75	2.74	28.43	28.44	51.2	51.6	4.04	4.08	32.6	32.8	25	24
M1	28/5/2022	Mid-Ebb	Cloudy	Smooth	12:38	2.2	M	1.1	2			7.02		2.73		28.44		51.9		4.11		33.1		22	
M2	28/5/2022	Mid-Ebb	Cloudy	Smooth	12:57	1.2	M	0.6	1	0.319	272	7.25	7.26	3.28	3.28	28.66	28.67	58.7	58.5	4.62	4.61	26.6	26.9	30	29
M2	28/5/2022	Mid-Ebb	Cloudy	Smooth	12:57	1.2	M	0.6	2			7.26		3.27		28.68		58.3		4.59		27.3		27	
M3	28/5/2022	Mid-Ebb	Fine	Moderate	12:55	0.9	M	0.45	1	0.067	133	7.08	7.06	1.74	1.75	26.86	26.92	48.1	48.4	4.09	4.12	35.0	34.8	19	20
M3	28/5/2022	Mid-Ebb	Fine	Moderate	12:55	0.9	M	0.45	2			7.04		1.76		26.97		48.7		4.14		34.7		21	

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	31/5/2022	Mid-Flood	Fine	Moderate	7:14	0.9	M	0.45	1	0.067	119	7.29	7.30	5.69	5.67	29.55	29.53	76.7	76.8	5.67	5.68	20.6	20.5	23	25
M1	31/5/2022	Mid-Flood	Fine	Moderate	7:14	0.9	M	0.45	2			7.31		5.64		29.52		76.8		5.69		20.5		26	
M2	31/5/2022	Mid-Flood	Fine	Moderate	7:30	0.8	M	0.4	1	0.093	79	7.18	7.18	5.57	5.56	29.17	29.18	72.3	72.4	5.48	5.49	20.5	20.5	35	35
M2	31/5/2022	Mid-Flood	Fine	Moderate	7:30	0.8	M	0.4	2			7.17		5.54		29.19		72.4		5.49		20.5		34	
M3	31/5/2022	Mid-Flood	Cloudy	Calm	7:09	0.8	M	0.4	1	0.282	97	7.37	7.38	3.01	3.02	26.51	26.52	82.1	81.7	6.11	6.07	22.2	21.8	17	18
M3	31/5/2022	Mid-Flood	Cloudy	Calm	7:09	0.8	M	0.4	2			7.38		3.03		26.52		81.2		6.03		21.4		19	
M1	31/5/2022	Mid-Ebb	Fine	Moderate	14:35	0.8	M	0.4	1	0.095	296	7.49	7.49	4.19	4.19	29.14	29.16	83.7	83.7	6.14	6.14	20.9	20.9	15	16
M1	31/5/2022	Mid-Ebb	Fine	Moderate	14:35	0.8	M	0.4	2			7.49		4.18		29.18		83.6		6.13		20.9		16	
M2	31/5/2022	Mid-Ebb	Fine	Moderate	14:17	0.7	M	0.35	1	0.104	312	7.51	7.52	4.25	4.24	29.57	29.58	84.2	84.5	6.27	6.28	21.5	21.5	28	29
M2	31/5/2022	Mid-Ebb	Fine	Moderate	14:17	0.7	M	0.35	2			7.52		4.23		29.58		84.8		6.29		21.6		29	
M3	31/5/2022	Mid-Ebb	Cloudy	Calm	14:20	0.6	M	0.3	1	0.302	247	7.56	7.55	2.21	2.21	28.84	28.84	88.8	88.3	6.55	6.49	18.9	19.3	22	22
M3	31/5/2022	Mid-Ebb	Cloudy	Calm	14:20	0.6	M	0.3	2			7.54		2.20		28.84		87.7		6.42		19.7		21	

Remark

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For Flood Tide

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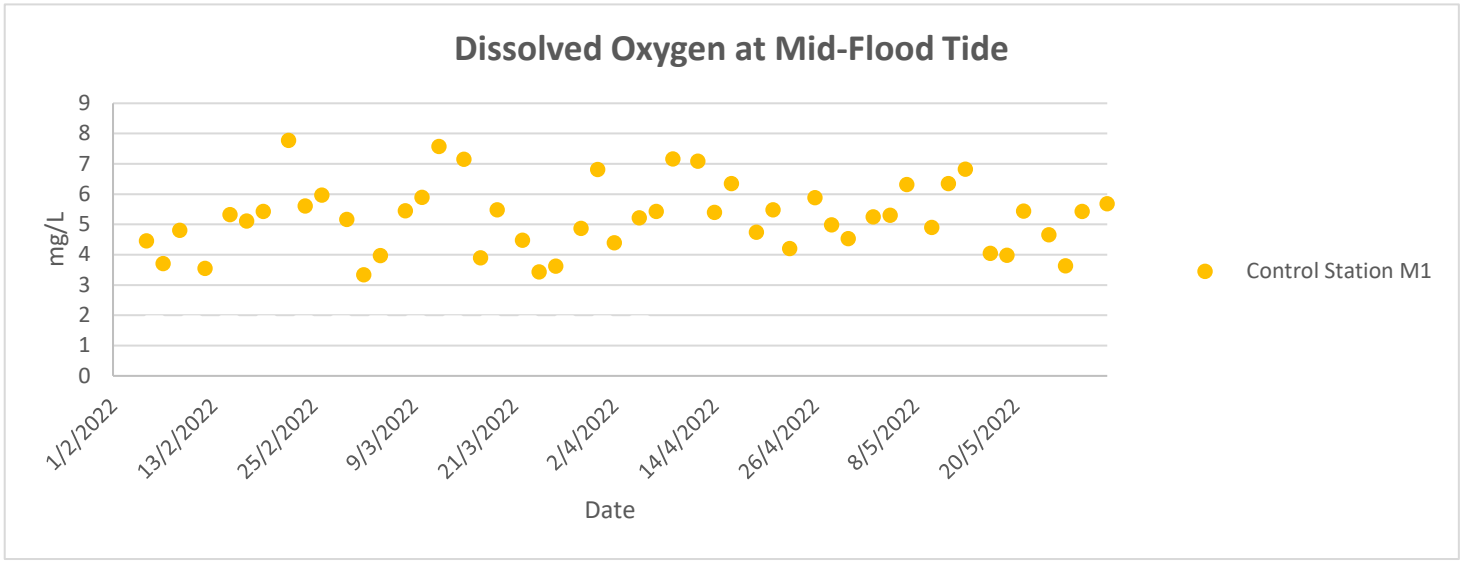
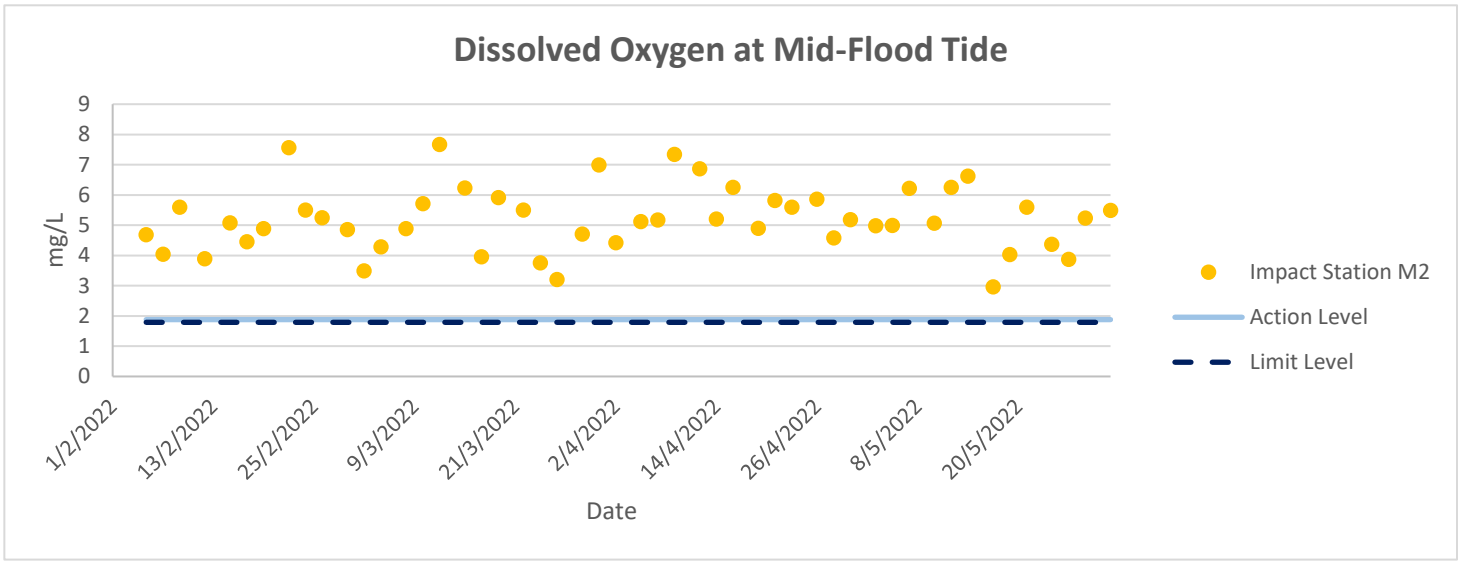
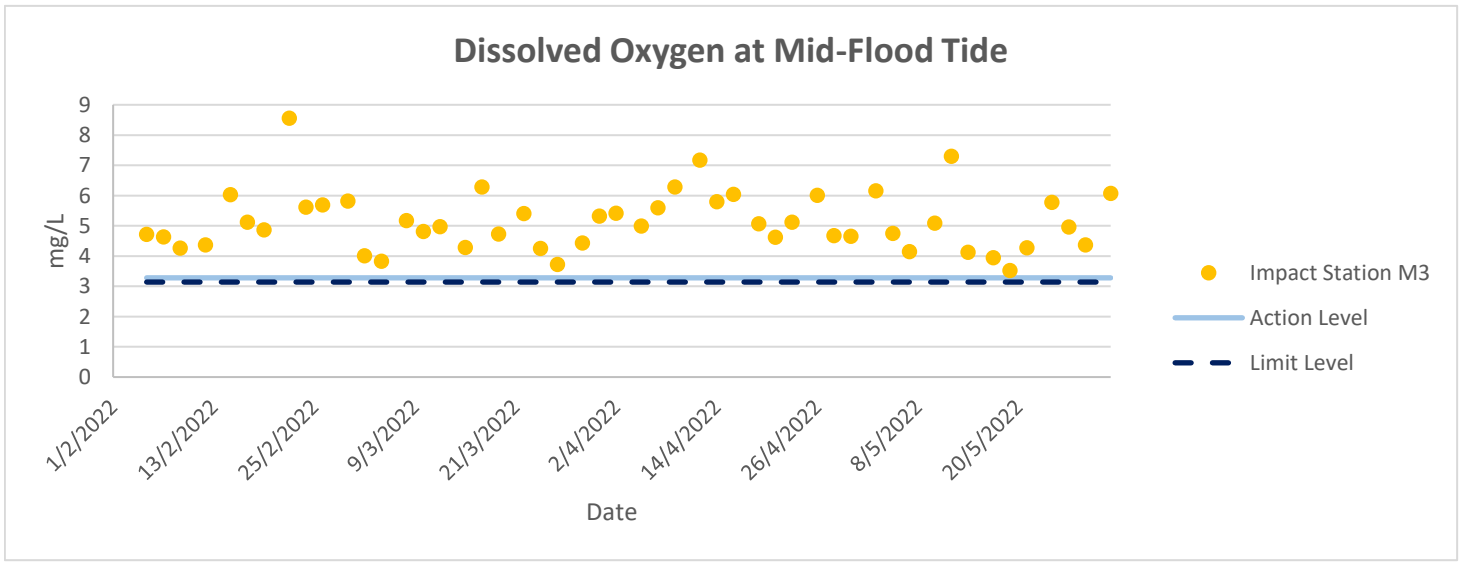
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74.3	78.0	104	167

