



Cudgen Lakes Sand Quarry

Environmental Monitoring - Surface Water

Project Approval (PA):	05_0103B
Environmental Protection Licence (EPL):	12385
Licensee:	Gales-Kingscliff Pty Limited
Licensee Address:	20 Ginahgulla Road Bellevue Hill, NSW 2023
Premises:	Cudgen Lakes Altona Drive Cudgen, NSW 2487
Licensee Website:	http://www.galeskingscliff.com.au/
Licensee Website - Monitoring Results:	https://www.galeskingscliff.com.au/reports
EPA Public Register:	https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers
Monitoring Month:	Jun-25
Report prepared on:	24/07/2025
Originator:	R.W. Corkery & Co. Pty Limited

Monitoring Requirements - Surface Water

EPL 12385 Requirements

Monitoring Points - Water and Land

EPL Condition	EPA Identification Number	Site ID	Type of Monitoring Point	Type of Discharge Point	Location Description*
P1.2	1	EPL 1	Water Quality Monitoring Point	Water Quality Monitoring Point	Dredge Pond South Spillway West
	2	EPL 2	Water Quality Monitoring Point	Water Quality Monitoring Point	Dredge Pond South Spillway East
* See 'Monitoring Map' tab.					

Limit Conditions

EPL Condition	EPA Identification Number	Site ID	Pollutant	Units of Measure	50 Percentile Concentration Limit	90 Percentile Concentration Limit	3DGM Concentration Limit	100 Percentile Concentration Limit	Monitoring Frequency	Sampling Method
L2.4	1 & 2	EPL1 & EPL2	Oil & Grease	Visible	N/A	N/A	N/A	nil	Special Frequency 1*	Visual Inspection
			pH	pH	N/A	N/A	N/A	6.5 - 8.5	Special Frequency 1*	Probe
			Total Suspended Solids (TSS)	milligrams per litre (mg/L)	N/A	N/A	N/A	50	Special Frequency 1*	Grab Sample
*Special Frequency 1: sampling once <24 hours prior to; and, sampling the discharge daily during, each discharge event arising from rainfall of less than 82.5mm falling in total over a period of up to five days duration.										

Management Plan Requirements - Soil and Water Management Plan

Version: May 2021

Note: The Soil and Water Management Plan (SWMP) fulfils the requirement for a Surface Water Monitoring Program under Condition 21 of Schedule 3 of PA 05_0103.

Water Quality Objectives - Dredge Pond

Parameters	Units of Measure	Objective	Comment
pH	pH	6.5 - 9.0	Upper objective value reflects upper limit of recorded data.~
Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)	6192	Objective value reflects upper limit of recorded data.~
Dissolved Oxygen (DO)	milligrams per litre (mg/L)	>6*	Original objective value retained.**
Turbidity	NTU	<20	Original objective value retained.**
Sodium (Na)	milligrams per litre (mg/L)	813	Objective value reflects upper limit of recorded data.~
Magnesium (Mg)	milligrams per litre (mg/L)	119	Objective value reflects upper limit of recorded data.~
Potassium (K)	milligrams per litre (mg/L)	<40	Original objective value retained.**
Chloride (Cl)	milligrams per litre (mg/L)	1390	Objective value reflects upper limit of recorded data.~
Sulfate (SO4)	milligrams per litre (mg/L)	<800	Original objective value retained.**
Bicarbonate (HCO3)	milligrams per litre (mg/L)	<400	Original objective value retained.**
Aluminium (Al)	milligrams per litre (mg/L)	<0.5	Original objective value retained.**
Arsenic (As)	milligrams per litre (mg/L)	<0.42	Derived from Australian and New Zealand Guidelines for Fresh and Marine Water Quality – 90% protection for freshwater species.
Filterable Iron (Fe)	milligrams per litre (mg/L)	<20	Original objective value retained.**
Ammonia (NH3)	milligrams per litre (mg/L)	<20	Original objective value retained.**
*Applicable to surface samples only (i.e. monitoring points DP1, DP2, DP3).			
**Objective value as specified in the original conditions for PA 05_0103.			
~ Data recorded between September 2015 and April 2019.			

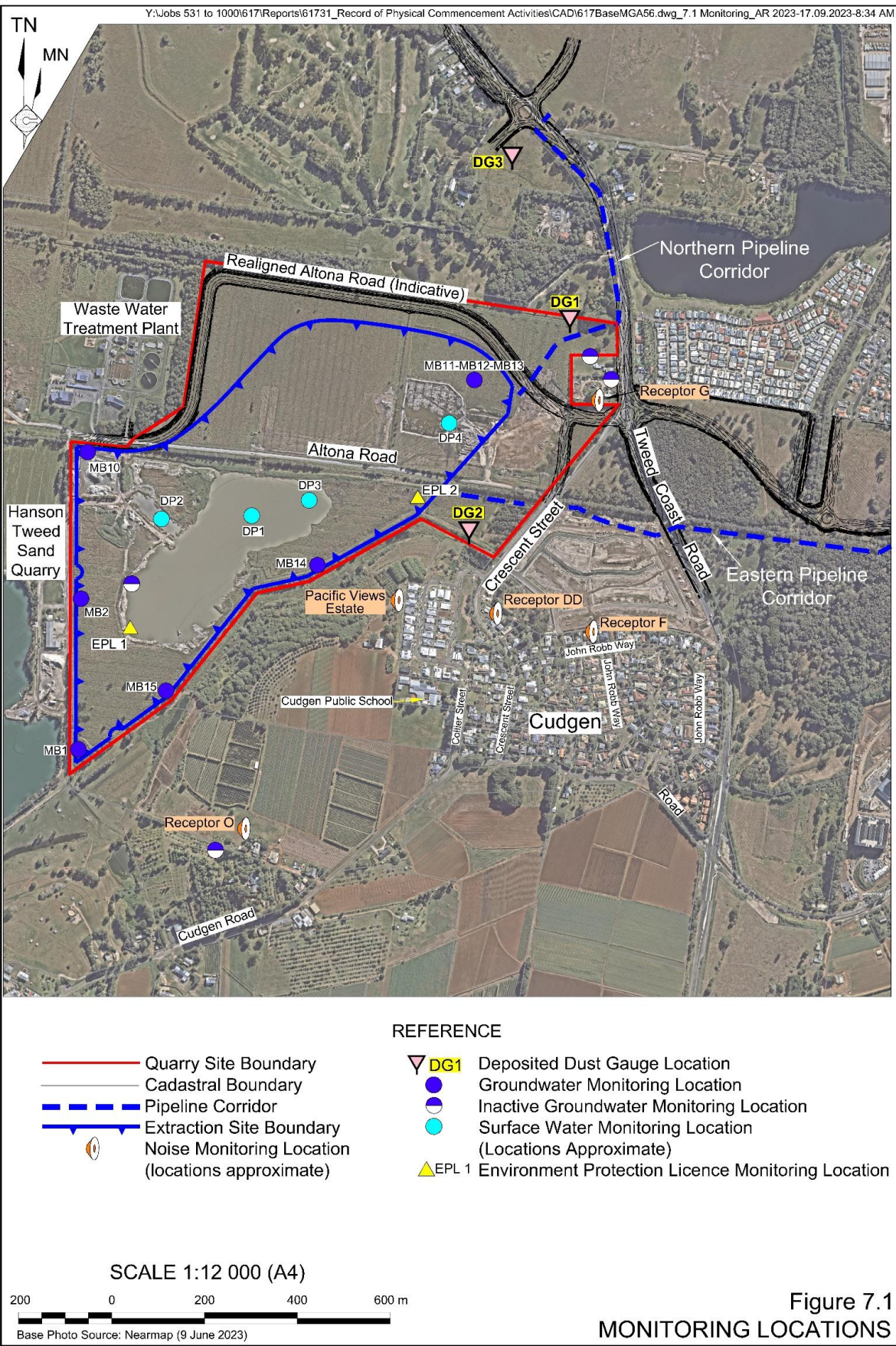
Monitoring Points - Parameters, Locations & Frequency

Occurrence	Frequency	Parameters	Units of Measure	Measurement Type	Sampling Method	Location ID		
Operational Periods ¹	Twice Daily (prior to dredging & at cessation)	Standing Surface Water Level (Dredge Pond)	m AHD	Field	Calibrated height gauge, water level sensor or calibrated water level monitor	On Dredge		
	Weekly	Temperature	degrees Celsius (°C)	Field	Probe	DP1, DP2, DP3, DP4		
		pH	pH					
		Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)					
		Oxygen Reduction Potential (ORP)	millivolts (mV)					
		Turbidity	NTU					
		Dissolved Oxygen (DO)	milligrams per litre (mg/L)					
		Oil and Grease	Present / Absent	Visual Inspection	Visual			
	Monthly	Total Phosphorous (P)	milligrams per litre (mg/L)	Laboratory	Grab Sample	DP1, DP2, DP3, DP4		
		Total Nitrogen (N)	milligrams per litre (mg/L)					
		Orthophosphate (Reactive Phosphorous)	milligrams per litre (mg/L)					
		Ammonia Nitrogen	milligrams per litre (mg/L)					
		NOx Nitrogen	milligrams per litre (mg/L)					
		Oil and Grease	Present / Absent	Visual Inspection	Visual			
		Weather - Cloud Cover	Sunny / Overcast					
		Weather - Rain	Raining / Dry					
		Water Colour and Appearance	Cloudy / Clear					
		Odour	Present / Absent					
		Frothing	Present / Absent					
		Floating Debris	Present / Absent					
		Nuisance Organisms (e.g. Macrophytes, Phytoplankton Scum,	Present / Absent					
		Chlorophyll a	mg/m ³	Laboratory	Grab Sample (Composite)	Composite of DP1, DP2, DP3 & DP4		
		Total Algal Cell Count	cells/mL					
		Total Algal Biovolume	mm ³ /L					
		Potentially Toxic Cyanobacteria Cell Count	cells/mL					
		Potentially Toxic Cyanobacteria Biovolume	mm ³ /L					
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)					
	Quarterly	Major Cations*	milligrams per litre (mg/L)	Laboratory	Grab Sample	DP1, DP2, DP3, DP4		
		Major Anions**	milligrams per litre (mg/L)					
		Filterable Iron	milligrams per litre (mg/L)					
		Aluminium	milligrams per litre (mg/L)					
		Arsenic	milligrams per litre (mg/L)					
	6-Monthly (Summer & Winter)	Temperature	degrees Celsius (°C)	Field	Probe	DP1-1, DP1-2, etc. (at 1m depth and then every 2m depth interval to the pond base)		
		pH	pH					
		Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)					
		Oxygen Reduction Potential (ORP)	millivolts (mV)					
		Turbidity	NTU					
		Dissolved Oxygen (DO)	milligrams per litre (mg/L)	Laboratory	Grab Sample			
		Oil and Grease	Present / Absent				Visual Inspection	Visual
		Major Cations*	milligrams per litre (mg/L)					
Major Anions**		milligrams per litre (mg/L)						
Filterable Iron		milligrams per litre (mg/L)						
Aluminium		milligrams per litre (mg/L)						
Arsenic		milligrams per litre (mg/L)						
Total Phosphorous (P)		milligrams per litre (mg/L)						
Total Nitrogen (N)		milligrams per litre (mg/L)						
Orthophosphate (Reactive Phosphorous)		milligrams per litre (mg/L)						
Ammonia Nitrogen		milligrams per litre (mg/L)						
NOx Nitrogen		milligrams per litre (mg/L)						
Chlorophyll a		mg/m ³						
Total Algal Cell Count		cells/mL						
Total Algal Biovolume		mm ³ /L						
Potentially Toxic Cyanobacteria Cell Count		cells/mL						
Potentially Toxic Cyanobacteria Biovolume		mm ³ /L						
Toxins (cytotoxic cylindrospermopsin)		micrograms per litre (µg/L)						

Non-Operational Periods ²	Quarterly	Temperature	degrees Celsius (°C)	Field	Probe	DP1, DP2, DP3, DP4
		pH	pH			
		Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)			
		Oxygen Reduction Potential (ORP)	millivolts (mV)			
		Turbidity	NTU			
		Dissolved Oxygen (DO)	milligrams per litre (mg/L)			
		Total Phosphorous (P)	milligrams per litre (mg/L)			
		Total Nitrogen (N)	milligrams per litre (mg/L)			
		Orthophosphate (Reactive Phosphorous)	milligrams per litre (mg/L)			
		Ammonia Nitrogen	milligrams per litre (mg/L)			
		NOx Nitrogen	milligrams per litre (mg/L)			
		Chlorophyll a	mg/m ³			
		Total Algal Cell Count	cells/mL			
		Total Algal Biovolume	mm ³ /L			
		Potentially Toxic Cyanobacteria Cell Count	cells/mL			
		Potentially Toxic Cyanobacteria Biovolume	mm ³ /L			
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)			
		Oil and Grease	Present / Absent			
		Weather - Cloud Cover	Sunny / Overcast			
		Weather - Rain	Raining / Dry			
		Water Colour and Appearance	Cloudy / Clear			
		Odour	Present / Absent			
		Frothing	Present / Absent			
		Floating Debris	Present / Absent			
		Nuisance Organisms (e.g. Macrophytes, Phytoplankton Scum,	Present / Absent			
	6-Monthly (Summer & Winter)	Temperature	degrees Celsius (°C)	Field	Probe	DP1-1, DP1-2, etc. (at 1m depth and then every 2m depth interval to the pond base)
		pH	pH			
		Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)			
		Oxygen Reduction Potential (ORP)	millivolts (mV)			
		Turbidity	NTU			
		Dissolved Oxygen (DO)	milligrams per litre (mg/L)			
		Oil and Grease	Present / Absent	Visual Inspection	Visual	
		Major Cations*	milligrams per litre (mg/L)	Laboratory	Grab Sample	
		Major Anions**	milligrams per litre (mg/L)			
		Filterable Iron	milligrams per litre (mg/L)			
		Aluminium	milligrams per litre (mg/L)			
		Arsenic	milligrams per litre (mg/L)			
		Total Phosphorous (P)	milligrams per litre (mg/L)			
		Total Nitrogen (N)	milligrams per litre (mg/L)			
		Orthophosphate (Reactive Phosphorous)	milligrams per litre (mg/L)			
		Ammonia Nitrogen	milligrams per litre (mg/L)			
		NOx Nitrogen	milligrams per litre (mg/L)			
		Chlorophyll a	mg/m ³			
		Total Algal Cell Count	cells/mL			
		Total Algal Biovolume	mm ³ /L			
		Potentially Toxic Cyanobacteria Cell Count	cells/mL			
		Potentially Toxic Cyanobacteria Biovolume	mm ³ /L			
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)			

