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
Date of Publication:	16/08/2023
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
		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
		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/m³	Laboratory	Grab Sample (Composite)	Composite of DP1, DP2 & DP3
		Total Algal Cell Count	cells/mL			
		Total Algal Biovolume	mm³/L			
		Potentially Toxic Cyanobacteria Cell Count	cells/mL			
		Potentially Toxic Cyanobacteria Biovolume	mm³/L			
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)			
	Quarterly	Major Cations*	milligrams per litre (mg/L)	Laboratory	Grab Sample	DP1, DP2, DP3
		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)			
		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/m³			
		Total Algal Cell Count	cells/mL			
		Total Algal Biovolume	mm³/L			
		Potentially Toxic Cyanobacteria Cell Count	cells/mL			
		Potentially Toxic Cyanobacteria Biovolume	mm³/L			
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)			

Non-Operational Periods[2]	Quarterly	Temperature	degrees Celsius (°C)	Field	Probe	DP1, DP2, DP3
		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)	Laboratory	Grab Sample	
		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/m³			
		Total Algal Cell Count	cells/mL			
		Total Algal Biovolume	mm³/L			
		Potentially Toxic Cyanobacteria Cell Count	cells/mL			
		Potentially Toxic Cyanobacteria Biovolume	mm³/L			
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/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			
	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/m³			
		Total Algal Cell Count	cells/mL			
		Total Algal Biovolume	mm³/L			
		Potentially Toxic Cyanobacteria Cell Count	cells/mL			
		Potentially Toxic Cyanobacteria Biovolume	mm³/L			
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)			

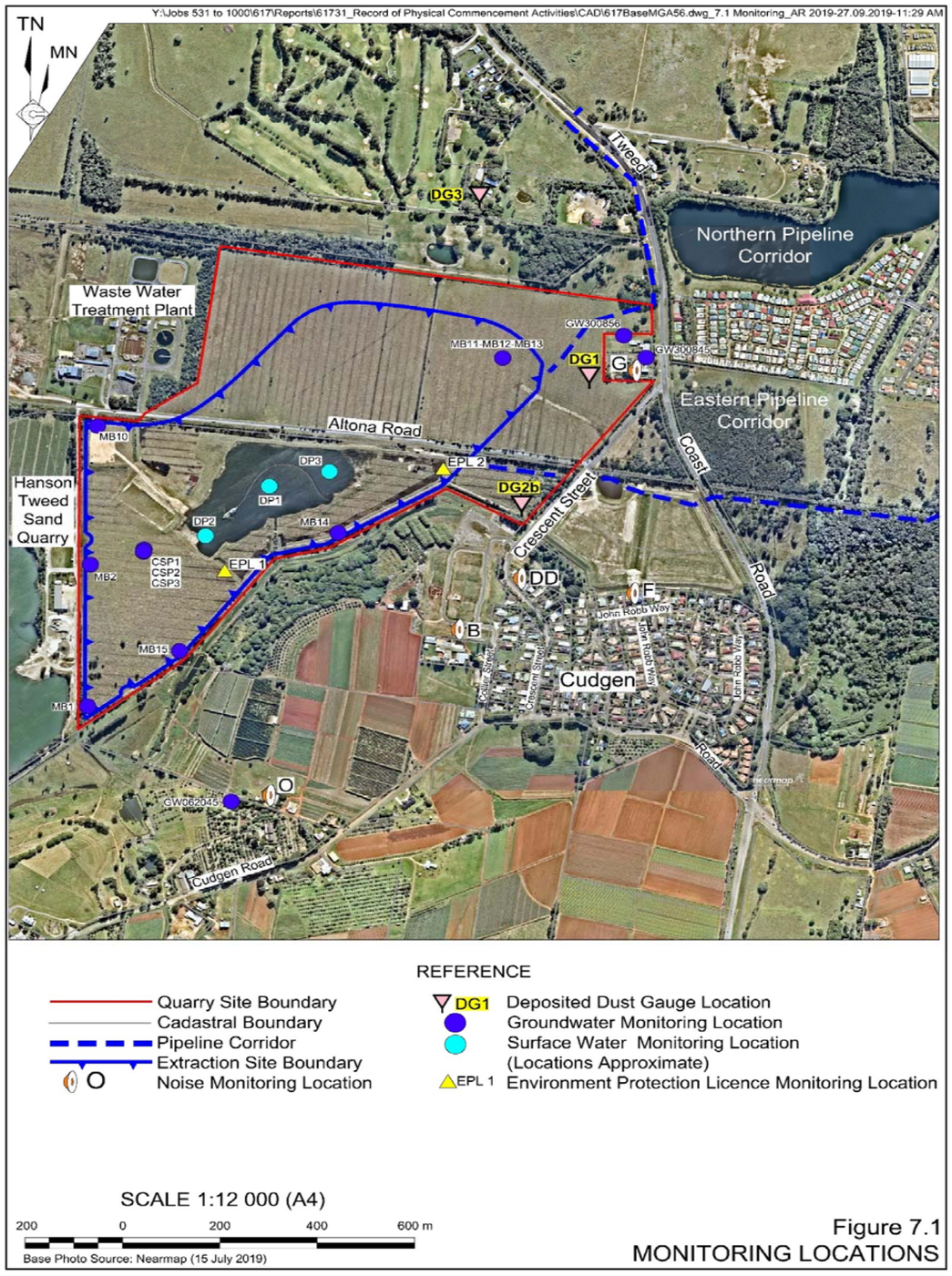
[1] Operational Periods = periods during which extraction and/or processing of material, and/or the placement of fines and/or VENM material, is occurring at the Quarry.

[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 dredge pond (DP1). 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.

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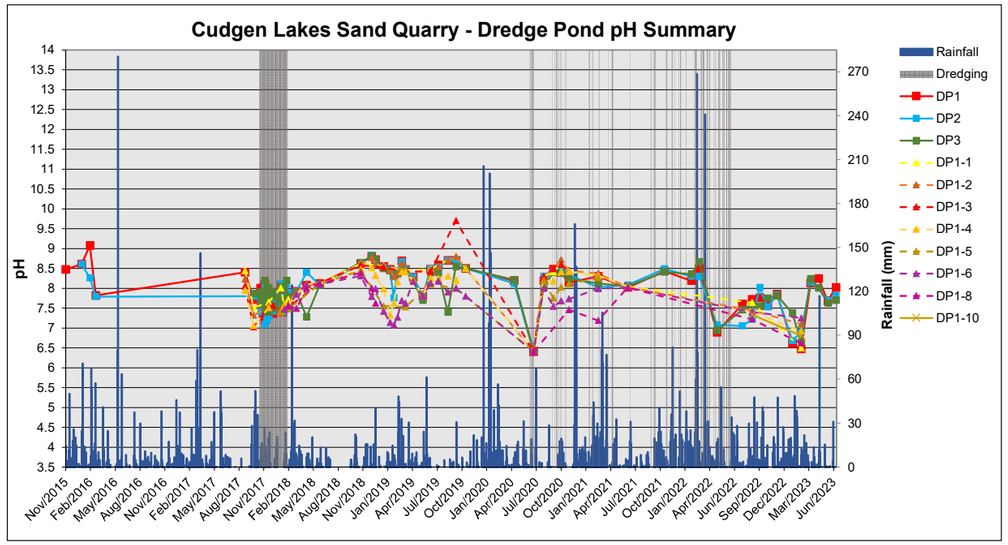
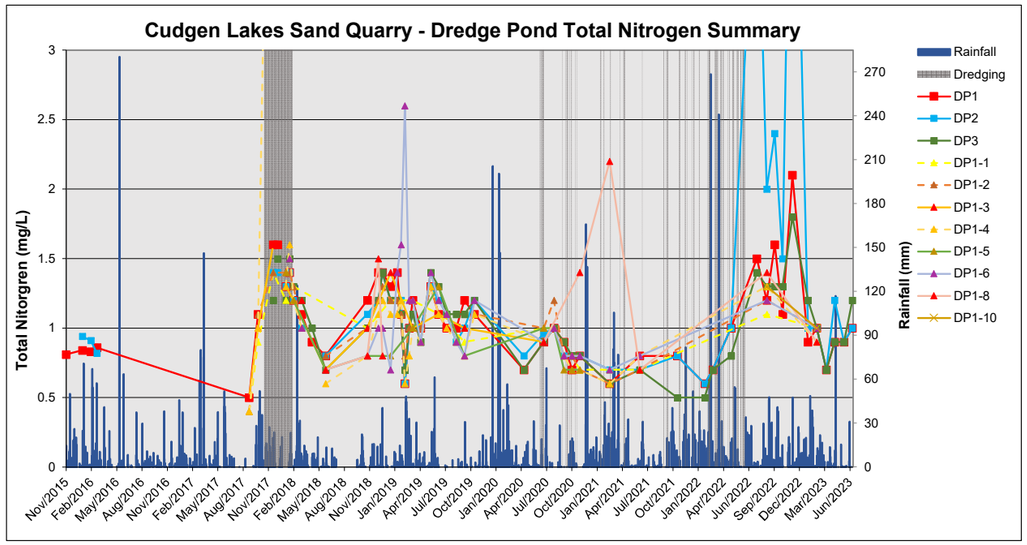
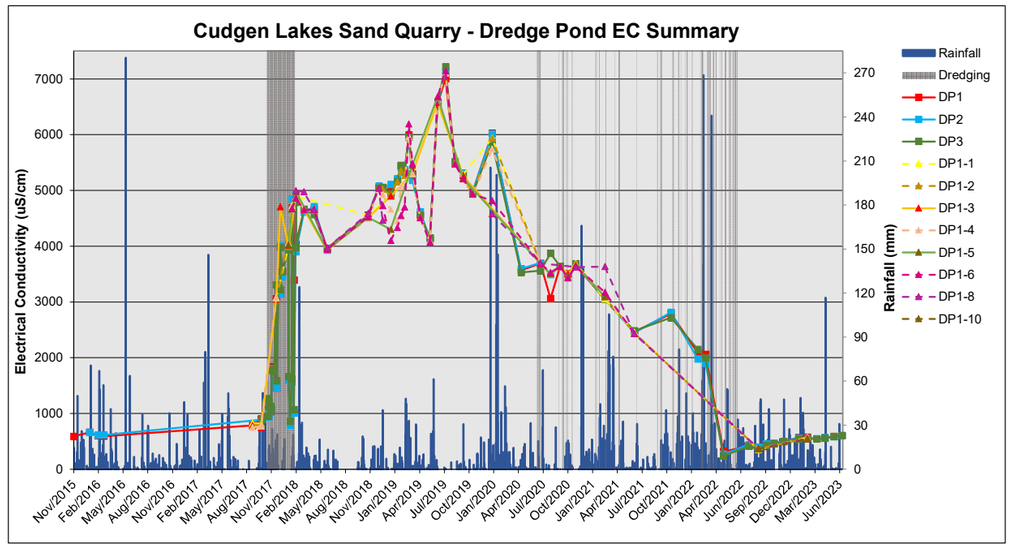
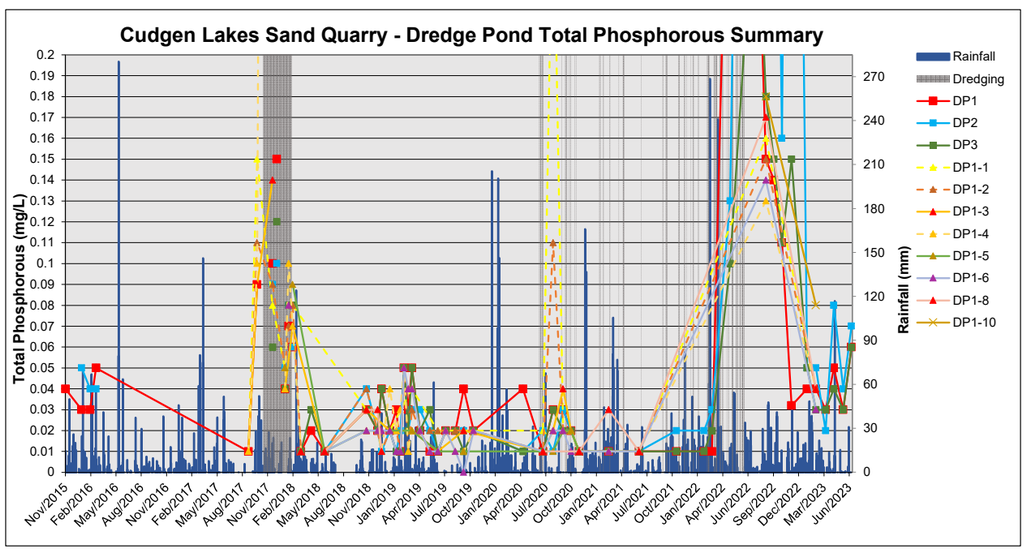
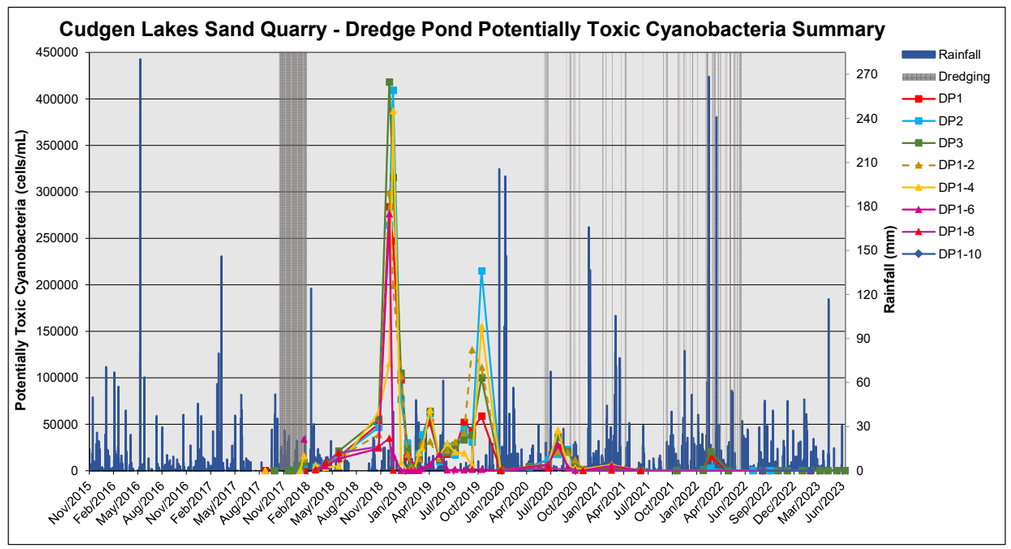
Surface Water Quality Monitoring Summary

