Annual Environmental Report

2020

Cork City

D0033-01

CONTENTS

Rev 1 Note: Section 4.1.1 answer changed to "Unknown". Approved 09/07/2021

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2020 AER

This Annual Environmental Report has been prepared for D0033-01, Cork City, in Cork in accordance with the requirements of the wastewater discharge licence for the agglomeration. Specified reports where relevant are included as an appendix to the AER.

1.1 ANNUAL STATEMENT OF MEASURES

A summary of any improvements undertaken is provided where applicable.

1. DAP to assess collection network issue underway with expected completion of the DAP by 30/03/2022.
2. More stringent ELVs/Sensitive Waters issue review has determined that Phosphorus is being provided at WwTP.

1.2 TREATMENT SUMMARY

The agglomeration is served by a wastewater treatment plant(s)

- Carrigrennan (Cork City) WWTP - 2020 with a Plant Capacity PE of 413200, the treatment type is 2 - Secondary treatment

1.3 ELV OVERVIEW

The overall compliance of the final effluent with the Emission Limit Values (ELVs) is shown below. More detailed information on the below ELV's can be found in Section 2.

Discharge Point Reference	Treatment Plant	Discharge Type	Compliance Status	Parameters failing if relevant
TPEFF0400D0033SW001	Carrigrennan (Cork City) WWTP - 2020	Treated	Non-Compliant	Total Nitrogen mg/l Total Phosphorus (as P) mg/l

1.4 LICENCE SPECIFIC REPORTING INCLUDED IN AER

Assessment / Report	Included in AER
There are no Licence Specific Reports included in the AER.	

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1 CARRIGRENNAN (CORK CITY) WWTP - 2020 - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - CARRIGRENNAN (CORK CITY) WWTP - 2020

A summary of influent monitoring for the treatment plant is presented below. This monitoring is primarily undertaken in order to determine the overall efficiency of the plant in removing pollutants from the raw wastewater.

Parameters	Number of Samples	Annual Max	Annual Mean
Total Phosphorus (as P) mg/l	25	3.3	1.89
Total Nitrogen mg/l	25	30	16.17
Suspended Solids mg/l	260	410	129.31
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	260	260	91.8
COD-Cr mg/l	260	1300	266.63
Hydraulic Capacity	N/A	266498	126805

If other inputs in the form of sludge / leachate are added to the WWTP then these are included in Section 2.1.5 if applicable.

Significance of Results:

The annual mean hydraulic loading is less than the peak Treatment Plant Capacity. The annual maximum hydraulic loading is less than the peak Treatment Plant Capacity. Further details on the plant capacity and efficiency can be found under the sectional ‘Operational Performance Summary’. The design of the wastewater tretament plant allows for peak values and therefore the peak loads have not impacted on compliance with Emission Limit Values.

2.1.2 EFFLUENT MONITORING SUMMARY - TPEFF0400D0033SW001

Parameter	WWDL ELV (Schedule A)	ELV with Condition 2 Interpretation included Note 1	Interim % reduction from influent concentration	Number of sample results	Number of exceedances	Number of with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
COD-Cr mg/l	125	250	N/A	261	N/A	N/A	64.47	Pass
Suspended Solids mg/l	35	87.5	N/A	261	2	N/A	14.71	Pass
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	50	N/A	261	N/A	N/A	8.64	Pass
Total Nitrogen mg/l	10	12	N/A	25	24	22	16.6	Fail
pH pH units	9	9	N/A	261	N/A	N/A	7.63	Pass
Total Phosphorus (as P) mg/l	2.5	3	N/A	25	2	1	1.73	Fail
Odour Descriptive	N/A	N/A	N/A	261	N/A	N/A	N/A	
Appearance (on Sampling) Descriptive	N/A	N/A	N/A	261	N/A	N/A	N/A	
Ammonia-Total (as N) mg/l	N/A	N/A	N/A	25	N/A	N/A	12.36	

Parameter	WWDL ELV (Schedule A)	ELV with Condition 2 Interpretation included Note 1	Interim % reduction from influent concentration	Number of sample results	Number of exceedances	Number of with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Total Oxidised Nitrogen (as N) mg/l	N/A	N/A	N/A	25	N/A	N/A	2.75	
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	25	N/A	N/A	1.53	

Notes:
1 – This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied

Cause of Exceedance(s):

No N&P removal treatment step

Significance of Results:

The WWTP is non compliant with the ELV's set in the Wastewater Discharge Licence. The impact on receiving waters is assessed further in Section 2

2.1.3 AMBIENT MONITORING SUMMARY FOR THE TREATMENT PLANT DISCHARGE TPEFF0400D0033SW001

A summary of monitoring from ambient monitoring points associated with the wastewater discharge is provided in the sections below. For discharges to rivers upstream (U/S) and downstream (D/S) location data is provided. For other ambient points in lakes, coastal or transitional waters, monitoring data from the most appropriate monitoring station is selected.

The table below provides details of ambient monitoring locations and details of any designations as sensitive areas.

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	River Station Code	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Status
Upstream	165691, 74463	RS19B140110	No	No	No	No	Unassigned
Downstream	162843, 69176	RS19T050890	No	No	No	No	Unassigned
Downstream	162863, 71034	RS19C120110	No	No	No	No	Unassigned
Downstream	165003, 71212	RS19C120740	No	No	No	No	Unassigned
Downstream	164101, 68782	RS19G040140	No	No	No	No	Unassigned
Downstream	164344, 69415	RS19G040190	No	No	No	No	Unassigned
Downstream	165278, 69503	RS19G040300	No	No	No	No	Unassigned
Downstream	165697, 70336	RS19G040490	No	No	No	No	Unassigned
Downstream	165401, 70768	RS19G040700	No	No	No	No	Unassigned
Downstream	166291, 74796	RS19G880990	No	No	No	No	Unassigned
Downstream	166925, 74246	RS19B140300	No	No	No	No	Moderate
Downstream	167422, 73340	RS19B140800	No	No	No	No	Moderate
Downstream	168942, 73453	RS19G090400	No	No	No	No	Moderate
Downstream	167868, 73539	RS19G090800	No	No	No	No	Moderate
Downstream	167496, 72342	RS19K750900	No	No	No	No	Moderate
Downstream	174650, 70440	TW04003159LE2005	No	No	No	No	Moderate

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	River Station Code	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Status
Downstream	170242, 72195	TW04003159LE2006	No	No	No	No	Moderate
Downstream	176559, 69260	TW05003157LE4005	No	No	No	No	Moderate
Downstream	178202, 64723	CW05003150LE8004	No	No	No	No	Moderate

The results for ambient results and / or additional monitoring data sets are included in the **Appendix 7.1 - Ambient monitoring summary**

Significance of Results:

The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence.

The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009.

The discharge from the wastewater treatment plant does not have an observable impact on the water quality.

The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status.

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - CARRIGRENNAN (CORK CITY) WWTP - 2020

2.1.4.1 Treatment Efficiency Report - Carrigrennan (Cork City) WWTP - 2020

Treatment efficiency is based on the removal of key pollutants from the influent wastewater by the treatment plant. In essence the calculation is based on the balance of load coming into the plant versus the load leaving the plant. The efficiency is presented as a percentage removal rate.

A summary presentation of the efficiency of the treatment process including information for all the parameters specified in the licence is included below:

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)
COD	12294838	3142122	74

Parameter	Influent mass loading (kg/year)	Effluent mass emission (kg/year)	Efficiency (% reduction of influent load)
cBOD	4232931	421119	90
SS	5962536	716716	88
TP	89802	87926	2.09
TN	767268	843063	-9.88

Note: The above data is based on sample results for the number of dates reported

2.1.4.2 Treatment Capacity Report Summary - Carrigrennan (Cork City) WWTP - 2020

Treatment capacity is an assessment of the hydraulic (flow) and organic (the amount of pollutants) load a treatment plant is designed to treat versus the current loading of that plant.

Carrigrennan (Cork City) WWTP - 2020	
Peak Hydraulic Capacity (m^3/day) - As Constructed	359592
DWF to the Treatment Plant (m^3/day)	59359.01
Current Hydraulic Loading - annual max (m^3/day)	266498
Average Hydraulic loading to the Treatment Plant (m^3/day)	126805
Organic Capacity (PE) - As Constructed	413200
Organic Capacity (PE) - Collected Load (peak week)[Note1]	241480
Organic Capacity (PE) - Remaining	171720
Will the capacity be exceeded in the next three years? (Yes/No)	No

Nominal design capacities can be based on conservative design principles. In some cases assessment of existing plants has shown organic capacities significantly higher than the nominal design capacity. Accordingly plants that appear to be overloaded when comparing a collected peak load with the nominal design capacity can be fully compliant due to the safety factors in the original design.

