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

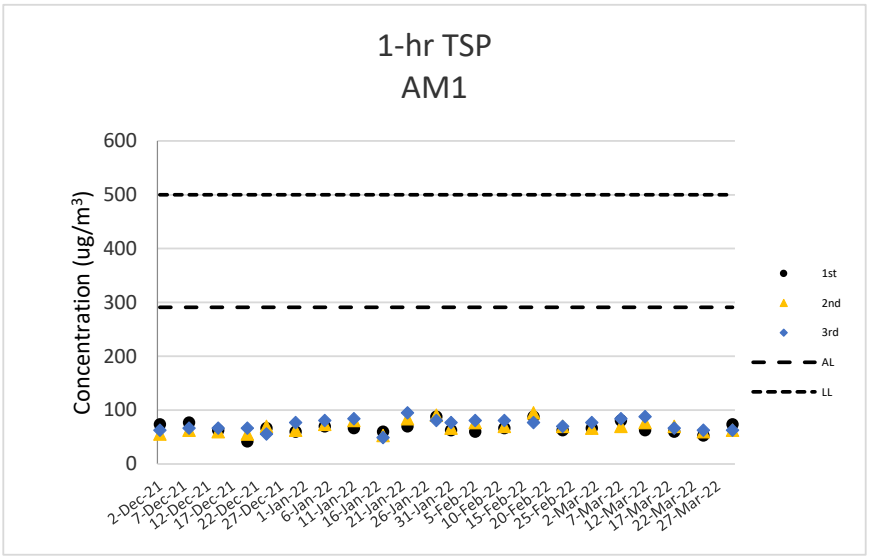
AM1 - Topfine Machinery (China) Co. Ltd.

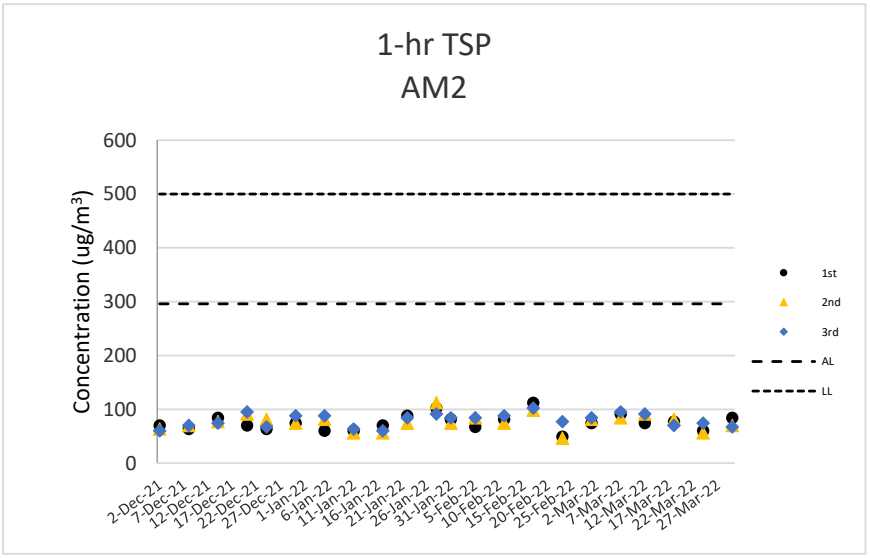
			1-hour TSP (µg/m³)				
Date	Weather Condition	Start Time	1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
1-Mar-22	Fine	8:31	67	67	77	291	500
7-Mar-22	Cloudy	8:33	81	70	84		
12-Mar-22	Fine	8:36	63	77	88		
18-Mar-22	Fine	8:30	60	70	67		
24-Mar-22	Cloudy	8:42	53	60	63		
30-Mar-22	Fine	8:33	74	63	63		
		Min	53				
		Max	88				
		Average	69				

AM2 - Squatter house at the west of Yuen Long STW

			1-hour TSP (µg/m³)				
Date	Weather Condition	Start Time	1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
1-Mar-22	Fine	8:41	74	81	84	296	500
7-Mar-22	Cloudy	8:45	91	84	95		
12-Mar-22	Fine	8:48	74	91	91		
18-Mar-22	Fine	8:40	77	81	70		
24-Mar-22	Cloudy	8:31	60	56	74		
30-Mar-22	Fine	8:43	84	70	67		
		Min	56				
		Max	95				
		Average	78				

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)
1-Mar-22	10:02	54	56	51	0.2	Fine	75
7-Mar-22	13:04	55	57	52	0.1	Cloudy	75
18-Mar-22	11:29	54	55	51	0.2	Fine	75
24-Mar-22	13:09	55	57	52	0.3	Cloudy	75
30-Mar-22	10:03	55	58	52	0.2	Fine	75
	Max	55					
	Min	54					

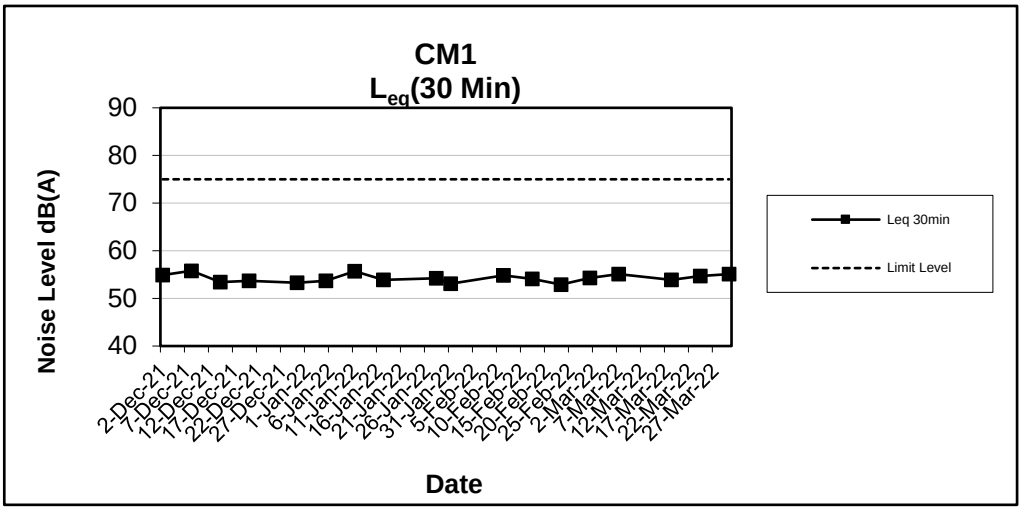
CM2 - Squatter house to the west of YLSTW

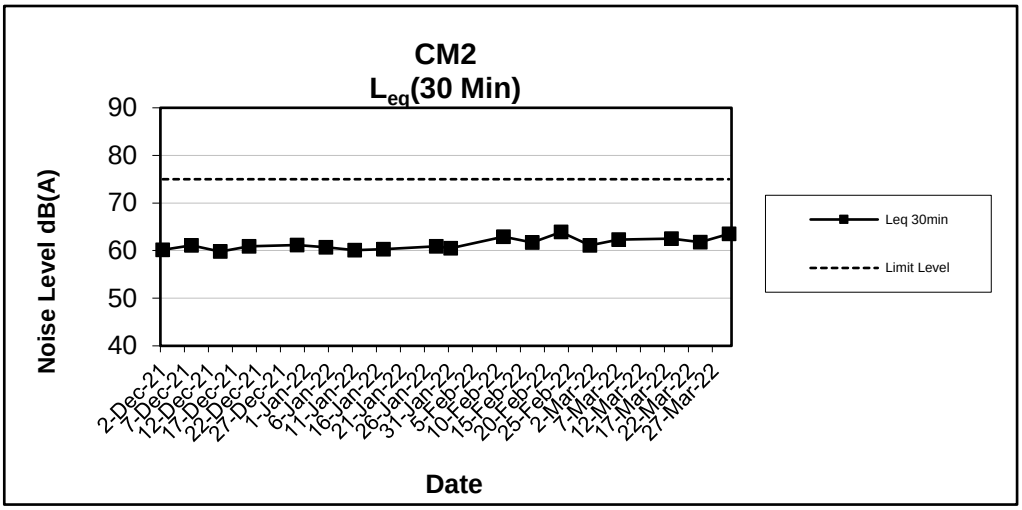
Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
1-Mar-22	8:45	61	64	55	0.4	Fine	75
7-Mar-22	8:50	62	65	56	0.3	Cloudy	75
18-Mar-22	8:44	63	66	55	0.3	Fine	75
24-Mar-22	11:28	62	65	55	0.3	Cloudy	75
30-Mar-22	8:47	64	66	56	0.2	Fine	75
	Max	64					
	Min	61					

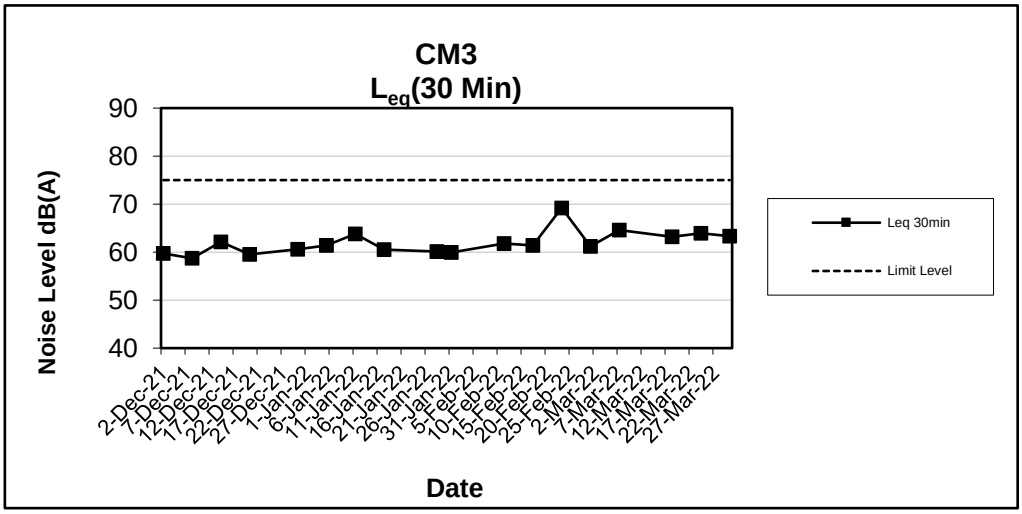
CM3 - Squatter house to the east of YLSTW

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)
1-Mar-22	11:22	61	65	55	0.4	Fine	75
7-Mar-22	10:16	65	69	56	0.4	Cloudy	75
18-Mar-22	10:09	63	66	56	0.5	Fine	75
24-Mar-22	9:29	64	67	57	0.4	Cloudy	75
30-Mar-22	11:24	63	66	56	0.3	Fine	75
	Max	65					
	Min	61					

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	1/3/2022	Mid-Flood	Fine	Calm	8:14	2	M	1	1	0.303	316	7.30	7.31	7.72	7.73	19.81	19.82	59.9	60.4	5.11	5.16	19.3	19.2	20	20
M1	1/3/2022	Mid-Flood	Fine	Calm	8:14	2	M	1	2			7.32		7.74		19.82		60.9		5.21		19.2		19	
M2	1/3/2022	Mid-Flood	Fine	Calm	8:29	1	M	0.5	1	0.278	271	7.43	7.42	7.58	7.58	19.96	19.96	57.7	57.5	4.88	4.86	17.3	17.1	18	18
M2	1/3/2022	Mid-Flood	Fine	Calm	8:29	1	M	0.5	2			7.41		7.57		19.95		57.2		4.83		16.9		18	
M3	1/3/2022	Mid-Flood	Fine	Moderate	8:09	1.3	M	0.65	1	0.051	146	7.49	7.49	7.43	7.43	20.94	20.94	68.1	68.1	5.82	5.82	17.7	17.8	24	23
M3	1/3/2022	Mid-Flood	Fine	Moderate	8:09	1.3	M	0.65	2			7.49		7.42		20.94		68.0		5.81		17.8		22	
M1	1/3/2022	Mid-Ebb	Fine	Calm	13:54	2.2	M	1.1	1	0.229	228	7.48	7.48	6.78	6.79	24.66	24.67	61.5	61.7	5.16	5.18	17.5	17.6	18	18
M1	1/3/2022	Mid-Ebb	Fine	Calm	13:54	2.2	M	1.1	2			7.47		6.79		24.68		61.9		5.19		17.6		18	
M2	1/3/2022	Mid-Ebb	Fine	Calm	13:36	1.2	M	0.6	1	0.211	246	7.35	7.36	6.57	6.58	24.37	24.38	56.1	55.7	4.75	4.72	14.1	14.3	12	13
M2	1/3/2022	Mid-Ebb	Fine	Calm	13:36	1.2	M	0.6	2			7.36		6.58		24.38		55.3		4.68		14.5		13	
M3	1/3/2022	Mid-Ebb	Fine	Moderate	13:49	0.9	M	0.45	1	0.105	72	7.36	7.38	6.08	6.08	21.92	21.92	61.9	61.7	5.23	5.22	13.4	13.4	11	11
M3	1/3/2022	Mid-Ebb	Fine	Moderate	13:49	0.9	M	0.45	2			7.39		6.07		21.93		61.4		5.20		13.4		11	

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	3/3/2022	Mid-Flood	Fine	Moderate	9:17	1.2	M	0.6	1	0.087	106	7.30	7.32	6.73	6.75	21.73	21.72	38.4	40.1	3.11	3.34	19.9	19.9	56	54
M1	3/3/2022	Mid-Flood	Fine	Moderate	9:17	1.2	M	0.6	2			7.34		6.76		21.72		41.7		3.56		19.8		52	
M2	3/3/2022	Mid-Flood	Fine	Moderate	9:34	1.3	M	0.65	1	0.067	75	7.34	7.35	6.75	6.76	21.30	21.27	40.7	41.0	3.47	3.49	25.4	25.4	28	30
M2	3/3/2022	Mid-Flood	Fine	Moderate	9:34	1.3	M	0.65	2			7.35		6.76		21.24		41.2		3.51		25.4		31	
M3	3/3/2022	Mid-Flood	Cloudy	Calm	9:16	0.4	M	0.2	1	0.251	94	7.27	7.28	6.63	6.63	21.34	21.35	47.6	47.3	4.04	4.01	31.0	30.8	12	13
M3	3/3/2022	Mid-Flood	Cloudy	Calm	9:16	0.4	M	0.2	2			7.28		6.63		21.36		46.9		3.98		30.6		13	
M1	3/3/2022	Mid-Ebb	Fine	Moderate	15:03	0.8	M	0.4	1	0.117	73	7.54	7.55	7.04	7.05	20.73	20.73	49.8	49.9	4.28	4.29	35.5	35.4	30	30
M1	3/3/2022	Mid-Ebb	Fine	Moderate	15:03	0.8	M	0.4	2			7.55		7.05		20.73		49.9		4.29		35.4		29	
M2	3/3/2022	Mid-Ebb	Fine	Moderate	14:45	0.9	M	0.45	1	0.105	43	7.42	7.42	6.87	6.88	21.55	21.55	51.8	51.7	4.56	4.55	24.0	23.9	10	12
M2	3/3/2022	Mid-Ebb	Fine	Moderate	14:45	0.9	M	0.45	2			7.41		6.88		21.55		51.6		4.54		23.9		14	
M3	3/3/2022	Mid-Ebb	Cloudy	Calm	14:48	0.4	M	0.2	1	0.229	271	7.14	7.15	5.72	5.72	26.04	26.05	42.1	42.3	3.58	3.60	25.8	26.2	34	35
M3	3/3/2022	Mid-Ebb	Cloudy	Calm	14:48	0.4	M	0.2	2			7.16		5.71		26.05		42.5		3.62		26.6		36	