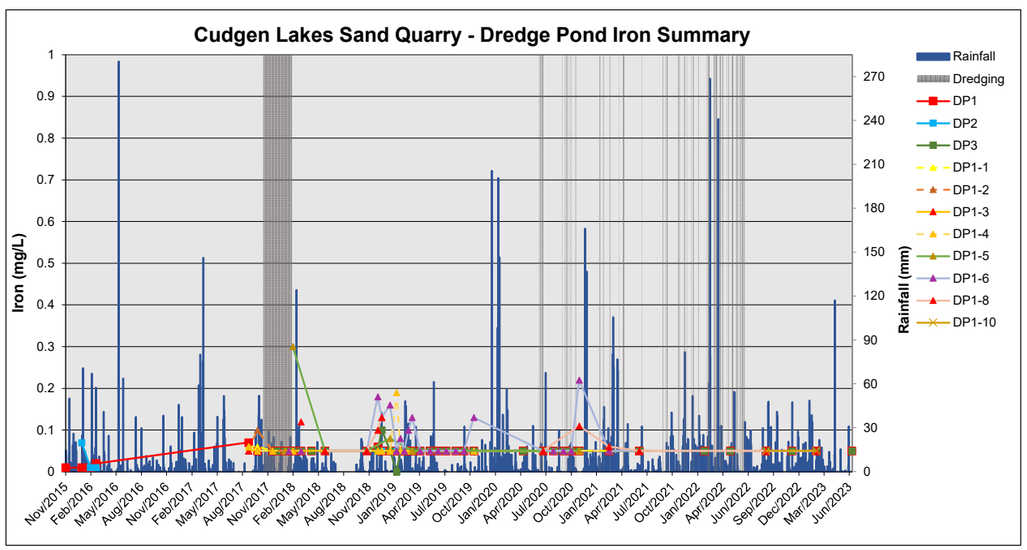












Site: DP1			Physical									Major Cations & Anions							Metals			Nutrients								Bacteria / Algae			
Sample Date		Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity uS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium 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 colforms 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*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
Pre-Extraction	30/11/2015	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**		
	26/01/2016	Fine, Clear, some algae, catttle & 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		
	25/02/2016	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**		
	17/03/2016	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**		
	4/09/2017			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
	5/10/2017			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**		
	8/10/2017	Algae/chroropyll only to lab		27.2	7.81	886	6.83	61.2		**156**																					5	10
2017/2018	30/10/2017	**Commencement of extraction**																															
	30/10/2017	Daily monitoring requirement for first 2 weeks of dredging.		23.4	8.0	1056	**4.23**	224																									
	31/10/2017	Daily monitoring requirement for first 2 weeks of dredging.		20.1	7.9	1069	**4.28**	210																									
	1/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22.1	7.9	1061	**4.25**	216																									
	2/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22.4	7.6	980	**2.78**	2.12																									
	3/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		20.2	7.7	1142	**3.26**	206																									
	6/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22.4	7.6	1042	**4.18**	214																									
	7/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22.1	7.3	1031	**3.76**	210																									
	8/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.9	8.0	1090	**3.93**	212																									
	9/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.7	1052	**4.05**	209																									
	10/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.5	7.9	1067	**4.02**	204																									
	13/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.1	7.4	1767	**4.2**	132																									
	14/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.7	8.1	1837	**4**	122																									
	15/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21	7.2	1795	**3.9**	134																									
	21/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.5	7.4	1623	**4.6**	133																									
	28/11/2017			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
	30/11/2017	Weekly monitoring requirement.		21.6	7.6	1455	**4.8**	143																									
	6/12/2017	Weekly monitoring requirement.		22	7.8	**3210**	6.53	206																									
	13/12/2017	Weekly monitoring requirement.		22.9	7.8	**3150**	**3.95**	147																									
	13/12/2017	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**
	20/12/2017	Weekly monitoring requirement.		22.8	7.7	**3550**	**4.15**	157																									
	11/01/2018	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**
	12/01/2018	Weekly monitoring requirement.		21.8	7.7	1610	**4.16**	172																									
	17/01/2018	Weekly monitoring requirement.		20.9	7.4	797	**3.43**	116																									
	23/01/2018	Weekly monitoring requirement.		21.8	7.7	1569	**4.12**	168																									
	24/01/2018	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**
	31/01/2018	Weekly monitoring requirement.		20.5	7.8	**3391**	**5.73**	161																									
	7/02/2018	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**
	7/02/2018	Weekly monitoring requirement.		19.1	7.8	**4040**	**5.68**	111																									
	8/02/2018	**Last day of first extraction campaign.**																															
	8/03/2018	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	0.01	**0.01**	**1.1**	0.01	0.01	1.1	0.02	0.01			1940	**51**
	13/04/2018	Birds on Dredge pond and surrounds. Algae numbers significantly reduced. Field measurements, algae counts and chlorophyll only for vertical profile samples in dredge pond.		26	8.07	**4659**	7.37	134		0.6		**636**	134	100	24	**1120**	263	245	0.02	0.002	0.05	**0.02**	**0.01**	**0.9**	0.01	0.01	0.9	0.01	**0.1**			6980	**12**
	31/05/2018	Aquatic Birds on dredge pond		19.6	8.12	**3960**	**5.59**	61		6.8	5	**663**	135	**101**	23	**1290**	313	270	0.02	0.002	0.05	0.01	**0.01**	**0.8**	0.01	0.03	0.8	0.06	**0.03**	20	50	14900	9
2018/2019	25/10/2018			25.1	**8.62**	**4553**	6.59	80	5	15.2	5	**671**	121	100	22	**1250**	334	205	0.05	0.005	0.05	**0.03**	**0.01**	**1.2**	0.01	0.01	1.2	0.06	0.01	110	40	**50300**	**13**
	3/12/2018	S/W WIND TBC		27.6	8.8	5061	8.76	44.2	12	10.1		**642**	112	99	22	**1310**	301	188	0.03	0.001	0.06	**0.02**	**0.01**	**1.4**	0.01	0.02	1.4	0.02	**0.02**			**284000**	**15**
	17/12/2018			26.5	8.72	5048	9.92	13	7	11.3		**686**	107	99	24	**1170**	302	171	0.06	0.002	0.05	**0.04**	**0.01**	**1.4**	0.01	0.01	1.4	0.05	0.01			**247000**	**31**
	15/01/2019			29.4	**8.54**	**4978**	**4.93**	26.5	6	7.5	5	**813**	116	**119**	27	**1320**	298	148	0.02	0.002	0.05	**0.02**	**0.01**	**1.3**	0.01	0.01	1.3	0.05	0.01	270	**410**	**97700**	**15**
	7/02/2019	Aquatic Birds and Cattle. No algal scum on surface. No Oil and grease sampling. Hut mud DP1-8		28.8	8.47	**5172**	7.84	-43.6	18	10.3		**691**	94	98	22	**1380**	364	172	0.04	0.002	0.05	**0.03**	0.005	**1.4**	0.01	0.01	1.4	0.01	0.01			14900	10
	21/02/2019			27.8	8.32	**5440**	8.14	16.8	7	**23.8**		**755**	110	**115**	26	**1380**	328	161	0.03	0.002	0.05	0.01	0.001	**1.1**	0.01	0.01	1.1	0.06	0.01			5090	5
	6/03/2019	Cattle on site and near dredge pond. Aquatic birds on dredge pond. No visible algal scum		26.8	8.41	**5352**	8.93	-41.6	5	1.2		**730**	110	**110**	24	**1390**	323	194	0.02	0.002	0.05	**0.05**	**0.008**	**0.6**	0.01	0.01	0.6	0.01	0.01			1200	8
	21/03/2019			28.1	**8.69**	**5995**	**5.72**	-110	5	3.24		**738**	110	**112**	26	**1340**	296	171	0.03	0.002	0.05	**0.03**	0.001	**1**	0.01	0.01	1	0.02	0.01			13400	**11**
	3/04/2019			24.3	8.47	**5298**	**5.27**	109		8.2	5	**757**	124	**117**	24	**1250**	303	188	0.03	0.002	0.05	**0.05**	0.003	**1.2**	0.01	0.01	1.2	0.03	0.01	230	120	36800	9
	1/05/2019			23.4	8.28	**4559**	8.52	40.9	5	4.3		**786**	127	**123**	26	**1310**	297	189	0.01	0.002	0.05	**0.02**	0.001	**1**	0.01	0.01	1	0.03	0.01			**52000**	10
	5/06/2019			17.9	7.8	**4140**	6.9	57.2	6	-9.7		**706**	125	**111**	24	**1300**	292	226	0.01	0.002	0.05	0.01	0.004	**1.3**	0.02	0.04	1.2	0.37	**0.06**			12700	**12**
2019/2020	3/07/2019			18.7	8.48	**6549**	**5.17**	85		1.1	5	**728**	124	**110**	24	**1290**	256	226	0.01	0.001	0.05	0.01	0.001	**1.1**	0.02	0.11	1	0.13	**0.13**	430	**1800**	17700	**11**
	31/07/2019	Aquatic birds on drdge pond, no visible algal scum on dredge pond, no cattle on site.		18	**8.58**	**7007**	6.54	111.2	5	7.4		**717**	126	**109**	24	**1330**	311	216	0.01	0.001	0.05	**0.02**	0.001	**1**	0.01	0.1	0.9	0.03	**0.1**			21700	7
	3/09/2019	Water birds, yellow/brown water colour. Posible machine activity recently.		20.9	**8.7**	**5475**	7.4	123.1	5	8.2		**721**	122	**110**	23	**1350**	328	188	0.01	0.001	0.05	**0.02**	0.001	**1**	0.01	0.01	**1**	0.01	0.01			**52100**	8
	2/10/2019			25	**8.7**	**5298**	**5.3**	91.8	5	5.7	5	**760**	132	**114**	25	**1370**	308	193	0.01	0.002	0.05	**0.04**	0.001	**1.2**	0.01	0.01	1.2	0.02	0.01	10	10	42900	10
	6/11/2019	Aquatic birds present. Cattle present. Low water level		23	8.5	**4974**	8.8	115.5	5	5.7		**735**	105	**109**	25	**1350**	318	187	0.02	0.002	0.05	**0.02**	0.001	**1.1**	0.01	0.01	1.1	0.01	0.01			**58700**	**15**
	15/01/2020	Aquatic birds present. Cattle present. Low water level. pH meter calibration issue - spurious data		28.3	**10.6***	**6025**	8	72.3	5	3.1		**833**	121	**125**	28	**1400**	335	167	0.01	0.001	0.05	**0.05**	0.001	**1.3**	0.01	0.01	**1.3**	0.01	0.01	500	**420**	870	8
	28/04/2020	Land-based extraction commenced 16/04/20		24.6	8.19	**3565**	8.71	43.4	5	**20.8**	5	523	64	77	18	1000	183	134	0.01	0.002	0.05	**0.04**	0.001	**0.7**	0.01	0.01	0.7	0.03	0.01	20	100	4160	1
2020/2021	7/07/2020	Clear.		16.7	**6.4**	**3691**	9.1	124	5	2.8	5	581	85	88	20	**1010**	205	180	0.01	0.002	0.05	0.01	0.002	**0.9**	0.01	0.04	0.9	0.17	**0.04**	60	10	11800	
	12/08/2020	Clear		18.6	8.19	**3061**	10.5	82	9	6.6	5	546	88	83	19	**1030**	182	169	0.01	0.002	0.05	**0.03**	0.001	**1**	0.01	0.04	0.9	0.05	**0.05**	50	20	24600	8
	16/09/2020			21.4	8.48	**3640**	10.67	95.8	15	**55.43**	5	564	87	83	19	**1080**	197	148	0.01	0.002	0.05	**0.03**	0.002	**0.9**	0.01	0.01	**0.9**	0.02	0.01	10	30	21000	**13**
	14/10/2020			24.4	8.39	**3503**	9.85	62.1	8	13	5	553	96	82	19	**1040**	228	141	0.02	0.002	0.05	**0.02**	0.001	**0.7**	0.01	0.01	0.7	0.01	0.01			7510	1
	11/11/2020			24.4	8.15	**3649**	9.44	74.1	5	2.5		552	88	82	19	**1070**	233	143	0.03	0.002	0.05	0.01	0.001	**0.8**	0.01	0.01	0.8	0.06	0.01	30	**280**	1280	5
	24/02/2021	Clear		26.8	8.3	**3061**	8.35	69.8	5	6.1		436	77	67	15	905	192	126	0.03	0.002	0.05	0.01	0.001	**0.6**	0.01	0.01	**0.6**	0.01	0.01	640	**280**	3690	4
	10/06/2021	Clear		17.6	8.02	2465	8.8	50.6	5	4.35		392	70	56	14	762	165	136	0.02	0.002	0.05	0.01	0.001	**0.8**	0.02	0.04	0.7	0.2	**0.06**	30	10	5	2
2021/2022	20/10/2021	Clear		24.71	8.43	2791	6.95	-95.1		4.5												0.01	0.002	**0.8**	0.01	0.01	0.6	0.01	0.01			5	3
	25/01/2022	Clear		27.55	8.19	2084	6.13	-105.6		10	NV	341	72	48	12	659	142	122	0.02	0.001	0.05	0.01	0.001	**0.6**	0.01	0.01	**0.6**	0.04	0.01			330	2
	22/02/2022	Clear		28.54	8.5	2058	6.37	-115.7		11	NV											0.01	0.002	**0.7**	0.01	0.01	0.7	0.06	0.01			14900	2
	27/04/2022	Cloudy		22.76	6.89	318	6.58	-36.1		**28**	NV	41	14	6	3	75	21	33	0.02	0.001	0.05	**0.36**	0.004	**1**	0.01	0.18	**0.8**	0.05	0.15			5	5
	23/05/2022	Due to major flood event, high rainfall, and poor drainage the site was deemed inaccessible to undertake sampling during May 2022.																															
	22/06/2022	Due to previous major flood events, ongoing rain and slow drainage, the site was deemed inaccessible to undertake sampling during June 2022.																															
2022/2023	27/07/2022	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
	31/08/2022	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**
	28/09/2022	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
	26/10/2022	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
	29/11/2022	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**
	23/01/2023	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
	23/02/2023	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
	29/03/2023	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
	27/04/2023	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
	30/05/2023	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
	28/06/2023	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
Reporting Period (2022/2023)	**Average**			22.3	7.60	507	6.06	49.8	NLM	**192.9**	NV	53	38	8	4	91	42	70	0.01	0.001	0.05	**0.09**	0.002	**1.2**	0.01	0.39	0.8	0.03	**0.38**	NLM	NLM	5	6
	Maximum			27.1	8.24	605	8.16	204.9	NLM	**593.0**	NV	58	43	10	5	100	55	90	0.01	0.001	0.05	**0.30**	0.004	**2.1**	0.02	0.46	1.6	0.08	**0.46**	NLM	NLM	5	**22**
	Minimum			15.7	**6.47**	367	**2.87**	-90.7	NLM	19.3	NV	48	27	7	4	82	30	55	0.01	0.001	0.05	**0.03**	0.001	**0.7**	0.01	0.32	0.4	0.01	**0.32**	NLM	NLM	5	1
All Results	**Average**	-		23.5	7.96	2689	6.01	85.1	10	**52.9**	5	511	91	76	18	922	213	161	0.03	0.002	0.05	**0.05**	**0.005**	**1.1**	0.01	0.09	1.0	0.05	**0.10**	394	**403**	22927	10
	Maximum	-		30.9	**9.07**	**7007**	10.67	224.0	68	**593.0**	5	**833**	137	**125**	28	1400	364	270	0.19	0.005	0.07	**0.36**	**0.020**	**2.1**	0.02	0.46	1.6	0.37	**0.46**	**4800**	**2160**	**284000**	**51**
	80th Percentile	-		27.0	8.47	4731	8.14	165.0	11	**91.1**	5	730	126	110	24	1338	313	225	0.04	0.002	0.05	**0.06**	**0.010**	**1.3**	0.01	0.14	1.2	0.06	**0.32**	444	**828**	24600	**13**
	Median (50th Percentile)	-		23.3	7.92	2275	**5.89**	93.8	5	10.1	5	604	107	93	22	1090	261	171	0.02	0.002	0.05	**0.03**	0.003	**1.0**	0.01	0.01	0.9	0.03	**0.02**	110	120	1940	8
	20th Percentile	-		20.8	7.60	651	**4.11**	16.0	5	3.8	4	95	43	13	8	132	45	93	0.01	0.001	0.05	0.01	0.001	**0.8**	0.01	0.01	0.6	0.01	0.01	20	18	5	2
	Minimum	-		15.7	**6.40**	318	**0.20**	-115.7	2	-9.7	2	41	14	6	3	75	14	33	0.01	0.001	0.01	0.01	0.001	**0.5**	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