For Ebb Tide

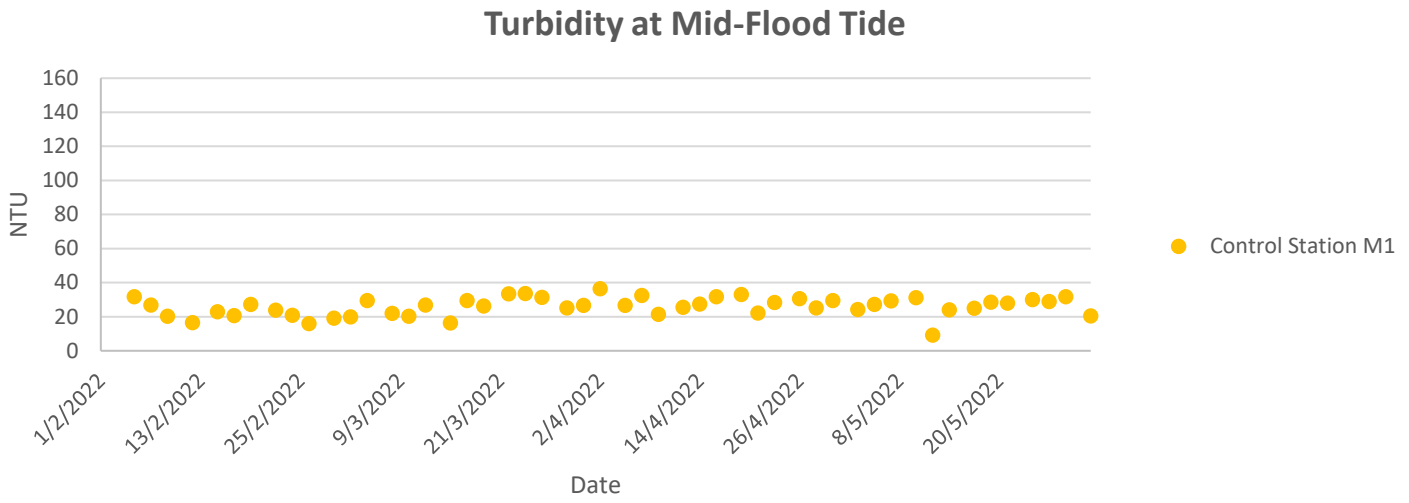
Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

