Air Quality Monitoring Results

1-hour TSP Monitoring Result for

Contract No. SPW 02/2023

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

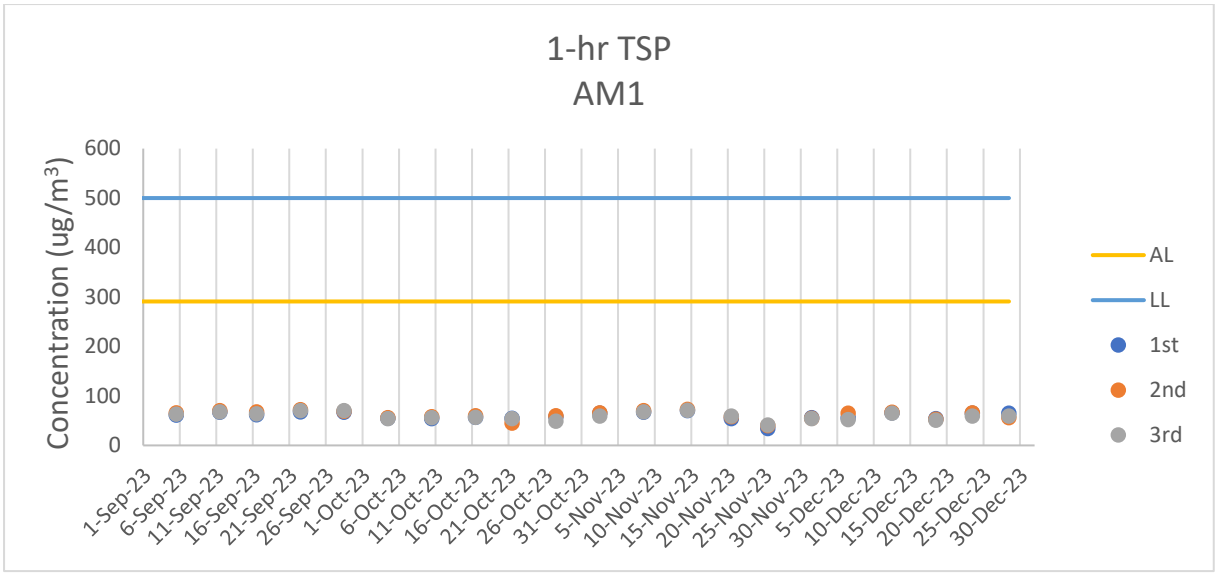
AM1 - Topfine Machinery (China) Co. Ltd.

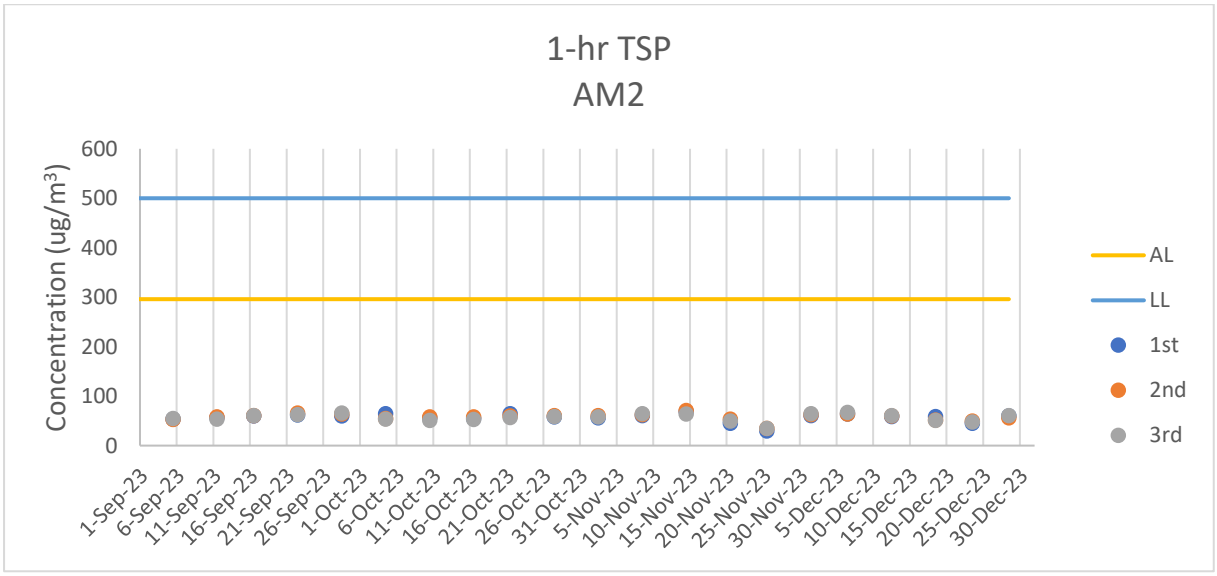
Date	Weather Condition	Start Time	1-hour TSP (μg/m³) 1st Measurement	2nd Measurement	3rd Measurement	Action Level (ug/m^3)	Limit Level (ug/m^3)
1/12/2023	fine	8:10	56	55	54	291	500
6/12/2023	fine	8:22	56	65	52		
12/12/2023	fine	8:45	66	67	65		
18/12/2023	fine	9:02	54	53	51		
23/12/2023	fine	8:54	65	66	59		
28/12/2023	fine	9:01	65	56	59		
		Min	51				
		Max	67				
		Average	59				

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)
1/12/2023	fine	13:00	61	63	65	296	500
6/12/2023	fine	13:45	64	64	67		
12/12/2023	fine	13:09	59	60	61		
18/12/2023	fine	13:13	59	52	51		
23/12/2023	fine	14:02	45	50	48		
28/12/2023	fine	13:34	60	56	61		
		Min	45				
		Max	67				
		Average	58				

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





Air Quality Monitoring Results

Noise Monitoring Results

Noise Impact Monitoring Result for
Contract No. SPW 02/2023
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)
1/12/2023	09:08	54.5	56.3	52.2	0.4	sunny	75
6/12/2023	09:14	56.6	58.5	53.5	0.1	sunny	75
12/12/2023	09:12	57.8	60.4	54.8	0.6	sunny	75
18/12/2023	09:01	60.7	63.3	59.5	0.2	sunny	75
28/12/2023	09:17	59.3	61.5	57.9	0.2	sunny	75
	Max	60.7					
	Min	54.5					

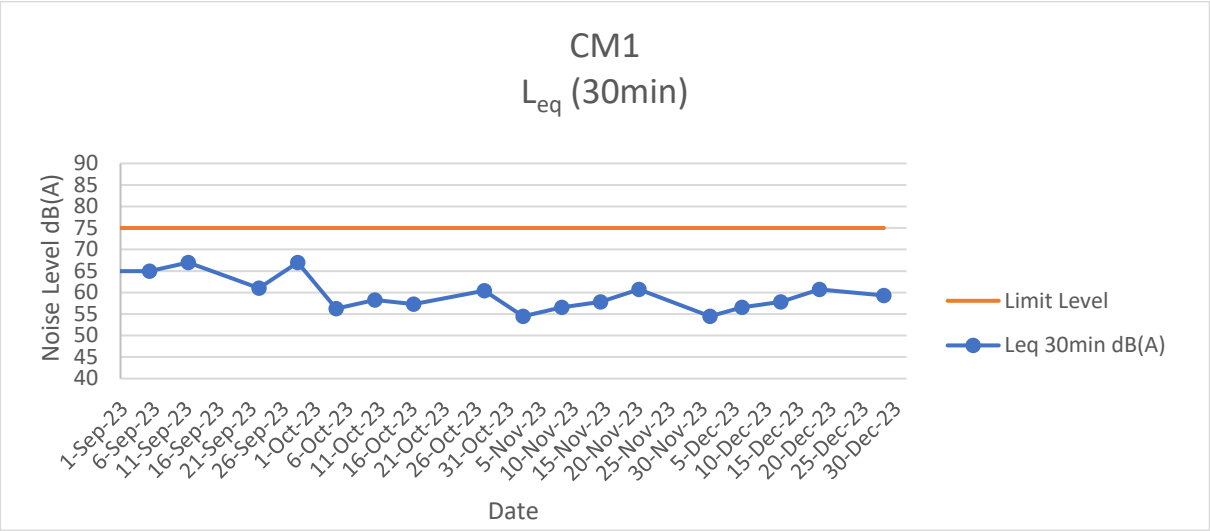
CM2 - Squatter house to the west of YLSTW

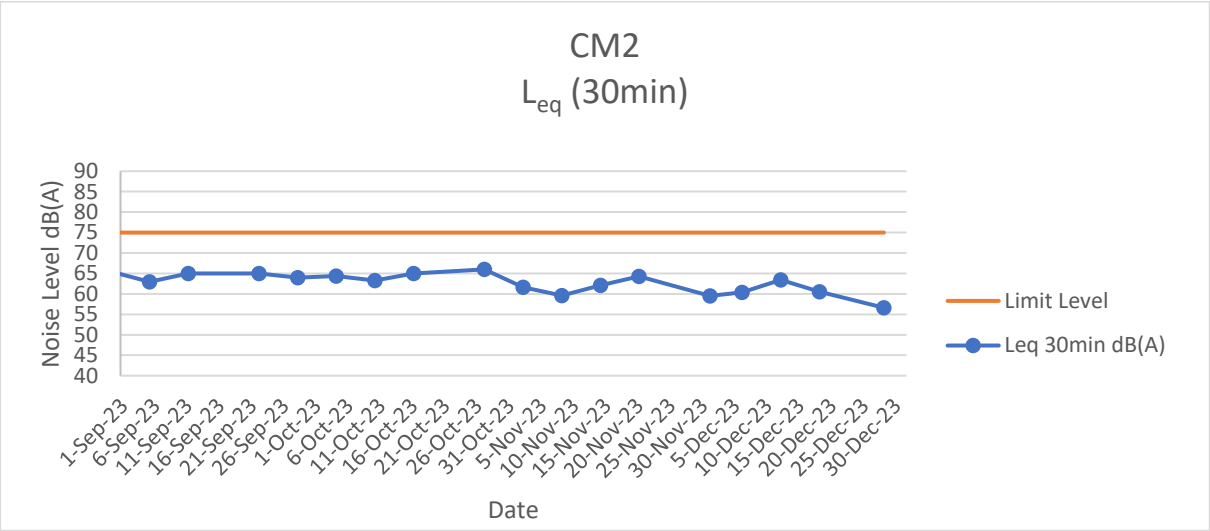
Date	Start Time	L_{eq} 30min dB(A)	L_{10} dB(A)	L_{90} dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
1/12/2023	08:21	59.5	61.4	57.7	0.2	sunny	75
6/12/2023	08:33	60.4	62.1	59.2	0.1	sunny	75
12/12/2023	08:20	63.4	64.4	60.5	0.4	sunny	75
18/12/2023	08:17	60.5	61.4	58.6	0.2	sunny	75
28/12/2023	08:24	56.6	58.3	53.4	0.4	sunny	75
	Max	63.4					
	Min	56.6					

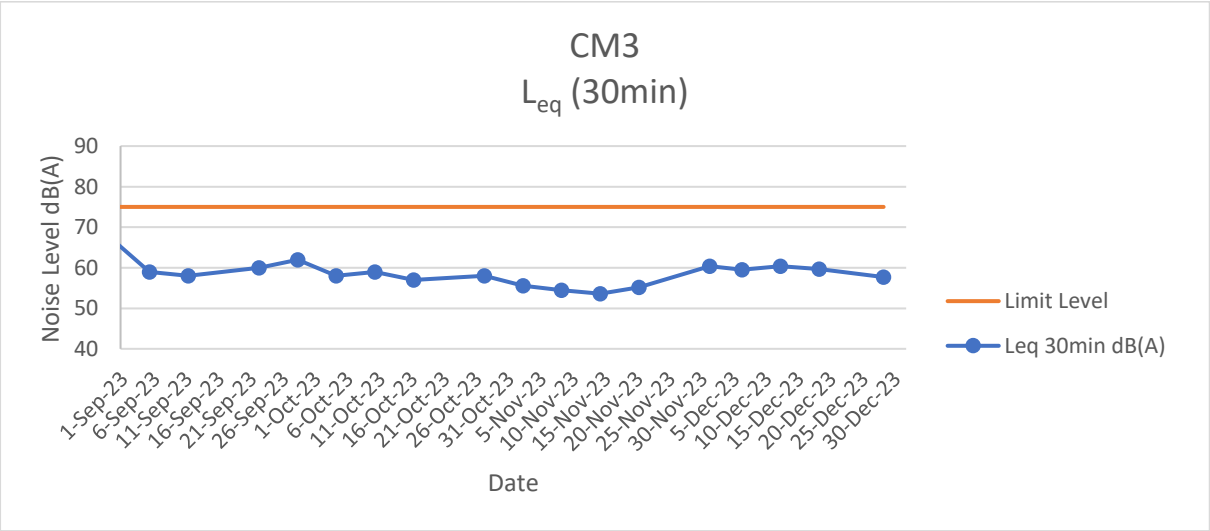
CM3 - Squatter house to the east of YLSTW

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)
1/12/2023	11:55	60.4	62.1	58.5	0.4	sunny	75
6/12/2023	12:10	59.5	63.2	58.4	0.2	sunny	75
12/12/2023	11:59	60.4	62.1	50.4	0.7	sunny	75
18/12/2023	12:14	59.7	62.5	58.1	0.6	sunny	75
28/12/2023	12:30	57.7	59.5	56.4	0.1	sunny	75
	Max	60.4					
	Min	57.7					

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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	1/12/2023	Mid-Flood	Sunny	Low	10:48	2.8	M	1.40	1	0.078	180.029	8.61	8.62	8.36	8.335	23.7	23.75	35.0	35.18	2.63	2.645	11.62	11.525	34	31
M1	1/12/2023	Mid-Flood	Sunny	Low	10:49	2.8	M	1.40	2			8.62		8.31		23.8		35.4		2.66		11.43		28	
M2	1/12/2023	Mid-Flood	Sunny	Low	11:13	2.6	M	1.30	1	0.081	173.048	8.55	8.56	8.43	8.43	23.7	23.70	35.2	34.71	2.65	2.61	11.78	11.87	39	34
M2	1/12/2023	Mid-Flood	Sunny	Low	11:13	2.6	M	1.30	2			8.57		8.43		23.7		34.2		2.57		11.96		28	
M3	1/12/2023	Mid-Flood	Sunny	/	10:58	2	M	1.00	1	0.083	181.078	8.6	8.60	8.45	8.48	23.7	23.70	50.5	49.68	3.8	3.735	45.81	45.715	33	33
M3	1/12/2023	Mid-Flood	Sunny	/	10:58	2	M	1.00	2			8.6		8.51		23.7		48.8		3.67		45.62		32	
M1	1/12/2023	Mid-Ebb	Sunny	Low	15:53	2.5	M	1.25	1	0.068	306.826	8.48	8.48	8.39	8.35	23.8	23.85	36.0	36.18	2.71	2.72	16.90	16.9	37	36
M1	1/12/2023	Mid-Ebb	Sunny	Low	15:53	2.5	M	1.25	2			8.48		8.31		23.9		36.3		2.73		16.9		34	
M2	1/12/2023	Mid-Ebb	Sunny	Low	15:21	2.4	M	1.20	1	0.058	327.47	8.55	8.55	8.29	8.32	23.8	23.80	33.9	33.05	2.55	2.485	16.23	16.135	29	28
M2	1/12/2023	Mid-Ebb	Sunny	Low	15:21	2.4	M	1.20	2			8.55		8.35		23.8		32.2		2.42		16.04		26	
M3	1/12/2023	Mid-Ebb	Sunny	/	15:36	1.8	M	0.90	1	0.062	319.01	8.61	8.61	8.44	8.44	23.8	23.80	51.9	51.87	3.9	3.9	43.96	43.96	2.5	3
M3	1/12/2023	Mid-Ebb	Sunny	/	15:36	1.8	M	0.90	2			8.61		8.44		23.8		51.9		3.9		43.96		2.5	