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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
Pre-Extraction	30/11/2015	No sample collected due to equipment failure. Fine Sunny Approx 30mm rain previous week (BoM - Coolangatta).																														
	26/01/2016	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		
	25/02/2016	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		
	17/03/2016	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**		
	8/10/2017	Algae/chrorophyll only to lab		27.5	7.8	890	6.41	58.8		**143**																					5	9
2017/2018	30/10/2017	**Commencement of extraction**																														
	30/10/2017	Daily monitoring requirement for first 2 weeks of dredging.		23.3	7.7	932	**4.25**	230																								
	31/10/2017	Daily monitoring requirement for first 2 weeks of dredging.		20.3	7.7	1029	**4.01**	175																								
	1/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.2	7.4	997	**4.11**	192																								
	2/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.8	7.7	957	**2.77**	209																								
	3/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		20.4	7.7	1158	**2.96**	204																								
	6/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22.4	7.6	1118	**4.1**	217																								
	7/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22	7.6	1098	**3.8**	211																								
	8/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1125	**3.9**	210																								
	9/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.4	7.7	1065	**3.98**	204																								
	10/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.6	7.8	1069	**3.92**	208																								
	13/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.3	7.6	1762	**4.1**	134																								
	14/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.5	8.1	1806	**4.3**	124																								
	15/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		20.5	7.1	1769	**4.3**	178																								
	21/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.4	7.2	1586	**4.7**	143																								
	28/11/2017								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
	30/11/2017	Weekly monitoring requirement.		21.6	7.3	1458	**5**	154																								
	6/12/2017	Weekly monitoring requirement.		22	7.9	**3290**	6.28	199																								
	13/12/2017	Weekly monitoring requirement.		22.7	7.8	**3140**	**3.58**	144																								
	13/12/2017			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**
	20/12/2017	Weekly monitoring requirement.		23.3	7.7	**3450**	**3.88**	158																								
	11/01/2018			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**
	12/01/2018	Weekly monitoring requirement.		21.7	7.6	1600	**4.1**	271																								
	17/01/2018	Weekly monitoring requirement.		20.9	7.4	791	**3.37**	153																								
	23/01/2018	Weekly monitoring requirement.		21.7	7.6	1560	**4.07**	265																								
	24/01/2018			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**
	31/01/2018	Weekly monitoring requirement.		22.3	8.1	1008	**5.02**	1322																								
	7/02/2018			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**
	7/02/2018	Weekly monitoring requirement.		21.2	7.8	**3900**	**5.66**	206																								
	8/02/2018	**Last day of first extraction campaign.**																														
	8/03/2018			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**
	13/04/2018			26.2	8.4	**4708**	8.15	178		**104**																						7880	7
	31/05/2018			19.2	8.08	**3929**	**4.98**	61		7.1	5	**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
2018/2019	25/10/2018			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**
	3/12/2018			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**
	17/12/2018			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**
	15/01/2019			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**
	7/02/2019			29	8.46	**5208**	7.72	-7.8	5	**4.6**		**772**	116	**119**	27	**1370**	317	171	0.02	0.002	0.05	0.01	0.005	**1.2**	0.01	0.01	1.2	0.05	0.01			29500	**12**
	21/02/2019			27.8	7.76	**5410**	7.76	41.5	5	**39.3**		**774**	109	**116**	26	**1380**	330	158	0.03	0.002	0.05	**0.02**	0.001	**1.2**	0.01	0.01	1.2	0.02	0.01			3970	6
	6/03/2019			27	8.43	**5367**	8.98	11.8	5	**2.1**		**739**	112	**113**	25	**1360**	318	190	0.02	0.002	0.05	**0.05**	**0.01**	**0.6**	0.01	0.01	0.6	0.01	0.01			835	7
	21/03/2019			28	**8.67**	**5954**	**5.65**	-109	5	**3.22**		**731**	110	**110**	25	**1300**	293	165	0.03	0.002	0.05	**0.02**	0.002	**1**	0.01	0.01	1	0.02	0.01			18100	6
	3/04/2019			24.8	8.47	**5179**	**5.24**	107	8	7.9	5	**745**	125	**114**	24	**1250**	299	178	0.04	0.002	0.05	**0.03**	0.001	**1.1**	0.01	0.01	1.1	0.02	0.01	240	140	38300	**12**
	1/05/2019			24	8.29	**4616**	8.78	51.9	5	**4.7**		**782**	126	**119**	26	**1310**	295	189	0.01	0.002	0.05	**0.03**	0.001	**1**	0.01	0.01	1	0.04	0.01			**61500**	9
	5/06/2019			18.4	7.8	**4135**	7.5	63.9	5	**-9.9**		**707**	125	**111**	24	**1280**	309	224	0.01	0.002	0.05	**0.02**	0.002	**1.3**	0.02	0.05	1.2	0.36	**0.07**			9940	10
2019/2020	3/07/2019			18.6	8.49	**6564**	6.68	85	5	**3**	5	**728**	126	**112**	24	**1260**	261	227	0.01	0.001	0.05	0.01	0.001	**1.2**	0.02	0.11	1.1	0.14	**0.13**	80	140	26000	9
	31/07/2019			18.2	**8.53**	**7136**	6.24	117	5	7.3		**719**	124	**109**	24	**1350**	314	215	0.01	0.001	0.05	**0.02**	0.001	**1.1**	0.01	0.11	1	0.02	**0.11**			17000	8
	3/09/2019			21.4	**8.7**	**5497**	8.2	122.3	5	6.8		**741**	125	**113**	24	**1350**	330	186	0.01	0.001	0.05	**0.02**	0.001	**0.9**	0.01	0.01	**0.9**	0.02	0.01			44600	8
	2/10/2019			25.1	**8.7**	**5312**	6.7	80.4	5	5.8	5	**755**	131	**114**	25	**1380**	309	193	0.01	0.002	0.05	**0.02**	0.001	**1**	0.01	0.01	1	0.02	0.01	100	10	30800	10
	6/11/2019			23.1	8.5	**4977**	8.6	37.8	8	**3.7**		**727**	105	**109**	25	**1340**	319	190	0.02	0.002	0.05	**0.02**	0.001	**1.2**	0.01	0.01	1.2	0.02	0.01			**215000**	**14**
	15/01/2020	pH meter calibration issue - spurious data.		28.5	**9.1***	**6007**	8.2	-77.3	5	**4.6**		**844**	124	**126**	28	**1420**	322	162	0.01	0.002	0.05	**0.02**	0.001	**1**	0.01	0.01	1	0.01	0.01	820	**590**	5	7
	28/04/2020	Land-based extraction commenced 16/04/20		25.1	8.12	**3594**	8.81	53.3	5	**24.9**	5	**525**	64	77	18	1000	188	132	0.01	0.002	0.05	0.01	0.001	**0.8**	0.01	0.01	0.8	0.02	0.01	40	90	3700	2
2020/2021	7/07/2020	Cloudy.		17.1	**6.4**	**3700**	9	116	5	**3.8**	5	**602**	88	90	20	**1020**	221	174	0.01	0.002	0.05	**0.02**	**0.006**	**0.96**	0.01	0.04	0.9	0.18	**0.04**	60	20	11900	
	12/08/2020	Clear		18.4	8.3	**3488**	10.6	92	5	7.3	5	**559**	90	82	19	**1020**	182	168	0.01	0.001	0.05	0.01	0.001	**1**	0.01	0.04	0.9	0.04	**0.05**	30	10	17500	9
	16/09/2020			21.6	8.41	**3636**	10.59	85.1	5	**45.8**	5	**570**	87	84	19	**1080**	189	149	0.01	0.002	0.05	**0.03**	0.001	**0.8**	0.01	0.01	**0.8**	0.01	0.01	10	10	22600	**11**
	14/10/2020			24.7	**8.53**	**3489**	9.46	47.9	5	14.3	5	**567**	96	82	19	**1040**	232	136	0.02	0.002	0.05	**0.02**	0.001	**0.8**	0.01	0.01	0.8	0.01	0.01			4480	6
	11/11/2020			24.7	8.33	**3677**	9.31	-21.7	5	**3**		**548**	86	81	18	**1060**	236	143	0.03	0.002	0.05	0.01	0.001	**0.8**	0.01	0.01	0.8	0.01	0.01	10	180	1160	5
	24/02/2021	Clear		26.7	8.03	**3050**	8.15	67.4	5	5.6		433	77	65	16	901	194	127	0.04	0.002	0.05	0.01	0.004	**0.7**	0.01	0.01	**0.7**	0.2	0.01	620	180	4090	5
	10/06/2021	Clear		17.5	8.08	2451	9.02	78.6	5	**3.38**		392	69	56	14	782	163	136	0.01	0.002	0.05	0.01	0.001	**0.7**	0.02	0.04	0.6	0.18	**0.06**	10	50	5	2
2021/2022	20/10/2021	Clear (New channel NW)		25.52	8.49	2814	6.68	-98.5		5.7	NV											**0.02**	0.001	**0.8**	0.01	0.06	0.7	0.1	**0.06**			5	**11**
	25/01/2022			28.2	8.3	1975	6.43	-110.3		6.1	NV	325	74	48	12	630	140	122	0.02	0.001	0.05	**0.02**	0.001	**0.6**	0.01	0.01	0.6	0.04	0.01			946	4
	22/02/2022	Cloudy		30.25	8.3	1904	7.01	-104.6		**32**	NV											**0.03**	0.002	**0.7**	0.01	0.01	**0.7**	0.03	0.01			2590	4
	27/04/2022	Cloudy		22.93	7.08	271	7.1	-46.8		**41**	NV	37	14	6	2	64	22	36	0.01	0.001	0.05	**0.13**	0.003	**1**	0.01	0.14	0.9	0.01	**0.14**			5	5
	23/05/2022	Due to major flood event, high rainfall, and poor drainage the site was deemed inaccessible to undertake sampling during May 2022.																														
	22/06/2022	Due to previous major flood events, ongoing rain and slow drainage, the site was deemed inaccessible to undertake sampling during June 2022.																														
2022/2023	27/07/2022	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
	31/08/2022	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
	28/09/2022	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
	26/10/2022	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
	29/11/2022	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**
	23/01/2023	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
	23/02/2023	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
	29/03/2023	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
	27/04/2023	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
	30/05/2023	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
	28/06/2023	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
Reporting Period (2022/2023)		**Average**	-	22.2	7.54	516.5	6.22	53.4	NLM	395.0	NV	50.8	39.3	8.0	4.3	92.3	42.8	74.5	0.01	0.001	0.05	0.26	0.002	2.0	0.01	0.39	1.6	0.0	0.38	NLM	NLM	5.0	5.7
		Maximum	-	27.0	8.15	603.0	8.63	209.2	NLM	1000.0	NV	57.0	45.0	10.0	5.0	106.0	56.0	91.0	0.01	0.001	0.05	0.96	0.005	5.8	0.01	0.46	5.4	0.1	0.46	NLM	NLM	5.0	22.0
		Minimum	-	16.3	6.68	400.0	2.82	-103.4	NLM	68.5	NV	44.0	32.0	7.0	4.0	83.0	32.0	58.0	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.29	0.4	0.0	0.29	NLM	NLM	5.0	1.0
All Results		**Average**	-	23.5	7.92	2734	6.12	107.5	7	**94.5**	5	527	94	80	19	971	224	164	0.02	0.002	0.05	**0.08**	0.005	**1.2**	0.01	0.09	1.1	0.1	**0.11**	160	208	29066	**10**
		Maximum	-	32.0	8.83	**7136**	10.60	1322.0	38	**1000.0**	5	**844**	137	**126**	28	**1420**	335	270	0.10	0.005	0.07	**0.96**	**0.020**	**5.8**	0.02	0.46	5.4	0.4	**0.46**	820	**1180**	**409000**	**40**