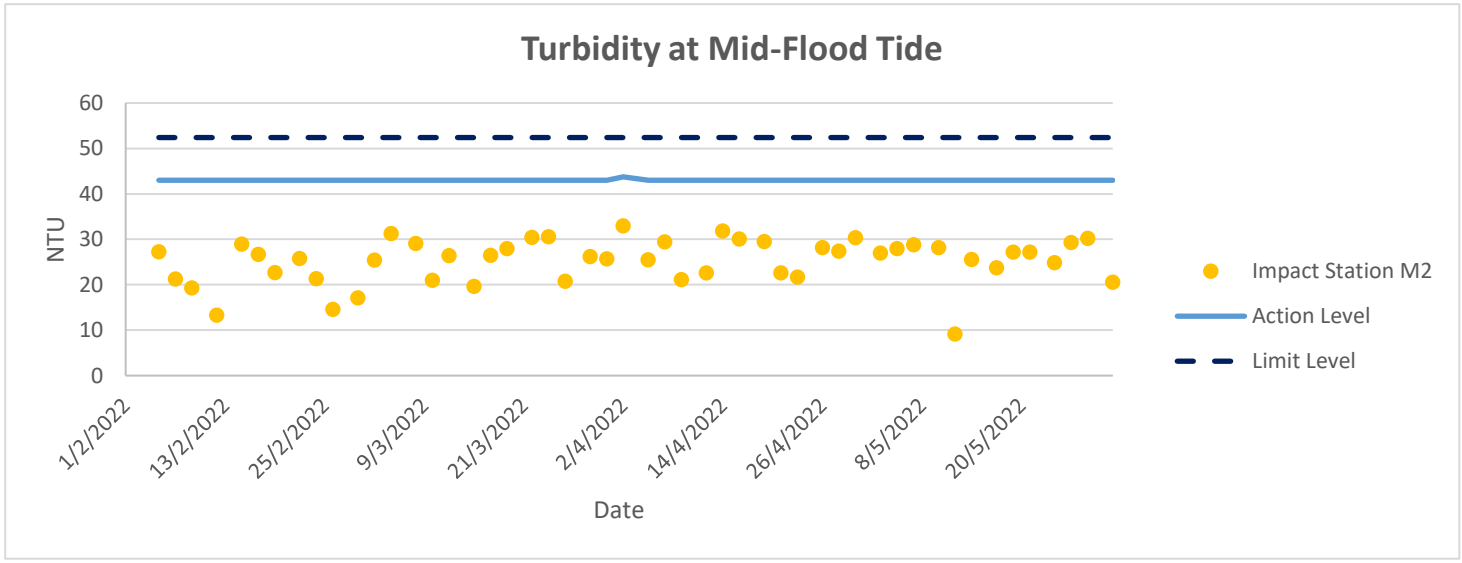


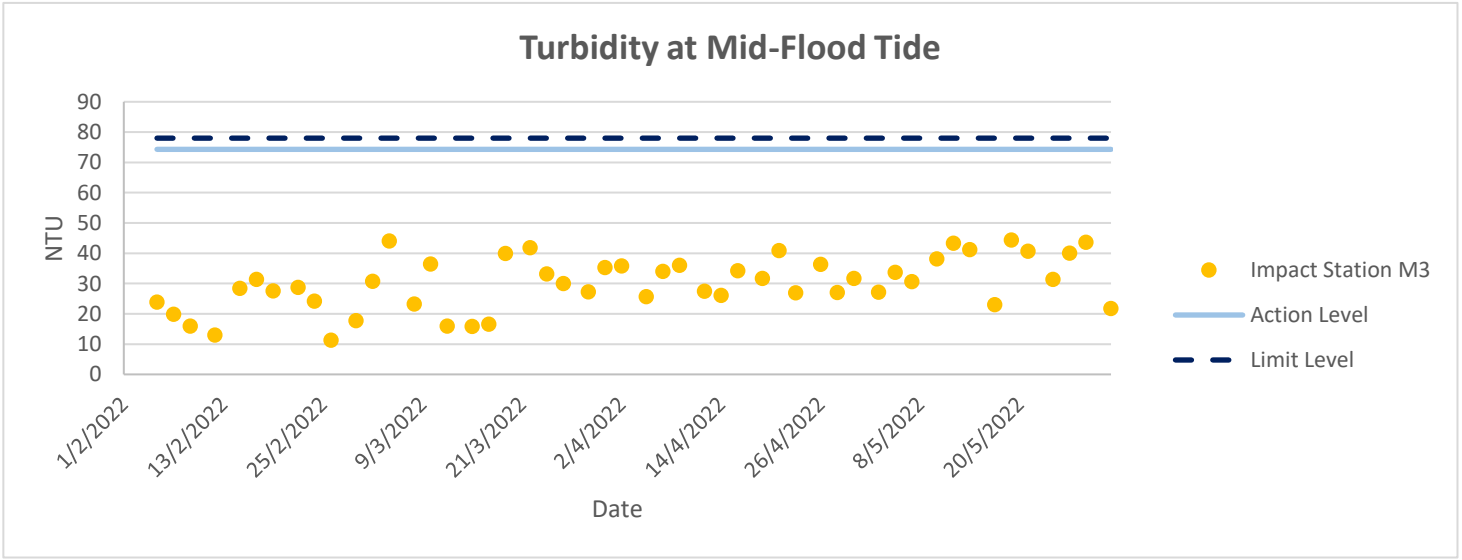




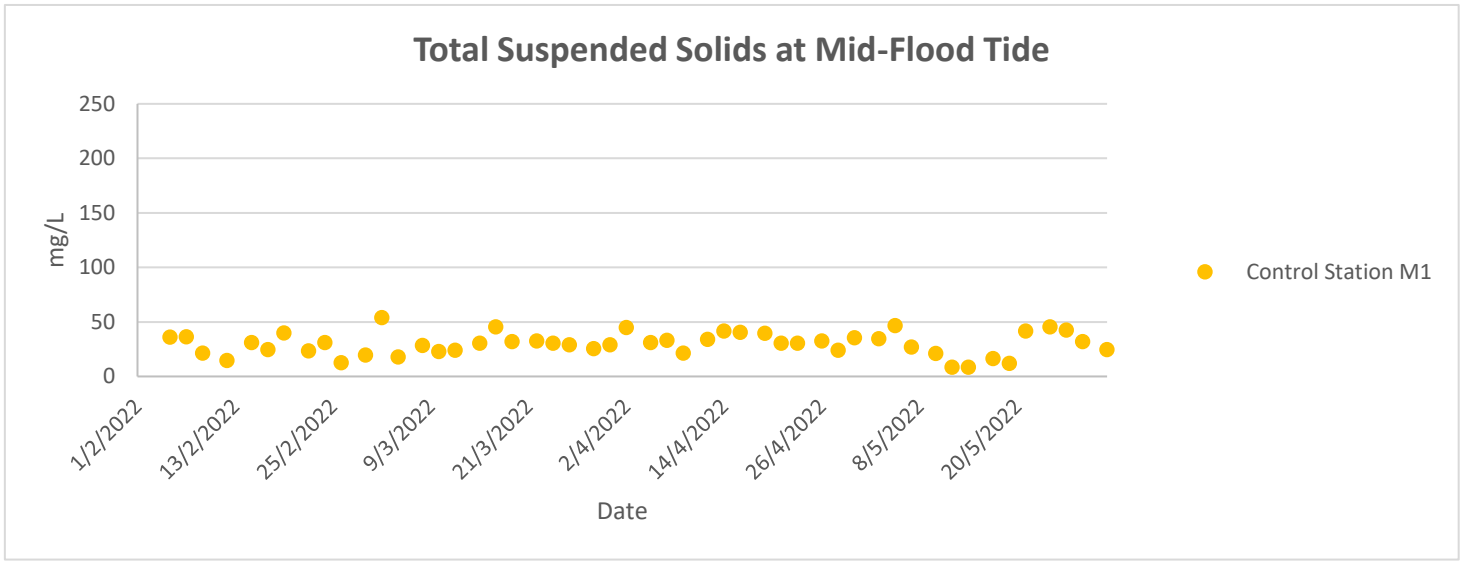
Water Quality Monitoring Results

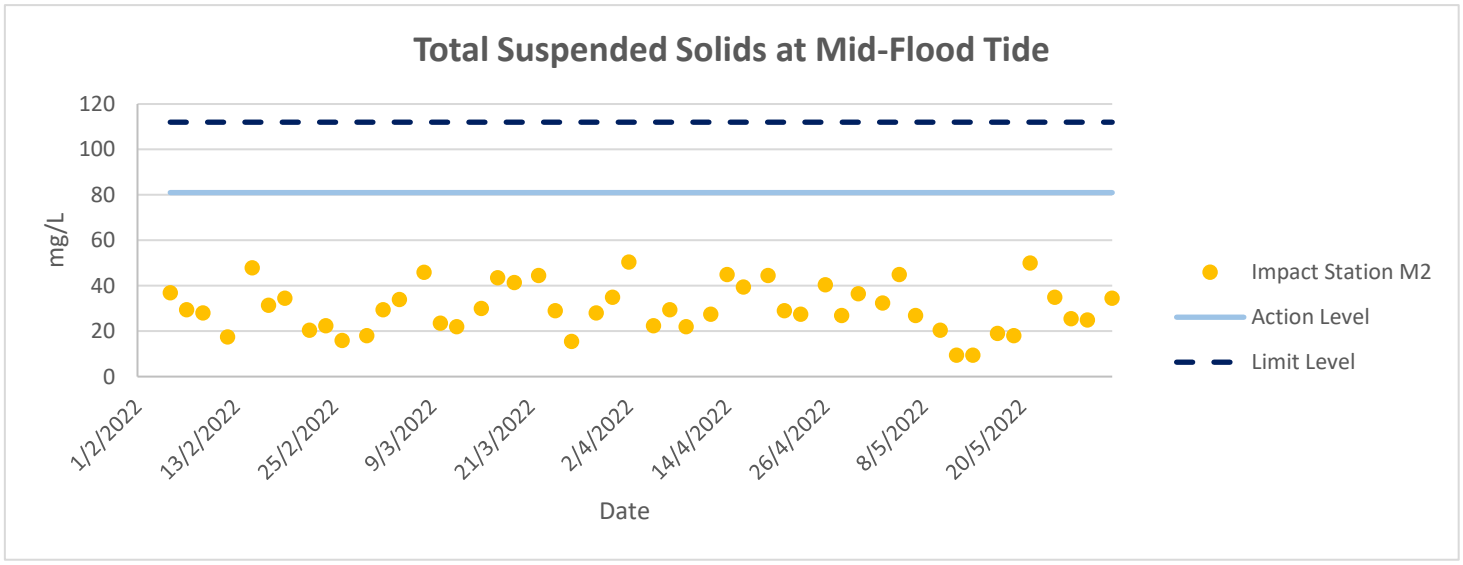


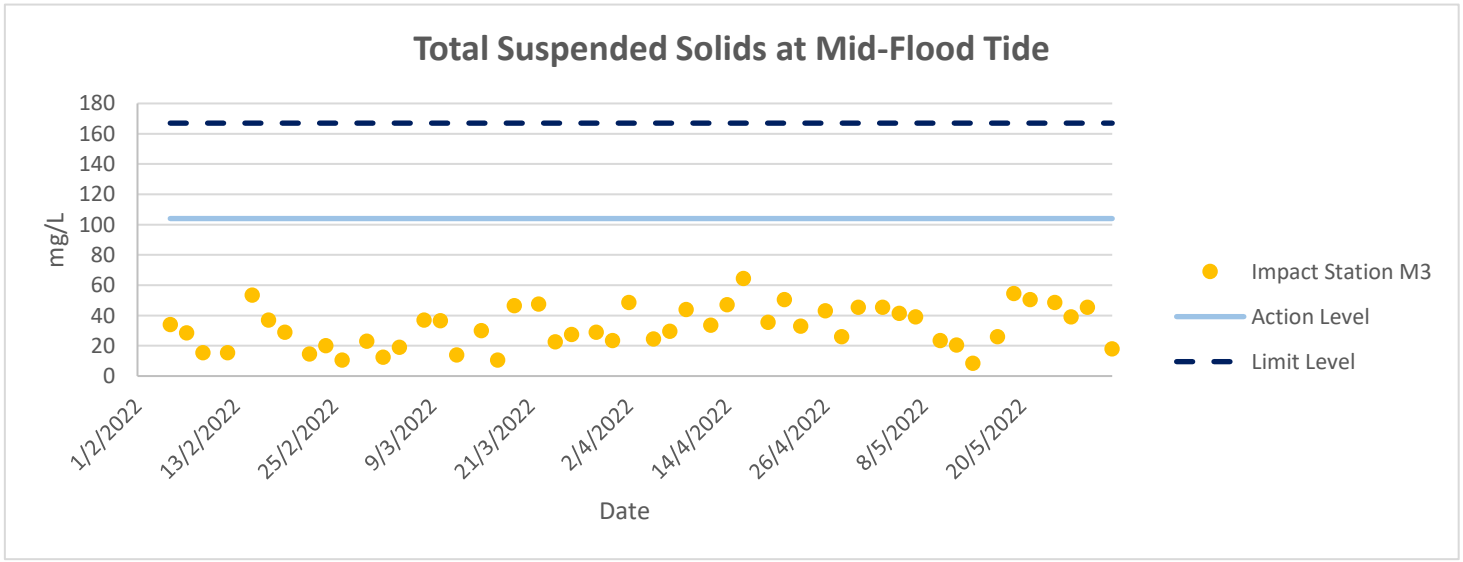




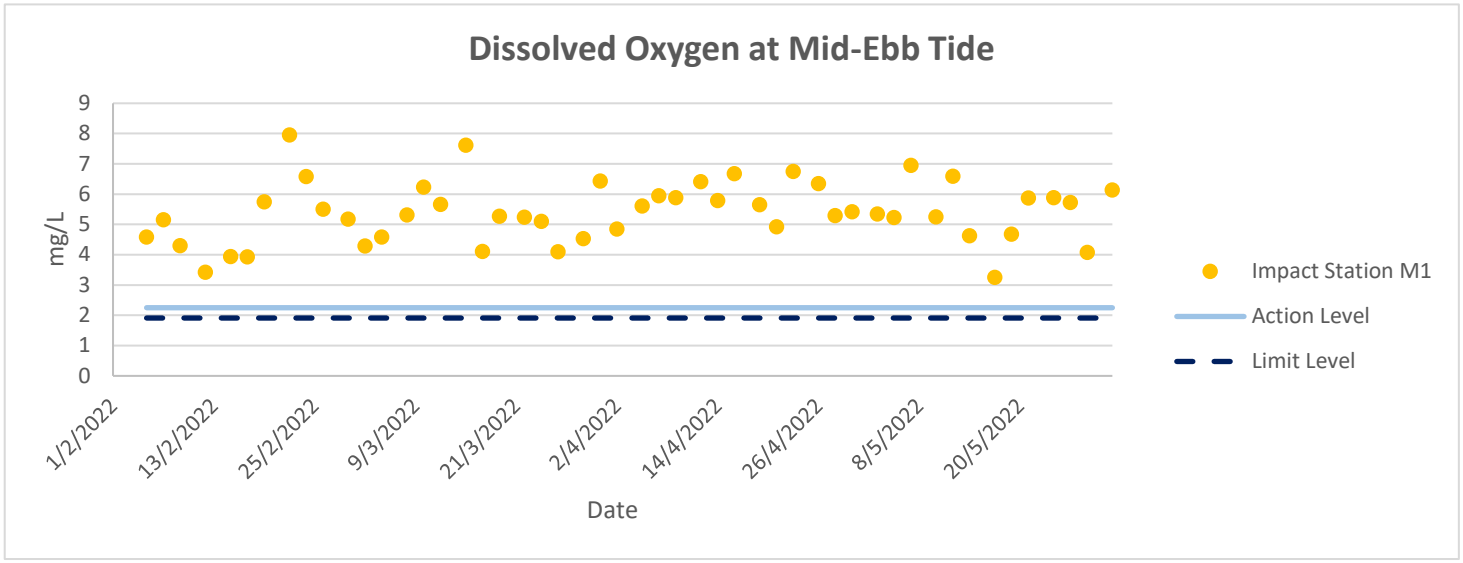
Water Quality Monitoring Results