¹ Operational Periods = periods during which extraction and/or processing of material, and/or the placement of fines and/or VENM material, is occurring at the Quarry.
² Non-Operational Periods = periods during which no extraction, processing, fines placement or VENM placement activities are occurring. Note: for surface water monitoring purposes, non-operational periods also include periods during which transportation activities alone occur.
*Major Cations = Sodium, Calcium, Magnesium & Potassium
**Major Anions = Chloride, Sulfate & Bicarbonate

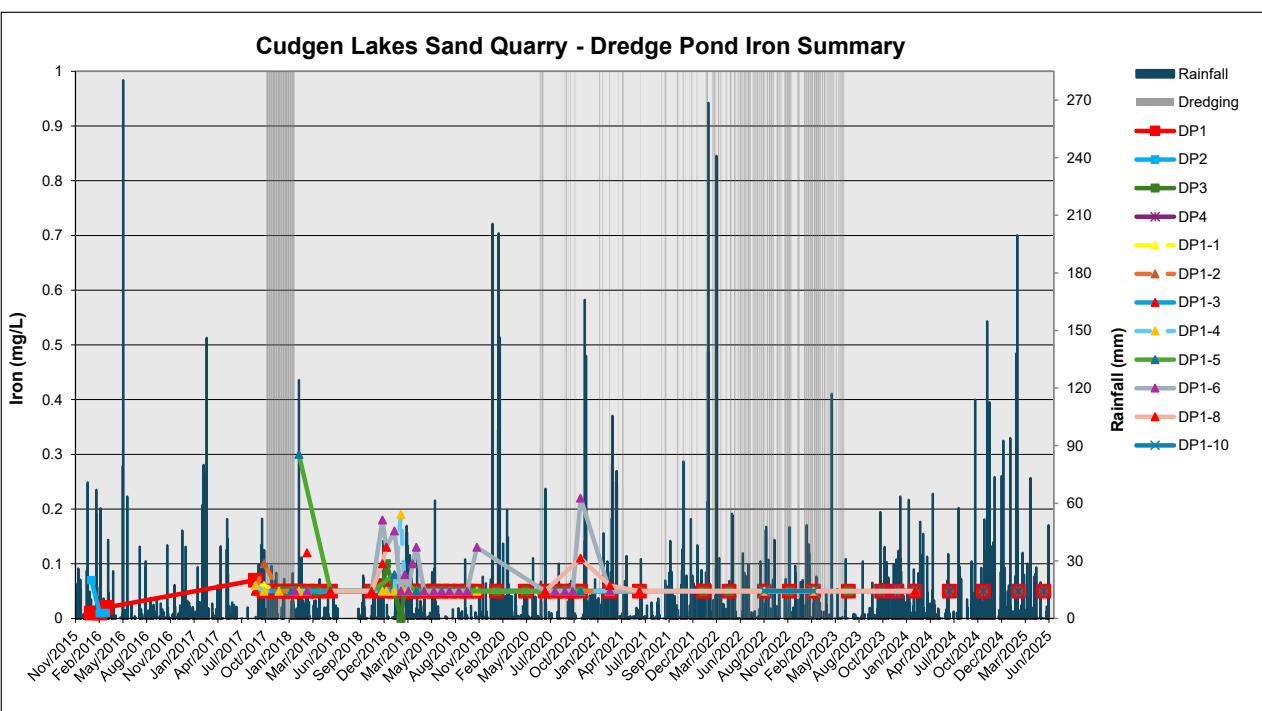
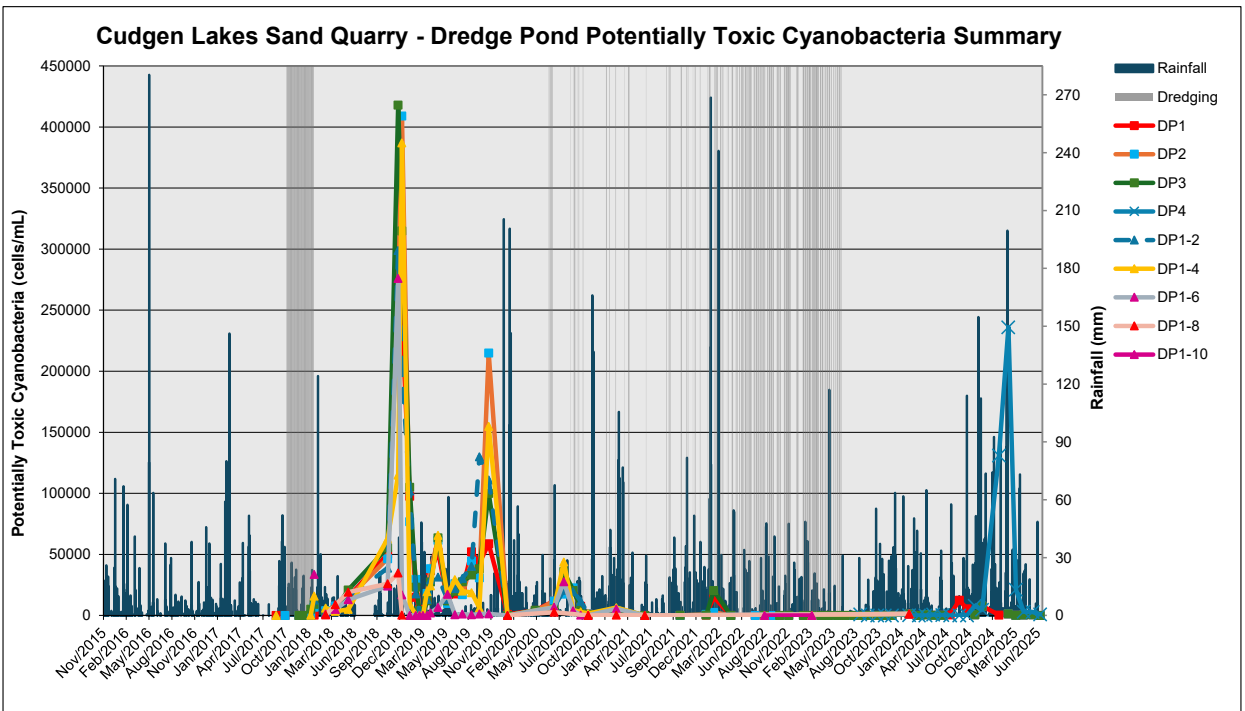
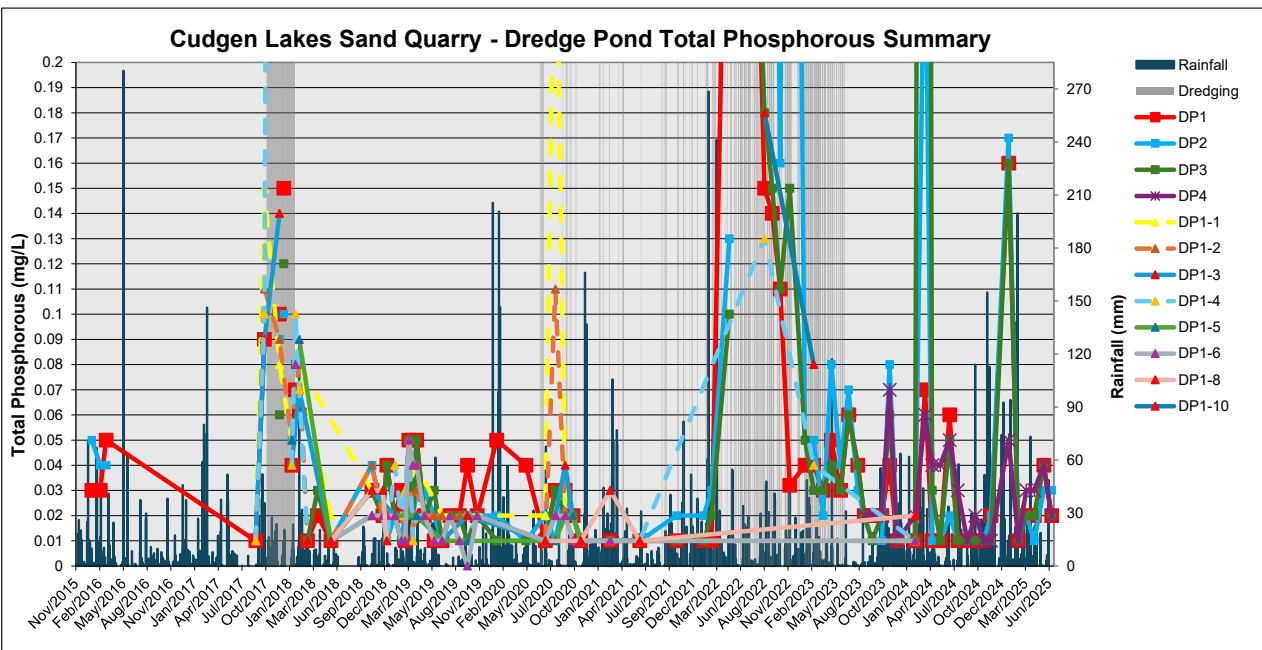
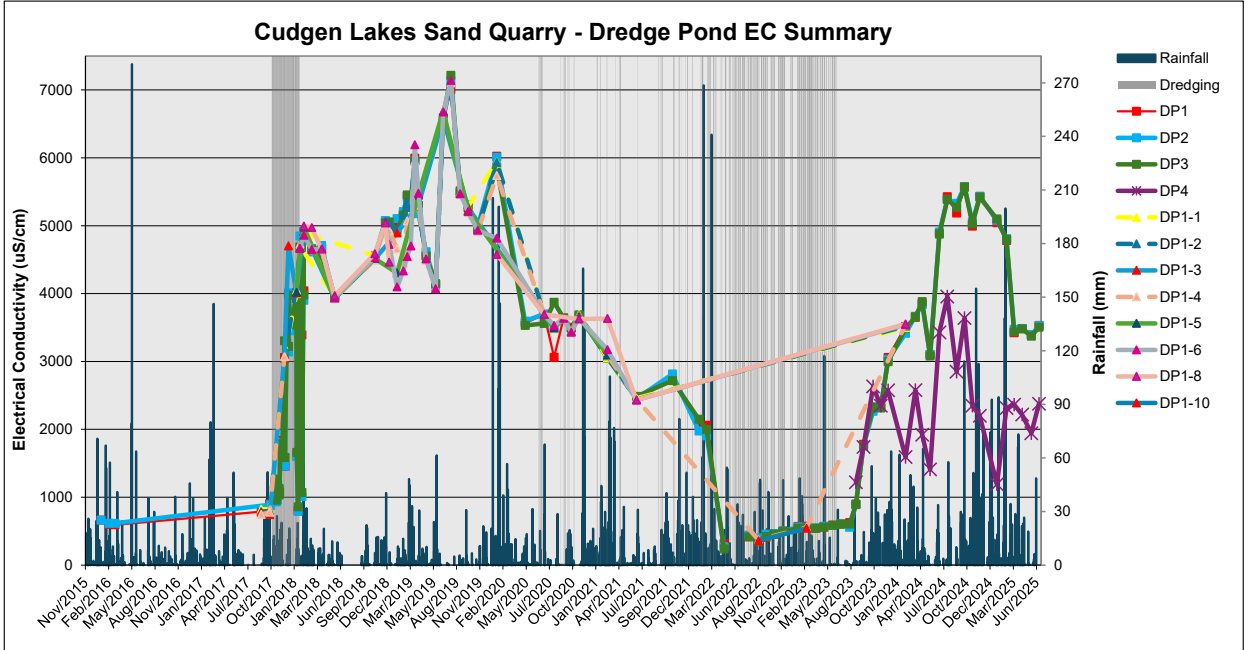
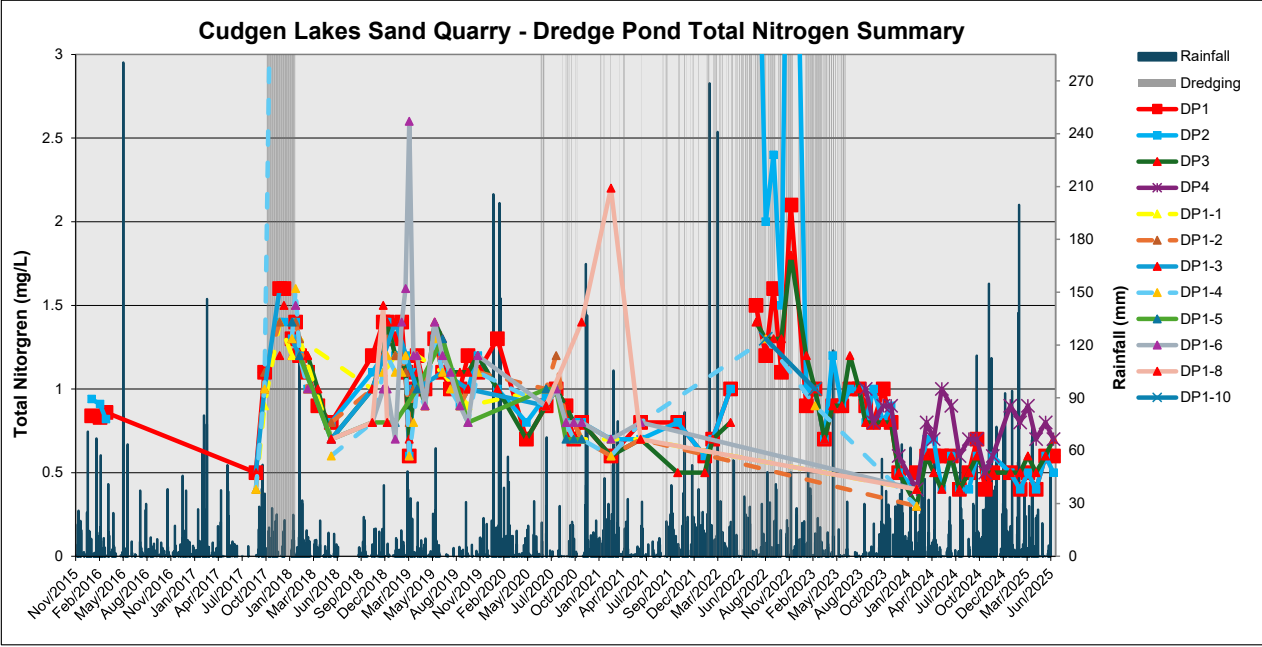
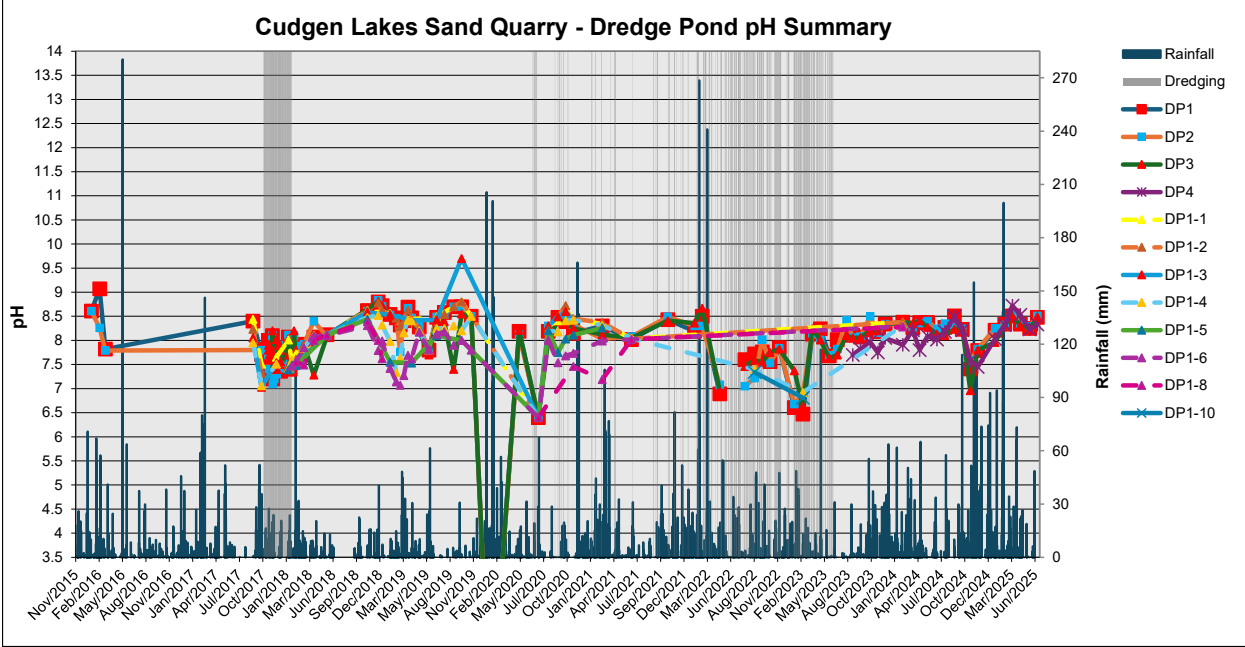
Monitoring Location Map - Surface Water