		80th Percentile	-	27.0	8.46	4918	8.20	194.0	9	**85.5**	5	736	125	113	25	1340	313	222	0.04	0.002	0.05	**0.08**	**0.010**	**1.3**	0.01	0.14	1.2	0.1	**0.31**	180	**340**	29760	**12**
		Median (50th Percentile)	-	23.0	7.88	2213	6.26	90.0	5	11.1	5	613	109	95	22	1180	274	171	0.01	0.002	0.05	**0.03**	0.002	**1.0**	0.01	0.02	1.0	0.0	**0.02**	100	120	3835	8
		20th Percentile	-	20.9	7.60	663	**4.07**	11.8	5	**4.6**	5	170	53	26	10	324	90	106	0.01	0.001	0.05	**0.01**	0.001	**0.8**	0.01	0.01	0.7	0.0	0.01	30	20	5	5
		Minimum	-	16.3	**6.40**	271	**0.19**	-110.3	4	**-9.9**	2	37	14	6	2	64	14	36	0.01	0.001	0.01	0.01	0.001	**0.6**	0.01	0.01	0.4	0.0	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
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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
Pre-Extraction	8/10/2017	Algae/chrorophyll only to lab		27.3	7.87	898	7.17	63.4		139																						5	7
2017/2018	30/10/2017	**Commencement of extraction**																															
	30/10/2017	Daily monitoring requirement for first 2 weeks of dredging.		23.5	7.8	956	**4.8**	225																									
	31/10/2017	Daily monitoring requirement for first 2 weeks of dredging.		19.4	7.9	1266	**4.83**	184																									
	1/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		20.5	7.9	1170	**4.83**	195																									
	2/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1119	**2.17**	211																									
	3/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		20.7	7.7	1202	**3.46**	205																									
	6/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22.5	7.6	1117	**4.1**	219																									
	7/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		22	7.6	1098	**3.82**	209																									
	8/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1128	**3.88**	212																									
	9/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.6	1043	**3.94**	210																									
	10/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.8	1073	**3.97**	211																									
	13/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.1	7.6	1783	**4.2**	136																									
	14/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.7	8.2	1784	**4.8**	120																									
	15/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.3	7.4	1790	**4.1**	132																									
	21/11/2017	Daily monitoring requirement for first 2 weeks of dredging.		21.4	7.7	1752	**5.3**	136																									
	28/11/2017			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
	30/11/2017	Weekly monitoring requirement.		21.7	7.4	1584	**4.9**	129																									
	6/12/2017	Weekly monitoring requirement.		22	7.9	**3260**	6.31	199																									
	13/12/2017	Weekly monitoring requirement.		22.6	7.8	**3220**	**3.67**	153																									
	13/12/2017			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**
	20/12/2017	Weekly monitoring requirement.		23.3	7.5	**3540**	**3.57**	161																									
	11/01/2018			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**
	12/01/2018	Weekly monitoring requirement.		21.7	7.7	1660	**4.3**	180																									
	17/01/2018	Weekly monitoring requirement.		20.8	7.5	857	**3.4**	145																									
	23/01/2018	Weekly monitoring requirement.		21.7	7.7	1620	**4.21**	178																									
	24/01/2018			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**
	31/01/2018	Weekly monitoring requirement.		23.3	8.2	1068	**2.55**	168																									
	7/02/2018	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**
	7/02/2018	Weekly monitoring requirement.		20.9	7.8	**3980**	**5.08**	201																									
	8/02/2018	**Last day of first extraction campaign.**																															
	8/03/2018			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**
	13/04/2018			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
	31/05/2018			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
2018/209	25/10/2018			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**
	3/12/2018			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**
	17/12/2018			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**
	15/01/2019			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**
	7/02/2019			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
	21/02/2019			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
	6/03/2019			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	7
	21/03/2019			27.7	8.46	**5954**	**5.74**	-94.8	5	**3.21**		**745**	110	**112**	26	**1290**	293	162	0.03	0.002	0.05	**0.02**	0.001	**1**	0.01	0.01	1	0.01	0.01			12100	9
	3/04/2019			25	8.44	**5291**	**4.91**	197	10	7.8	5	**746**	126	**114**	24	**1240**	302	170	0.02	0.002	0.05	**0.05**	0.002	**1.1**	0.01	0.01	1.1	0.05	0.01	330	**270**	27500	9
	1/05/2019			23.2	8.19	**4553**	7.72	-62	5	6.1		**800**	127	**119**	25	**1300**	294	188	0.01	0.002	0.05	**0.02**	0.001	**0.9**	0.01	0.01	0.9	0.04	0.01			**63600**	10
	5/06/2019			18.4	7.7	**4147**	7.4	73	6	**-9.7**		**710**	128	**110**	24	**1270**	306	224	0.01	0.002	0.05	**0.03**	0.002	**1.4**	0.02	0.04	1.3	0.36	**0.06**			11900	**11**
2019/2020	3/07/2019			19.7	8.39	**6587**	7.05	87	5	**1.8**	5	**733**	125	**108**	24	**1280**	249	224	0.01	0.001	0.05	0.01	0.001	**1.3**	0.02	0.14	1.1	0.14	**0.16**	50	40	19800	10
	31/07/2019			18.4	8.39	**7215**	6.6	95.8	5	9.1		**702**	125	**110**	24	**1330**	304	212	0.01	0.001	0.05	**0.02**	0.001	**1.1**	0.01	0.11	1	0.01	**0.11**			27600	7
	3/09/2019			20.8	7.4	**5514**	9.5	116.4	5	9.6		**738**	124	**111**	23	**1340**	333	175	0.01	0.001	0.05	**0.02**	0.001	**1.1**	0.01	0.01	**1.1**	0.03	0.01			33200	**14**
	2/10/2019			24.5	**8.55**	**5283**	**5.9**	95.3	5	5.3	5	**754**	129	**113**	24	**1390**	312	194	0.01	0.002	0.05	0.01	0.001	**1.1**	0.01	0.01	1.1	0.01	0.01	60	40	38400	10
	6/11/2019			22.7	8.5	**4938**	8.8	126.8	5	5.4		**734**	106	**109**	25	**1290**	318	187	0.02	0.002	0.05	**0.02**	0.001	**1.2**	0.01	0.01	1.2	0.02	0.01			**100000**	**15**
	15/01/2020	pH meter calibration issue - spurious data.		27.2	**13.4***	**5864**	8	54.2	5	**3**		**846**	118	**126**	28	**1400**	316	163	0.02	0.001	0.05	0.01	0.001	**1**	0.01	0.01	1	0.02	0.01	120	80	5	9
	28/04/2020	Land-based extraction commenced 16/04/20.		24.2	8.21	**3530**	8.83	48.8	5	**-2.4**	5	**531**	64	78	18	1000	187	130	0.01	0.002	0.05	0.01	0.001	**0.7**	0.01	0.01	0.7	0.01	0.01	20	80	4260	3
2020/2021	7/07/2020	Clear.		16.7	**6.4**	**3560**	9.3	132	5	**2.1**	5	**590**	87	89	20	**1020**	216	174	0.01	0.002	0.05	0.01	0.005	**0.9**	0.01	0.02	0.9	0.16	**0.02**	70	10	5360	
	12/08/2020	Clear		17.8	8.03	**3871**	10.4	93	5	8.1	5	**552**	89	85	19	**1030**	183	165	0.02	0.002	0.05	**0.03**	0.001	**1**	0.01	0.04	1	0.05	**0.05**	20	30	36000	9
	16/09/2020			21.5	8.4	**3639**	10.5	137	8	**95**	5	**572**	87	85	19	**1080**	191	148	0.01	0.002	0.05	**0.02**	0.001	**0.9**	0.01	0.01	**0.9**	0.11	0.01	10	10	20500	**11**
	14/10/2020			23.7	8.38	**3497**	9.7	86.1	5	10.8	5	**573**	97	84	20	**1030**	230	141	0.03	0.002	0.05	**0.02**	0.001	**0.8**	0.01	0.01	0.8	0.01	0.01			6380	6
	11/11/2020			24.2	8.25	**3687**	9.35	87.9	5	**2.9**		**549**	88	82	19	**1040**	235	142	0.03	0.002	0.05	0.01	0.001	**0.8**	0.01	0.01	0.8	0.03	0.01	10	130	915	6
	24/02/2021	Clear		26.6	8.12	**3047**	8.35	-180.1	5	**4**		440	77	67	16	903	195	126	0.03	0.002	0.05	0.01	0.001	**0.6**	0.01	0.01	0.6	0.01	0.01	80	40	4000	5
	10/06/2021	Clear		18	8.05	2483	8.93	49.6	5	**35.21**		393	70	57	14	779	164	136	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	2
2021/2022	20/10/2021	Clear		23.95	8.41	2718	7.7	-93.4		**2.1**	NV											0.01	0.002	**0.5**	0.01	0.01	0.5	0.01	0.01			180	2
	25/01/2022			27.44	8.36	2148	6.55	-113.1		14	NV	338	73	47	12	654	141	120	0.02	0.001	0.05	0.01	0.001	**0.5**	0.01	0.04	0.5	0.02	**0.04**			355	2
	22/02/2022	Clear		28.93	8.67	1998	6.65	-125.6		12	NV											0.02	0.002	**0.7**	0.01	0.01	**0.7**	0.03	0.01			20400	1
	27/04/2022	Cloudy		22.94	6.94	236	6.43	-39.1		**45**	NV	46	13	6	3	71	21	35	0.01	0.001	0.05	**0.1**	0.003	**0.8**	0.01	0.16	0.6	0.01	**0.16**			5	5
	23/05/2022	Due to major flood event, high rainfall, and poor drainage the site was deemed inaccessible to undertake sampling during May 2022.																															
	22/06/2022	Due to previous major flood events, ongoing rain and slow drainage, the site was deemed inaccessible to undertake sampling during June 2022.																															
2022/2023	27/07/2022	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**				
	31/08/2022	Cloudy, Very Turbid		20.37	7.59	351	6.93	211.3		**413**		52	24	7	3	89	30	49	0.01	0.001	0.05	**0.18**	0.001	**1.3**	0.01	0.43	0.9	0.02	**0.43**			5	**12**
	28/09/2022	Cloudy, Turbid		21.64	7.55	420	6.86	-80.2		**309**												**0.15**	0.005	**1.3**			**0.9**	0.01	0.37				
	26/10/2022	Cloudy, Turbid		26.8	7.75	457	**4.77**	106.4														**0.11**	0.003	**1.3**	0.01	0.39	0.9	0.01	**0.39**			5	2
	29/11/2022	Cloudy, Turbid		23.42	7.82	497	**4.37**	85.5		**201**		49	37	7	4	86	36	64	0.01	0.001	0.05	**0.15**	0.005	**1.8**	0.01	0.45	1.3	0.01	**0.45**			5	**22**
	23/01/2023	Cloudy, Turbid		26.6	7.37	539	7.94	79.06		**79.15**												**0.05**	0.001	**1.2**			0.8	0.01	**0.42**			5	5
	23/02/2023	Cloudy, Turbid		25.9	6.63	548	7.29	153.7		**54.04**		48	43	7	4	84	41	71	0.01	0.001	0.05	**0.03**	0.001	**1**	0.01	0.39	**0.6**	0.02	0.39			5	4
	29/03/2023	Cloudy, Turbid, Frothin on shore		26.1	8.24	541	**3.12**	-56.1		**86.8**												**0.03**	0.001	**0.7**			**0.4**	0.01	**0.31**			5	5
	27/04/2023	Cloudy, Turbid		21.5	8.01	559	8.19	-42.1		**95.5**												**0.04**	0.003	**0.9**	0.01	0.34	**0.6**	0.02	**0.34**			5	2
	30/05/2023	Cloudy, Turbid		18.84	7.63	586	6.47	-46.2		**75.2**												**0.03**	0.001	**0.9**	0.01	0.41	**0.5**	0.01	**0.41**			5	1
	28/06/2023	Cloudy, Turbid		16.99	7.7	602	**4.82**	-44.7		**82.9**		58	44	10	5	98	55	90	0.01	0.001	0.05	**0.06**	0.003	**1.2**	0.01	0.38	**0.8**	0.07	**0.38**			5	2