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	5/3/2022	Mid-Flood	Fine	Moderate	9:58	1.1	M	0.55	1	0.093	75	7.23	7.23	6.19	6.19	22.58	22.60	48.2	47.6	4.02	3.97	29.4	29.5	18	18
M1	5/3/2022	Mid-Flood	Fine	Moderate	9:58	1.1	M	0.55	2			7.23		6.18		22.63		47.0		3.92		29.7		18	
M2	5/3/2022	Mid-Flood	Fine	Moderate	10:29	1	M	0.5	1	0.123	124	7.26	7.27	6.44	6.43	22.94	22.97	51.2	51.3	4.26	4.29	31.3	31.3	35	34
M2	5/3/2022	Mid-Flood	Fine	Moderate	10:29	1	M	0.5	2			7.27		6.42		22.99		51.4		4.31		31.2		33	
M3	5/3/2022	Mid-Flood	Fine	Calm	9:58	0.4	M	0.2	1	0.261	91	7.22	7.23	6.77	6.77	23.18	23.19	46.5	46.8	3.80	3.83	43.8	44.1	17	19
M3	5/3/2022	Mid-Flood	Fine	Calm	9:58	0.4	M	0.2	2			7.23		6.77		23.20		47.1		3.85		44.3		21	
M1	5/3/2022	Mid-Ebb	Fine	Moderate	16:19	0.8	M	0.4	1	0.049	130	7.27	7.27	6.78	6.78	23.60	23.62	56.1	56.3	4.58	4.59	30.6	30.6	27	29
M1	5/3/2022	Mid-Ebb	Fine	Moderate	16:19	0.8	M	0.4	2			7.26		6.77		23.64		56.4		4.59		30.6		30	
M2	5/3/2022	Mid-Ebb	Fine	Moderate	15:57	0.9	M	0.45	1	0.106	265	7.42	7.43	4.27	4.28	23.47	23.49	74.1	74.3	6.15	6.17	31.5	31.4	45	46
M2	5/3/2022	Mid-Ebb	Fine	Moderate	15:57	0.9	M	0.45	2			7.44		4.29		23.52		74.4		6.18		31.2		46	
M3	5/3/2022	Mid-Ebb	Fine	Calm	15:47	0.4	M	0.2	1	0.241	257	7.31	7.31	5.82	5.81	25.79	25.80	55.3	55.1	4.60	4.58	38.1	38.1	50	49
M3	5/3/2022	Mid-Ebb	Fine	Calm	15:47	0.4	M	0.2	2			7.30		5.80		25.80		54.9		4.56		38.2		47	

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)
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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	8/3/2022	Mid-Flood	Fine	Smooth	10:46	2.2	M	1.1	1	0.296	245	7.18	7.19	6.79	6.79	20.51	20.52	61.7	61.8	5.43	5.45	22.6	22.1	29	29
M1	8/3/2022	Mid-Flood	Fine	Smooth	10:46	2.2	M	1.1	2			7.19		6.78		20.52		61.9		5.46		21.6		28	
M2	8/3/2022	Mid-Flood	Fine	Smooth	11:06	1.2	M	0.6	1	0.272	295	7.22	7.23	7.08	7.09	20.97	20.98	55.9	55.8	4.90	4.89	28.5	29.1	47	46
M2	8/3/2022	Mid-Flood	Fine	Smooth	11:06	1.2	M	0.6	2			7.24		7.09		20.99		55.6		4.87		29.7		45	
M3	8/3/2022	Mid-Flood	Fine	Moderate	10:21	1.1	M	0.55	1	0.065	80	7.32	7.31	5.89	5.84	20.09	20.14	59.0	59.1	5.18	5.18	24.5	23.3	38	37
M3	8/3/2022	Mid-Flood	Fine	Moderate	10:21	1.1	M	0.55	2			7.30		5.79		20.19		59.1		5.17		22.0		36	
M1	8/3/2022	Mid-Ebb	Fine	Smooth	17:45	2.2	M	1.1	1	0.255	336	7.43	7.43	5.71	5.71	23.38	23.39	60.2	60.5	5.29	5.32	30.9	31.1	43	43
M1	8/3/2022	Mid-Ebb	Fine	Smooth	17:45	2.2	M	1.1	2			7.43		5.70		23.39		60.8		5.34		31.2		42	
M2	8/3/2022	Mid-Ebb	Fine	Smooth	17:23	1.2	M	0.6	1	0.281	258	7.30	7.31	5.14	5.15	23.75	23.75	58.6	58.9	5.07	5.10	27.9	27.8	36	35
M2	8/3/2022	Mid-Ebb	Fine	Smooth	17:23	1.2	M	0.6	2			7.31		5.16		23.74		59.1		5.12		27.6		33	
M3	8/3/2022	Mid-Ebb	Fine	Moderate	17:21	0.7	M	0.35	1	0.109	235	7.41	7.41	6.05	6.05	20.03	20.04	67.7	67.7	5.94	5.94	29.3	29.4	24	25
M3	8/3/2022	Mid-Ebb	Fine	Moderate	17:21	0.7	M	0.35	2			7.41		6.05		20.04		67.6		5.93		29.4		26	

Remark

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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	10/3/2022	Mid-Flood	Fine	Moderate	11:06	1.2	M	0.6	1	0.066	124	7.37	7.36	7.71	7.72	20.75	20.75	68.4	68.7	5.87	5.89	20.4	20.4	25	23
M1	10/3/2022	Mid-Flood	Fine	Moderate	11:06	1.2	M	0.6	2			7.34		7.73		20.75		68.9		5.91		20.4		21	
M2	10/3/2022	Mid-Flood	Fine	Moderate	11:24	0.9	M	0.45	1	0.103	71	7.35	7.35	7.79	7.80	20.68	20.69	66.8	66.6	5.72	5.71	21.0	21.0	23	24
M2	10/3/2022	Mid-Flood	Fine	Moderate	11:24	0.9	M	0.45	2			7.34		7.81		20.69		66.4		5.70		21.0		24	
M3	10/3/2022	Mid-Flood	Fine	Calm	11:07	0.4	M	0.2	1	0.209	97	7.32	7.33	3.81	3.82	22.44	22.44	56.4	56.2	4.83	4.81	36.4	36.5	35	37
M3	10/3/2022	Mid-Flood	Fine	Calm	11:07	0.4	M	0.2	2			7.33		3.83		22.43		55.9		4.79		36.5		38	
M1	10/3/2022	Mid-Ebb	Fine	Moderate	19:02	0.9	M	0.45	1	0.103	71	7.26	7.27	6.98	6.96	20.94	20.95	70.3	70.3	6.24	6.24	19.5	19.5	32	32
M1	10/3/2022	Mid-Ebb	Fine	Moderate	19:02	0.9	M	0.45	2			7.27		6.94		20.95		70.2		6.23		19.5		31	
M2	10/3/2022	Mid-Ebb	Fine	Moderate	18:43	0.7	M	0.35	1	0.045	312	7.41	7.41	7.04	7.02	20.86	20.88	73.7	73.4	6.32	6.29	19.2	19.2	27	27
M2	10/3/2022	Mid-Ebb	Fine	Moderate	18:43	0.7	M	0.35	2			7.41		6.99		20.91		73.0		6.25		19.2		26	
M3	10/3/2022	Mid-Ebb	Fine	Calm	18:46	0.4	M	0.2	1	0.251	246	7.53	7.52	4.31	4.32	23.02	23.02	47.8	48.1	4.14	4.17	40.0	40.2	34	34
M3	10/3/2022	Mid-Ebb	Fine	Calm	18:46	0.4	M	0.2	2			7.51		4.32		23.01		48.4		4.19		40.5		34	

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	12/3/2022	Mid-Flood	Fine	Moderate	9:15	1.2	M	0.6	1	0.058	145	7.22	7.23	5.91	5.93	24.49	24.49	93.6	93.7	7.55	7.57	26.9	27.0	24	24
M1	12/3/2022	Mid-Flood	Fine	Moderate	9:15	1.2	M	0.6	2			7.23		5.94		24.48		93.8		7.59		27.0		24	
M2	12/3/2022	Mid-Flood	Fine	Moderate	9:38	1	M	0.5	1	0.104	71	7.23	7.24	6.04	6.05	24.49	24.53	95.1	95.4	7.64	7.67	26.4	26.4	23	22
M2	12/3/2022	Mid-Flood	Fine	Moderate	9:38	1	M	0.5	2			7.24		6.05		24.57		95.7		7.69		26.3		21	
M3	12/3/2022	Mid-Flood	Fine	Moderate	9:16	1.2	M	0.6	1	0.074	259	7.26	7.27	0.93	0.93	21.29	21.30	56.6	56.4	4.99	4.98	16.1	16.0	13	14
M3	12/3/2022	Mid-Flood	Fine	Moderate	9:16	1.2	M	0.6	2			7.27		0.93		21.30		56.2		4.96		15.9		15	
M1	12/3/2022	Mid-Ebb	Fine	Moderate	22:14	1	M	0.5	1	0.042	93	7.52	7.53	6.49	6.49	20.68	20.69	62.5	62.5	5.68	5.66	30.2	30.2	32	31
M1	12/3/2022	Mid-Ebb	Fine	Moderate	22:14	1	M	0.5	2			7.53		6.48		20.69		62.4		5.64		30.2		29	
M2	12/3/2022	Mid-Ebb	Fine	Moderate	21:54	0.9	M	0.45	1	0.066	76	7.41	7.42	6.23	6.26	20.71	20.72	64.9	64.7	5.73	5.71	29.1	29.1	23	22
M2	12/3/2022	Mid-Ebb	Fine	Moderate	21:54	0.9	M	0.45	2			7.42		6.28		20.72		64.4		5.69		29.1		21	
M3	12/3/2022	Mid-Ebb	Fine	Moderate	21:58	0.9	M	0.45	1	0.095	80	7.30	7.30	0.85	0.85	20.62	20.61	49.9	49.9	4.46	4.46	13.2	13.1	5	5
M3	12/3/2022	Mid-Ebb	Fine	Moderate	21:58	0.9	M	0.45	2			7.30		0.85		20.60		49.8		4.45		13.1		5	

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	15/3/2022	Mid-Flood	Fine	Calm	7:34	2	M	1	1	0.268	103	7.74	7.75	7.67	7.68	21.32	21.33	84.3	84.5	7.13	7.15	17.0	16.5	31	31
M1	15/3/2022	Mid-Flood	Fine	Calm	7:34	2	M	1	2			7.76		7.68		21.34		84.7		7.16		15.9		30	
M2	15/3/2022	Mid-Flood	Fine	Calm	7:53	1	M	0.5	1	0.279	191	7.40	7.41	7.37	7.36	21.78	21.79	73.3	73.6	6.20	6.23	19.1	19.6	31	30
M2	15/3/2022	Mid-Flood	Fine	Calm	7:53	1	M	0.5	2			7.42		7.35		21.79		73.9		6.26		20.1		29	
M3	15/3/2022	Mid-Flood	Fine	Moderate	7:30	1.2	M	0.6	1	0.044	145	8.36	8.36	7.65	7.66	25.96	25.96	64.8	64.9	4.27	4.28	15.8	15.9	32	30
M3	15/3/2022	Mid-Flood	Fine	Moderate	7:30	1.2	M	0.6	2			8.35		7.66		25.96		64.9		4.29		15.9		28	
M1	15/3/2022	Mid-Ebb	Fine	Calm	12:48	2.2	M	1.1	1	0.24	178	7.60	7.59	6.69	6.68	25.93	25.94	96.4	96.6	7.59	7.61	25.3	24.8	31	32
M1	15/3/2022	Mid-Ebb	Fine	Calm	12:48	2.2	M	1.1	2			7.58		6.67		25.94		96.8		7.63		24.4		33	
M2	15/3/2022	Mid-Ebb	Fine	Calm	12:28	1.2	M	0.6	1	0.248	214	7.67	7.67	6.77	6.76	25.47	25.48	92.8	92.5	7.30	7.27	21.8	22.0	35	33
M2	15/3/2022	Mid-Ebb	Fine	Calm	12:28	1.2	M	0.6	2			7.66		6.74		25.48		92.1		7.24		22.3		30	
M3	15/3/2022	Mid-Ebb	Fine	Moderate	12:41	1	M	0.5	1	0.092	73	7.39	7.39	6.79	6.78	25.49	25.71	67.1	67.7	4.38	4.40	26.5	26.5	27	29
M3	15/3/2022	Mid-Ebb	Fine	Moderate	12:41	1	M	0.5	2			7.38		6.77		25.92		68.2		4.41		26.5		30	

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	17/3/2022	Mid-Flood	Fine	Moderate	8:11	0.9	M	0.45	1	0.057	117	7.28	7.28	6.70	6.72	24.01	24.02	47.9	48.0	3.88	3.90	29.8	29.6	42	46
M1	17/3/2022	Mid-Flood	Fine	Moderate	8:11	0.9	M	0.45	2			7.27		6.73		24.03		48.1		3.91		29.4		49	
M2	17/3/2022	Mid-Flood	Fine	Moderate	8:31	1.1	M	0.55	1	0.106	44	7.22	7.23	6.93	6.94	24.14	24.15	49.2	49.3	3.94	3.95	26.4	26.5	44	44
M2	17/3/2022	Mid-Flood	Fine	Moderate	8:31	1.1	M	0.55	2			7.24		6.94		24.15		49.4		3.96		26.5		43	
M3	17/3/2022	Mid-Flood	Fine	Calm	8:16	0.4	M	0.2	1	0.262	90	7.62	7.62	6.92	6.93	23.21	23.22	79.2	79.5	6.26	6.29	16.4	16.6	11	11
M3	17/3/2022	Mid-Flood	Fine	Calm	8:16	0.4	M	0.2	2			7.61		6.94		23.23		79.8		6.31		16.9		10	
M1	17/3/2022	Mid-Ebb	Fine	Moderate	13:50	0.7	M	0.35	1	0.044	342	7.28	7.25	6.74	6.76	24.02	24.07	50.9	50.8	4.12	4.11	29.0	29.0	42	42
M1	17/3/2022	Mid-Ebb	Fine	Moderate	13:50	0.7	M	0.35	2			7.22		6.77		24.11		50.7		4.09		29.0		41	
M2	17/3/2022	Mid-Ebb	Fine	Moderate	13:34	0.9	M	0.45	1	0.066	318	7.34	7.36	6.69	6.71	23.95	23.93	53.4	53.5	4.33	4.36	30.1	30.2	45	47
M2	17/3/2022	Mid-Ebb	Fine	Moderate	13:34	0.9	M	0.45	2			7.38		6.72		23.91		53.6		4.39		30.2		48	
M3	17/3/2022	Mid-Ebb	Fine	Calm	13:41	0.6	M	0.3	1	0.233	256	7.76	7.77	6.09	6.10	26.95	26.96	90.9	91.3	7.09	7.12	26.3	27.0	34	35
M3	17/3/2022	Mid-Ebb	Fine	Calm	13:41	0.6	M	0.3	2			7.77		6.10		26.96		91.6		7.15		27.6		36	

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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	19/3/2022	Mid-Flood	Fine	Moderate	9:04	1.1	M	0.55	1	0.068	129	7.48	7.50	7.75	7.75	26.22	26.22	70.7	70.8	5.47	5.48	26.2	26.3	31	32
M1	19/3/2022	Mid-Flood	Fine	Moderate	9:04	1.1	M	0.55	2			7.51		7.74		26.22		70.9		5.49		26.4		33	
M2	19/3/2022	Mid-Flood	Fine	Moderate	9:20	0.9	M	0.45	1	0.123	92	7.56	7.57	7.71	7.73	26.22	26.22	76.3	76.4	5.90	5.91	27.9	27.9	42	42
M2	19/3/2022	Mid-Flood	Fine	Moderate	9:20	0.9	M	0.45	2			7.58		7.74		26.22		76.4		5.92		27.9		41	
M3	19/3/2022	Mid-Flood	Fine	Calm	8:53	0.6	M	0.3	1	0.273	97	7.36	7.35	6.88	6.89	25.31	25.32	60.2	60.6	4.69	4.73	39.3	40.0	48	47
M3	19/3/2022	Mid-Flood	Fine	Calm	8:53	0.6	M	0.3	2			7.34		6.89		25.32		61.0		4.76		40.6		45	
M1	19/3/2022	Mid-Ebb	Fine	Moderate	14:58	0.9	M	0.45	1	0.093	59	7.47	7.49	7.72	7.73	25.96	25.95	67.8	67.8	5.27	5.27	32.1	32.1	41	39
M1	19/3/2022	Mid-Ebb	Fine	Moderate	14:58	0.9	M	0.45	2			7.51		7.74		25.94		67.7		5.26		32.0		37	
M2	19/3/2022	Mid-Ebb	Fine	Moderate	14:39	0.7	M	0.35	1	0.111	65	7.50	7.52	7.78	7.79	25.80	25.75	71.0	71.1	5.53	5.55	35.4	35.3	22	20
M2	19/3/2022	Mid-Ebb	Fine	Moderate	14:39	0.7	M	0.35	2			7.54		7.79		25.70		71.2		5.56		35.3		18	
M3	19/3/2022	Mid-Ebb	Fine	Calm	14:42	0.6	M	0.3	1	0.282	243	7.11	7.12	6.21	6.22	28.84	28.85	65.4	65.1	5.12	5.09	44.4	44.8	48	50
M3	19/3/2022	Mid-Ebb	Fine	Calm	14:42	0.6	M	0.3	2			7.12		6.23		28.85		64.7		5.06		45.2		52	