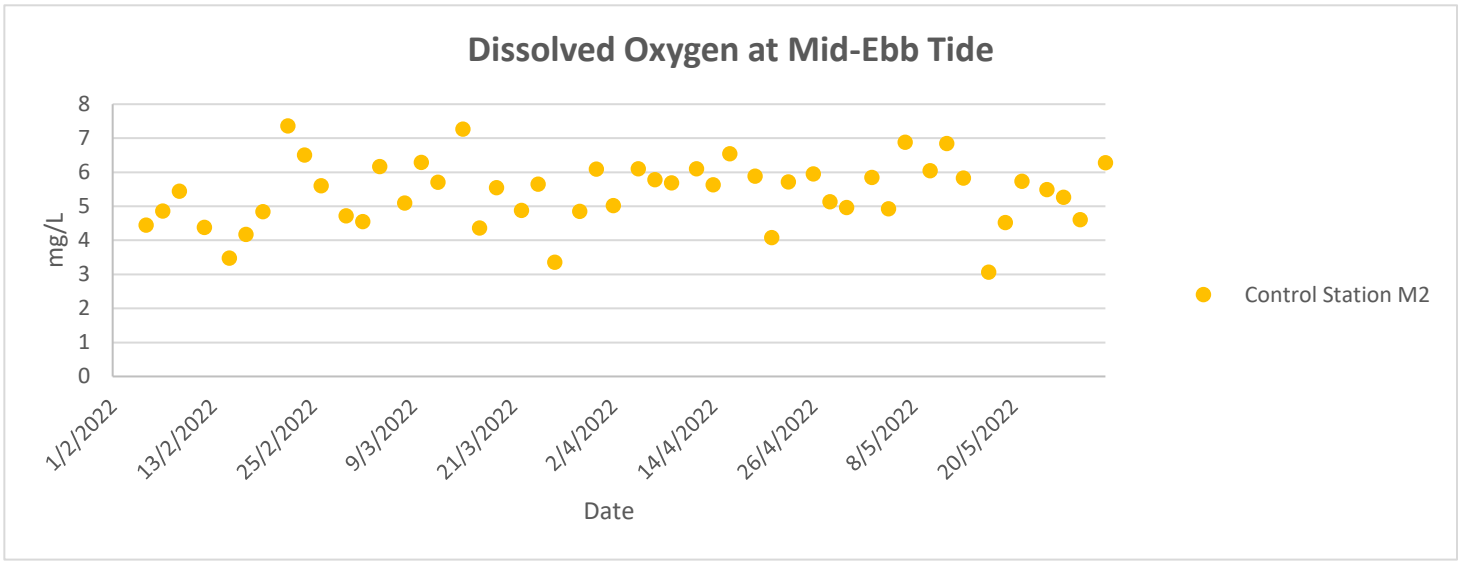


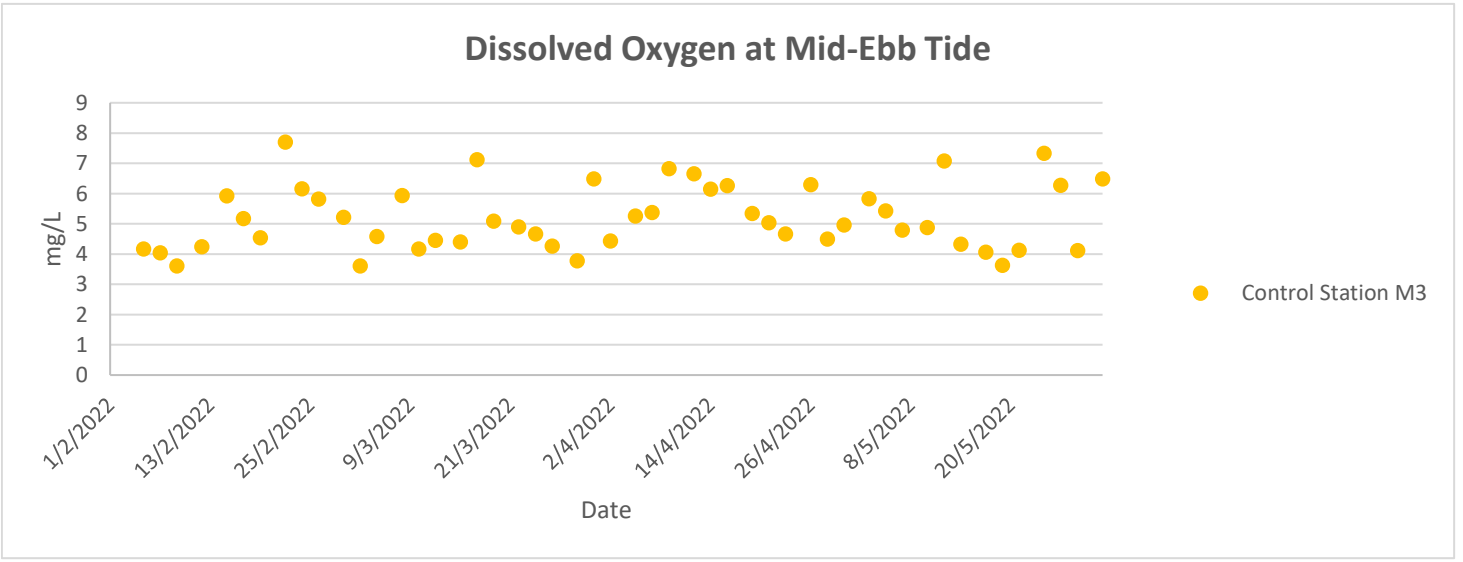




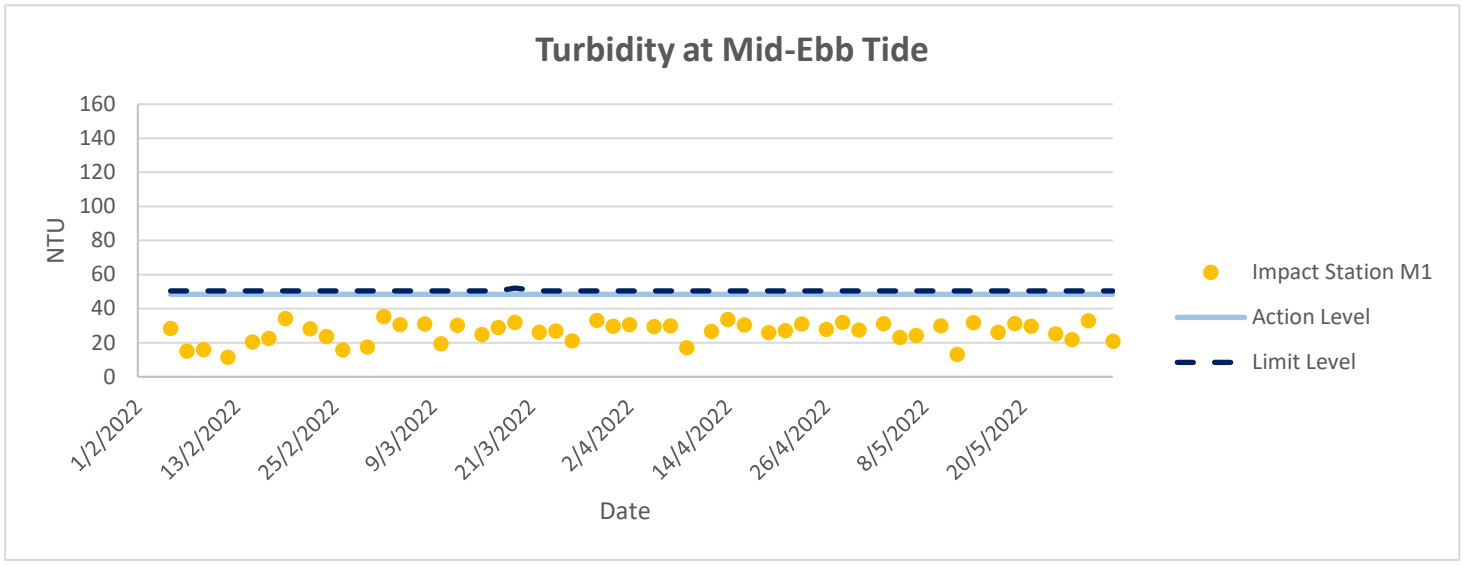
Water Quality Monitoring Results

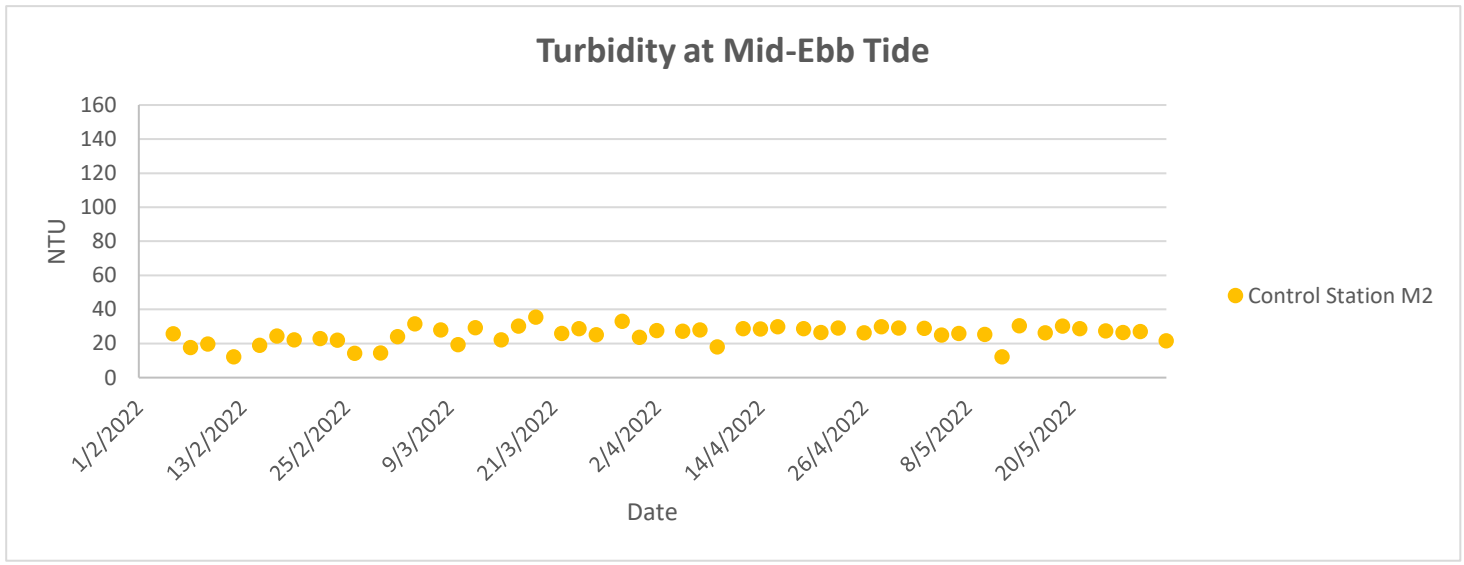


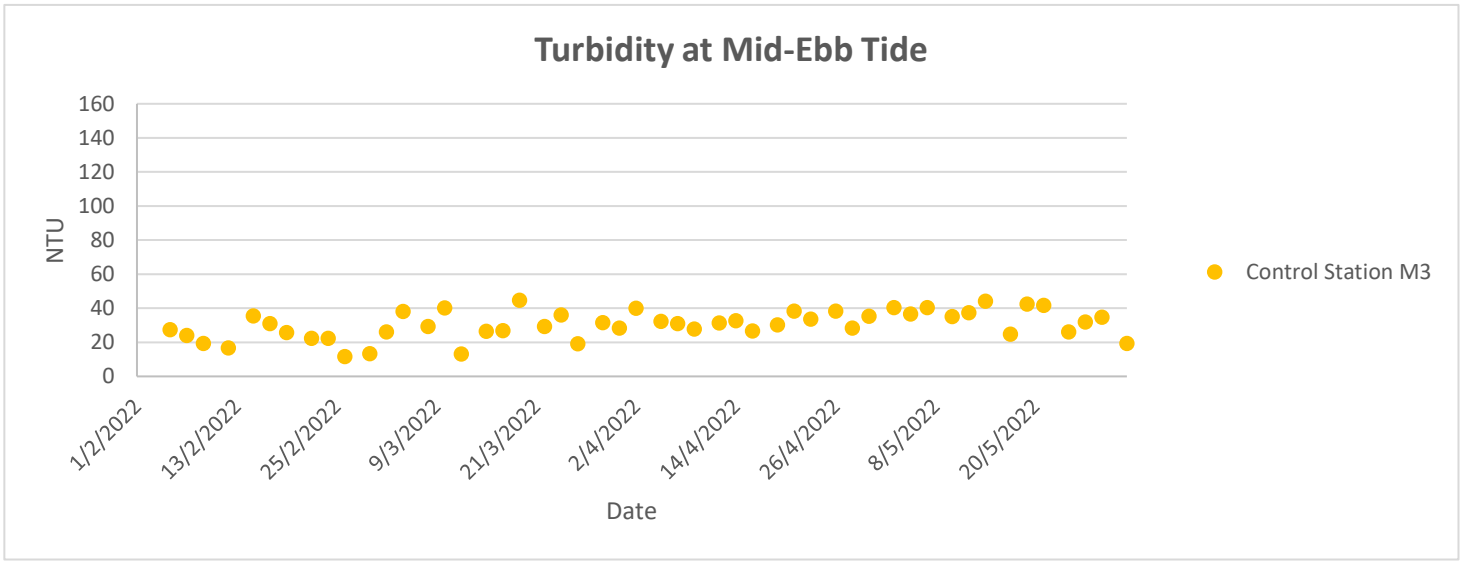




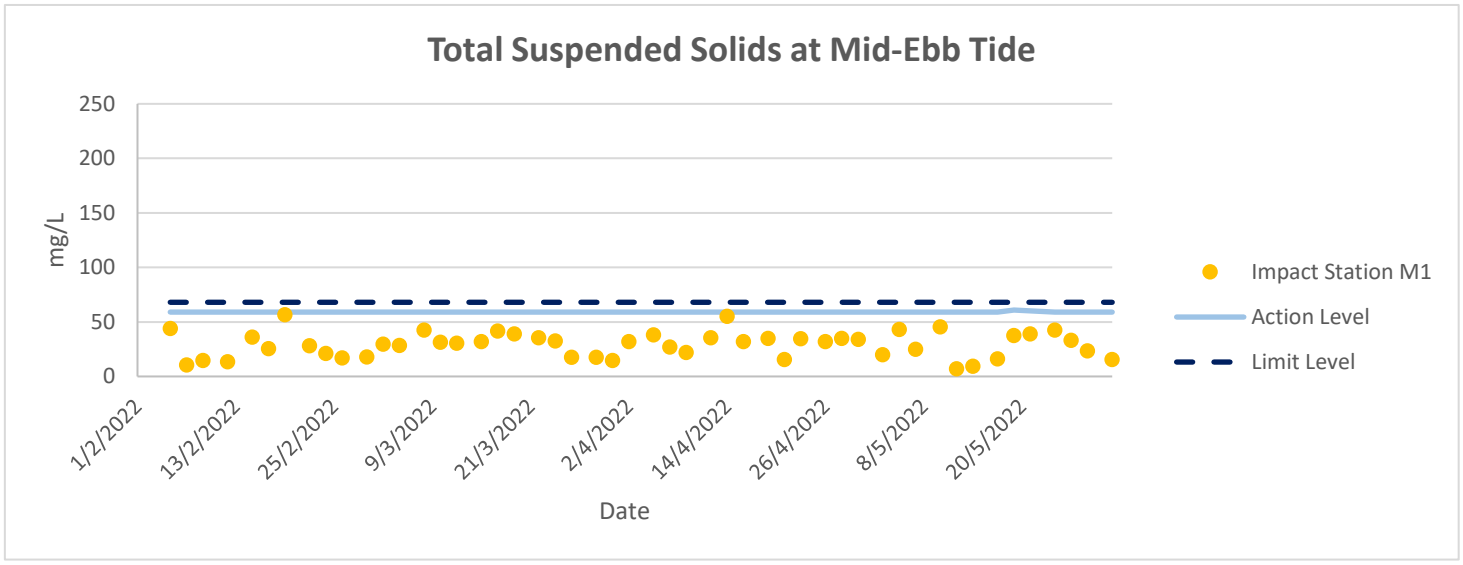
Water Quality Monitoring Results