Reporting Period (2022/2023)	**Average**	-	22.2	7.61	501.4	6.07	45.0	NLM	202.4	NV	52	37	8	4	89	41	69	0.01	0.001	0.05	0.10	0.002	1.2	0.01	0.39	0.8	0.02	0.38	NLM	NLM	5	6
	Maximum	-	26.8	8.24	602.0	8.19	211.3	NLM	627.0	NV	58	44	10	5	98	55	90	0.01	0.001	0.05	0.29	0.005	1.8	0.01	0.45	1.3	0.07	0.45	NLM	NLM	5	22
	Minimum	-	16.2	6.63	351.0	3.12	-80.2	NLM	54.0	NV	48	24	7	3	84	30	49	0.01	0.001	0.05	0.03	0.001	0.7	0.01	0.32	0.4	0.01	0.31	NLM	NLM	5	1
All Results	**Average**	-	23.3	7.91	2842	6.07	85.1	9	**55.9**	5	559	99	84	19	1028	238	170	0.02	0.002	0.05	**0.05**	0.004	**1.1**	0.01	0.09	0.9	0.05	**0.11**	89	182	30348	**10**
	Maximum	-	30.8	8.81	**7215**	10.50	225.0	54	**627.0**	5	**846**	136	**126**	28	**1400**	333	273	0.05	0.005	0.10	**0.29**	**0.010**	**1.8**	0.02	0.45	1.5	0.36	**0.45**	330	**1620**	**418000**	**48**
	80th Percentile	-	26.7	8.39	4847	8.25	181.6	11	**80.7**	5	735	127	110	24	1322	313	224	0.03	0.002	0.05	**0.06**	**0.010**	**1.3**	0.01	0.16	1.2	0.06	**0.32**	126	216	30960	**15**
	Median (50th Percentile)	-	22.8	7.89	2882.5	6.05	94.2	5	11.4	5	613	110	96	22	1185	283	172	0.01	0.002	0.05	**0.03**	0.002	**1.1**	0.01	0.01	1.0	0.02	0.01	65	65	4615	9
	20th Percentile	-	20.8	7.57	933	**4.05**	3.0	5	**3.1**	5	431	72	65	16	832	179	129	0.01	0.001	0.05	0.01	0.001	**0.8**	0.01	0.01	0.7	0.01	0.01	14	24	5	3
	Minimum	-	16.2	6.40	236	**0.19**	-180.1	5	**-9.7**	5	46	13	6	3	71	21	35	0.01	0.001	0.05	0.01	0.001	**0.5**	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
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	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*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
Pre - Extraction	4/09/2017			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
	5/10/2017			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	30/10/2017	**Commencement of extraction**																															
	28/11/2017			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		
	11/01/2018			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		
	24/01/2018			27.5	7.51	**4693**	**2.88**	37.3		**53.6**																							
	7/02/2018			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		
	8/02/2018	**Last day of first extraction campaign.**																															
2018 / 2019	25/10/2018			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		
	15/01/2019			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**		
	3/04/2019			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	3/07/2019			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		
	2/10/2019			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		
	15/01/2020	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	7/07/2020	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		
	12/08/2020	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		
	16/09/2020			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		
	14/10/2020			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
	11/11/2020			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**		
	24/02/2021	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		
	10/06/2021	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	31/08/2022	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	10
	23/02/2023	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**			5	4
Reporting Period (2022/2023)	**Average**		-	22.8	7.07	461	7.15	206.4	ND	**242.8**	ND	51	34	7	4	86	36	61	0.01	0.001	0.05	0.10	0.003	1.1	0.01	0.42	0.7	0.02	0.42	ND	ND	ND	ID
	Maximum		-	27.0	7.64	568	7.50	212.4	ND	**428.0**	ND	53	43	7	4	88	42	71	0.01	0.001	0.05	0.16	0.004	1.1	0.01	0.43	0.7	0.02	0.43	ND	ND	ND	ID
	Minimum		-	18.6	6.50	353	6.79	200.3	ND	**57.6**	ND	49	24	7	3	84	30	50	0.01	0.001	0.05	0.04	0.001	1.0	0.01	0.41	0.6	0.01	0.41	ND	ND	ND	ID
All Results	**Average**		-	23.9	8.02	3585	6.76	77.1	12	**45.6**	5	513	93	77	18	932	209	160	0.02	0.002	0.05	**0.06**	0.005	**1.0**	0.01	0.06	0.9	0.07	**0.06**	139	155	5	5
	Maximum		-	30.6	8.80	6553	10.71	212.4	62	**428.0**	5	**838**	153	**121**	28	**1410**	334	263	0.07	0.005	0.06	**0.29**	**0.010**	**1.4**	0.02	0.43	1.4	0.29	**0.43**	480	**840**	5	10
	80th Percentile		-	27.3	8.55	5131	9.34	111.4	9	**59.1**	5	734	125	112	24	1310	306	215	0.03	0.002	0.05	**0.08**	**0.010**	**1.2**	0.01	0.04	1.2	0.13	**0.06**	268	**252**	ID	ID
	Median (50th Percentile)		-	24.6	8.32	3691	6.79	77.4	5	8.0	5	566	95	84	20	1045	227	156	0.01	0.002	0.05	**0.02**	0.003	**1.0**	0.01	0.01	1.0	0.04	0.01	90	100	5	5
	20th Percentile		-	18.6	7.54	1477	**4.64**	23.4	5	3.8	5	183	51	28	9	342	78	126	0.01	0.001	0.05	**0.01**	0.001	**0.7**	0.01	0.01	0.7	0.01	0.01	16	10	ID	ID
	Minimum		-	16.8	**6.40**	353	**2.16**	-2.0	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	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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
Pre-Extraction	4/09/2017			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
	5/10/2017			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	30/10/2017	**Commencement of extraction**																															
	28/11/2017			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		
	11/01/2018			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
	24/01/2018			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**
	7/02/2018			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		
	8/02/2018	**Last day of first extraction campaign**																															
	8/03/2018			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**
	13/04/2018			24.9	8.11	**4663**	6.7	113		7.1																						5160	7
	31/05/2018			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
2018/2019	25/10/2018			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**
	3/12/2018			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**
	17/12/2018			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**
	15/01/2019			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**
	7/02/2019			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**
	21/02/2019			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
	6/03/2019			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
	21/03/2019			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
	3/04/2019			24.9	8.43	**5310**	**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**
	1/05/2019			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**
	5/06/2019			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	3/07/2019			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**
	31/07/2019			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
	3/09/2019			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
	2/10/2019			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
	6/11/2019	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**
	15/01/2020	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	7/07/2020	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	
	12/08/2020	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**
	16/09/2020			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
	14/10/2020			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
	11/11/2020			23.7	8.45	**3675**	9.49	76.6	5	**2.9**		**551**	88	82	19	**1060**	236	144	0.03	0.002	0.05	0.01	0.001	**0.7**	0.01	0.01	0.7	0.01	0.01	40	120	1260	6
	24/02/2021	Clear		26.6	8.37	**3084**	8.92	35.2	5	**4.6**		441	78	66	16	910	197	126	0.03	0.002	0.05	0.01	0.001	**0.6**	0.01	0.01	0.6	0.01	0.01	120	120	6260	5
	10/06/2021	Clear		17.3	8.03	2438	8.77	57.5		**3.92**		397	71	58	14	787	164	134	0.01	0.002	0.05	0.01	0.001	**0.7**	0.02	0.04	0.6	0.18	**0.06**	40	20	5	2
2021/2022	N/A																																
2022/2023	31/08/2022	Cloudy, Very Turbid		17.69	7.44	367	6.77	208.1		**448**		51	24	7	3	89	31	49	0.01	0.001	0.05	**0.15**	0.002	**1.2**	0.01	0.45	0.8	0.01	**0.45**			5	10
	23/02/2023	Cloudy, Turbid		26.4	7.1	553	7.24	220.4		**44.56**		50	43	8	4	86	42	71	0.01	0.001	0.05	**0.04**	0.002	**1**	0.01	0.38	0.6	0.01	**0.38**			5	3
Reporting Period (2022/2023)	**Average**		-	22.0	7.27	460	7.01	214.3	ND	**246.3**	ND	51	34	8	4	88	37	60	0.01	0.001	0.05	**0.10**	0.002	**1.1**	0.01	0.42	0.7	0.01	**0.42**	ND	ND	5	7
	Maximum		-	26.4	7.44	553	7.24	220.4	ND	**448.0**	ND	51	43	8	4	89	42	71	0.01	0.001	0.05	**0.15**	0.002	**1.2**	0.01	0.45	0.8	0.01	**0.45**	ND	ND	5	10
	Minimum		-	17.7	7.10	367	6.77	208.1	ND	**44.6**	ND	50	24	7	3	86	31	49	0.01	0.001	0.05	**0.04**	0.002	**1.0**	0.01	0.38	0.6	0.01	**0.38**	ND	ND	5	3
All Results	**Average**		-	23.4	8.14	4186	6.97	62.1	10	**31.0**	5	592	104	90	21	1083	248	176	0.02	0.002	0.05	**0.03**	0.005	**1.0**	0.01	0.05	1.0	0.08	**0.05**	104	139	36954	**11**
	Maximum		-	29.0	**8.80**	**7123**	10.72	220.4	53	**448.0**	5	**831**	146	**123**	28	1410	345	270	0.11	0.005	0.10	**0.15**	**0.010**	**1.4**	0.02	0.45	1.4	0.36	**0.45**	450	**1010**	**299000**	**32**
	80th Percentile		-	27.2	**8.61**	5304	8.89	112.2	13	**23.5**	5	733	128	113	25	1340	314	224	0.03	0.002	0.05	**0.05**	**0.010**	**1.2**	0.01	0.04	1.2	0.14	**0.05**	132	138	39400	**13**
	Median (50th Percentile)		-	24.0	8.34	4658	7.24	65.5	5	7.4	5	679	110	100	23	1245	287	176	0.02	0.002	0.05	**0.02**	0.003	**1.0**	0.01	0.01	1.0	0.04	0.01	50	60	13150	9
	20th Percentile		-	18.7	7.53	3166	**5.65**	5.2	5	3.4	5	454	86	72	18	910	193	135	0.01	0.001	0.05	0.01	0.001	**0.8**	0.01	0.01	0.8	0.01	0.01	38	10	575	6
	Minimum		-	16.8	**6.40**	367	**2.17**	-106.0	5	-9.8	5	50	24	7	3	86	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	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. NLM = No Longer Monitored