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	78	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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	4/12/2023	Mid-Flood	Cloudy	Low	13:18	2.6	M	1.30	1	0.086	177.853	8.16	8.17	8.40	8.385	22.7	22.70	41.8	42.29	3.14	3.18	16.53	16.64	34	35
M1	4/12/2023	Mid-Flood	Cloudy	Low	13:19	2.6	M	1.30	2			8.18		8.37		22.7		42.8		3.22		16.75		35	
M2	4/12/2023	Mid-Flood	Cloudy	Low	13:51	2.3	M	1.15	1	0.085	189.221	8.13	8.13	8.55	8.515	22.7	22.70	40.7	40.63	3.06	3.055	18.50	18.57	40	39
M2	4/12/2023	Mid-Flood	Cloudy	Low	13:52	2.3	M	1.15	2			8.13		8.48		22.7		40.6		3.05		18.64		38	
M3	4/12/2023	Mid-Flood	Cloudy	/	13:44	2	M	1.00	1	0.093	185.375	8.23	8.24	8.33	8.31	22.7	22.75	50.7	49.94	3.81	3.755	37.43	37.44	40	38
M3	4/12/2023	Mid-Flood	Cloudy	/	13:44	2	M	1.00	2			8.24		8.29		22.8		49.2		3.7		37.45		36	
M1	4/12/2023	Mid-Ebb	Cloudy	Low	9:36	2.1	M	1.05	1	0.065	322.615	8.15	8.15	8.44	8.46	22.8	22.80	37.8	38.50	2.84	2.895	18.64	18.44	42	50
M1	4/12/2023	Mid-Ebb	Cloudy	Low	9:36	2.1	M	1.05	2			8.15		8.48		22.8		39.2		2.95		18.24		58	
M2	4/12/2023	Mid-Ebb	Cloudy	Low	9:01	2	M	1.00	1	0.078	332.912	8.18	8.18	8.36	8.34	22.8	22.85	39.5	38.77	2.97	2.915	15.44	15.45	55	46
M2	4/12/2023	Mid-Ebb	Cloudy	Low	9:02	2	M	1.00	2			8.18		8.32		22.9		38.0		2.86		15.46		36	
M3	4/12/2023	Mid-Ebb	Cloudy	/	9:28	1.6	M	0.80	1	0.061	326.409	8.25	8.25	8.47	8.435	22.8	22.85	51.6	51.21	3.88	3.85	39.65	39.665	36	38
M3	4/12/2023	Mid-Ebb	Cloudy	/	9:28	1.6	M	0.80	2			8.25		8.4		22.9		50.8		3.82		39.68		39	

Remark

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

For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	6/12/2023	Mid-Flood	Cloudy	Low	14:53	2.4	M	1.20	1	0.092	166.545	8.36	8.37	8.52	8.525	23.4	23.40	40.2	40.17	3.02	3.02	21.00	21.065	12	13
M1	6/12/2023	Mid-Flood	Cloudy	Low	14:53	2.4	M	1.20	2			8.38		8.53		23.4		40.2		3.02		21.13		13	
M2	6/12/2023	Mid-Flood	Cloudy	Low	15:22	2.1	M	1.05	1	0.083	184.148	8.24	8.24	8.49	8.525	23.4	23.45	38.3	37.51	2.88	2.82	20.80	20.615	14	15
M2	6/12/2023	Mid-Flood	Cloudy	Low	15:23	2.1	M	1.05	2			8.23		8.56		23.5		36.7		2.76		20.43		16	
M3	6/12/2023	Mid-Flood	Cloudy	/	15:08	1.8	M	1.00	1	0.084	169.008	8.28	8.28	8.47	8.46	23.4	23.40	51.9	51.47	3.9	3.87	60.72	60.72	12	13
M3	6/12/2023	Mid-Flood	Cloudy	/	15:08	1.8	M	1.00	2			8.28		8.45		23.4		51.1		3.84		60.72		13	
M1	6/12/2023	Mid-Ebb	Cloudy	Low	10:51	2.1	M	1.05	1	0.066	337.327	8.31	8.30	8.39	8.345	23.2	23.25	37.6	37.17	2.83	2.795	19.78	19.915	17	17
M1	6/12/2023	Mid-Ebb	Cloudy	Low	10:51	2.1	M	1.05	2			8.29		8.3		23.3		36.7		2.76		20.05		16	
M2	6/12/2023	Mid-Ebb	Cloudy	Low	10:26	2	M	1.00	1	0.067	309.549	8.3	8.30	8.30	8.28	23.2	23.20	38.8	39.43	2.92	2.965	18.81	18.81	14	15
M2	6/12/2023	Mid-Ebb	Cloudy	Low	10:26	2	M	1.00	2			8.29		8.26		23.2		40.0		3.01		18.81		15	
M3	6/12/2023	Mid-Ebb	Cloudy	/	10:28	1.7	M	0.80	1	0.08	344.621	8.25	8.24	8.31	8.33	23.2	23.20	53.1	53.47	3.99	4.02	65.49	65.415	16	17
M3	6/12/2023	Mid-Ebb	Cloudy	/	10:28	1.7	M	0.80	2			8.23		8.35		23.2		53.9		4.05		65.34		17	

Remark

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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	78	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	50.5	54.7	59	68

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	8/12/2023	Mid-Flood	Cloudy	Low	15:52	2.4	M	1.20	1	0.079	170.717	8.11	8.12	8.42	8.46	22.8	22.80	45.4	45.69	3.41	3.435	24.50	24.5	7	8
M1	8/12/2023	Mid-Flood	Cloudy	Low	15:53	2.4	M	1.20	2			8.13		8.5		22.8		46.0		3.46		24.5		9	
M2	8/12/2023	Mid-Flood	Cloudy	Low	16:16	2.2	M	1.10	1	0.084	185.446	8.12	8.12	8.45	8.49	22.8	22.85	47.2	46.68	3.55	3.51	26.66	26.5	7	8
M2	8/12/2023	Mid-Flood	Cloudy	Low	16:18	2.2	M	1.10	2			8.12		8.53		22.9		46.2		3.47		26.34		8	
M3	8/12/2023	Mid-Flood	Cloudy	/	15:58	1.8	M	1.00	1	0.077	181.211	8.22	8.22	8.57	8.54	22.8	22.80	52.0	51.74	3.91	3.89	51.36	51.25	10	10
M3	8/12/2023	Mid-Flood	Cloudy	/	15:58	1.8	M	1.00	2			8.22		8.51		22.8		51.5		3.87		51.14		10	
M1	8/12/2023	Mid-Ebb	Cloudy	Low	9:55	2	M	1.05	1	0.075	340.756	8.16	8.15	8.42	8.435	22.5	22.50	38.4	37.71	2.89	2.835	21.54	21.445	10	10
M1	8/12/2023	Mid-Ebb	Cloudy	Low	9:56	2	M	1.05	2			8.14		8.45		22.5		37.0		2.78		21.35		9	
M2	8/12/2023	Mid-Ebb	Cloudy	Low	9:31	1.8	M	1.00	1	0.078	314.924	8.18	8.18	8.45	8.41	22.5	22.50	40.0	39.77	3.01	2.99	22.63	22.52	8	9
M2	8/12/2023	Mid-Ebb	Cloudy	Low	9:31	1.8	M	1.00	2			8.18		8.37		22.5		39.5		2.97		22.41		10	
M3	8/12/2023	Mid-Ebb	Cloudy	/	9:36	1.4	M	0.80	1	0.067	319.97	8.32	8.32	8.55	8.505	22.5	22.50	52.1	51.27	3.92	3.855	52.69	52.78	8	10
M3	8/12/2023	Mid-Ebb	Cloudy	/	9:36	1.4	M	0.80	2			8.31		8.46		22.5		50.4		3.79		52.87		11	

Remark

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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	78	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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	11/12/2023	Mid-Flood	Cloudy	Low	9:08	2.5	M	1.25	1	0.095	164.841	8.47	8.48	8.48	8.465	21.6	21.60	40.2	39.50	3.02	2.97	12.67	12.625	19	20
M1	11/12/2023	Mid-Flood	Cloudy	Low	9:09	2.5	M	1.25	2			8.48		8.45		21.6		38.8		2.92		12.58		21	
M2	11/12/2023	Mid-Flood	Cloudy	Low	9:36	2.2	M	1.10	1	0.094	182.754	8.34	8.35	8.40	8.435	21.6	21.60	37.2	36.51	2.8	2.745	12.92	13.01	25	24
M2	11/12/2023	Mid-Flood	Cloudy	Low	9:37	2.2	M	1.10	2			8.35		8.47		21.6		35.8		2.69		13.1		23	
M3	11/12/2023	Mid-Flood	Cloudy	/	9:15	2	M	1.00	1	0.086	162.617	8.22	8.23	8.30	8.3	21.6	21.60	51.7	52.47	3.89	3.945	55.41	55.26	22	21
M3	11/12/2023	Mid-Flood	Cloudy	/	9:15	2	M	1.00	2			8.23		8.30		21.6		53.2		4		55.11		19	
M1	11/12/2023	Mid-Ebb	Cloudy	Low	12:43	2	M	1.05	1	0.08	336.227	8.35	8.35	8.45	8.43	21.4	21.40	36.7	36.18	2.76	2.72	13.87	13.77	24	24
M1	11/12/2023	Mid-Ebb	Cloudy	Low	12:44	2	M	1.05	2			8.34		8.41		21.4		35.6		2.68		13.67		24	
M2	11/12/2023	Mid-Ebb	Cloudy	Low	12:17	1.8	M	1.00	1	0.059	324.752	8.24	8.25	8.45	8.445	21.4	21.40	35.8	36.51	2.69	2.745	14.55	14.4	29	28
M2	11/12/2023	Mid-Ebb	Cloudy	Low	12:17	1.8	M	1.00	2			8.25		8.44		21.4		37.2		2.8		14.25		27	
M3	11/12/2023	Mid-Ebb	Cloudy	/	12:24	1.6	M	0.80	1	0.063	332.63	8.31	8.30	8.47	8.51	21.4	21.45	56.4	56.13	4.24	4.22	51.36	51.42	22	29
M3	11/12/2023	Mid-Ebb	Cloudy	/	12:24	1.6	M	0.80	2			8.29		8.55		21.5		55.9		4.2		51.48		35	

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	78	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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	13/12/2023	Mid-Flood	Cloudy	Low	13:37	2.4	M	1.20	1	0.092	167.478	8.74	8.74	7.09	7.11	23.2	23.25	42.8	42.63	3.22	3.205	22.13	22.29	30	36
M1	13/12/2023	Mid-Flood	Cloudy	Low	13:38	2.4	M	1.20	2			8.73		7.13		23.3		42.4		3.19		22.45		42	
M2	13/12/2023	Mid-Flood	Cloudy	Low	13:57	2.2	M	1.10	1	0.095	190.563	8.33	8.33	7.27	7.3	23.2	23.25	37.5	38.10	2.82	2.865	21.41	21.52	50	39
M2	13/12/2023	Mid-Flood	Cloudy	Low	13:58	2.2	M	1.10	2			8.32		7.33		23.3		38.7		2.91		21.63		28	
M3	13/12/2023	Mid-Flood	Cloudy	/	13:44	2	M	1.00	1	0.078	186.64	8.3	8.31	7.47	7.505	23.2	23.20	55.3	55.06	4.16	4.14	66.12	66.05	50	49
M3	13/12/2023	Mid-Flood	Cloudy	/	13:45	2	M	1.00	2			8.32		7.54		23.2		54.8		4.12		65.98		48	
M1	13/12/2023	Mid-Ebb	Cloudy	Low	8:55	2.2	M	1.05	1	0.068	309.442	8.3	8.29	7.27	7.225	23.5	23.55	44.8	45.09	3.37	3.39	22.30	22.16	25	27
M1	13/12/2023	Mid-Ebb	Cloudy	Low	8:56	2.2	M	1.05	2			8.28		7.18		23.6		45.4		3.41		22.02		29	
M2	13/12/2023	Mid-Ebb	Cloudy	Low	8:35	2.1	M	1.00	1	0.074	336.213	8.24	8.25	7.25	7.225	23.5	23.50	41.2	40.96	3.1	3.08	24.10	24.03	41	38
M2	13/12/2023	Mid-Ebb	Cloudy	Low	8:36	2.1	M	1.00	2			8.26		7.2		23.5		40.7		3.06		23.96		34	
M3	13/12/2023	Mid-Ebb	Cloudy	/	8:41	1.9	M	0.80	1	0.07	306.606	8.27	8.27	7.38	7.415	23.5	23.50	58.7	58.52	4.41	4.4	69.69	69.76	30	33
M3	13/12/2023	Mid-Ebb	Cloudy	/	8:42	1.9	M	0.80	2			8.26		7.45		23.5		58.4		4.39		69.83		35	

Remark

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

For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	56.3	61.0	59	68

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	15/12/2023	Mid-Flood	Cloudy	Low	10:10	2.8	M	1.40	1	0.084	173.941	8.24	8.23	7.38	7.39	23.2	23.25	32.7	33.05	2.46	2.485	30.64	30.545	19	22
M1	15/12/2023	Mid-Flood	Cloudy	Low	10:10	2.8	M	1.40	2			8.22		7.4		23.3		33.4		2.51		30.45		24	
M2	15/12/2023	Mid-Flood	Cloudy	Low	10:36	2.6	M	1.30	1	0.08	187.98	8.17	8.18	7.41	7.39	23.2	23.25	37.6	38.30	2.83	2.88	26.77	26.685	21	28
M2	15/12/2023	Mid-Flood	Cloudy	Low	10:36	2.6	M	1.30	2			8.19		7.37		23.3		39.0		2.93		26.6		34	
M3	15/12/2023	Mid-Flood	Cloudy	/	10:58	2	M	1.00	1	0.074	189.181	8.25	8.25	7.31	7.355	23.2	23.25	57.6	56.06	4.33	4.215	59.95	59.99	12	13
M3	15/12/2023	Mid-Flood	Cloudy	/	10:58	2	M	1.00	2			8.24		7.40		23.3		54.5		4.1		60.03		14	
M1	15/12/2023	Mid-Ebb	Cloudy	Low	15:21	2.1	M	1.05	1	0.075	314.352	8.2	8.21	7.44	7.42	23.3	23.30	35.6	34.65	2.68	2.605	36.65	26.58	30	37
M1	15/12/2023	Mid-Ebb	Cloudy	Low	15:21	2.1	M	1.05	2			8.22		7.4		23.3		33.6		2.53		36.34		43	
M2	15/12/2023	Mid-Ebb	Cloudy	Low	14:55	2	M	1.00	1	0.064	344.905	8.2	8.19	7.41	7.405	23.3	23.35	36.3	37.04	2.73	2.785	36.62	26.84	40	42
M2	15/12/2023	Mid-Ebb	Cloudy	Low	14:55	2	M	1.00	2			8.18		7.4		23.4		37.8		2.84		36.7		44	
M3	15/12/2023	Mid-Ebb	Cloudy	/	15:49	1.6	M	0.80	1	0.081	342.831	8.27	8.27	7.30	7.33	23.3	23.30	53.1	52.47	3.99	3.945	67.92	67.705	34	33
M3	15/12/2023	Mid-Ebb	Cloudy	/	15:49	1.6	M	0.80	2			8.27		7.36		23.3		51.9		3.9		67.49		31	

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	78	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	56.7	61.5	59	68

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	18/12/2023	Mid-Flood	Cloudy	Low	12:41	3	M	1.50	1	0.093	169.392	8.97	8.98	9.66	9.635	28.8	28.85	51.5	51.01	3.87	3.835	27.61	27.5	62	62
M1	18/12/2023	Mid-Flood	Cloudy	Low	12:42	3	M	1.50	2			8.98		9.61		28.9		50.5		3.8		27.39		62	
M2	18/12/2023	Mid-Flood	Cloudy	Low	13:03	2.6	M	1.30	1	0.075	189.694	8.46	8.47	9.55	9.56	28.8	28.80	50.7	50.54	3.81	3.8	28.00	28.13	64	66
M2	18/12/2023	Mid-Flood	Cloudy	Low	13:03	2.6	M	1.30	2			8.47		9.57		28.8		50.4		3.79		28.26		68	
M3	18/12/2023	Mid-Flood	Cloudy	/	13:00	2.2	M	1.00	1	0.087	175.602	8.58	8.58	9.41	9.45	28.8	28.85	56.1	55.46	4.22	4.17	52.36	52.46	63	63
M3	18/12/2023	Mid-Flood	Cloudy	/	13:00	2.2	M	1.00	2			8.58		9.49		28.9		54.8		4.12		52.56		63	
M1	18/12/2023	Mid-Ebb	Cloudy	Low	18:11	2.4	M	1.05	1	0.065	312.308	8.28	8.29	9.61	9.59	28.9	28.90	50.5	47.48	3.8	3.57	21.63	21.56	60	61
M1	18/12/2023	Mid-Ebb	Cloudy	Low	18:11	2.4	M	1.05	2			8.29		9.57		28.9		44.4		3.34		21.49		62	
M2	18/12/2023	Mid-Ebb	Cloudy	Low	17:58	2.2	M	1.00	1	0.08	314.169	8.15	8.16	9.53	9.505	28.9	28.95	35.8	35.11	2.69	2.64	26.76	26.86	53	58
M2	18/12/2023	Mid-Ebb	Cloudy	Low	17:59	2.2	M	1.00	2			8.16		9.48		29.0		34.4		2.59		26.96		62	
M3	18/12/2023	Mid-Ebb	Cloudy	/	18:05	2	M	0.80	1	0.062	317.651	8.33	8.33	8.36	8.325	28.9	28.95	50.0	49.01	3.76	3.685	57.26	57.275	74	68
M3	18/12/2023	Mid-Ebb	Cloudy	/	18:05	2	M	0.80	2			8.32		8.29		29.0		48.0		3.61		57.29		61	