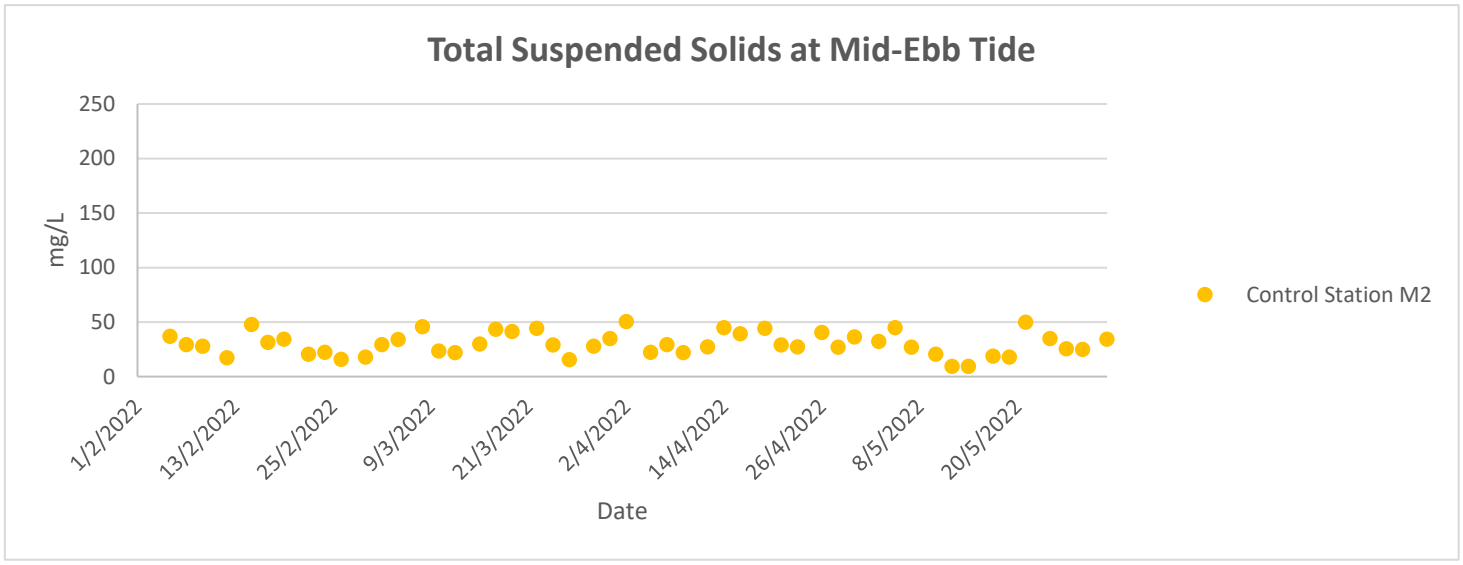


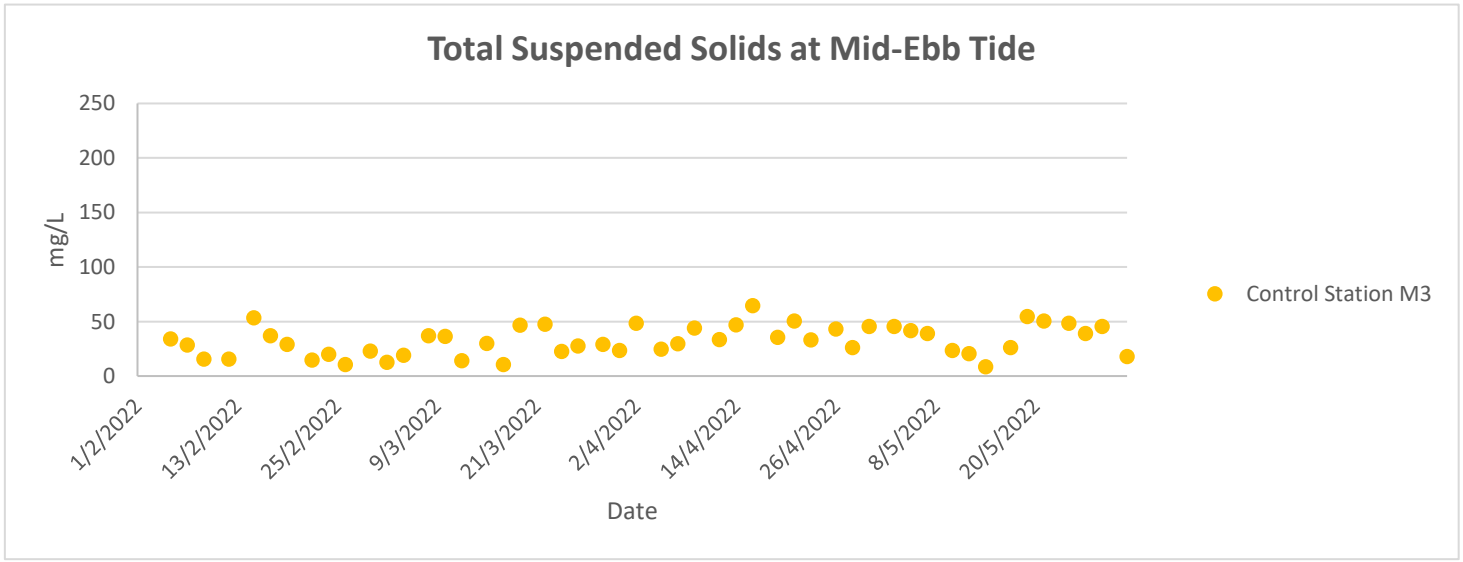




Water Quality Monitoring Results







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 (31 individuals). On the other hand, species with the least abundance (1 individual) was the White-breasted Waterhen *Amaurornis phoenicurus*.