Monitoring Point Location Description

The three dredge pond monitoring locations are shown indicatively in the monitoring location map. The three locations include two edge locations (DP2 and DP3) and one in the approximate middle of the southern dredge pond (DP1) and northern dredge pond (DP4). All depth measurements are to be taken at location DP1 at a depth of 1m and then at 2m intervals to the current floor of the dredge pond. Given the changing size and shape of the dredge pond the precise location of each monitoring point will vary over time and will be selected by the monitoring consultant based upon the pond condition at the time of sampling.

617 - CUDGEN LAKES SAND QUARRY
Surface Water Quality Monitoring Summary



Site: DP1			Physical										Major Cations & Anions								Metals			Nutrients										Bacteria / Algae				
Sample Date			Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a				
Objectives			-	-	6.5-9	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		-	-	<50000	<10				
Pre-Extraction	2015-11-30	Fine Sunny Approx 30mm rain previous week (BoM - Coolangatta)		24.5	8.47	591	6.12	148	8.8	4	2		24	11	7	120	20	57	0.19	0.002	0.01	0.04	0.02	0.81			0.81	0.02	0.02	860	860							
	2016-01-26	Fine, Clear, some algae, cattle & ducks		27.3	8.61	663	5.87	192	4.3	3.8	2	64	25	12	7	120	16	76	0.08	0.001	0.01	0.03	0.02	0.84			0.84	0.02	0.02	128	174							
	2016-02-25	Algae, ducks, low turbidity		25.8	9.07	601	6.04	104	1.7	2.1	4	69	26	12	8	120	15	58	0.04		0.01	0.03	0.02	0.83			0.83	0.02	0.02	4800	360							
	2016-03-17	Sample taken in 20cm of clear water. Surface chop caused by wind. Cattle surrounding dam. Water birds. Approx 80mm rain previous week (BoM - Coolangatta).		26.8	7.82	593	5.97	70	7	5.9	4	64	26	12	8	110	14	92	0.16	0.001	0.02	0.05	0.02	0.86			0.86	0.02	0.02	270	820							
	2017-09-04			26.2	8.4	786	9.24	132	5	0.9	5	132	33	21	8	236	57	98	0.06	0.001	0.07	0.01	0.01	0.5	0.01	0.02	0.5	0.02	0.02	40	10	5	2					
	2017-10-05			28.3	7.71	901	7.36	48.7	68	138	5	95	46	17	7	182	40	130	0.03	0.001	0.05	0.09	0.01	1.1	0.01	0.03	1.1	0.01	0.03	320	1180							
	2017-10-08	Algae/chlorophyll only to lab		27.2	7.81	886	6.83	61.2		156																					5		10					
2017/2018	2017-10-30	Commencement of extraction																																				
	2017-10-30	Daily monitoring requirement for first 2 weeks of dredging.		23.4	8.0	1056	4.23	224																														
	2017-10-31	Daily monitoring requirement for first 2 weeks of dredging.		20.1	7.9	1069	4.28	210																														
	2017-11-01	Daily monitoring requirement for first 2 weeks of dredging.		22.1	7.9	1061	4.25	216																														
	2017-11-02	Daily monitoring requirement for first 2 weeks of dredging.		22.4	7.6	980	2.78	2.12																														
	2017-11-03	Daily monitoring requirement for first 2 weeks of dredging.		20.2	7.7	1142	3.26	206																														
	2017-11-06	Daily monitoring requirement for first 2 weeks of dredging.		22.4	7.6	1042	4.18	214																														
	2017-11-07	Daily monitoring requirement for first 2 weeks of dredging.		22.1	7.3	1031	3.76	210																														
	2017-11-08	Daily monitoring requirement for first 2 weeks of dredging.		21.9	8.0	1090	3.93	212																														
	2017-11-09	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.7	1052	4.05	209																														
	2017-11-10	Daily monitoring requirement for first 2 weeks of dredging.		21.5	7.9	1067	4.02	204																														
	2017-11-13	Daily monitoring requirement for first 2 weeks of dredging.		21.1	7.4	1767	4.2	132																														
	2017-11-14	Daily monitoring requirement for first 2 weeks of dredging.		21.7	8.1	1837	4	122																														
	2017-11-15	Daily monitoring requirement for first 2 weeks of dredging.		21	7.2	1795	3.9	134																														
	2017-11-21	Daily monitoring requirement for first 2 weeks of dredging.		21.5	7.4	1623	4.6	133																														
	2017-11-28			27.3	7.4	3058	3.14	50.4	55	97	5	454	110	72	19	874	197	237	0.01	0.001	0.05	0.1	0.01	1.6	0.01	0.12	1.5	0.32	0.12	110	2160	5	6					
	2017-11-30	Weekly monitoring requirement.		21.6	7.6	1455	4.8	143																														
	2017-12-06	Weekly monitoring requirement.		22	7.8	3210	6.53	206																														
	2017-12-13	Weekly monitoring requirement.		22.9	7.8	3150	3.95	147																														
	2017-12-13	Birds on Dredge pond and surrounds		27	7.36	3991	0.2	107		125.3		563	121	89	22	992	261	234	0.01	0.001	0.05	0.15	0.01	1.6	0.01	0.01	1.6	0.16	0.01			5	28					
	2017-12-20	Weekly monitoring requirement.		22.8	7.7	3550	4.15	157																														
	2018-01-11	Birds on Dredge pond and surrounds		30.9	8.07	4012	2.17	-0.7	12	20.1	5	628	136	97	24	1090	270	240	0.01	0.002	0.05	0.04	0.01	1.3	0.01	0.01	1.3	0.02	0.01	110	90	825	13					
	2018-01-12	Weekly monitoring requirement.		21.8	7.7	1610	4.16	172																														
	2018-01-17	Weekly monitoring requirement.		20.9	7.4	797	3.43	116																														
	2018-01-23	Weekly monitoring requirement.		21.8	7.7	1569	4.12	168																														
	2018-01-24	Birds on Dredge pond and surrounds		27.4	7.54	4685	3.27	36.2		55.2		606	129	96	22	1240	296	223	0.01	0.002	0.05	0.07	0.01	1.4	0.01	0.02	1.4	0.21	0.02			355	24					
	2018-01-31	Weekly monitoring requirement.		20.5	7.8	3391	5.73	161																														
	2018-02-07	Birds on Dredge pond and surrounds		26.6	7.72	4915	5.21	30.9		19.5	5	693	137	103	24	1350	315	264	0.01	0.002	0.05	0.06	0.01	1.2	0.01	0.01	1.2	0.1	0.01	20	40		22					
	2018-02-07	Weekly monitoring requirement.		19.1	7.8	4040	5.68	111																														
	8/02/2018	Last day of first extraction campaign.																																				
	2018-03-08	Water Birds on Dredge Pond, no algae visible, slight brown/green tinge to pond water, level		25	7.92	4642	5.33	63		10.1		602	126	93	22	1180	307	237	0.04	0.002	0.05																	

	2022-06-22	Due to previous major flood events, ongoing rain and slow drainage, the site was deemed inaccessible to undertake sampling during June 2022.
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2022/2023	2022-07-27	Cloudy, Turbid		15.7	7.60	416	6.12	126.0		593.0												0.30	0.004	1.5	0.01	0.33	1.2	0.01	0.33			5	5
	2022-08-31	Cloudy, Very Turbid		19.1	7.72	367	6.80	204.9		410.0		58	27	8	4	90	30	55	0.01	0.001	0.05	0.15	0.002	1.2	0.01	0.42	0.8	0.04	0.42		5	11	
	2022-09-28	Cloudy, Turbid		23.2	7.76	408	6.77	-90.7		312.0												0.14	0.002	1.6			1.2	0.01	0.38		5	5	
	2022-10-26	Cloudy, Turbid		26.4	7.56	454	5.05	106.9														0.11	0.003	1.1	0.01	0.39	0.7	0.01	0.39		5	2	
	2022-11-29	Cloudy, Turbid		23.6	7.85	497	4.21	75.2		187.0		48	37	7	4	92	40	64	0.01	0.001	0.05	0.03	0.004	2.1	0.01	0.46	1.6	0.08	0.46		5	22	
	2023-01-23	Cloudy, Turbid		26.9	6.61	569	8.00	164.3		76.9												0.04	0.001	0.9			0.5	0.01	0.42		5	5	
	2023-02-23	Cloudy, Turbid		27.1	6.47	573	7.42	173.1		54.0		49	43	7	4	82	42	70	0.01	0.001	0.05	0.04	0.001	1.0	0.01	0.38	0.6	0.01	0.38		5	4	
	2023-03-29	Cloudy, Turbid		26.1	8.13	541	2.87	-50.8		92.6												0.03	0.001	0.7			0.4	0.01	0.32		5	5	
	2023-04-27	Cloudy, Turbid		21.6	8.24	558	8.16	-54.2		92.8												0.05	0.002	0.9	0.02	0.32	0.6	0.05	0.34		5	2	
	2023-05-30	Cloudy, Turbid		19.3	7.68	587	5.90	-45.6		19.3												0.03	0.001	0.9	0.01	0.40	0.5	0.03	0.40		5	1	
2023-06-28	Cloudy, Turbid		16.4	8.02	605	5.37	-61.0		91.1		56	43	10	5	100	55	90	0.01	0.001	0.05	0.06	0.003	1.0	0.01	0.38	0.6	0.04	0.38		5	2		
2023/2024	2023-07-31																														5	4	
		Cloudy, Turbid		18.5	8.11	624	5.98	-68.3		74.2												0.04	0.001	1.0	0.01	0.36	0.6	0.02	0.36				
	2023-08-23	Cloudy, Turbid		21.6	8.11	898	4.19	-77.4		27.3												0.02	0.001	0.9	0.01	0.36	0.5	0.07	0.36		5	3	
	2023-09-20	Clear		22.7	8.07	1779	9.10	-70.9		8.3												0.02	0.001	0.8	0.05	0.30	0.5	0.03	0.35		5	1	
	2023-10-25	Clear		25.2	8.22	2311	9.03	-71.5		24.3		277	103	52	13	560	245	135	0.01	0.001	0.05	0.02	0.001	1.0	0.01	0.30	0.7	0.23	0.31		5	2	
	2023-11-22	Clear		25.9	8.18	2356	9.22	-81.2		8.4												0.04	0.001	0.8			0.5	0.02	0.25		5	4	
	2023-12-19	Clear	7	29.3	8.34	3058	5.89	-90.9		7.1		423	138	72	18	763	322	165	0.01	0.001	0.05	0.01	0.003	0.5	0.01	0.01	0.5	0.10	0.01		5	10	
	2024-02-21	Clear		29.3	8.38	3515	5.69	-82.2		3.4		457	137	69	19	884	318	160	0.01	0.001	0.05	0.01	0.001	0.5	0.01	0.09	0.4	0.01	0.09		1240	2	
	2024-03-28	Clear Redox meter failed		25.4	8.26	3649	4.07			4.7												0.07	0.001	0.6	0.01	0.05	0.6	0.16	0.05		5	10	
	2024-04-22	Clear		23.8	8.37	3849	4.61	-87.1		7.9												0.01	0.018	0.6	0.01	0.01	0.6	0.09	0.01		605	10	
	2024-05-21	Clear		20.3	8.37	3102	8.18	-82.9		4.2												0.01	0.002	0.6	0.01	0.01	0.6	0.08	0.01		160	18	
	2024-06-24	Clear	7.5	17.8	8.16	4884	8.11	-73.1		5.9		698	153	109	25	1280	407	188	0.01	0.001	0.05	0.06	0.007	0.6	0.01	0.01	0.6	0.08	0.60		160	11	
2024/2025	2024-07-23	Clear	8	16.9	8.27	5426	7.57	-81.7		2.9												0.01	0.001	0.4	0.04	0.01	0.4	0.06	0.40		500	18	
	2024-08-26	Clear	7.5	22.9	8.51	5187	8.47	-106.5		21.0												0.01	0.001	0.5	0.02	0.01	0.5	0.03	0.02		12500	8	
	2024-09-24	Clear	7	22.4	8.23	5566	7.37	-96.3		3.7												0.01	0.002	0.7	0.04	0.01	0.7	0.01	0.04		5440	6	
	2024-10-23	Clear	0.7	23.8	7.41	4994	9.66	95.1		0.7		686	139	110	26	1380	371	189	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01		665	6	
	2024-11-19	Clear	0.75	25.9	7.79	5432	7.39	119.5		4.5												0.02	0.001	0.5	0.01	0.01	0.5	0.01	0.01		7700	13	
	2025-01-21	Clear	0.75	27.4	8.21	5043	4.81	-68.1		31.0												0.16	0.001	0.5	0.01	0.01	0.5	0.01	0.01		360	2	
	2025-02-25	Clear	7.5	28.2	8.34	4782	5.69	-71.1		1.6		771	133	118	28	1340	336	169	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01		1340	1	
	2025-03-25	Clear	0.7	26.1	8.51	3421	5.99	-836.2		3.3												0.02	0.002	0.5	0.01	0.01	0.5	0.01	0.01		170	7	
	2025-04-23	Clear	0.7	24.5	8.34	3483	6.68	-77.1		2.7												0.02	0.001	0.4	0.01	0.01	0.4	0.01	0.01		440	1	
	2025-05-27	Clear	0.7	21.8	8.25	3391	5.60	-73.8		11.4		448	90	66	18	957	238	135	0.01	0.001	0.05	0.04	0.002	0.6	0.01	0.01	0.6	0.02	0.01		580	1	
	2025-06-24	Clear	0.7	18.3	8.48	3530	5.51	-86.8		5.8												0.02	0.001	0.6	0.01	0.05	0.5	0.02	0.05		85	4	
	Reporting Period (2024/2025)	Average		3.2	23.5	8.21	4569	6.79	-116.6	0.0	8.1	0.0	635	121	98	24	1225.7	315	164.33	0.01	0.001	0.05	0.03	0.00	0.50	0.02	0.01	0.49	0.02	0.05	0.0	0.0	2707
Maximum			8.0	28.2	8.51	5566	9.66	119.5	0.0	31.0	0.0	771	139	118	28	1380	371	189	0.01	0.001	0.05	0.16	0.00	0.70	0.04	0.05	0.70	0.06	0.40	0.0	0.0	12500	18
All Results	Minimum		0.7	16.9	7.41	3391	4.81	-836.2	0.0	0.7	0.0	448	90	66	18	957	238	135	0.01	0.001	0.05	0.01	0.00	0.40	0.01	0.01	0.40	0.01	0.01	0.0	0.0	85	1
	Average		3.8	23.5	8.02	2900	6.17	46.1	10.3	41.1	4.6	514.5	96	77.2	19	936.0	227.5	161.6	0.03	0.00159	0.05	0.04	0.00	0.92	0.01	0.09	0.83	0.05	0.11	394.3	403.2	16273	9
	Maximum		8.0	30.9	9.07	7007	10.67	224.0	68.0	593.0	5.0	833	153	125	28	1400	407	270	0.19	0.005	0.07	0.36	0.02	2.10	0.05	0.46	1.60	0.37	0.60	4800.0	2160.0	284000	51
	80 th Percentile		7.5	27.0	8.47	4962	8.18	147.0	10.8	54.7	5.0	729.2	130	110	24	1340	319.6	218.8	0.03	0.002	0.05	0.05	0.01	1.20	0.01	0.13	1.20	0.08	0.33	444.0	828.0	14900	13
	Median (50 th Percentile)		0.8	23.4	8.11	3082	5.98	69.8	5.0	8.2	5.0	602	110	91	22	1085	266.5	169	0.01	0.002	0.05	0.03	0.00	0.90	0.01	0.01	0.75	0.02	0.02	110.0	120.0	605	7
	20 th Percentile		0.7	20.6	7.69	888	4.18	-71.5	5.0	3.3	4.2	190	45	19.4	8	214.4	56.2	112.4	0.01	0.001	0.05	0.01	0.00	0.60	0.01	0.01	0.50	0.01	0.01	20.0	18.0	5	2
	Minimum		0.7	15.7	6.40	318	0.20	-836.2	1.7	-9.7	2.0	41	14	6	3	75	14	33	0.01	0.001	0.01	0.01	0.00	0.40	0.01	0.01	0.40	0.01	0.01	10.0	10.0	5	1