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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	78	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	50.5	54.7	75	81.25

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	20/12/2023	Mid-Flood	Cloudy	Low	14:20	2.5	M	1.25	1	0.084	169.259	8.09	8.10	9.65	9.615	16.9	16.95	58.7	57.99	4.41	4.36	28.39	28.405	19	21
M1	20/12/2023	Mid-Flood	Cloudy	Low	14:21	2.5	M	1.25	2			8.11		9.58		17		57.3		4.31		28.42		23	
M2	20/12/2023	Mid-Flood	Cloudy	Low	14:48	2.2	M	1.10	1	0.076	170.356	8.07	8.08	9.48	9.435	16.9	16.90	47.1	47.55	3.54	3.575	29.31	29.435	23	21
M2	20/12/2023	Mid-Flood	Cloudy	Low	14:49	2.2	M	1.10	2			8.08		9.39		16.9		48.0		3.61		29.56		18	
M3	20/12/2023	Mid-Flood	Cloudy	/	15:02	2	M	1.00	1	0.094	186.592	8.22	8.22	9.43	9.415	16.9	16.95	51.1	51.47	3.84	3.87	64.55	64.655	9	11
M3	20/12/2023	Mid-Flood	Cloudy	/	15:03	2	M	1.00	2			8.21		9.40		17		51.9		3.9		64.76		12	
M1	20/12/2023	Mid-Ebb	Cloudy	Low	10:04	2.1	M	1.05	1	0.07	320.625	8.12	8.11	9.64	9.635	17.2	17.20	48.5	47.61	3.65	3.58	27.39	27.235	10	12
M1	20/12/2023	Mid-Ebb	Cloudy	Low	10:04	2.1	M	1.05	2			8.1		9.63		17.2		46.7		3.51		27.08		13	
M2	20/12/2023	Mid-Ebb	Cloudy	Low	9:46	2	M	1.00	1	0.058	306.956	8.06	8.07	9.41	9.425	17.2	17.25	48.8	49.21	3.67	3.7	27.71	27.815	12	12
M2	20/12/2023	Mid-Ebb	Cloudy	Low	9:46	2	M	1.00	2			8.08		9.44		17.3		49.6		3.73		27.92		12	
M3	20/12/2023	Mid-Ebb	Cloudy	/	9:50	1.9	M	0.80	1	0.063	313.889	8.3	8.29	9.48	9.435	17.2	17.25	56.4	56.53	4.24	4.25	59.98	59.975	18	14
M3	20/12/2023	Mid-Ebb	Cloudy	/	9:50	1.9	M	0.80	2			8.28		9.39		17.3		56.7		4.26		59.97		10	

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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	78	104	167

For Ebb Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	52.7	57.1	59	68

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	22/12/2023	Mid-Flood	Cloudy	Low	15:35	2.3	M	1.15	1	0.088	174.254	8.06	8.06	9.63	9.665	16.9	16.90	51.1	50.07	3.84	3.765	26.98	26.805	13	15
M1	22/12/2023	Mid-Flood	Cloudy	Low	15:36	2.3	M	1.15	2			8.06		9.7		16.9		49.1		3.69		26.63		17	
M2	22/12/2023	Mid-Flood	Cloudy	Low	15:52	1.9	M	0.95	1	0.093	172.501	8.11	8.10	9.45	9.405	16.9	16.95	50.1	50.54	3.77	3.8	28.96	28.77	18	14
M2	22/12/2023	Mid-Flood	Cloudy	Low	15:52	1.9	M	0.95	2			8.09		9.36		17		50.9		3.83		28.58		10	
M3	22/12/2023	Mid-Flood	Cloudy	/	15:49	1.6	M	1.00	1	0.084	181.515	8.07	8.08	9.33	9.285	16.9	16.95	54.8	54.26	4.12	4.08	48.10	48.095	18	18
M3	22/12/2023	Mid-Flood	Cloudy	/	15:49	1.6	M	1.00	2			8.08		9.24		17		53.7		4.04		48.09		17	
M1	22/12/2023	Mid-Ebb	Cloudy	Low	9:34	2	M	1.05	1	0.072	321.894	8.08	8.08	9.60	9.585	17.4	17.40	50.5	50.14	3.8	3.77	25.00	25.17	16	18
M1	22/12/2023	Mid-Ebb	Cloudy	Low	9:34	2	M	1.05	2			8.08		9.57		17.4		49.7		3.74		25.34		19	
M2	22/12/2023	Mid-Ebb	Cloudy	Low	9:00	1.8	M	1.00	1	0.078	314.747	8.07	8.07	9.60	9.61	17.4	17.45	51.2	50.67	3.85	3.81	29.47	29.465	16	18
M2	22/12/2023	Mid-Ebb	Cloudy	Low	9:00	1.8	M	1.00	2			8.07		9.62		17.5		50.1		3.77		29.46		20	
M3	22/12/2023	Mid-Ebb	Cloudy	/	9:52	1.6	M	0.80	1	0.075	341.839	8.12	8.12	9.45	9.42	17.4	17.45	52.3	51.47	3.93	3.87	44.30	44.28	19	17
M3	22/12/2023	Mid-Ebb	Cloudy	/	9:52	1.6	M	0.80	2			8.11		9.39		17.5		50.7		3.81		44.26		14	

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	78	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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	25/12/2023	Mid-Flood	Cloudy	Low	9:12	2.5	M	1.25	1	0.081	171.758	8.18	8.19	8.20	8.225	17.8	17.80	43.2	43.36	3.25	3.26	29.91	29.98	50	39
M1	25/12/2023	Mid-Flood	Cloudy	Low	9:12	2.5	M	1.25	2			8.2		8.25		17.8		43.5		3.27		30.05		28	
M2	25/12/2023	Mid-Flood	Cloudy	Low	9:44	2.2	M	1.10	1	0.09	161.747	8.14	8.14	8.34	8.365	17.8	17.80	46.3	46.15	3.48	3.47	29.72	29.745	33	40
M2	25/12/2023	Mid-Flood	Cloudy	Low	9:45	2.2	M	1.10	2			8.13		8.39		17.8		46.0		3.46		29.77		46	
M3	25/12/2023	Mid-Flood	Cloudy	/	9:36	2	M	1.00	1	0.08	165.338	8.26	8.27	8.44	8.425	17.8	17.85	51.5	52.20	3.87	3.925	52.11	51.995	39	38
M3	25/12/2023	Mid-Flood	Cloudy	/	9:36	2	M	1.00	2			8.28		8.41		17.9		52.9		3.98		51.88		37	
M1	25/12/2023	Mid-Ebb	Cloudy	Low	12:33	2.2	M	1.05	1	0.062	325.522	8.14	8.14	8.46	8.455	18.3	18.30	37.9	36.91	2.85	2.775	30.47	30.605	28	28
M1	25/12/2023	Mid-Ebb	Cloudy	Low	12:34	2.2	M	1.05	2			8.13		8.45		18.3		35.9		2.7		30.74		27	
M2	25/12/2023	Mid-Ebb	Cloudy	Low	12:05	2.1	M	1.00	1	0.061	331.436	8.14	8.15	8.31	8.315	18.3	18.35	39.6	40.37	2.98	3.035	29.62	29.505	30	31
M2	25/12/2023	Mid-Ebb	Cloudy	Low	12:05	2.1	M	1.00	2			8.16		8.32		18.4		41.1		3.09		29.39		32	
M3	25/12/2023	Mid-Ebb	Cloudy	/	12:21	2	M	0.80	1	0.077	331.649	8.28	8.29	8.25	8.21	18.3	18.35	52.9	52.87	3.98	3.975	47.80	47.74	31	32
M3	25/12/2023	Mid-Ebb	Cloudy	/	12:21	2	M	0.80	2			8.3		8.17		18.4		52.8		3.97		47.68		33	

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
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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	78	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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	27/12/2023	Mid-Flood	Sunny	Low	8:32	2.8	M	1.40	1	0.09	173.635	7.8	7.81	4.58	4.555	23.4	23.40	38.4	39.17	2.89	2.945	16.99	16.935	57	53
M1	27/12/2023	Mid-Flood	Sunny	Low	8:33	2.8	M	1.40	2			7.82		4.53		23.4		39.9		3		16.88		49	
M2	27/12/2023	Mid-Flood	Sunny	Low	8:56	2.6	M	1.30	1	0.087	175.917	7.62	7.62	4.32	4.335	23.4	23.45	35.6	35.44	2.68	2.665	18.66	18.445	52	54
M2	27/12/2023	Mid-Flood	Sunny	Low	8:57	2.6	M	1.30	2			7.62		4.35		23.5		35.2		2.65		18.23		55	
M3	27/12/2023	Mid-Flood	Sunny	/	8:43	2.2	M	1.00	1	0.089	190.153	7.54	7.53	4.69	4.695	23.4	23.40	51.5	50.61	3.87	3.805	37.45	37.465	14	23
M3	27/12/2023	Mid-Flood	Sunny	/	8:44	2.2	M	1.00	2			7.52		4.70		23.4		49.7		3.74		37.48		31	
M1	27/12/2023	Mid-Ebb	Sunny	Low	13:43	2.2	M	1.05	1	0.076	343.843	7.99	8.00	4.35	4.385	23.6	23.60	37.4	36.38	2.81	2.735	15.40	15.495	51	50
M1	27/12/2023	Mid-Ebb	Sunny	Low	13:44	2.2	M	1.05	2			8.01		4.42		23.6		35.4		2.66		15.59		49	
M2	27/12/2023	Mid-Ebb	Sunny	Low	13:12	2	M	1.00	1	0.074	315.903	7.64	7.64	4.57	4.605	23.6	23.60	36.3	35.44	2.73	2.665	16.70	16.715	29	34
M2	27/12/2023	Mid-Ebb	Sunny	Low	13:13	2	M	1.00	2			7.64		4.64		23.6		34.6		2.6		16.73		38	
M3	27/12/2023	Mid-Ebb	Sunny	/	13:29	1.9	M	0.80	1	0.075	314.554	7.73	7.74	4.31	4.28	23.6	23.65	51.1	51.67	3.84	3.885	41.10	40.925	51	54
M3	27/12/2023	Mid-Ebb	Sunny	/	13:30	1.9	M	0.80	2			7.74		4.25		23.7		52.3		3.93		40.75		56	

Remark

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For Flood Tide

Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M2(Impact Station)	1.88	1.79	43.0	52.4	81	112
M3(Impact Station)	3.28	3.14	74	78	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

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	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.	Value	Ave.
M1	29/12/2023	Mid-Flood	Sunny	Low	9:51	2.4	M	1.20	1	0.076	163.955	7.65	7.65	3.28	3.27	24.5	24.50	36.7	36.11	2.76	2.715	21.80	21.91	27	25
M1	29/12/2023	Mid-Flood	Sunny	Low	9:51	2.4	M	1.20	2			7.65		3.26		24.5		35.5		2.67		22.02		22	
M2	29/12/2023	Mid-Flood	Sunny	Low	10:22	2.3	M	1.15	1	0.087	173.087	7.78	7.78	3.47	3.495	24.5	24.50	34.7	35.11	2.61	2.64	22.69	22.53	23	23
M2	29/12/2023	Mid-Flood	Sunny	Low	10:23	2.3	M	1.15	2			7.77		3.52		24.5		35.5		2.67		22.37		22	
M3	29/12/2023	Mid-Flood	Sunny	/	9:59	2	M	1.00	1	0.09	183.421	7.88	7.88	3.33	3.305	24.5	24.50	48.9	48.81	3.68	3.67	45.66	45.485	42	46
M3	29/12/2023	Mid-Flood	Sunny	/	9:59	2	M	1.00	2			7.88		3.28		24.5		48.7		3.66		45.31		50	
M1	29/12/2023	Mid-Ebb	Sunny	Low	14:48	2.1	M	1.05	1	0.076	330.237	7.75	7.75	3.31	3.3	24.9	24.95	37.2	36.58	2.8	2.75	23.40	23.46	57	50
M1	29/12/2023	Mid-Ebb	Sunny	Low	14:49	2.1	M	1.05	2			7.75		3.29		25.0		35.9		2.7		23.52		42	
M2	29/12/2023	Mid-Ebb	Sunny	Low	14:24	2	M	1.00	1	0.078	310.428	7.81	7.82	3.34	3.3	24.9	24.90	33.1	32.98	2.49	2.48	24.77	24.595	50	54
M2	29/12/2023	Mid-Ebb	Sunny	Low	14:24	2	M	1.00	2			7.82		3.26		24.9		32.9		2.47		24.42		57	
M3	29/12/2023	Mid-Ebb	Sunny	/	14:36	1.8	M	0.80	1	0.074	324.008	7.83	7.83	3.43	3.4	24.9	24.95	46.6	47.08	3.5	3.54	51.36	51.22	58	59
M3	29/12/2023	Mid-Ebb	Sunny	/	14:37	1.8	M	0.80	2			7.82		3.37		25.0		47.6		3.58		51.08		60	