Transect Walk

Among the different species recorded, the Chinese Pond Heron and Plain Prinia *Prinia inornata* were noted with the highest abundance (6 individuals each); while the species Black-collared Starling *Gracupica nigricollis*, Common Moorhen *Gallinula chloropus*, Common Myna *Acridotheres tristis*, Dusky Warbler *Phylloscopus fuscatus*, and Large-billed Crow *Corvus macrorhynchos* 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 (31 individuals). On the other hand, the Black Kite *Milvus migrans*, Collared Crow *Corvus torquatus*, and Greater Coucal *Centropus sinensis* had the lowest abundance (2 individuals each).

Transect Walk

Among the different species recorded, the Chinese Pond Heron was noted with the highest abundance (6 individuals) while the Little Egret *Egretta garzetta* had the lowest recorded abundance (3 individuals)

Appendix F.2 Ecological Bird Monitoring Result (17 May 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 [9]
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	5	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Greater Coucal	*Centropus sinensis*	1	Common	R	-	Class II	Vulnerable	LC	LC	Y	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Azure-winged Magpie	*Cyanopica cyanus*	3	Introduced	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Yellow Bittern	*Ixobrychus sinensis*	1	Uncommon	PM,SV	-	-	-	LC	LC	N	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Yellow-bellied Prinia	*Prinia flaviventris*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW1	Pond-FLW	Eurasian Collared Dove	*Streptopelia decaocto*	1	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	3	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Common Myna	*Acridotheres tristis*	2	Uncommon	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Black Kite	*Milvus migrans*	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Dusky Warbler	*Phylloscopus fuscatus*	3	Common	PM,WV	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW2	Pond-FLW	Plain Prinia	*Prinia inornata*	7	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW3	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW3	Pond-FLW	Black-collared Starling	*Gracupica nigricollis*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW3	Pond-FLW	Yellow Bittern	*Ixobrychus sinensis*	1	Uncommon	PM,SV	-	-	-	LC	LC	N	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW3	Pond-FLW	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	White-breasted Waterhen	*Amaurornis phoenicurus*	1	Common	R	-	-	-	LC	LC	N	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Yellow-bellied Prinia	*Prinia flaviventris*	5	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW4	Pond-FLW	Eurasian Collared Dove	*Streptopelia decaocto*	1	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Pied Kingfisher	*Ceryle rudis*	3	Uncommon	R	-	-	-	LC	LC	N	Y

17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Masked Laughingthrush	*Garrulax perspicillatus*	6	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Black Kite	*Milvus migrans*	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Yellow-bellied Prinia	*Prinia flaviventris*	3	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Eurasian Collared Dove	*Streptopelia decaocto*	1	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW5	Pond-FLW	Little Grebe	*Tachybaptus ruficollis*	4	Common	R	LC	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Great Egret	*Ardea alba*	3	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	6	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Collared Crow	*Corvus torquatus*	2	Uncommon	R	LC	-	-	NT	VU	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Little Egret	*Egretta garzetta*	5	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Little Grebe	*Tachybaptus ruficollis*	1	Common	R	LC	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW6	Pond-FLW	Marsh Sandpiper	*Tringa stagnatilis*	5	Common	PM,WV	RC	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Great Egret	*Ardea alba*	2	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	5	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Point Count	FLW7	Pond-FLW	Black-collared Starling	*Gracupica nigricollis*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Domestic Pigeon	*Columba livia*	3	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Eurasian Tree Sparrow	*Passer montanus*	4	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Reedbed	Yellow-bellied Prinia	*Prinia flaviventris*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Plain Prinia	*Prinia inornata*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Chinese Bulbul	*Pycnonotus sinensis*	7	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Spotted Dove	*Spilopelia chinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	White-shouldered Starling	*Sturnia sinensis*	3	Common	PM	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	NSW1	Pond-NSW	Japanese White-eye	*Zosterops japonicus*	2	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Common Moorhen	*Gallinula chloropus*	1	Common	R	-	-	-	LC	LC	N	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW1	Plantation-NSW	Japanese White-eye	*Zosterops japonicus*	1	Abundant	R	-	-	-	LC	LC	N	N

17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	5	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Mangrove	Chinese Pond Heron	*Ardeola bacchus*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Large-billed Crow	*Corvus macrorhynchos*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	In flight	Chinese Pond Heron	*Ardeola bacchus*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Greater Coucal	*Centropus sinensis*	1	Common	R	-	Class II	Vulnerable	LC	LC	Y	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Little Egret	*Egretta garzetta*	5	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Common Moorhen	*Gallinula chloropus*	1	Common	R	-	-	-	LC	LC	N	Y
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Black-collared Starling	*Gracupica nigricollis*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Point Count	SP/NSW3	Modified Watercourse	White Wagtail	*Motacilla alba*	3	Common	PM,WV	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	Plantation-FLW	Chinese Pond Heron	*Ardeola bacchus*	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	Developed Area-FLW	Chinese Pond Heron	*Ardeola bacchus*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	In Flight	Large-billed Crow	*Corvus macrorhynchos*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	Plantation-FLW	Azure-winged Magpie	*Cyanopica cyanus*	3	Introduced	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Little Egret	*Egretta garzetta*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	Grassland-FLW	Eurasian Tree Sparrow	*Passer montanus*	5	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Yellow-bellied Prinia	*Prinia flaviventris*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	FLW	Transect	FLW	Pond-FLW	Plain Prinia	*Prinia inornata*	4	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Transect	NSW	Plantation-NSW	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Transect	NSW	Modified Watercourse	Common Moorhen	*Gallinula chloropus*	1	Common	R	-	-	-	LC	LC	N	Y
17/05/2022	Daytime	Wet Season	NSW	Transect	NSW	Pond-NSW	Dusky Warbler	*Phylloscopus fuscatus*	1	Common	PM,WV	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Transect	NSW	Pond-NSW	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	NSW	Transect	NSW	Plantation-NSW	Red-whiskered Bulbul	*Pycnonotus jocosus*	3	Abundant	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Common Myna	*Acridotheres tristis*	1	Uncommon	R	-	-	-	LC	LC	N	N
17/05/2022	Daytime	Wet Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Black-collared Starling	*Gracupica nigricollis*	1	Common	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 (17 May 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Acridotheres cristatellus	14	0.084337	-2.47293	-0.20856	0.515755
Acridotheres tristis	2	0.012048	-4.41884	-0.05324	0.235255
Amaurornis phoenicurus	1	0.006024	-5.11199	-0.0308	0.157424
Ardea alba	6	0.036145	-3.32023	-0.12001	0.398455
Ardeola bacchus	31	0.186747	-1.678	-0.31336	0.525821
Centropus sinensis	2	0.012048	-4.41884	-0.05324	0.235255
Ceryle rudis	3	0.018072	-4.01338	-0.07253	0.291094
Columba livia	3	0.018072	-4.01338	-0.07253	0.291094
Corvus macrorhynchos	2	0.012048	-4.41884	-0.05324	0.235255
Corvus torquatus	2	0.012048	-4.41884	-0.05324	0.235255
Cyanopica cyanus	3	0.018072	-4.01338	-0.07253	0.291094
Egretta garzetta	17	0.10241	-2.27877	-0.23337	0.531794
Gallinula chloropus	2	0.012048	-4.41884	-0.05324	0.235255
Garrulax perspicillatus	6	0.036145	-3.32023	-0.12001	0.398455
Gracupica nigricollis	3	0.018072	-4.01338	-0.07253	0.291094
Ixobrychus sinensis	2	0.012048	-4.41884	-0.05324	0.235255
Milvus migrans	2	0.012048	-4.41884	-0.05324	0.235255
Motacilla alba	3	0.018072	-4.01338	-0.07253	0.291094
Passer montanus	4	0.024096	-3.72569	-0.08978	0.334477
Phylloscopus fuscatus	3	0.018072	-4.01338	-0.07253	0.291094
Prinia flaviventris	12	0.072289	-2.62708	-0.18991	0.498908
Prinia inornata	10	0.060241	-2.8094	-0.16924	0.475466
Pycnonotus sinensis	7	0.042169	-3.16608	-0.13351	0.422701
Spilopelia chinensis	7	0.042169	-3.16608	-0.13351	0.422701
Streptopelia decaocto	3	0.018072	-4.01338	-0.07253	0.291094
Sturnia sinensis	3	0.018072	-4.01338	-0.07253	0.291094
Tachybaptus ruficollis	5	0.03012	-3.50255	-0.1055	0.369514
Tringa stagnatilis	5	0.03012	-3.50255	-0.1055	0.369514
Zosterops japonicus	3	0.018072	-4.01338	-0.07253	0.291094
Total	**166**	**1**	**-107.734**	**-2.9785**	**9.687611**
Richness	**29**				
SS	**9.69**				
SQ	**8.87**				
H	**2.98**				
S^2_H	**0.01**				

Appendix F.3.2 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Point Count Method) in All Habitats (17 May 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Ardea alba	6	0.085714	-2.45674	-0.21058	0.517333
Ardeola bacchus	31	0.442857	-0.81451	-0.36071	0.293802
Centropus sinensis	2	0.028571	-3.55535	-0.10158	0.361157
Corvus torquatus	2	0.028571	-3.55535	-0.10158	0.361157

Egretta garzetta	17	0.242857	-1.41528	-0.34371	0.486448
Milvus migrans	2	0.028571	-3.55535	-0.10158	0.361157
Tachybaptus ruficollis	5	0.071429	-2.63906	-0.1885	0.497473
Tringa stagnatilis	5	0.071429	-2.63906	-0.1885	0.497473
Total	**70**	**1**	**-20.6307**	**-1.59675**	**3.376001**
Richness	**8**				
SS	**3.38**				
SQ	**2.55**				
H	**1.60**				
S^2_H	**0.01**				

Appendix F.3.3 Ecological Bird Monitoring Diversity (All avifauna species in Transect Walk Method) in All Habitats (17 May 2022)

