Air Quality Monitoring Results

1-hour TSP Monitoring Result for

Contract No. SPW 07/2020

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

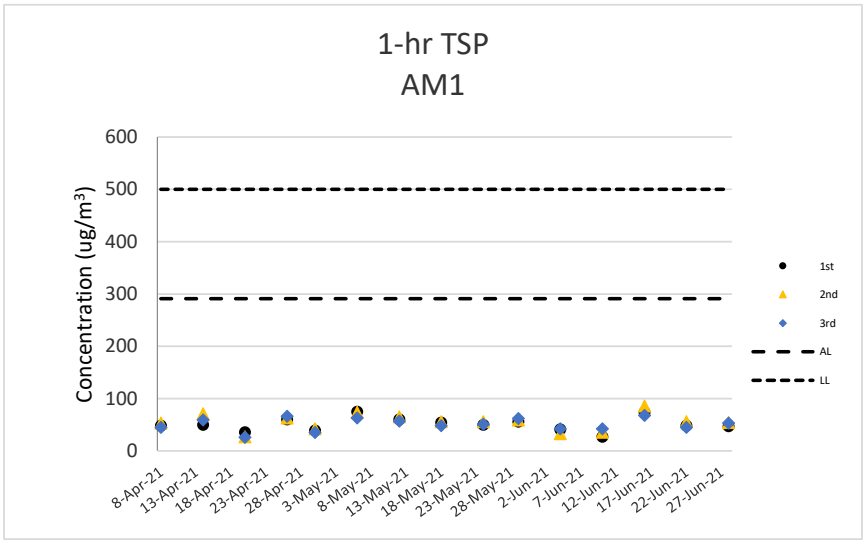
AM1 - Topfine Machinery (China) Co. Ltd.

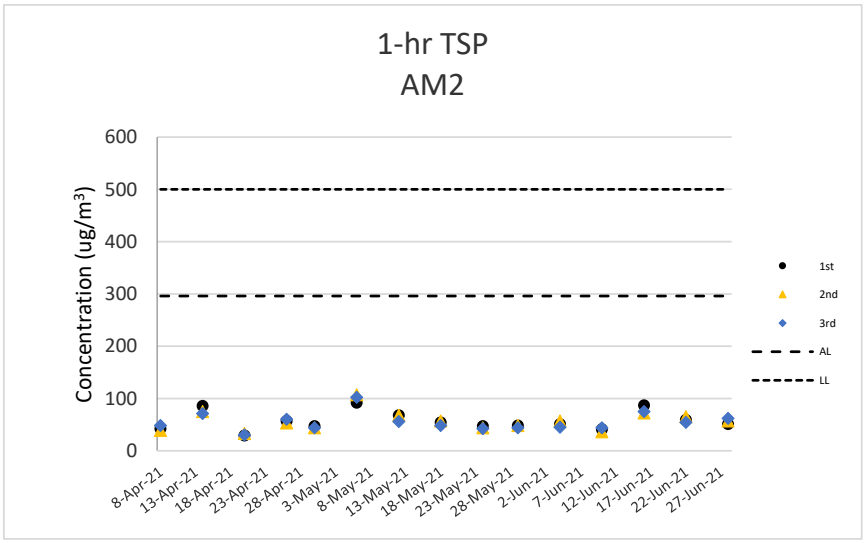
Date	Weather Condition	Start Time	1-hour TSP (µg/m³) 1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
4-Jun-21	Fine	10:02	41	33	42	291	500
10-Jun-21	Fine	10:44	27	36	42		
16-Jun-21	Fine	10:57	74	86	68		
22-Jun-21	Cloudy	12:23	48	56	45		
28-Jun-21	Cloudy	13:06	47	54	53		
		Min	27				
		Max	86				
		Average	50				

AM2 - Squatter house at the west of Yuen Long STW

Date	Weather Condition	Start Time	1-hour TSP (µg/m³) 1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
4-Jun-21	Fine	09:44	51	57	45	296	500
10-Jun-21	Fine	10:08	41	36	44		
16-Jun-21	Fine	11:20	87	72	75		
22-Jun-21	Cloudy	11:34	59	65	54		
28-Jun-21	Cloudy	13:27	51	57	62		
		Min	36				
		Max	87				
		Average	57				

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


1-hr TSP
AM1
Concentration (ug/m³)
600
500
400
300
200
100
0
8-Apr-21
13-Apr-21
18-Apr-21
23-Apr-21
28-Apr-21
3-May-21
8-May-21
13-May-21
18-May-21
23-May-21
28-May-21
2-Jun-21
7-Jun-21
12-Jun-21
17-Jun-21
22-Jun-21
27-Jun-21
1st
2nd
3rd
AL
LL


1-hr TSP
AM2
Concentration (ug/m³)
600
500
400
300
200
100
0
8-Apr-21
13-Apr-21
18-Apr-21
23-Apr-21
28-Apr-21
3-May-21
8-May-21
13-May-21
18-May-21
23-May-21
28-May-21
2-Jun-21
7-Jun-21
12-Jun-21
17-Jun-21
22-Jun-21
27-Jun-21
1st
2nd
3rd
AL
LL

Noise Monitoring Results

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

CM1 - Squatter house to the north of YLSTW

Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
4-Jun-21	12:17	52	54	48	0.3	Fine	75
10-Jun-21	12:24	52	58	50	0.2	Fine	75
16-Jun-21	09:14	57	59	53	0.7	Fine	75
22-Jun-21	14:02	57	59	55	0.2	Cloudy	75
28-Jun-21	14:49	56	58	54	0.4	Cloudy	75
	Max	57					
	Min	52					

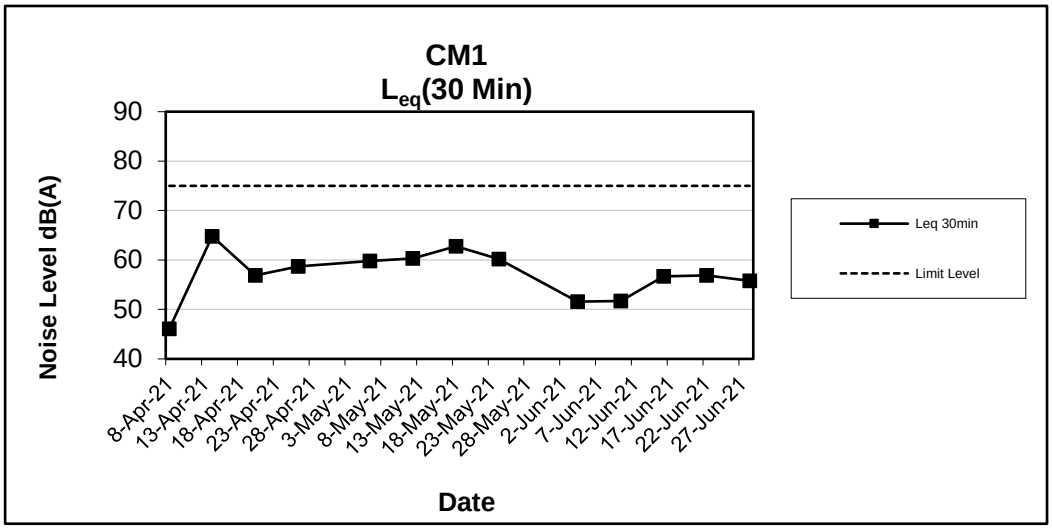
CM2 - Squatter house to the west of YLSTW

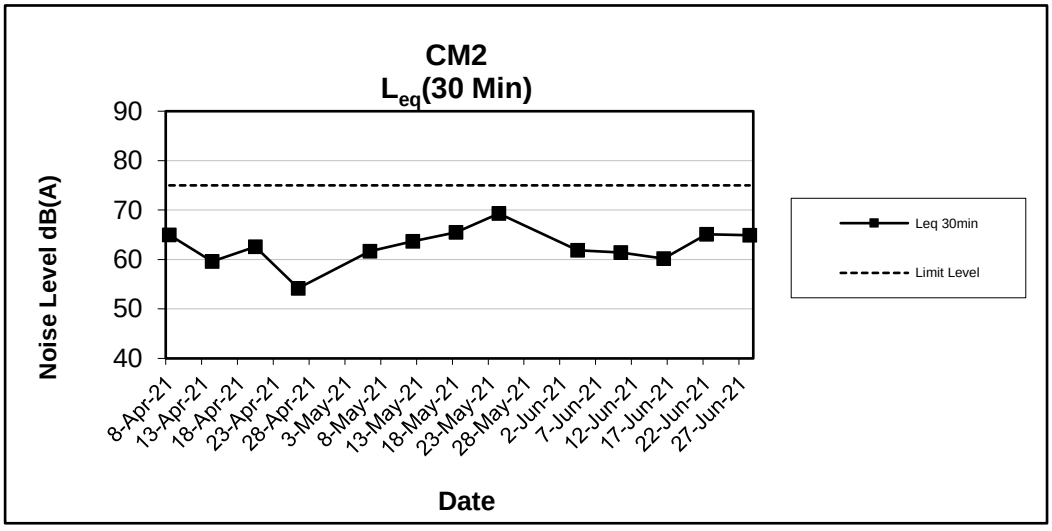
Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
4-Jun-21	09:50	62	65	58	0.2	Fine	75
10-Jun-21	10:24	61	64	59	0.5	Fine	75
16-Jun-21	11:24	60	63	56	0.8	Fine	75
22-Jun-21	11:46	65	68	62	0.3	Cloudy	75
28-Jun-21	13:38	65	67	62	0.3	Cloudy	75
	Max	65					
	Min	60					

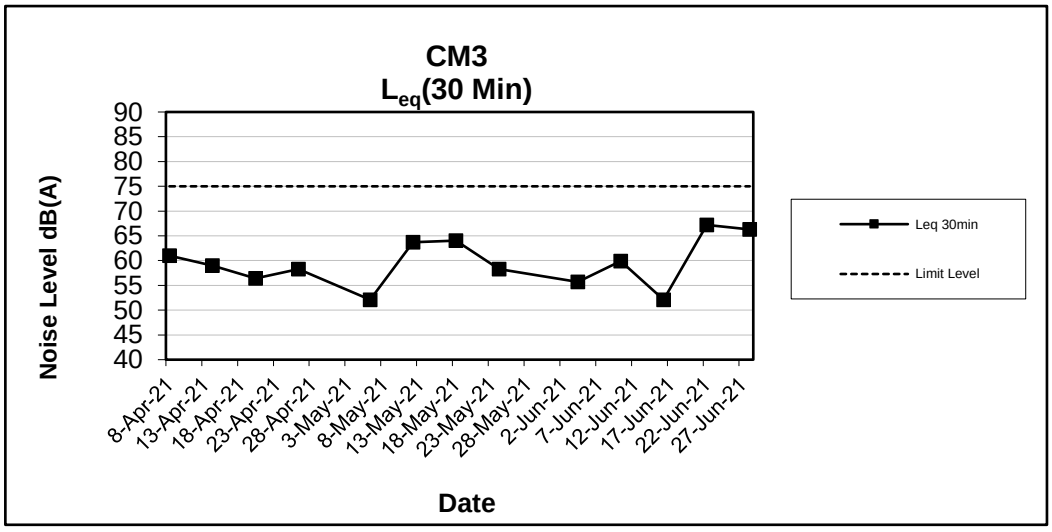
CM3 - Squatter house to the east of YLSTW

Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
4-Jun-21	11:23	56	59	53	0.1	Fine	75
10-Jun-21	11:27	60	63	58	0.4	Fine	75
16-Jun-21	10:03	52	58	49	0.6	Fine	75
22-Jun-21	15:41	67	71	63	0.3	Cloudy	75
28-Jun-21	15:57	66	69	62	0.5	Cloudy	75
	Max	67					
	Min	52					

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.


CM1
L_{eq}(30 Min)
Noise Level dB(A)
90
80
70
60
50
40
8-Apr-21
13-Apr-21
18-Apr-21
23-Apr-21
28-Apr-21
3-May-21
8-May-21
13-May-21
18-May-21
23-May-21
28-May-21
2-Jun-21
7-Jun-21
12-Jun-21
17-Jun-21
22-Jun-21
27-Jun-21
Date
Leq 30min
Limit Level


CM2
L_{eq}(30 Min)
Noise Level dB(A)
90
80
70
60
50
40
8-Apr-21
13-Apr-21
18-Apr-21
23-Apr-21
28-Apr-21
3-May-21
8-May-21
13-May-21
18-May-21
23-May-21
28-May-21
2-Jun-21
7-Jun-21
12-Jun-21
17-Jun-21
22-Jun-21
27-Jun-21
Date
Leq 30min
Limit Level


CM3
L_{eq}(30 Min)
Noise Level dB(A)
90
85
80
75
70
65
60
55
50
45
40
8-Apr-21
13-Apr-21
18-Apr-21
23-Apr-21
28-Apr-21
3-May-21
8-May-21
13-May-21
18-May-21
23-May-21
28-May-21
2-Jun-21
7-Jun-21
12-Jun-21
17-Jun-21
22-Jun-21
27-Jun-21
Date
Leq 30min
Limit Level