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data. NLM = No Longer Monitored
NV - Not visible

Site: DP2			Physical										Major Cations & Anions								Metals			Nutrients										Bacteria / Algae				
Sample Date			Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a				
			Objectives	-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20							<20				<50000	<10				
Pre-Extraction	2015-11-30	No sample collected due to equipment failure. Fine Sunny Approx 30mm rain previous week (BoM - Coolangatta).																																				
	2016-01-26	Fine, clear, some algae, cattle & ducks		27.3	8.61	663	5.87	194	4.3	4.7	2	64	25	12	7	120	16	94	0.07	0.001	0.07	0.05	0.020	0.94				0.94	0.02	0.02	128	174						
	2016-02-25	Fine, clear, some algae, ducks		23.7	8.26	613	3.75	124	9	5.1	4	67	27	12	8	120	15	96	0.10	0.002	0.01	0.04	0.020	0.91				0.91	0.02	0.02	140	50						
	2016-03-17	Overcast, some algae, water birds, cattle		26.6	7.79	615	3.43	82	4.3	3.5	4	65	27	12	8	110	14	94	0.05	0.002	0.01	0.04	0.020	0.82				0.82	0.02	0.02	150	340						
	2017-10-08	Algae/chlorophyll only to lab		27.5	7.8	890	6.41	58.8			143																						5	9				
2017/2018	2017-10-30	Commencement of extraction																																				
	2017-10-30	Daily monitoring requirement for first 2 weeks of dredging.		23.3	7.7	932	4.25	230																														
	2017-10-31	Daily monitoring requirement for first 2 weeks of dredging.		20.3	7.7	1029	4.01	175																														
	2017-11-01	Daily monitoring requirement for first 2 weeks of dredging.		21.2	7.4	997	4.11	192																														
	2017-11-02	Daily monitoring requirement for first 2 weeks of dredging.		21.8	7.7	957	2.77	209																														
	2017-11-03	Daily monitoring requirement for first 2 weeks of dredging.		20.4	7.7	1158	2.96	204																														
	2017-11-06	Daily monitoring requirement for first 2 weeks of dredging.		22.4	7.6	1118	4.1	217																														
	2017-11-07	Daily monitoring requirement for first 2 weeks of dredging.		22	7.6	1098	3.8	211																														
	2017-11-08	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1125	3.9	210																														
	2017-11-09	Daily monitoring requirement for first 2 weeks of dredging.		21.4	7.7	1065	3.98	204																														
	2017-11-10	Daily monitoring requirement for first 2 weeks of dredging.		21.6	7.8	1069	3.92	208																														
	2017-11-13	Daily monitoring requirement for first 2 weeks of dredging.		21.3	7.6	1762	4.1	134																														
	2017-11-14	Daily monitoring requirement for first 2 weeks of dredging.		21.5	8.1	1806	4.3	124																														
	2017-11-15	Daily monitoring requirement for first 2 weeks of dredging.		20.5	7.1	1769	4.3	178																														
	2017-11-21	Daily monitoring requirement for first 2 weeks of dredging.		21.4	7.2	1586	4.7	143																														
	2017-11-28									38		5	453	109	71	18	882	198	239	0.01	0.001	0.05	0.09	0.010	1.4	0.01	0.02	1.4	0.13	0.02	150	1180	5	9				
	2017-11-30	Weekly monitoring requirement.		21.6	7.3	1458	5	154																														
	2017-12-06	Weekly monitoring requirement.		22	7.9	3290	6.28	199																														
	2017-12-13	Weekly monitoring requirement.		22.7	7.8	3140	3.58	144																														
	2017-12-13			27	7.42	4010	0.19	131		88.9			565	122	90	22	996	261	228	0.01	0.001	0.05	0.1	0.010	1.4	0.01	0.01	1.4	0.12	0.01			5	40				
	2017-12-20	Weekly monitoring requirement.		23.3	7.7	3450	3.88	158																														
	2018-01-11			32	8.11	3998	6.8	-0.8	18	22.1	5	624	137	95	24	1080	274	241	0.01	0.002	0.05	0.05	0.010	1.3	0.01	0.01	1.3	0.01	0.01	130	120	1250	12					
	2018-01-12	Weekly monitoring requirement.		21.7	7.6	1600	4.1	271																														
	2018-01-17	Weekly monitoring requirement.		20.9	7.4	791	3.37	153																														
	2018-01-23	Weekly monitoring requirement.		21.7	7.6	1560	4.07	265																														
	2018-01-24			29.1	7.78	4849	4.88	41.2		34.4			613	130	99	23	1250	298	220	0.01	0.002	0.05	0.08	0.010	1.4	0.01	0.05	1.4	0.21	0.05			6830	24				
	2018-01-31	Weekly monitoring requirement.		22.3	8.1	1008	5.02	1322																														
	2018-02-07			27.3	7.88	4918	5.35	32.5		23.8	5	680	135	101	24	1340	305	260	0.02	0.002	0.05	0.06	0.010	1.2	0.01	0.02	1.2	0.04	0.02					25				
	2018-02-07	Weekly monitoring requirement.		21.2	7.8	3900	5.66	206																														
	2018-02-08	Last day of first extraction campaign.																																				
	2018-03-08			25.3	7.92	4614	7.43	63		17.6			584	123	90	21	1180	292	236	0.03	0.002	0.05	0.01	0.010	1	0.01	0.04	1	0.02	0.04			4020	38				
	2018-04-13			26.2	8.4	4708	8.15	178		104			628	127	95	22	1290	311	270	0.01	0.002	0.05	0.01	0.010	0.8	0.01	0.04	0.8	0.07	0.04	60	100	14300	8				
	2018-05-31			19.2	8.08	3929	4.98	61		7.1	5		674	119	100	22	1210	335	190	0.05	0.005	0.05	0.04	0.010	1.1	0.01	0.01	1.1	0.03	0.01	80	110	46500	12				
2018/2019	2018-10-25			25.1	8.61	4535	8.71	82	10	12	5	674	119	100	22	1210	335	190	0.05	0.005	0.05	0.04	0.010	1.1	0.01	0.01	1.1	0.03	0.01	80	110	46500	12					
	2018-12-03			27.9	8.83	5076	9.26	60.1	12	11.4		694	118	108	24	1320	303	181	0.05	0.002	0.05	0.02	0.01	1.2	0.01	0.02	1.2	0.02	0.02			264000	18					
	2018-12-17			26.3	8.71	5037	9.65	28	9	9.2		688	107	99	23	1300	294	174	0.04	0.002	0.05	0.01	0.01	1.4	0.01	0.01	1.4	0.01	0.01			409000	32					
	2019-01-15			30.5	8.53	5105	5	39.5	6	10.7	5	694	97	104	23	1310	297	139	0.03	0.002	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.05	0.01	180	460	76800	13					
	2019-02-07			29	8.46	5208	7.72	-7.8	5	4.6		772	116	119	27																							

2022/2023	2022-07-27	Cloudy, Very Turbid			16.3	7.05	442	6.34	125.2		1000.0									0.96	0.004	4.6	0.01	0.35	4.2	0.1	0.35				5	5	
	2022-08-31	Cloudy, Very Turbid			20.6	7.22	400	7.02	209.2		615.0		54	32	7	4	89	32	58	0.01	0.001	0.05	0.24	0.002	2.0	0.01	0.46	1.5	0.1	0.46		5	10
	2022-09-28	Cloudy, Very Turbid			22.6	8.02	454	6.97	-103.4		966.0										0.46	0.005	2.4			2.1	0.1	0.33			5	5	
	2022-10-26	Cloudy, Turbid			25.1	7.53	463	5.12	111.9												0.16	0.003	1.5	0.01	0.37	1.1	0.0	0.37			5	2	
	2022-11-29	Cloudy, Turbid			23.1	7.84	500	4.25	87.9		759.0		48	37	7	4	91	41	77	0.01	0.001	0.05	0.74	0.002	5.8	0.01	0.43	5.4	0.0	0.43		5	22
	2023-01-23	Cloudy, Turbid			27.0	6.68	561	8.00	158.3		82.9										0.05	0.001	1.0			0.6	0.0	0.42			5	5	
	2023-02-23	Cloudy, Turbid			26.5	6.90	556	7.15	193.2		68.5		44	45	8	4	83	42	72	0.01	0.001	0.05	0.05	0.002	1.0	0.01	0.40	0.6	0.0	0.40		5	4
	2023-03-29	Cloudy, Turbid			26.1	8.15	548	2.82	-52.1		86.1										0.02	0.001	0.7			0.4	0.0	0.32			5	5	
	2023-04-27	Cloudy, Turbid			21.1	8.01	571	8.63	-43.1		177.1										0.08	0.002	1.2	0.01	0.29	0.9	0.1	0.29			5	2	
	2023-05-30	Cloudy, Turbid			18.9	7.69	583	7.08	-50.5		82.5										0.04	0.002	0.9	0.01	0.41	0.5	0.0	0.41			5	1	
2023-06-28	Cloudy, Turbid			16.8	7.82	603	4.99	-49.5		113.0		57	43	10	5	106	56	91	0.01	0.001	0.05	0.07	0.002	1.0	0.01	0.38	0.6	0.1	0.38		5	2	
2023/2024	2023-07-31	Cloudy, Turbid			20.0	8.42	557	5.80	-79.8		71.8										0.03	0.001	1.0	0.01	0.36	0.6	0.0	0.36			5	4	
	2023-08-23	Cloudy, Turbid			20.7	8.06	890	4.11	-74.3		33.9										0.02	0.001	0.8	0.01	0.37	0.4	0.0	0.37			5	3	
	2023-09-20	Cloudy/Turbid			22.7	8.08	1754	10.25	-70.5		23.1										0.01	0.001	1.0	0.05	0.31	0.6	0.1	0.36			5	1	
	2023-10-25	Clear			25.4	8.50	2265	10.13	-70.9		13.9		274	104	51	13	560	246	135	0.01	0.001	0.05	0.01	0.001	0.8	0.01	0.31	0.5	0.0	0.32		5	2
	2023-11-22	Clear			27.3	8.16	2319	10.06	-79.3		11.5										0.08	0.001	0.9			0.7	0.0	0.24			5	4	
	2023-12-19	Clear	7		29.5	8.34	3030	5.72	-90.6		7.7		419	138	72	18	774	326	165	0.01	0.001	0.05	0.01	0.003	0.5	0.01	0.01	0.5	0.0	0.01		5	10
	2024-02-21	Clear			29.4	8.33	3414	5.75	-79.4		5.1		467	144	69	19	803	323	161	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.0	0.01		1240	2
	2024-03-28	Clear			25.0	8.27	3666	5.61			6.2										0.27	0.001	0.7	0.01	0.01	0.7	0.0	0.01			5	10	
	2024-04-22	Clear			23.5	8.36	3838	4.44	-86.4		8.4										0.01	0.008	0.7	0.01	0.09	0.6	0.1	0.09			605	10	
	2024-05-21	Clear			20.2	8.40	3102	8.56	-85.4		5.2										0.01	0.002	0.4	0.01	0.01	0.4	0.0	0.01			160	18	
2024-06-24	Clear		7.5	17.2	8.24	4906	8.08	-76.9		5.5		681	151	105	24	1280	406	189	0.01	0.001	0.05	0.02	0.004	0.6	0.01	0.02	0.6	0.1	0.60		160	11	
2024/2025	2024-07-23	Clear		8	16.7	8.35	5387	7.89	-84.6		2.6										0.01	0.001	0.4	0.04	0.01	0.4	0.08	0.40					
	2024-08-26	Clear		7.5	22.5	8.33	5328	7.71	-99.5		1.6										0.01	0.001	0.4	0.02	0.01	0.4	0.02	0.02					
	2024-09-24	Clear	7		22.5	8.24	5575	7.59	-96.7		4.1										0.01	0.002	0.6	0.02	0.03	0.6	0.0	0.05					
	2024-10-23	Clear		0.7	23.7	7.59	5055	9.57	92.7		0.4		679	141	111	26	1360	387	165	0.01	0.001	0.05	0.01	0.001	0.5	0.01	0.01	0.5	0.0	0.01		665	6
	2024-11-19	Clear		0.75	25.9	7.82	5433	7.21	108.7		4.3										0.02	0.001	0.6	0.01	0.01	0.6	0.02	0.01			7700	13	
	2025-01-21	Clear		0.75	27.5	8.25	5078	5.39	-69.7		1.9										0.17	0.001	0.5	0.01	0.01	0.5	0.02	0.01					
	2025-02-25	Clear		7.5	28.0	8.32	4809	6.26	-70.1		1.6		749	130	113	27	1360	359	167	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01		1340	1
	2025-03-25	Clear		0.7	26.1	8.53	3473	6.54	-82.4		3.5										0.02	0.001	0.5	0.01	0.01	0.5	0.01	0.01			170	7	
	2025-04-23	Clear		0.7	24.3	8.35	3486	7.12	-77.3		2.8										0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01			440	1	
	2025-05-27	Clear		0.7	22.0	8.29	3390	6.46	-76.9		9.2		446	91	66	18	962	240	136	0.01	0.001	0.05	0.03	0.001	0.6	0.01	0.01	0.6	0.04	0.01		580	1
2025-06-24	Clear		0.7	18.4	8.51	3527	6.01	-88.8		3.5										0.03	0.002	0.5	0.01	0.04	0.5	0.02	0.04			85	4		