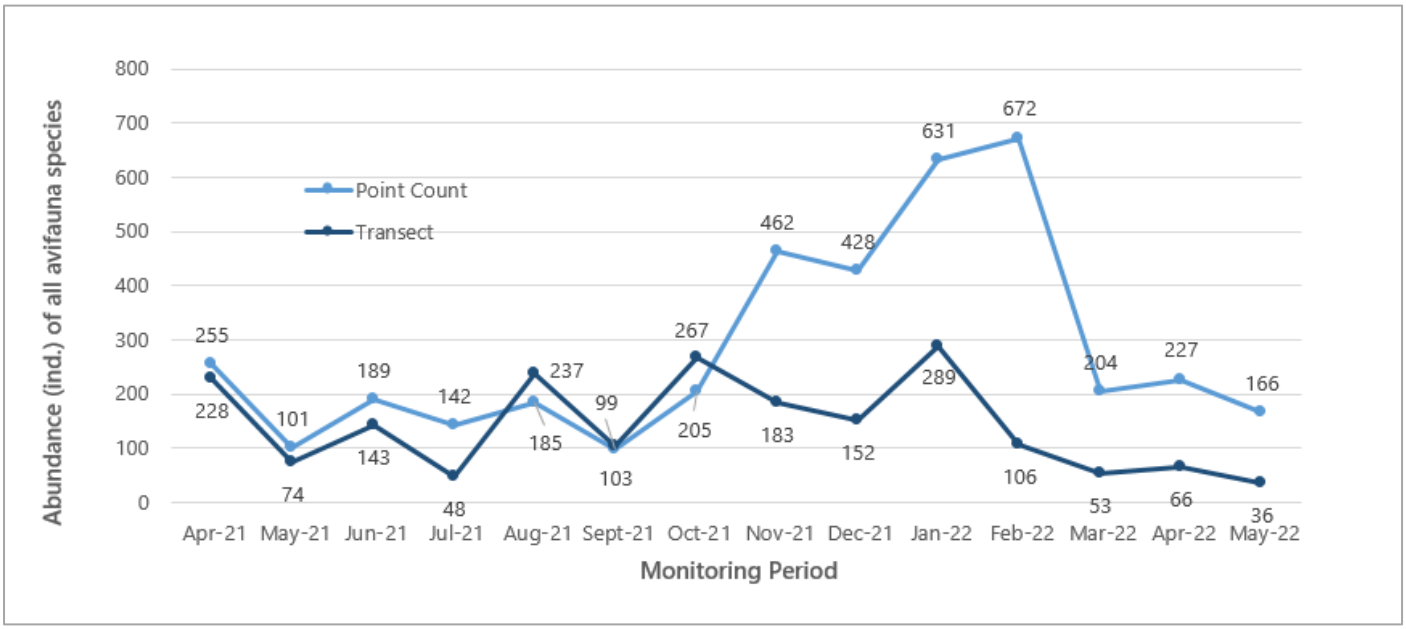
Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)^2
Acridotheres cristatellus	3	0.083333	-2.48491	-0.20708	0.514563
Acridotheres tristis	1	0.027778	-3.58352	-0.09954	0.356711
Ardeola bacchus	6	0.166667	-1.79176	-0.29863	0.535067
Corvus macrorhynchos	1	0.027778	-3.58352	-0.09954	0.356711
Cyanopica cyanus	3	0.083333	-2.48491	-0.20708	0.514563
Egretta garzetta	3	0.083333	-2.48491	-0.20708	0.514563
Gallinula chloropus	1	0.027778	-3.58352	-0.09954	0.356711
Gracupica nigricollis	1	0.027778	-3.58352	-0.09954	0.356711
Passer montanus	5	0.138889	-1.97408	-0.27418	0.541249
Phylloscopus fuscatus	1	0.027778	-3.58352	-0.09954	0.356711
Prinia flaviventris	2	0.055556	-2.89037	-0.16058	0.464125
Prinia inornata	6	0.166667	-1.79176	-0.29863	0.535067
Pycnonotus jocosus	3	0.083333	-2.48491	-0.20708	0.514563
Total	**36**	**1**	**-36.3052**	**-2.35802**	**5.917319**
Richness	**13**				
SS	**5.917319**				
SQ	**5.560261**				
H	**2.36**				
S^2_H	**0.014548**				

Appendix F.3.4 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Transect Walk Method) in All Habitats (17 May 2022)

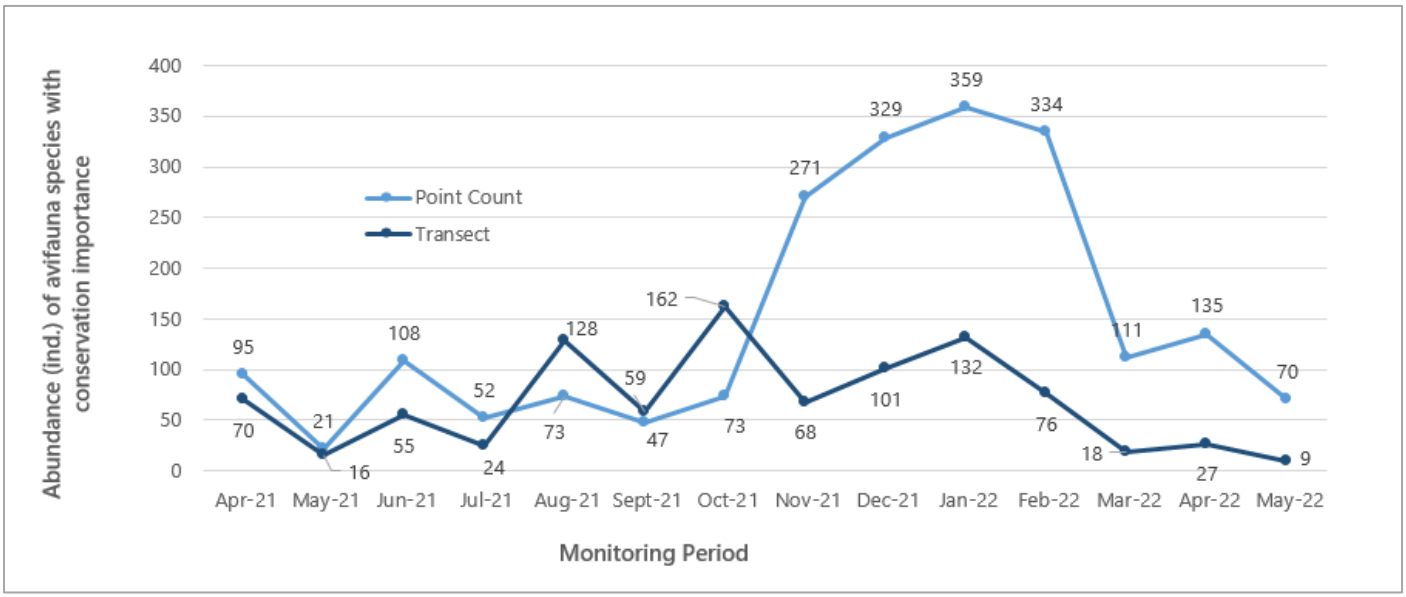
Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)^2
Ardeola bacchus	6	0.666667	-0.40547	-0.27031	0.109601
Egretta garzetta	3	0.333333	-1.09861	-0.3662	0.402316
Total	**9**	**1**	**-1.50408**	**-0.63651**	**0.511918**
Richness	**2**				
SS	**0.511918**				
SQ	**0.40515**				
H	**0.64**				

S^2_H	0.018036				

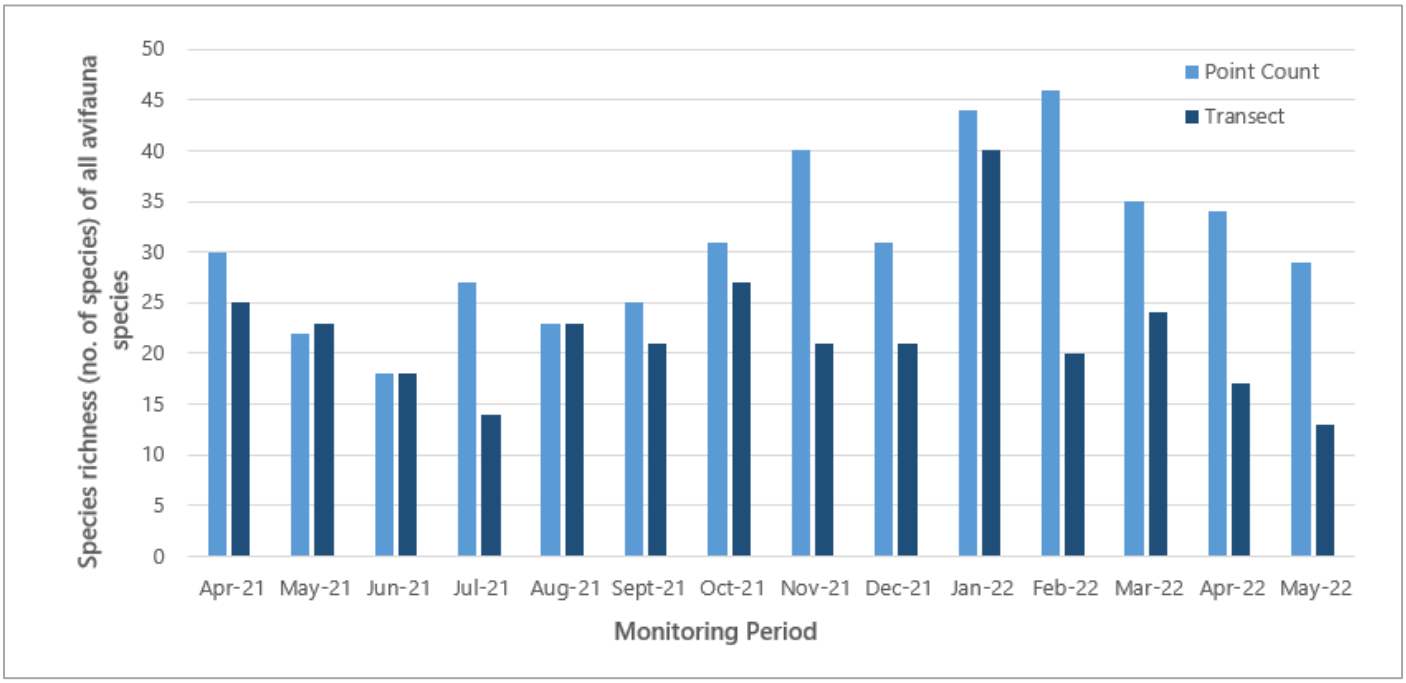
Appendix F.4.1 Abundance of all avifauna species throughout the monitoring period