Water Quality Monitoring Results

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

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	1/6/2021	Mid-Flood	Cloudy	Calm	11:20	1	M	0.5	1	0.044	168	7.18	7.19	3.10	3.10	29.55	29.55	24.9	25.0	1.88	1.89	40.8	40.7	51	55
M1	1/6/2021	Mid-Flood	Cloudy	Calm	11:20	1	M	0.5	2			7.19		3.10		29.54		25.1		1.89		40.5		59	
M2	1/6/2021	Mid-Flood	Cloudy	Calm	11:00	0.8	M	0.4	1	0.057	145	7.19	7.19	3.09	3.09	29.78	29.79	30.9	30.6	2.54	2.56	24.7	24.6	23	26
M2	1/6/2021	Mid-Flood	Cloudy	Calm	11:00	0.8	M	0.4	2			7.19		3.09		29.79		30.3		2.57		24.5		29	
M3	1/6/2021	Mid-Flood	Cloudy	Calm	11:26	0.8	M	0.4	1	0.103	74	7.14	7.15	2.23	2.23	29.26	29.27	53.7	53.7	4.06	4.06	41.6	41.5	19	20
M3	1/6/2021	Mid-Flood	Cloudy	Calm	11:26	0.8	M	0.4	2			7.15		2.23		29.27		53.6		4.05		41.4		20	
M1	1/6/2021	Mid-Ebb	Cloudy	Calm	06:40	1.2	M	0.6	1	0.087	260	7.51	7.51	7.54	7.57	27.88	27.86	80.5	81.0	6.52	6.59	33.6	33.3	25	27
M1	1/6/2021	Mid-Ebb	Cloudy	Calm	06:40	1.2	M	0.6	2			7.51		7.60		27.84		81.4		6.66		33.0		29	
M2	1/6/2021	Mid-Ebb	Cloudy	Calm	07:00	0.8	M	0.4	1	0.076	253	7.50	7.50	6.99	7.01	28.10	28.08	75.3	75.2	5.73	5.72	26.1	26.4	24	24
M2	1/6/2021	Mid-Ebb	Cloudy	Calm	07:00	0.8	M	0.4	2			7.50		7.03		28.06		75.0		5.70		26.6		24	
M3	1/6/2021	Mid-Ebb	Cloudy	Calm	06:52	0.4	M	0.2	1	0.095	255	7.06	7.06	0.22	0.22	29.26	29.27	53.7	53.7	4.06	4.06	41.6	41.5	52	50
M3	1/6/2021	Mid-Ebb	Cloudy	Calm	06:52	0.4	M	0.2	2			7.06		0.22		29.27		53.6		4.05		41.4		47	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	48.8	52.8	81	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	3/6/2021	Mid-Flood	Fine	Calm	14:15	1	M	0.5	1	0.055	278	7.15	7.15	1.06	1.06	29.63	29.66	33.7	33.1	2.73	2.73	45.4	45.5	43	43
M1	3/6/2021	Mid-Flood	Fine	Calm	14:15	1	M	0.5	2			7.15		1.06		29.69		32.5		2.73		45.5		43	
M2	3/6/2021	Mid-Flood	Fine	Calm	14:00	0.9	M	0.45	1	0.05	209	7.20	7.20	0.93	0.93	30.27	30.28	34.7	34.7	2.60	2.60	31.8	32.3	52	55
M2	3/6/2021	Mid-Flood	Fine	Calm	14:00	0.9	M	0.45	2			7.20		0.93		30.29		34.7		2.59		32.7		58	
M3	3/6/2021	Mid-Flood	Fine	Calm	14:05	0.5	M	0.25	1	0.139	261	7.24	7.24	0.82	0.82	33.83	33.84	51.8	51.8	3.65	3.65	38.9	39.0	62	66
M3	3/6/2021	Mid-Flood	Fine	Calm	14:05	0.5	M	0.25	2			7.24		0.82		33.84		51.7		3.65		39.1		69	
M1	3/6/2021	Mid-Ebb	Fine	Calm	09:28	0.9	M	0.45	1	0.054	136	7.15	7.15	0.91	0.91	29.94	29.94	36.0	36.3	3.00	3.01	29.6	29.6	41	41
M1	3/6/2021	Mid-Ebb	Fine	Calm	09:28	0.9	M	0.45	2			7.15		0.91		29.94		36.5		3.02		29.5		41	
M2	3/6/2021	Mid-Ebb	Fine	Calm	10:00	0.7	M	0.35	1	0.053	182	7.15	7.15	0.85	0.85	29.66	29.66	28.9	29.1	2.51	2.53	25.1	25.1	26	25
M2	3/6/2021	Mid-Ebb	Fine	Calm	10:00	0.7	M	0.35	2			7.15		0.85		29.65		29.2		2.55		25.1		23	
M3	3/6/2021	Mid-Ebb	Fine	Calm	09:25	0.8	M	0.4	1	0.108	77	7.03	7.04	0.92	0.92	28.50	28.50	40.9	40.0	3.38	3.31	18.5	18.2	26	25
M3	3/6/2021	Mid-Ebb	Fine	Calm	09:25	0.8	M	0.4	2			7.05		0.92		28.50		39.1		3.24		17.8		24	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	54.5	59.1	81	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	5/6/2021	Mid-Flood	Fine	Smooth	04:50	1.2	M	0.6	1	0.071	277	7.32	7.32	1.21	1.21	28.88	28.89	51.0	51.3	3.90	3.88	36.5	36.5	54	52
M1	5/6/2021	Mid-Flood	Fine	Smooth	04:50	1.2	M	0.6	2			7.31		1.21		28.89		51.6		3.86		36.4		50	
M2	5/6/2021	Mid-Flood	Fine	Smooth	05:08	1	M	0.5	1	0.082	237	7.40	7.40	1.22	1.22	28.98	29.00	55.3	57.0	4.46	4.56	39.3	38.9	52	51
M2	5/6/2021	Mid-Flood	Fine	Smooth	05:08	1	M	0.5	2			7.40		1.22		29.02		58.6		4.66		38.5		49	
M3	5/6/2021	Mid-Flood	Fine	Calm	05:30	1.8	M	0.9	1	0.041	115	7.28	7.26	1.03	1.04	28.59	28.59	50.7	50.6	4.01	3.97	16.0	16.0	24	24
M3	5/6/2021	Mid-Flood	Fine	Calm	05:30	1.8	M	0.9	2			7.24		1.04		28.59		50.4		3.92		15.9		23	
M1	5/6/2021	Mid-Ebb	Fine	Smooth	11:30	1	M	0.5	1	0.049	178	7.31	7.31	1.00	1.00	28.85	28.88	42.7	42.6	3.18	3.16	41.7	41.1	33	37
M1	5/6/2021	Mid-Ebb	Fine	Smooth	11:30	1	M	0.5	2			7.31		1.00		28.90		42.4		3.14		40.5		40	
M2	5/6/2021	Mid-Ebb	Fine	Smooth	11:11	0.8	M	0.4	1	0.042	151	7.34	7.34	0.94	0.94	29.34	29.34	41.9	41.7	3.15	3.14	26.8	26.9	44	43
M2	5/6/2021	Mid-Ebb	Fine	Smooth	11:11	0.8	M	0.4	2			7.34		0.94		29.34		41.4		3.12		27.0		42	
M3	5/6/2021	Mid-Ebb	Fine	Calm	11:45	0.3	M	0.15	1	0.013	50	7.27	7.27	0.49	0.49	30.31	30.31	46.2	46.3	3.72	3.74	26.7	26.4	28	28
M3	5/6/2021	Mid-Ebb	Fine	Calm	11:45	0.3	M	0.15	2			7.26		0.48		30.31		46.4		3.75		26.1		27	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.7	52.4	81	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	8/6/2021	Mid-Flood	Fine	Calm	06:13	1.2	M	0.6	1	0.026	113	7.99	7.99	3.20	3.20	30.11	30.12	116.3	116.2	8.60	8.60	37.6	37.6	33	32
M1	8/6/2021	Mid-Flood	Fine	Calm	06:13	1.2	M	0.6	2			7.98		3.19		30.12		116.0		8.59		37.6		30	
M2	8/6/2021	Mid-Flood	Fine	Calm	06:33	0.9	M	0.45	1	0.028	105	7.73	7.74	1.91	1.92	30.63	30.64	107.0	107.1	7.94	7.94	36.8	37.0	37	38
M2	8/6/2021	Mid-Flood	Fine	Calm	06:33	0.9	M	0.45	2			7.74		1.92		30.64		107.1		7.93		37.1		39	
M3	8/6/2021	Mid-Flood	Fine	Calm	06:20	0.8	M	0.4	1	0.107	280	7.33	7.33	2.61	2.61	29.20	29.25	69.3	68.4	5.23	5.12	56.2	57.9	87	85
M3	8/6/2021	Mid-Flood	Fine	Calm	06:20	0.8	M	0.4	2			7.33		2.61		29.30		67.4		5.01		59.6		82	
M1	8/6/2021	Mid-Ebb	Fine	Calm	13:00	1	M	0.5	1	0.019	72	7.70	7.70	2.38	2.38	30.93	30.94	103.1	103.3	7.59	7.61	41.0	41.1	83	**87**
M1	8/6/2021	Mid-Ebb	Fine	Calm	13:00	1	M	0.5	2			7.69		2.37		30.94		103.4		7.63		41.2		90	
M2	8/6/2021	Mid-Ebb	Fine	Calm	12:41	0.8	M	0.4	1	0.02	58	8.05	8.05	2.00	2.00	32.01	32.02	124.5	123.6	9.26	9.22	39.3	39.2	59	58
M2	8/6/2021	Mid-Ebb	Fine	Calm	12:41	0.8	M	0.4	2			8.04		1.99		32.02		122.7		9.17		39.1		56	
M3	8/6/2021	Mid-Ebb	Fine	Calm	12:58	0.5	M	0.25	1	0.085	90	7.53	7.54	2.44	2.44	31.50	31.40	115.1	115.9	8.46	8.48	25.0	25.0	35	33
M3	8/6/2021	Mid-Ebb	Fine	Calm	12:58	0.5	M	0.25	2			7.54		2.44		31.30		116.6		8.49		25.0		31	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	45.1	52.4	81	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	10/6/2021	Mid-Flood	Fine	Moderate	07:07	1.1	M	0.55	1	0.021	144	7.88	7.85	5.87	5.88	29.85	29.87	131.2	131.5	9.64	9.65	24.2	24.3	56	58
M1	10/6/2021	Mid-Flood	Fine	Moderate	07:07	1.1	M	0.55	2			7.81		5.88		29.88		131.7		9.66		24.4		59	
M2	10/6/2021	Mid-Flood	Fine	Moderate	07:20	0.9	M	0.45	1	0.029	81	7.74	7.75	3.49	3.49	29.99	30.00	94.5	94.6	6.99	6.99	33.1	33.1	39	42
M2	10/6/2021	Mid-Flood	Fine	Moderate	07:20	0.9	M	0.45	2			7.75		3.48		30.00		94.6		6.98		33.1		45	
M3	10/6/2021	Mid-Flood	Fine	Calm	07:25	1	M	0.5	1	0.101	268	7.21	7.22	3.38	3.38	29.40	29.40	54.2	53.6	4.06	4.01	63.0	63.3	90	90
M3	10/6/2021	Mid-Flood	Fine	Calm	07:25	1	M	0.5	2			7.22		3.38		29.40		52.9		3.96		63.5		89	
M1	10/6/2021	Mid-Ebb	Fine	Moderate	14:04	0.9	M	0.45	1	0.042	156	7.54	7.59	3.65	3.65	30.41	30.41	82.4	82.7	6.06	6.12	44.9	44.9	76	**73**
M1	10/6/2021	Mid-Ebb	Fine	Moderate	14:04	0.9	M	0.45	2			7.63		3.64		30.40		82.9		6.17		44.9		70	
M2	10/6/2021	Mid-Ebb	Fine	Moderate	13:50	0.7	M	0.35	1	0.037	217	7.44	7.45	3.58	3.59	30.29	30.30	66.8	66.8	4.92	4.91	42.9	42.8	77	77
M2	10/6/2021	Mid-Ebb	Fine	Moderate	13:50	0.7	M	0.35	2			7.46		3.59		30.30		66.7		4.90		42.6		76	
M3	10/6/2021	Mid-Ebb	Fine	Calm	14:00	0.3	M	0.15	1	0.108	86	7.15	7.16	2.19	2.20	29.30	29.30	59.7	59.2	4.52	4.47	26.7	27.2	41	40
M3	10/6/2021	Mid-Ebb	Fine	Calm	14:00	0.3	M	0.15	2			7.16		2.20		29.30		58.6		4.41		27.6		39	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	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	2.25	1.91	48.4	50.4	70	76
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	12/6/2021	Mid-Flood	Fine	Moderate	07:53	2.4	M	1.2	1	0.103	227	7.78	7.79	8.05	8.05	29.22	29.23	89.7	90.0	6.58	6.60	21.9	22.2	31	31
M1	12/6/2021	Mid-Flood	Fine	Moderate	07:53	2.4	M	1.2	2			7.79		8.04		29.24		90.2		6.62		22.4		30	
M2	12/6/2021	Mid-Flood	Fine	Moderate	08:09	1.6	M	0.8	1	0.166	311	7.80	7.80	7.35	7.35	29.27	29.28	84.9	84.7	6.22	6.21	23.1	22.9	30	31
M2	12/6/2021	Mid-Flood	Fine	Moderate	08:09	1.6	M	0.8	2			7.80		7.34		29.28		84.4		6.19		22.7		32	
M3	12/6/2021	Mid-Flood	Fine	Calm	08:10	1.2	M	0.6	1	0.023	224	7.19	7.19	5.31	5.31	29.60	29.61	61.0	61.5	4.51	4.55	36.1	36.1	40	41
M3	12/6/2021	Mid-Flood	Fine	Calm	08:10	1.2	M	0.6	2			7.19		5.30		29.61		61.9		4.59		36.1		41	
M1	12/6/2021	Mid-Ebb	Fine	Moderate	15:21	2	M	1	1	0.158	262	7.34	7.34	4.36	4.36	28.89	28.90	55.2	55.1	4.13	4.12	29.7	29.9	34	33
M1	12/6/2021	Mid-Ebb	Fine	Moderate	15:21	2	M	1	2			7.33		4.35		28.91		55.0		4.11		30.0		31	
M2	12/6/2021	Mid-Ebb	Fine	Moderate	15:06	1.4	M	0.7	1	0.093	79	7.30	7.30	3.20	3.25	29.43	29.43	44.6	44.8	3.34	3.36	27.7	27.8	28	30
M2	12/6/2021	Mid-Ebb	Fine	Moderate	15:06	1.4	M	0.7	2			7.29		3.30		29.42		44.9		3.37		27.8		32	
M3	12/6/2021	Mid-Ebb	Fine	Calm	15:17	0.8	M	0.4	1	0.017	163	7.05	7.05	1.20	1.20	28.79	28.79	59.6	59.3	4.50	4.50	21.0	21.0	20	20
M3	12/6/2021	Mid-Ebb	Fine	Calm	15:17	0.8	M	0.4	2			7.05		1.20		28.79		59.0		4.49		21.0		20	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	15/6/2021	Mid-Flood	Fine	Calm	09:36	0.9	M	0.45	1	0.062	122	7.40	7.40	6.23	6.23	29.66	29.66	69.8	69.9	5.14	5.14	44.2	44.3	71	69
M1	15/6/2021	Mid-Flood	Fine	Calm	09:36	0.9	M	0.45	2			7.40		6.22		29.66		69.9		5.13		44.3		66	
M2	15/6/2021	Mid-Flood	Fine	Calm	09:56	1.2	M	0.6	1	0.043	72	7.47	7.47	6.18	6.18	29.89	29.89	72.2	72.2	5.27	5.28	41.9	41.9	75	69
M2	15/6/2021	Mid-Flood	Fine	Calm	09:56	1.2	M	0.6	2			7.46		6.18		29.89		72.1		5.28		41.9		62	
M3	15/6/2021	Mid-Flood	Fine	Calm	09:30	1.2	M	0.6	1	0.028	181	7.11	7.12	4.26	4.26	30.09	30.10	64.5	64.7	4.76	4.77	45.1	45.3	33	30
M3	15/6/2021	Mid-Flood	Fine	Calm	09:30	1.2	M	0.6	2			7.12		4.26		30.10		64.8		4.78		45.4		27	
M1	15/6/2021	Mid-Ebb	Fine	Calm	17:14	0.7	M	0.35	1	0.021	71	7.44	7.46	7.99	7.96	30.29	30.25	71.2	71.0	5.12	5.11	32.1	31.7	23	23
M1	15/6/2021	Mid-Ebb	Fine	Calm	17:14	0.7	M	0.35	2			7.48		7.93		30.20		70.7		5.09		31.2		22	
M2	15/6/2021	Mid-Ebb	Fine	Calm	16:58	0.8	M	0.4	1	0.041	111	7.53	7.54	6.53	6.54	32.94	32.97	77.6	77.5	5.60	5.59	32.9	33.0	35	36
M2	15/6/2021	Mid-Ebb	Fine	Calm	16:58	0.8	M	0.4	2			7.54		6.54		32.99		77.4		5.58		33.0		36	
M3	15/6/2021	Mid-Ebb	Fine	Calm	16:59	0.8	M	0.4	1	0.019	261	7.62	7.62	4.43	4.43	30.54	30.54	109.1	109.1	7.97	7.97	23.0	23.1	25	24
M3	15/6/2021	Mid-Ebb	Fine	Calm	16:59	0.8	M	0.4	2			7.62		4.43		30.54		109.0		7.96		23.1		22	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	53.1	57.5	82	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	17/6/2021	Mid-Flood	Fine	Calm	11:50	1.3	M	0.65	1	0.026	173	7.38	7.38	3.11	3.11	31.09	31.09	58.5	58.7	4.29	4.30	53.1	53.2	29	28
M1	17/6/2021	Mid-Flood	Fine	Calm	11:50	1.3	M	0.65	2			7.38		3.11		31.09		58.8		4.31		53.2		27	
M2	17/6/2021	Mid-Flood	Fine	Calm	11:30	1	M	0.5	1	0.024	179	7.31	7.31	3.23	3.23	30.79	30.80	47.4	47.4	3.17	3.17	36.2	36.2	35	36
M2	17/6/2021	Mid-Flood	Fine	Calm	11:30	1	M	0.5	2			7.30		3.23		30.80		47.3		3.17		36.1		36	
M3	17/6/2021	Mid-Flood	Fine	Calm	12:04	0.6	M	0.3	1	0.128	260	7.31	7.31	3.03	3.04	31.40	31.45	63.6	64.0	4.62	4.65	36.0	38.7	33	35
M3	17/6/2021	Mid-Flood	Fine	Calm	12:04	0.6	M	0.3	2			7.30		3.04		31.50		64.4		4.67		41.4		36	
M1	17/6/2021	Mid-Ebb	Fine	Calm	06:35	0.9	M	0.45	1	0.029	252	7.63	7.63	2.79	2.79	31.96	31.97	94.4	94.5	6.82	6.80	50.0	50.7	54	56
M1	17/6/2021	Mid-Ebb	Fine	Calm	06:35	0.9	M	0.45	2			7.62		2.79		31.97		94.5		6.78		51.4		57	
M2	17/6/2021	Mid-Ebb	Fine	Calm	07:00	0.7	M	0.35	1	0.022	244	7.56	7.56	2.81	2.81	31.73	31.74	82.9	83.3	6.07	6.09	49.6	50.2	82	80
M2	17/6/2021	Mid-Ebb	Fine	Calm	07:00	0.7	M	0.35	2			7.56		2.81		31.74		83.6		6.10		50.7		78	
M3	17/6/2021	Mid-Ebb	Fine	Calm	07:15	0.1	M	0.05	1	0.097	78	7.24	7.24	2.03	2.04	30.10	30.10	61.7	62.3	4.50	4.54	38.4	40.3	66	68
M3	17/6/2021	Mid-Ebb	Fine	Calm	07:15	0.1	M	0.05	2			7.23		2.04		30.10		62.9		4.58		42.2		70	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	63.8	69.1	81	112
M3	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	2.25	1.91	54.3	58.8	88.8	96.2
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	19/6/2021	Mid-Flood	Fine	Calm	14:22	1.6	M	0.8	1	0.021	234	7.41	7.43	1.67	1.67	31.71	31.71	66.3	66.2	4.82	4.81	40.6	40.7	56	55
M1	19/6/2021	Mid-Flood	Fine	Calm	14:22	1.6	M	0.8	2			7.44		1.66		31.70		66.1		4.79		40.7		54	
M2	19/6/2021	Mid-Flood	Fine	Calm	14:13	1.4	M	0.7	1	0.03	77	7.35	7.36	1.42	1.43	31.75	31.75	66.8	66.8	4.87	4.87	42.8	42.5	52	50
M2	19/6/2021	Mid-Flood	Fine	Calm	14:13	1.4	M	0.7	2			7.36		1.44		31.75		66.7		4.86		42.1		48	
M3	19/6/2021	Mid-Flood	Fine	Calm	14:35	1.2	M	0.6	1	0.094	107	6.92	6.93	0.81	0.81	33.90	33.91	54.8	54.8	4.00	4.00	34.2	35.0	35	35
M3	19/6/2021	Mid-Flood	Fine	Calm	14:35	1.2	M	0.6	2			6.93		0.81		33.91		54.7		3.99		35.7		34	
M1	19/6/2021	Mid-Ebb	Fine	Calm	09:17	1.1	M	0.55	1	0.025	165	7.27	7.27	2.00	2.01	31.24	31.24	51.7	51.3	3.83	3.79	42.2	42.1	59	58
M1	19/6/2021	Mid-Ebb	Fine	Calm	09:17	1.1	M	0.55	2			7.26		2.01		31.24		50.8		3.74		41.9		56	
M2	19/6/2021	Mid-Ebb	Fine	Calm	09:30	1.3	M	0.65	1	0.023	91	7.24	7.24	1.54	1.55	31.28	31.26	42.1	42.1	3.04	3.04	41.3	41.6	26	27
M2	19/6/2021	Mid-Ebb	Fine	Calm	09:30	1.3	M	0.65	2			7.23		1.55		31.24		42.0		3.03		41.8		27	
M3	19/6/2021	Mid-Ebb	Fine	Calm	09:20	1.2	M	0.6	1	0.083	104	7.21	7.23	0.76	0.76	30.25	30.25	49.9	49.5	3.62	3.59	27.3	27.4	25	25
M3	19/6/2021	Mid-Ebb	Fine	Calm	09:20	1.2	M	0.6	2			7.24		0.76		30.24		49.1		3.56		27.4		24	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	48.8	52.8	81	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	22/6/2021	Mid-Flood	Cloudy	Calm	18:55	1.1	M	0.55	1	0.019	99	7.52	7.52	2.63	2.64	28.60	28.60	75.7	75.7	5.85	5.85	39.4	39.5	38	38
M1	22/6/2021	Mid-Flood	Cloudy	Calm	18:55	1.1	M	0.55	2			7.52		2.64		28.60		75.6		5.84		39.6		38	
M2	22/6/2021	Mid-Flood	Cloudy	Calm	18:36	1	M	0.5	1	0.013	172	7.37	7.34	2.60	2.60	28.59	28.59	76.6	76.5	5.92	5.92	40.8	40.9	39	39
M2	22/6/2021	Mid-Flood	Cloudy	Calm	18:36	1	M	0.5	2			7.31		2.59		28.59		76.4		5.91		40.9		38	
M3	22/6/2021	Mid-Flood	Cloudy	Calm	18:50	0.6	M	0.3	1	0.092	74	7.36	7.37	1.68	1.69	28.55	28.55	54.2	54.3	4.17	4.18	58.4	59.2	54	56
M3	22/6/2021	Mid-Flood	Cloudy	Calm	18:50	0.6	M	0.3	2			7.38		1.69		28.54		54.4		4.18		59.9		58	
M1	22/6/2021	Mid-Ebb	Cloudy	Calm	11:48	0.6	M	0.3	1	0.035	144	7.45	7.45	0.36	0.37	28.58	28.59	75.7	75.7	5.86	5.86	43.0	43.0	24	24
M1	22/6/2021	Mid-Ebb	Cloudy	Calm	11:48	0.6	M	0.3	2			7.44		0.37		28.59		75.6		5.85		43.0		23	
M2	22/6/2021	Mid-Ebb	Cloudy	Calm	12:08	0.8	M	0.4	1	0.039	198	7.52	7.52	0.48	0.46	28.62	28.62	68.8	68.6	5.44	5.43	40.9	40.9	35	35
M2	22/6/2021	Mid-Ebb	Cloudy	Calm	12:08	0.8	M	0.4	2			7.51		0.44		28.61		68.4		5.41		40.9		34	
M3	22/6/2021	Mid-Ebb	Cloudy	Calm	11:52	0.3	M	0.15	1	0.06	251	7.29	7.29	0.82	0.82	26.32	26.33	51.4	51.3	3.97	3.96	62.5	62.1	51	50
M3	22/6/2021	Mid-Ebb	Cloudy	Calm	11:52	0.3	M	0.15	2			7.28		0.82		26.34		51.1		3.95		61.7		48	