2.1.5 SLUDGE / OTHER INPUTS - CARRIGRENNAN (CORK CITY) WWTP - 2020

'Other inputs' to the waste water treatment plant are summarised in table below

Input type	Quantity	Unit	P.E.	% of load to WWTP	Included in Influent Monitoring (Y/N)?	Is there a leachate/sludge acceptance procedure for the WWTP?	Is there a dedicated leachate/sludge acceptance facility for the WWTP? (Y/N)
There is no Sludge and Other Input data for the Treatment Plant included in the AER.							

3 COMPLAINTS AND INCIDENTS

3.1 COMPLAINTS SUMMARY

A summary of complaints of an environmental nature is included below.

Number of Complaints	Nature of Complaint	Number Open Complaints	Number Closed Complaints
3	Blocked Sewer	0	3

3.2 REPORTED INCIDENTS SUMMARY

Environmental incidents that arise in an agglomeration are reported on an on-going basis in accordance with our waste water discharge licences. Where an incident occurs and it is reportable under the licence, it is reported to the Environmental Protection Agency through their Environmental Data Exchange Network, or in some instances by telephone. Some incidents which arise in the agglomeration are recorded by Irish Water but may not be reportable under our licence for example where the incident does not have an impact on environmental performance.

A summary of reported incidents is included below.

3.2.1 SUMMARY OF INCIDENTS

Incident Type	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Breach of ELV	WWTP upgrade required to meet ELV	1	Yes	No
Uncontrolled release	EO caused by power failure	1	No	Yes
Uncontrolled release	EO caused by pump failure	1	No	Yes

Incident Type	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Uncontrolled release	Blocked Sewer	1	No	Yes
Uncontrolled release	Blocked Sewer	1	No	Yes
Uncontrolled release	Blocked Sewer	1	No	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Broken Sewer Pipe	1	No	Yes
Uncontrolled release	Plant or equipment breakdown at WWTP	1	No	No
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Broken Sewer Pipe	1	No	No
Uncontrolled release	Adverse Weather	1	No	Yes
Uncontrolled release	Adverse Weather	1	No	Yes
Uncontrolled release	Adverse Weather	1	No	Yes
Uncontrolled release	Adverse Weather	1	Yes	Yes
Uncontrolled release	Network Infrastructure	1	Yes	No
Uncontrolled release	Blocked Sewer	1	No	No
Uncontrolled release	Adverse Weather	1	No	Yes

Incident Type	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Abatement Equipment offline	Plant or equipment breakdown at WWTP	1	No	No
Uncontrolled release	Blocked Sewer	1	No	No
Uncontrolled release	EO caused by pump failure	1	No	No
Uncontrolled release	EO caused by ragging or blocking	1	No	Yes
Uncontrolled release	Adverse Weather	1	No	Yes
Uncontrolled release	EO caused by power failure	1	No	Yes
Abatement Equipment offline	Plant or equipment breakdown at WWTP	1	No	No
Uncontrolled release	Adverse Weather	1	No	No

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2020	28
Number of Incidents reported to the EPA via EDEN in 2020	28
Explanation of any discrepancies between the two numbers above	N/A

4 INFRASTRUCTURAL ASSESSMENTS AND PROGRAMME OF IMPROVEMENTS

4.1 STORM WATER OVERFLOW IDENTIFICATION AND INSPECTION REPORT

A summary of the operation of the storm water overflows and their significance where known is included below:

4.1.1 SWO IDENTIFICATION

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
S02	165746, 71653	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S03	165987, 71722	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S04	166772, 72082	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S05	166965, 72159	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S06	167054, 72194	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S07	167469, 72139	No	Medium	Meeting	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
S08	167435, 72646	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S08	167435, 72646	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S09	167497, 72348	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S10	167405, 73414	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S11	167493, 73692	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S13	167458, 73281	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S14	167497, 72348	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S15	167497, 72348	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S16	167435, 72646	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S17	167558, 72135	No	Medium	Meeting	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
S18	167666, 72129	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S19	168078, 72052	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S19	168078, 72052	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S19	168078, 72052	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S20	168765, 72118	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S21	169349, 72330	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S22	170463, 72270	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S23	170703, 72271	No	Medium	Not Meeting	Unknown	Unknown	Not Monitored
S24	170271, 72107	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S25	168303, 71862	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
S25	168303, 71862	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S26	167915, 71715	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S26	167915, 71715	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S26	167915, 71715	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S26	167915, 71715	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S27	167533, 71538	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S28	167441, 71546	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S29	167260, 71521	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S30	167185, 71501	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S30	167185, 71501	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
S30	167185, 71501	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S31	166415, 71478	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S32	165976, 71334	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S33	164347, 69423	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S34	171683, 69814	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S35	165254, 71147	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S35	165254, 71147	Yes	High	Not yet Assessed	Unknown	Unknown	Not Monitored
S36	165602, 70434	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S37	165598, 70436	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S38	165705, 69791	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
S39	166295, 69286	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
S40	168668, 69893	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
S41	170018, 69669	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
S42	170046, 70086	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
S43	168831, 73441	Yes	Medium	Meeting	Unknown	Unknown	Not Monitored
S44	171627, 71861	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S44	171627, 71861	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S44	171627, 71861	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S45	168313, 70079	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
S45	168313, 70079	Yes	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
S47	167497, 72348	No	Medium	Meeting	Unknown	Unknown	Not Monitored
S48	176683, 69726	Yes	Medium	Meeting	143	4515070	Monitored
S49	170768, 72079	Yes	Medium	Meeting	97	944370	Monitored
SD04	163247, 69974	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	172538, 69463	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	172788, 74183	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	174518, 71127	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	175958, 72971	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	177329, 73294	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	173100, 69468	No	Medium	Not yet Assessed	Unknown	Unknown	Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
TBC	175339, 71489	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	175512, 71475	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	167915, 71715	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	167915, 71715	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	169935, 73933	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	163148, 71116	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	164731, 69408	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
TBC	168765, 72118	No	Medium	Not Meeting	Unknown	Unknown	Not Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	168765, 72118	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	167119, 71591	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	164943, 71226	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	164252, 69363	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	165228, 69252	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	165200, 71159	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	165281, 71163	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	169118, 69210	No	Medium	Meeting	Unknown	Unknown	Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	172264, 72015	No	Medium	Not yet Assessed	Unknown	Unknown	Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	171683, 69814	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	173151, 70547	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	171176, 72149	No	Medium	Meeting	Unknown	Unknown	Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
TBC	170607, 72270	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	169812, 72296	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	173033, 69515	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	165485, 71594	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	172700, 72881	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	177975, 73141	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	TBC, TBC	No	Unknown	Not yet Assessed	Unknown	Unknown	Unknown
TBC	167607, 71505	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
TBC	165219, 69285	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	163247, 69974	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	162898, 69881	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	162794, 70707	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	164492, 71229	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	165605, 70430	No	Medium	Not yet Assessed	Unknown	Unknown	Not Monitored
TBC	165605, 70430	No	High	Meeting	Unknown	Unknown	Not Monitored
TBC	176798, 70342	No	Medium	Meeting	Unknown	4480660	Monitored
TBC	168307, 72009	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	168668, 69893	No	Medium	Meeting	Unknown	Unknown	Monitored

WWDL Name / Code for Storm Water Overflow	Irish Grid Ref.	Included in Schedule A4 of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2020 (No. of events)	Total volume discharged in 2020 (m3)	Monitoring Status
TBC	166610, 71492	No	Medium	Meeting	Unknown	Unknown	Monitored
SD20	167273, 72119	No	Unknown	Not yet Assessed	346	829088	Monitored
SD21	167386, 71575	No	Unknown	Not yet Assessed	270	703162	Monitored
TBC	170607, 72270	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	165262, 71318	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	164731, 69408	No	Medium	Meeting	Unknown	Unknown	Monitored
TBC	165014, 71472	No	Medium	Meeting	Unknown	Unknown	Not Monitored
TBC	170473, 69691	No	Medium	Meeting	Unknown	Unknown	Not Monitored

SWO Summary	
How much sewage was discharged via SWOs in the agglomeration in the year (m3)?	Unknown
Is each SWO identified as not meeting DoEHLG Guidance included in the Programme of Improvements?	N/A

SWO Summary	
The SWO Assessment included the requirements of relevant of WWDL schedules?	No
Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7?	No

4.2 REPORT ON PROGRESS MADE AND PROPOSALS BEING DEVELOPED TO MEET THE IMPROVEMENT PROGRAMME REQUIREMENTS.

4.2.1 SPECIFIED IMPROVEMENT PROGRAMME SUMMARY

A wastewater discharge licence may require a number of reports on specific subject areas to be prepared for the agglomeration in question. These reports are submitted to the EPA as part of the Annual Environmental Report. This section provides list of the various reports required for this agglomeration and a brief summary of their recommendations.