Remark

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Monitoring Location	DO		NTU		SS	
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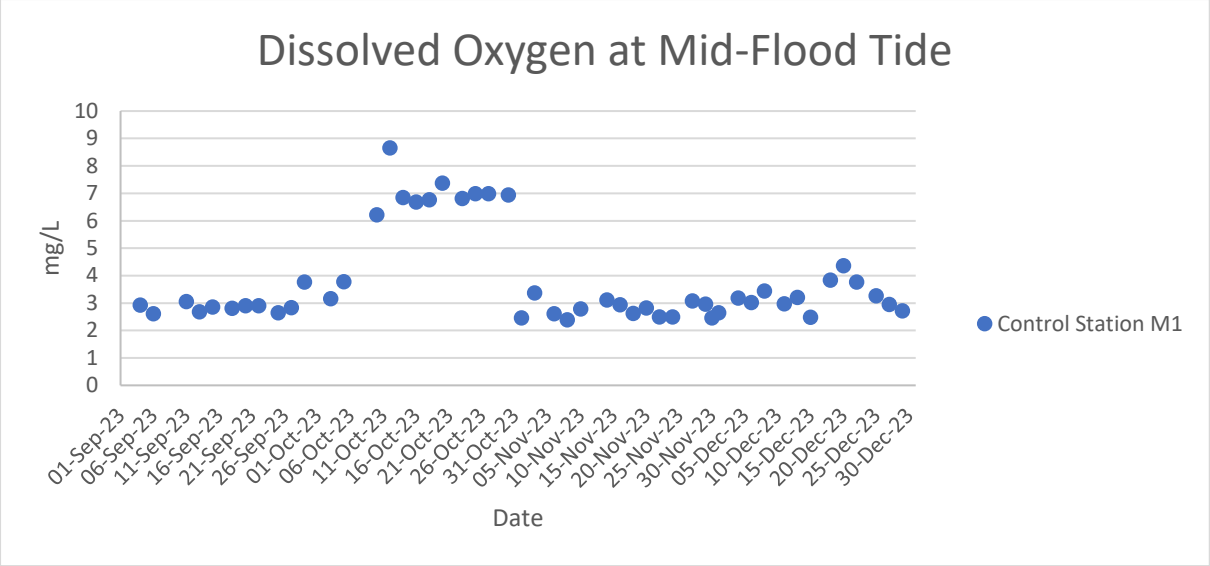
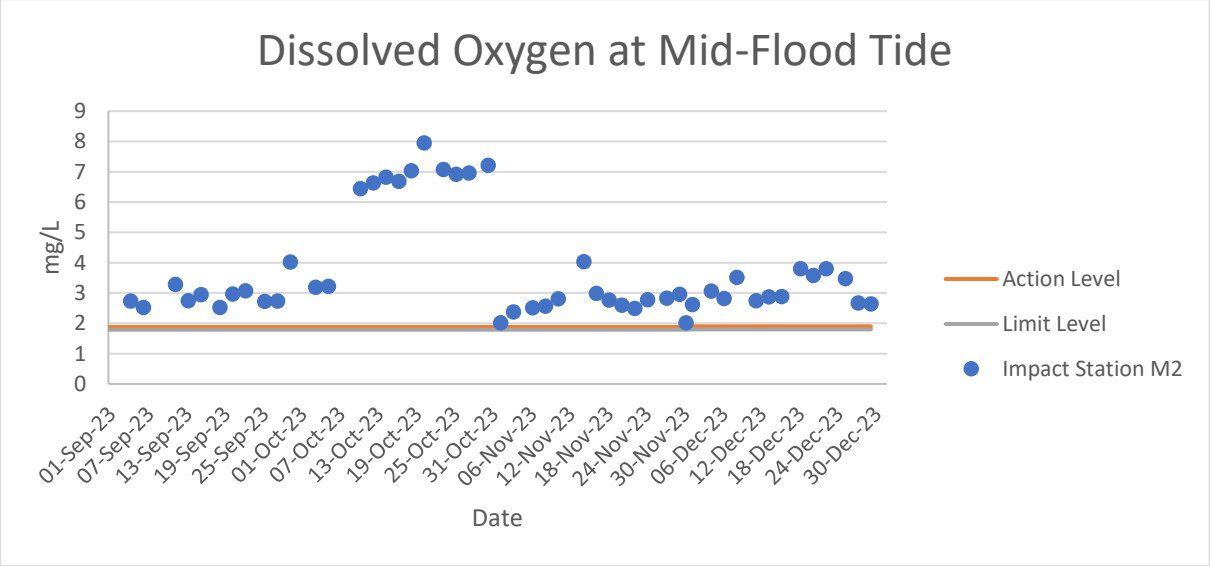
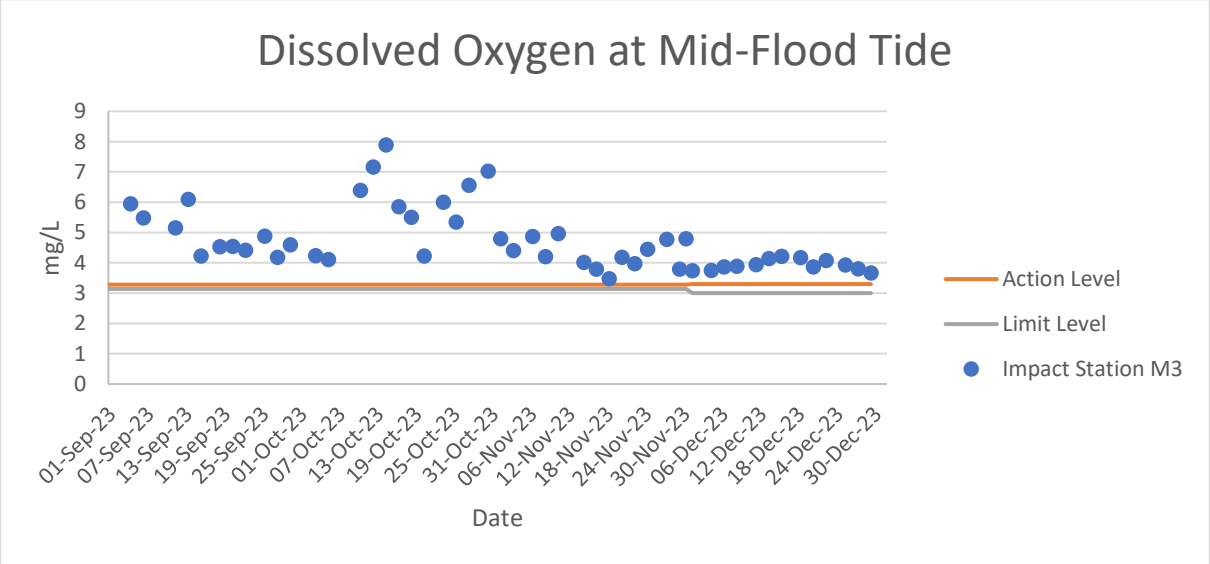
M3(Impact Station)	3.28	3.14	74	78	104	167

For Ebb Tide

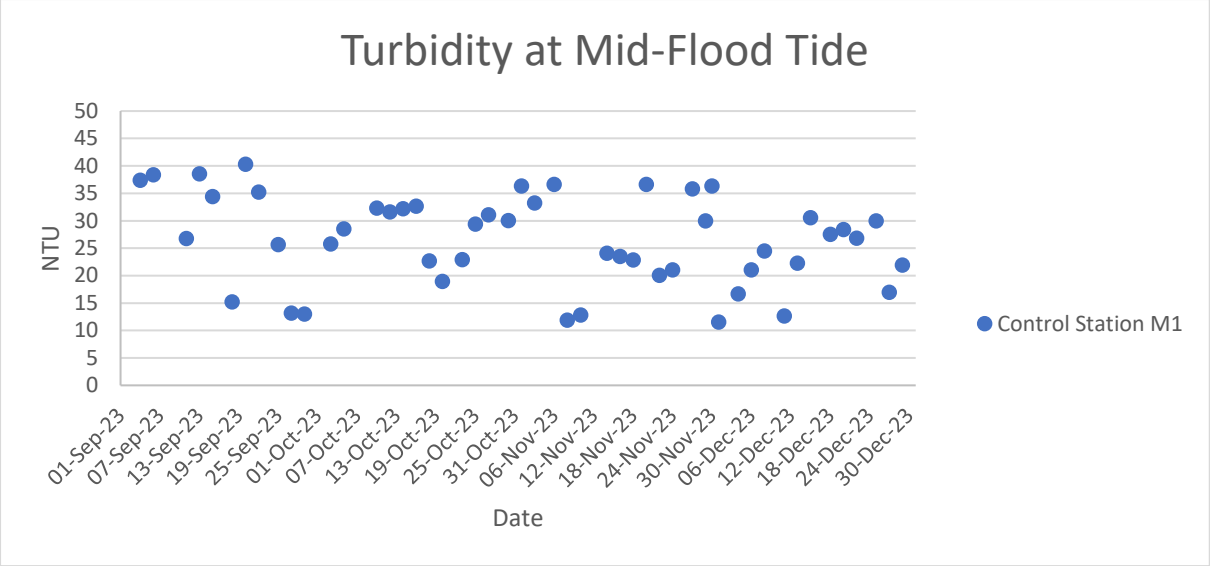
Monitoring Location	DO		NTU		SS	
	AL	LL	AL	LL	AL	LL
M1(Impact Station)	2.25	1.91	48.4	50.4	59	68