Remark

1. Orange and Bold: Action Level Exceedance (For Impact Station Only)
2. Red and Bold: Limit Level Exceedance (For Impact Station Only)
3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.
4. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	47.4	52.4	81	112
M3	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	2.25	1.91	61.8	67.0	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	24/6/2021	Mid-Flood	Rainy	Moderate	06:38	1.1	M	0.55	1	0.136	235	7.18	7.18	1.02	1.02	27.19	27.27	29.2	29.0	2.31	2.30	42.9	43.4	120	115
M1	24/6/2021	Mid-Flood	Rainy	Moderate	06:38	1.1	M	0.55	2			7.18		1.02		27.35		28.8		2.28		43.9		110	
M2	24/6/2021	Mid-Flood	Rainy	Moderate	06:57	1	M	0.5	1	0.202	252	7.15	7.15	1.12	1.12	27.37	27.38	29.5	29.4	2.32	2.32	46.3	46.9	50	49
M2	24/6/2021	Mid-Flood	Rainy	Moderate	06:57	1	M	0.5	2			7.15		1.12		27.38		29.3		2.31		47.4		47	
M3	24/6/2021	Mid-Flood	Rainy	Calm	06:39	1	M	0.5	1	0.02	273	7.15	7.15	1.11	1.11	27.39	27.39	43.6	43.2	3.97	3.98	55.6	55.7	77	72
M3	24/6/2021	Mid-Flood	Rainy	Calm	06:39	1	M	0.5	2			7.15		1.11		27.39		42.8		3.99		55.7		67	
M1	24/6/2021	Mid-Ebb	Rainy	Moderate	13:26	1	M	0.5	1	0.249	179	7.24	7.24	0.82	0.82	26.95	26.95	39.1	38.9	3.11	3.10	78.9	79.5	78	76
M1	24/6/2021	Mid-Ebb	Rainy	Moderate	13:26	1	M	0.5	2			7.23		0.82		26.95		38.7		3.09		80.0		73	
M2	24/6/2021	Mid-Ebb	Rainy	Moderate	13:40	0.9	M	0.45	1	0.201	189	7.18	7.18	0.81	0.81	27.30	27.30	26.3	26.2	1.96	1.96	106.1	107.1	110	110
M2	24/6/2021	Mid-Ebb	Rainy	Moderate	13:40	0.9	M	0.45	2			7.18		0.81		27.29		26.1		1.95		108.1		110	
M3	24/6/2021	Mid-Ebb	Rainy	Calm	13:15	0.7	M	0.35	1	0.06	167	7.39	7.39	0.13	0.13	26.76	26.76	80.6	80.6	6.44	6.44	69.1	69.0	96	93
M3	24/6/2021	Mid-Ebb	Rainy	Calm	13:15	0.7	M	0.35	2			7.39		0.13		26.76		80.5		6.43		68.9		89	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	52.1	56.4	138	150
M3	3.28	3.14	74.3	78.0	138	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1	2.25	1.91	105.7	114.5	121.5	132
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	26/6/2021	Mid-Flood	Fine	Calm	07:45	1.3	M	0.65	1	0.043	261.9	7.22	7.22	5.47	5.47	28.09	28.09	40.8	40.8	3.11	3.11	26.8	26.8	26	27
M1	26/6/2021	Mid-Flood	Fine	Calm	07:45	1.3	M	0.65	2			7.22		5.47		28.09		40.7		3.10		26.8		28	
M2	26/6/2021	Mid-Flood	Fine	Calm	08:12	0.7	M	0.35	1	0.034	284.1	7.23	7.23	5.50	5.53	28.11	28.11	38.5	38.5	2.92	2.92	22.6	22.6	21	21
M2	26/6/2021	Mid-Flood	Fine	Calm	08:12	0.7	M	0.35	2			7.23		5.56		28.11		38.5		2.92		22.6		20	
M3	26/6/2021	Mid-Flood	Fine	Calm	07:54	1.3	M	0.65	1	0.025	139	7.12	7.13	1.49	1.48	27.50	27.50	56.3	56.0	4.41	4.40	21.5	21.5	22	24
M3	26/6/2021	Mid-Flood	Fine	Calm	07:54	1.3	M	0.65	2			7.14		1.46		27.50		55.7		4.38		21.5		26	
M1	26/6/2021	Mid-Ebb	Fine	Calm	15:15	1.1	M	0.55	1	0.037	136	7.29	7.29	3.15	3.16	27.94	27.94	35.8	35.8	2.74	2.73	23.7	23.7	26	26
M1	26/6/2021	Mid-Ebb	Fine	Calm	15:15	1.1	M	0.55	2			7.29		3.16		27.94		35.7		2.72		23.6		26	
M2	26/6/2021	Mid-Ebb	Fine	Calm	15:00	0.8	M	0.4	1	0.052	117	7.29	7.29	2.30	2.30	27.99	28.04	33.1	33.1	2.50	2.50	26.8	26.8	22	24
M2	26/6/2021	Mid-Ebb	Fine	Calm	15:00	0.8	M	0.4	2			7.29		2.30		28.08		33.0		2.50		26.8		26	
M3	26/6/2021	Mid-Ebb	Fine	Calm	15:21	0.9	M	0.45	1	0.018	88	7.14	7.15	1.49	1.49	27.79	27.79	52.8	53.1	4.12	4.19	24.0	24.0	28	28
M3	26/6/2021	Mid-Ebb	Fine	Calm	15:21	0.9	M	0.45	2			7.15		1.48		27.79		53.4		4.26		24.0		28	

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. Limti 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. Limti 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
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	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	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

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

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	29/6/2021	Mid-Flood	Fine	Calm	10:15	1.2	M	0.6	1	0.023	75	7.26	7.27	1.03	1.04	27.96	27.96	45.8	45.7	3.48	3.49	40.3	40.0	45	46
M1	29/6/2021	Mid-Flood	Fine	Calm	10:15	1.2	M	0.6	2			7.27		1.04		27.96		45.6		3.50		39.7		46	
M2	29/6/2021	Mid-Flood	Fine	Calm	10:27	1.4	M	0.7	1	0.046	122	7.06	7.06	0.65	0.66	27.96	27.96	26.8	26.8	2.34	2.34	44.1	43.7	35	39
M2	29/6/2021	Mid-Flood	Fine	Calm	10:27	1.4	M	0.7	2			7.05		0.66		27.96		26.7		2.33		43.3		42	
M3	29/6/2021	Mid-Flood	Fine	Calm	10:15	1.2	M	0.6	1	0.117	275	6.93	6.92	0.60	0.60	28.47	28.47	41.6	41.5	3.30	3.29	50.5	49.7	43	47
M3	29/6/2021	Mid-Flood	Fine	Calm	10:15	1.2	M	0.6	2			6.91		0.60		28.46		41.4		3.27		48.8		50	
M1	29/6/2021	Mid-Ebb	Fine	Calm	17:33	0.8	M	0.4	1	0.043	84	7.18	7.17	1.12	1.12	28.23	28.26	38.6	38.4	3.10	3.01	44.3	44.3	26	29
M1	29/6/2021	Mid-Ebb	Fine	Calm	17:33	0.8	M	0.4	2			7.16		1.11		28.28		38.1		2.92		44.3		31	
M2	29/6/2021	Mid-Ebb	Fine	Calm	17:16	0.7	M	0.35	1	0.032	122	7.18	7.19	1.16	1.16	28.34	28.34	37.8	37.8	2.93	2.92	40.6	40.6	26	25
M2	29/6/2021	Mid-Ebb	Fine	Calm	17:16	0.7	M	0.35	2			7.19		1.15		28.34		37.7		2.91		40.6		24	
M3	29/6/2021	Mid-Ebb	Fine	Calm	17:20	1.1	M	0.55	1	0.123	265	7.06	7.06	0.28	0.28	28.26	28.26	48.8	48.7	3.80	3.79	30.2	31.0	30	27
M3	29/6/2021	Mid-Ebb	Fine	Calm	17:20	1.1	M	0.55	2			7.06		0.28		28.25		48.6		3.78		31.8		23	

Remark

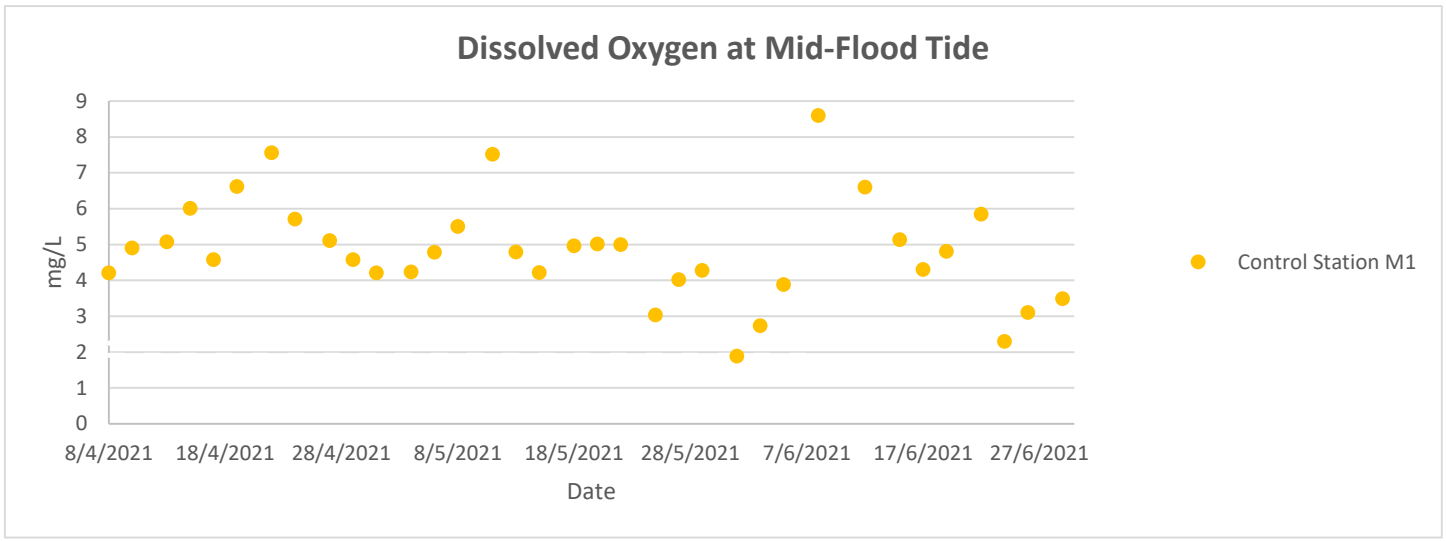
1. Orange and Bold: Action Level Exceedance (For Impact Station Only)
2. Red and Bold: Limit Level Exceedance (For Impact Station Only)
3. Action Level for Turbidity: 95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day.
4. Limti Level for Turbidity: 99%-ile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