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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	52.1	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	22/3/2022	Mid-Flood	Fine	Moderate	10:13	1.1	M	0.55	1	0.043	75	7.57	7.56	5.98	5.97	26.62	26.63	57.9	57.7	4.49	4.48	33.4	33.4	35	33
M1	22/3/2022	Mid-Flood	Fine	Moderate	10:13	1.1	M	0.55	2			7.54		5.96		26.65		57.4		4.46		33.5		30	
M2	22/3/2022	Mid-Flood	Fine	Moderate	10:39	0.9	M	0.45	1	0.078	68	7.66	7.67	5.05	5.05	28.11	28.10	72.4	72.4	5.50	5.50	30.4	30.4	42	45
M2	22/3/2022	Mid-Flood	Fine	Moderate	10:39	0.9	M	0.45	2			7.67		5.04		28.10		72.3		5.49		30.4		47	
M3	22/3/2022	Mid-Flood	Cloudy	Calm	10:04	0.6	M	0.3	1	0.285	80	7.57	7.57	5.04	5.05	25.60	25.61	68.7	69.0	5.38	5.41	41.8	41.9	47	48
M3	22/3/2022	Mid-Flood	Cloudy	Calm	10:04	0.6	M	0.3	2			7.56		5.05		25.62		69.3		5.43		42.0		48	
M1	22/3/2022	Mid-Ebb	Fine	Moderate	16:40	0.9	M	0.45	1	0.063	177	7.68	7.67	4.14	4.17	29.23	29.24	70.7	70.8	5.23	5.24	26.2	26.2	37	36
M1	22/3/2022	Mid-Ebb	Fine	Moderate	16:40	0.9	M	0.45	2			7.66		4.19		29.24		70.8		5.24		26.2		34	
M2	22/3/2022	Mid-Ebb	Fine	Moderate	16:21	0.7	M	0.35	1	0.119	312	7.59	7.59	5.71	5.73	26.97	26.96	62.7	62.8	4.87	4.88	25.9	25.9	36	35
M2	22/3/2022	Mid-Ebb	Fine	Moderate	16:21	0.7	M	0.35	2			7.58		5.74		26.94		62.8		4.89		25.9		34	
M3	22/3/2022	Mid-Ebb	Cloudy	Calm	16:22	0.4	M	0.2	1	0.299	251	7.71	7.72	3.93	3.93	28.38	28.38	62.3	62.1	4.92	4.90	29.0	29.4	31	33
M3	22/3/2022	Mid-Ebb	Cloudy	Calm	16:22	0.4	M	0.2	2			7.73		3.92		28.37		61.8		4.88		29.9		34	

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	24/3/2022	Mid-Flood	Cloudy	Smooth	11:00	2.4	M	1.2	1	0.287	250	7.23	7.23	3.67	3.67	20.54	20.55	38.9	38.8	3.45	3.44	33.2	33.7	30	31
M1	24/3/2022	Mid-Flood	Cloudy	Smooth	11:00	2.4	M	1.2	2			7.22		3.66		20.55		38.6		3.42		34.2		31	
M2	24/3/2022	Mid-Flood	Cloudy	Smooth	11:19	1.2	M	0.6	1	0.271	231	7.32	7.33	3.86	3.87	20.92	20.93	42.0	42.4	3.72	3.76	30.9	30.6	28	29
M2	24/3/2022	Mid-Flood	Cloudy	Smooth	11:19	1.2	M	0.6	2			7.33		3.88		20.94		42.8		3.79		30.2		30	
M3	24/3/2022	Mid-Flood	Fine	Moderate	11:09	1.1	M	0.55	1	0.059	24	7.35	7.35	3.69	3.69	20.55	20.58	48.5	48.4	4.27	4.26	33.7	33.2	22	23
M3	24/3/2022	Mid-Flood	Fine	Moderate	11:09	1.1	M	0.55	2			7.34		3.68		20.61		48.2		4.24		32.7		23	
M1	24/3/2022	Mid-Ebb	Cloudy	Smooth	18:10	2.2	M	1.1	1	0.332	274	7.37	7.38	5.49	5.50	19.62	19.61	58.9	58.7	5.12	5.10	26.7	26.9	30	33
M1	24/3/2022	Mid-Ebb	Cloudy	Smooth	18:10	2.2	M	1.1	2			7.38		5.51		19.60		58.4		5.08		27.2		35	
M2	24/3/2022	Mid-Ebb	Cloudy	Smooth	17:56	1.2	M	0.6	1	0.365	296	7.43	7.44	5.39	5.39	19.87	19.87	65.1	64.8	5.68	5.65	28.9	28.7	30	32
M2	24/3/2022	Mid-Ebb	Cloudy	Smooth	17:56	1.2	M	0.6	2			7.44		5.39		19.86		64.5		5.62		28.5		33	
M3	24/3/2022	Mid-Ebb	Fine	Moderate	18:00	0.8	M	0.4	1	0.119	48	7.37	7.36	3.72	3.73	20.66	20.67	52.7	52.8	4.63	4.66	36.1	36.2	37	40
M3	24/3/2022	Mid-Ebb	Fine	Moderate	18:00	0.8	M	0.4	2			7.34		3.73		20.67		52.9		4.69		36.2		42	

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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	26/3/2022	Mid-Flood	Cloudy	Smooth	7:59	2.4	M	1.2	1	0.293	264	7.19	7.20	6.65	6.66	21.51	21.52	43.6	43.9	3.59	3.62	31.4	31.5	29	29
M1	26/3/2022	Mid-Flood	Cloudy	Smooth	7:59	2.4	M	1.2	2			7.20		6.67		21.53		44.2		3.64		31.5		29	
M2	26/3/2022	Mid-Flood	Cloudy	Smooth	8:19	1.2	M	0.6	1	0.313	258	7.25	7.26	6.25	6.26	21.99	21.99	38.7	38.4	3.23	3.20	20.3	20.8	15	16
M2	26/3/2022	Mid-Flood	Cloudy	Smooth	8:19	1.2	M	0.6	2			7.26		6.26		21.98		38.0		3.17		21.2		16	
M3	26/3/2022	Mid-Flood	Cloudy	Smooth	7:53	0.6	M	0.3	1	0.273	88	7.27	7.27	6.01	6.02	21.87	21.88	44.6	44.9	3.70	3.73	30.9	30.1	28	28
M3	26/3/2022	Mid-Flood	Cloudy	Smooth	7:53	0.6	M	0.3	2			7.27		6.03		21.88		45.1		3.75		29.3		27	
M1	26/3/2022	Mid-Ebb	Cloudy	Smooth	20:53	2.2	M	1.1	1	0.319	288	7.35	7.36	4.04	4.05	23.50	23.50	48.9	49.2	4.07	4.10	21.2	21.1	17	18
M1	26/3/2022	Mid-Ebb	Cloudy	Smooth	20:53	2.2	M	1.1	2			7.36		4.05		23.49		49.4		4.12		21.0		18	
M2	26/3/2022	Mid-Ebb	Cloudy	Smooth	20:34	1.2	M	0.6	1	0.328	323	7.32	7.33	3.49	3.49	23.70	23.71	40.8	40.4	3.39	3.36	24.8	25.0	22	23
M2	26/3/2022	Mid-Ebb	Cloudy	Smooth	20:34	1.2	M	0.6	2			7.34		3.48		23.71		40.0		3.32		25.2		23	
M3	26/3/2022	Mid-Ebb	Cloudy	Smooth	20:38	0.6	M	0.3	1	0.288	238	7.39	7.39	4.92	4.93	23.58	23.58	51.4	51.3	4.28	4.27	19.3	19.2	7	7
M3	26/3/2022	Mid-Ebb	Cloudy	Smooth	20:38	0.6	M	0.3	2			7.38		4.93		23.58		51.1		4.25		19.1		7	

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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	29/3/2022	Mid-Flood	Fine	Moderate	6:56	1.2	M	0.6	1	0.065	75	7.12	7.12	2.60	2.61	20.50	20.50	54.2	55.0	4.81	4.87	25.2	25.2	25	26
M1	29/3/2022	Mid-Flood	Fine	Moderate	6:56	1.2	M	0.6	2			7.11		2.62		20.49		55.7		4.93		25.2		26	
M2	29/3/2022	Mid-Flood	Fine	Moderate	7:10	1	M	0.5	1	0.116	308	7.14	7.15	2.59	2.59	20.64	20.66	58.1	57.9	4.73	4.71	26.1	26.2	28	28
M2	29/3/2022	Mid-Flood	Fine	Moderate	7:10	1	M	0.5	2			7.15		2.58		20.67		57.6		4.69		26.2		28	
M3	29/3/2022	Mid-Flood	Cloudy	Calm	7:02	0.2	M	0.1	1	0.247	92	7.03	7.04	3.66	3.67	17.02	17.03	49.6	49.1	4.48	4.43	27.5	27.3	28	29
M3	29/3/2022	Mid-Flood	Cloudy	Calm	7:02	0.2	M	0.1	2			7.04		3.68		17.03		48.6		4.38		27.2		30	
M1	29/3/2022	Mid-Ebb	Fine	Moderate	12:59	1.1	M	0.55	1	0.075	115	7.26	7.27	1.57	1.57	20.29	20.29	54.6	54.7	4.51	4.53	33.1	33.1	19	18
M1	29/3/2022	Mid-Ebb	Fine	Moderate	12:59	1.1	M	0.55	2			7.28		1.56		20.29		54.8		4.54		33.1		16	
M2	29/3/2022	Mid-Ebb	Fine	Moderate	12:41	0.8	M	0.4	1	0.056	205	7.22	7.23	1.48	1.46	20.06	20.04	59.1	59.3	4.81	4.85	32.9	33.0	15	15
M2	29/3/2022	Mid-Ebb	Fine	Moderate	12:41	0.8	M	0.4	2			7.23		1.44		20.02		59.4		4.89		33.0		14	
M3	29/3/2022	Mid-Ebb	Cloudy	Calm	12:39	0.4	M	0.2	1	0.214	269	7.25	7.26	2.22	2.22	20.11	20.11	41.7	41.9	3.75	3.77	31.5	31.7	19	18
M3	29/3/2022	Mid-Ebb	Cloudy	Calm	12:39	0.4	M	0.2	2			7.27		2.21		20.10		42.1		3.79		31.8		17	

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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	31/3/2022	Mid-Flood	Fine	Moderate	8:29	1.5	M	0.75	1	0.056	213	7.39	7.39	1.37	1.38	24.76	24.77	81.0	80.8	6.83	6.82	26.8	26.8	29	29
M1	31/3/2022	Mid-Flood	Fine	Moderate	8:29	1.5	M	0.75	2			7.39		1.38		24.77		80.5		6.80		26.8		29	
M2	31/3/2022	Mid-Flood	Fine	Moderate	8:09	1.3	M	0.65	1	0.048	34	7.31	7.33	1.42	1.43	23.12	23.18	81.8	82.1	6.95	6.99	25.6	25.7	37	35
M2	31/3/2022	Mid-Flood	Fine	Moderate	8:09	1.3	M	0.65	2			7.35		1.44		23.24		82.4		7.03		25.7		33	
M3	31/3/2022	Mid-Flood	Fine	Calm	8:00	0.4	M	0.2	1	0.235	95	7.14	7.15	4.28	4.28	21.57	21.58	62.4	62.6	5.30	5.32	35.1	35.3	24	24
M3	31/3/2022	Mid-Flood	Fine	Calm	8:00	0.4	M	0.2	2			7.16		4.27		21.58		62.8		5.34		35.5		23	
M1	31/3/2022	Mid-Ebb	Fine	Moderate	13:50	0.8	M	0.4	1	0.068	116	7.20	7.22	1.62	1.63	23.07	23.08	75.7	75.8	6.42	6.43	29.8	29.8	14	15
M1	31/3/2022	Mid-Ebb	Fine	Moderate	13:50	0.8	M	0.4	2			7.23		1.64		23.09		75.9		6.44		29.8		15	
M2	31/3/2022	Mid-Ebb	Fine	Moderate	14:10	0.7	M	0.35	1	0.104	325	7.26	7.25	1.38	1.36	22.94	22.94	70.9	70.8	6.11	6.09	23.6	23.6	13	13
M2	31/3/2022	Mid-Ebb	Fine	Moderate	14:10	0.7	M	0.35	2			7.24		1.33		22.93		70.6		6.07		23.6		13	
M3	31/3/2022	Mid-Ebb	Fine	Calm	13:48	0.4	M	0.2	1	0.221	259	7.33	7.33	3.38	3.39	28.20	28.21	76.4	76.3	6.50	6.49	28.5	28.4	14	14
M3	31/3/2022	Mid-Ebb	Fine	Calm	13:48	0.4	M	0.2	2			7.32		3.39		28.22		76.1		6.47		28.3		14	