Specified Improvement Programmes (under Schedule A and C of WWDL)	Description	Licence Schedule	Licence Completion Date	Date Expired? (N/NA/Y)	Status of Works	Timeframe for Completing the Work	Comments
D0033-SIP:03	Improvement in operation of, and reduction in frequency of discharge via, CS071 (S48N and S48S)	C	31/12/2020	Yes	Works Completed		
D0033-SIP:04	Upgrading of waste water works, as required, to ensure Storm Water Overflows comply with the criteria outlined in DoEHLG.	C	22/12/2015	Yes	Works Completed		

Specified Improvement Programmes (under Schedule A and C of WWDL)	Description	Licence Schedule	Licence Completion Date	Date Expired? (N/NA/Y)	Status of Works	Timeframe for Completing the Work	Comments
D0033-SIP:02	Infiltration and inflow programme	C	22/12/2015	Yes	Work ongoing on-site		
D0033-SIP:01	Cessation of discharge from SD02 (St Patrick's Bridge)	A	22/12/2015	Yes	Works Completed		

A summary of the status of any improvements identified by under Condition 5.2 is included below.

4.2.2 IMPROVEMENT PROGRAMME SUMMARY

Improvement Identifier	Improvement Description / or any Operational Improvements	Improvement Source	Expected Completion Date	Comments
There are no Improvements Programme for this Agglomeration.				

4.2.3 SEWER INTEGRITY RISK ASSESSMENT

The utilisation of multiple capital maintenance programmes and the outputs of the workshops with the Local Authority Operations Staff held under the programme can be used to satisfy the requirements of Condition 5 regarding network integrity. Improvement works identified by way of these programmes and workshops will be included in the Improvements Summary Table.

5 LICENCE SPECIFIC REPORTS

A wastewater discharge licence may require a number of reports on specific subject areas to be prepared for the agglomeration in question. These reports are submitted to the EPA as part of the Annual Environmental Report. This section provides list of the various reports required for this agglomeration and a brief summary of their recommendations.

5.a Licence Specific Reports Summary Table

Licence Specific Report	Required by licence	Year included in AER	Included in this AER	Reference to relevant section of AER
Priority Substances Assessment	Yes	2012	No	
Shellfish Impact Assessment	Yes		No	
Toxicity of Final Effluent	Yes	2011	No	

5.1 PRIORITY SUBSTANCES ASSESSMENT

The Priority Substances Assessment Report has been included in the AER 2012

5.2 SHELLFISH IMPACT ASSESSMENT

The Shellfish Impact Assessment is currently ongoing

5.3 TOXICITY OF FINAL EFFLUENT

The Toxicity of Final Effluent Report has been included in the AER 2011

6 CERTIFICATION AND SIGN OFF

6.1 SUMMARY OF AER CONTENTS

Parameter	Answer
Does the AER include an Executive Summary?	Yes
Does the AER include an assessment of the performance of the Waste Water Works (i.e. have the results of assessments been interpreted against WWDL requirements and or Environmental Quality Standards)?	Yes
Is there a need to advise the EPA for consideration of a Technical Amendment / Review of the licence?	No
List reason e.g. additional SWO identified	N/A
Is there a need to request/advise the EPA of any modification to the existing WWDL with respect to condition 4 changes to monitoring location, frequency etc	No
List reason e.g. changes to monitoring requirements	N/A
Have these processes commenced?	N/A
Are all outstanding reports and assessments from previous AERs included as an appendix to this AER	No

I certify that the information given in this Annual Environmental Report is truthful, accurate and complete:

Signed: Date: 09/07/2021

This AER has been produced by Irish Water's Environmental Information System (EIMS) and has been electronically signed off in that system for and on behalf of ,

Katherine Walshe

Acting Head of Environmental Regulation.