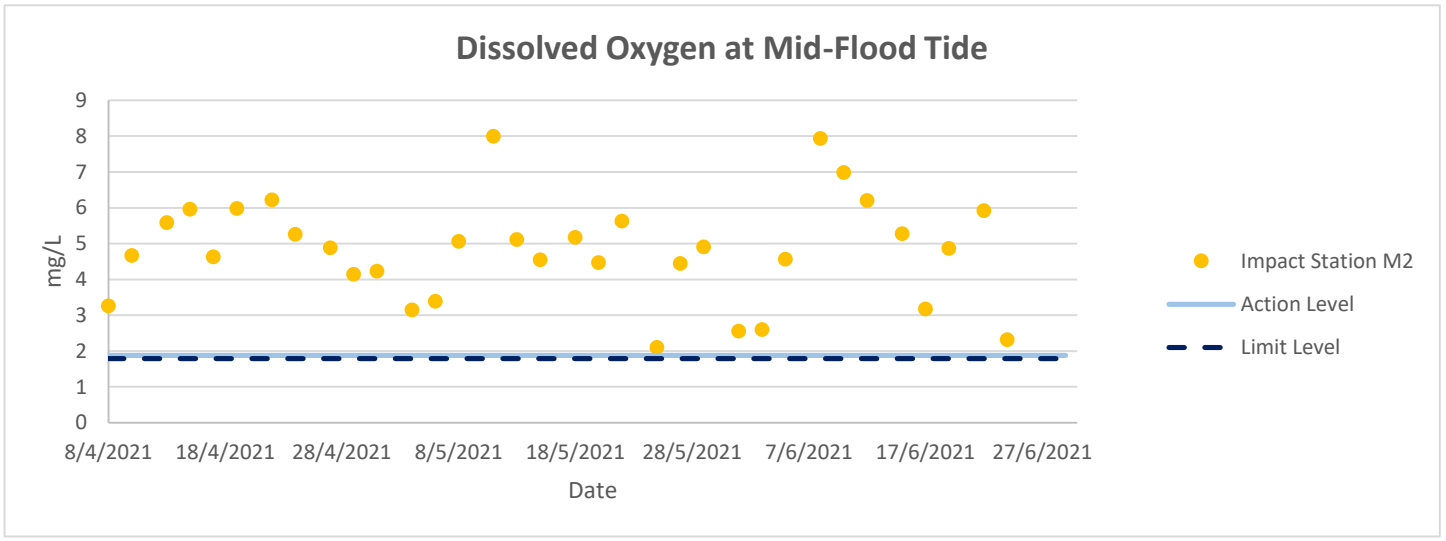
For Flood Tide

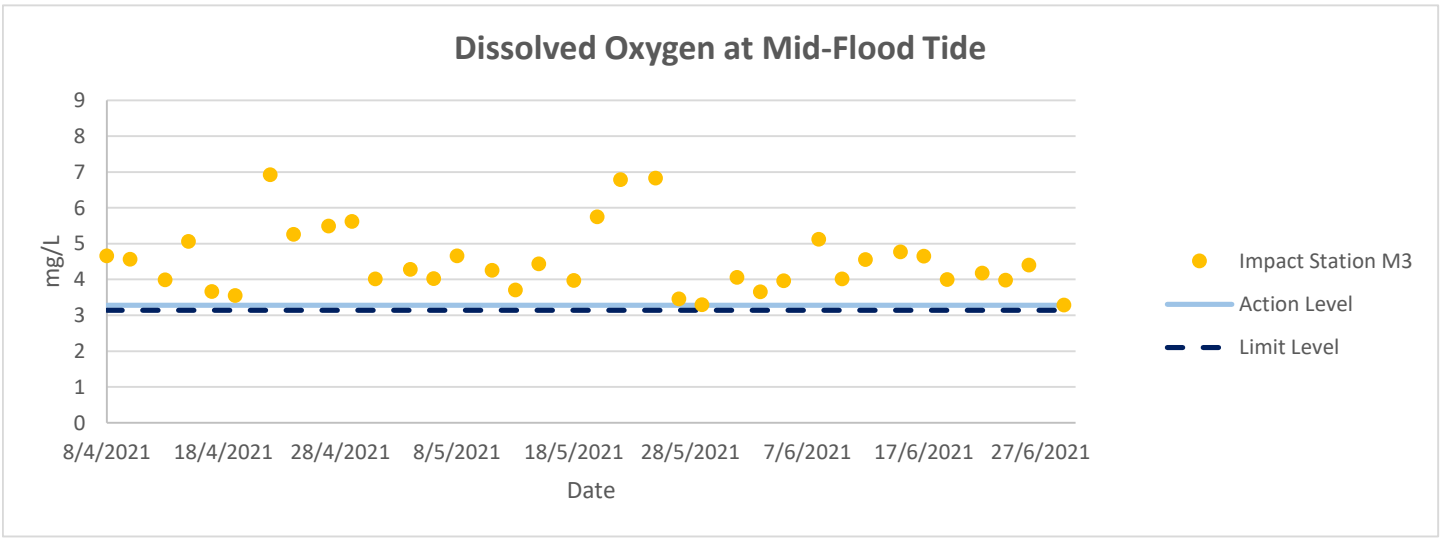
Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	48.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

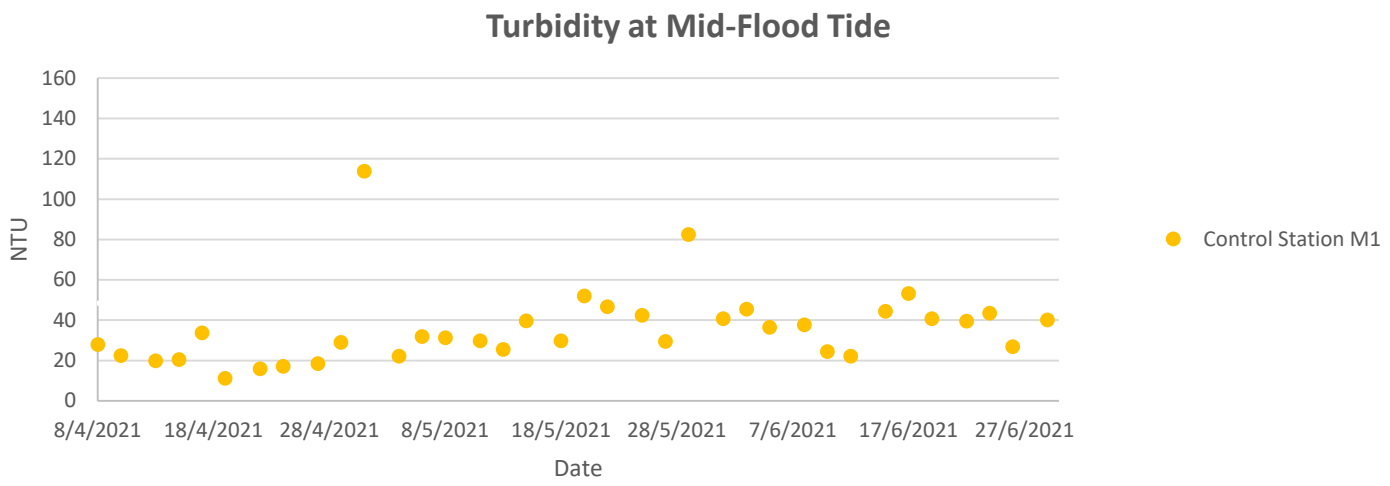
For Ebb Tide

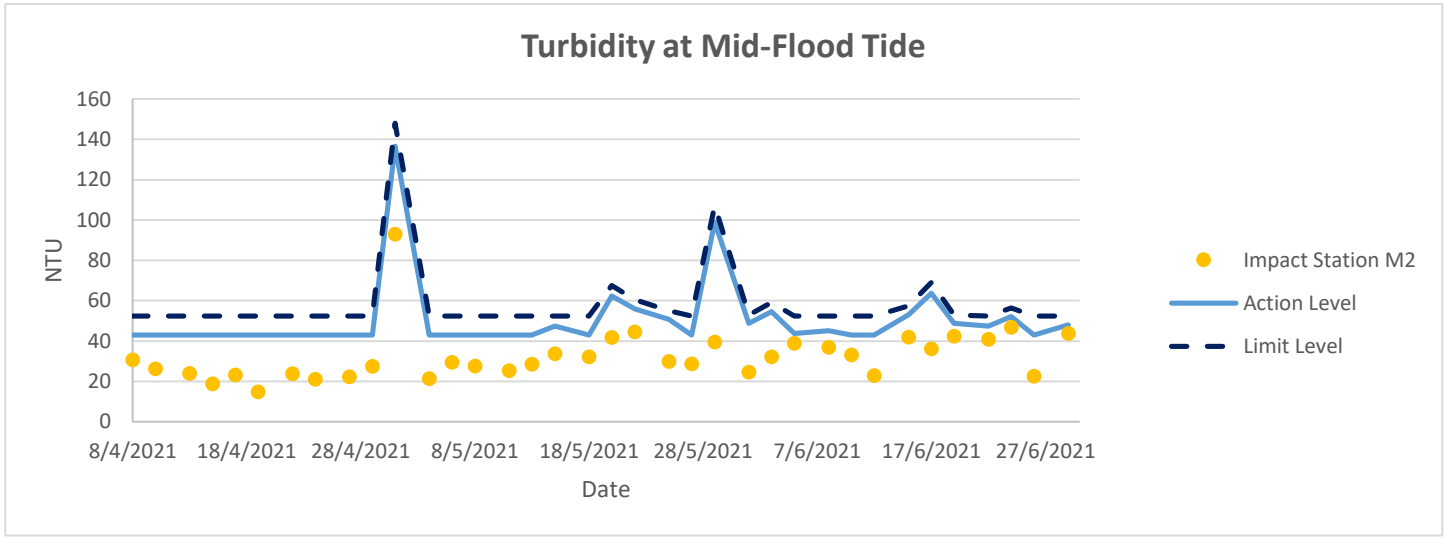
Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1	2.25	1.91	48.4	50.4	59	68
M2	1.88	1.79	43.0	52.4	81	112
M3	3.28	3.14	74.3	78.0	104	167

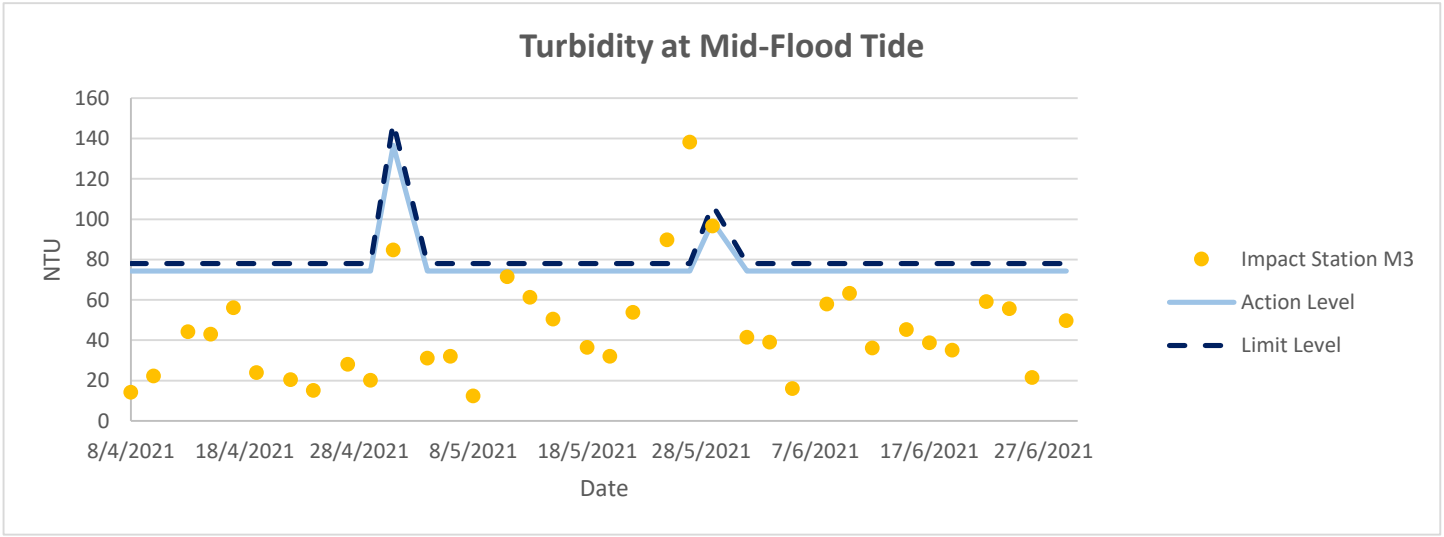

Dissolved Oxygen at Mid-Flood Tide
mg/L
9
8
7
6
5
4
3
2
1
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M1

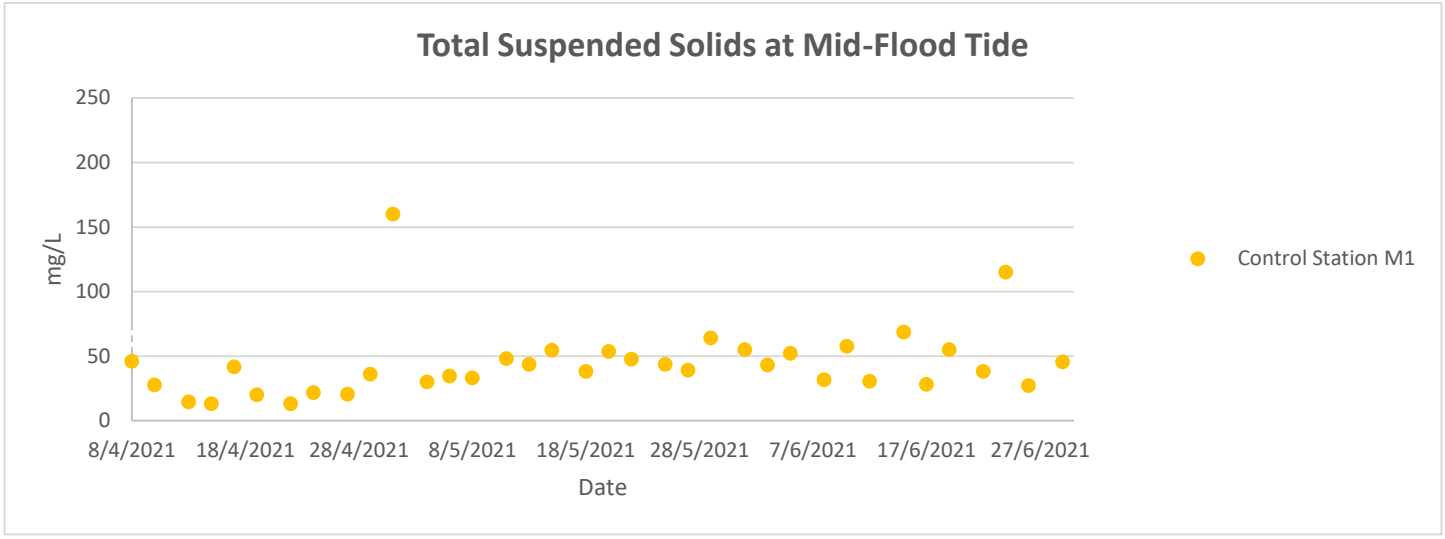

Dissolved Oxygen at Mid-Flood Tide
mg/L
9
8
7
6
5
4
3
2
1
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M2
Action Level
Limit Level