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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
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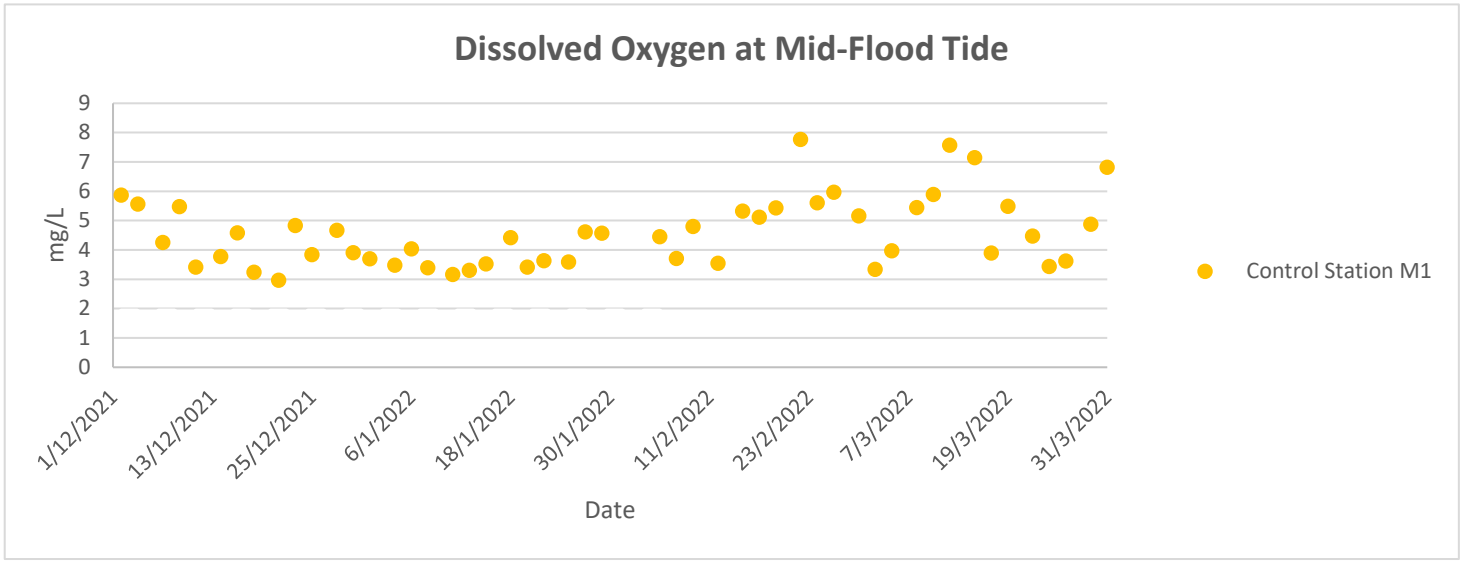
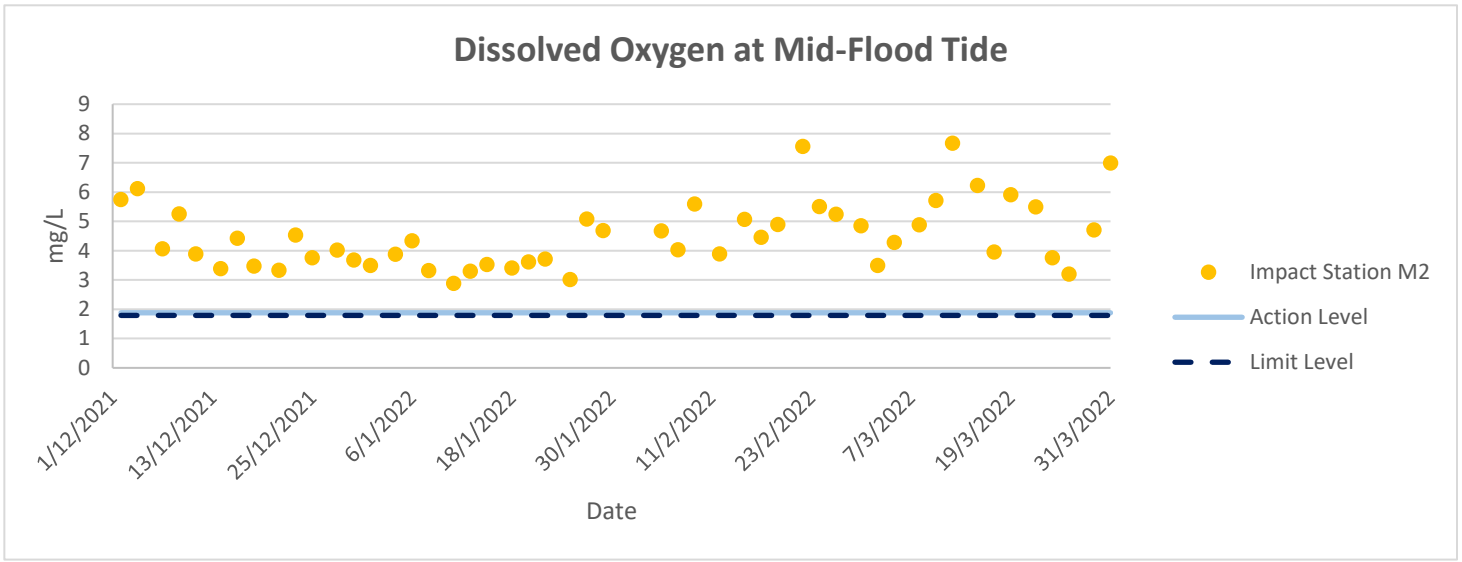
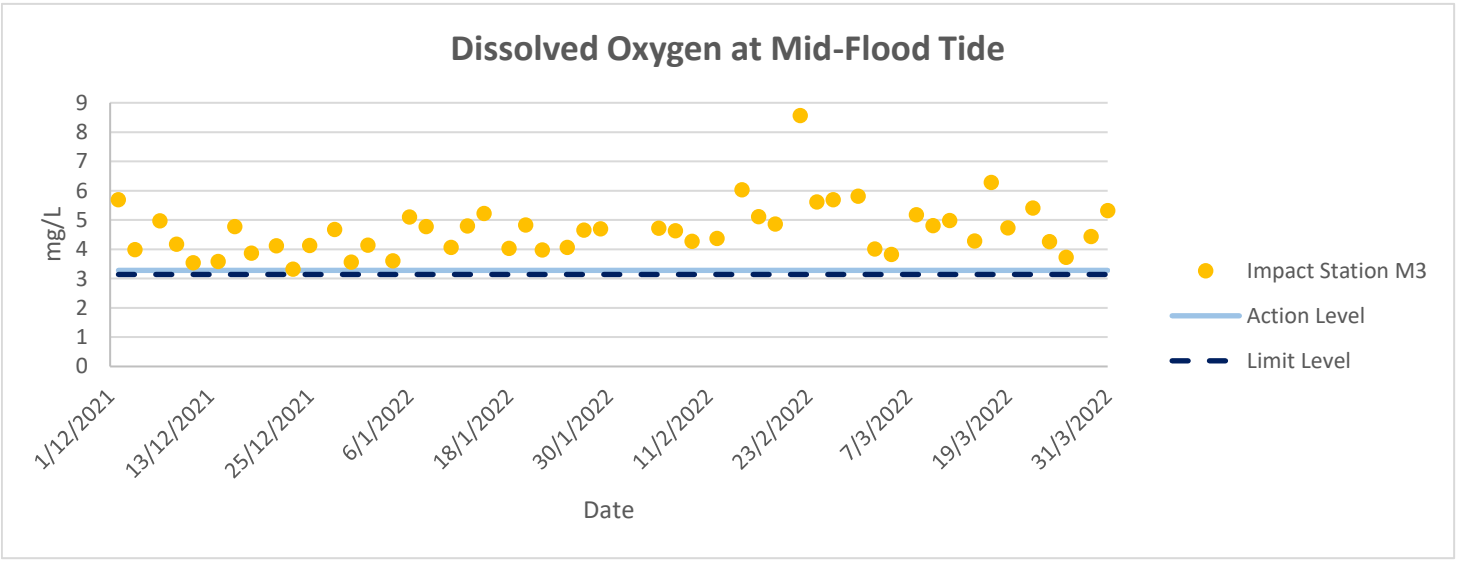
For Ebb Tide

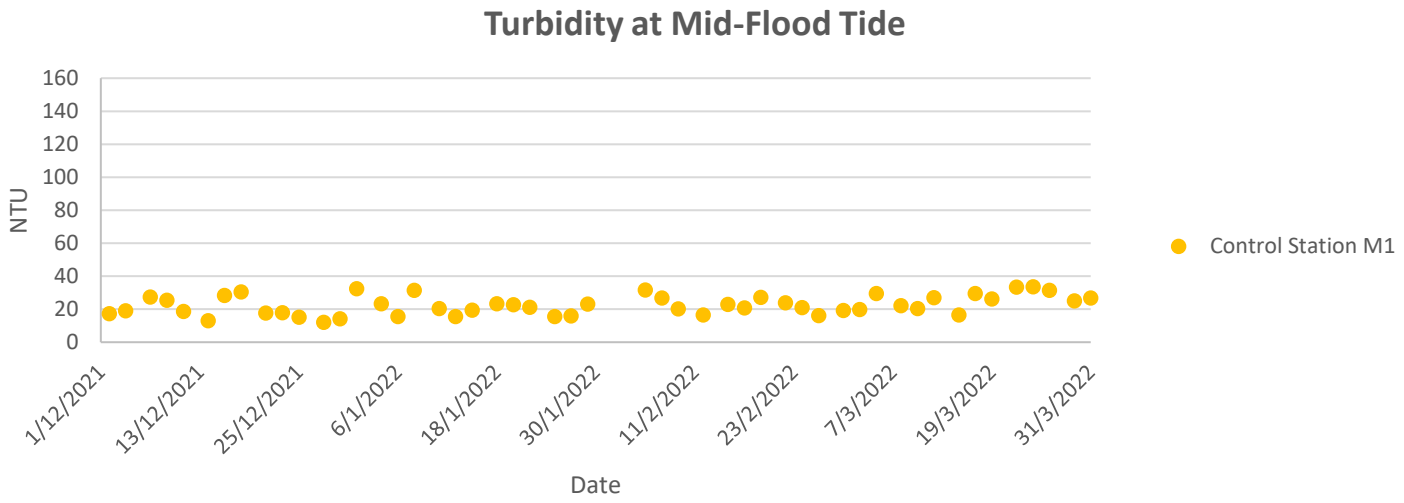
Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