7 APPENDIX

Appendix
Appendix 7.1 - Ambient monitoring summary

Cork City Council D0033-01 — 31-Dec-20

435 473 525 566 73 564 414 999 250

Report No	Station Code	Sample No	Date	Station Name	Sample Purpose	Station Ref. No.	Tide	Sampled Depth	Measured Depth	pH	Conductivity	Salinity	Temp	DO	Total Oxidised Nitrogen	Ammonia	Total Nitrogen	Ortho-Phosphate		Chlorophyll-a	E. Coliforms	BOD	DO (% Saturation)	D.O.	100% DO (fresh)
									m	pH unit	mS/cm @ 20°C	PSU	°C	mg/l O2	mg/l N	mg/l N	mg/l N	µg/l P	mg/l P	µg/l	MPN/100mls	mg/l O2	%	mg/l	mg/l
20-05613	CW05003150LE8004	2020-17011	13/02/2020	Haulbowline	301	C5	Low	Top	14.10	7.8	25.6	17.5	8.7	9.510	1.54	0.1200	1.71	38.0	0.038	1.0	1,842	0.50	81.7	9.51	11.64
	CW05003150LE8004	2020-17012	13/02/2020	Haulbowline	301	C5	Low	Middle		7.9	31.1	21.7	8.4	9.7	1.35	0.1000	1.50	36.0	0.036	1.0	2,046	0.50	82.2	9.65	11.74
	CW05003150LE8004	2020-17013	13/02/2020	Haulbowline	301	C5	Low	Bottom		8.0	36.9	26.2	7.6	10.1	0.84	0.0600	1.13	29.0	0.029	1.0	1,081	0.50	84.6	10.12	11.96
	TW05003157LE4005	2020-17014	13/02/2020	End L. Mahon	201	C6	Low	Top	8.80	7.9	20.9	14.0	7.3	11.6	1.69	0.1360	1.95	42.0	0.042	4.0	4,106	0.50	96.1	11.58	12.05
	TW05003157LE4005	2020-17015	13/02/2020	End L. Mahon	201	C6	Low	Middle		7.9	23.1	15.6	7.7	9.8	1.62	0.1300	1.93	41.0	0.041	1.0	4,884	0.50	81.9	9.78	11.94
	TW05003157LE4005	2020-17016	13/02/2020	End L. Mahon	201	C6	Low	Bottom		7.9	28.0	19.3	7.8	11.5	1.36	0.1200	1.67	35.0	0.035	1.0	1,860	0.50	96.4	11.46	11.89
	TW04003159LE2005	2020-17017	13/02/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.7	6.6	4.1	7.8	10.7	2.18	0.1000	2.47	43.0	0.043	1.0	2,247	0.50	90.1	10.71	11.89
	TW04003159LE2005	2020-17018	13/02/2020	Blackrock Castle	201	C7	Low	Middle		7.8	19.0	12.6	7.9	10.2	1.82	0.1200	1.98	44.0	0.044	1.0	3,873	0.50	86.2	10.23	11.87
	TW04003159LE2005	2020-17019	13/02/2020	Blackrock Castle	201	C7	Low	Bottom		7.9	28.1	19.4	8.0	10.4	1.25	0.1400	1.65	42.0	0.042	1.0	3,255	0.50	87.5	10.36	11.84
	TW05003157LE4004	2020-17020	13/02/2020	Mid L. Mahon	201	C8	Low	Top	8.40	7.8	15.6	10.2	7.2	10.7	1.89	0.1100	2.23	42.0	0.042	1.0	2,613	0.50	88.8	10.74	12.09
	TW05003157LE4004	2020-17021	13/02/2020	Mid L. Mahon	201	C8	Low	Middle		7.8	19.2	12.7	7.6	10.3	1.67	0.1400	2.15	43.0	0.043	1.0	1,860	0.50	85.8	10.27	11.97
	TW05003157LE4004	2020-17022	13/02/2020	Mid L. Mahon	201	C8	Low	Bottom		7.9	21.7	14.6	7.9	10.2	1.35	0.1400	1.99	41.0	0.041	13.0	2,224	0.50	85.4	10.15	11.88
	TW04003159LE2006	2020-17023	13/02/2020	Tivoli	201	C9	Low	Top	6.80	7.7	3.8	2.3	8.1	11.1	2.32	0.0600	2.59	38.0	0.038	1.0	2,755	0.50	94.0	11.11	11.82
	TW04003159LE2006	2020-17024	13/02/2020	Tivoli	201	C9	Low	Bottom		7.9	34.1	24.0	8.1	10.1	1.26	0.1700	1.38	46.0	0.046	1.0	3,255	0.50	85.7	10.13	11.82
	CW05003150LE8004	2020-17025	13/02/2020	Haulbowline	301	C5	High	Top	15.60	8.0	35.9	25.4	8.7	10.1	1.00	0.0700	1.26	31.0	0.031	1.0	839	0.50	86.7	10.11	11.65
	CW05003150LE8004	2020-17026	13/02/2020	Haulbowline	301	C5	High	Middle		8.0	43.0	31.0	8.6	10.1	0.46	0.0175	0.81	24.0	0.024	1.0	171	0.50	86.9	10.14	11.67
	CW05003150LE8004	2020-17027	13/02/2020	Haulbowline	301	C5	High	Bottom		8.0	42.8	30.8	8.6	9.9	0.50	0.0175	0.86	26.0	0.026	1.0	160	0.50	84.9	9.91	11.67
	TW05003157LE4005	2020-17028	13/02/2020	End L. Mahon	201	C6	High	Top	11.80	7.9	26.7	18.3	8.6	10.3	1.74	0.1210	1.81	37.0	0.037	1.0	1,782	0.50	88.4	10.32	11.68
	TW05003157LE4005	2020-17029	13/02/2020	End L. Mahon	201	C6	High	Middle		8.0	36.9	26.2	8.5	10.4	1.03	0.0800	1.21	31.0	0.031	4.0	744	0.50	88.8	10.40	11.71
	TW05003157LE4005	2020-17030	13/02/2020	End L. Mahon	201	C6	High	Bottom		8.0	40.2	28.8	8.4	10.2	0.68	0.0500	1.01	25.0	0.025	1.0	683	0.50	86.8	10.18	11.73
	TW04003159LE2005	2020-17031	13/02/2020	Blackrock Castle	201	C7	High	Top	10.20	7.8	12.5	8.0	8.8	10.5	2.19	0.1000	2.32	52.0	0.052	2.0	2,014	0.50	90.7	10.52	11.60
	TW04003159LE2005	2020-17032	13/02/2020	Blackrock Castle	201	C7	High	Middle		7.9	29.1	20.1	8.6	10.7	1.35	0.1600	1.67	41.0	0.041	3.0	3,076	0.50	91.2	10.65	11.68
	TW04003159LE2005	2020-17033	13/02/2020	Blackrock Castle	201	C7	High	Bottom		7.9	34.8	24.5	8.4	10.3	1.10	0.1400	1.37	42.0	0.042	1.0	1,396	0.50	87.7	10.30	11.74
	TW05003157LE4004	2020-17034	13/02/2020	Mid L. Mahon	201	C8	High	Top	11.40	7.8	15.8	10.3	8.5	11.0	2.05	0.1200	2.29	43.0	0.043	1.0	3,076	0.50	93.9	10.98	11.69
	TW05003157LE4004	2020-17035	13/02/2020	Mid L. Mahon	201	C8	High	Middle		8.0	37.0	26.2	8.4	10.6	0.83	0.0900	1.21	32.0	0.032	1.0	934	0.50	90.5	10.62	11.73
	TW05003157LE4004	2020-17036	13/02/2020	Mid L. Mahon	201	C8	High	Bottom		8.0	38.8	27.7	8.3	10.3	0.74	0.1000	1.11	35.0	0.035	1.0	1,401	1.50	87.1	10.25	11.76