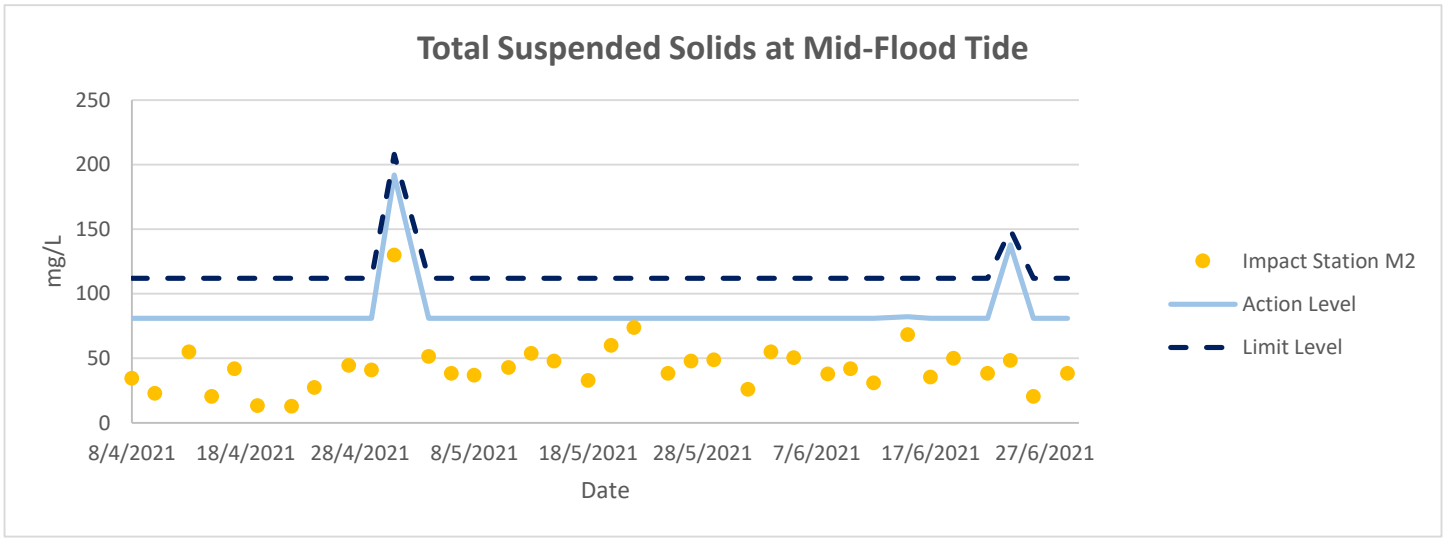

Dissolved Oxygen at Mid-Flood Tide
mg/L
9
8
7
6
5
4
3
2
1
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M3
Action Level
Limit Level

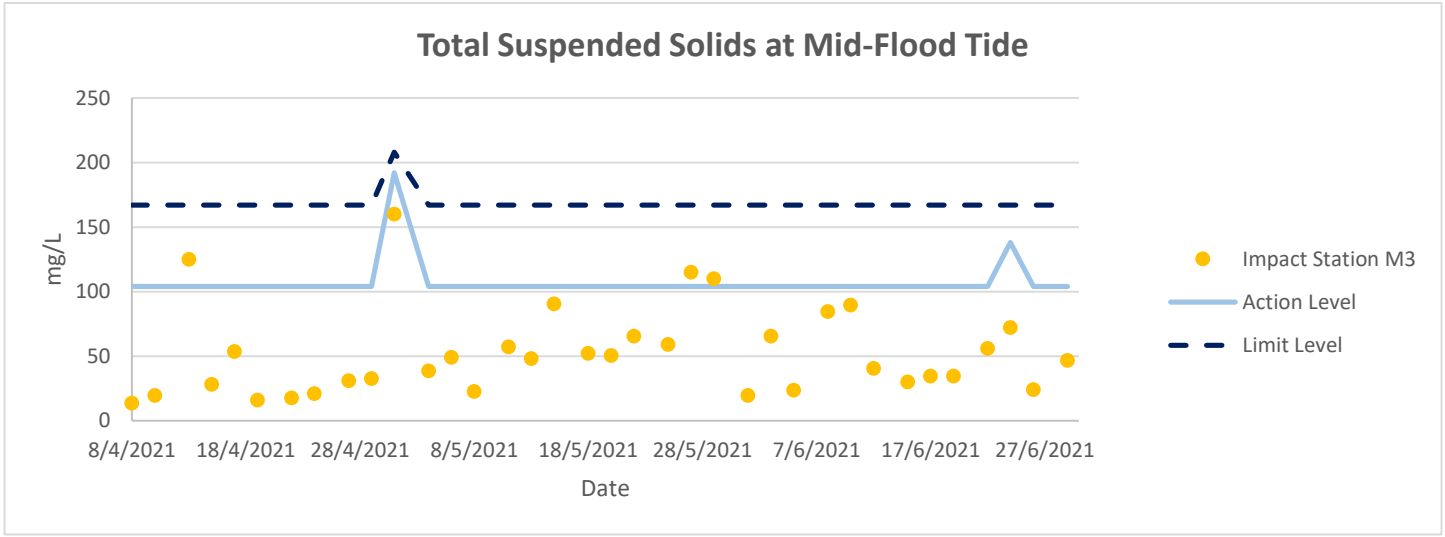

Turbidity at Mid-Flood Tide
160
140
120
100
80
60
40
20
0
NTU
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M1

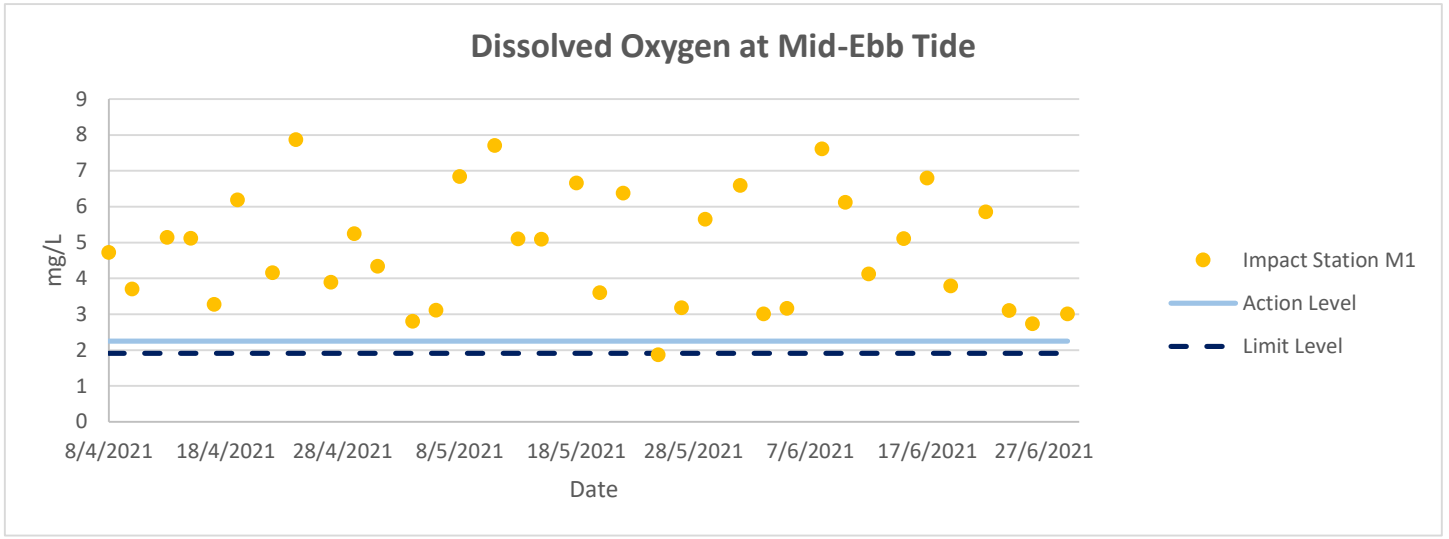

Turbidity at Mid-Flood Tide
160
140
120
100
80
60
40
20
0
NTU
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M2
Action Level
Limit Level

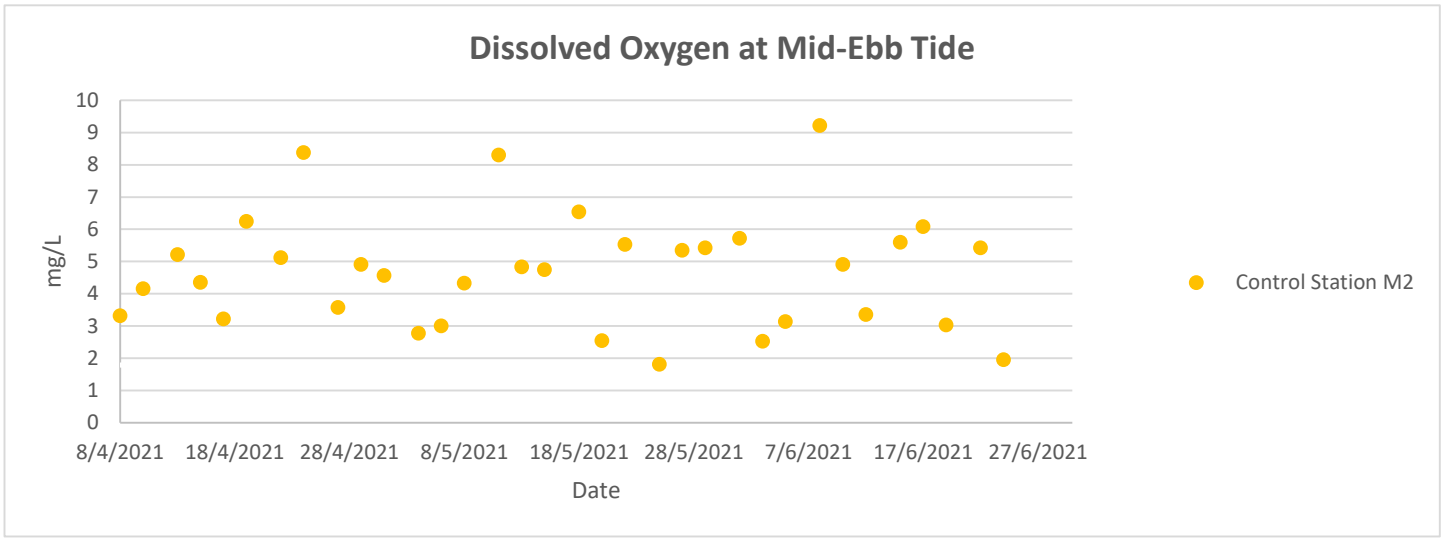

Turbidity at Mid-Flood Tide
160
140
120
100
80
60
40
20
0
NTU
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M3
Action Level
Limit Level

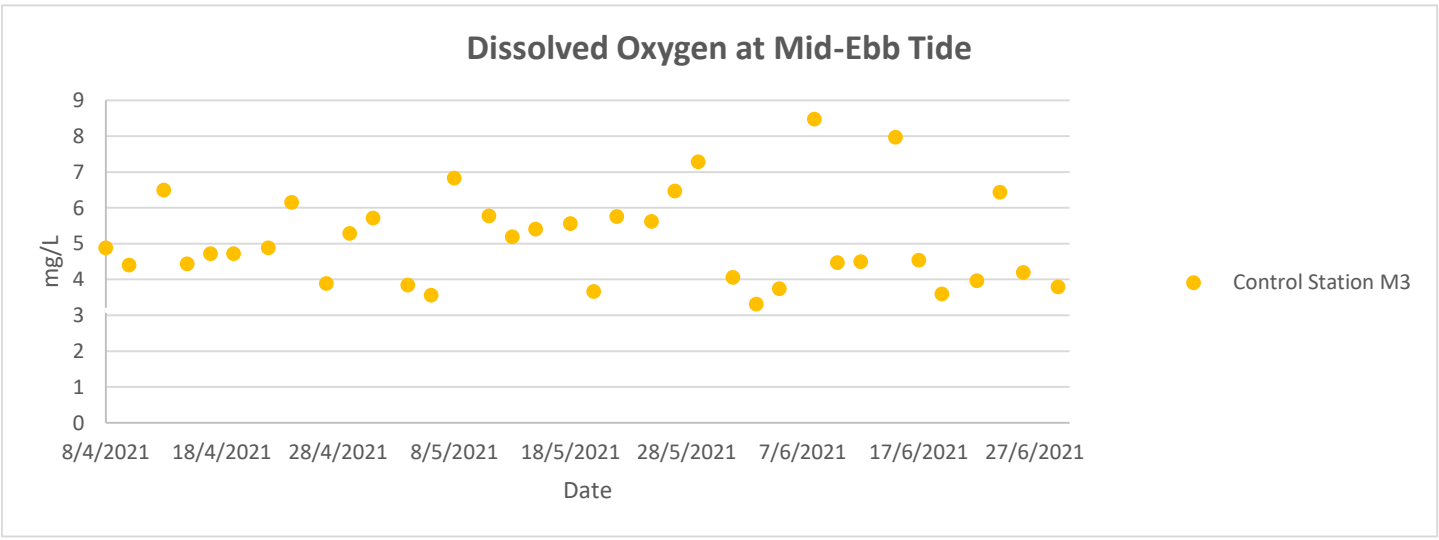

Total Suspended Solids at Mid-Flood Tide
250
200
150
100
50
0
mg/L
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M1

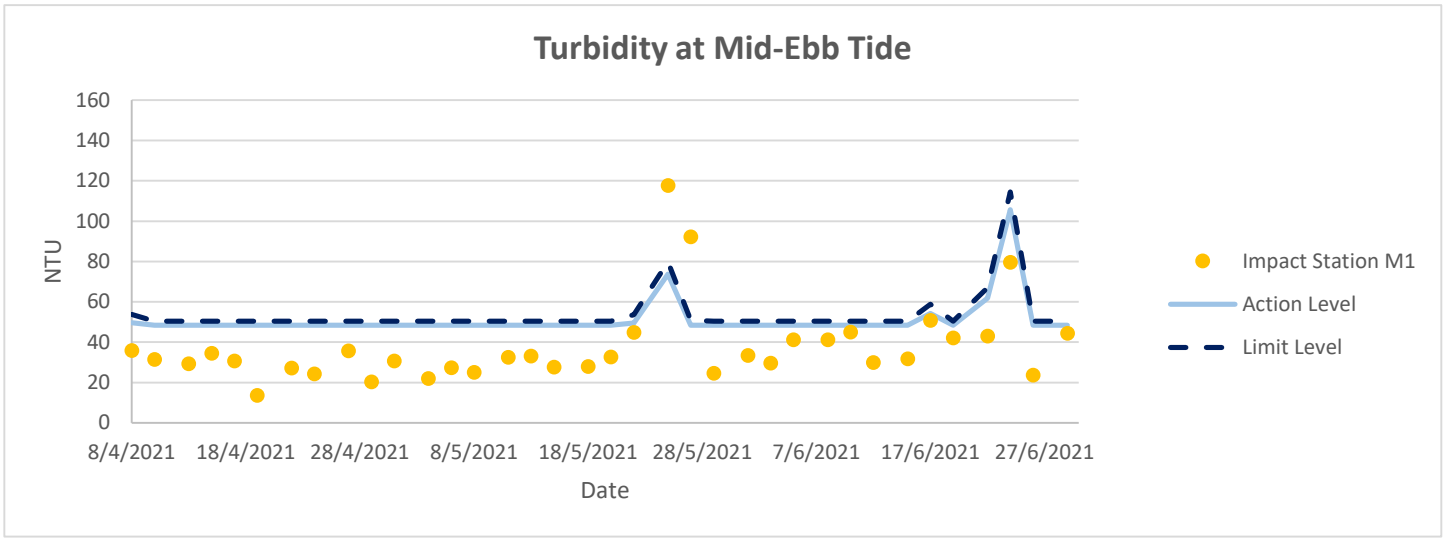

Total Suspended Solids at Mid-Flood Tide
250
200
150
100
50
0
mg/L
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M2
Action Level
Limit Level