Site: DP1-3			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*	*<6190*	*>6*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
Pre-Extraction	4/09/2017			19.1	8.05	769	6.02	125	6	**3.4**		130	33	21	8	236	57	96	0.04	0.001	0.05	0.01	**0.01**	**0.5**	0.02	0.01	0.5	0.02	**0.03**	20	20	5	2
	5/10/2017			22.8	7.03	743	**3.12**	76.6	48	**163**		96	48	17	7	174	43	134	0.01	0.001	0.05	**0.09**	**0.01**	**1**	0.01	0.02	1	0.19	**0.02**	400	**770**		
2017/2018	30/10/2017	**Commencement of extraction**																															
	28/11/2017			27.1	7.54	**3053**	**3.09**	18.1	88	**113**		456	110	72	18	881	221	244	0.01	0.001	0.05	**0.14**	**0.01**	**1.6**	0.01	0.09	1.5	0.3	**0.09**	170	120		
	13/12/2017			27.6	7.56	**4703**	**2.49**	31.1																									
	11/01/2018			27.9	7.45	**4008**	**1.07**	-14	12	**24.2**	5	**640**	133	99	24	**1120**	277	253	0.01	0.002	0.05	**0.04**	**0.01**	**1.3**	0.01	0.01	1.3	0.3	0.01	10	10		
	7/02/2018			27.7	7.53	**4916**	**4.54**	26		**39.5**	5	**682**	133	100	24	**1370**	309	262	0.01	0.002	0.05	**0.07**	**0.01**	**1.2**	0.01	0.02	1.2	0.21	**0.02**	10	30		
	8/02/2018	**Last day of first extraction campaign.**																															
	31/05/2018			19.3	8.12	**3927**	8.59	60.7			5	**634**	128	96	22	**1270**	284	270	0.01	0.002	0.05	0.01	**0.01**	**0.7**	0.01	0.03	0.7	0.08	**0.03**	30	90	25500	8
2018 / 2019	25/10/2018			22.3	**8.58**	**4510**	7.17	84	11	11.7	5	**687**	122	**102**	22	**1240**	330	200	0.05	0.005	0.05	**0.03**	**0.01**	**1**	0.01	0.01	1	0.02	0.01	40	10		
	15/01/2019			28.8	**8.53**	**4894**	**4.5**	24.1	8	9.8	5	**698**	98	**105**	24	**1310**	301	138	0.03	0.002	0.05	**0.02**	**0.01**	**1.4**	0.01	0.01	1.4	0.05	0.01	220	140		
	3/04/2019			24.9	8.42	**5308**	**4.53**	83	8	6.2	5	**745**	127	**115**	25	**1200**	288	181	0.03	0.002	0.05	**0.02**	0.001	**1**	0.01	0.01	1	0.04	0.01	190	190		
2019 / 2020	3/07/2019			18.2	8.42	**6577**	**5.41**	85	5	5.4	5	**721**	124	**110**	24	**1270**	252	227	0.01	0.001	0.05	0.01	0.001	**1.1**	0.02	0.11	1	0.14	**0.13**	40	90		
	2/10/2019			23.3	**9.7**	**5262**	6	59.8	5	5.5	5	**765**	132	**115**	25	**1380**	306	190	0.02	0.002	0.05	**0.02**	0.001	**1**	0.01	0.01	1	0.02	0.01	30	10		
2020/2021	7/07/2020	Clear.		16.7	**6.4**	**3691**	9	117	5	**3.1**	5	**609**	90	91	21	**1020**	199	178	0.02	0.002	0.05	0.01	0.004	**0.9**	0.01	0.04	0.9	0.19	**0.04**	70	10		
	12/08/2020	Clear		17.1	8.3	**3494**	10.4	89	5	8.2	5	**537**	89	83	18	**1020**	182	166	0.01	0.002	0.05	**0.02**	0.001	**1**	0.02	0.03	1	0.05	**0.05**	40	20		
	16/09/2020			20.8	8.49	**3624**	10.78	97.3	5	**27.63**	5	**573**	89	86	19	**1090**	191	151	0.01	0.001	0.05	**0.04**	0.002	**0.8**	0.01	0.01	**0.8**	0.01	0.01	170	**910**		
	14/10/2020			23.4	**8.6**	**3501**	9.26	89.6	5	13.8	5	**562**	92	83	20	**1040**	227	140	0.03	0.002	0.05	**0.02**	0.002	**0.8**	0.01	0.01	0.8	0.01	0.01				
	11/11/2020			23.2	8.42	**3662**	9.08	81.8	5	**3**		**548**	88	82	19	**1060**	236	147	0.03	0.002	0.05	0.01	0.005	**0.8**	0.01	0.01	0.8	0.01	0.01	40	80		
2021/2022	N/A																																
2022/2023	N/A																																