	TW04003159LE2006	2020-17037	13/02/2020	Tivoli	201	C9	High	Top	9.20	7.7	3.9	2.3	9.4	11.1	2.11	0.0900	2.58	50.0	0.050	1.0	1,515	0.50	96.6	11.07	11.46
	TW04003159LE2006	2020-17038	13/02/2020	Tivoli	201	C9	High	Bottom		7.9	28.4	19.6	9.2	10.0	1.27	0.1800	1.66	47.0	0.047	3.0	1,935	0.50	86.5	9.96	11.51
20-06526	CW05003150LE8004	2020-19565	28/05/2020	Haulbowline	301	C5	Low	Top	14.10	8.3	42.7	30.8	18.9	9.1	0.24	0.0175	0.60	5.0	0.005	12.0	30	2.90	97.6	9.07	9.30
	CW05003150LE8004	2020-19566	28/05/2020	Haulbowline	301	C5	Low	Middle		8.2	43.4	31.3	18.8	9.1	0.19	0.0175	0.25	5.0	0.005	12.5	41	2.00	97.8	9.11	9.32
	CW05003150LE8004	2020-19567	28/05/2020	Haulbowline	301	C5	Low	Bottom		8.2	45.2	32.8	17.3	9.1	0.13	0.0175	0.60	5.0	0.005	8.0	134	1.10	94.7	9.10	9.61
	TW05003157LE4005	2020-19568	28/05/2020	End L. Mahon	201	C6	Low	Top	8.80	8.4	40.2	28.8	19.6	9.6	0.34	0.0175	0.70	5.0	0.005	24.3	97	3.90	104.3	9.56	9.16
	TW05003157LE4005	2020-19569	28/05/2020	End L. Mahon	201	C6	Low	Middle		8.3	40.7	29.2	18.6	8.9	0.34	0.0175	1.00	5.0	0.005	21.9	259	3.10	95.1	8.89	9.35
	TW05003157LE4005	2020-19570	28/05/2020	End L. Mahon	201	C6	Low	Bottom		8.2	41.5	29.8	19.0	8.5	0.33	0.0175	0.70	5.0	0.005	20.6	183	2.30	91.3	8.48	9.28
	TW04003159LE2005	2020-19571	28/05/2020	Blackrock Castle	201	C7	Low	Top	4.10	8.3	28.3	19.5	21.5	8.8	0.92	0.0175	1.20	5.0	0.005	19.8	20	2.90	99.3	8.76	8.82
	TW04003159LE2005	2020-19572	28/05/2020	Blackrock Castle	201	C7	Low	Middle		8.3	32.1	22.4	19.7	9.6	0.82	0.0175	1.20	5.0	0.005	15.8	20	2.20	104.4	9.55	9.15
	TW04003159LE2005	2020-19573	28/05/2020	Blackrock Castle	201	C7	Low	Bottom		8.3	35.2	24.8	21.0	8.9	0.54	0.0175	1.00	12.0	0.012	23.2	10	2.90	99.9	8.90	8.91
	TW05003157LE4004	2020-19574	28/05/2020	Mid L. Mahon	201	C8	Low	Top	8.40	8.4	36.5	25.8	20.6	9.5	0.51	0.0175	0.90	5.0	0.005	19.8	5	3.70	105.9	9.52	8.99
	TW05003157LE4004	2020-19575	28/05/2020	Mid L. Mahon	201	C8	Low	Middle		8.3	38.6	27.5	18.8	10.1	0.40	0.0175	0.80	5.0	0.005	19.8	63	3.20	107.9	10.05	9.32
	TW05003157LE4004	2020-19576	28/05/2020	Mid L. Mahon	201	C8	Low	Bottom		8.2	41.4	29.7	18.8	9.1	0.31	0.0550	0.80	13.0	0.013	16.0	86	1.90	97.3	9.07	9.32
	TW04003159LE2006	2020-19577	28/05/2020	Tivoli	201	C9	Low	Top	6.80	7.8	5.4	3.2	21.0	8.6	1.64	0.0590	2.10	18.0	0.018	1.0	512	0.50	96.9	8.64	8.91
	TW04003159LE2006	2020-19578	28/05/2020	Tivoli	201	C9	Low	Bottom		8.1	39.2	28.0	19.5	8.8	0.34	0.0790	0.90	23.0	0.023	21.9	63	2.50	96.2	8.84	9.19
	CW05003150LE8004	2020-19579	28/05/2020	Haulbowline	301	C5	High	Top	15.60	8.3	44.3	32.1	18.4	8.5	0.15	0.0350	0.50	5.0	0.005	4.0	75	2.60	90.5	8.49	9.38
	CW05003150LE8004	2020-19580	28/05/2020	Haulbowline	301	C5	High	Middle		8.2	45.5	33.0	16.9	8.2	0.06	0.0175	0.90	5.0	0.005	5.1	31	2.20	84.4	8.17	9.68
	CW05003150LE8004	2020-19581	28/05/2020	Haulbowline	301	C5	High	Bottom		8.3	45.6	33.1	17.2	8.6	0.06	0.0175	0.25	5.0	0.005	7.5	52	2.40	89.3	8.60	9.63
	TW05003157LE4005	2020-19582	28/05/2020	End L. Mahon	201	C6	High	Top	11.80	8.4	40.3	28.8	18.1	9.0	0.40	0.0175	0.80	5.0	0.005	6.9	97	3.80	95.3	9.00	9.44
	TW05003157LE4005	2020-19583	28/05/2020	End L. Mahon	201	C6	High	Middle		8.3	43.1	31.1	16.9	9.3	0.27	0.0175	0.70	5.0	0.005	8.0	75	1.80	95.6	9.25	9.68
	TW05003157LE4005	2020-19584	28/05/2020	End L. Mahon	201	C6	High	Bottom		8.2	44.0	31.8	17.0	9.1	0.17	0.0175	0.60	16.0	0.016	6.7	52	3.90	94.6	9.14	9.66
	TW04003159LE2005	2020-19585	28/05/2020	Blackrock Castle	201	C7	High	Top	10.20	8.1	15.9	10.4	20.4	8.9	1.20	0.0175	1.80	12.0	0.012	4.8	399	1.30	98.5	8.88	9.01
	TW04003159LE2005	2020-19586	28/05/2020	Blackrock Castle	201	C7	High	Middle		8.4	40.1	28.7	18.4	8.6	0.35	0.0750	0.80	10.0	0.010	12.8	332	4.10	91.9	8.62	9.38
	TW04003159LE2005	2020-19587	28/05/2020	Blackrock Castle	201	C7	High	Bottom		8.2	42.3	30.4	19.0	8.7	0.52	0.0500	0.70	15.0	0.015	10.1	266	2.20	94.1	8.73	9.28
	TW05003157LE4004	2020-19588	28/05/2020	Mid L. Mahon	201	C8	High	Top	11.40	8.4	39.6	28.3	19.7	8.6	0.40	0.0175	0.70	5.0	0.005	11.5	119	3.80	93.7	8.57	9.14
	TW05003157LE4004	2020-19589	28/05/2020	Mid L. Mahon	201	C8	High	Middle		8.3	42.3	30.4	17.8	8.8	0.26	0.0175	0.80	10.0	0.010	9.6	97	3.60	92.2	8.77	9.51
	TW05003157LE4004	2020-19590	28/05/2020	Mid L. Mahon	201	C8	High	Bottom		8.2	43.6	31.5	18.4	8.7	0.21	0.0175	0.60	5.0	0.005	13.1	161	1.90	92.8	8.72	9.40
	TW04003159LE2006	2020-19591	28/05/2020	Tivoli	201	C9	High	Top	9.20	8.1	15.5	10.1	18.5	8.7	1.55	0.0550	2.00	17.0	0.017	1.0	420	0.50	92.8	8.70	9.37
	TW04003159LE2006	2020-19592	28/05/2020	Tivoli	201	C9	High	Bottom		8.3	39.1	27.9	17.5	8.5	0.33	0.0750	0.90	15.0	0.015	11.7	85	3.60	88.7	8.48	9.56