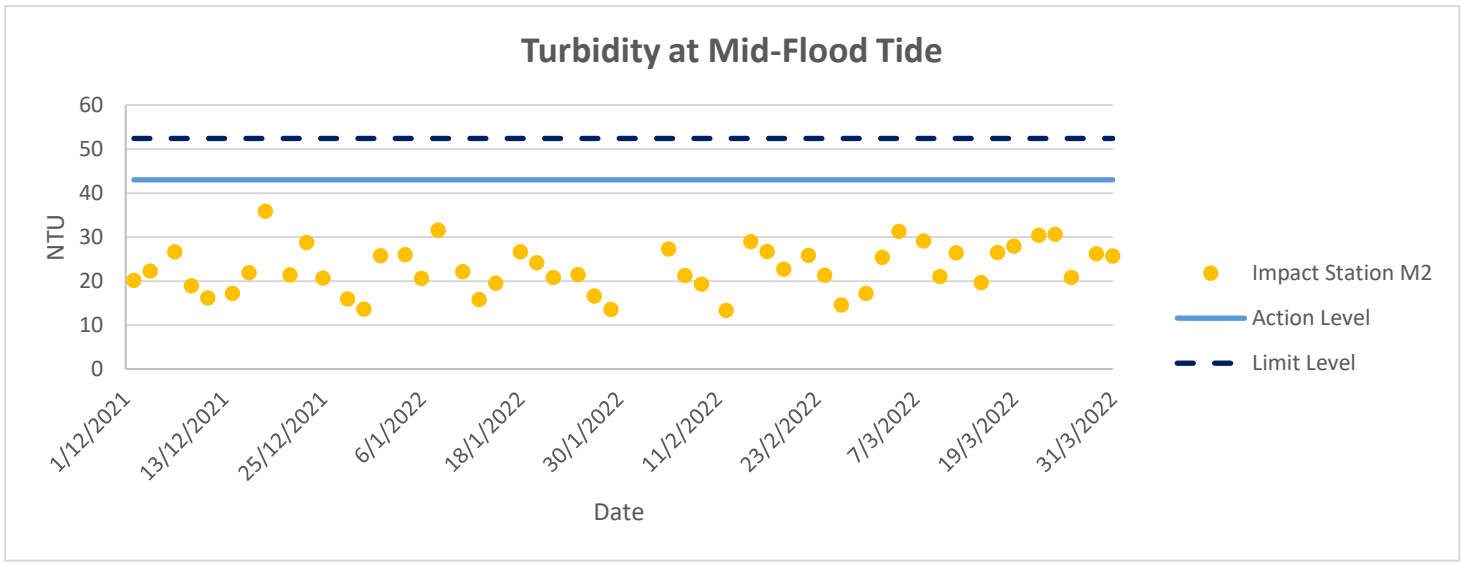


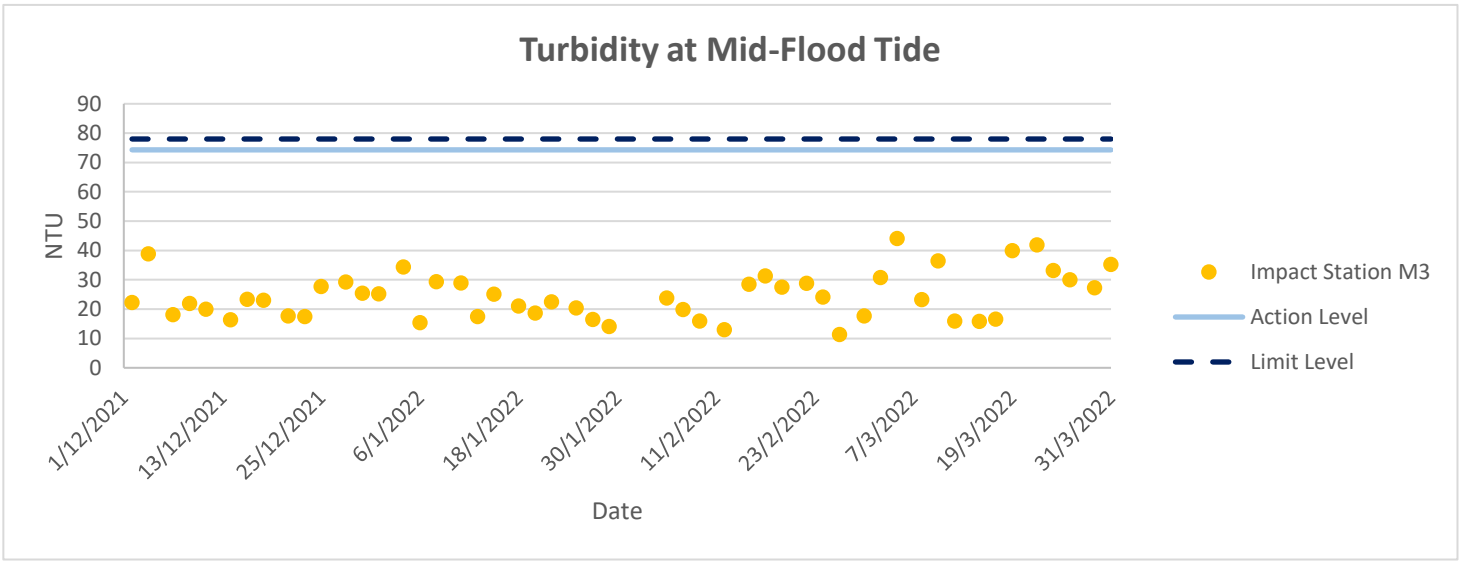




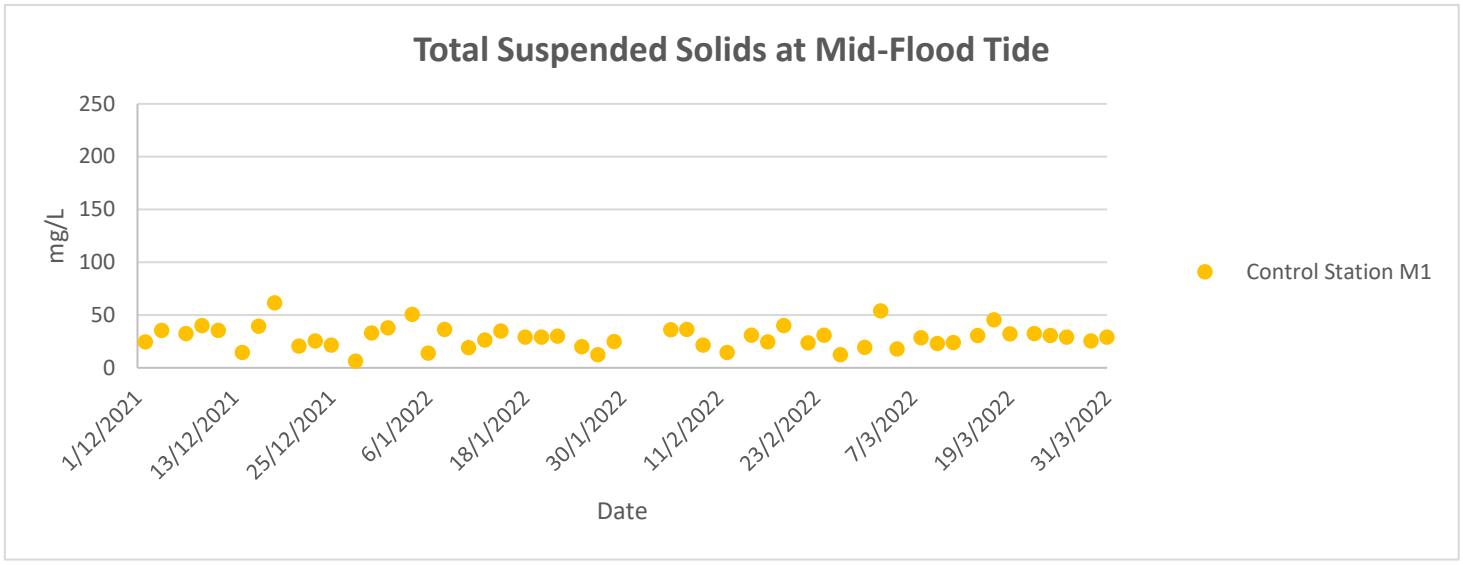
Water Quality Monitoring Results

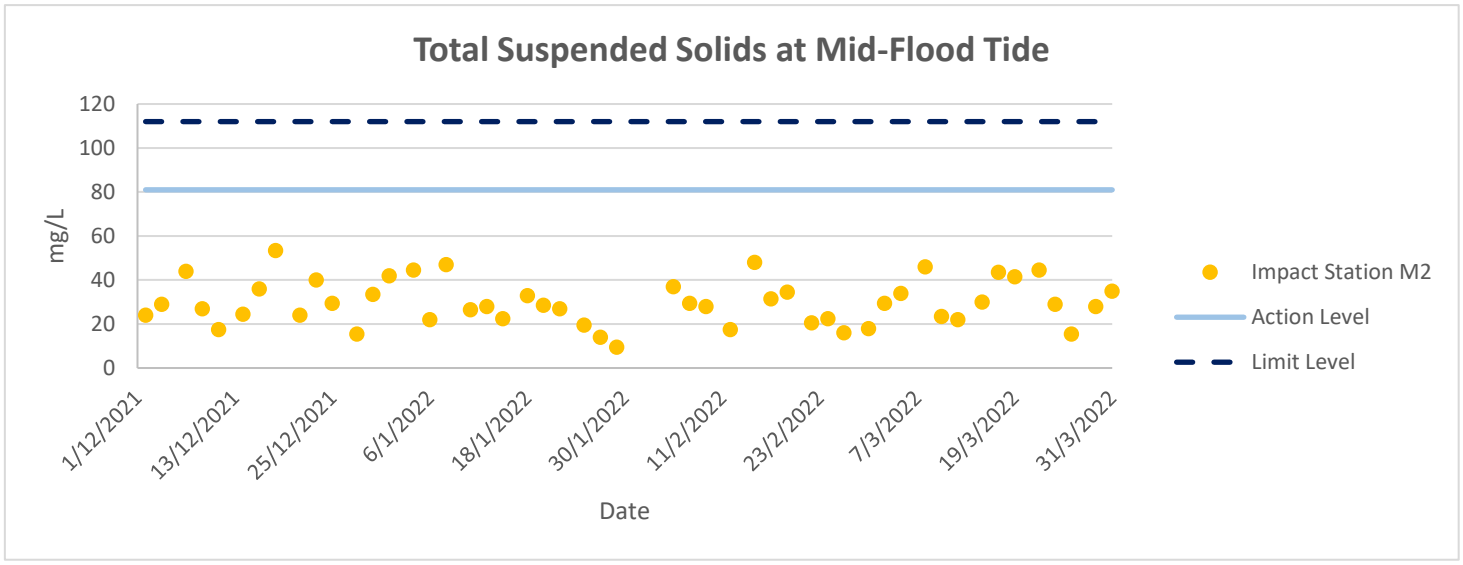


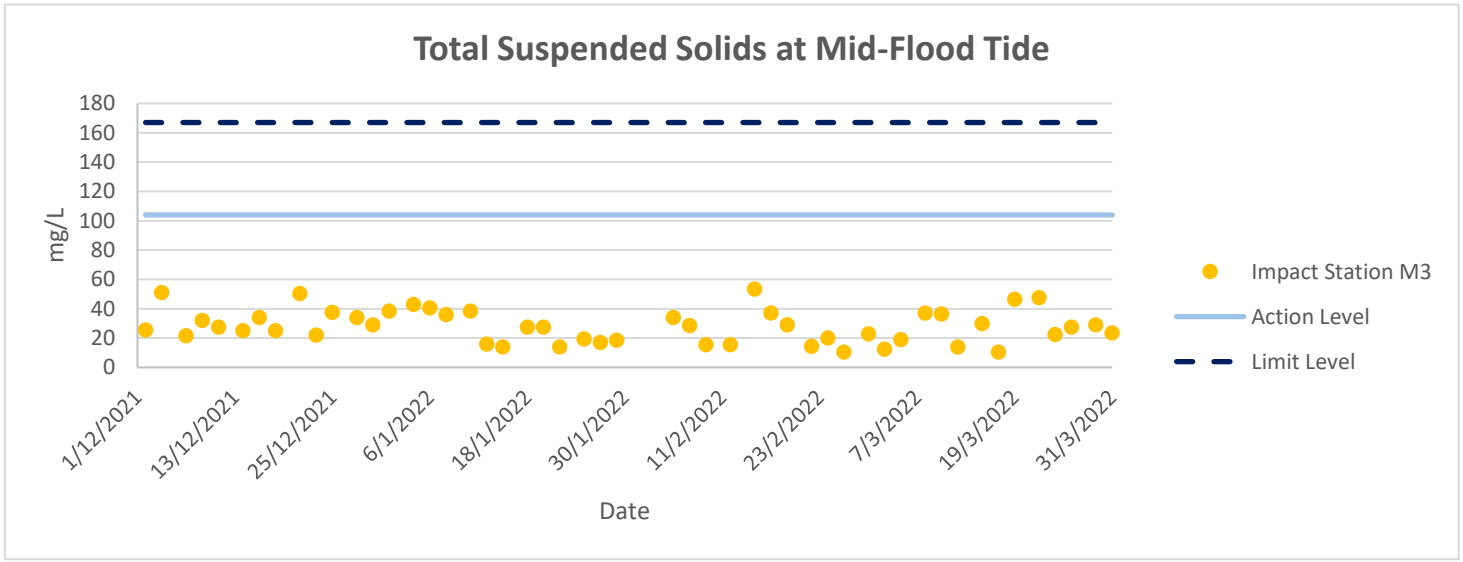




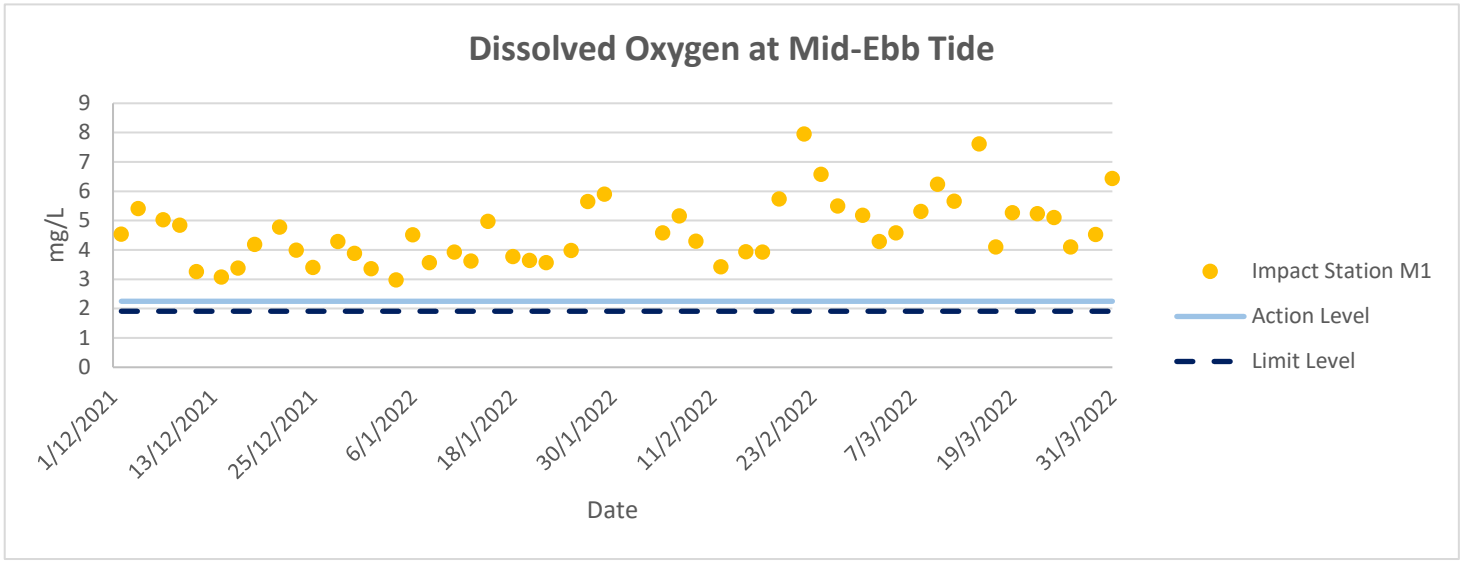
Water Quality Monitoring Results

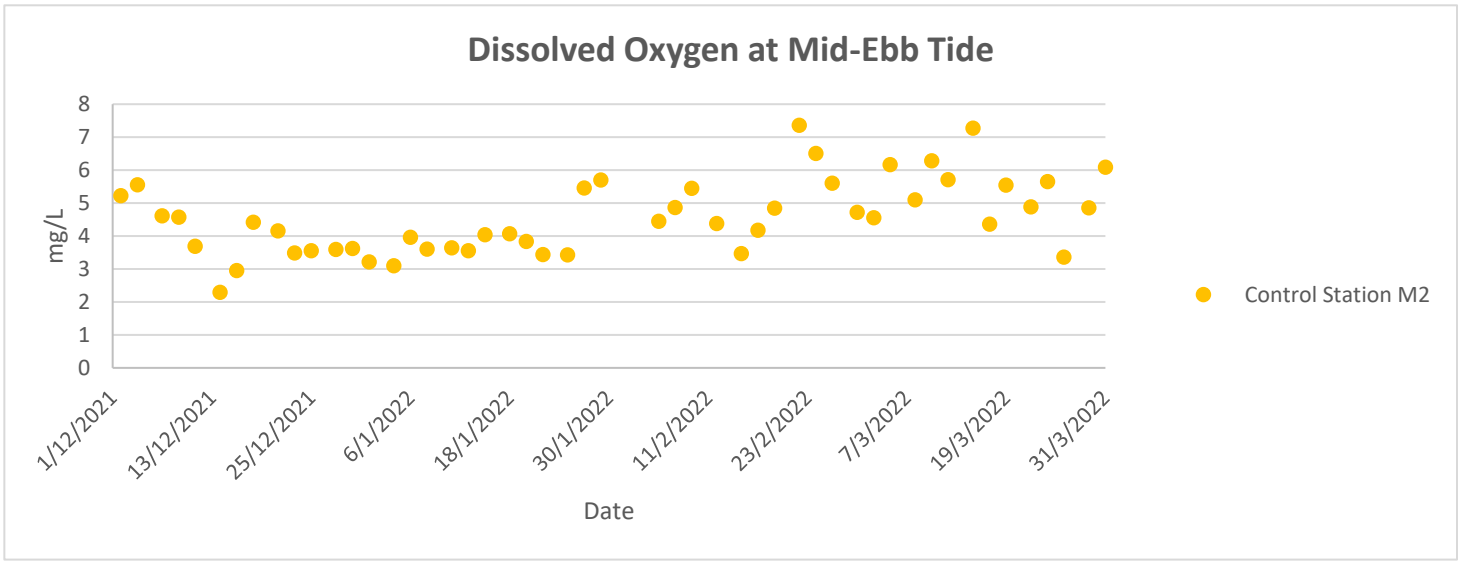


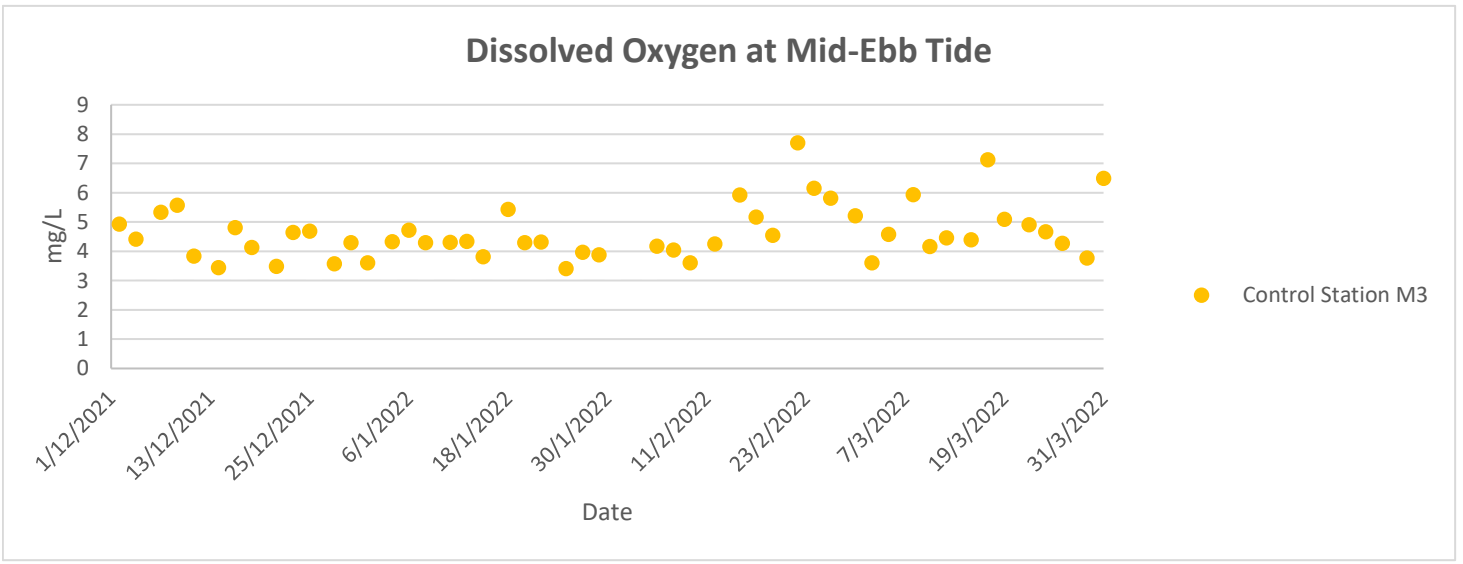




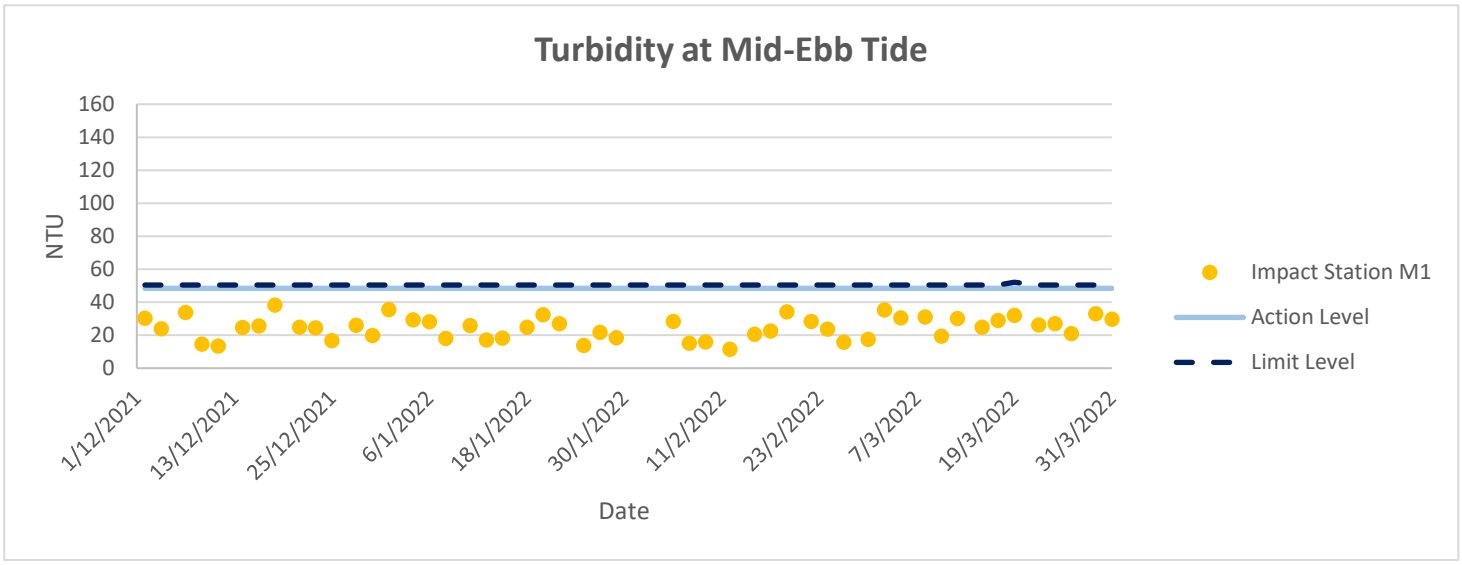
Water Quality Monitoring Results

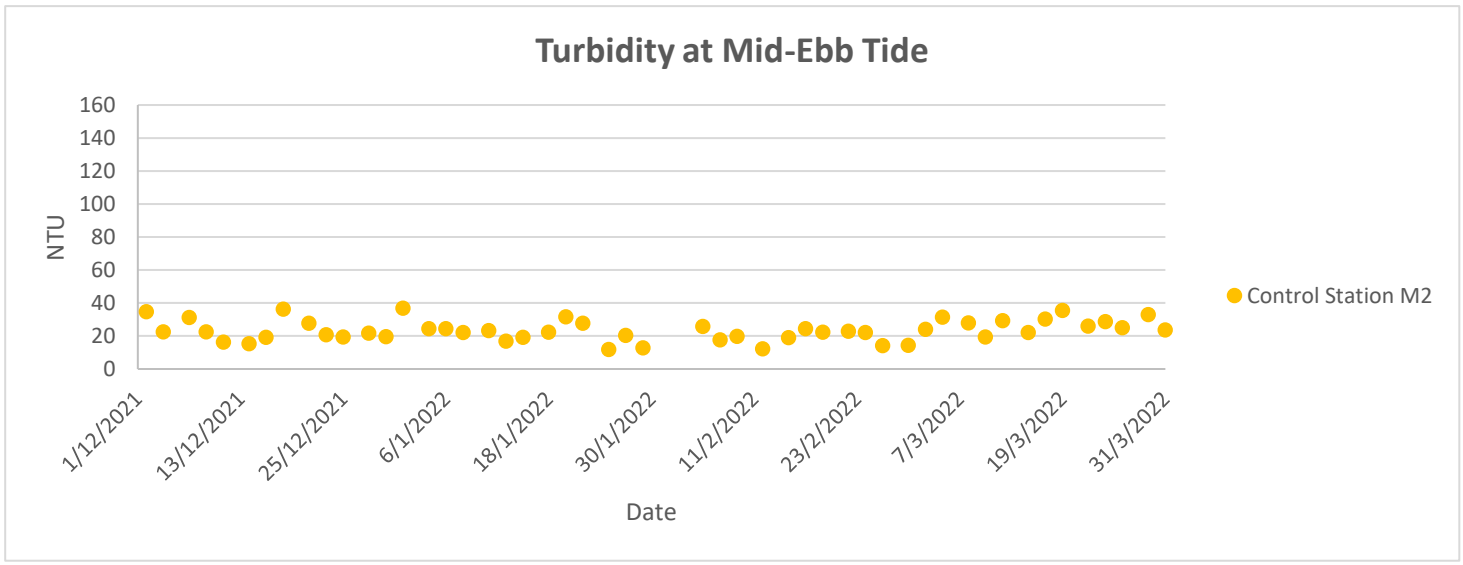


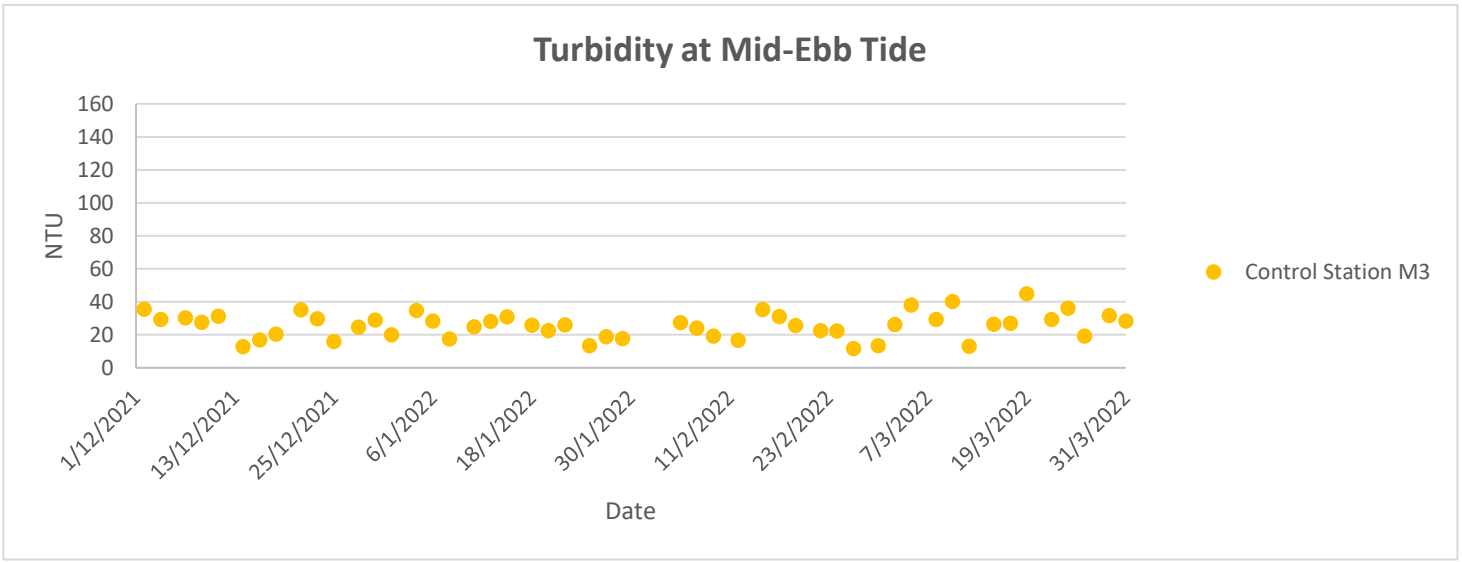




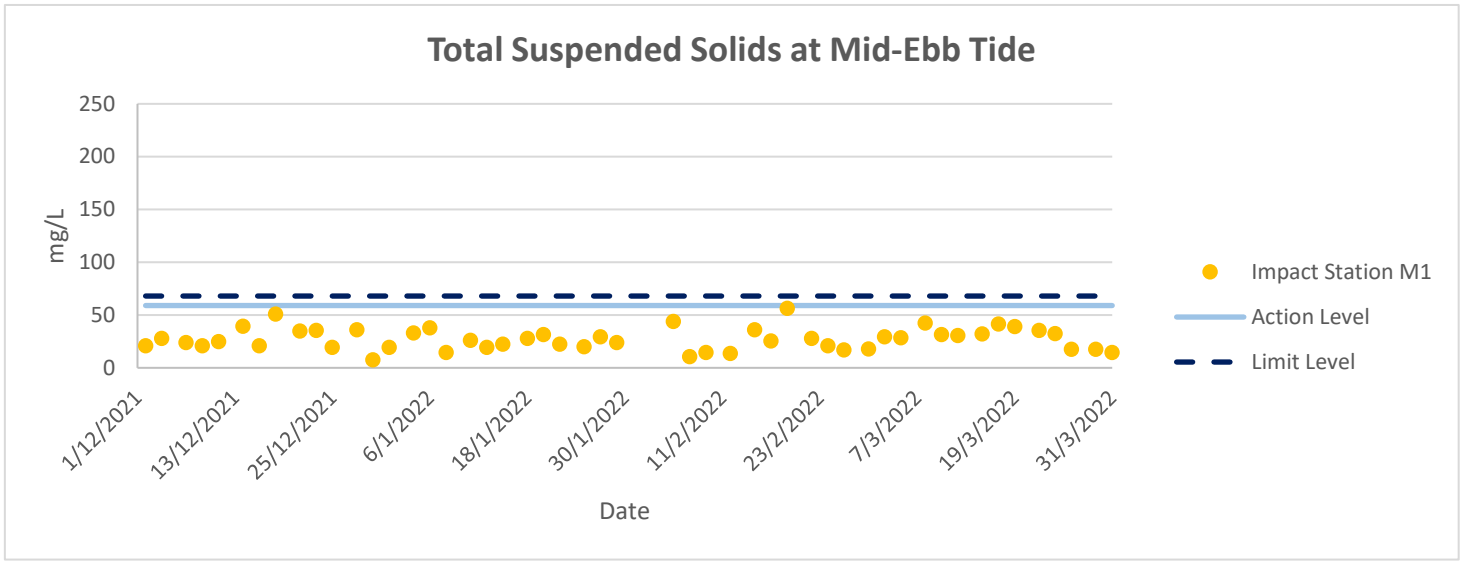
Water Quality Monitoring Results

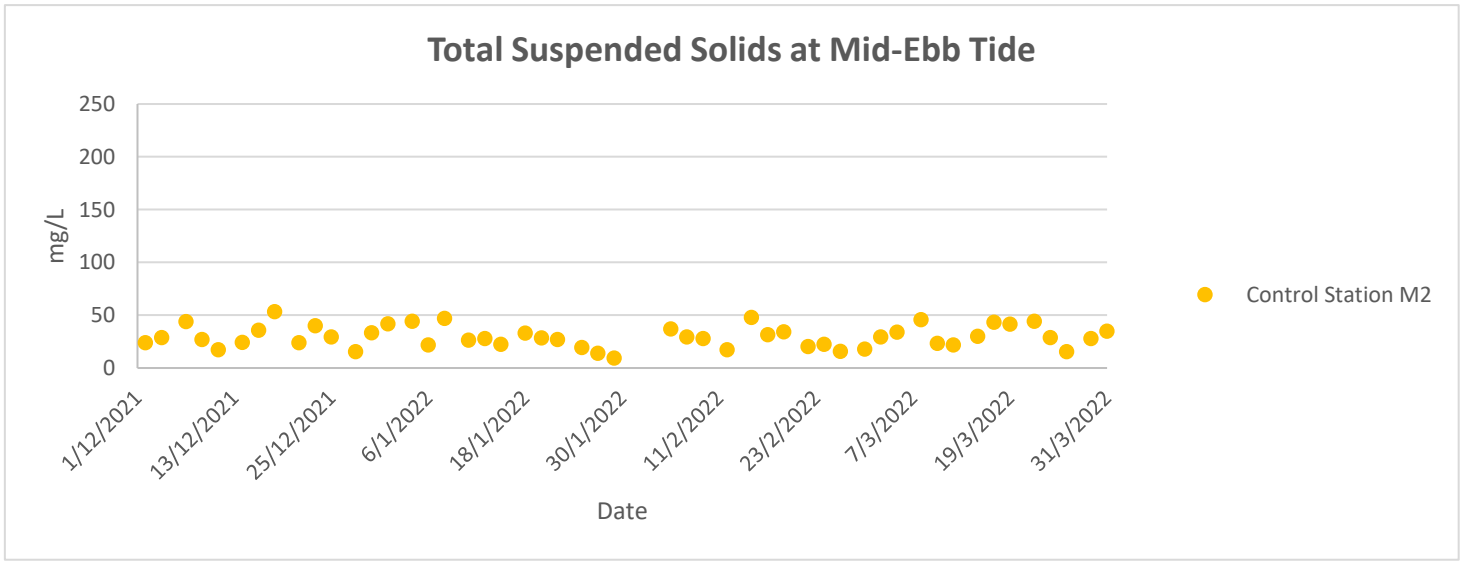


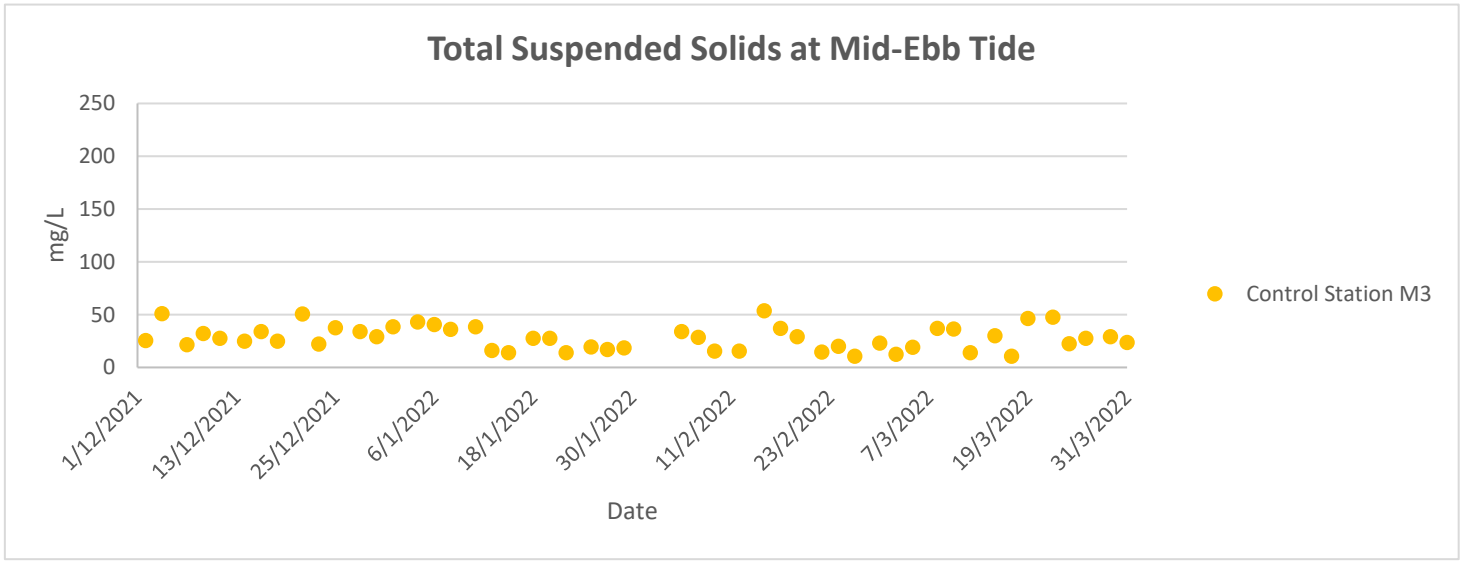




Water Quality Monitoring Results







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 Black-winged Stilt *Himantopus himantopus* was noted with the highest abundance (26 individuals). On the other hand, species with the least abundance (1 individual each) were the Asian Koel *Eudynamys scolopaceus,* Black Kite *Milvus migrans*, Intermediate Egret *Egretta intermedia,* Northern Pintail *Anas acuta,* Oriental Magpie Robin *Copsychus saularis,* Scaly-breasted Munia *Lonchura punctulata,* and Tufted Duck *Aythya fuligula*.

Transect Walk

Among the different species recorded, the Northern Shoveler *Anas clypeata* was noted with the highest abundance (6 individuals); while the species Asian Koel, Chinese Bulbul *Pycnonotus sinensis,* Great Cormorant *Phalacrocorax carbo*, Greater Coucal *Centropus sinensis,* Great Egret *Ardea alba,* Grey Heron *Ardea cinerea,* Intermediate Egret, and White-rumped Munia *Lonchura striata* 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 Black-winged Stilt was recorded with the highest abundance (26 individuals). On the other hand, the Black Kite, Intermediate Egret, Northern Pintail, and Tufted Duck had the lowest abundance (1 individual each).

Transect Walk

Among the different species recorded, the Northern Shoveler was noted with the highest abundance (6 ind.) while the Great Cormorant, Great Egret, Grey Heron, Greater Coucal, and Intermediate Egret had the lowest recorded abundance (1 individual each).

Appendix F.2 Ecological Bird Monitoring Result (15 March 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
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Greater Coucal	*Centropus sinensis*	1	Common	R	-	Class II	Vulnerable	LC	LC	Y	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Pied Kingfisher	*Ceryle rudis*	2	Uncommon	R	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Oriental Magpie Robin	*Copsychus saularis*	2	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Azure-winged Magpie	*Cyanopica cyanus*	3	Introduced	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	White-rumped Munia	*Lonchura striata*	1	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	White Wagtail	*Motacilla alba*	2	Common	PM,WV	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Eurasian Tree Sparrow	*Passer montanus*	2	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Chinese Bulbul	*Pycnonotus sinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Transect	FLW	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW1	