Pre-Extraction	**Average**	-	21.0	7.54	756	**4.57**	100.8	27	**83.2**	ND	113	41	19	8	205	50	115	0.03	0.001	0.05	**0.05**	**0.010**	**0.8**	0.02	0.02	0.8	0.11	**0.03**	210	**395**	5	2
	Maximum	-	22.8	8.05	769	6.02	125.0	48	**163.0**	ND	130	48	21	8	236	57	134	0.04	0.001	0.05	**0.09**	**0.010**	**1.0**	0.02	0.02	1.0	0.19	**0.03**	400	**770**	5	2
	Minimum	-	19.1	7.03	743	**3.12**	76.6	6	**3.4**	ND	96	33	17	7	174	43	96	0.01	0.001	0.05	0.01	**0.010**	**0.5**	0.01	0.01	0.5	0.02	**0.02**	20	20	5	2
Reporting Period (2021/2022)	**Average**	-	NS	**NS**	**NS**	NS	NS	NS	**NS**	NS	**NS**	NS	**NS**	**NS**	NS	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	NS	NS	NS	NS	**NS**	NS	NS	**NS**	**NS**
	Maximum	-	NS	**NS**	**NS**	NS	NS	NS	**NS**	NS	**NS**	NS	**NS**	**NS**	NS	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	NS	NS	NS	NS	**NS**	NS	NS	**NS**	**NS**
	Minimum	-	NS	**NS**	**NS**	NS	NS	NS	**NS**	NS	**NS**	NS	**NS**	**NS**	NS	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	NS	NS	NS	NS	**NS**	NS	NS	**NS**	**NS**
All Results	**Average**	-	23.0	8.07	3920	6.18	66.7	15	**29.2**	5	568	102	86	20	1043	231	186	0.02	0.002	0.05	**0.04**	**0.006**	**1.0**	0.01	0.03	1.0	0.10	**0.03**	99	167	12753	5
	Maximum	-	28.8	**9.70**	**6577**	10.78	125.0	88	**163.0**	5	765	133	115	25	1380	330	270	0.05	0.005	0.05	**0.14**	**0.010**	**1.6**	0.02	0.11	1.5	0.30	**0.13**	400	**910**	25500	8
	80th Percentile	-	27.6	**8.55**	5054	9.15	92.7	12	**37.1**	5	712	130	108	24	1294	304	249	0.03	0.002	0.05	**0.06**	**0.010**	**1.3**	0.02	0.04	1.3	0.20	**0.05**	186	180	**ID**	**ID**
	Median (50th Percentile)	-	23.2	8.30	3927	6.00	81.8	6	9.8	5	622	104	94	22	1105	244	180	0.02	0.002	0.05	**0.02**	**0.008**	**1.0**	0.01	0.01	1.0	0.05	**0.02**	40	80	12753	5
	20th Percentile	-	18.7	7.50	3318	**3.11**	25.2	5	3.8	5	488	88	76	18	937	186	139	0.01	0.001	0.05	0.01	0.001	**0.8**	0.01	0.01	0.8	0.01	0.01	22	10	**ID**	**ID**
	Minimum	-	16.7	**6.40**	743	**1.07**	-14.0	5	3.0	5	96	33	17	7	174	43	96	0.01	0.001	0.05	0.01	0.001	**0.5**	0.01	0.01	0.5	0.01	0.01	10	10	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

Site:		DP1-4	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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
Pre-E	4/09/2017			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
	5/10/2017			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**		
2017/2018	30/10/2017	**Commencement of extraction**																															
	28/11/2017			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		
	13/12/2017																																
	11/01/2018			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
	24/01/2018			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**
	7/02/2018			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		
	8/02/2018	**Last day of first extraction campaign**																															
	8/03/2018			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**
	13/04/2018			24.9	8.1	**4651**	6.16	131		8.7																						3380	5
	31/05/2018			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
2018/2019	25/10/2018			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**
	3/12/2018			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**
	17/12/2018			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**
	15/01/2019			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
	7/02/2019			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**
	21/02/2019			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**
	6/03/2019			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**
	21/03/2019			26.8	8.42	**5956**	**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
	3/04/2019			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
	1/05/2019			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**
	5/06/2019			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	3/07/2019			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
	31/07/2019			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
	3/09/2019			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
	2/10/2019			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
	6/11/2019	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**
	15/01/2020	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	7/07/2020	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	
	12/08/2020	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
	16/09/2020			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**
	14/10/2020			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
	11/11/2020			22.9	8.42	**3659**	8.96	75.1	5	**3.1**		**544**	87	81	19	**1050**	232	146	0.03	0.002	0.05	0.01	0.003	**0.7**	0.01	0.01	0.7	0.04	0.01	20	50	1560	7
	24/02/2021	Clear		25.7	8.31	**3095**	8.07	50.6	5	**3.7**		430	76	65	16	911	198	128	0.03	0.002	0.05	0.01	0.004	**0.6**	0.01	0.01	0.6	0.1	0.01	140	80	6390	7
	10/06/2021	Clear		17.4	8.04	2448	8.73	62.8		**3.88**		390	69	56	14	758	163	138	0.01	0.002	0.05	0.01	0.001	**0.8**	0.02	0.04	0.7	0.23	**0.06**	10	70	5	3
2021/2022	N/A																																
2022/2023	31/08/2022	Cloudy, Very Turbid		16.98	7.4	370	6.73	206.1		**371**		52	25	7	3	92	30	49	0.01	0.001	0.05	**0.13**	0.002	**1.3**	0.01	0.48	0.8	0.02	**0.48**			5	10
	23/02/2023	Cloudy, Turbid		26.2	6.92	556	6.92	243.9		**65.64**		48	43	7	4	85	42	71	0.01	0.001	0.05	**0.04**	0.002	**0.9**	0.01	0.39	0.5	0.02	**0.39**			5	2

Reporting Period (2022/2023)	**Average**	-	21.6	7.16	463	6.83	225.0	NS	**218.3**	NS	50	34	7	4	89	36	60	0.01	0.001	0.05	**0.09**	0.002	**1.1**	0.01	0.44	0.7	0.02	**0.44**	NS	NS	5	6
	Maximum	-	26.2	7.40	556	6.92	243.9	NS	**371.0**	NS	52	43	7	4	92	42	71	0.01	0.001	0.05	**0.13**	0.002	**1.3**	0.01	0.48	0.8	0.02	**0.48**	NS	NS	5	10
	Minimum	-	17.0	6.92	370	6.73	206.1	NS	**65.6**	NS	48	25	7	3	85	30	49	0.01	0.001	0.05	**0.04**	0.002	**0.9**	0.01	0.39	0.5	0.02	**0.39**	NS	NS	5	2
All Results	**Average**	-	22.5	7.95	4131	**5.26**	44.3	106	**31.9**	5	590	104	89	21	1078	247	187	0.02	0.002	0.05	**0.08**	**0.005**	**1.2**	0.01	0.05	1.1	0.09	**0.05**	86	133	32080	**13**
	Maximum	-	28.1	**8.52**	**7103**	9.60	243.9	2660	**371.0**	5	**833**	146	**124**	28	1410	333	264	0.05	0.005	0.19	**1.81**	**0.010**	**7.3**	0.02	0.48	7.3	0.37	**0.48**	420	**850**	**387000**	**89**
	80th Percentile	-	26.1	8.41	5172	8.00	111.1	8	**38.3**	5	741	128	112	25	1330	308	231	0.03	0.002	0.05	**0.04**	**0.010**	**1.2**	0.01	0.04	1.2	0.20	**0.05**	122	172	35160	**15**
	Median (50th Percentile)	-	22.9	8.14	4493	**5.24**	62.8	5	7.5	5	678	111	101	23	1250	286	189	0.01	0.002	0.05	**0.02**	0.004	**1.0**	0.01	0.01	0.9	0.05	0.01	40	70	6255	9
	20th Percentile	-	18.0	7.51	3165	**2.91**	-14.4	5	3.3	5	451	87	72	18	911	191	146	0.01	0.001	0.05	0.01	0.001	**0.8**	0.01	0.01	0.7	0.02	0.01	10	10	197	6
	Minimum	-	16.6	**6.40**	370	**0.33**	-219.7	5	-9.8	5	48	25	7	3	85	30	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	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

Site: DP1-5			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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
2017/2018	30/10/2017	Commencement of extraction																														
	11/01/2018			28.2	7.39	4020	0.47	-4.9	19	26.1	5	645	135	99	24	1120	229	245	0.01	0.002	0.05	0.05	0.01	1.4	0.01	0.01	1.4	0.35	0.01	40	50		
	24/01/2018			27.4	7.49	4671	2.74	36.7		84																						
	7/02/2018			25.5	7.48	4979	4.08	20		112	5	704	146	104	26	1370	309	268	0.11	0.002	0.3	0.09	0.01	1.2	0.01	0.02	1.2	0.18	0.02	60	60		
	8/02/2018	Last day of first extraction campaign.																														
	31/05/2018			19.3	8.11	3936	5.07	59.4		6.5	5	626	127	95	22	1280	282	270	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.07	0.03	30	90	22300	8
2018 / 2019	25/10/2018			20.5	8.44	4517	5.22	89	5	4.6	5	667	121	100	22	1250	338	214	0.05	0.005	0.05	0.02	0.01	0.8	0.01	0.01	0.8	0.03	0.01	10	30		
	15/01/2019			23.9	7.55	4302	0.36	-220	5	4.2	5	653	114	99	22	1270	290	232	0.01	0.002	0.08	0.02	0.01	0.8	0.01	0.01	0.8	0.05	0.01	20	150		
	3/04/2019			23.5	7.53	5451	0.59	-104.5	7	5.5	5	742	127	111	24	1240	293	180	0.03	0.002	0.05	0.02	0.001	1	0.01	0.01	1	0.04	0.01	120	100		
2019 / 2020	3/07/2019			17.9	8.1	6687	2.46	85	5	2.2	5	728	127	110	24	1320	257	232	0.01	0.001	0.05	0.01	0.001	1.3	0.02	0.1	1.2	0.29	0.12	330	360		
	2/10/2019			19.4	8	5221	1.5	36.4	5	2.6	5	764	132	117	25	1360	303	231	0.01	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.02	0.01	80	40		
2020/2021	7/07/2020	Clear.		16.7	6.4	3693	8.8	115	5	2.6	5	587	85	88	20	1020	196	174	0.01	0.002	0.05	0.01	0.004	1	0.01	0.04	1	0.14	0.04	50	20		
	12/08/2020	Clear		16.9	8.2	3499	9.5	89	5	7.8	5	544	89	82	19	1020	185	171	0.01	0.002	0.05	0.01	0.001	1	0.02	0.03	0.9	0.05	0.05	30	20		
	16/09/2020			18.1	7.75	3635	5.86	120	5	24.61	5	550	85	81	18	1080	192	177	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.01	0.02	10	20		
	14/10/2020			19.3	8.03	3442	2.56	47.8	5	20.5	5	569	95	84	19	1030	219	172	0.06	0.002	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.05	0.01				
	11/11/2020			22.1	8.11	3654	4.61	83	5	2.8		540	88	82	19	1040	231	159	0.02	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	20	100		
	24/02/2021	Clear		25.5	8.26	3095	7.48	52.2		5.1																						
2021/2022	N/A																															
2022/2023	N/A																															