Cork City Council D0033-01 — 31-Dec-20

435 473 525 566 73 564 414 999 250

Report No	Station Code	Sample No	Date	Station Name	Sample Purpose	Station Ref. No.	Tide	Sampled Depth	Measured Depth	pH	Conductivity	Salinity	Temp	DO	Total Oxidised Nitrogen	Ammonia	Total Nitrogen	Ortho-Phosphate		Chlorophyll-a	E. Coliforms	BOD	DO (% Saturation)	D.O.	100% DO (fresh)
									m	pH unit	mS/cm @ 20°C	PSU	°C	mg/l O2	mg/l N	mg/l N	mg/l N	µg/l P	mg/l P	µg/l	MPN/100mls	mg/l O2	%	mg/l	mg/l
20-06975	CW05003150LE8004	2020-20663	25/06/2020	Haulbowline	301	C5	Low	Top	14.10	8.3	38.2	27.2	20.6	7.8	0.35	0.0175	0.80	5.0	0.005	61.7	121	6.90	86.8	7.80	8.99
	CW05003150LE8004	2020-20664	25/06/2020	Haulbowline	301	C5	Low	Middle		8.2	41.0	29.4	19.1	8.5	0.26	0.0175	0.70	11.0	0.011	17.4	265	2.60	91.8	8.50	9.26
	CW05003150LE8004	2020-20665	25/06/2020	Haulbowline	301	C5	Low	Bottom		8.1	42.7	30.8	17.8	8.5	0.10	0.0175	0.60	13.0	0.013	7.5	145	1.80	89.4	8.50	9.51
	TW05003157LE4005	2020-20666	25/06/2020	End L. Mahon	201	C6	Low	Top	8.80	8.3	33.4	23.4	18.6	7.7	0.55	0.0175	0.90	10.0	0.010	20.8	109	2.80	82.3	7.70	9.35
	TW05003157LE4005	2020-20667	25/06/2020	End L. Mahon	201	C6	Low	Middle		8.3	39.0	27.8	17.9	7.7	0.38	0.0175	0.80	10.0	0.010	88.6	75	4.10	81.1	7.70	9.49
	TW05003157LE4005	2020-20668	25/06/2020	End L. Mahon	201	C6	Low	Bottom		8.3	39.1	27.9	17.4	8.1	0.29	0.0175	0.80	14.0	0.014	15.2	226	3.20	84.5	8.10	9.58
	TW04003159LE2005	2020-20669	25/06/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.8	10.6	6.7	18.7	8.8	1.20	0.0175	1.30	18.0	0.018	1.0	2,878	0.50	94.3	8.80	9.33
	TW04003159LE2005	2020-20670	25/06/2020	Blackrock Castle	201	C7	Low	Middle		8.1	41.3	29.6	18.4	8.5	0.28	0.0175	0.70	13.0	0.013	1.0	109	0.50	90.5	8.50	9.39
	TW04003159LE2005	2020-20671	25/06/2020	Blackrock Castle	201	C7	Low	Bottom		8.1	40.9	29.3	18.0	8.5	0.23	0.0175	0.70	18.0	0.018	3.7	31	1.50	89.8	8.50	9.47
	TW05003157LE4004	2020-20672	25/06/2020	Mid L. Mahon	201	C8	Low	Top	8.40	8.3	25.5	17.4	18.6	8.4	1.01	0.0175	1.00	16.0	0.016	3.7	189	1.50	89.8	8.40	9.35
	TW05003157LE4004	2020-20673	25/06/2020	Mid L. Mahon	201	C8	Low	Middle		8.2	38.9	27.7	18.2	8.3	0.36	0.0175	0.80	13.0	0.013	12.8	269	2.50	88.0	8.30	9.43
	TW05003157LE4004	2020-20674	25/06/2020	Mid L. Mahon	201	C8	Low	Bottom		8.1	39.7	28.4	17.6	8.3	0.21	0.0175	0.70	16.0	0.016	6.1	86	1.70	87.0	8.30	9.55
	TW04003159LE2006	2020-20675	25/06/2020	Tivoli	201	C9	Low	Top	6.80	7.7	6.9	4.2	19.3	8.7	1.34	0.0175	1.40	18.0	0.018	2.7	529	0.50	94.4	8.70	9.22
	TW04003159LE2006	2020-20676	25/06/2020	Tivoli	201	C9	Low	Bottom		8.0	41.6	29.9	18.8	8.7	0.25	0.0175	0.70	25.0	0.025	1.0	97	1.30	93.4	8.70	9.31
	CW05003150LE8004	2020-20677	25/06/2020	Haulbowline	301	C5	High	Top	15.60	8.2	45.5	33.0	23.3	8.5	0.08	0.0175	0.25	12.0	0.012	2.9	10	1.60	99.7	8.50	8.53
	CW05003150LE8004	2020-20678	25/06/2020	Haulbowline	301	C5	High	Middle		8.1	46.0	33.4	21.6	8.7	0.07	0.0175	0.25	13.0	0.013	4.0	30	2.00	98.7	8.70	8.81
	CW05003150LE8004	2020-20679	25/06/2020	Haulbowline	301	C5	High	Bottom		8.1	46.2	33.6	20.0	8.8	0.07	0.0175	0.25	13.0	0.013	2.7	5	1.60	96.8	8.80	9.09
	TW05003157LE4005	2020-20680	25/06/2020	End L. Mahon	201	C6	High	Top	11.80	8.3	39.4	28.1	22.8	8.6	0.36	0.0175	0.70	13.0	0.013	6.1	110	2.30	99.9	8.60	8.61
	TW05003157LE4005	2020-20681	25/06/2020	End L. Mahon	201	C6	High	Middle		8.3	43.3	31.3	21.5	8.9	0.17	0.0175	0.60	16.0	0.016	9.3	75	2.70	101.2	8.93	8.83
	TW05003157LE4005	2020-20682	25/06/2020	End L. Mahon	201	C6	High	Bottom		8.1	45.0	32.6	21.0	9.1	0.11	0.0175	0.50	15.0	0.015	1.0	63	2.10	102.2	9.11	8.92
	TW04003159LE2005	2020-20683	25/06/2020	Blackrock Castle	201	C7	High	Top	10.20	9.0	24.4	16.6	22.4	8.8	1.32	0.0175	1.90	35.0	0.035	1.0	355	2.80	101.4	8.80	8.68
	TW04003159LE2005	2020-20684	25/06/2020	Blackrock Castle	201	C7	High	Middle		8.4	37.2	26.4	21.6	8.6	0.36	0.0175	0.80	16.0	0.016	30.7	495	5.80	97.6	8.60	8.81
	TW04003159LE2005	2020-20685	25/06/2020	Blackrock Castle	201	C7	High	Bottom		8.2	42.2	30.4	21.0	8.5	0.22	0.0175	0.70	18.0	0.018	5.1	145	3.00	95.4	8.50	8.91
	TW05003157LE4004	2020-20686	25/06/2020	Mid L. Mahon	201	C8	High	Top	11.40	8.3	32.9	23.0	24.8	8.4	0.54	0.0175	0.80	10.0	0.010	4.3	318	2.20	101.3	8.40	8.29
	TW05003157LE4004	2020-20687	25/06/2020	Mid L. Mahon	201	C8	High	Middle		8.3	43.0	31.0	22.8	8.5	0.22	0.0175	0.60	14.0	0.014	5.9	135	2.70	98.7	8.50	8.61
	TW05003157LE4004	2020-20688	25/06/2020	Mid L. Mahon	201	C8	High	Bottom		8.2	43.9	31.7	21.8	8.5	0.17	0.0175	0.50	23.0	0.023	5.6	41	2.40	96.8	8.50	8.78
	TW04003159LE2006	2020-20689	25/06/2020	Tivoli	201	C9	High	Top	9.20	7.8	4.6	2.7	21.1	8.8	1.34	0.0175	1.50	16.0	0.016	1.0	135	0.50	99.0	8.81	8.90
	TW04003159LE2006	2020-20690	25/06/2020	Tivoli	201	C9	High	Bottom		8.1	41.6	29.9	22.7	8.3	0.24	0.0175	0.60	19.0	0.019	4.5	10	1.70	96.2	8.30	8.63
20-07271	CW05003150LE8004	2020-21438	16/07/2020	Haulbowline	301	C5	Low	Top	14.10	8.5	44.3	29.9	15.8	8.4	0.01	0.0350	0.50	5.0	0.005	15.8	74	6.20	84.9	8.42	9.92
	CW05003150LE8004	2020-21439	16/07/2020	Haulbowline	301	C5	Low	Middle		8.5	44.6	30.4	15.6	8.1	0.01	0.0175	0.60	5.0	0.005	20.3	30	7.00	81.0	8.06	9.95
	CW05003150LE8004	2020-21440	16/07/2020	Haulbowline	301	C5	Low	Bottom		8.5	45.1	30.6	15.3	8.0	0.01	0.0175	0.50	5.0	0.005	12.3	30	7.20	79.9	8.01	10.02
	TW05003157LE4005	2020-21441	16/07/2020	End L. Mahon	201	C6	Low	Top	8.80	8.6	41.0	27.5	15.6	8.3	0.04	0.0175	0.60	5.0	0.005	58.2	5	6.60	83.7	8.33	9.95
	TW05003157LE4005	2020-21442	16/07/2020	End L. Mahon	201	C6	Low	Middle		8.7	42.9	29.0	15.8	7.2	0.01	0.0175	0.60	5.0	0.005	35.2	282	7.20	72.6	7.20	9.91
	TW05003157LE4005	2020-21443	16/07/2020	End L. Mahon	201	C6	Low	Bottom		8.6	43.7	29.7	15.3	7.7	0.01	0.0175	0.70	5.0	0.005	38.2	288	5.70	76.4	7.65	10.02
	TW04003159LE2005	2020-21444	16/07/2020	Blackrock Castle	201	C7	Low	Top	4.10	9.3	35.2	23.4	16.1	10.7	0.16	0.0175	3.80	20.0	0.020	193.8	5	26.50	108.6	10.70	9.85
	TW04003159LE2005	2020-21445	16/07/2020	Blackrock Castle	201	C7	Low	Middle		8.4	44.1	30.1	15.4	7.6	0.01	0.0175	0.90	5.0	0.005	16.0	31	5.90	76.2	7.62	10.00
	TW04003159LE2005	2020-21446	16/07/2020	Blackrock Castle	201	C7	Low	Bottom		8.2	44.8	30.7	14.3	8.5	0.06	0.0175	0.80	5.0	0.005	8.0	10	2.50	82.7	8.47	10.24
	TW05003157LE4004	2020-21447	16/07/2020	Mid L. Mahon	201	C8	Low	Top	8.40	8.8	35.8	23.9	15.8	9.2	0.36	0.0175	1.30	5.0	0.005	36.6	74	4.40	93.0	9.22	9.91
	TW05003157LE4004	2020-21448	16/07/2020	Mid L. Mahon	201	C8	Low	Middle		8.6	43.4	29.6	15.6	8.2	0.01	0.0175	0.90	5.0	0.005	22.2	121	6.60	82.5	8.21	9.95
	TW05003157LE4004	2020-21449	16/07/2020	Mid L. Mahon	201	C8	Low	Bottom		8.4	44.9	30.9	14.6	8.2	0.01	0.0175	0.50	5.0	0.005	12.8	135	6.50	80.9	8.23	10.17
	TW04003159LE2006	2020-21450	16/07/2020	Tivoli	201	C9	Low	Top	6.80	8.3	31.8	20.9	16.1	7.3	0.73	0.0175	1.10	10.0	0.010	1.0	132	3.60	74.2	7.31	9.85
	TW04003159LE2006	2020-21451	16/07/2020	Tivoli	201	C9	Low	Bottom		8.2	44.9	30.8	14.8	7.2	0.01	0.0175	0.25	12.0	0.012	1.0	10	1.90	71.4	7.23	10.13
	CW05003150LE8004	2020-21452	16/07/2020	Haulbowline	301	C5	High	Top	15.60	8.4	44.9	31.1	15.2	8.5	0.01	0.0175	0.60	5.0	0.005	4.5	299	4.30	84.9	8.52	10.04
	CW05003150LE8004	2020-21453	16/07/2020	Haulbowline	301	C5	High	Middle		8.3	46.0	31.9	15.7	7.6	0.01	0.0175	0.25	5.0	0.005	7.5	213	4.30	76.2	7.57	9.93
	CW05003150LE8004	2020-21454	16/07/2020	Haulbowline	301	C5	High	Bottom		8.3	46.0	31.8	14.8	7.5	0.01	0.0175	0.50	5.0	0.005	4.5	122	4.00	73.8	7.47	10.13
	TW05003157LE4005	2020-21455	16/07/2020	End L. Mahon	201	C6	High	Top	11.80	8.5	44.0	30.4	16.2	9.0	0.01	0.0175	0.60	5.0	0.005	13.4	97	2.90	91.3	8.97	9.83
	TW05003157LE4005	2020-21456	16/07/2020	End L. Mahon	201	C6	High	Middle		8.3	45.0	31.1	16.0	7.0	0.01	0.0175	0.25	5.0	0.005	13.4	169	4.60	70.4	6.95	9.87
	TW05003157LE4005	2020-21457	16/07/2020	End L. Mahon	201	C6	High	Bottom		8.3	45.5	31.4	15.1	7.0	0.01	0.0175	0.25	5.0	0.005	9.1	132	4.30	69.9	7.03	10.06
	TW04003159LE2005	2020-21458	16/07/2020	Blackrock Castle	201	C7	High	Top	10.20	8.6	33.0	21.9	16.8	10.5	0.47	0.0175	1.40	5.0	0.005	103.1	52	7.10	108.0	10.48	9.71
	TW04003159LE2005	2020-21459	16/07/2020	Blackrock Castle	201	C7	High	Middle		8.2	44.8	30.9	15.8	8.4	0.01	0.0175	0.80	5.0	0.005	14.4	86	2.60	85.0	8.43	9.91
	TW04003159LE2005	2020-21460	16/07/2020	Blackrock Castle	201	C7	High	Bottom		8.2	45.0	31.1	15.1	7.3	0.01	0.0175	0.80	5.0	0.005	7.5	75	2.30	72.1	7.25	10.06
	TW05003157LE4004	2020-21461	16/07/2020	Mid L. Mahon	201	C8	High	Top	11.40	8.6	43.1	29.7	16.7	10.6	0.01	0.0175	1.50	5.0	0.005	96.1	74	8.30	109.1	10.61	9.73
	TW05003157LE4004	2020-21462	16/07/2020	Mid L. Mahon	201	C8	High	Middle		8.3	44.8	31.0	15.4	7.3	0.01	0.0175	0.90	5.0	0.005	27.2	538	4.20	73.3	7.33	10.00
	TW05003157LE4004	2020-21463	16/07/2020	Mid L. Mahon	201	C8	High	Bottom		8.3	45.0	31.1	15.0	7.6	0.01	0.0175	0.70	5.0	0.005	5.1	435	5.30	74.9	7.55	10.08
	TW04003159LE2006	2020-21464	16/07/2020	Tivoli	201	C9	High	Top	9.20	8.5	34.2	22.8	16.9	8.8	0.59	0.0175	1.20	5.0	0.005	4.3	135	8.30	91.0	8.81	9.69
	TW04003159LE2006	2020-21465	16/07/2020	Tivoli	201	C9	High	Bottom		8.2	44.7	30.6	15.8	7.1	0.01	0.0175	0.25	5.0	0.005	2.4	52	1.80	71.7	7.11	9.91