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	1	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW1	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW1	Pond-FLW	Long-tailed Shrike	*Lanius schach*	2	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW1	Pond-FLW	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW1	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW1	Pond-FLW	Japanese White-eye	*Zosterops japonicus*	4	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW2	Pond-FLW	Oriental Magpie Robin	*Copsychus saularis*	1	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW2	Pond-FLW	Dusky Warbler	*Phylloscopus fuscatus*	3	Common	PM,WV	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW2	Pond-FLW	Yellow-bellied Prinia	*Prinia flaviventris*	3	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW2	Pond-FLW	Chinese Bulbul	*Pycnonotus sinensis*	1	Abundant	R	-	-	-	LC	LC	N	N

15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW3	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW3	Pond-FLW	Dusky Warbler	*Phylloscopus fuscatus*	3	Common	PM,WV	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW3	Pond-FLW	Yellow-bellied Prinia	*Prinia flaviventris*	3	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW3	Pond-FLW	Chinese Bulbul	*Pycnonotus sinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW3	Pond-FLW	Little Grebe	*Tachybaptus ruficollis*	2	Common	R	LC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW4	Pond-FLW	Tufted Duck	*Aythya fuligula*	1	Uncommon	WV	LC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW4	Pond-FLW	Black Kite	*Milvus migrans*	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW4	Pond-FLW	Plain Prinia	*Prinia inornata*	1	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW5	Pond-FLW	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW5	Pond-FLW	Chinese Pond Heron	*Ardeola bacchus*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW5	Pond-FLW	White Wagtail	*Motacilla alba*	2	Common	PM,WV	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW5	Pond-FLW	Eurasian Tree Sparrow	*Passer montanus*	3	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW5	Pond-FLW	Little Grebe	*Tachybaptus ruficollis*	7	Common	R	LC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW6	Pond-FLW	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW6	Pond-FLW	Eastern Cattle Egret	*Bubulcus coromandus*	4	Common	R.PM	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW6	Pond-FLW	Pied Kingfisher	*Ceryle rudis*	2	Uncommon	R	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW6	Pond-FLW	White Wagtail	*Motacilla alba*	1	Common	PM,WV	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW6	Pond-FLW	Great Cormorant	*Phalacrocorax carbo*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW6	Pond-FLW	Little Grebe	*Tachybaptus ruficollis*	1	Common	R	LC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW7	Pond-FLW	Crested Myna	*Acridotheres cristatellus*	4	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW7	Pond-FLW	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW7	Pond-FLW	Azure-winged Magpie	*Cyanopica cyanus*	2	Introduced	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	FLW	Point Count	FLW7	Pond-FLW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N