Reporting Period (2024/2025)	Average	3.2	23.4	8.23	4595	7.07	-49.5	0.0	3.2	0.0	624.7	121	96.667	24	1227.3	328.67	156	0.01	0.001	0.05	0.03	0.00	0.49	0.01	0.01	0.49	0.02	0.05	0.0	0.0	1569	5
	Maximum	8.0	28.0	8.53	5575	9.57	108.7	0.0	9.2	0.0	749	141	113	27	1360	387	167	0.01	0.001	0.05	0.17	0.00	0.60	0.04	0.04	0.60	0.08	0.40	0.0	0.0	7700	13
	Minimum	0.7	16.7	7.59	3390	5.39	-99.5	0.0	0.4	0.0	446	91	66	18	962	240	136	0.01	0.001	0.05	0.01	0.00	0.40	0.01	0.01	0.40	0.01	0.01	0.0	0.0	85	1
All Results	Average	3.8	23.5	8.00	2944	6.34	69.7	7.4	69.0	4.7	527.8	99	80.479	19	977.6	238.63	163.5	0.02	0.00165	0.05	0.07	0.00	1.04	0.01	0.09	0.95	0.05	0.11	159.9	208.1	21339	9
	Maximum	8.0	32.0	8.83	7136	10.60	1322.0	38.0	1000.0	5.0	844	151	126	28	1420	406	270	0.10	0.005	0.07	0.96	0.02	5.80	0.05	0.46	5.40	0.36	0.60	820.0	1180.0	409000	40
	80 th Percentile	7.5	27.0	8.43	5013	8.42	177.4	8.8	54.9	5.0	732.6	128	112.2	25	1342	319.6	216	0.03	0.002	0.05	0.06	0.01	1.20	0.01	0.13	1.20	0.07	0.32	180.0	340.0	17860	12
	Median (50 th Percentile)	0.8	23.1	8.08	3215	6.38	63.9	5.0	7.8	5.0	607.5	110	92.5	22	1130	292.5	166	0.01	0.002	0.05	0.02	0.00	0.93	0.01	0.01	0.80	0.02	0.02	100.0	120.0	750	7
	20 th Percentile	0.7	20.6	7.60	907	4.11	-76.9	5.0	3.6	4.6	314.8	68	50.4	13	616	158.4	126	0.01	0.001	0.05	0.01	0.00	0.60	0.01	0.01	0.50	0.01	0.01	30.0	20.0	5	3
	Minimum	0.7	16.3	6.40	271	0.19	-110.3	4.3	0.4	2.0	37	14	6	2	64	14	36	0.01	0.001	0.01	0.01	0.00	0.40	0.01	0.01	0.40	0.01	0.01	10.0	10.0	5	1

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data. NLM = No Longer Monitored

NV - Not visible

Site: DP3		Physical									Major Cations & Anions							Metals			Nutrients										Bacteria / Algae			
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	ElectricalConductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
		Objectives	-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	1390	<800	<400	<0.5	<0.42	<20								<20		<1000/10	<230/100	<50000	<10
Pre-Extraction	2017-10-08	Algae/chororophytl only to lab		27.3	7.87	898	7.17	63.4		139																						5	7	
2017/2018	2017-10-30	Commencement of extraction																																
	2017-10-30	Daily monitoring requirement for first 2 weeks of dredging.		23.5	7.8	956	4.8	225																										
	2017-10-31	Daily monitoring requirement for first 2 weeks of dredging.		19.4	7.9	1266	4.83	184																										
	2017-11-01	Daily monitoring requirement for first 2 weeks of dredging.		20.5	7.9	1170	4.83	195																										
	2017-11-02	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1119	2.17	211																										
	2017-11-03	Daily monitoring requirement for first 2 weeks of dredging.		20.7	7.7	1202	3.46	205																										
	2017-11-06	Daily monitoring requirement for first 2 weeks of dredging.		22.5	7.6	1117	4.1	219																										
	2017-11-07	Daily monitoring requirement for first 2 weeks of dredging.		22	7.6	1098	3.82	209																										
	2017-11-08	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1128	3.88	212																										
	2017-11-09	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.6	1043	3.94	210																										
	2017-11-10	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.8	1073	3.97	211																										
	2017-11-13	Daily monitoring requirement for first 2 weeks of dredging.		21.1	7.6	1783	4.2	136																										
	2017-11-14	Daily monitoring requirement for first 2 weeks of dredging.		21.7	8.2	1784	4.8	120																										
	2017-11-15	Daily monitoring requirement for first 2 weeks of dredging.		21.3	7.4	1790	4.1	132																										
	2017-11-21	Daily monitoring requirement for first 2 weeks of dredging.		21.4	7.7	1752	5.3	136																										
	2017-11-28		30.5	8.02	3304	8.66	28.6	16	11.7	5	456	104	73	18	845	192	241	0.02	0.001	0.05	0.06	0.010	1.20	0.01	0.01	1.2	0.02	0.01	260	1620	5	3		
	2017-11-30	Weekly monitoring requirement.	21.7	7.4	1584	4.9	129																											
	2017-12-06	Weekly monitoring requirement.	22	7.9	3260	6.31	199																											
	2017-12-13	Weekly monitoring requirement.	22.6	7.8	3220	3.67	153																											
	2017-12-13		28.7	7.89	3977	0.19	92		31.4		562	120	89	22	994	249	225	0.01	0.001	0.05	0.12	0.010	1.50	0.01	0.01	1.5	0.21	0.01			5	25		
	2017-12-20	Weekly monitoring requirement.	23.3	7.5	3540	3.57	161																											
	2018-01-11		30.8	8.04	3935	2.14	-0.5	14	25.5	5	612	135	95	24	1090	272	240	0.01	0.002	0.05	0.04	0.010	1.20	0.01	0.01	1.2	0.01	0.01	130	260	5200	16		
	2018-01-12	Weekly monitoring requirement.	21.7	7.7	1660	4.3	180																											
	2018-01-17	Weekly monitoring requirement.	20.8	7.5	857	3.4	145																											
	2018-01-23	Weekly monitoring requirement.	21.7	7.7	1620	4.21	178																											
	2018-01-24		27.4	7.53	4665	2.75	5.3	53.7			592	127	94	22	1260	300	224	0.01	0.002	0.05	0.08	0.010	1.50	0.01	0.06	1.4	0.23	0.06			9200	13		
	2018-01-31	Weekly monitoring requirement.	23.3	8.2	1068	2.55	168																											
	2018-02-07	Depth 4.7m	26.4	7.52	4786	4.83	28		26.3	5	681	136	101	25	1350	307	266	0.01	0.002	0.05	0.08	0.010	1.30	0.01	0.01	1.3	0.14	0.01				25		
	2018-02-07	Weekly monitoring requirement.	20.9	7.8	3980	5.08	201																											
	2018-02-08	Last day of first extraction campaign.																																
	2018-03-08		25.1	7.91	4661	5.15	49		11.4		613	127	93	22	1190	249	241	0.03	0.002	0.05	0.01	0.010	1.20	0.01	0.06	1.1	0.01	0.06			1400	48		
	2018-04-13		26.2	7.28	4564	7.17	166		0.7		609	131	97	22	1160	322	246	0.02	0.002	0.05	0.03	0.010	1.00	0.01	0.01	1	0.02	0.01			4970	10		
	2018-05-31		19.6	8.09	3959	6.08	53		7.9	5	633	127	96	22	1300	311	273	0.01	0.002	0.05	0.01	0.010	0.70	0.01	0.03	0.7	0.06	0.03	50	80	20900	8		
2018/2019	2018-10-25		24.9	8.65	4541	6.87	79	10	14.8	5	690	121	101	22	1200	323	194	0.05	0.005	0.05	0.03	0.010	1.00	0.01	0.01	1	0.04	0.01	120	50	55600	13		
	2018-12-03		27.5	8.81	5042	9.25	116	14	12.4		656	110	100	22	1320	300	180	0.04	0.001	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.06	0.01			418000	18		
	2018-12-17		26.5	8.72	5054	9.71	18	6	10.8		686	107	99	23	1180	300	170	0.04	0.002	0.1	0.04	0.01	1.4	0.01	0.01	1.4	0.05	0.01			315000	32		
	2019-01-15		28.9	8.5	4938	4.94	69.5	13	7.3	5	679	96	103	23	1320	302	137	0.03	0.001	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.05	0.01	90	150	105000	16		
	2019-02-07		28.3	8.44	5156	7.62	-70.5	ND	3.1		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	0.005	1.2	0.01	0.02	1.2	0.05	0.02			23200	8		
	2019-02-21		28	8.36	5452	8.02	28.8	5	31.6		767	111	115	26	1390	331	154	0.03	0.002	0.05	0.01	0.001	1.1	0.01	0.01	1.1	0.01	0.01			3960	5		
	2019-03-06		26.7	8.36	5335	9.04	16.2	5	0.6		721	110	110	24	1380	320	188	0.02	0.002	0.05	0.05	0.006	0.7	0.01	0.01	0.7	0.02	0.01			1040</			

2022/2023	2022-07-27	Cloudy			16.16	7.46	415	6.02	128.6		627										0.29	0.002	1.4	0.01	0.32	1.1	0.01	0.32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Reporting Period (2024/2025)	Average	3.2	23.8	8.11	4578	6.85	-45.6	0.0	3.8	0.0	614.3	120	96	23	1244.67	319	164.67	0.01	0.001	0.05	0.03	0.00	0.54	0.01	0.02	0.52	0.02	0.06	0.0	0.0	1569	5
	Maximum	8.0	28.3	8.50	5572	9.58	113.5	0.0	11.1	0.0	716	137	113	26	1400	381	186	0.01	0.001	0.05	0.16	0.00	0.70	0.04	0.07	0.60	0.07	0.40	0.0	0.0	7700	13
	Minimum	0.7	18.4	6.96	3372	5.36	-97.5	0.0	0.5	0.0	461	94	67	18	964	229	135	0.01	0.001	0.05	0.01	0.00	0.40	0.01	0.01	0.40	0.01	0.01	0.0	0.0	85	1
All Results	Average	3.8	23.4	7.97	3030	6.24	52.0	8.7	41.0	5.0	554.93	104	84.4	20	1029.44	250.489	169.22	0.02	0.0016	0.05	0.06	0.00	0.91	0.01	0.09	0.81	0.05	0.12	89.4	181.9	22018	9
	Maximum	8.0	30.8	8.81	7215	10.50	225.0	53.7	627.0	5.0	846	155	126	28	1400	405	273	0.05	0.005	0.10	1.29	0.01	1.80	0.04	0.45	1.50	0.55	0.60	330.0	1620.0	418000	48
	80 th Percentile	7.5	26.7	8.38	4938	8.09	162.0	11.2	45.0	5.0	730.6	129	110	25	1328	319.6	224	0.03	0.002	0.05	0.06	0.01	1.20	0.01	0.15	1.10	0.06	0.34	126.0	216.0	20900	13
	Median (50 th Percentile)	0.8	23.1	8.04	3338	6.29	73.0	5.0	7.8	5.0	612	110	95	22	1180	294	170	0.01	0.002	0.05	0.02	0.00	0.90	0.01	0.01	0.75	0.02	0.02	65.0	65.0	790	7
	20 th Percentile	0.7	20.7	7.60	1068	4.21	-73.0	5.0	2.9	5.0	428.8	79	67	16	792.2	187.8	135.2	0.01	0.001	0.05	0.01	0.00	0.60	0.01	0.01	0.50	0.01	0.01	14.0	24.0	5	2
	Minimum	0.7	16.2	6.40	236	0.19	-180.1	5.0	-9.7	5.0	46	13	6	3	71	21	35	0.01	0.001	0.05	0.01	0.00	0.30	0.01	0.01	0.30	0.01	0.01	10.0	10.0	5	1

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data. NLM = No Longer Monitored
NV - Not visible