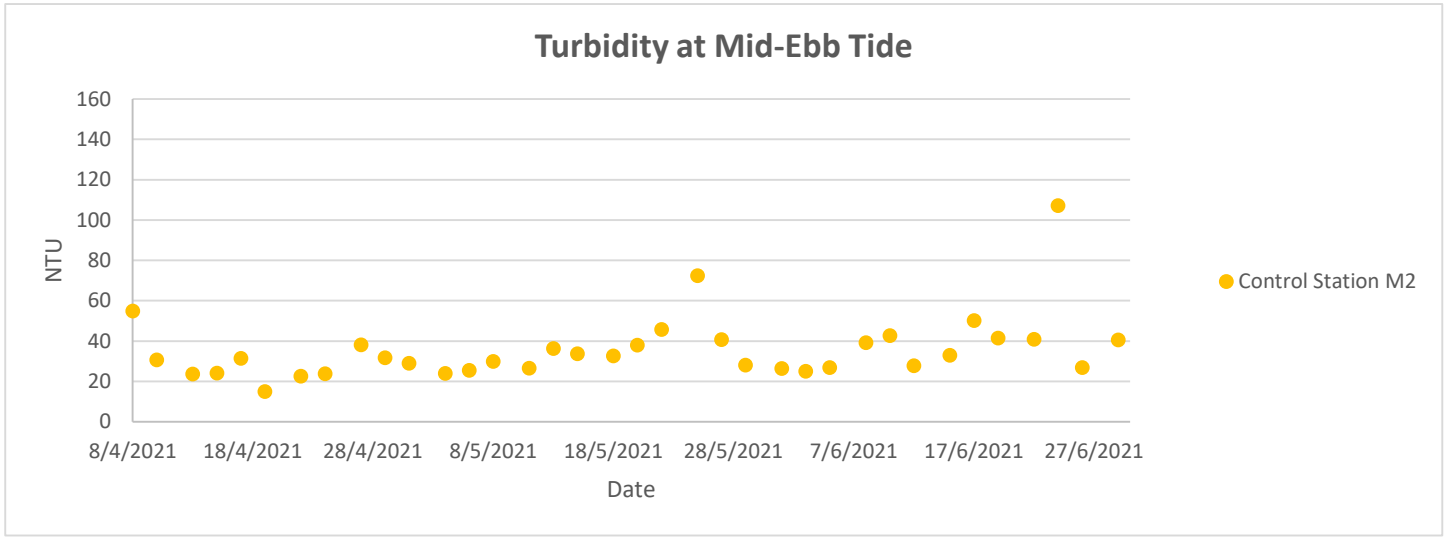

Total Suspended Solids at Mid-Flood Tide
250
200
150
100
50
0
mg/L
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M3
Action Level
Limit Level

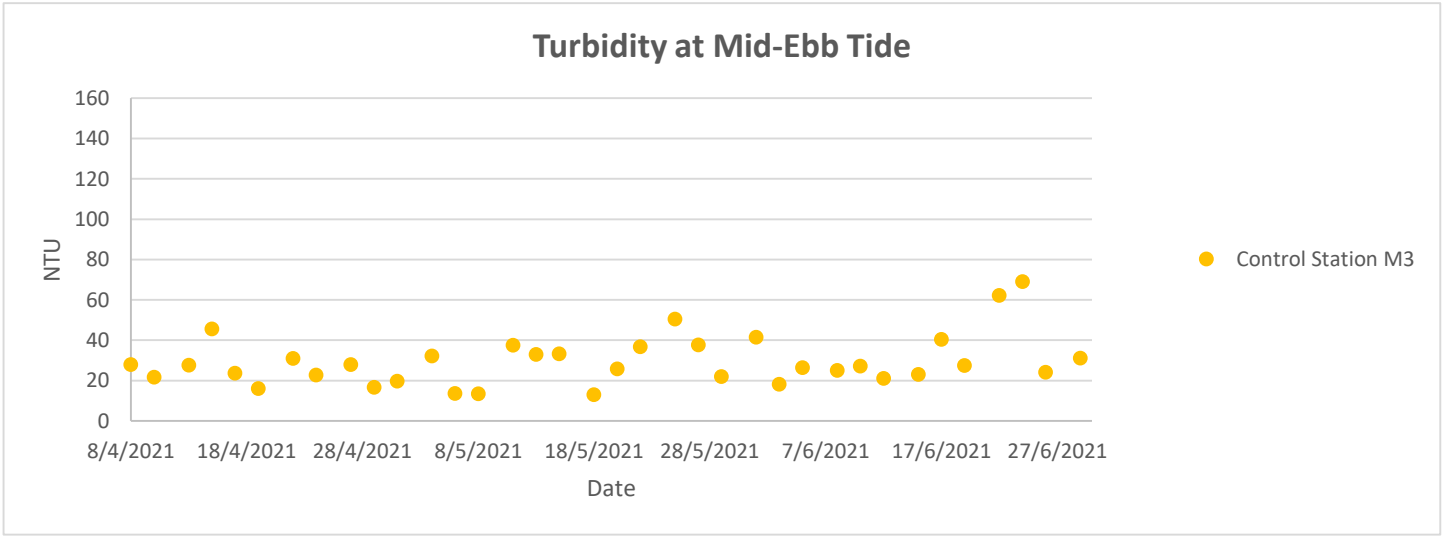

Dissolved Oxygen at Mid-Ebb Tide
mg/L
9
8
7
6
5
4
3
2
1
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M1
Action Level
Limit Level

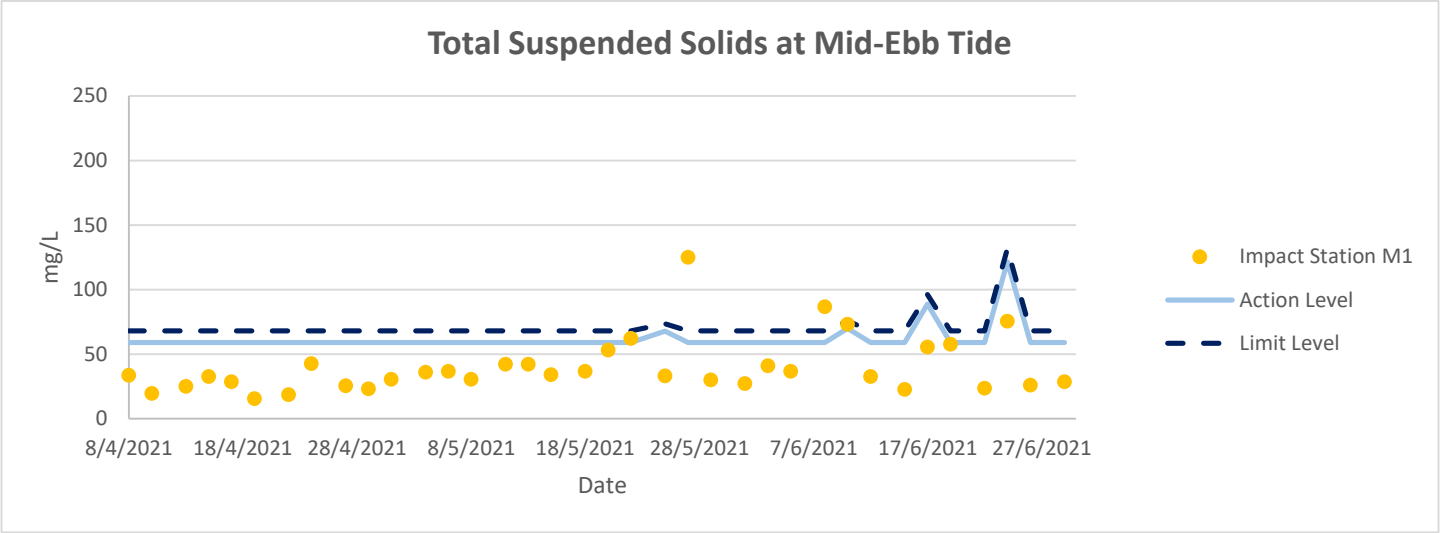

Dissolved Oxygen at Mid-Ebb Tide
mg/L
10
9
8
7
6
5
4
3
2
1
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M2

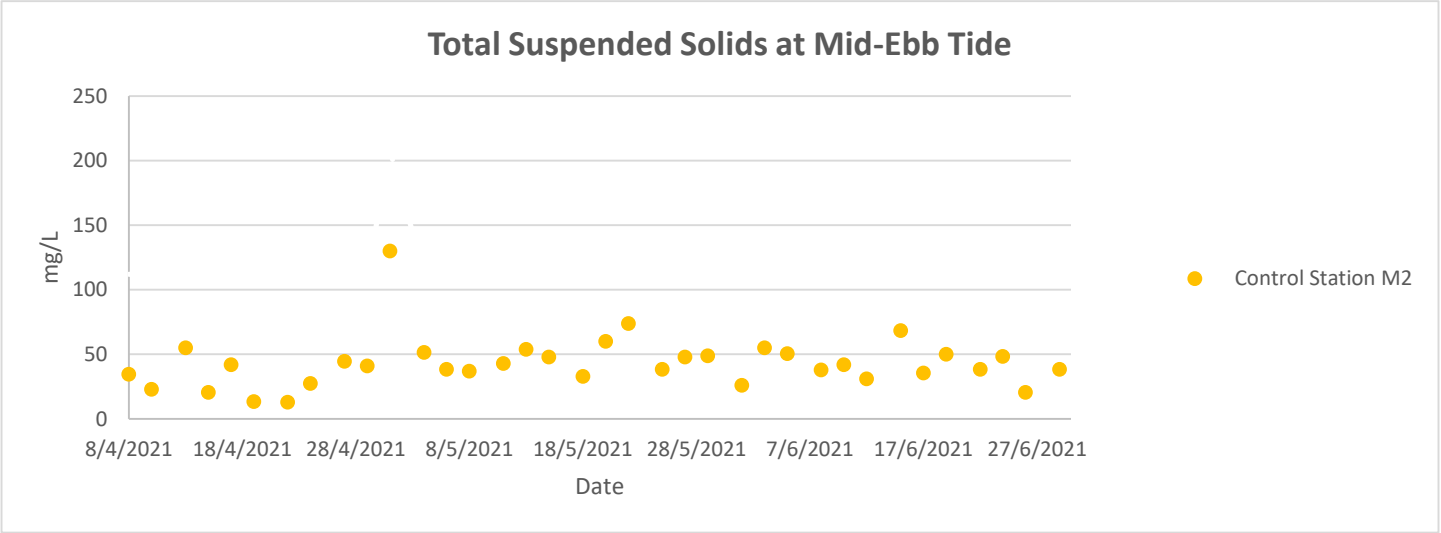

Dissolved Oxygen at Mid-Ebb Tide
mg/L
9
8
7
6
5
4
3
2
1
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M3

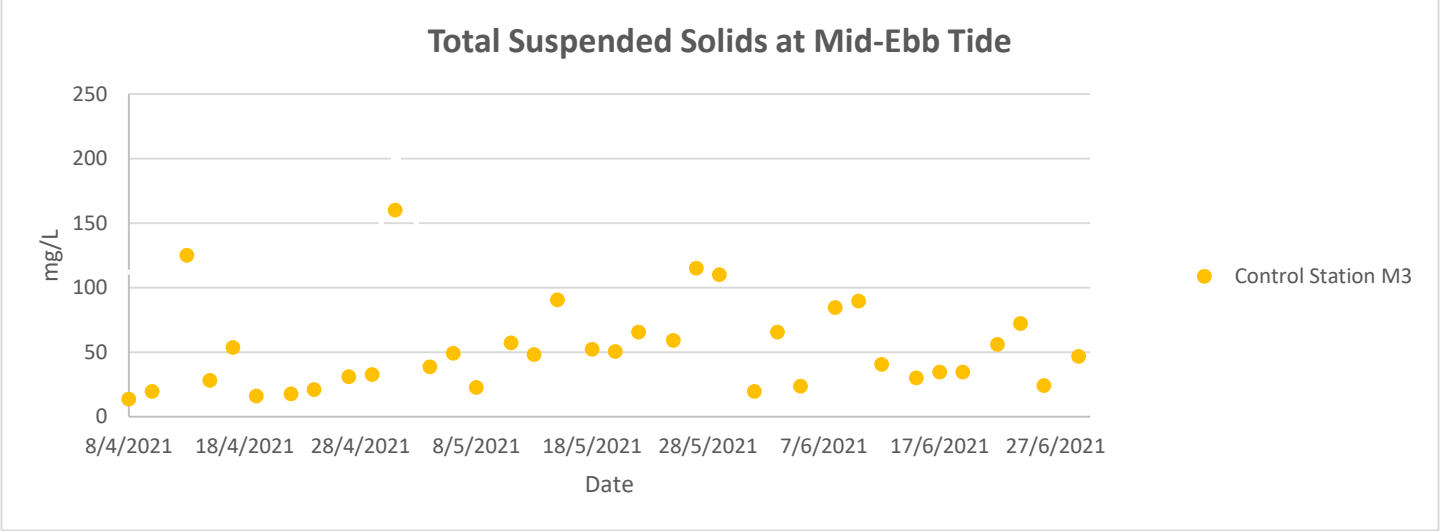

Turbidity at Mid-Ebb Tide
NTU
160
140
120
100
80
60
40
20
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M1
Action Level
Limit Level


Turbidity at Mid-Ebb Tide
NTU
160
140
120
100
80
60
40
20
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M2


Turbidity at Mid-Ebb Tide
NTU
160
140
120
100
80
60
40
20
0
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M3


Total Suspended Solids at Mid-Ebb Tide
250
200
150
100
50
0
mg/L
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Impact Station M1
Action Level
Limit Level


Total Suspended Solids at Mid-Ebb Tide
250
200
150
100
50
0
mg/L
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M2


Total Suspended Solids at Mid-Ebb Tide
250
200
150
100
50
0
mg/L
8/4/2021
18/4/2021
28/4/2021
8/5/2021
18/5/2021
28/5/2021
7/6/2021
17/6/2021
27/6/2021
Date
Control Station M3

Ecology Monitoring Results

Appendix F.1 Supplemental Discussion

F.1.1 Active Ardeid Night Roost

For the final night roost, all three individuals utilized the canopy to emergent layers of the roosting substrate *Sonneratia apetala* and *S. caseolaris*. The night roost (ANR2) located at the northeast of the Project boundary, as noted to be active last April 2021, was not used by the ardeids during the current monitoring period, similar with the May 2021 results. This was, however, not caused by the Project's construction activities as the recorded noise level ((59.0 dB(A)) near ANR2 was lower with respect to the action limit level of 65.5 dB(A) which more likely to cause behavioural responses of some kind by the ardeids (Wright et al. 2010). Furthermore, ardeid night roosts are known for their highly changeable locations and roosting population. These roosting locations can change in temporal basis and even change from day to day on a small scale. In Hong Kong, fluctuation of roosting population, abandonment or change in locations of roosting site without major nearby environmental change has been observed in roosts and locations (HKJC, 2005; Lee et al., 2004; MTRC, 2010).

F.1.2 Ecological Monitoring of Birds

F.1.2.1 Abundance

F.1.2.1.1 All Avifauna Species

Point Count

Among the different species recorded, the Chinese Pond Heron *Ardeola bacchus* was noted with the highest abundance (88 ind.), followed by Barn Swallow *Hirundo rustica* (15 ind.) and Eurasian Tree Sparrow *Passer montanus* (15 ind.). The high abundance of Chinese Pond Heron was due to its concurrent breeding period. On the other hand, two species were noted with low abundances (only one ind.), these include the Black-collared Starling *Gracupica nigricollis* and Red-whiskered Bulbul *Pycnonotus jocosus*.

Transect Walk

Among the different species recorded, the Chinese Pond Heron was noted with the highest abundance (43 ind.), followed by Azure-winged Magpie *Cyanopica cyanus* (15 ind.) and Barn Swallow (13 ind.).