Cork City Council D0033-01 — 31-Dec-20

435 473 525 566 73 564 414 999 250

Report No	Station Code	Sample No	Date	Station Name	Sample Purpose	Station Ref. No.	Tide	Sampled Depth	Measured Depth	pH	Conductivity	Salinity	Temp	DO	Total Oxidised Nitrogen	Ammonia	Total Nitrogen	Ortho-Phosphate		Chlorophyll-a	E. Coliforms	BOD	DO (% Saturation)	D.O.	100% DO (fresh)
									m	pH unit	mS/cm @ 20°C	PSU	°C	mg/l O2	mg/l N	mg/l N	mg/l N	µg/l P	mg/l P	µg/l	MPN/100mls	mg/l O2	%	mg/l	mg/l
20-07789	CW05003150LE8004	2020-22770	24/08/2020	Haulbowline	301	C5	Low	Top	14.10	7.9	34.1	24.0	13.8	6.9	0.44	0.1660	0.80	26.0	0.026	3.5	309	1.00	66.9	6.92	10.35
	CW05003150LE8004	2020-22771	24/08/2020	Haulbowline	301	C5	Low	Middle		7.9	37.7	26.8	13.3	7.7	0.34	0.1350	0.70	27.0	0.027	1.0	279	0.50	73.5	7.69	10.47
	CW05003150LE8004	2020-22772	24/08/2020	Haulbowline	301	C5	Low	Bottom		8.0	42.7	30.8	14.4	9.3	0.14	0.0390	0.25	16.0	0.016	1.0	160	0.50	91.0	9.30	10.22
	TW05003157LE4005	2020-22773	24/08/2020	End L. Mahon	201	C6	Low	Top	8.80	7.9	30.4	21.1	16.7	7.3	0.53	0.1990	0.90	29.0	0.029	1.0	556	1.10	74.9	7.28	9.73
	TW05003157LE4005	2020-22774	24/08/2020	End L. Mahon	201	C6	Low	Middle		7.9	31.7	22.1	16.4	7.1	0.47	0.1980	0.90	31.0	0.031	1.0	521	0.50	72.0	7.05	9.79
	TW05003157LE4005	2020-22775	24/08/2020	End L. Mahon	201	C6	Low	Bottom		7.9	34.3	24.1	16.2	6.7	0.36	0.1660	0.80	27.0	0.027	1.0	414	0.50	68.2	6.70	9.83
	TW04003159LE2005	2020-22776	24/08/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.7	17.3	11.4	17.3	6.6	1.07	0.2610	1.30	37.0	0.037	1.0	5,794	0.50	68.7	6.60	9.60
	TW04003159LE2005	2020-22777	24/08/2020	Blackrock Castle	201	C7	Low	Middle		7.8	30.8	21.4	16.7	6.9	0.71	0.2600	1.10	42.0	0.042	1.0	2,359	0.50	70.7	6.88	9.73
	TW04003159LE2005	2020-22778	24/08/2020	Blackrock Castle	201	C7	Low	Bottom		7.9	33.7	23.7	16.2	7.2	0.34	0.1890	1.00	30.0	0.030	1.0	573	1.20	73.2	7.19	9.83
	TW05003157LE4004	2020-22779	24/08/2020	Mid L. Mahon	201	C8	Low	Top	8.40	7.9	29.2	20.2	16.8	6.7	0.63	0.2660	1.00	33.0	0.033	1.0	410	1.30	69.2	6.72	9.71
	TW05003157LE4004	2020-22780	24/08/2020	Mid L. Mahon	201	C8	Low	Middle		7.9	33.2	23.3	16.3	7.0	0.45	0.2310	0.90	32.0	0.032	1.0	521	1.10	71.4	7.00	9.81
	TW05003157LE4004	2020-22781	24/08/2020	Mid L. Mahon	201	C8	Low	Bottom		7.9	36.6	25.9	15.8	7.1	0.27	0.1440	0.80	25.0	0.025	1.0	717	1.00	71.8	7.12	9.91
	TW04003159LE2006	2020-22782	24/08/2020	Tivoli	201	C9	Low	Top	6.80	7.6	8.3	5.2	17.8	6.2	1.49	0.1200	1.80	33.0	0.033	1.0	2,014	0.50	65.2	6.20	9.51
	TW04003159LE2006	2020-22783	24/08/2020	Tivoli	201	C9	Low	Bottom		7.9	34.3	24.1	17.1	6.5	0.37	0.4170	1.00	89.0	0.089	1.0	471	1.20	67.6	6.52	9.64
	CW05003150LE8004	2020-22784	24/08/2020	Haulbowline	301	C5	High	Top	15.60	8.0	38.5	27.4	15.6	6.1	0.29	0.1030	0.60	18.0	0.018	1.0	173	1.10	61.3	6.10	9.95
	CW05003150LE8004	2020-22785	24/08/2020	Haulbowline	301	C5	High	Middle		8.0	42.7	30.8	14.7	7.6	0.17	0.0500	0.25	14.0	0.014	1.0	52	0.50	74.9	7.60	10.15
	CW05003150LE8004	2020-22786	24/08/2020	Haulbowline	301	C5	High	Bottom		8.0	45.2	32.8	13.6	10.9	0.13	0.0410	0.25	14.0	0.014	1.0	20	0.50	104.8	10.90	10.40
	TW05003157LE4005	2020-22787	24/08/2020	End L. Mahon	201	C6	High	Top	11.80	8.0	32.9	23.0	16.2	6.3	0.44	0.1690	0.80	27.0	0.027	1.0	86	1.20	64.1	6.30	9.83
	TW05003157LE4005	2020-22788	24/08/2020	End L. Mahon	201	C6	High	Middle		8.0	40.1	28.7	15.2	7.2	0.24	0.0970	0.60	22.0	0.022	1.0	5	1.00	71.7	7.20	10.04
	TW05003157LE4005	2020-22789	24/08/2020	End L. Mahon	201	C6	High	Bottom		8.0	42.7	30.8	14.7	9.1	0.18	0.0600	0.25	17.0	0.017	1.0	31	0.50	89.7	9.10	10.15
	TW04003159LE2005	2020-22790	24/08/2020	Blackrock Castle	201	C7	High	Top	10.20	7.6	11.0	7.0	17.2	6.1	0.83	0.1640	1.40	33.0	0.033	1.0	988	0.50	63.6	6.12	9.62
	TW04003159LE2005	2020-22791	24/08/2020	Blackrock Castle	201	C7	High	Middle		7.9	35.2	24.8	16.1	6.4	0.41	0.2260	0.80	34.0	0.034	1.0	243	0.50	64.5	6.35	9.85
	TW04003159LE2005	2020-22792	24/08/2020	Blackrock Castle	201	C7	High	Bottom		8.0	37.6	26.7	15.8	8.9	0.40	0.1930	0.90	30.0	0.030	1.0	63	1.40	89.4	8.86	9.91
	TW05003157LE4004	2020-22793	24/08/2020	Mid L. Mahon	201	C8	High	Top	11.40	8.0	29.6	20.5	16.3	6.3	0.56	0.1750	1.00	29.0	0.029	1.0	355	1.40	64.2	6.30	9.81
	TW05003157LE4004	2020-22794	24/08/2020	Mid L. Mahon	201	C8	High	Middle		8.0	40.0	28.6	15.2	7.4	0.23	0.0870	0.60	64.0	0.064	1.0	20	0.50	73.9	7.42	10.04
	TW05003157LE4004	2020-22795	24/08/2020	Mid L. Mahon	201	C8	High	Bottom		8.0	40.0	28.6	14.8	8.3	0.23	0.0820	0.60	21.0	0.021	1.0	20	0.50	82.0	8.30	10.13
	TW04003159LE2006	2020-22796	24/08/2020	Tivoli	201	C9	High	Top	9.20	7.7	7.2	4.4	17.1	5.9	1.17	0.1700	1.60	36.0	0.036	1.0	754	0.50	61.1	5.89	9.64
	TW04003159LE2006	2020-22797	24/08/2020	Tivoli	201	C9	High	Bottom		7.9	36.1	25.5	16.0	7.3	0.46	0.2680	0.80	36.0	0.036	2.7	292	1.40	74.0	7.30	9.87
20-08096	CW05003150LE8004	2020-23645	14/09/2020	Haulbowline	301	C5	Low	Top	14.10	8.0	43.4	31.3	15.2	9.8	0.45	0.2810	0.80	34.0	0.034	1.0	199	0.50	97.5	9.79	10.04
	CW05003150LE8004	2020-23646	14/09/2020	Haulbowline	301	C5	Low	Middle		8.0	44.3	32.1	15.0	10.8	0.29	0.1720	0.80	26.0	0.026	1.0	98	0.50	107.2	10.81	10.08
	CW05003150LE8004	2020-23647	14/09/2020	Haulbowline	301	C5	Low	Bottom		8.0	44.3	32.1	14.8	12.5	0.28	0.1380	0.70	25.0	0.025	1.0	160	0.50	123.4	12.50	10.13
	TW05003157LE4005	2020-23648	14/09/2020	End L. Mahon	201	C6	Low	Top	8.80	8.0	39.0	27.8	15.7	9.9	0.78	0.3400	1.10	36.0	0.036	1.0	179	1.10	100.1	9.94	9.93
	TW05003157LE4005	2020-23649	14/09/2020	End L. Mahon	201	C6	Low	Middle		8.0	40.8	29.2	15.5	10.0	0.63	0.3630	1.10	37.0	0.037	1.0	228	1.00	100.4	10.02	9.98
	TW05003157LE4005	2020-23650	14/09/2020	End L. Mahon	201	C6	Low	Bottom		8.0	41.6	29.9	14.9	11.8	0.60	0.6510	1.00	41.0	0.041	1.0	309	0.50	116.3	11.75	10.11
	TW04003159LE2005	2020-23651	14/09/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.8	26.7	18.3	16.4	9.9	2.45	0.2960	2.40	38.0	0.038	1.0	2,382	0.50	101.4	9.92	9.79
	TW04003159LE2005	2020-23652	14/09/2020	Blackrock Castle	201	C7	Low	Middle		7.9	39.4	28.1	16.0	10.1	0.72	0.3920	1.30	41.0	0.041	1.0	455	0.50	102.6	10.13	9.87
	TW04003159LE2005	2020-23653	14/09/2020	Blackrock Castle	201	C7	Low	Bottom		7.9	42.0	30.2	15.8	10.4	0.50	0.4180	1.20	42.0	0.042	1.0	256	0.50	104.9	10.40	9.91
	TW05003157LE4004	2020-23654	14/09/2020	Mid L. Mahon	201	C8	Low	Top	8.40	8.0	36.8	26.1	13.8	10.2	0.99	0.3250	1.40	38.0	0.038	1.0	677	1.10	98.5	10.20	10.35
	TW05003157LE4004	2020-23655	14/09/2020	Mid L. Mahon	201	C8	Low	Middle		8.0	41.4	29.7	15.6	10.5	0.53	0.3540	1.10	45.0	0.045	1.0	233	0.50	105.6	10.51	9.95
	TW05003157LE4004	2020-23656	14/09/2020	Mid L. Mahon	201	C8	Low	Bottom		8.0	43.2	31.2	15.4	10.7	0.68	0.3240	1.00	37.0	0.037	1.0	201	0.50	107.4	10.74	10.00
	TW04003159LE2006	2020-23657	14/09/2020	Tivoli	201	C9	Low	Top	6.80	7.8	8.3	5.2	16.3	9.4	2.81	0.1610	3.00	31.0	0.031	1.0	4,106	0.50	95.9	9.41	9.81
	TW04003159LE2006	2020-23658	14/09/2020	Tivoli	201	C9	Low	Bottom		7.9	41.8	30.0	13.7	10.5	0.40	0.4080	1.10	60.0	0.060	1.0	199	0.50	101.2	10.50	10.37
	CW05003150LE8004	2020-23659	14/09/2020	Haulbowline	301	C5	High	Top	15.60	8.0	44.7	32.4	16.1	9.3	0.26	0.1830	0.70	18.0	0.018	3.7	368	0.50	94.4	9.30	9.85
	CW05003150LE8004	2020-23660	14/09/2020	Haulbowline	301	C5	High	Middle		8.0	45.4	32.9	15.0	11.1	0.21	0.1490	0.70	14.0	0.014	3.7	108	0.50	110.1	11.10	10.08
	CW05003150LE8004	2020-23661	14/09/2020	Haulbowline	301	C5	High	Bottom		8.0	46.3	33.7	14.7	11.4	0.16	0.1240	0.60	16.0	0.016	1.0	31	0.50	111.9	11.36	10.15
	TW05003157LE4005	2020-23662	14/09/2020	End L. Mahon	201	C6	High	Top	11.80	8.0	42.1	30.3	15.8	9.9	0.47	0.3210	1.00	31.0	0.031	4.0	122	0.50	99.9	9.90	9.91
	TW05003157LE4005	2020-23663	14/09/2020	End L. Mahon	201	C6	High	Middle		8.0	44.1	31.9	16.0	10.5	0.32	0.1950	0.80	43.0	0.043	1.0	199	0.50	106.4	10.50	9.87
	TW05003157LE4005	2020-23664	14/09/2020	End L. Mahon	201	C6	High	Bottom		8.0	44.8	32.5	15.6	11.1	0.27	0.1950	0.70	23.0	0.023	1.0	109	0.50	111.8	11.13	9.95
	TW04003159LE2005	2020-23665	14/09/2020	Blackrock Castle	201	C7	High	Top	10.20	8.0	35.1	24.7	15.5	8.9	1.16	0.3130	1.60	34.0	0.034	6.4	538	2.90	89.4	8.92	9.98
	TW04003159LE2005	2020-23666	14/09/2020	Blackrock Castle	201	C7	High	Middle		7.9	41.0	29.4	15.7	9.1	0.64	0.4070	1.10	40.0	0.040	1.0	379	0.50	91.1	9.05	9.93
	TW04003159LE2005	2020-23667	14/09/2020	Blackrock Castle	201	C7	High	Bottom		7.9	41.5	29.8	15.3	10.5	0.55	0.5090	1.10	47.0	0.047	1.0	185	0.50	105.0	10.52	10.02
	TW05003157LE4004	2020-23668	14/09/2020	Mid L. Mahon	201	C8	High	Top	11.40	8.0	41.8	30.0	15.8	9.4	0.57	0.3280	1.00	108.0	0.108	2.7	203	0.50	94.5	9.37	9.91
	TW05003157LE4004	2020-23669	14/09/2020	Mid L. Mahon	201	C8	High	Middle		8.0	43.0	31.0	15.6	9.4	0.45	0.3260	0.90	33.0	0.033	1.0	323	0.50	94.5	9.41	9.95
	TW05003157LE4004	2020-23670	14/09/2020	Mid L. Mahon	201	C8	High	Bottom		8.0	44.3	32.1	15.3	10.6	0.37	0.3090	0.80	33.0	0.033	1.0	327	0.50	106.2	10.64	10.02
	TW04003159LE2006	2020-23671	14/09/2020	Tivoli	201	C9	High	Top	9.20	7.8	16.3	10.7	15.8	9.4	2.58	0.2530	1.10	32.0	0.032	1.0	3,130	0.50	94.8	9.40	9.91
	TW04003159LE2006	2020-23672	14/09/2020	Tivoli	201	C9	High	Bottom		7.9	41.4	29.7	15.6	9.7	0.55	0.3920	2.50	44.0	0.044	1.0	161	0.50	97.8	9.74	9.95