Site: DP4			Physical									Major Cations & Anions							Metals			Nutrients										Bacteria / Algae			
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	ElectricalConductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a		
Objectives			-	-	6.5-9.0	<6192	>6		<20			<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20							<20					<50000	<10	
2023/2024	2023-07-31	New northern dredge pond location Cloudy, Turbid		20.31	7.92	686	5.25	-56.8		116		62	63	16	6	101	94	107	0.01	0.001	0.05	0.04	0.001	1.1	0.01	0.32	0.8	0.06	0.32			5	2		
	2023-08-23	Cloudy, Turbid		22.55	7.7	1218	3.99	-54.4		71.3									0.01		0.05	0.02	0.001	1	0.01	0.31	0.7	0.11	0.31			900	2		
	2023-09-20	Cloudy/Turbid, Frothing on bank		23.65	7.82	1740	9.77	-56.9		22.9												0.02	0.001	0.8	0.05	0.23	0.5	0.09	0.28			5	1		
	2023-10-25	Clear		26.27	7.97	2632	9.47	-68.5		20.1		296	136	58	16	604	320	180	0.01	0.001	0.05	0.02	0.001	0.9	0.03	0.26	0.6	0.07	0.29			5	4		
	2023-11-22	Cloudy, Turbid	0	26.43	7.75	2347	9.52	-54.3		13.7												0.07	0.001	0.9			0.7	0.04	0.24			5	5		
	2023-12-19	Cloudy, Turbid	-3.5	30.2	8.05	2574	6.78	-75.7		12.4		337	141	63	16	625	334	186	0.01	0.001	0.05	0.01	0.004	0.6	0.01	0.01	0.6	0.01	0.01			5	12		
	2024-02-21	Cloudy, Turbid		28.15	7.91	1591	6.73	-53.1		17.5		202	114	37	11	399	234	134	0.15	0.001	0.05	0.02	0.002	0.4	0.01	0.01	0.4	0.01	0.01			125	4		
	2024-03-28	Cloudy, Turbid		23.81	8.21	2578	4.55			17.6												0.06	0.001	0.8	0.01	0.01	0.8	0.01	0.01			5	8		
	2024-04-22	Cloudy, Turbid		22.51	7.8	1920	5.05	-53.8		47.5												0.04	0.004	0.7	0.01	0.01	0.7	0.06	0.01			5	7		
2024-05-21	Cloudy, Turbid		19.25	8.09	1408	8.7	-63.8		12.6												0.04	0.004	1	0.01	0.01	1	0.02	0.01			750	9			
2024-06-24	Clear	-1	17.42	8.02	3428	9.57	-61.2		10.6		437	150	73	18	546	355	200	0.01	0.001	0.05	0.05	0.001	0.9	0.01	0.01	0.9	0.02	0.9			295	6			
2024/2025	2024-07-23	Cloudy	4	16.3	8.18	3956	8.22	-72.6		4.6												0.03	0.009	0.6	0.02	0.01	0.6	0.01	0.90			5	2		
	2024-08-26	Cloudy		23.9	8.49	2850	7.63	-109.1		9.1												0.01	0.001	0.7	0.01	0.01	0.7	0.02	0.01			5	2		
	2024-09-24	Cloudy	-1	23.91	8.21	3638	7.81	-94.5		8.4												0.02	0.003	0.7	0.01	0.01	0.7	0.03	0.01			80	4		
	2024-10-23	Cloudy	-0.1	24.6	7.58	2346	9.51	115.7		5.63		279	90	49	13	565	202	128	0.07	0.001	0.05	0.01	0.001	0.5	0.01	0.01	0.5	0.01	0.01			7940	10		
	2024-11-19	Cloudy	-0.2	25.6	7.45	2199	7.12	92.4		9.3												0.01	0.003	0.6	0.01	0.01	0.6	0.03	0.01			4680	8		
	2025-01-21	Slightly Cloudy		29.6	8.03	1189	6.01	-60.6		9.2												0.05	0.001	0.9	0.01	0.01	0.9	0.03	0.01			131000	2		
	2025-02-25	Slightly Cloudy	0.1	27.4	8.32	2313	5.95	-68.9		9.9		305	78	50	12	642	184	120	0.01	0.001	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.01	0.01			236000	2		
	2025-03-25	Slightly Cloudy		26.0	8.72	2364	6.67	-94.8		9.9												0.03	0.003	0.9	0.01	0.09	0.8	0.01	0.09			21200	28		
	2025-04-23	Slightly Cloudy	0.45	24.5	8.53	2217	6.89	-84.6		10.3												0.03	0.001	0.7	0.01	0.02	0.7	0.03	0.02			3060	7		
	2025-05-27	Clear	-0.1	22.6	8.23	1941	7.13	-72.7		26.6		235	81	35	11	516	160	126	0.01	0.001	0.05	0.04	0.001	0.8	0.04	0.01	0.8	0.02	0.01			2760	3		
	2025-06-24	Clear	0	19.2	8.33	2375	5.40	-79.2		24.7												0.02	0.001	0.7	0.01	0.02	0.7	0.01	0.02			855	15		

Reporting Period (2024/2025)	Average	0.4	24.0	8.19	2490	7.12	-48.1	0.0	11.6	0.0	273	83	44.7	12	574.3	182	124.7	0.03	0.001	0.05	0.02	0.00	0.72	0.01	0.02	0.71	0.02	0.10	0.0	0.0	37053	8
	Maximum	4.0	29.6	8.72	3956	9.51	115.7	0.0	26.6	0.0	305	90	50	13	642	202	128	0.07	0.001	0.05	0.05	0.01	0.90	0.04	0.09	0.90	0.03	0.90	0.0	0.0	236000	28
	Minimum	-1.0	16.3	7.45	1189	5.40	-109.1	0.0	4.6	0.0	235	78	35	11	516	160	120	0.01	0.001	0.05	0.01	0.00	0.50	0.01	0.01	0.50	0.01	0.01	0.0	0.0	5	2
All Results	Average	-0.1	23.8	8.06	2250	7.17	-53.7	0.0	22.3	0.0	269.1	107	47.6	13	499.8	235.4	147.6	0.04	0.001	0.05	0.03	0.00	0.77	0.01	0.07	0.70	0.03	0.16	0.0	0.0	18622	7
	Maximum	4.0	30.2	8.72	3956	9.77	115.7	0.0	116.0	0.0	437	150	73	18	642	355	200	0.15	0.001	0.05	0.07	0.01	1.10	0.05	0.32	1.00	0.11	0.90	0.0	0.0	236000	28
	80 th Percentile	0.3	26.8	8.32	2719	9.49	-54.0	0.0	25.5	0.0	357	143	65	16	628.4	338.2	188.8	0.09	0.001	0.05	0.04	0.00	0.90	0.02	0.17	0.80	0.06	0.30	0.0	0.0	5984	9
	Median (50 th Percentile)	-0.1	23.9	8.04	2330	7.01	-63.8	0.0	12.5	0.0	287.5	102	49.5	13	555.5	218	131	0.01	0.001	0.05	0.03	0.00	0.80	0.01	0.01	0.70	0.02	0.01	0.0	0.0	210	5
	20 th Percentile	-1.0	19.9	7.78	1518	5.34	-82.4	0.0	9.2	0.0	174	75	31.2	10	339.4	146.8	117.4	0.01	0.001	0.05	0.01	0.00	0.60	0.01	0.01	0.60	0.01	0.01	0.0	0.0	5	2
	Minimum	-3.5	16.3	7.45	686	3.99	-109.1	0.0	4.6	0.0	62	63	16	6	101	94	107	0.01	0.001	0.05	0.01	0.00	0.40	0.01	0.01	0.40	0.01	0.01	0.0	0.0	5	1

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data. NLM = No Longer Monitored

NV - Not visible

Site: DP1-1			Physical										Major Cations / Anions								Metals			Nutrients										Bacteria / Algae			
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a				
Objectives			-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		<1000/100	<230/100	<50000	<10			
Pre - Extraction	2017-09-04			21.5	8.44	824	7.01	121	5	3.9		129	33	20	8	236	56	98	0.05	0.001	0.06	0.01	0.01	0.4	0.01	0.01	0.4	0.02	0.01	10	10	5	1				
	2017-10-05			24	7.51	819	4.51	54.4	62	149		98	46	17	7	179	39	128	0.07	0.001	0.06	0.15	0.01	0.9	0.01	0.03	0.9	0.16	0.03	480	840						
2017/2018	2017-10-30	Commencement of extraction																																			
	2017-11-28			26.9	7.65	3066	3.11	19.4	53	85		456	110	72	18	877	281	237	0.01	0.001	0.05	0.08	0.01	1.4	0.01	0.01	1.4	0.29	0.01	180	100						
	2018-01-11			30.6	8.01	3997	2.16	-2	10	22.1	5	624	135	96	24	1100	224	239	0.01	0.002	0.05	0.05	0.01	1.2	0.01	0.01	1.2	0.02	0.01	60	120						
	2018-01-24			27.5	7.51	4693	2.88	37.3		53.6																											
	2018-05-31			19.5	8.12	3959	5.19	61		6.9	5	627	128	95	22	1280	290	274	0.01	0.002	0.05	0.02	0.01	0.7	0.01	0.03	0.7	0.06	0.03	40	80	16800	8				
	2018-02-07			26.4	7.72	4894	5.17	27.8		17.8	5	766	153	114	27	1350	308	263	0.01	0.002	0.05	0.08	0.01	1.3	0.01	0.01	1.3	0.11	0.01	90	80						
	2018-02-08	Last day of first extraction campaign.																																			
2018 / 2019	2018-10-25			24.9	8.62	4559	5.93	80	7	13.8	5	680	121	102	22	1220	334	193	0.05	0.005	0.05	0.03	0.01	1	0.01	0.01	1	0.05	0.01	90	50						
	2019-01-15			28.9	8.56	4899	4.85	13.5	5	8	5	693	98	104	24	1320	288	139	0.03	0.002	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.05	0.01	190	370						
	2019-04-03			24.6	8.44	5300	4.84	96.9	8	7.5	5	735	125	112	24	1240	298	173	0.03	0.002	0.05	0.04	0.002	1.2	0.01	0.01	1.2	0.04	0.01	340	160						
2019 / 2020	2019-07-03			18.7	8.49	6553	5.75	85	5	4.4	5	729	125	110	24	1270	248	221	0.01	0.001	0.05	0.02	0.001	1.1	0.01	0.12	1	0.13	0.13	100	140						
	2019-10-02			24.2	8.8	5286	6.5	65.9	5	7.7	5	758	131	115	25	1380	315	189	0.01	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.01	0.01	10	10						
	2020-01-15	Aquatic birds present. Cattle present. Low water level. pH meter calibration issue - spurious data		28.4	10.2*	5940	8	82.3	5	3		838	122	121	28	1410	316	164	0.01	0.001	0.05	0.02	0.002	1.1	0.01	0.01	1.1	0.03	0.01	350	270						
2020/2021	2020-07-07	Clear.		16.8	6.4	3694	9.1	121	5	2.6	5	602	87	90	20	1020	195	183	0.01	0.002	0.05	0.02	0.007	1	0.01	0.04	1	0.104	0.04	120	10						
	2020-08-12	Clear		18	8.3	3490	10.5	90	5	6.6	5	552	91	85	19	1020	185	162	0.01	0.001	0.05	0.29	0.001	1	0.01	0.04	1	0.04	0.05	20	10						
	2020-09-16			21.4	8.41	3640	10.71	94.5	6	60.1	5	565	87	83	18	1080	193	149	0.03	0.002	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.01	0.01	10	10						
	2020-10-14			24.5	8.63	3510	9.78	67.6	5	15.3	5	566	98	83	20	1040	230	139	0.03	0.002	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.02	0.01				6				
	2020-11-11			24.6	8.44	3691	9.5	77.4	5	2.4		534	86	80	18	1050	238	145	0.03	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	70	240						
	2021-02-24	Clear		26.7	8.34	3053	8.56	20.5	5	4.8		439	78	66	16	905	195	126	0.03	0.002	0.05	0.01	0.007	0.7	0.01	0.01	0.7	0.01	0.01	220	180						
	2021-06-10	Clear		17.5	8.04	2456	8.79	53.1	5	3.75		400	72	58	14	767	166	136	0.01	0.002	0.05	0.01	0.001	0.7	0.02	0.04	0.6	0.18	0.06	20	40						
2021/2022	N/A																																				
2022/2023	2022-08-31																															5	10				
		Cloudy, Very Turbid		18.59	7.64	353	6.79	212.4		428		53	24	7	3	88	30	50	0.01	0.001	0.05	0.16	0.004	1.1	0.01	0.43	0.7	0.01	0.43			5	4				
	2023-02-23																															5	4				
		Cloudy, Turbid		27	6.5	568	7.5	200.3		57.64		49	43	7	4	84	42	71	0.01	0.001	0.05	0.04	0.001	1	0.01	0.41	0.6	0.02	0.41								
2023/2024	2024-02-21																															1240	2				
		Clear		29.53	8.38	3499	5.49	-81.8		4.9		492	152	73	20	891	326	160	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01								

Reporting Period (2023/2024)	Average	-	29.5	8.38	3499	5.49	-81.8	ND	4.9	ND	492	152	73	20	891	326	160	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01	ND	ND	ND	ID
	Maximum	-	29.5	8.38	3499	5.49	-81.8	ND	4.9	ND	492	152	73	20	891	326	160	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01	ND	ND	ND	ID
	Minimum	-	29.5	8.38	3499	5.49	-81.8	ND	4.9	ND	492	152	73	20	891	326	160	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01	ND	ND	ND	ID
All Results	Average	-	23.9	8.04	3598	6.64	69.5	12	42.1	5	518	98	78	18	946	218	165	0.02	0.002	0.05	0.05	0.005	0.9	0.01	0.06	0.9	0.06	0.06	133	151	3611	5
	Maximum	-	30.6	8.80	6553	10.71	212.4	62	428.0	5	838	153	121	28	1410	334	274	0.07	0.005	0.06	0.29	0.010	1.4	0.02	0.43	1.4	0.29	0.43	480	840	16800	10
	80 th Percentile	-	27.7	8.52	4976	9.18	101.7	9	58.1	5	731	129	111	24	1296	311	227	0.03	0.002	0.05	0.08	0.010	1.2	0.01	0.04	1.2	0.12	0.05	244	246	ID	ID
	Median (50 th Percentile)	-	24.6	8.32	3691	6.50	67.6	5	7.7	5	566	98	84	20	1045	234	161	0.01	0.002	0.05	0.02	0.003	1.0	0.01	0.01	0.9	0.04	0.01	90	90	5	5
	20 th Percentile	-	18.7	7.59	2130	4.77	20.3	5	3.9	5	292	62	43	12	555	122	127	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	18	10	ID	ID
	Minimum	-	16.8	6.40	353	2.16	-81.8	5	2.4	5	49	24	7	3	84	30	50	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01	10	10	5	1

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data. NLM = No Longer Monitored