F.1.2.1.2 Avifauna Species of Conservation Importance

Point Count

Among the different species recorded, the Chinese Pond Heron was noted with the highest abundance (88 ind.) while the remaining species such as the Little Egret (12 ind.) followed by the Great Egret *Ardea alba* (5 ind.) and Little Grebe *Tachybaptus ruficollis* (3 ind.) were noted with low abundances.

Transect Walk

Among the different species recorded, the Chinese Pond Heron was noted with the highest abundance (43 ind.). The remaining species such as the Little Egret (6 ind.), Great Egret (4 ind.) and Black Kite *Milvus migrans* (2 ind.) were noted with low abundances.

F.1.2.2 Diversity (Species Richness and Shannon Diversity Index)

F.1.2.2.1 All Avifauna Species

Point Count

A significant current decline in the Shannon diversity index was noted relative to the baseline results of H'=3.93 at α=0.05. However, the significant decline was not caused by the construction works of the Project as noise levels (47.5 to 65.9 dB(A)) recorded from the different point count locations during the ecological bird monitoring are mostly low. The generally low noise levels are unlikely to cause significant impact to birds as behavioral response of some kind are more likely to occur at above 65.5 dB(A) (Wright et al. 2010). Only two stations, SP/NSW3 with 65.9 dB(A) and SP/NSW2 with 65.7 dB(A), have readings slightly above 65.5. dB(A). These stations are located across the Shan Pui River, relatively far from the construction works area; and are close to the roadsides with low to moderate traffic. During the monitoring period passing vehicles, barking dogs, and noisy insects were noted. The lower diversity during this period with respect to the baseline data could be due to the current dominance of Chinese Pond Heron in the community. The current dominance of this species was due to its concurrent breeding period. This dominant species could have decreased the performance of co-occurring species (Gilbert et al. 2009) and forced them to utilize other areas outside the survey area, thus, made the area less diverse. Furthermore, low diversity index usually results from high dominance in the community as these are inversely related (Shaukat et al., 1978).

Appendix F.2 Ecological Bird Monitoring Results (15 & 18 June 2021)

Date (dd/mm/yyyy)	Daytime/Night time	Season	Area	Transect/Point Count	Point Count (Location)/Transect Impact	Common Name	Scientific Name	Abundance	Habitat	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	Remarks
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Azure-winged Magpie	*Cyanopica cyanus*	10	Developed Area (Chinese Banyan Trees)	Introduced	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Chinese Pond Heron	*Ardeola bacchus*	38	Developed Area (Chinese Banyan Trees)	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Plain Prinia	*Prinia inornata*	2	Grassland-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Yellow-bellied Prinia	*Prinia flaviventris*	2	Grassland-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Black Kite	*Milvus migrans*	1	In-flight	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Transect	YLIE-CW	Little Egret	*Egretta garzetta*	1	Modified Watercourse	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Transect	YLIE-CW	White-breasted Waterhen	*Amaurornis phoenicurus*	1	Modified Watercourse	Common	R	-	-	-	LC	LC	N	Y	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Great Egret	*Ardea alba*	2	Modified Watercourse	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Barn Swallow	*Hirundo rustica*	7	Modified Watercourse	Abundant	PM,SV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Little Egret	*Egretta garzetta*	5	Modified Watercourse	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Great Egret	*Ardea alba*	1	Modified Watercourse	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	White Wagtail	*Motacilla alba*	1	Modified Watercourse	Common	PM,WV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Chinese Pond Heron	*Ardeola bacchus*	1	Modified Watercourse	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	White Wagtail	*Motacilla alba*	3	Modified Watercourse	Common	PM,WV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Azure-winged Magpie	*Cyanopica cyanus*	5	Plantation-FLW	Introduced	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Black-collared Starling	*Gracupica nigricollis*	5	Plantation-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Chinese Bulbul	*Pycnonotus sinensis*	5	Plantation-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Crested Myna	*Acridotheres cristatellus*	2	Plantation-NSW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Masked Laughingthrush	*Garrulax perspicillatus*	11	Plantation-NSW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	SP/NSW1	Masked Laughingthrush	*Garrulax perspicillatus*	4	Plantation-NSW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Red-whiskered Bulbul	*Pycnonotus jocosus*	4	Plantation-NSW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	SP/NSW1	Red-whiskered Bulbul	*Pycnonotus jocosus*	1	Plantation-NSW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Spotted Dove	*Spilopelia chinensis*	2	Plantation-NSW	Abundant	R	-	-	-	LC	LC	N	N	

15/06/2021	Daytime	Wet	FLW	Point Count	FLW1	Azure-winged Magpie	*Cyanopica cyanus*	6	Pond-FLW	Introduced	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Barn Swallow	*Hirundo rustica*	6	Pond-FLW	Abundant	PM,SV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW1	Barn Swallow	*Hirundo rustica*	2	Pond-FLW	Abundant	PM,SV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW4	Barn Swallow	*Hirundo rustica*	2	Pond-FLW	Abundant	PM,SV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW6	Barn Swallow	*Hirundo rustica*	5	Pond-FLW	Abundant	PM,SV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW7	Barn Swallow	*Hirundo rustica*	6	Pond-FLW	Abundant	PM,SV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Black Kite	*Milvus migrans*	1	Pond-FLW	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW3	Black-crowned Night Heron	*Nycticorax nycticorax*	1	Pond-FLW	Common	R,WV	-	-	-	LC	LC	N	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW2	Chinese Bulbul	*Pycnonotus sinensis*	2	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW1	Chinese Pond Heron	*Ardeola bacchus*	20	Pond-FLW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW4	Chinese Pond Heron	*Ardeola bacchus*	1	Pond-FLW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW6	Chinese Pond Heron	*Ardeola bacchus*	12	Pond-FLW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW7	Chinese Pond Heron	*Ardeola bacchus*	11	Pond-FLW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW3	Crested Myna	*Acridotheres cristatellus*	2	Pond-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW5	Crested Myna	*Acridotheres cristatellus*	1	Pond-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW7	Crested Myna	*Acridotheres cristatellus*	2	Pond-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Eurasian Tree Sparrow	*Passer montanus*	9	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW5	Eurasian Tree Sparrow	*Passer montanus*	4	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW7	Eurasian Tree Sparrow	*Passer montanus*	3	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Great Egret	*Ardea alba*	1	Pond-FLW	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW5	Great Egret	*Ardea alba*	2	Pond-FLW	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW6	Great Egret	*Ardea alba*	3	Pond-FLW	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW7	Little Egret	*Egretta garzetta*	3	Pond-FLW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW4	Little Grebe	*Tachybaptus ruficollis*	1	Pond-FLW	Common	R	LC	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW5	Little Grebe	*Tachybaptus ruficollis*	1	Pond-FLW	Common	R	LC	-	-	LC	LC	Y	Y	

15/06/2021	Daytime	Wet	FLW	Point Count	FLW6	Little Grebe	*Tachybaptus ruficollis*	1	Pond-FLW	Common	R	LC	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW5	Masked Laughingthrush	*Garrulax perspicillatus*	5	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW4	Plain Prinia	*Prinia inornata*	1	Pond-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Spotted Dove	*Spilopelia chinensis*	3	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	Spotted Dove	*Spilopelia chinensis*	5	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW1	Spotted Dove	*Spilopelia chinensis*	3	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW3	Spotted Dove	*Spilopelia chinensis*	2	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW4	Spotted Dove	*Spilopelia chinensis*	1	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW5	Spotted Dove	*Spilopelia chinensis*	6	Pond-FLW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Transect	FLW	White Wagtail	*Motacilla alba*	2	Pond-FLW	Common	PM,WV	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW5	White-breasted Waterhen	*Amaurornis phoenicurus*	2	Pond-FLW	Common	R	-	-	-	LC	LC	N	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW4	Yellow-bellied Prinia	*Prinia flaviventris*	2	Pond-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW7	Black-collared Starling	*Gracupica nigricollis*	1	Pond-NSW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Black-collared Starling	*Gracupica nigricollis*	1	Pond-NSW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	NSW1	Black-crowned Night Heron	*Nycticorax nycticorax*	1	Pond-NSW	Common	R,WV	-	-	-	LC	LC	N	Y	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	Chinese Pond Heron	*Ardeola bacchus*	2	Pond-NSW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	NSW	Point Count	NSW1	Eurasian Tree Sparrow	*Passer montanus*	5	Pond-NSW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	NSW1	Eurasian Tree Sparrow	*Passer montanus*	3	Pond-NSW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	SP/NSW1	Little Egret	*Egretta garzetta*	1	Pond-NSW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	NSW	Point Count	NSW1	Oriental Magpie Robin	*Copsychus saularis*	4	Pond-NSW	Abundant	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Transect	NSW	White-shouldered Starling	*Sturnia sinensis*	2	Pond-NSW	Common	PM	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	NSW1	Chinese Pond Heron	*Ardeola bacchus*	1	Reedbed	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
15/06/2021	Daytime	Wet	FLW	Point Count	FLW4	Plain Prinia	*Prinia inornata*	1	Pond-FLW	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	NSW1	Plain Prinia	*Prinia inornata*	2	Reedbed	Common	R	-	-	-	LC	LC	N	N	
15/06/2021	Daytime	Wet	NSW	Point Count	NSW1	Yellow-bellied Prinia	*Prinia flaviventris*	1	Reedbed	Common	R	-	-	-	LC	LC	N	N	
18/06/2021	Nighttime	Wet	FLW	Point Count	FLW1	Chinese Pond Heron	*Ardeola bacchus*	40	Developed Area (Chinese Banyan Trees)	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	Probably roosting

18/06/2021	Nighttime	Wet	FLW	Point Count	FLW1	Little Egret	*Egretta garzetta*	6	Developed Area (Chinese Banyan Trees)	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	Probably roosting
18/06/2021	Nighttime	Wet	NSW	Point Count	SP/NSW1	Chinese Pond Heron	*Ardeola bacchus*	1	In-flight	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
18/06/2021	Nighttime	Wet	NSW	Point Count	SP/NSW2	Little Egret	*Egretta garzetta*	2	In-flight	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
18/06/2021	Nighttime	Wet	NSW	Transect	NSW	Chinese Pond Heron	*Ardeola bacchus*	2	Mangrove	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
18/06/2021	Nighttime	Wet	NSW	Point Count	NSW1	Chinese Pond Heron	*Ardeola bacchus*	1	Pond-NSW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	
18/06/2021	Nighttime	Wet	NSW	Point Count	SP/NSW2	Chinese Pond Heron	*Ardeola bacchus*	1	Pond-NSW	Common	R	PRC (RC)	-	-	LC	LC	Y	Y	

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 & 18 June 2021)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Ardeola bacchus	60	0.31746	-1.1474	-0.36425	0.417947
Cyanopica cyanus	6	0.031746	-3.44999	-0.10952	0.377854
Egretta garzetta	6	0.031746	-3.44999	-0.10952	0.377854
Hirundo rustica	2	0.010582	-4.5486	-0.04813	0.218939
Spilopelia chinensis	3	0.015873	-4.14313	-0.06576	0.272469
Pycnonotus sinensis	2	0.010582	-4.5486	-0.04813	0.218939
Acridotheres cristatellus	2	0.010582	-4.5486	-0.04813	0.218939
Nycticorax nycticorax	1	0.005291	-5.24175	-0.02773	0.145375
Spilopelia chinensis	2	0.010582	-4.5486	-0.04813	0.218939
Ardeola bacchus	1	0.005291	-5.24175	-0.02773	0.145375
Hirundo rustica	2	0.010582	-4.5486	-0.04813	0.218939
Prinia flaviventris	2	0.010582	-4.5486	-0.04813	0.218939
Prinia inornata	2	0.010582	-4.5486	-0.04813	0.218939
Spilopelia chinensis	1	0.005291	-5.24175	-0.02773	0.145375
Tachybaptus ruficollis	1	0.005291	-5.24175	-0.02773	0.145375
Acridotheres cristatellus	1	0.005291	-5.24175	-0.02773	0.145375
Amaurornis phoenicurus	2	0.010582	-4.5486	-0.04813	0.218939
Ardea alba	2	0.010582	-4.5486	-0.04813	0.218939
Garrulax perspicillatus	5	0.026455	-3.63231	-0.09609	0.349039
Passer montanus	4	0.021164	-3.85545	-0.0816	0.314593
Spilopelia chinensis	6	0.031746	-3.44999	-0.10952	0.377854
Tachybaptus ruficollis	1	0.005291	-5.24175	-0.02773	0.145375
Ardea alba	3	0.015873	-4.14313	-0.06576	0.272469
Ardeola bacchus	12	0.063492	-2.75684	-0.17504	0.48255
Hirundo rustica	5	0.026455	-3.63231	-0.09609	0.349039
Tachybaptus ruficollis	1	0.005291	-5.24175	-0.02773	0.145375
Acridotheres cristatellus	2	0.010582	-4.5486	-0.04813	0.218939
Ardeola bacchus	11	0.058201	-2.84385	-0.16552	0.470701
Egretta garzetta	3	0.015873	-4.14313	-0.06576	0.272469
Gracupica nigricollis	1	0.005291	-5.24175	-0.02773	0.145375
Hirundo rustica	6	0.031746	-3.44999	-0.10952	0.377854
Passer montanus	3	0.015873	-4.14313	-0.06576	0.272469
Ardeola bacchus	2	0.010582	-4.5486	-0.04813	0.218939
Copsychus saularis	4	0.021164	-3.85545	-0.0816	0.314593
Nycticorax nycticorax	1	0.005291	-5.24175	-0.02773	0.145375
Passer montanus	8	0.042328	-3.16231	-0.13385	0.423288
Prinia flaviventris	1	0.005291	-5.24175	-0.02773	0.145375
Prinia inornata	2	0.010582	-4.5486	-0.04813	0.218939
Ardeola bacchus	1	0.005291	-5.24175	-0.02773	0.145375
Egretta garzetta	1	0.005291	-5.24175	-0.02773	0.145375
Garrulax perspicillatus	4	0.021164	-3.85545	-0.0816	0.314593
Pycnonotus jocosus	1	0.005291	-5.24175	-0.02773	0.145375
Ardeola bacchus	1	0.005291	-5.24175	-0.02773	0.145375
Egretta garzetta	2	0.010582	-4.5486	-0.04813	0.218939

Total	189				
SS	10.9191				
SQ	8.944876				
H	2.9908				
S^2_H	0.011048				

Appendix F.3.2 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Point Count Method) in All Habitats (15 & 18 June 2021)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Ardeola bacchus	60	0.555556	-0.58779	-0.32655	0.191941
Egretta garzetta	6	0.055556	-2.89037	-0.16058	0.464125
Ardeola bacchus	1	0.009259	-4.68213	-0.04335	0.202985
Tachybaptus ruficollis	1	0.009259	-4.68213	-0.04335	0.202985
Ardea alba	2	0.018519	-3.98898	-0.07387	0.294667
Tachybaptus ruficollis	1	0.009259	-4.68213	-0.04335	0.202985
Ardea alba	3	0.027778	-3.58352	-0.09954	0.356711
Ardeola bacchus	12	0.111111	-2.19722	-0.24414	0.536422
Tachybaptus ruficollis	1	0.009259	-4.68213	-0.04335	0.202985
Ardeola bacchus	11	0.101852	-2.28424	-0.23265	0.531436
Egretta garzetta	3	0.027778	-3.58352	-0.09954	0.356711
Ardeola bacchus	2	0.018519	-3.98898	-0.07387	0.294667
Ardeola bacchus	1	0.009259	-4.68213	-0.04335	0.202985
Egretta garzetta	1	0.009259	-4.68213	-0.04335	0.202985
Ardeola bacchus	1	0.009259	-4.68213	-0.04335	0.202985
Egretta garzetta	2	0.018519	-3.98898	-0.07387	0.294667
Total	108				
SS	4.742239				
SQ	2.849615				
H	1.68808				
S^2_H	0.018167				

Appendix F.3.3 Appendix F.2c Ecological Bird Monitoring Diversity (All avifauna species in Transect Walk Method) in All Habitats (15 & 18 June 2021)