15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Plantation-NSW	Common Myna	*Acridotheres tristis*	3	Uncommon	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Modified Watercourse	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Modified Watercourse	Tufted Duck	*Aythya fuligula*	2	Uncommon	WV	LC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	FLW	Transect	NSW	Pond-NSW	Large-billed Crow	*Corvus macrorhynchos*	2	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Plantation-NSW	Asian Koel	*Eudynamys scolopaceus*	1	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Plantation-NSW	Masked Laughingthrush	*Garrulax perspicillatus*	4	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Plantation-NSW	Common Tailorbird	*Orthotomus sutorius*	3	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	In-flight	Great Cormorant	*Phalacrocorax carbo*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Plantation-NSW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Transect	NSW	Modified Watercourse	Little Grebe	*Tachybaptus ruficollis*	2	Common	R	LC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Little Egret	*Egretta garzetta*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Scaly-breasted Munia	*Lonchura punctulata*	1	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	White Wagtail	*Motacilla alba*	3	Common	PM,WV	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Great Cormorant	*Phalacrocorax carbo*	10	Common	WV	PRC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Chinese Bulbul	*Pycnonotus sinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	NSW1	Pond-NSW	Eurasian Collared Dove	*Streptopelia decaocto*	3	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Northern Pintail	*Anas acuta*	1	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Northern Shoveler	*Anas clypeata*	1	Abundant	WV	RC	-	-	LC	LC	Y	Y

15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	3	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Intermediate Egret	*Egretta intermedia*	1	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Asian Koel	*Eudynamys scolopaceus*	1	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Common Moorhen	*Gallinula chloropus*	6	Common	R	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Masked Laughingthrush	*Garrulax perspicillatus*	5	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Black-winged Stilt	*Himantopus himantopus*	1	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Plain Prinia	*Prinia inornata*	3	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Red-whiskered Bulbul	*Pycnonotus jocosus*	2	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Chinese Bulbul	*Pycnonotus sinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Pied Avocet	*Recurvirostra avosetta*	4	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW1	Modified Watercourse	Common Redshank	*Tringa totanus*	1	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Azure-winged Magpie	*Cyanopica cyanus*	3	Introduced	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Black-winged Stilt	*Himantopus himantopus*	3	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Pied Avocet	*Recurvirostra avosetta*	3	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Little Grebe	*Tachybaptus ruficollis*	1	Common	R	LC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW2	Modified Watercourse	Common Greenshank	*Tringa nebularia*	1	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Northern Shoveler	*Anas clypeata*	3	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Chinese Pond Heron	*Ardeola bacchus*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Pied Kingfisher	*Ceryle rudis*	3	Uncommon	R	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Little Egret	*Egretta garzetta*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y

15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Masked Laughingthrush	*Garrulax perspicillatus*	3	Abundant	R	-	-	-	LC	LC	N	N
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Black-winged Stilt	*Himantopus himantopus*	7	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Black-winged Stilt	*Himantopus himantopus*	15	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Great Cormorant	*Phalacrocorax carbo*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Pied Avocet	*Recurvirostra avosetta*	5	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Pied Avocet	*Recurvirostra avosetta*	2	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Common Greenshank	*Tringa nebularia*	4	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Common Greenshank	*Tringa nebularia*	8	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Common Redshank	*Tringa totanus*	5	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	NSW	Point Count	SP/NSW3	Modified Watercourse	Common Redshank	*Tringa totanus*	7	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Northern Shoveler	*Anas clypeata*	6	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Grey Heron	*Ardea cinerea*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Intermediate Egret	*Egretta intermedia*	1	Common	PM	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Common Moorhen	*Gallinula chloropus*	2	Common	R	-	-	-	LC	LC	N	Y
15/03/2022	Daytime	Dry Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Pied Avocet	*Recurvirostra avosetta*	3	Abundant	WV	RC	-	-	LC	LC	Y	Y
15/03/2022	Daytime	Dry Season	YLIE	Transect	YLIE-CW	Modified Watercourse	Spotted Dove	*Spilopelia chinensis*	2	Abundant	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 (15 March 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Acridotheres cristatellus	7	0.034314	-3.37221	-0.11571	0.390209
Alcedo atthis	2	0.009804	-4.62497	-0.04534	0.20971
Anas acuta	1	0.004902	-5.31812	-0.02607	0.138639
Anas clypeata	4	0.019608	-3.93183	-0.07709	0.303123
Ardea alba	4	0.019608	-3.93183	-0.07709	0.303123
Ardeola bacchus	8	0.039216	-3.23868	-0.12701	0.411335
Aythya fuligula	1	0.004902	-5.31812	-0.02607	0.138639
Bubulcus coromandus	4	0.019608	-3.93183	-0.07709	0.303123
Ceryle rudis	5	0.02451	-3.70868	-0.0909	0.337116
Copsychus saularis	1	0.004902	-5.31812	-0.02607	0.138639
Cyanopica cyanus	5	0.02451	-3.70868	-0.0909	0.337116
Egretta garzetta	2	0.009804	-4.62497	-0.04534	0.20971
Egretta intermedia	1	0.004902	-5.31812	-0.02607	0.138639
Eudynamys scolopaceus	1	0.004902	-5.31812	-0.02607	0.138639
Gallinula chloropus	6	0.029412	-3.52636	-0.10372	0.365742
Garrulax perspicillatus	8	0.039216	-3.23868	-0.12701	0.411335
Himantopus himantopus	26	0.127451	-2.06002	-0.26255	0.540863
Lanius schach	2	0.009804	-4.62497	-0.04534	0.20971
Lonchura punctulata	1	0.004902	-5.31812	-0.02607	0.138639
Milvus migrans	1	0.004902	-5.31812	-0.02607	0.138639
Motacilla alba	6	0.029412	-3.52636	-0.10372	0.365742
Passer montanus	3	0.014706	-4.21951	-0.06205	0.261827
Phalacrocorax carbo	12	0.058824	-2.83321	-0.16666	0.472182
Phylloscopus fuscatus	6	0.029412	-3.52636	-0.10372	0.365742
Prinia flaviventris	6	0.029412	-3.52636	-0.10372	0.365742
Prinia inornata	10	0.04902	-3.01553	-0.14782	0.445757
Pycnonotus jocosus	2	0.009804	-4.62497	-0.04534	0.20971
Pycnonotus sinensis	7	0.034314	-3.37221	-0.11571	0.390209
Recurvirostra avosetta	14	0.068627	-2.67906	-0.18386	0.492565
Spilopelia chinensis	4	0.019608	-3.93183	-0.07709	0.303123
Streptopelia decaocto	3	0.014706	-4.21951	-0.06205	0.261827
Tachybaptus ruficollis	11	0.053922	-2.92022	-0.15746	0.459828
Tringa nebularia	13	0.063725	-2.75317	-0.17545	0.483036
Tringa totanus	13	0.063725	-2.75317	-0.17545	0.483036
Zosterops japonicus	4	0.019608	-3.93183	-0.07709	0.303123
Total	**204**	**1**	**-137.584**	**-3.22478**	**10.96613**
Richness	**35**				
SS	**11**				
SQ	**10.4**				
H	**3.22**				
S^2_H	**0**				

Appendix F.3.2 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Point Count Method) in All Habitats (15 March 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Anas acuta	1	0.009009	-4.70953	-0.04243	0.199817
Anas clypeata	4	0.036036	-3.32324	-0.11976	0.397978
Ardea alba	4	0.036036	-3.32324	-0.11976	0.397978
Ardeola bacchus	8	0.072072	-2.63009	-0.18956	0.498549
Aythya fuligula	1	0.009009	-4.70953	-0.04243	0.199817
Egretta garzetta	2	0.018018	-4.01638	-0.07237	0.290655
Egretta intermedia	1	0.009009	-4.70953	-0.04243	0.199817
Himantopus himantopus	26	0.234234	-1.45143	-0.33998	0.493452
Milvus migrans	1	0.009009	-4.70953	-0.04243	0.199817
Phalacrocorax carbo	12	0.108108	-2.22462	-0.2405	0.535022
Recurvirostra avosetta	14	0.126126	-2.07047	-0.26114	0.540685
Tachybaptus ruficollis	11	0.099099	-2.31163	-0.22908	0.529551
Tringa nebularia	13	0.117117	-2.14458	-0.25117	0.538648
Tringa totanus	13	0.117117	-2.14458	-0.25117	0.538648
Total	**111**	**1**	**-44.4784**	**-2.24418**	**5.560434**
Richness	**14**				
SS	**5.56**				
SQ	**5.036**				
H	**2.244**				
S^2_H	**0.005**				

Appendix F.3.3 Ecological Bird Monitoring Diversity (All avifauna species in Transect Walk Method) in All Habitats (15 March 2022)

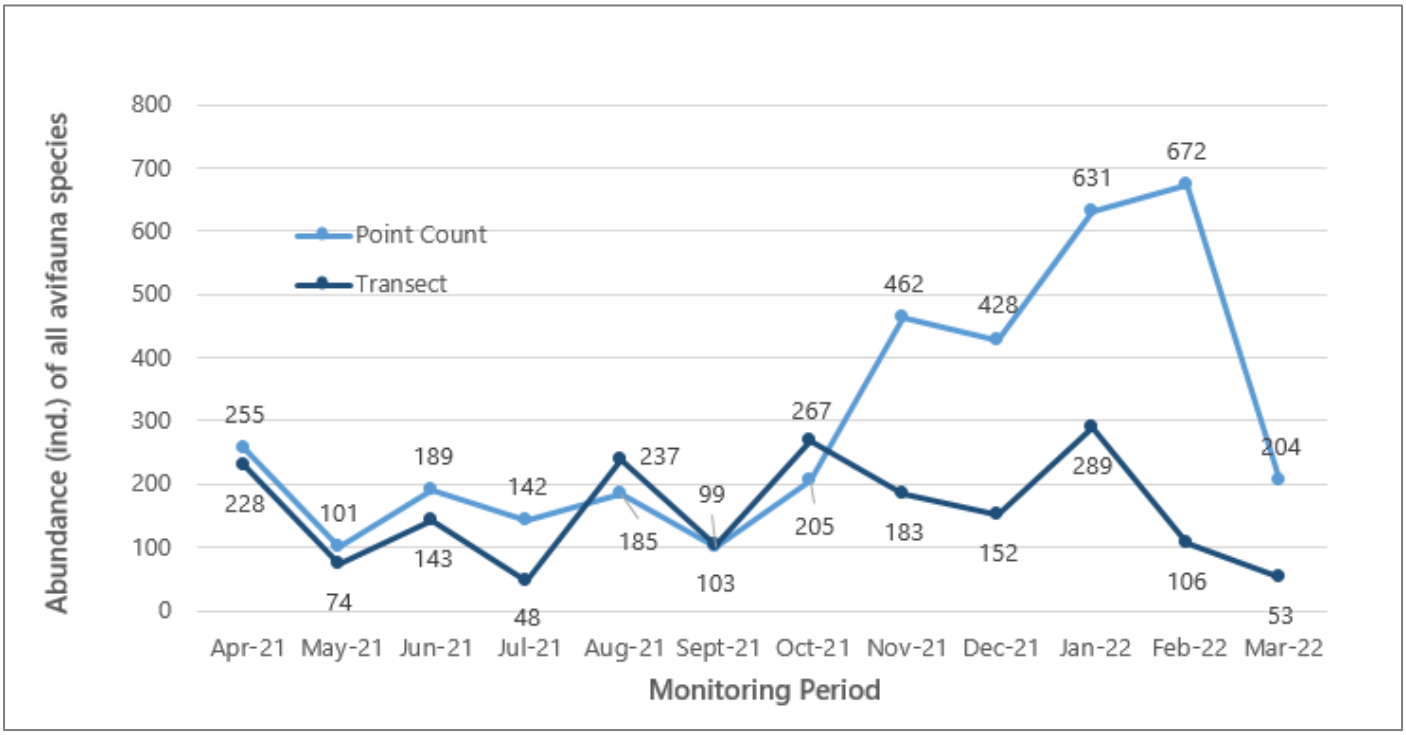
Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Acridotheres cristatellus	2	0.037736	-3.27714	-0.12367	0.405271
Acridotheres tristis	3	0.056604	-2.87168	-0.16255	0.466786
Anas clypeata	6	0.113208	-2.17853	-0.24663	0.537283
Ardea alba	1	0.018868	-3.97029	-0.07491	0.297419
Ardea cinerea	1	0.018868	-3.97029	-0.07491	0.297419
Aythya fuligula	2	0.037736	-3.27714	-0.12367	0.405271
Centropus sinensis	1	0.018868	-3.97029	-0.07491	0.297419
Ceryle rudis	2	0.037736	-3.27714	-0.12367	0.405271
Copsychus saularis	2	0.037736	-3.27714	-0.12367	0.405271
Corvus macrorhynchos	2	0.037736	-3.27714	-0.12367	0.405271
Cyanopica cyanus	3	0.056604	-2.87168	-0.16255	0.466786
Egretta intermedia	1	0.018868	-3.97029	-0.07491	0.297419
Eudynamys scolopaceus	1	0.018868	-3.97029	-0.07491	0.297419
Gallinula chloropus	2	0.037736	-3.27714	-0.12367	0.405271
Garrulax perspicillatus	4	0.075472	-2.584	-0.19502	0.503928
Lonchura striata	1	0.018868	-3.97029	-0.07491	0.297419
Motacilla alba	2	0.037736	-3.27714	-0.12367	0.405271
Orthotomus sutorius	3	0.056604	-2.87168	-0.16255	0.466786
Passer montanus	2	0.037736	-3.27714	-0.12367	0.405271

Phalacrocorax carbo	1	0.018868	-3.97029	-0.07491	0.297419
Pycnonotus sinensis	1	0.018868	-3.97029	-0.07491	0.297419
Recurvirostra avosetta	3	0.056604	-2.87168	-0.16255	0.466786
Spilopelia chinensis	5	0.09434	-2.36085	-0.22272	0.525814
Tachybaptus ruficollis	2	0.037736	-3.27714	-0.12367	0.405271
Total	**53**	**1**	**-79.8667**	**-3.02684**	**9.460959**
Richness	**24**				
SS	**9.460959**				
SQ	**9.161764**				
H	**3.026841**				
S^2_H	**0.009739**				

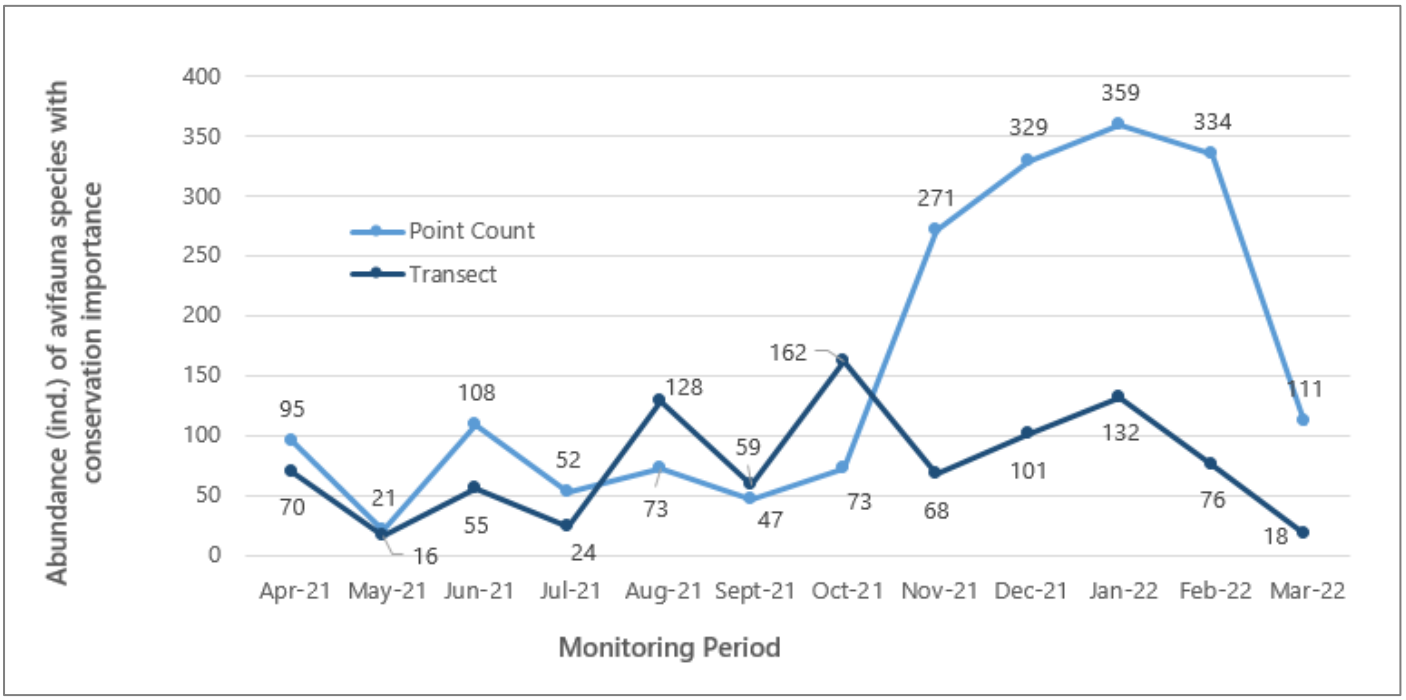
Appendix F.3.4 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Transect Walk Method) in All Habitats (15 March 2022)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Anas clypeata	6	0.333333	-1.09861	-0.3662	0.402316
Ardea alba	1	0.055556	-2.89037	-0.16058	0.464125
Ardea cinerea	1	0.055556	-2.89037	-0.16058	0.464125
Aythya fuligula	2	0.111111	-2.19722	-0.24414	0.536422
Centropus sinensis	1	0.055556	-2.89037	-0.16058	0.464125
Egretta intermedia	1	0.055556	-2.89037	-0.16058	0.464125
Phalacrocorax carbo	1	0.055556	-2.89037	-0.16058	0.464125
Recurvirostra avosetta	3	0.166667	-1.79176	-0.29863	0.535067
Tachybaptus ruficollis	2	0.111111	-2.19722	-0.24414	0.536422
Total	**18**	**1**	**-21.7367**	**-1.95598**	**4.330852**
Richness	**9**				
SS	**4.330852**				
SQ	**3.825873**				
H	**1.955984**				
S^2_H	**0.0404**				