Site: DP1-2		Physical										Major Cations & Anions								Metals			Nutrients										Bacteria / Algae			
Sample Date		Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a			
																																		Objectives	-	-
Pre-Extraction	2017-09-04			20.1	8.23	787	6.86	126	5	1.9		134	33	21	8	237	57	97	0.04	0.001	0.05	0.01	0.01	0.4	0.01	0.02	0.4	0.02	0.02	40	10	5	2			
	2017-10-05			23	7.32	798	3.32	63.8	46	166		96	46	17	7	176	44	131	0.11	0.001	0.1	0.11	0.01	1.1	0.01	0.02	1.1	0.17	0.02	450	1010					
2017/2018	2017-10-30	Commencement of extraction																																		
	2017-11-28			26.8	7.53	3048	3.21	19	53	99		454	108	72	18	878	198	238	0.01	0.001	0.05	0.09	0.01	1.4	0.01	0.01	1.4	0.3	0.01	60	130					
	2018-01-11			28.3	7.49	4114	2.17	-0.9	13	23.2	5	648	136	100	24	1130	281	242	0.01	0.002	0.05	0.05	0.01	1.4	0.01	0.01	1.4	0.31	0.01	30	50	5	8			
	2018-01-24			27.4	7.5	4679	2.31	33		70.2		685	146	110	26	1250	301	223	0.01	0.002	0.05	0.07	0.01	1.4	0.01	0.01	1.4	0.12	0.01			12700	30			
	2018-02-07			26.2	7.61	4903	6.96	21		23.6	5	693	138	102	25	1350	311	265	0.01	0.002	0.05	0.08	0.01	1.3	0.01	0.02	1.3	0.12	0.02	40	60					
	2018-02-08	Last day of first extraction campaign																																		
	2018-03-08			24.8	7.89	4658	3.29	61		14.9		600	125	92	22	1180	229	240	0.03	0.002	0.05	0.01	0.01	1	0.01	0.02	1	0.01	0.02			2360	29			
	2018-04-13			24.9	8.11	4663	6.7	113		7.1																					5160	7				
2018/2019	2018-05-31			19.4	8.12	3944	5.95	61		7.8	5	634	128	96	22	1270	290	270	0.01	0.002	0.05	0.01	0.01	0.8	0.01	0.05	0.7	0.07	0.05	40	90	14200	8			
	2018-10-25			24.7	8.61	4524	6.54	79	8	15.2	5	673	119	100	22	1230	329	196	0.05	0.005	0.05	0.04	0.01	1	0.01	0.01	1	0.03	0.01	120	50	38800	13			
	2018-12-03			27.3	8.78	5056	8.53	67.7	13	9.6		643	110	99	22	1320	306	180	0.03	0.001	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.09	0.01			299000	16			
	2018-12-17			26.2	8.61	5022	8.78	-11	9	9.6		686	106	99	23	1170	282	175	0.04	0.002	0.05	0.01	0.01	1.3	0.01	0.01	1.3	0.12	0.01			199000	32			
	2019-01-15			29	8.55	4913	7.26	1.8	6	9.5	5	693	97	104	23	1310	300	135	0.03	0.002	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.04	0.01	180	170	102000	16			
	2019-02-07			28.4	8.46	5153	7.75	-77.5	9	6.1		776	117	118	27	1350	314	162	0.02	0.002	0.05	0.02	0.005	1.2	0.01	0.01	1.2	0.02	0.01			17600	12			
	2019-02-21			23.7	8.29	5351	7.98	-4.8	5	22.5		766	110	114	26	1380	345	154	0.03	0.002	0.05	0.01	0.001	1.1	0.01	0.01	1.1	0.05	0.01			3430	6			
	2019-03-06			26.1	8.38	5268	8.95	-7.5	5	2.4		733	113	111	25	1360	321	189	0.02	0.002	0.05	0.05	0.005	0.8	0.01	0.01	0.8	0.01	0.01			955	7			
	2019-03-21			27.8	8.63	5968	5.77	-106	8	3.22		732	110	111	25	1290	287	161	0.03	0.002	0.05	0.01	0.001	1	0.01	0.01	1	0.01	0.01			13100	9			
	2019-04-03			24.9	8.43	5300	4.23	92	13	6.7	5	721	124	111	24	1240	301	177	0.03	0.001	0.05	0.03	0.001	1	0.01	0.01	1	0.04	0.01	120	110	29300	11			
	2019-05-01			23.1	8.25	4518	8.14	19.6	5	4.5		726	120	110	24	1290	286	189	0.01	0.002	0.05	0.02	0.003	1	0.01	0.01	1	0.04	0.01			31400	13			
	2019-06-05			17.9	7.8	4096	6.8	57.7	5	-9.8		724	133	115	26	1270	302	225	0.01	0.002	0.05	0.02	0.003	1.3	0.02	0.04	1.2	0.36	0.06			13200	12			
2019 / 2020	2019-07-03			18.5	8.47	6558	5.65	85	5	1.6	5	706	123	106	24	1260	252	224	0.03	0.001	0.05	0.02	0.001	1.1	0.02	0.11	1	0.14	0.13	90	60	22000	11			
	2019-07-31			17.9	8.54	7123	5.65	109.2	5	5.2		733	129	113	24	1340	312	217	0.01	0.001	0.05	0.02	0.001	1.1	0.01	0.11	1	0.01	0.11			30500	8			
	2019-09-03			19.7	8.7	5468	7.3	127	5	7.3		780	127	120	25	1340	333	188	0.01	0.001	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.02	0.01			40300	8			
	2019-10-02			24	8.8	5278	6	65.5	6	7.4	5	761	131	114	25	1370	308	190	0.01	0.002	0.05	0.02	0.001	1	0.01	0.01	1	0.01	0.01	40	20	130000	10			
	2019-11-06	Aquatic birds present. Cattle present. Low water		22.7	8.5	4942	8.7	117.1	13	3.9		735	105	109	25	1320	319	186	0.02	0.002	0.05	0.02	0.001	1.1	0.01	0.01	1.1	0.03	0.01			111000	13			
	2020-01-15	Aquatic birds present. Cattle present. Low water level. pH meter calibration issue - spurious data		27.4	12.6*	5934	7.9	90.1	5	4.3		831	121	123	28	1410	315	162	0.01	0.002	0.05	0.01	0.002	1	0.01	0.01	1	0.03	0.01	350	460	5	8			
2020/2021	2020-07-07	Clear.		16.8	6.4	3692	9.1	119	5	3	5	586	86	88	20	1010	217	175	0.01	0.002	0.05	0.01	0.004	1	0.01	0.04	1	0.24	0.04	80	10	7160				
	2020-08-12	Clear		17	8.3	3494	10.4	90	5	7.6	5	544	87	82	18	1030	182	170	0.01	0.002	0.05	0.11	0.001	1.2	0.01	0.04	1.1	0.04	0.05	20	10	20600	12			
	2020-09-16			21	8.5	3633	10.72	95.7	5	33.5	5	570	88	84	19	1080	193	149	0.01	0.001	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.02	0.01	10	10	19600	9			
	2020-10-14			23.5	8.72	3496	9.78	68.1	5	13.5	5	578	100	85	20	1040	231	142	0.02	0.002	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.01	0.01			11600	6			
	2020-10																																			

Site: DP1-4			Physical										Major Cations & Anions								Metals			Nutrients										Bacteria / Algae			
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a				
Pre-E	2017-09-04	Objectives	-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		<1000/100	<230/100	<50000	<10			
	2017-10-05			17.9	7.95	746	5.57	125	7	4.8		131	33	20	8	234	57	97	0.05	0.001	0.06	0.01	0.01	0.4	0.02	0.02	0.4	0.04	0.04			5	2				
2017/2018	2017-10-05			22.7	7.06	777	1.79	81.1	61	166		90	46	17	6	173	43	134	0.01	0.001	0.05	0.1	0.01	1	0.01	0.02	1	0.2	0.02	290	850						
	2017-10-30	Commencement of extraction																																			
	2017-11-28			26.8	7.51	3072	2.85	17	2660	102		451	108	72	18	883	224	236	0.01	0.001	0.05	1.81	0.01	7.3	0.01	0.01	7.3	0.24	0.01	100	220						
	2017-12-13																																				
	2018-01-11			28.1	7.42	4052	0.68	-20	7	22	5	636	134	100	24	1130	269	240	0.01	0.002	0.05	0.04	0.01	1.3	0.01	0.01	1.3	0.33	0.01	10	10	250	6				
	2018-01-24			27.8	7.59	4729	2.49	23		101		681	146	108	25	1250	300	222	0.01	0.002	0.05	0.1	0.01	1.6	0.01	0.03	1.6	0.24	0.03			15900	22				
	2018-02-07			25.3	7.57	4981	4.57	24		58.7	5	710	140	106	26	1380	308	260	0.02	0.002	0.05	0.07	0.01	1.2	0.01	0.02	1.2	0.2	0.02	70	70						
	2018-02-08	Last day of first extraction campaign																																			
	2018-03-08			24.3	7.85	4651	3.37	53			14.2		602	127	93	22	1190	285	238	0.03	0.002	0.05	0.01	0.01	1	0.01	0.01	1	0.01	0.01			6120	30			
	2018-04-13			24.9	8.1	4651	6.16	131			8.7																						3380	5			
2018/2019	2018-05-31			19.2	8.11	3931	5.65	60.3		7.7	5	629	129	95	22	1270	286	261	0.01	0.002	0.05	0.01	0.01	0.6	0.01	0.02	0.6	0.06	0.02	40	80	4980	8				
	2018-10-25			21.1	8.48	4493	5.24	88	6	11.7	5	674	121	102	22	1250	332	210	0.05	0.005	0.05	0.02	0.01	0.8	0.01	0.01	0.8	0.04	0.01	20	10	62800	14				
	2018-12-03			25.8	8.52	5015	5.15	40.5	8	4.3		624	108	97	22	1310	305	201	0.03	0.001	0.05	0.02	0.01	1.1	0.01	0.01	1.1	0.06	0.01			115000	15				
	2018-12-17			25.2	8.32	4925	3.15	-54	8	3.8		690	110	100	24	1180	289	176	0.03	0.002	0.05	0.01	0.01	1.2	0.01	0.01	1.2	0.05	0.01			387000	30				
	2019-01-15			27.1	7.98	4657	0.33	-206.6	5	5.3	5	684	103	102	23	1290	301	190	0.02	0.002	0.05	0.04	0.01	1.1	0.01	0.01	1.1	0.05	0.01	10	20	9170	9				
	2019-02-07			23.4	7.33	4450	0.78	-209.4	14	33.4		710	128	103	22	1250	286	264	0.02	0.002	0.19	0.02	0.005	1.1	0.01	0.01	1.1	0.05	0.01			225	89				
	2019-02-21			24.8	7.63	5070	0.91	-219.7	5	39.5		765	111	114	25	1360	333	187	0.02	0.002	0.05	0.03	0.004	1.2	0.01	0.01	1.2	0.05	0.01			155	18				
	2019-03-06			24.6	8.16	5090	6.35	-103	5	3.1		731	112	110	24	1350	306	206	0.02	0.002	0.05	0.05	0.005	0.6	0.01	0.01	0.6	0.01	0.01			760	12				
	2019-03-21			26.8	8.42	5953	4.18	-34	5	3.22		752	111	113	26	1290	288	178	0.03	0.002	0.05	0.01	0.002	0.8	0.01	0.01	0.8	0.02	0.01			19500	6				
	2019-04-03			24.5	8.41	5301	4.46	74.4	5	7.5	5	748	128	114	24	1230	292	181	0.02	0.002	0.05	0.02	0.003	1	0.01	0.01	1	0.06	0.01	110	120	24200	10				
2019-05-01			22.8	8.2	4491	7.64	7.9	5	4.6		783	131	121	26	1300	286	188	0.01	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.03	0.01			65600	11					
2019-06-05			17.8	7.8	4086	6.8	58.8	5	-9.8		714	128	112	25	1280	297	226	0.01	0.002	0.05	0.01	0.002	1.3	0.02	0.04	1.2	0.37	0.06			16600	10					
2019/2020	2019-07-03			18.2	8.25	6627	4.67	85	5	2.9	5	733	127	110	24	1280	260	229	0.01	0.001	0.05	0.01	0.001	1.1	0.02	0.12	1	0.17	0.14	100	430	29400	7				
	2019-07-31			17.5	8.25	7103	4.89	111.9	5	7.5		704	122	107	24	1340	311	231	0.01	0.001	0.05	0.02	0.001	1	0.01	0.14	0.9	0.04	0.14			20000	8				
	2019-09-03			18.4	8.3	5479	5.1	137.6	5	5.7		741	125	112	24	1340	328	216	0.01	0.001	0.05	0.01	0.002	0.9	0.01	0.01	0.9	0.02	0.01			18700	9				
	2019-10-02			20.5	8.2	5192	3.2	46.2	5	1.3	5	752	128	111	25	1330	296	230	0.01	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.01	0.01	10	10	6080	6				
	2019-11-06	Aquatic birds present. Cattle present. Low water level		22.5	8.5	4917	8.4	98.1	6	5.9		739	106	109	25	1310	318	190	0.02	0.002	0.05	0.02	0.001	1.1	0.01	0.01	1.1	0.01	0.01			155000	15				
	2020-01-15	pH meter calibration issue - spurious data.		26.7	10*	5738	7.7	89.2	5	4		833	123	124	28	1410	322	164	0.01	0.001	0.05	0.02	0.005	1	0.01	0.01	1	0.01	0.01	420	140	5	10				
Reporting Period (2021/2022)	2020-07-07	Clear.		16.6	6.4	3695	9	115	5	2.8	5	605	88	91	20	1020	197	175	0.01	0.002	0.05	0.01	0.004	0.9	0.01	0.04	0.9	0.15	0.04	40	10	6860					
	2020-08-12	Clear		16.8	8.2	3496	9.6	89	12	7.6	5	535	91	82	19	1020	182	166	0.01	0.002	0.05	0.02	0.001	1	0.01	0.04	0.9	0.06	0.05	50	10	43800	8				
	2020-09-16			19.4	8.18	3629	8.41	108.1	5	23.42	5	575	88	85	19	1080	191	174	0.01	0.001	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.06	0.01	20	80	4170	11				
	2020-10-14			21	8.41	3445	5.64	94.8	5	16.1	5	563	94	82	19	1030	224	171	0.01	0.002	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.01	0.01			2940	5				
	2020-11-11			22.9	8.42	3659	8.96	75.1	5	3.1		544																									