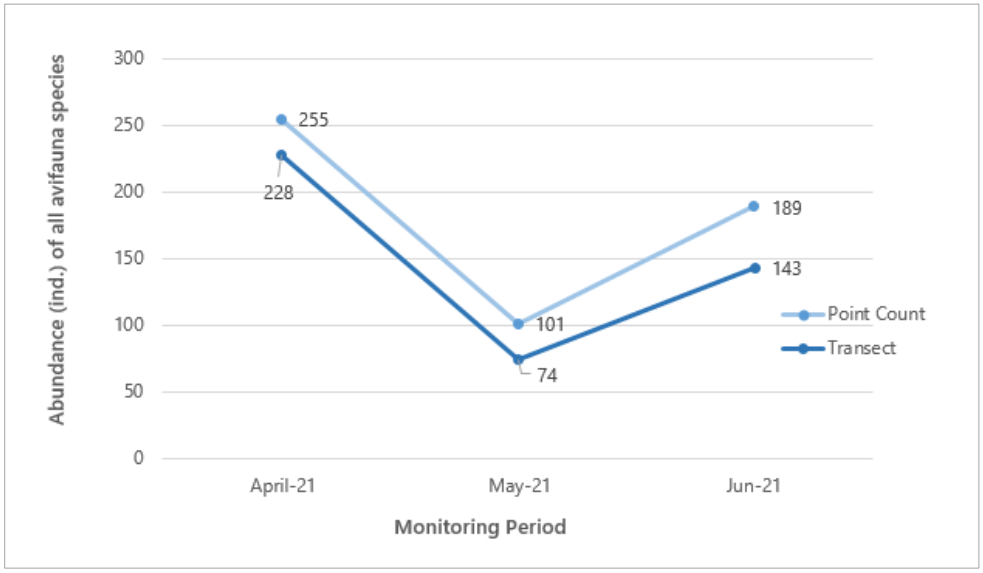
Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Ardea alba	1	0.006993	-4.96284	-0.03471	0.172237
Ardeola bacchus	38	0.265734	-1.32526	-0.35217	0.466712
Cyanopica cyanus	15	0.104895	-2.25479	-0.23652	0.533297
Gracupica nigricollis	5	0.034965	-3.35341	-0.11725	0.393194
Hirundo rustica	6	0.041958	-3.17109	-0.13305	0.421921
Milvus migrans	1	0.006993	-4.96284	-0.03471	0.172237
Motacilla alba	2	0.013986	-4.2697	-0.05972	0.254969
Passer montanus	9	0.062937	-2.76562	-0.17406	0.481384
Prinia flaviventris	2	0.013986	-4.2697	-0.05972	0.254969
Prinia inornata	2	0.013986	-4.2697	-0.05972	0.254969
Pycnonotus sinensis	5	0.034965	-3.35341	-0.11725	0.393194
Spilopelia chinensis	8	0.055944	-2.8834	-0.16131	0.46512

Acridotheres cristatellus	2	0.013986	-4.2697	-0.05972	0.254969
Ardea alba	3	0.020979	-3.86423	-0.08107	0.313265
Ardeola bacchus	5	0.034965	-3.35341	-0.11725	0.393194
Egretta garzetta	5	0.034965	-3.35341	-0.11725	0.393194
Garrulax perspicillatus	11	0.076923	-2.56495	-0.1973	0.506074
Gracupica nigricollis	1	0.006993	-4.96284	-0.03471	0.172237
Hirundo rustica	7	0.048951	-3.01693	-0.14768	0.445547
Milvus migrans	1	0.006993	-4.96284	-0.03471	0.172237
Motacilla alba	4	0.027972	-3.57655	-0.10004	0.35781
Pycnonotus jocosus	4	0.027972	-3.57655	-0.10004	0.35781
Spilopelia chinensis	2	0.013986	-4.2697	-0.05972	0.254969
Sturnia sinensis	2	0.013986	-4.2697	-0.05972	0.254969
Amaurornis phoenicurus	1	0.006993	-4.96284	-0.03471	0.172237
Egretta garzetta	1	0.006993	-4.96284	-0.03471	0.172237
Total	143				
SS	8.48495				
SQ	7.391771				
H	2.71878				
S^2_H	0.008256				

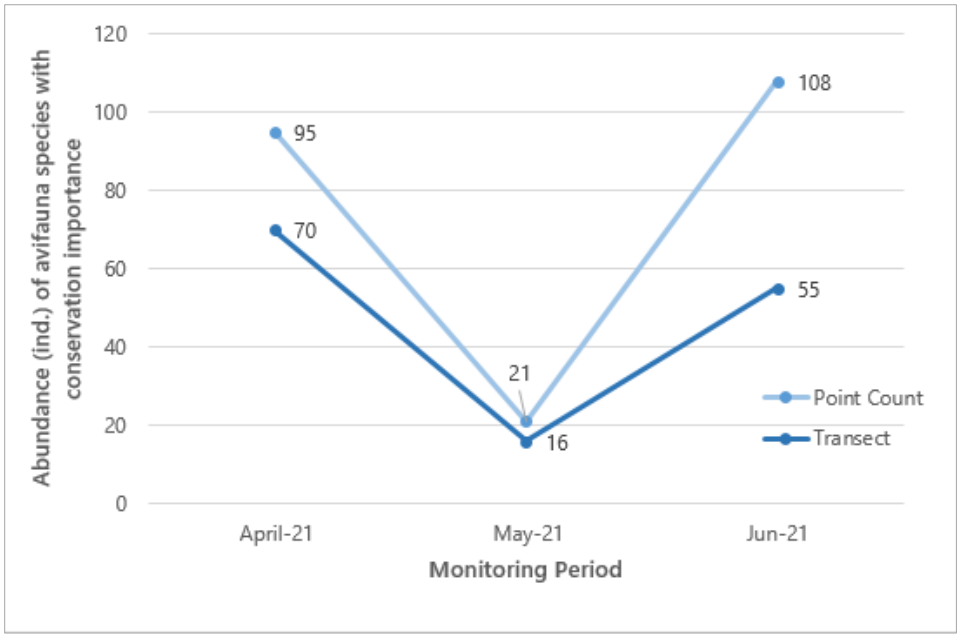
Appendix F.3.4 Appendix F.2d Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Transect Walk Method) in All Habitats (15 & 18 June 2021)

Scientific Name	**Count**	**P**	**Ln(P)**	**P*Ln(P)**	**P*Ln(P)^2**
Ardea alba	1	0.018182	-4.00733	-0.07286	0.291977
Ardeola bacchus	38	0.690909	-0.36975	-0.25546	0.094456
Milvus migrans	1	0.018182	-4.00733	-0.07286	0.291977
Ardea alba	3	0.054545	-2.90872	-0.15866	0.46149
Ardeola bacchus	5	0.090909	-2.3979	-0.21799	0.522718
Egretta garzetta	5	0.090909	-2.3979	-0.21799	0.522718
Milvus migrans	1	0.018182	-4.00733	-0.07286	0.291977
Egretta garzetta	1	0.018182	-4.00733	-0.07286	0.291977
Total	55				
SS	2.76929				
SQ	1.303119				
H	1.14154				
S^2_H	0.027815				

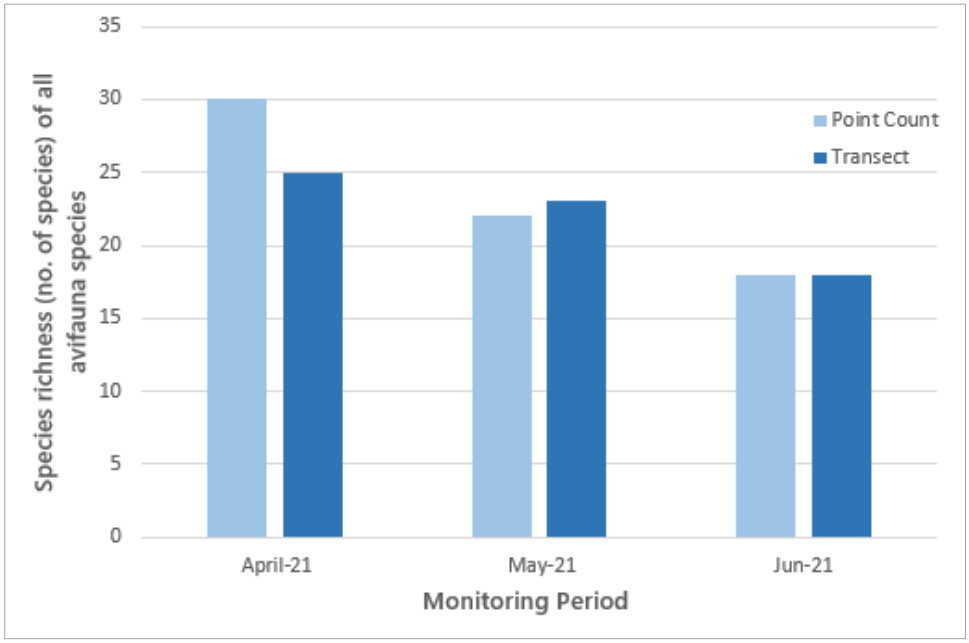
Appendix F.4.1 Abundance of all avifauna species throughout the monitoring period



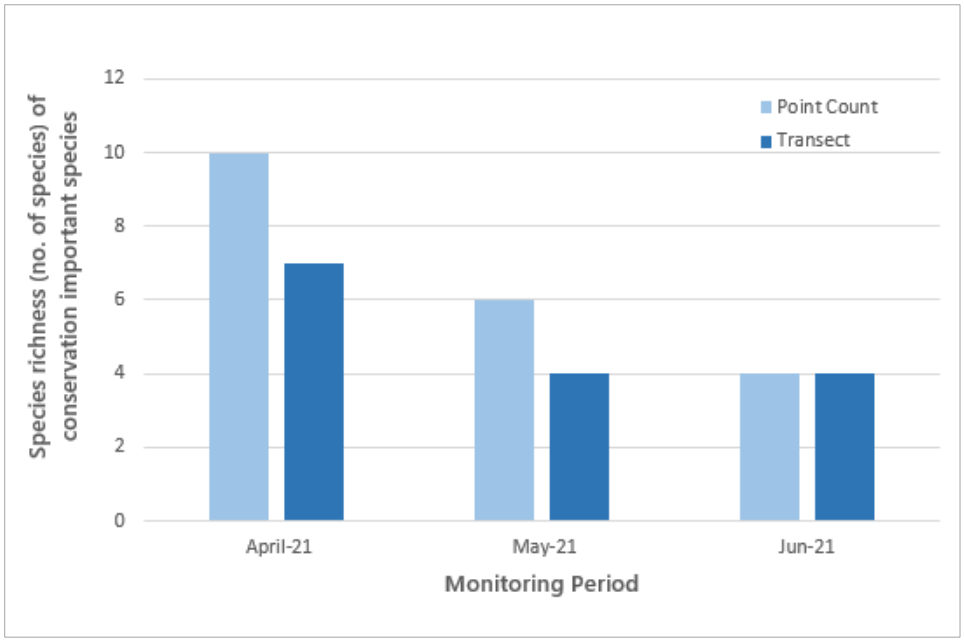
Appendix F.4.2 Abundance of avifauna species with conservation importance throughout the monitoring period



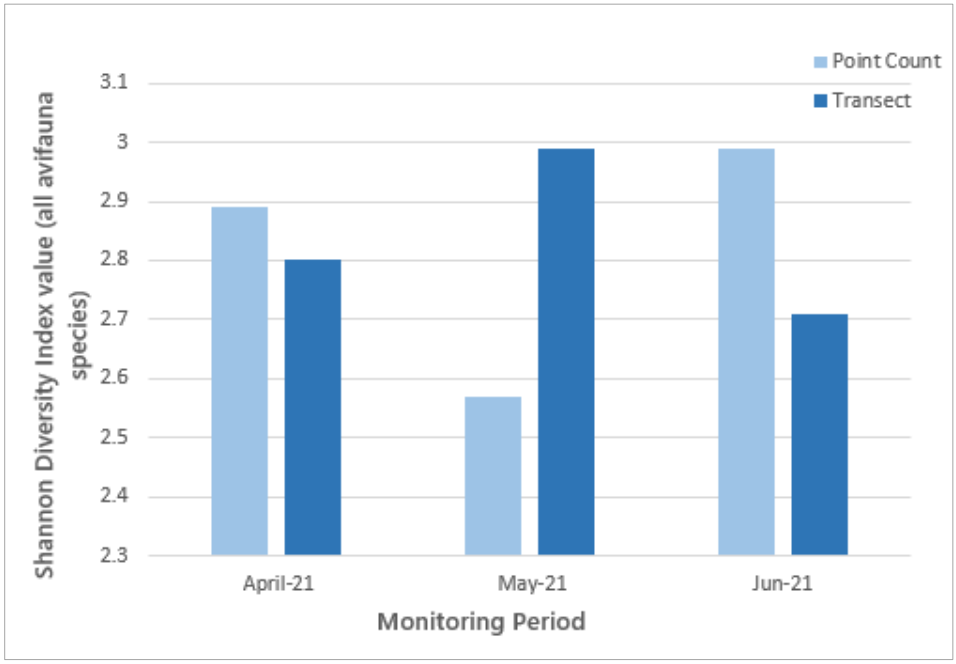
Appendix F.5.1 Species richness of all avifauna species throughout the monitoring period



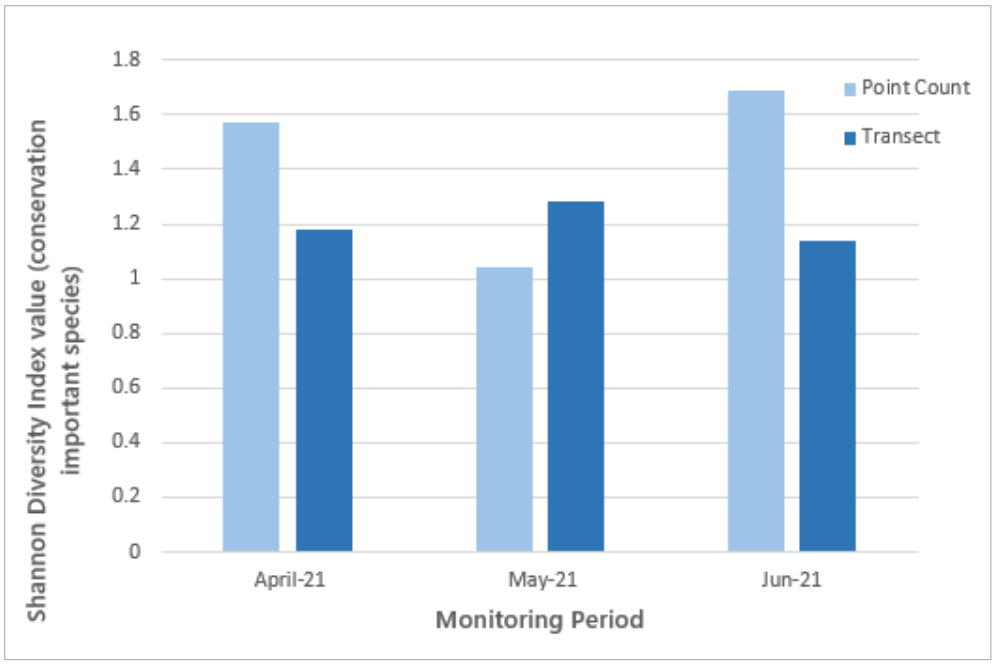
Appendix F.5.2 Species richness of avifauna species with conservation importance throughout the monitoring period



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 Hutcheson t-test testing method and output

Formula:

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

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

Months	June 2017	June 2021
Total	121	189
H	3.93844	2.9908
S^2_H	0.006478	0.011048
t	7.15822	
df	309	
Crit	1.967671	
p	5.99E-12	
CI	0.160975	0.210214

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

Months	June 2017	June 2021
Total	45	108
H	2.6933	1.68808
S^2_H	0.015166	0.018167
t	5.50581	
df	136	
Crit	1.977561	
p	1.77E-07	
CI	0.246303	0.269572