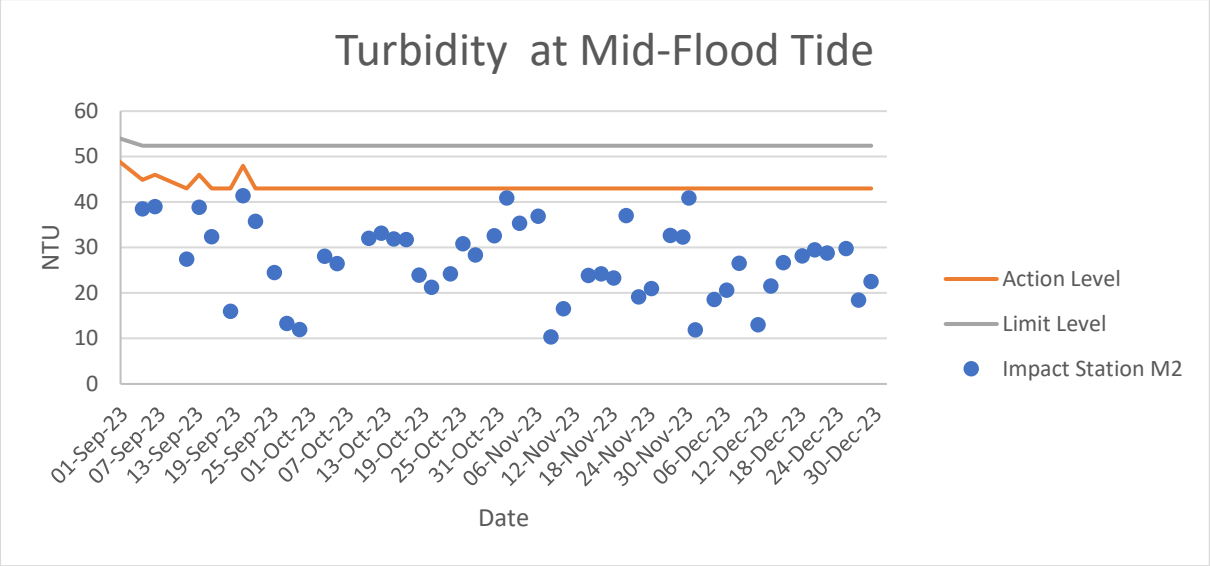


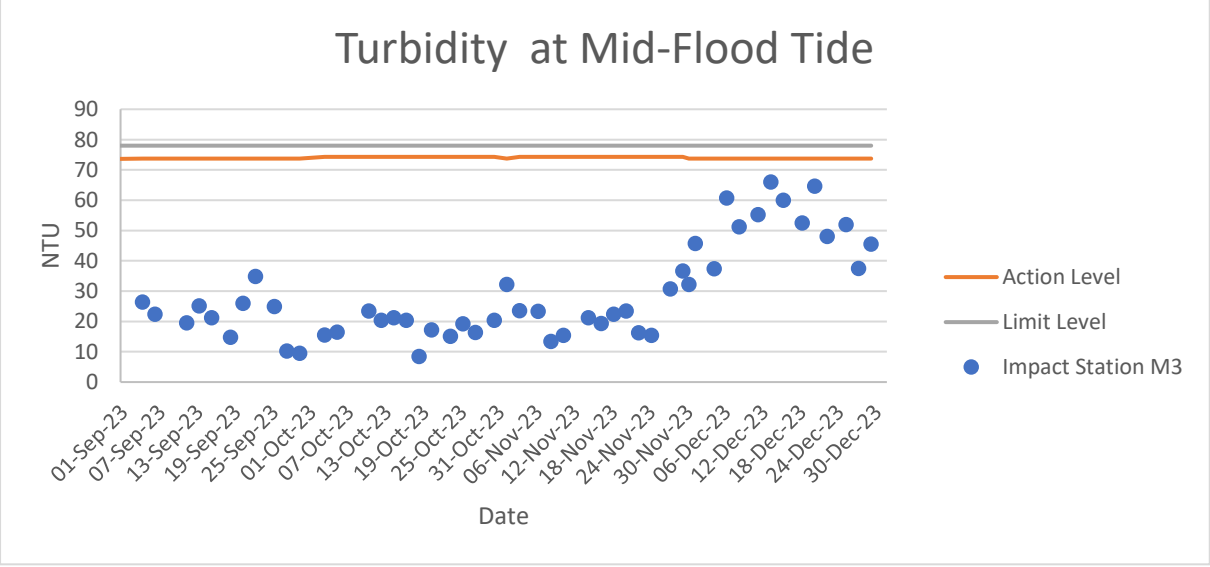




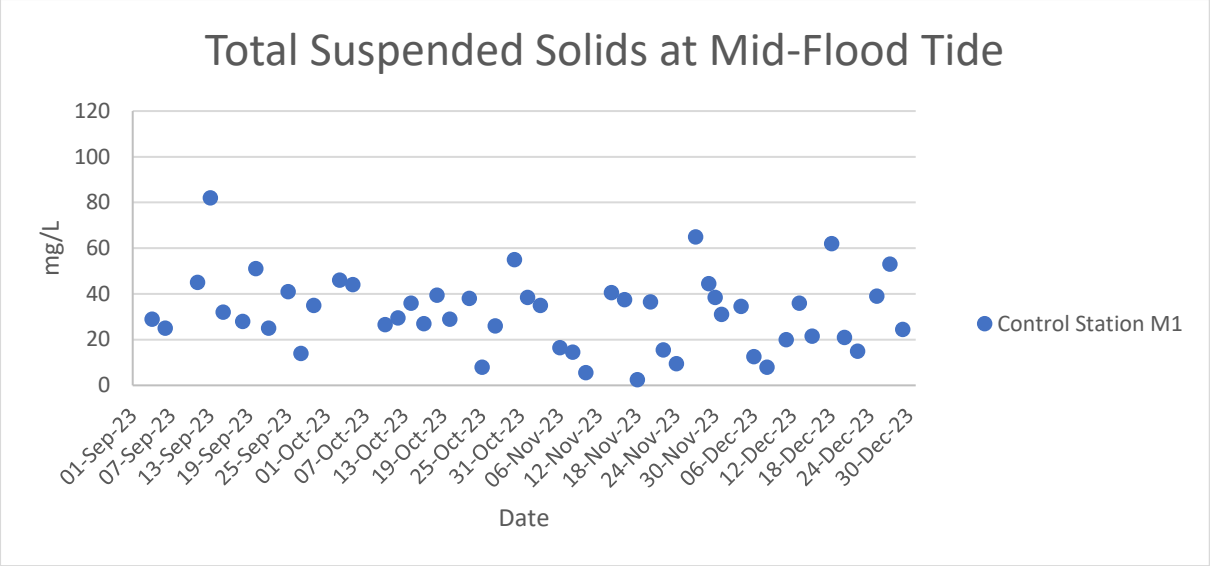
Water Quality Monitoring Results

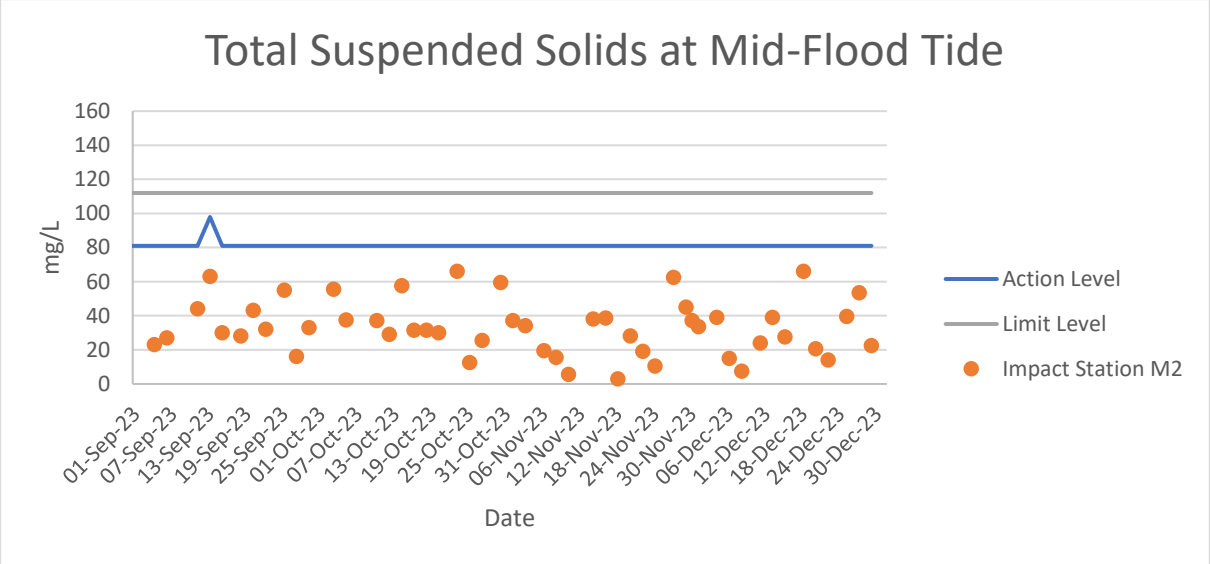


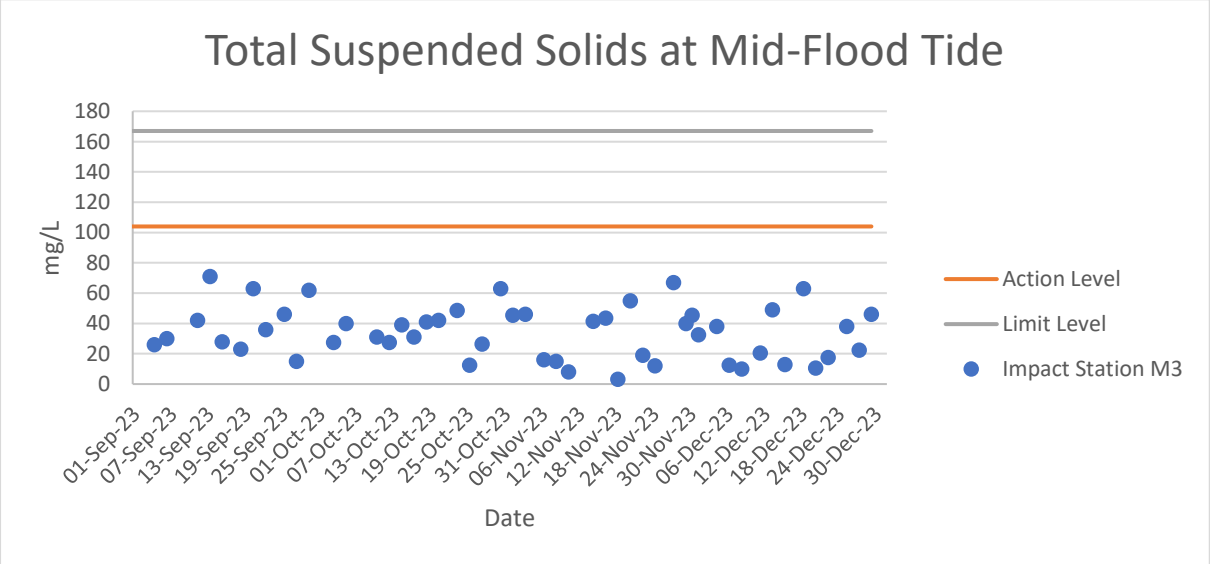




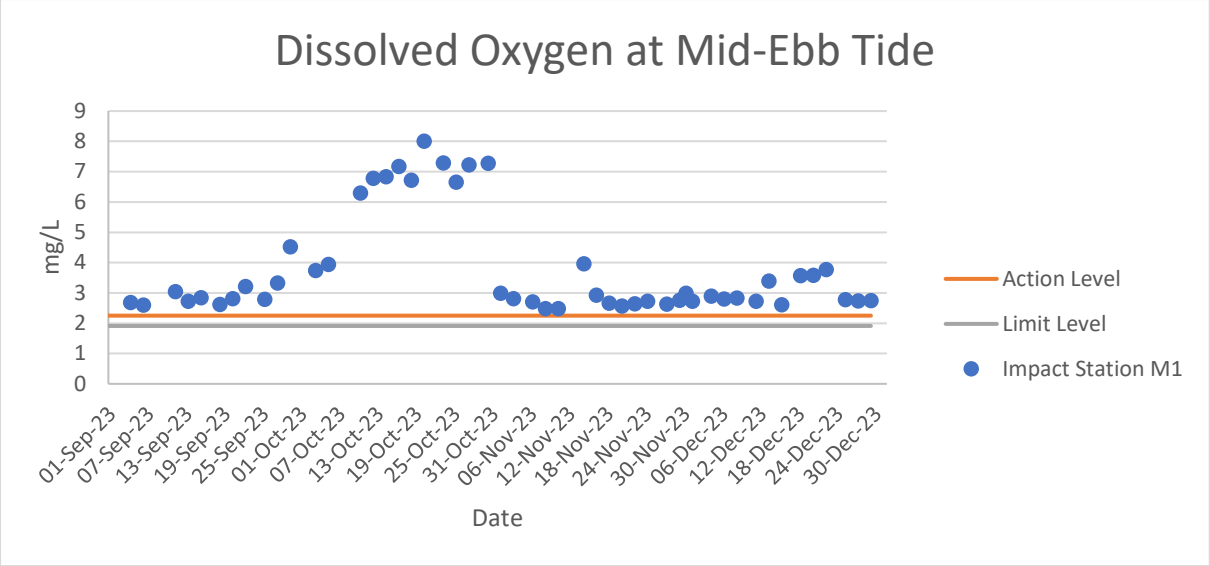
Water Quality Monitoring Results

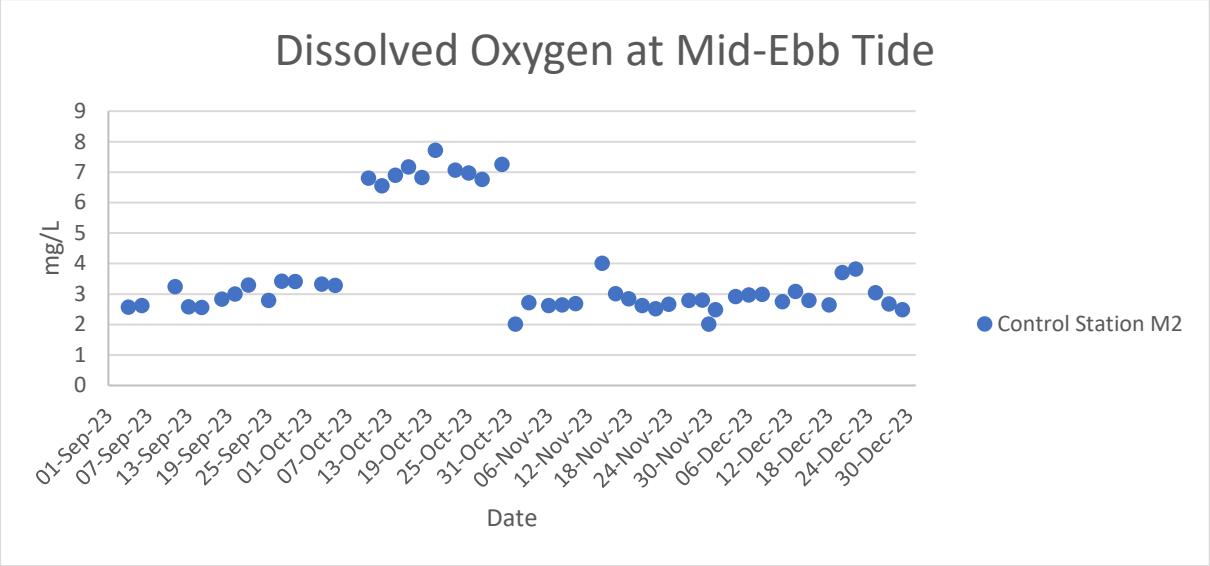


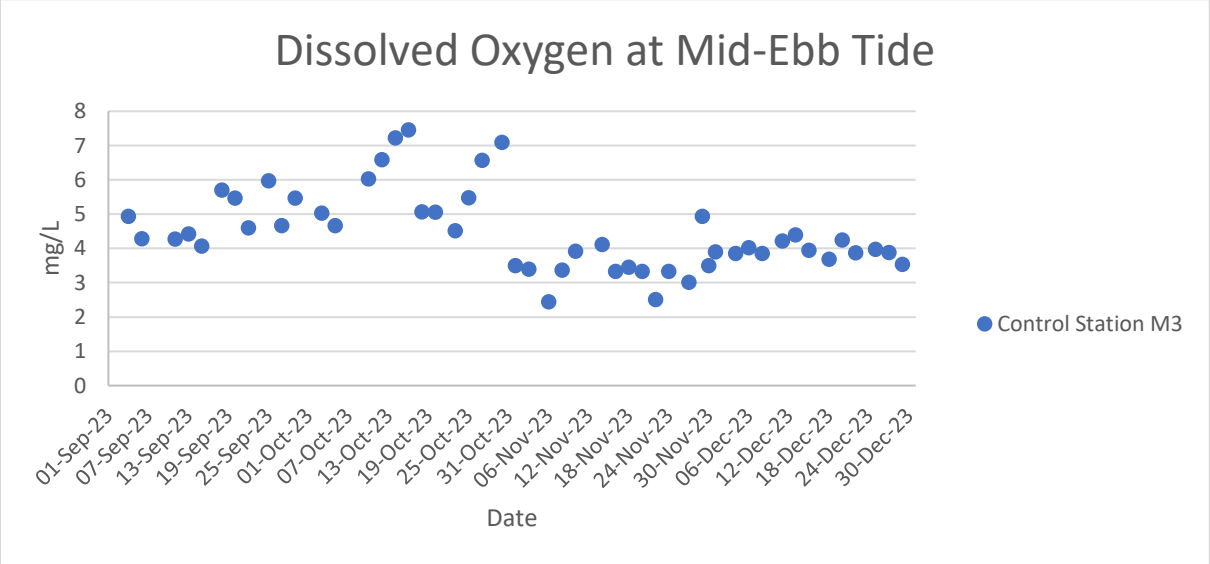




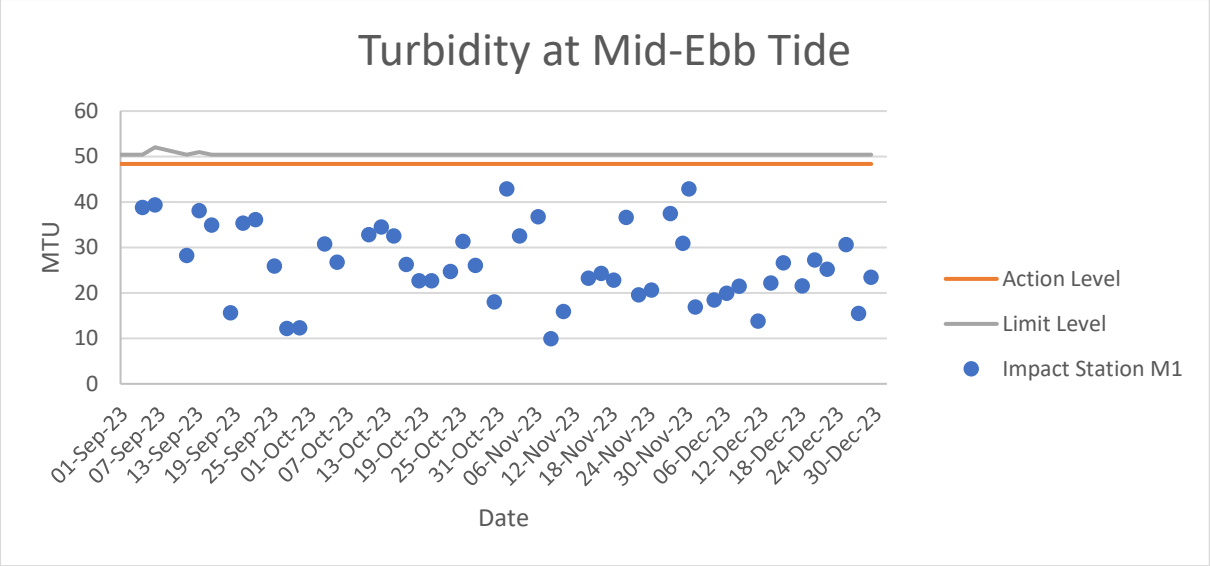
Water Quality Monitoring Results

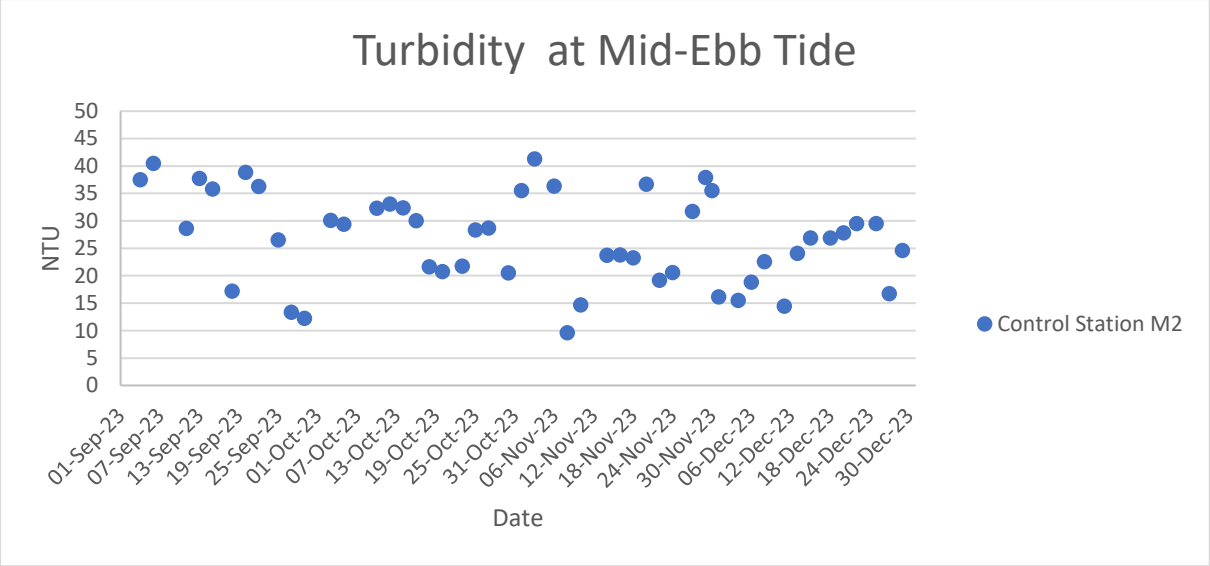


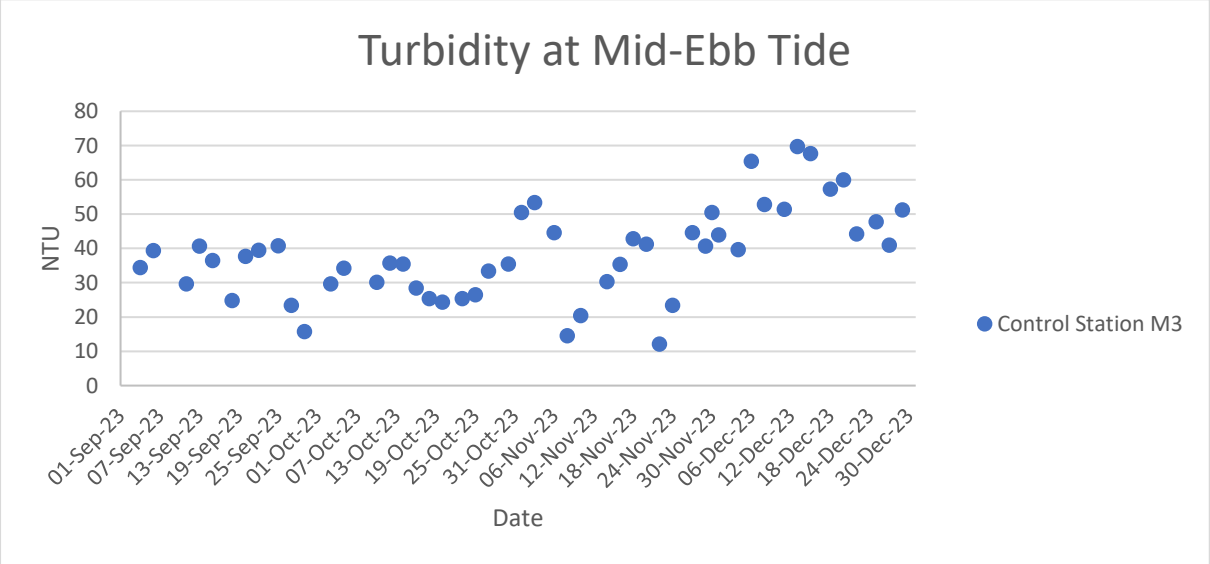




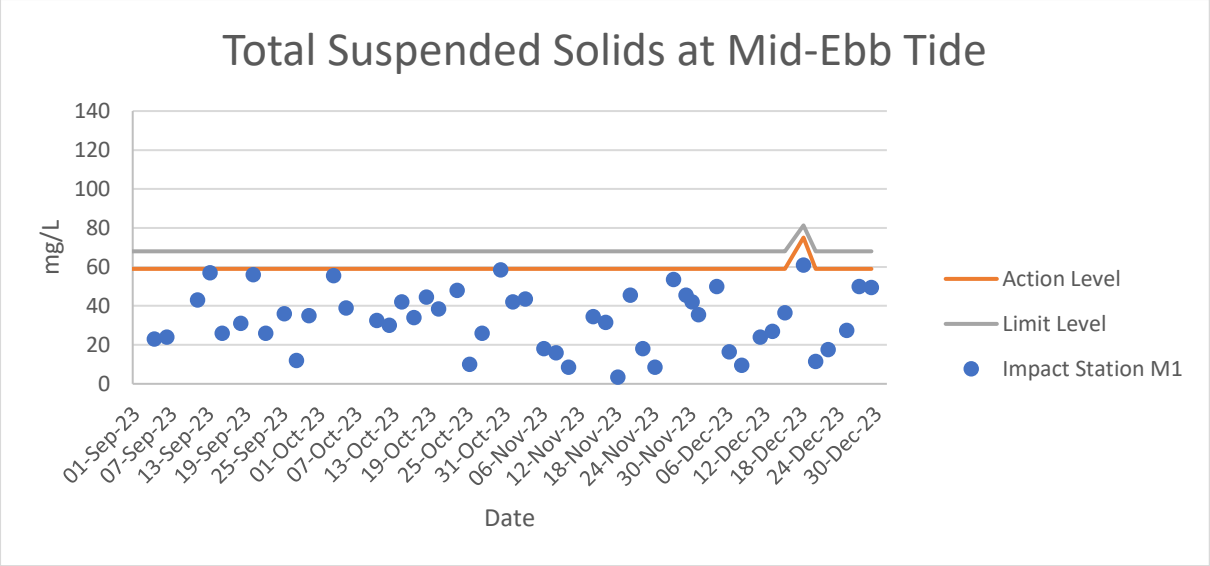
Water Quality Monitoring Results

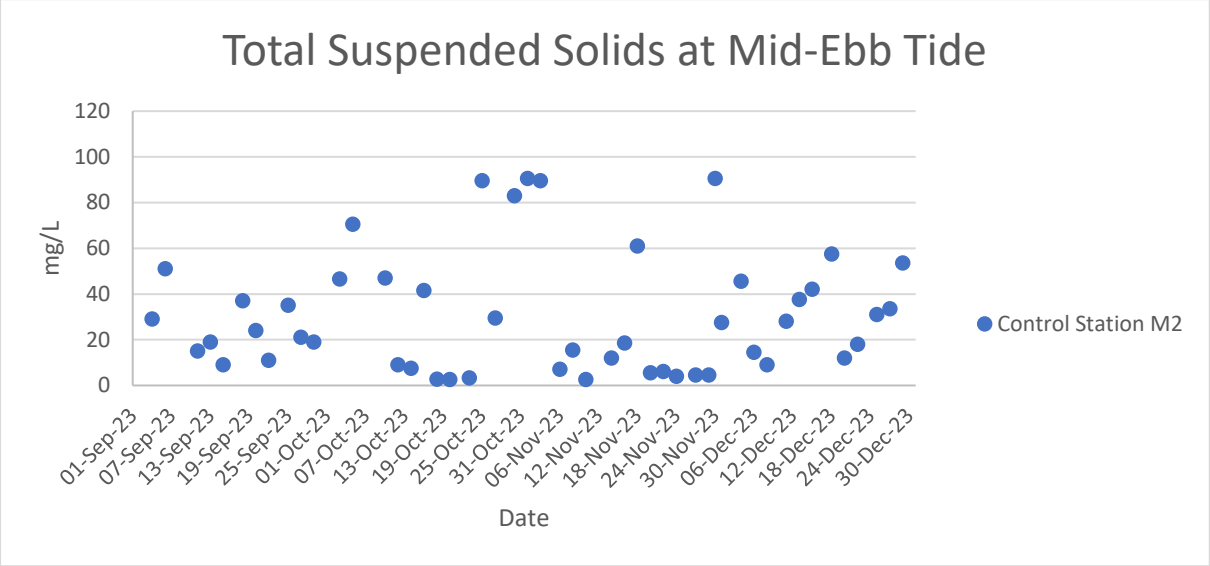


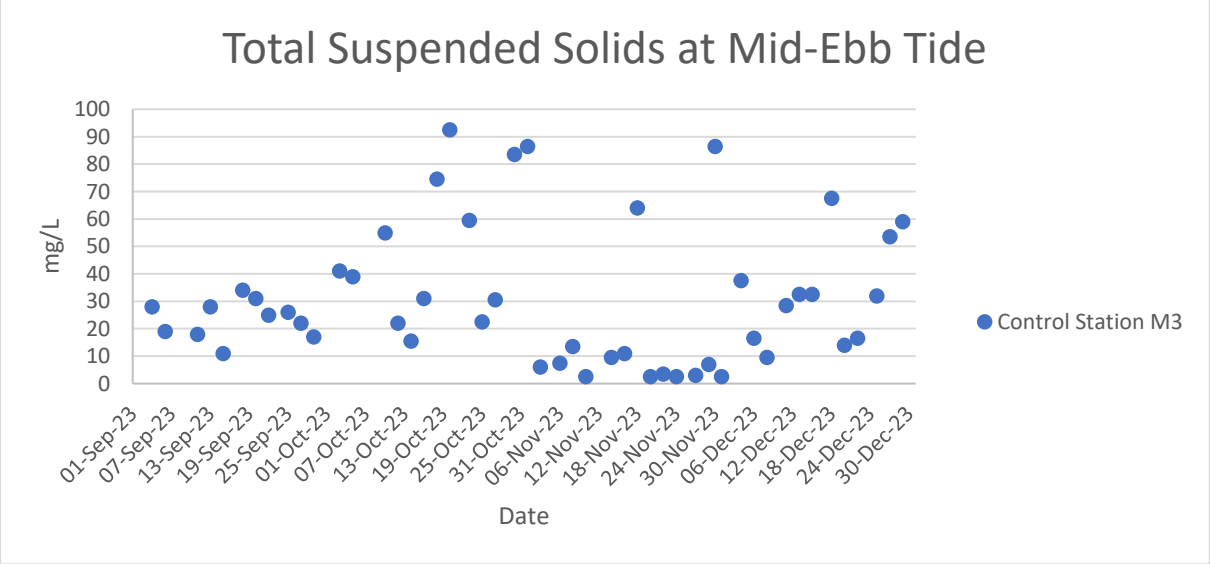




Water Quality Monitoring Results







Water Quality Monitoring Results

Ecology Monitoring Results for

Contract No. SPW 02/2023

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

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Black-collared Starling	*Gracupica nigricollis*	5	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Great Egret	*Ardea alba*	2	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Little Egret	*Egretta garzetta*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	White Wagtail	*Motacilla alba*	2	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Great Cormorant	*Phalacrocorax carbo*	4	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Chinese Pond Heron	*Ardeola bacchus*	8	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Grey Heron	*Ardea cinerea*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Common Myna	*Acridotheres tristis*	2	Uncommon	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW1	Red-billed Starling	*Spodiopsar sericeus*	10	Common	WV	GC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Black Kite	*Milvus migrans*	1	Common	R,WV	(RC)	Class II	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Black-collared Starling	*Gracupica nigricollis*	2	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Crested Myna	*Acridotheres cristatellus*	3	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Dusky Warbler	*Phylloscopus fuscatus*	3	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	White Wagtail	*Motacilla alba*	2	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	White-throated Kingfisher	*Halcyon smyrnensis*	1	Common	R	-	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Greater Coucal	*Centropus sinensis*	1	Common	R	-	Class II	Vulnerable	LC	LC	Y	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Plain Prinia	*Prinia inornata*	3	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Black-faced Bunting	*Emberiza spodocephala*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Grey Heron	*Ardea cinerea*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Little Grebe	*Tachybaptus ruficollis*	1	Common	R	LC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW2	Stejneger's Stonechat	*Saxicola stejnegeri*	1	Common	PM,WV	-	-	-	LC	LC	N	N

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	FLW	Point Count	FLW3	Chinese Bulbul	*Pycnonotus sinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW3	Common Tailorbird	*Orthotomus sutorius*	1	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW3	Crested Myna	*Acridotheres cristatellus*	2	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW3	Dusky Warbler	*Phylloscopus fuscatus*	2	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW3	Eurasian Tree Sparrow	*Passer montanus*	3	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW4	White Wagtail	*Motacilla alba*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW4	Great Cormorant	*Phalacrocorax carbo*	3	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW4	Scaly-breasted Munia	*Lonchura punctulata*	15	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW4	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW4	Greater Coucal	*Centropus sinensis*	1	Common	R	-	Class II	Vulnerable	LC	LC	Y	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW4	Common Moorhen	*Gallinula chloropus*	2	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW4	Zitting Cisticola	*Cisticola juncidis*	1	Common	PM.WV	LC	-	-	LC	LC	Y	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Black-collared Starling	*Gracupica nigricollis*	8	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Chinese Bulbul	*Pycnonotus sinensis*	3	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Crested Myna	*Acridotheres cristatellus*	10	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	White Wagtail	*Motacilla alba*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Yellow-browed Warbler	*Phylloscopus inornatus*	1	Common	WV,Sp	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Great Cormorant	*Phalacrocorax carbo*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Grey Heron	*Ardea cinerea*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Black-winged Kite	*Elanus caeruleus*	1	Uncommon	O	LC	Class II	VU	NT	LC	Y	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW5	Azure-winged Magpie	*Cyanopica cyanus*	6	Introduced	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Crested Myna	*Acridotheres cristatellus*	4	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Dusky Warbler	*Phylloscopus fuscatus*	1	Common	PM,WV	-	-	-	LC	LC	N	N

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Masked Laughingthrush	*Pterorhinus perspicillatus*	4	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Great Cormorant	*Phalacrocorax carbo*	2	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	White-breasted Waterhen	*Amaurornis phoenicurus*	1	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Eastern Buzzard	*Buteo japonicus*	1	Common	WV	-	Class II	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Chinese Pond Heron	*Ardeola bacchus*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW6	Grey Heron	*Ardea cinerea*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Black-collared Starling	*Gracupica nigricollis*	15	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Crested Myna	*Acridotheres cristatellus*	8	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Great Egret	*Ardea alba*	2	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Spotted Dove	*Spilopelia chinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Swinhoe's White-eye	*Zosterops simplex*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Eurasian Collared Dove	*Streptopelia decaocto*	4	Common	-	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Great Cormorant	*Phalacrocorax carbo*	12	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Chinese Pond Heron	*Ardeola bacchus*	2	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Little Grebe	*Tachybaptus ruficollis*	2	Common	R	LC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Eastern Cattle Egret	*Bubulcus coromandus*	11	Common	R.PM	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Black-crowned Night Heron	*Nycticorax nycticorax*	1	Common	R,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	FLW	Point Count	FLW7	Red-billed Starling	*Spodiopsar sericeus*	5	Common	WV	GC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Chinese Bulbul	*Pycnonotus sinensis*	11	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Common Tailorbird	*Orthotomus sutorius*	1	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Crested Myna	*Acridotheres cristatellus*	25	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Eurasian Tree Sparrow	*Passer montanus*	15	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Spotted Dove	*Spilopelia chinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Swinhoe's White-eye	*Zosterops simplex*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	White Wagtail	*Motacilla alba*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Yellow-browed Warbler	*Phylloscopus inornatus*	1	Common	WV,Sp	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Eurasian Collared Dove	*Streptopelia decaocto*	6	Common	-	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Great Cormorant	*Phalacrocorax carbo*	14	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Scaly-breasted Munia	*Lonchura punctulata*	35	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Eastern Yellow Wagtail	*Motacilla tschutschensis*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Black-faced Bunting	*Emberiza spodocephala*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Grey Heron	*Ardea cinerea*	2	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Little Grebe	*Tachybaptus ruficollis*	2	Common	R	LC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Common Moorhen	*Gallinula chloropus*	2	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Common Myna	*Acridotheres tristis*	5	Uncommon	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Tufted Duck	*Aythya fuligula*	2	Uncommon	WV	LC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Pied Kingfisher	*Ceryle rudis*	1	Uncommon	R	-	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	FLW	Transect	FLW	White-cheeked Starling	*Spodiopsar cineraceus*	4	Common	WV	PRC	-	-	-	-	Y	N