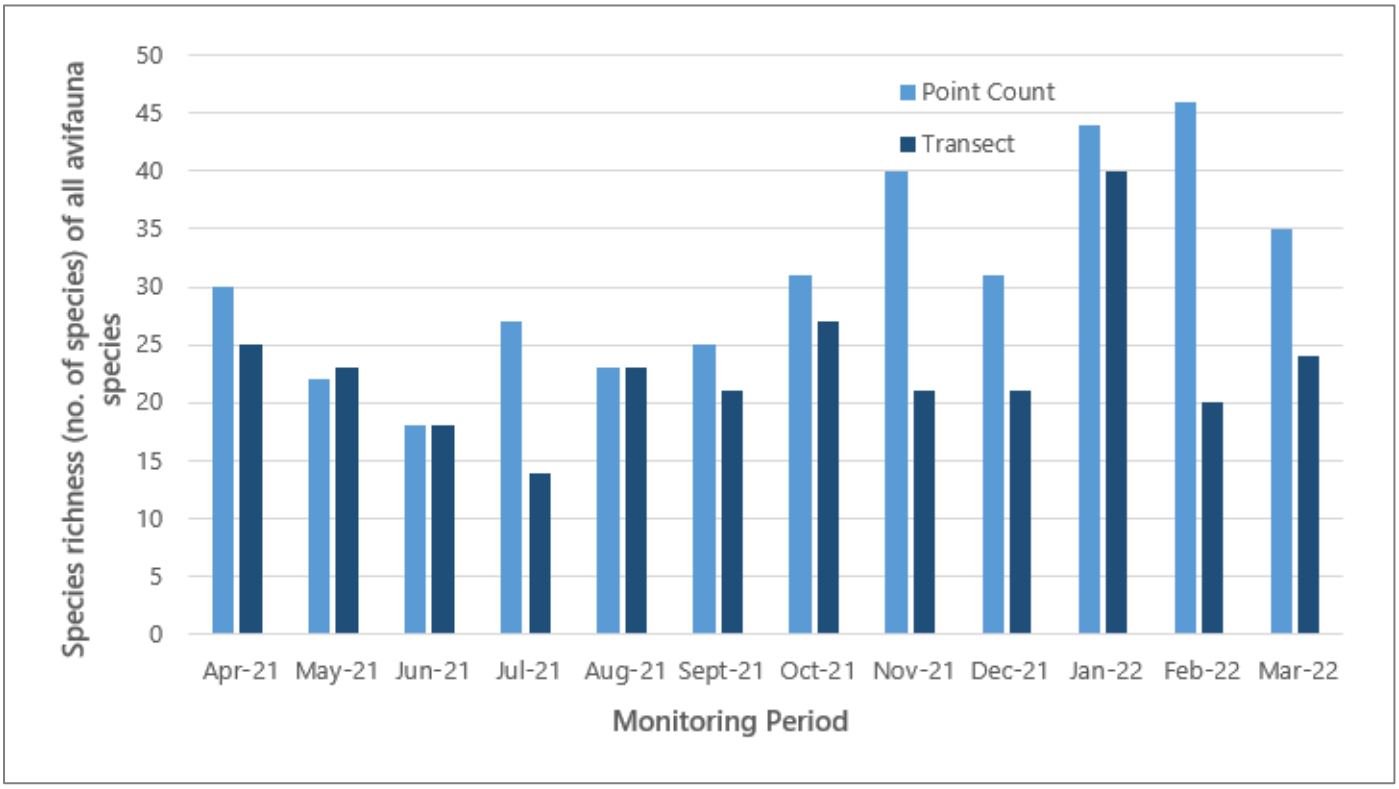
Appendix F.4.1 Abundance of all avifauna species throughout the monitoring period



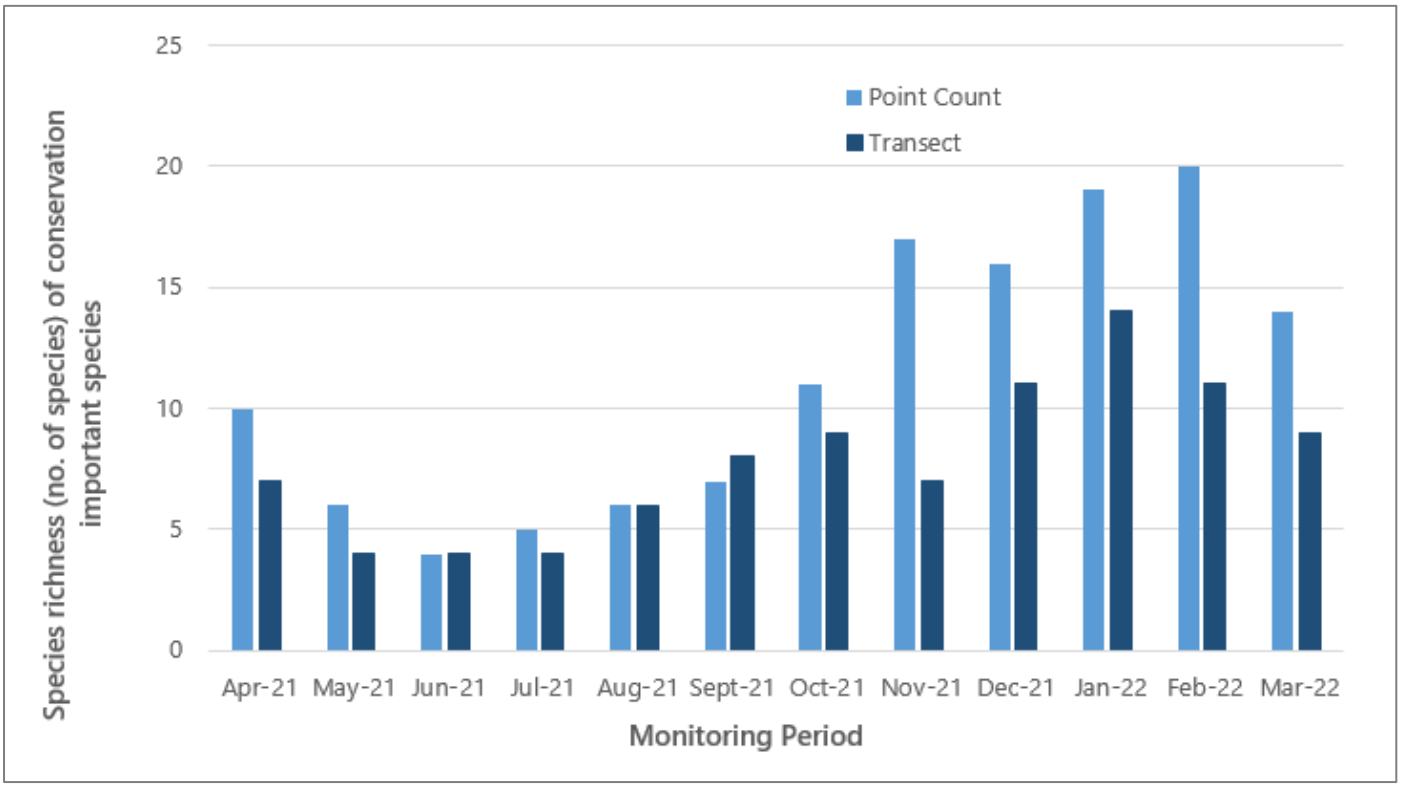
Appendix F.4.2 Abundance of avifauna species with conservation importance throughout the monitoring period



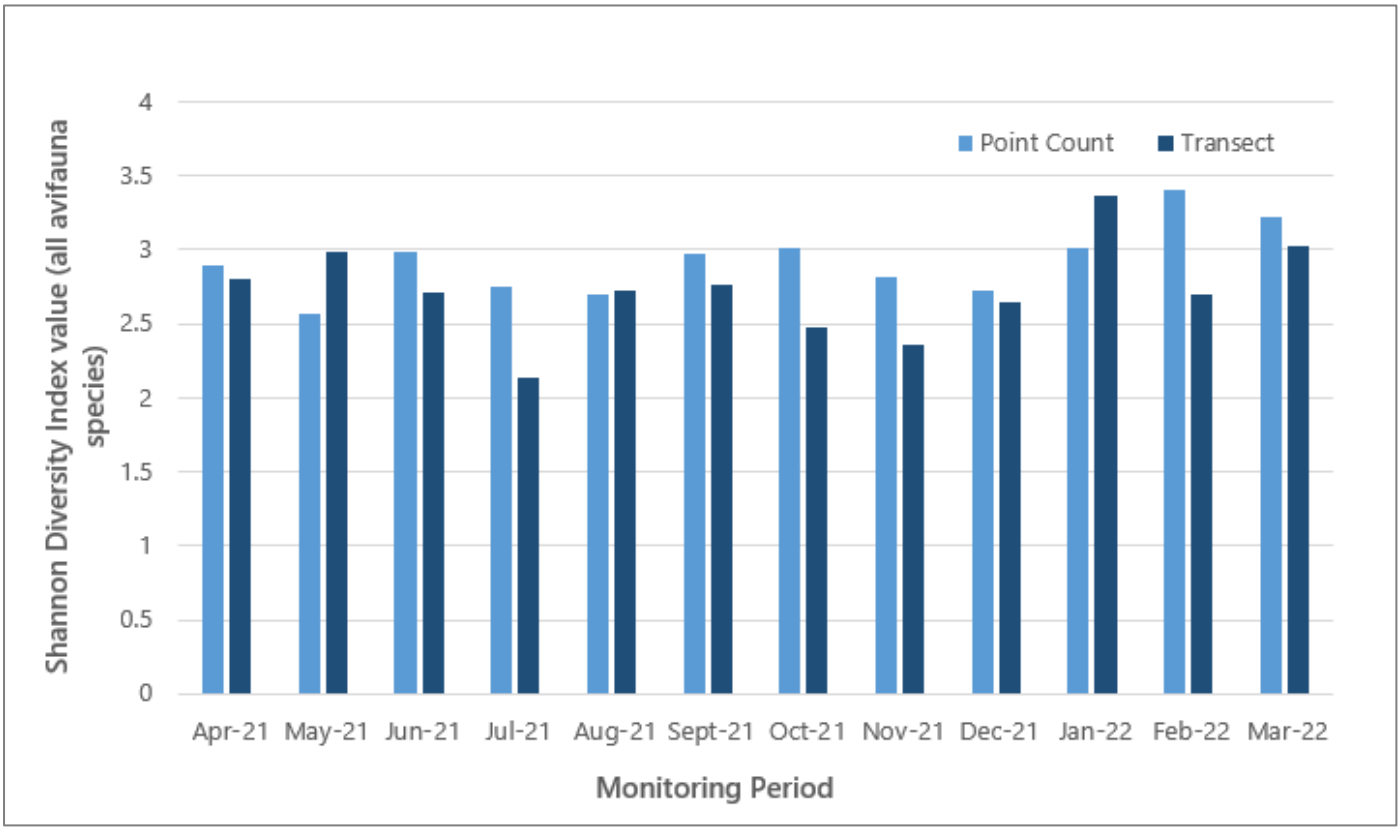
Appendix F.5.1 Species richness of all avifauna species throughout the monitoring period



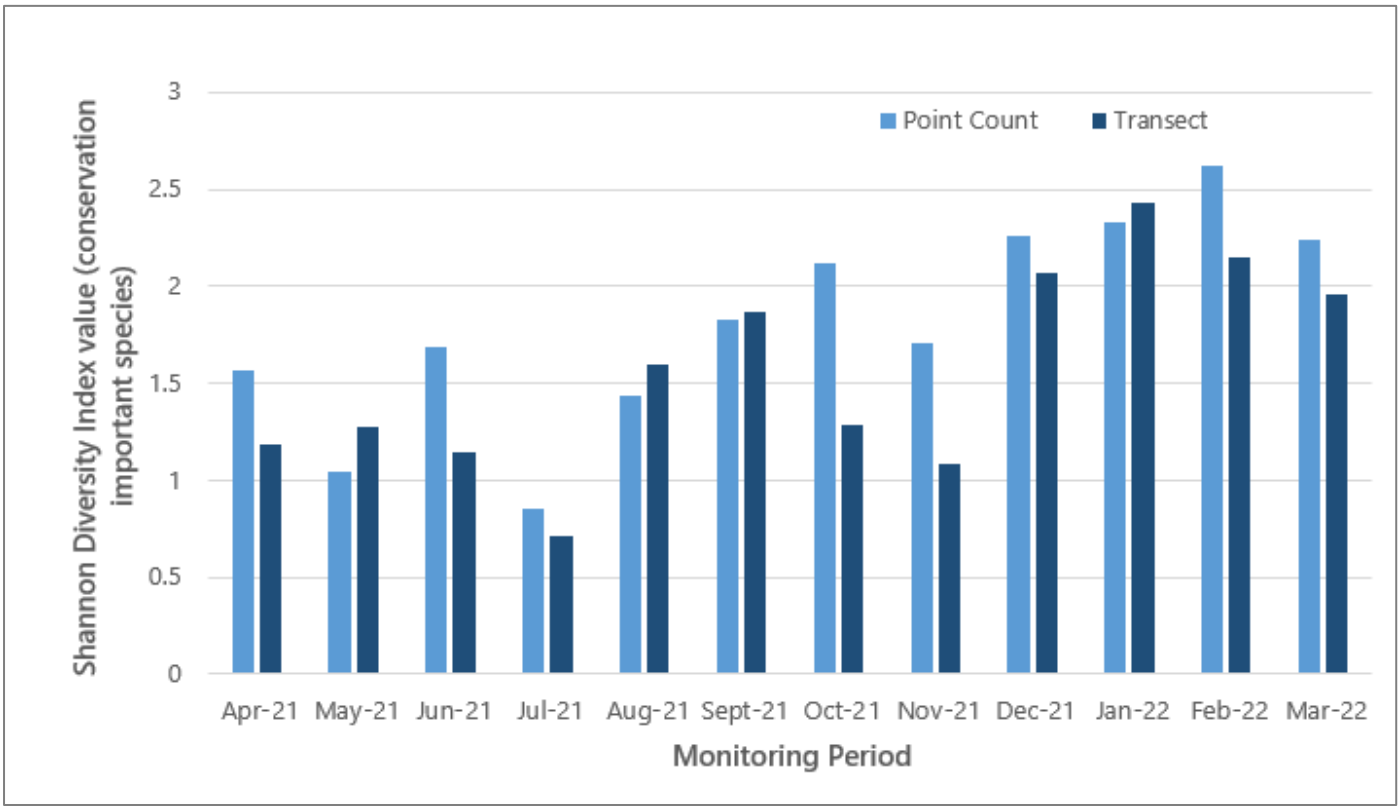
Appendix F.5.2 Species richness of avifauna species with conservation importance throughout the monitoring period



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	March 2017	March 2022
N	120	78
df	119	77
M	5.06	2.62
SS	21698.59	426.46
S^2	182.34	5.54
t-value	1.58	
p-value	0.12	

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	March 2017	March 2022
N	64	38
df	63	37
M	7.97	2.92
SS	20377.94	362.76
S^2	323.46	9.8
t-value	1.71	
p-value	0.09	

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.7.3 Abundance of all avifauna species – Transect Walk Method

Months	March 2017	March 2022
N	56	26
df	55	25
M	3.04	2.04
SS	955.93	32.96
S^2	17.38	1.32
t-value	1.2	
p-value	0.24	

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.7.4 Abundance of avifauna species with conservation importance – Transect Walk Method

Months	March 2017	March 2022
N	10	9
df	9	8
M	4.4	2
SS	694.4	22
S^2	77.16	2.75
t-value	0.8	
p-value	0.43	

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