Reporting Period (2021/2022)	Average	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Maximum	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Minimum	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
All Results	Average	-	21.6	7.79	4320	4.09	33.6	6	20.7	5	640	113	96	22	1185	256	210	0.03	0.002	0.07	0.02	0.005	0.9	0.01	0.02	0.9	0.10	0.03	67	87	22300	8
	Maximum	-	28.2	8.44	6687	9.50	120.0	19	112.0	5	764	146	117	26	1370	338	270	0.11	0.005	0.30	0.09	0.010	1.4	0.02	0.10	1.4	0.35	0.12	330	360	22300	8
	80th Percentile	-	25.5	8.18	5173	7.16	89.0	6	25.8	5	731	133	110	24	1328	304	250	0.05	0.002	0.06	0.03	0.010	1.2	0.01	0.03	1.2	0.20	0.04	96	120	ID	ID
	Median (50th Percentile)	-	20.5	8.00	4020	4.08	52.2	5	5.5	5	645	121	99	22	1240	257	214	0.01	0.002	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.05	0.01	35	55	22300	8
	20th Percentile	-	17.9	7.48	3526	0.77	0.1	5	2.6	5	549	87	82	19	1028	195	172	0.01	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.02	0.01	16	20	ID	ID
	Minimum	-	16.7	6.40	3095	0.36	-220.0	5	2.2	5	540	85	81	18	1020	185	159	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	10	20	22300	8

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: DP1-6			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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
2017/2018	30/10/2017	**Commencement of extraction**																															
	24/01/2018			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**
	7/02/2018			24.8	7.56	**4858**	**1.11**	23.1		10																							
	8/02/2018	**Last day of first extraction campaign.**																															
	8/03/2018			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**
	13/04/2018			24.9	8.09	**4655**	6.34	138		**4.3**																						5030	5
	31/05/2018			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
2018/2019	25/10/2018			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
	3/12/2018			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
	17/12/2018			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
	15/01/2019			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
	7/02/2019			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
	21/02/2019			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
	6/03/2019			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
	21/03/2019			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**
	3/04/2019			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**
	1/05/2019			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**
	5/06/2019			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	3/07/2019			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
	31/07/2019			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
	3/09/2019			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
	2/10/2019			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
	6/11/2019			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
	15/01/2020	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	7/07/2020	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	
	12/08/2020	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
	16/09/2020			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
	14/10/2020			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
	11/11/2020			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
	24/02/2021	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
	10/06/2021	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	31/08/2022	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
	23/02/2023	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
Reporting Period (2022/2023)	**Average**		-	21.3	7.33	456	6.72	226.8	NS	**227.8**	NS	49	34	7	4	88	37	61	0.01	0.001	0.05	**0.09**	0.002	**1.1**	0.01	0.43	0.7	0.01	**0.43**	NS	NS	5	7
	Maximum		-	25.9	7.40	548	6.93	248.4	NS	**394.0**	NS	50	43	7	4	90	42	71	0.01	0.001	0.05	**0.14**	0.002	**1.2**	0.01	0.46	0.7	0.01	**0.46**	NS	NS	5	10
	Minimum		-	16.7	7.25	363	6.51	205.1	NS	**61.7**	NS	47	24	7	3	86	31	50	0.01	0.001	0.05	**0.03**	0.001	**1.0**	0.01	0.40	0.6	0.01	**0.40**	NS	NS	5	3
All Results	**Average**		-	20.8	7.71	4312	**3.34**	-8.1	6	**23.3**	5	612	110	93	21	1131	246	212	0.01	0.002	0.08	**0.03**	0.005	**1.1**	0.01	0.05	1.0	0.21	**0.05**	59	62	14832	**14**
	Maximum		-	27.4	8.31	**7141**	9.00	248.4	19	**394.0**	5	791	148	119	27	1360	344	342	0.05	0.005	0.22	**0.15**	**0.025**	**2.6**	0.03	0.46	2.6	1.43	**0.46**	260	210	**276000**	**149**
	80th Percentile		-	24.4	8.08	5141	6.74	114.2	5	15.3	5	731	131	113	25	1320	302	265	0.02	0.002	0.13	**0.04**	**0.010**	**1.3**	0.01	0.04	1.3	0.33	**0.06**	74	104	16100	**11**
	Median (50th Percentile)		-	20.2	7.80	4545	**2.33**	34.4	5	5.2	5	654	122	100	23	1260	276	220	0.01	0.002	0.05	**0.02**	0.002	**1.0**	0.01	0.01	1.0	0.14	0.01	50	40	1200	6
	20th Percentile		-	17.6	7.40	3571	**0.83**	-144.9	5	2.3	5	541	87	82	19	1020	194	170	0.01	0.001	0.05	0.01	0.001	**0.8**	0.01	0.01	0.7	0.02	0.01	10	18	5	4
	Minimum		-	16.7	**6.40**	363	**0.11**	-313.0	5	-9.7	5	47	24	7	3	86	31	50	0.01	0.001	0.05	0.01	0.001	**0.7**	0.01	0.01	0.6	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: DP1-7			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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
2017 / 2018	31/05/2018			19.5	8.13	3971	5.82	55		7.8	5	630	130	96	22	1270	307	271	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.07	0.03	50	120	16400	8
2018 / 2019	25/10/2018			20.2	8.4	4623	3.44	78	5	2.2	5	727	130	110	24	1270	342	221	0.05	0.005	0.05	0.02	0.01	0.8	0.01	0.01	0.8	0.03	0.01	20	40		
	15/01/2019			21.7	7.32	4190	0.31	-273.6	5	2.7	5	665	127	101	22	1250	268	280	0.01	0.002	0.16	0.02	0.01	0.9	0.01	0.01	0.9	0.22	0.01	40	270		
	3/04/2019			22.2	7.4	5385	0.44	-194	5	2.9	5	694	145	105	22	1250	240	326	0.01	0.002	0.09	0.02	0.012	2.7	0.01	0.01	2.7	1.67	0.01	60	50		
2019 / 2020	3/07/2019			17.9	8.2	6713	3.04	87	5	3.8	5	727	127	111	24	1320	264	236	0.01	0.001	0.05	0.01	0.001	1.2	0.02	0.11	1.1	0.28	0.13	190	190		
	2/10/2019			20.7	8.2	5222	2.2	-50.8	5	2.3	5	736	128	112	24	1360	300	236	0.01	0.002	0.07	0.01	0.001	1	0.01	0.01	1	0.17	0.01	230	190		
2020/2021	7/07/2020	Clear.		16.7	6.4	3705	8.9	117	5	2.8	5	606	88	92	20	1020	198	177	0.01	0.002	0.05	0.02	0.017	0.9	0.01	0.04	0.9	0.18	0.04	40	10		
	12/08/2020	Clear		17	7.85	3517	8.1	96	5	10.9		486	80	72	17	1030	190	178	0.02	0.001	0.05	0.02	0.001	1	0.04	0.01	1	0.1	0.05	20	20		
	16/09/2020			17.4	7.45	3025	2.15	112.4	5	52.41	5	568	88	84	19	1080	191	202	0.01	0.001	0.05	0.02	0.001	0.8	0.02	0.01	0.8	20	0.02	10	10		
	14/10/2020			18	7.57	3440	2.31	-126.7	7	22.3	5	562	95	81	20	1030	215	178	0.02	0.002	0.1	0.01	0.005	1	0.01	0.01	1	0.32	0.01				
	11/11/2020			18.4	7.55	3627	2.7	-140.3	5	3.1		531	85	80	18	1040	215	173	0.01	0.002	0.17	0.01	0.001	1.1	0.01	0.01	1.1	0.44	0.01	30	140		
2021/2022	N/A																															
2022/2023	N/A																															

Reporting Period (2021/2022)	Average	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Maximum	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Minimum	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
All Results	Average	-	19.1	7.68	4311	3.58	-21.8	5	10.3	5	630	111	95	21	1175	248	225	0.02	0.002	0.08	0.02	0.006	1.1	0.01	0.02	1.1	2.13	0.03	69	104	16400	8
	Maximum	-	22.2	8.40	6713	8.90	117.0	7	52.4	5	736	145	112	24	1360	342	326	0.05	0.005	0.17	0.02	0.017	2.7	0.04	0.11	2.7	20.00	0.13	230	270	16400	8
	80th Percentile	-	21.3	8.20	5320	7.19	105.8	5	17.7	5	727	130	111	24	1300	304	276	0.02	0.002	0.14	0.02	0.011	1.2	0.02	0.04	1.1	1.18	0.05	164	190	ID	ID
	Median (50th Percentile)	-	18.4	7.57	3971	2.70	55.0	5	3.1	5	630	127	96	22	1250	240	221	0.01	0.002	0.05	0.02	0.005	1.0	0.01	0.01	1.0	0.22	0.01	40	85	16400	8
	20th Percentile	-	17.2	7.35	3471	1.12	-172.5	5	2.5	5	543	86	80	18	1030	194	177	0.01	0.001	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.08	0.01	20	12	ID	ID
	Minimum	-	16.7	6.40	3025	0.31	-273.6	5	2.2	5	486	80	72	17	1020	190	173	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.03	0.01	10	10	16400	8

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: DP1-8			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*			*5-20*	*10*	*<813*		*<119*	*<40*	*<1390*	*<800*	*<400*	*<0.5*	*<0.42*	*<20*	*0.01*	*<0.005*	*0.35*				*<20*	*0.01*	*<1000/100*	*<230/100*	*<50000*	*<10*
2017/2018	30/10/2017	**Commencement of extraction**																															
	7/02/2018			25.7	7.55	**4994**	**4.64**	18		**153**																				40	80		
	8/03/2018			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**
	13/04/2018			25	8	**4656**	6.03	102		6.9																						8790	6
	8/02/2018	**Last day of first extraction campaign.**																															
	31/05/2018			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	25/10/2018			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**
	3/12/2018			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
	17/12/2018			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
	7/02/2019																																
	21/02/2019	Hit Bottom																															
2019/2020	15/01/2020	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	7/07/2020	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	
	11/11/2020			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
	24/02/2021	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**
	10/06/2021	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	31/08/2022	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
	23/02/2023	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
Reporting Period (2021/2022)		**Average**	-	21.0	6.92	458	6.02	206.5	NS	**274.6**	NS	47	35	7	4	90	36	61	0.01	0.001	0.05	**0.11**	0.003	**1.2**	0.01	0.44	0.8	0.01	**0.44**	NS	NS	5	6
		Maximum	-	25.2	7.22	545	6.57	207.4	NS	**443.0**	NS	52	44	7	4	92	41	73	0.01	0.001	0.05	**0.17**	0.003	**1.4**	0.01	0.44	1.0	0.01	**0.44**	NS	NS	5	10
		Minimum	-	16.7	6.62	371	**5.47**	205.5	NS	**106.2**	NS	42	26	7	4	87	31	49	0.01	0.001	0.05	**0.04**	0.002	**0.9**	0.01	0.44	0.5	0.01	**0.44**	NS	NS	5	2
All Results		**Average**	-	21.1	7.62	3924	**4.16**	-21.8	5	**50.6**	5	552	101	83	19	1046	216	214	0.02	0.002	0.07	**0.03**	**0.007**	**1.3**	0.01	0.06	1.2	0.34	**0.06**	55	139	7727	**11**
		Maximum	-	26.1	8.39	5042	8.80	205.5	8	**443.0**	5	759	134	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**
		80th Percentile	-	25.1	8.06	4977	6.97	104.8	6	**42.3**	IS	662	131	100	23	1282	297	267	0.03	0.003	0.12	**0.04**	**0.010**	**1.9**	0.01	0.04	1.9	0.97	**0.05**	112	**272**	21860	**21**
		Median (50th Percentile)	-	20.9	7.59	4463	**4.64**	18.0	5	5.2	5	633	116	93	22	1120	212	221	0.01	0.002	0.05	0.01	**0.010**	**1.2**	0.01	0.01	1.0	0.13	0.01	45	130	473	8
		20th Percentile	-	17.1	7.21	3387	**0.86**	-195.1	5	3.2	IS	448	76	66	16	872	172	153	0.01	0.001	0.05	0.01	0.001	**0.7**	0.01	0.01	0.7	0.01	0.01	10	18	5	2
		Minimum	-	16.7	**6.40**	371	**0.64**	-246.3	5	1.4	5	52	26	7	4	92	31	49	0.01	0.001	0.05	0.01	0.001	**0.7**	0.01	0.01	0.6	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