4/12/2023	Daytime	Dry	FLW	Transect	FLW	Red-billed Starling	*Spodiopsar sericeus*	15	Common	WV	GC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW1	Chinese Bulbul	*Pycnonotus sinensis*	4	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	NSW2	Crested Myna	*Acridotheres cristatellus*	8	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	NSW3	Dusky Warbler	*Phylloscopus fuscatus*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	NSW4	Great Egret	*Ardea alba*	1	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW5	Little Egret	*Egretta garzetta*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW6	Red-whiskered Bulbul	*Pycnonotus jocosus*	2	Abundant	R	-	-	-	LC	LC	N	N

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	NSW	Point Count	NSW7	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	NSW8	Swinhoe's White-eye	*Zosterops simplex*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	NSW9	White Wagtail	*Motacilla alba*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	NSW10	Great Cormorant	*Phalacrocorax carbo*	35	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW11	White-breasted Waterhen	*Amaurornis phoenicurus*	1	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW12	Collared Crow	*Corvus torquatus*	1	Uncommon	R	LC	-	-	NT	VU	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW13	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW14	Common Sandpiper	*Actitis hypoleucos*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW15	Grey Heron	*Ardea cinerea*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	NSW16	Azure-winged Magpie	*Cyanopica cyanus*	4	Introduced	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	NSW17	Northern Shoveler	*Spatula clypeata*	2	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW1	Common Tailorbird	*Orthotomus sutorius*	1	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW2	Crested Myna	*Acridotheres cristatellus*	4	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW3	Dusky Warbler	*Phylloscopus fuscatus*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW4	Little Egret	*Egretta garzetta*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW5	White Wagtail	*Motacilla alba*	1	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW6	Yellow-browed Warbler	*Phylloscopus inornatus*	1	Common	WV,Sp	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW7	Great Cormorant	*Phalacrocorax carbo*	4	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW8	Chinese Pond Heron	*Ardeola bacchus*	8	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW9	Black-winged Stilt	*Himantopus himantopus*	7	Common	PM	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW10	Eurasian Teal	*Anas crecca*	6	Common	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW11	Northern Shoveler	*Spatula clypeata*	16	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW12	Black-tailed Godwit	*Limosa limosa*	2	Abundant	M,W	RC	-	Indeterminate	-	NT	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW13	Eurasian Wigeon	*Mareca penelope*	1	Common	WV	RC	-	-	LC	LC	Y	Y

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW14	Green Sandpiper	*Tringa ochropus*	1	Uncommon	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW15	Pied Avocet	*Recurvirostra avosetta*	4	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW16	Black-headed Gull	*Chroicocephalus ridibundus*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW2	Crested Myna	*Acridotheres cristatellus*	3	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW3	Masked Laughingthrush	*Pterorhinus perspicillatus*	3	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW4	Spotted Dove	*Spilopelia chinensis*	1	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW5	Great Cormorant	*Phalacrocorax carbo*	2	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW6	Azure-winged Magpie	*Cyanopica cyanus*	12	Introduced	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW3	Common Tailorbird	*Orthotomus sutorius*	1	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW4	Great Egret	*Ardea alba*	3	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW5	Great Cormorant	*Phalacrocorax carbo*	29	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW6	White-throated Kingfisher	*Halcyon smyrnensis*	1	Common	R	-	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW7	Chinese Pond Heron	*Ardeola bacchus*	7	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW8	Common Redshank	*Tringa totanus*	2	Common	PM	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW9	Common Greenshank	*Tringa nebularia*	4	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW10	Grey Heron	*Ardea cinerea*	4	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW11	Eurasian Teal	*Anas crecca*	35	Common	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW12	Common Moorhen	*Gallinula chloropus*	1	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW13	Northern Shoveler	*Spatula clypeata*	25	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW14	Black-tailed Godwit	*Limosa limosa*	4	Abundant	M,W	RC	-	Indeterminate	-	NT	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW15	Eurasian Wigeon	*Mareca penelope*	6	Common	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW16	Tufted Duck	*Aythya fuligula*	11	Uncommon	WV	LC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW17	Garganey	*Spatula querquedula*	4	Common	M,W	-	-	-	-	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW18	Marsh Sandpiper	*Tringa stagnatilis*	2	Common	PM,WV	RC	-	-	LC	LC	Y	Y

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW19	Pied Kingfisher	*Ceryle rudis*	1	Uncommon	R	-	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Point Count	SP/NSW20	Pied Avocet	*Recurvirostra avosetta*	2	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Chinese Pond Heron	*Ardeola bacchus*	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Black-winged Stilt	*Himantopus himantopus*	2	Common	PM	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Wood Sandpiper	*Tringa glareola*	1	Common	PM,WV	LC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Common Sandpiper	*Actitis hypoleucos*	2	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Plain Prinia	*Prinia inornata*	1	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Grey Heron	*Ardea cinerea*	1	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Eurasian Teal	*Anas crecca*	8	Common	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Common Moorhen	*Gallinula chloropus*	2	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Northern Shoveler	*Spatula clypeata*	4	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Black-tailed Godwit	*Limosa limosa*	1	Abundant	M,W	RC	-	Indeterminate	-	NT	Y	Y
4/12/2023	Daytime	Dry	NSW	Transect	NSW	Pied Avocet	*Recurvirostra avosetta*	35	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Chinese Bulbul	*Pycnonotus sinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Crested Myna	*Acridotheres cristatellus*	4	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Dusky Warbler	*Phylloscopus fuscatus*	2	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Great Egret	*Ardea alba*	2	Common	R,WV	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Little Egret	*Egretta garzetta*	1	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Oriental Magpie Robin	*Copsychus saularis*	1	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Spotted Dove	*Spilopelia chinensis*	2	Abundant	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	White Wagtail	*Motacilla alba*	2	Common	PM,WV	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Yellow-browed Warbler	*Phylloscopus inornatus*	1	Common	WV,Sp	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Great Cormorant	*Phalacrocorax carbo*	12	Common	WV	PRC	-	-	LC	LC	Y	Y