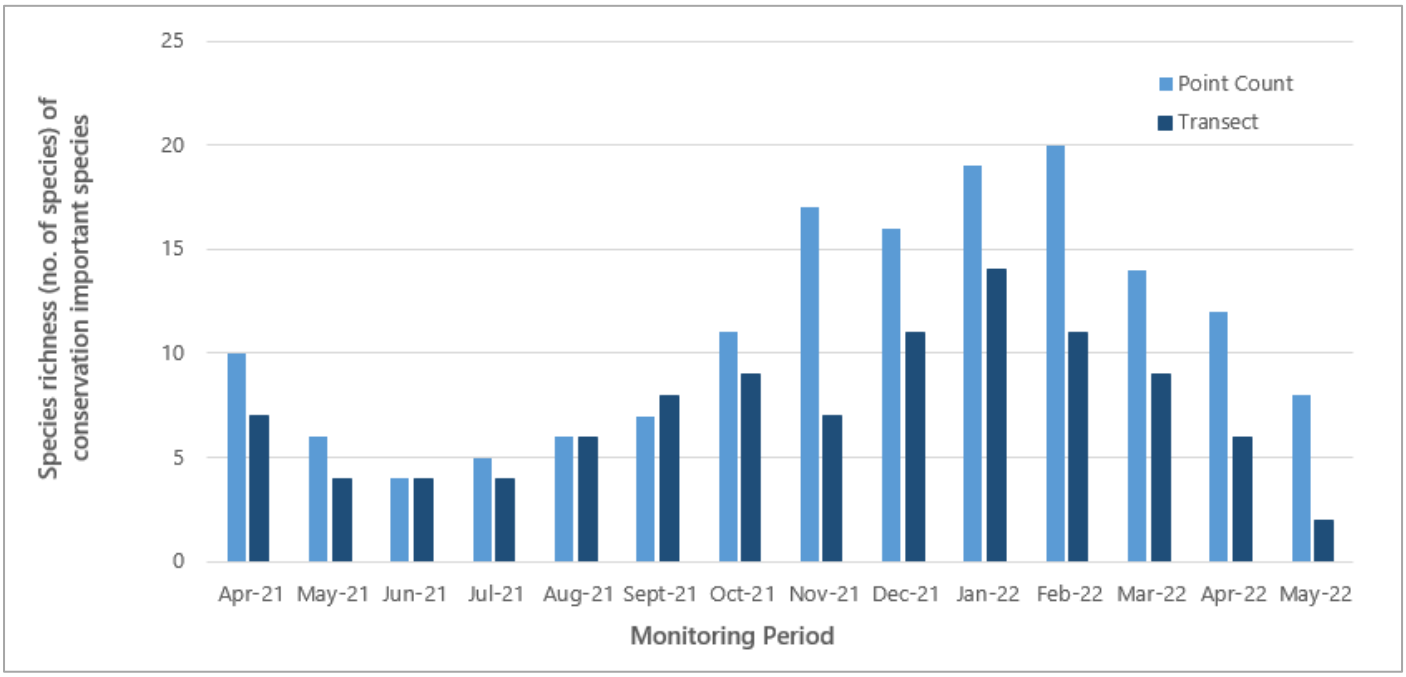
Appendix F.4.2 Abundance of avifauna species with conservation importance throughout the monitoring period



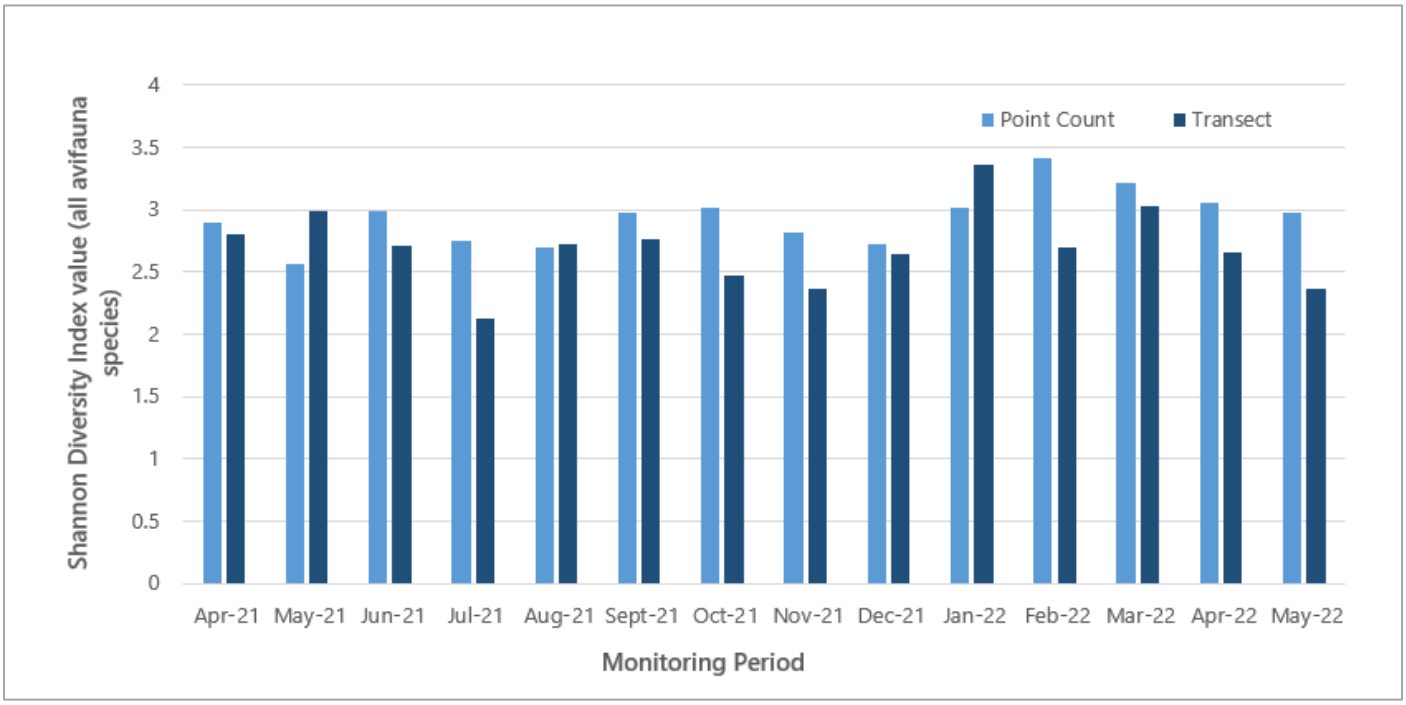
Appendix F.5.1 Species richness of all avifauna species throughout the monitoring period



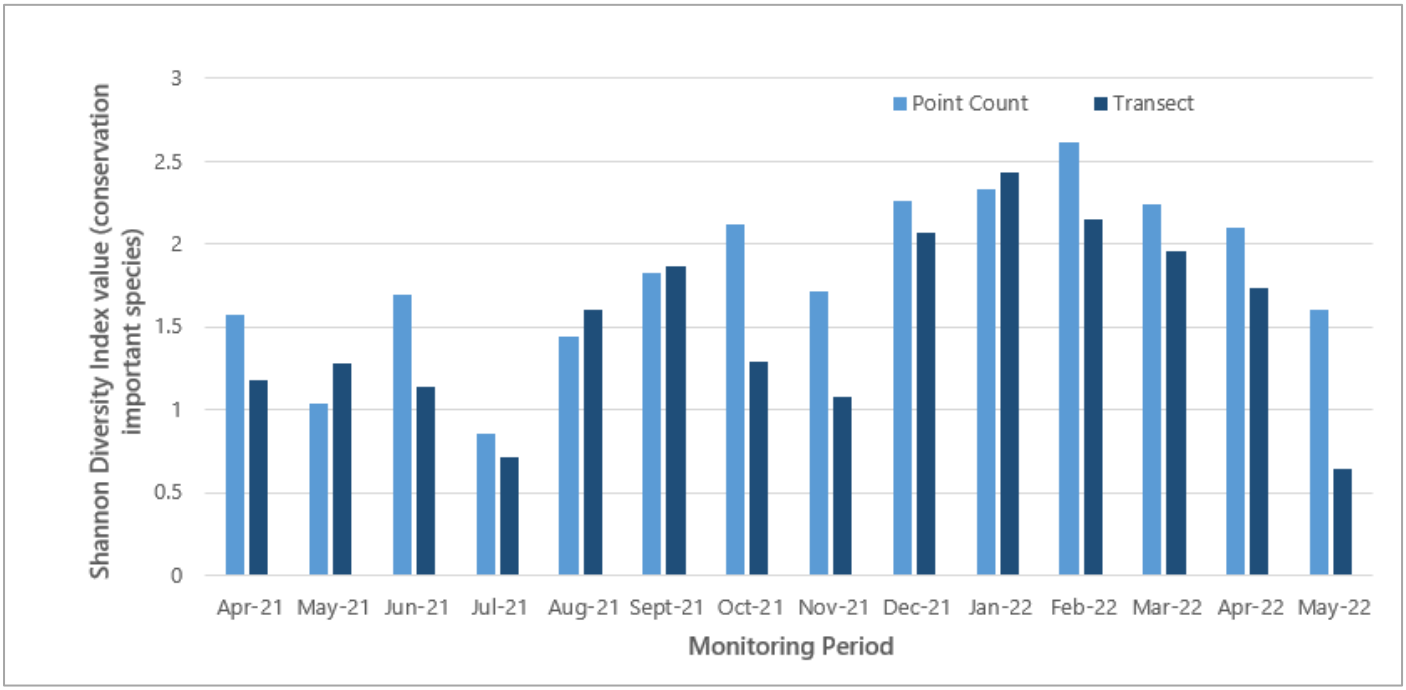
Appendix F.5.2 Species richness of avifauna species with conservation importance throughout the monitoring period



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	May 2017	May 2022
N	98	68
df	97	67
M	1.94	2.44
SS	397.63	178.76
S^2	4.1	2.67
t-value	-1.7	
p-value	.09	

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	May 2017	May 2022
N	27	26
df	26	25
M	2.63	2.69
SS	290.3	63.54
S^2	11.17	2.54
t-value	-0.09	
p-value	0.93	

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	May 2017	May 2022
Total	190	166

Months	May 2017	May 2022
N	31	29
H	3.13	2.98
S^2_H	0.003	0.005
t	1.70	
df	315.32	
Crit	1.97	
p	0.09	
CI	0.11	0.15

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
CI: confidence interval

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

Months	May 2017	May 2022
Total	71	70
N	7	8
H	1.72	1.60
S^2_H	0.005	0.013
t	0.96	
df	118.11	
Crit	1.98	
p	0.34	
CI	0.14	0.22

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
CI: confidence interval