Site: DP1-6			Physical								Major Cations & Anions								Metals			Nutrients								Bacteria / Algae			
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a
												<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20						<20			<1000/100	<230/100	<50000	<10
2017/2018	2017-10-30	Commencement of extraction																															
	2018-01-24			27.4	7.47	4667	2.09	34.4		95		605	131	97	23	1250	302	220	0.01	0.002	0.05	0.08	0.01	1.5	0.01	0.01	1.5	0.21	0.01			33600	21
	2018-02-07			24.8	7.56	4858	1.11	23.1		10																							
	2018-02-08	Last day of first extraction campaign.																															
	2018-03-08			24.3	7.85	4651	3.37	53		14.2		630	133	96	23	1230	238	252	0.02	0.002	0.05	0.01	0.01	1	0.01	0.01	1	0.01	0.01			1220	39
2018/2019	2018-04-13			24.9	8.09	4655	6.34	138		4.3																					5030	5	
	2018-05-31			19.4	8.1	3942	5.38	59		7.1	5	630	127	95	22	1280	283	271	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.07	0.03	50	70	12900	8
	2018-10-25			19.6	8.31	4531	3.12	82	5	3.1	5	710	124	105	23	1270	344	220	0.05	0.005	0.05	0.02	0.01	0.8	0.01	0.01	0.8	0.03	0.01	70	20	24100	8
	2018-12-03			21.6	7.79	5041	2.31	-130	10	2.3		637	122	100	22	1310	287	275	0.02	0.002	0.18	0.02	0.01	1	0.01	0.01	1	0.11	0.01			276000	8
	2018-12-17			23.4	7.99	4724	1.5	-130	5	2.1		654	122	95	23	1140	276	225	0.02	0.001	0.13	0.02	0.01	1	0.01	0.01	1	0.04	0.01			16900	5
	2019-01-15			21.8	7.42	4098	0.3	-276.5	5	2.3	5	648	121	98	22	1240	278	265	0.01	0.002	0.16	0.02	0.01	0.7	0.01	0.01	0.7	0.04	0.01	30	90	5	4
	2019-02-07			20.2	7.14	4332	0.11	-268.3	19	2.3		731	148	114	25	1270	274	302	0.01	0.002	0.05	0.01	0.005	1.4	0.01	0.01	1.4	0.56	0.01			75	2
	2019-02-21			20.6	7.07	4545	0.45	-219.7	5	16		728	137	111	25	1310	271	304	0.01	0.002	0.08	0.01	0.001	1.6	0.01	0.01	1.6	0.83	0.01			5	5
	2019-03-06			21.3	7.27	4701	0.64	-313	5	3.4		692	133	107	23	1320	196	342	0.01	0.002	0.05	0.05	0.005	2.6	0.01	0.01	2.6	1.43	0.01			5	4
	2019-03-21			24.4	7.69	6192	0.56	-53	5	3.37		751	120	115	26	1340	283	239	0.02	0.002	0.1	0.04	0.002	1.2	0.01	0.01	1.2	0.14	0.01			5	14
	2019-04-03			24	7.62	5477	0.21	-38.7	9	12.2	5	733	132	113	24	1260	311	217	0.02	0.002	0.13	0.04	0.003	1.2	0.01	0.01	1.2	0.04	0.01	60	80	2110	46
	2019-05-01			22.8	8.17	4511	7.4	-7.4	6	5.9		786	130	118	26	1310	287	187	0.02	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.03	0.01			6590	11
2019-06-05			17.7	7.8	4071	6.9	63.5	5	-9.7		722	130	113	25	1280	294	218	0.01	0.002	0.05	0.01	0.003	1.4	0.02	0.04	1.3	0.38	0.06			17400	10	
2019/2020	2019-07-03			18.1	8.13	6676	2.41	86	5	1.6	5	724	125	110	24	1300	255	234	0.01	0.001	0.05	0.01	0.001	1.2	0.02	0.1	1.1	0.33	0.12	260	210	580	5
	2019-07-31			17.5	8.18	7141	1.92	114.4	5	9.9		672	118	102	23	1320	313	232	0.01	0.001	0.05	0.02		1.1	0.01	0.12	1	0.19	0.12			1180	6
	2019-09-03			17.8	7.9	5473	2.7	153	5	2.7		730	123	110	23	1330	316	218	0.01	0.002	0.05	0.01	0.001	0.9	0.01	0.03	0.9	0.17	0.03			590	4
	2019-10-02			20.1	8	5207	1.46	5	5	1.3	5	736	129	112	24	1350	303	242	0.01	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.02	0.01	90	40	1180	2
	2019-11-06			18.8	7.8	4932	1.5	-154.9	5	-3.1		702	108	104	24	1250	281	256	0.01	0.002	0.13	0.02	0.001	1.2	0.01	0.01	1.2	0.42	0.01			1320	3
	2020-01-15	pH meter calibration issue - spurious data.		21.8	10.7*	4817	1.3	-162.4	5	12.9		791	124	119	27	1360	302	186	0.01	0.001	0.05	0.15	0.025	1.3	0.01	0.01	1.3	0.02	0.01	10	20	5	149
2020/2021	2020-07-07	Clear.		16.7	6.4	3691	9	114	5	2.7	5	596	87	90	20	1020	194	175	0.01	0.002	0.05	0.01	0.002	0.9	0.01	0.03	0.9	0.14	0.03	50	10	6780	
	2020-08-12	Clear		17	8	3529	7.8	93	5	11.5	5	547	89	82	19	1020	188	168	0.02	0.002	0.05	0.02	0.001	1	0.03	0.02	1	0.15	0.05	10	20	27700	5
	2020-09-16			17.5	7.54	3635	3.38	122.1	5	20.94	5	562	87	83	19	1080	192	177	0.01	0.001	0.05	0.02	0.001	0.8	0.02	0.01	0.8	0.09	0.02	10	10	3810	6
	2020-10-14			18.3	7.68	3431	1.19	-99.8	5	16.1	5	526	90	79	18	1020	216	176	0.02	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.25	0.01			360	8
	2020-11-11			19.3	7.73	3638	2.33	-109.5	5	5.2		541	86	82	19	1040	219	170	0.01	0.002	0.22	0.01	0.001	0.8	0.01	0.01	0.8	0.14	0.01	60	160	125	5
	2021-02-24	Clear		25.1	7.99	3173	4.89	55.6	5	5.7		450	80	68	16	936	199	136	0.02	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.02	0.01	60	20	5380	7
	2021-06-10	Clear		17.2	8.02	2431	8.51	63.1		3.95		403	72	58	15	774	168	134	0.01	0.001	0.05	0.01	0.001	0.8	0.02	0.04	0.7	0.2	0.06	10	60	5	1
2021/2022	N/A																																
2022/2023	2022-08-31	Cloudy, Very Turbid		16.68	7.4	363	6.51	205.1		394		50	24	7	3	90	31	50	0.01	0.001	0.05	0.14	0.002	1.2	0.01	0.46	0.7	0.01	0.46			5	10
	2023-02-23	Cloudy, Turbid		25.9	7.25	548	6.93	248.4		61.67		47	43	7	4	86	42	71	0.01	0.001	0.05	0.03	0.001	1	0.01	0.4	0.6	0.01	0.4			5	3
2023/2024	2024-02-21	Clear		27.79	8.29	3543	4.74	-76.5		8.2		460	142	68	19	910	330	164	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01			1240	3
Reporting Period (2023/2024)	Average	-		27.8	8.29	3543	4.74	-76.5	NS	8.2	NS	460	142	68	19	910	330	164	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3
	Maximum	-	</																														

Site: DP1-8			Physical									Major Cations & Anions							Metals				Nutrients										Bacteria / Algae																										
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a																										
			-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		<1000/100	<230/100	<50000	<10																									
2017/2018	2017-10-30	Commencement of extraction																																																									
	2018-02-07		25.7	7.55	4994	4.64	18			153																					40	80																											
	2018-03-08		24.7	7.49	4973	0.72	15.3			7.4		633	134	97	23	1240	176	262	0.04	0.002	0.12	0.01	0.01	1.2	0.01	0.01	1.2	0.04	0.01			540	26																										
	2018-04-13		25	8	4656	6.03	102			6.9																						8790	6																										
	2018-02-08	Last day of first extraction campaign.																																																									
	2018-05-31		19.6	8.11	3968	5.71	57			7.7	5	633	129	95	22	1270	306	271	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.06	0.03	110	170	19100	9																										
2018/2019	2018-10-25		26.1	8.39	4586	4.64	78	5	4.6	5	677	122	101	22	1260	333	221	0.05	0.005	0.05	0.03	0.01	0.8	0.01	0.01	0.8	0.01	0.01	10	90	26000	13																											
	2018-12-03		22.8	8	5042	4.02	-111	8	5.2			633	116	99	22	1330	284	294	0.02	0.002	0.1	0.03	0.01	1.5	0.01	0.01	1.5	0.59	0.01			34800	8																										
	2018-12-17		21.3	7.62	4463	0.64	-162	5	1.4			640	118	93	22	1120	264	259	0.02	0.001	0.13	0.01	0.01	0.8	0.01	0.01	0.8	0.01	0.01			405	2																										
	2019-02-07																																																										
	2019-02-21	Hit Bottom																																																									
2019/2020	2020-01-15	pH meter calibration issue - spurious data.	19.6	9.9*	4577	1.1	-246.3	5	3.5		759	132	111	25	1290	229	258	0.01	0.001	0.05	0.04	0.015	2.4	0.01	0.01	2.4	1.22	0.01	60	270	5	6																											
2020/2021	2020-07-07	Clear.	16.7	6.4	3692	8.8	116	5	3.2	5	608	88	91	20	1020	196	175	0.01	0.002	0.05	0.01	0.001	0.9	0.01	0.04	0.9	0.13	0.04	50	10	2680																												
	2020-11-11		18	7.46	3625	1.79	-185.4	5	3.1		520	83	79	18	1060	212	207	0.01	0.002	0.11	0.01	0.002	1.4	0.01	0.01	1.4	0.17	0.01	40	190	5	2																											
	2021-02-24	Clear	20.9	7.19	3632	0.9	-233.7	5	14.6		517	91	80	19	1050	178	218	0.02	0.004	0.06	0.03	0.003	2.2	0.01	0.01	2.2	1.3	0.01	120	280	390	34																											
	2021-06-10	Clear	17.2	8.02	2434	8.57	62.6		3.97		402	71	58	15	774	170	139	0.01	0.002	0.05	0.01	0.001	0.7	0.02	0.04	0.6	0.2	0.06	10	20	5	1																											
2021/2022	N/A																																																										
2022/2023	2022-08-31	Cloudy, Very Turbid	16.7	7.22	371	6.57	205.5		443		52	26	7	4	92	31	49	0.01	0.001	0.05	0.17	0.003	1.4	0.01	0.44	1	0.01	0.44			5	10																											
	2023-02-23	Cloudy, Turbid	25.2	6.62	545	5.47	207.4		106.23		42	44	7	4	87	41	73	0.01	0.001	0.05	0.04	0.002	0.9	0.01	0.44	0.5	0.01	0.44			5	2																											
2023/2024	2024-02-21																																																										
	Clear		27.69	8.28	3552	4.37	-76.2		6.8		466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01			1240	3																											
Reporting Period (2023/2024)		Average	-	27.7	8.28	3552	4.37	-76.2	NS	6.8	NS	466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3																										
		Maximum	-	27.7	8.28	3552	4.37	-76.2	NS	6.8	NS	466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3																										
		Minimum	-	27.7	8.28	3552	4.37	-76.2	NS	6.8	NS	466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3																										
All Results		Average	-	21.8	7.54	3674	4.26	-10.2	5	51.4	5	506	99	76	18	961	212	199	0.02	0.002	0.07	0.03	0.006	1.2	0.01	0.08	1.1	0.29	0.08	55	139	6712	9																										
		Maximum	-	27.7	8.39	5042	8.80	207.4	8	443.0	5	759	139	111	25	1330	333	294	0.05	0.005	0.13	0.17	0.015	2.4	0.02	0.44	2.4	1.30	0.44	120	280	34800	34																										
		80 th Percentile	-	25.6	8.04	4910	6.46	113.2	6	87.9	IS	647	132	99	22	1274	311	264	0.02	0.002	0.11	0.04	0.010	1.6	0.01	0.12	1.6	0.72	0.14	112	272	19100	16																										
		Median (50 th Percentile)	-	21.3	7.55	3968	4.64	18.0	5	6.8	5	608	116	91	20	1060	212	218	0.01	0.002	0.05	0.02	0.003	0.9	0.01	0.01	0.9	0.06	0.01	45	130	473	6																										
		20 th Percentile	-	17.4	7.08	2658	0.94	-180.7	5	3.3	IS	332	66	48	13	638	144	126	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.6	0.01	0.01	10	18	5	2																										
		Minimum	-	16.7	6.40	371	0.64	-246.3	5	1.4	5	42	26	7	4	87	31	49	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01	10	10	5	1																										

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data

Site: DP1-10			Physical									Major Cations & Anions							Metals			Nutrients									Bacteria / Algae			
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
Objectives			-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		<1000/100	<230/100	<50000	<10
2022/2023	31/08/2022	Cloudy, Very Turbid		16.95	7.34	359	6.5	215.1		514		54	27	8	4	90	31	50	0.01	0.001	0.05	0.18	0.004	1.3	0.01	0.44	0.9	0.01	0.44			5	10	
	23/02/2023	Cloudy, Turbid		25.1	6.81	542	5.46	203.2		103.46		49	44	8	4	85	41	73	0.01	0.001	0.05	0.08	0.003	1	0.01	0.43	0.6	0.01	0.43			5	2	

Reporting Period (2022/2023)	Average	-	21.0	7.08	451	5.98	209.2	NS	308.7	NS	52	36	8	4	88	36	62	0.01	0.001	0.05	0.13	0.004	1.2	0.01	0.44	0.8	0.01	0.44	NS	NS	5	6
	Maximum	-	25.1	7.34	542	6.50	215.1	NS	514.0	NS	54	44	8	4	90	41	73	0.01	0.001	0.05	0.18	0.004	1.3	0.01	0.44	0.9	0.01	0.44	NS	NS	5	10
	Minimum	-	17.0	6.81	359	5.46	203.2	NS	103.5	NS	49	27	8	4	85	31	50	0.01	0.001	0.05	0.08	0.003	1.0	0.01	0.43	0.6	0.01	0.43	NS	NS	5	2
All Results	Average	-	21.0	7.08	451	5.98	209.2	NS	308.7	NS	52	36	8	4	88	36	62	0.01	0.001	0.05	0.13	0.004	1.2	0.01	0.44	0.8	0.01	0.44	NS	NS	5	6
	Maximum	-	25.1	7.34	542	6.50	215.1	NS	514.0	NS	54	44	8	4	90	41	73	0.01	0.001	0.05	0.18	0.004	1.3	0.01	0.44	0.9	0.01	0.44	NS	NS	5	10
	80 th Percentile	-	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
	Median (50 th Percentile)	-	21.0	7.08	451	5.98	209.2	NS	308.7	NS	52	36	8	4	88	36	62	0.01	0.001	0.05	0.13	0.004	1.2	0.01	0.44	0.8	0.01	0.44	NS	NS	5	6
	20 th Percentile	-	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
	Minimum	-	17.0	6.81	359	5.46	203.2	NS	103.5	NS	49	27	8	4	85	31	50	0.01	0.001	0.05	0.08	0.003	1.0	0.01	0.43	0.6	0.01	0.43	NS	NS	5	2

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data