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	White-breasted Waterhen	*Amaurornis phoenicurus*	1	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Scaly-breasted Munia	*Lonchura punctulata*	4	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Chinese Pond Heron	*Ardeola bacchus*	16	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Common Kingfisher	*Alcedo atthis*	1	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Black-winged Stilt	*Himantopus himantopus*	15	Common	PM	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Common Redshank	*Tringa totanus*	3	Common	PM	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Common Greenshank	*Tringa nebularia*	5	Abundant	PM,WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Wood Sandpiper	*Tringa glareola*	1	Common	PM,WV	LC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Common Sandpiper	*Actitis hypoleucos*	4	Common	PM,WV	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Plain Prinia	*Prinia inornata*	2	Common	R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Grey Heron	*Ardea cinerea*	7	Common	WV	PRC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Eurasian Teal	*Anas crecca*	21	Common	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Common Moorhen	*Gallinula chloropus*	11	Common	R	-	-	-	LC	LC	N	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Northern Shoveler	*Spatula clypeata*	25	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Black-tailed Godwit	*Limosa limosa*	2	Abundant	M,W	RC	-	Indeterminate	-	NT	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Eurasian Wigeon	*Mareca penelope*	8	Common	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Marsh Sandpiper	*Tringa stagnatilis*	4	Common	PM,WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Pied Avocet	*Recurvirostra avosetta*	8	Abundant	WV	RC	-	-	LC	LC	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	House Swift	*Apus nipalensis*	50	Abundant, Common	SpM,R	-	-	-	LC	LC	N	N
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Black-faced Spoonbill	*Platalea minor*	1	Common	WV	PGC	Class II	EN	EN	EN	Y	Y
4/12/2023	Daytime	Dry	YLIE-CW	Transect	YLIE-CW	Black-headed Gull	*Chroicocephalus ridibundus*	2	Common	WV	PRC	-	-	LC	LC	Y	Y
15/12/2023	Night-time	Dry	FLW	Point Count	FLW1	Black-crowned Night Heron	*Nycticorax nycticorax*	1	Common	R,WV	-	-	-	LC	LC	N	Y
15/12/2023	Night-time	Dry	FLW	Point Count	FLW2	Pied Kingfisher	*Ceryle rudis*	1	Uncommon	R	-	-	-	LC	LC	Y	Y
15/12/2023	Night-time	Dry	FLW	Point Count	FLW3	Black-crowned Night Heron	*Nycticorax nycticorax*	2	Common	R,WV	-	-	-	LC	LC	N	Y

Appendix F.1 Ecological Bird Monitoring Result (4 and 15 December 2023)

Date (dd/mm/yyyy)	Daytime/ Night time	Season	Area	Transect / Point Count	Point Count (Location) / Transect Impact	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[9]	IUCN Red List[7] (v.2020-3)	Species of Conservation Importance	Wetland Dependent[8]
15/12/2023	Night-time	Dry	FLW	Point Count	FLW5	Chinese Pond Heron	*Ardeola bacchus*	4	Common	R	PRC (RC)	-	-	LC	LC	Y	Y
15/12/2023	Night-time	Dry	FLW	Transect	FLW	Savanna Nightjar	*Caprimulgus affinis*	2	Uncommon	R.PM	-	-	-	DD	-	N	N
15/12/2023	Night-time	Dry	FLW	Transect	FLW	Collared Scops Owl	*Otus lettia*	1	Common	R	-	Class II	-	LC	LC	Y	N
15/12/2023	Night-time	Dry	NSW	Point Count	SP/NSW1	Black-crowned Night Heron	*Nycticorax nycticorax*	1	Common	R,WV	-	-	-	LC	LC	N	Y
15/12/2023	Night-time	Dry	NSW	Point Count	SP/NSW3	Black-crowned Night Heron	*Nycticorax nycticorax*	1	Common	R,WV	-	-	-	LC	LC	N	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.
8. Wetland-dependent species (including wetland-dependent species and waterbirds).
9. Jiang et al. (2016). Red List of China's Vertebrates

Appendix F.2.1 Ecological Bird Monitoring Diversity (All avifauna species in Point Count Method) in All Habitats (4 and 15 December 2023)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)^2
Spatula querquedula	4	0.00787	-4.84419	-0.03814	0.18477
Spatula clypeata	43	0.08465	-2.46928	-0.20901	0.51611
Mareca penelope	7	0.01378	-4.28457	-0.05904	0.25296
Anas crecca	41	0.08071	-2.51691	-0.20314	0.51128
Aythya fuligula	11	0.02165	-3.83259	-0.08299	0.31806
Tachybaptus ruficollis	3	0.00591	-5.13187	-0.03031	0.15553
Nycticorax nycticorax	6	0.01181	-4.43872	-0.05243	0.23270
Ardeola bacchus	30	0.05906	-2.82928	-0.16708	0.47273
Bubulcus coromandus	11	0.02165	-3.83259	-0.08299	0.31806
Ardea cinerea	9	0.01772	-4.03326	-0.07146	0.28820
Ardea alba	8	0.01575	-4.15104	-0.06537	0.27136
Egretta garzetta	4	0.00787	-4.84419	-0.03814	0.18477
Phalacrocorax carbo	92	0.18110	-1.70869	-0.30945	0.52875
Elanus caeruleus	1	0.00197	-6.23048	-0.01226	0.07642
Milvus migrans	1	0.00197	-6.23048	-0.01226	0.07642
Buteo japonicus	1	0.00197	-6.23048	-0.01226	0.07642
Amaurornis phoenicurus	2	0.00394	-5.53733	-0.02180	0.12072
Gallinula chloropus	3	0.00591	-5.13187	-0.03031	0.15553
Himantopus himantopus	7	0.01378	-4.28457	-0.05904	0.25296
Recurvirostra avosetta	6	0.01181	-4.43872	-0.05243	0.23270
Limosa limosa	6	0.01181	-4.43872	-0.05243	0.23270
Actitis hypoleucos	1	0.00197	-6.23048	-0.01226	0.07642
Tringa ochropus	1	0.00197	-6.23048	-0.01226	0.07642
Tringa totanus	2	0.00394	-5.53733	-0.02180	0.12072
Tringa stagnatilis	2	0.00394	-5.53733	-0.02180	0.12072
Tringa nebularia	4	0.00787	-4.84419	-0.03814	0.18477
Chroicocephalus ridibundus	1	0.00197	-6.23048	-0.01226	0.07642
Streptopelia decaocto	4	0.00787	-4.84419	-0.03814	0.18477
Spilopelia chinensis	7	0.01378	-4.28457	-0.05904	0.25296
Centropus sinensis	2	0.00394	-5.53733	-0.02180	0.12072
Halcyon smyrnensis	2	0.00394	-5.53733	-0.02180	0.12072
Alcedo atthis	3	0.00591	-5.13187	-0.03031	0.15553
Ceryle rudis	2	0.00394	-5.53733	-0.02180	0.12072
Cyanopica cyanus	22	0.04331	-3.13944	-0.13596	0.42684
Corvus torquatus	1	0.00197	-6.23048	-0.01226	0.07642
Pycnonotus jocosus	2	0.00394	-5.53733	-0.02180	0.12072
Pycnonotus sinensis	9	0.01772	-4.03326	-0.07146	0.28820
Phylloscopus inornatus	2	0.00394	-5.53733	-0.02180	0.12072
Phylloscopus fuscatus	8	0.01575	-4.15104	-0.06537	0.27136
Cisticola juncidis	1	0.00197	-6.23048	-0.01226	0.07642
Prinia inornata	5	0.00984	-4.62104	-0.04548	0.21018
Orthotomus sutorius	3	0.00591	-5.13187	-0.03031	0.15553
Pterorhinus perspicillatus	7	0.01378	-4.28457	-0.05904	0.25296
Zosterops simplex	4	0.00787	-4.84419	-0.03814	0.18477

Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)^2
Acridotheres cristatellus	42	0.08268	-2.49281	-0.20610	0.51377
Acridotheres tristis	2	0.00394	-5.53733	-0.02180	0.12072
Spodiopsar sericeus	15	0.02953	-3.52243	-0.10401	0.36636
Gracupica nigricollis	30	0.05906	-2.82928	-0.16708	0.47273
Saxicola stejnegeri	1	0.00197	-6.23048	-0.01226	0.07642
Passer montanus	3	0.00591	-5.13187	-0.03031	0.15553
Lonchura punctulata	15	0.02953	-3.52243	-0.10401	0.36636
Motacilla alba	8	0.01575	-4.15104	-0.06537	0.27136
Emberiza spodocephala	1	0.00197	-6.23048	-0.01226	0.07642
Total	508	1	-250.31197	-3.21086	11.67375
Richness	53				
SS	11.67375				
SQ	10.30963				
H	3.21086				
S^2H	0.00279				

Appendix F.2.2 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Point Count Method) in All Habitats (4 and 15 December 2023)

Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Spatula clypeata	43	0.13480	-2.00399	-0.27013	0.54134
Mareca penelope	7	0.02194	-3.81928	-0.08381	0.32009
Anas crecca	41	0.12853	-2.05162	-0.26369	0.54099
Aythya fuligula	11	0.03448	-3.36730	-0.11611	0.39099
Tachybaptus ruficollis	3	0.00940	-4.66658	-0.04389	0.20480
Nycticorax nycticorax	6	0.01881	-3.97343	-0.07474	0.29696
Ardeola bacchus	30	0.09404	-2.36399	-0.22232	0.52556
Bubulcus coromandus	11	0.03448	-3.36730	-0.11611	0.39099
Ardea cinerea	9	0.02821	-3.56797	-0.10066	0.35916
Ardea alba	8	0.02508	-3.68575	-0.09243	0.34068
Egretta garzetta	4	0.01254	-4.37890	-0.05491	0.24044
Phalacrocorax carbo	92	0.28840	-1.24340	-0.35860	0.44588
Elanus caeruleus	1	0.00313	-5.76519	-0.01807	0.10419
Milvus migrans	1	0.00313	-5.76519	-0.01807	0.10419
Buteo japonicus	1	0.00313	-5.76519	-0.01807	0.10419
Himantopus himantopus	7	0.02194	-3.81928	-0.08381	0.32009
Recurvirostra avosetta	6	0.01881	-3.97343	-0.07474	0.29696
Limosa limosa	6	0.01881	-3.97343	-0.07474	0.29696
Tringa totanus	2	0.00627	-5.07204	-0.03180	0.16129
Tringa stagnatilis	2	0.00627	-5.07204	-0.03180	0.16129
Tringa nebularia	4	0.01254	-4.37890	-0.05491	0.24044
Chroicocephalus ridibundus	1	0.00313	-5.76519	-0.01807	0.10419
Centropus sinensis	2	0.00627	-5.07204	-0.03180	0.16129
Halcyon smyrnensis	2	0.00627	-5.07204	-0.03180	0.16129
Ceryle rudis	2	0.00627	-5.07204	-0.03180	0.16129
Corvus torquatus	1	0.00313	-5.76519	-0.01807	0.10419
Cisticola juncidis	1	0.00313	-5.76519	-0.01807	0.10419
Spodiopsar sericeus	15	0.04702	-3.05714	-0.14375	0.43947
Total	319	1	-117.64305	-2.49677	7.62338
Richness	28				
SS	7.62338				
SQ	6.23387				
H	2.49677				
S^2H	0.00464				

Appendix F.2.3 Ecological Bird Monitoring Diversity (All avifauna species in Transect Walk Method) in All Habitats (4 and 15 December 2023)

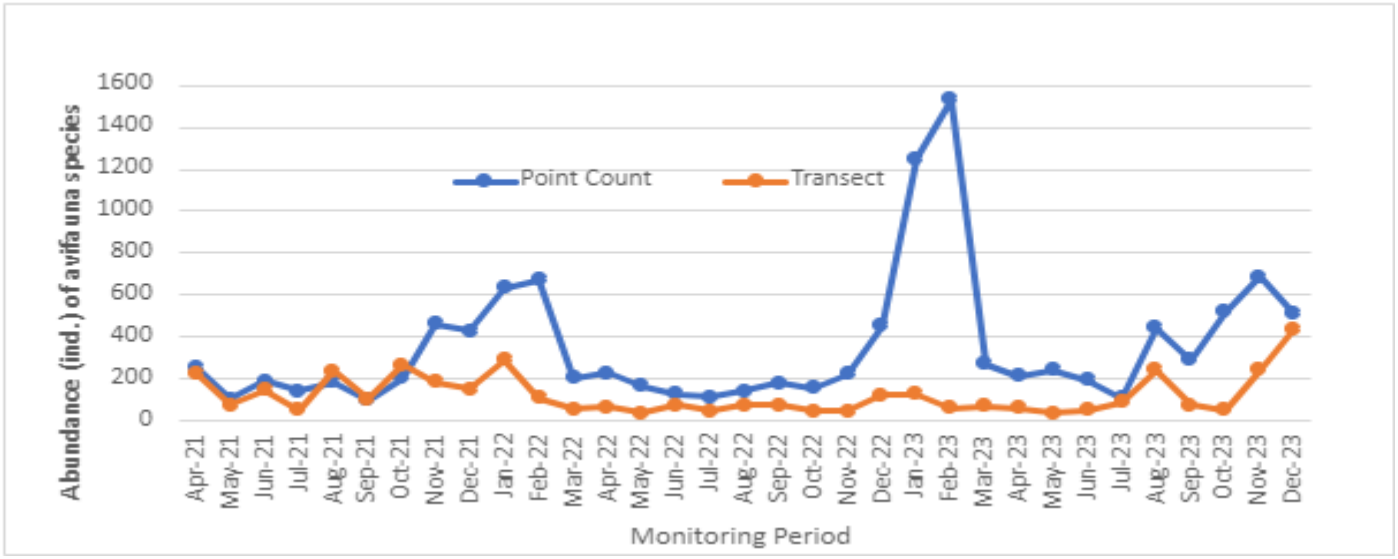
Scientific Name	Count	P	Ln(P)	P*Ln(P)	$P*Ln(P)^2$
Spatula clypeata	29	0.06651	-2.71035	-0.18028	0.48861
Mareca penelope	8	0.01835	-3.99820	-0.07336	0.29331
Anas crecca	29	0.06651	-2.71035	-0.18028	0.48861
Aythya fuligula	2	0.00459	-5.38450	-0.02470	0.13299
Tachybaptus ruficollis	2	0.00459	-5.38450	-0.02470	0.13299
Platalea minor	1	0.00229	-6.07764	-0.01394	0.08472
Ardeola bacchus	20	0.04587	-3.08191	-0.14137	0.43570
Ardea cinerea	10	0.02294	-3.77506	-0.08658	0.32686
Ardea alba	3	0.00688	-4.97903	-0.03426	0.17058
Egretta garzetta	1	0.00229	-6.07764	-0.01394	0.08472
Phalacrocorax carbo	26	0.05963	-2.81955	-0.16814	0.47407
Amaurornis phoenicurus	1	0.00229	-6.07764	-0.01394	0.08472
Gallinula chloropus	15	0.03440	-3.36959	-0.11593	0.39062
Himantopus himantopus	17	0.03899	-3.24443	-0.12650	0.41043
Recurvirostra avosetta	43	0.09862	-2.31644	-0.22846	0.52921
Limosa limosa	3	0.00688	-4.97903	-0.03426	0.17058
Actitis hypoleucos	6	0.01376	-4.28588	-0.05898	0.25278
Tringa totanus	3	0.00688	-4.97903	-0.03426	0.17058
Tringa stagnatilis	4	0.00917	-4.69135	-0.04304	0.20192
Tringa glareola	2	0.00459	-5.38450	-0.02470	0.13299
Tringa nebularia	5	0.01147	-4.46820	-0.05124	0.22895
Chroicocephalus ridibundus	2	0.00459	-5.38450	-0.02470	0.13299
Streptopelia decaocto	6	0.01376	-4.28588	-0.05898	0.25278
Spilopelia chinensis	4	0.00917	-4.69135	-0.04304	0.20192
Apus nipalensis	50	0.11468	-2.16562	-0.24835	0.53783
Alcedo atthis	2	0.00459	-5.38450	-0.02470	0.13299
Ceryle rudis	1	0.00229	-6.07764	-0.01394	0.08472
Pycnonotus sinensis	13	0.02982	-3.51269	-0.10474	0.36791
Phylloscopus inornatus	2	0.00459	-5.38450	-0.02470	0.13299
Phylloscopus fuscatus	2	0.00459	-5.38450	-0.02470	0.13299
Prinia inornata	5	0.01147	-4.46820	-0.05124	0.22895

Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)^2
Orthotomus sutorius	1	0.00229	-6.07764	-0.01394	0.08472
Zosterops simplex	2	0.00459	-5.38450	-0.02470	0.13299
Acridotheres cristatellus	29	0.06651	-2.71035	-0.18028	0.48861
Acridotheres tristis	5	0.01147	-4.46820	-0.05124	0.22895
Spodiopsar sericeus	15	0.03440	-3.36959	-0.11593	0.39062
Spodiopsar cineraceus	4	0.00917	-4.69135	-0.04304	0.20192
Copsychus saularis	1	0.00229	-6.07764	-0.01394	0.08472
Passer montanus	15	0.03440	-3.36959	-0.11593	0.39062
Lonchura punctulata	39	0.08945	-2.41408	-0.21594	0.52129
Motacilla tschutschensis	1	0.00229	-6.07764	-0.01394	0.08472
Motacilla alba	3	0.00688	-4.97903	-0.03426	0.17058
Emberiza spodocephala	1	0.00229	-6.07764	-0.01394	0.08472
Caprimulgus affinis	2	0.00459	-5.38450	-0.02470	0.13299
Otus lettia	1	0.00229	-6.07764	-0.01394	0.08472
Total	436	1	-204.69357	-3.16764	10.97422
Richness	45				
SS	10.97422				
SQ	10.03392				
H	3.16764				
S^2H	0.00227				

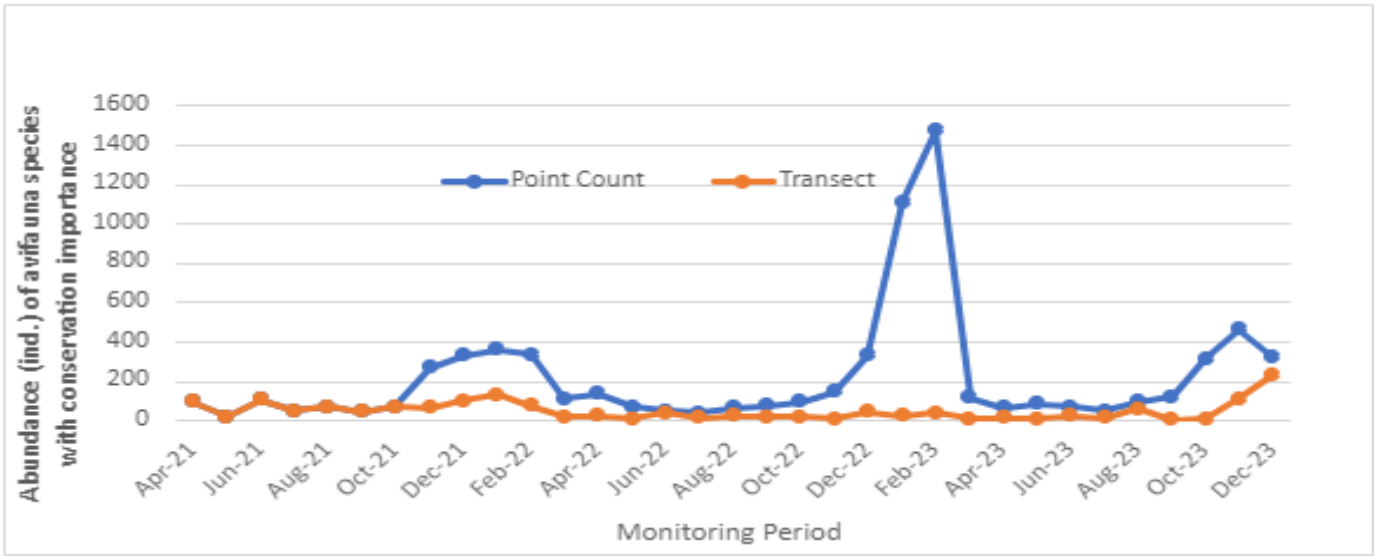
Appendix F.2.4 Ecological Bird Monitoring Diversity (Avifauna species of conservation importance in Transect Walk Method) in All Habitats (4 and 15 December 2023))

Scientific Name	Count	P	Ln(P)	P*Ln(P)	P*Ln(P)2
Spatula clypeata	29	0.12446	-2.08374	-0.25935	0.54042
Mareca penelope	8	0.03433	-3.37160	-0.11576	0.39031
Anas crecca	29	0.12446	-2.08374	-0.25935	0.54042
Aythya fuligula	2	0.00858	-4.75789	-0.04084	0.19431
Tachybaptus ruficollis	2	0.00858	-4.75789	-0.04084	0.19431
Platalea minor	1	0.00429	-5.45104	-0.02340	0.12753
Ardeola bacchus	20	0.08584	-2.45531	-0.21076	0.51747
Ardea cinerea	10	0.04292	-3.14845	-0.13513	0.42544
Ardea alba	3	0.01288	-4.35243	-0.05604	0.24391
Egretta garzetta	1	0.00429	-5.45104	-0.02340	0.12753
Phalacrocorax carbo	26	0.11159	-2.19294	-0.24471	0.53663
Himantopus himantopus	17	0.07296	-2.61783	-0.19100	0.50000
Recurvirostra avosetta	43	0.18455	-1.68984	-0.31186	0.52699
Limosa limosa	3	0.01288	-4.35243	-0.05604	0.24391
Tringa totanus	3	0.01288	-4.35243	-0.05604	0.24391
Tringa stagnatilis	4	0.01717	-4.06474	-0.06978	0.28364
Tringa glareola	2	0.00858	-4.75789	-0.04084	0.19431
Tringa nebularia	5	0.02146	-3.84160	-0.08244	0.31669
Chroicocephalus ridibundus	2	0.00858	-4.75789	-0.04084	0.19431
Ceryle rudis	1	0.00429	-5.45104	-0.02340	0.12753
Spodiopsar sericeus	15	0.06438	-2.74299	-0.17659	0.48438
Spodiopsar cineraceus	4	0.01717	-4.06474	-0.06978	0.28364
Caprimulgus affinis	2	0.00858	-4.75789	-0.04084	0.19431
Otus lettia	1	0.00429	-5.45104	-0.02340	0.12753
Total	233	1	-93.00841	-2.59240	7.55943
Richness	24				
SS	7.55943				
SQ	6.72053				
H	2.59240				
S^2H	0.00381				

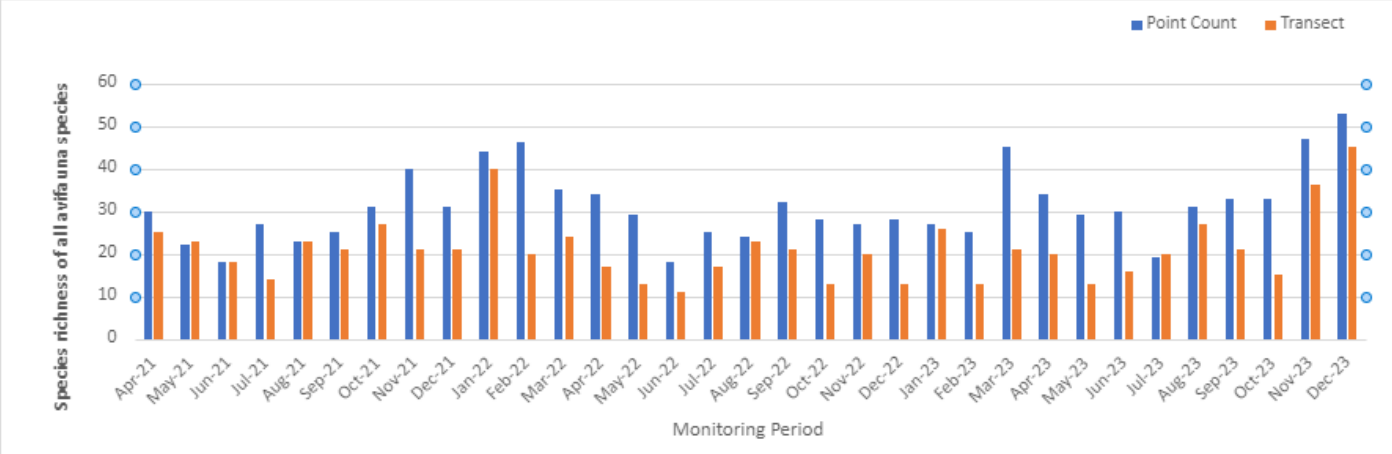
Appendix F.3.1 Abundance of all avifauna species throughout the monitoring period



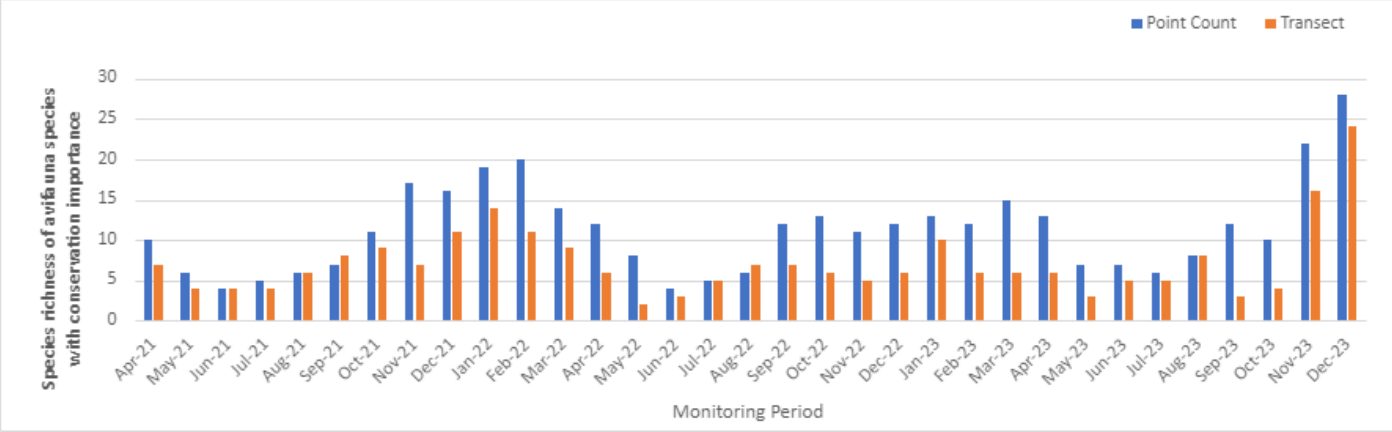
Appendix F.3.2 Abundance of avifauna species with conservation importance throughout the monitoring period



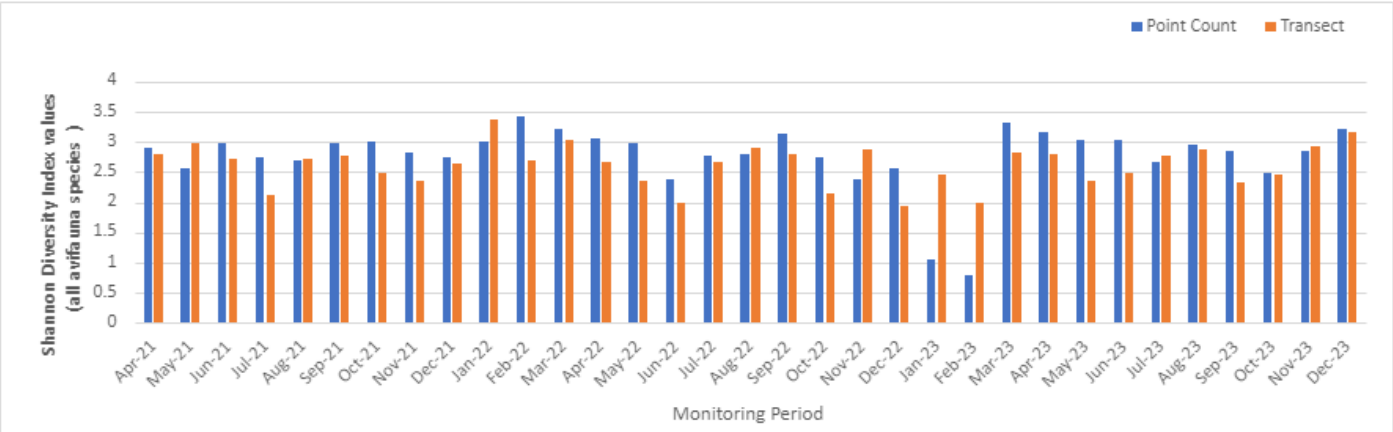
Appendix F.4.1 Species richness of all avifauna species throughout the monitoring period



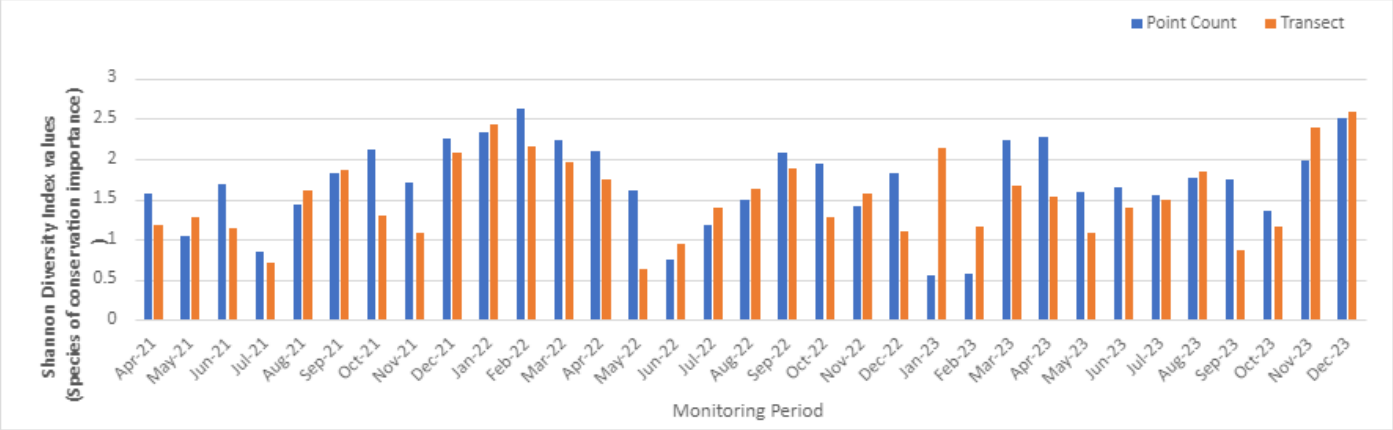
Appendix F.4.2 Species richness of avifauna species with conservation importance throughout the monitoring period



Appendix F.5.1 Shannon Diversity Index values of all avifauna species throughout the monitoring period



Appendix F.5.2 Shannon Diversity Index values of avifauna species with conservation importance throughout the monitoring period



Appendix F.6. Hutcheson t-test testing method and output

Formula:

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

Appendix F.6.1 Species diversity of all avifauna species – Point Count Method

Months	December 2016	December 2023
Total	530	508
Richness	35	53
H	2.458	3.211
S^2H	0.00338	0.00279
t	9.582	
df	1762.436	
Crit	1.961	
p	3.10E-21	
CI	0.116	0.106

Appendix F.6.2 Species diversity of all avifauna species – Transect Walk Method

Months	December 2016	December 2023
Total	85	436
Richness	22	45
H	2.671	3.168
S^2H	0.0105	0.00227
t	4.391	
df	125.724	
Crit	1.979	
p	2.38E-05	
CI	0.205	0.0953

Appendix F.6.3 Species diversity of avifauna species with conservation importance – Point Count Method

Months	December 2016	December 2023
Total	462	319
Richness	18	28
H	1.702	2.497
S^2H	0.00427	0.00464
t	8.419	
df	2011.094	
Crit	1.961	
p	7.12E-17	
CI	0.131	0.136

Appendix F.6.4 Species diversity of avifauna species with conservation importance – Transect Walk Method

Months	December 2016	December 2023
Total	16	233
Richness	5	24
H	1.392	2.592
S^2H	0.0286	0.00381
t	6.667	
df	20.546	
Crit	2.0860	
p	1.72E-06	
CI	0.338	0.123