Cork City Council D0033-01 — 31-Dec-20

435 473 525 566 73 564 414 999 250

Report No	Station Code	Sample No	Date	Station Name	Sample Purpose	Station Ref. No.	Tide	Sampled Depth	Measured Depth	pH	Conductivity	Salinity	Temp	DO	Total Oxidised Nitrogen	Ammonia	Total Nitrogen	Ortho-Phosphate		Chlorophyll-a	E. Coliforms	BOD	DO (% Saturation)	D.O.	100% DO (fresh)
									m	pH unit	mS/cm @ 20°C	PSU	°C	mg/l O2	mg/l N	mg/l N	mg/l N	µg/l P	mg/l P	µg/l	MPN/100mls	mg/l O2	%	mg/l	mg/l
20-08646	CW05003150LE8004	2020-25372	21/10/2020	Haulbowline	301	C5	Low	Top	14.10	7.9	30.5	21.2	12.2	8.1	0.82	0.1930	1.30	37.0	0.037	2.1	1,850	1.10	75.5	8.10	10.73
	CW05003150LE8004	2020-25373	21/10/2020	Haulbowline	301	C5	Low	Middle		8.0	35.2	24.8	11.9	8.4	0.53	0.1710	1.10	31.0	0.031	1.0	1,314	0.50	77.7	8.39	10.80
	CW05003150LE8004	2020-25374	21/10/2020	Haulbowline	301	C5	Low	Bottom		8.0	44.0	31.8	11.3	9.0	0.22	0.0870	0.80	21.0	0.021	1.0	882	0.50	81.7	8.95	10.95
	TW05003157LE4005	2020-25375	21/10/2020	End L. Mahon	201	C6	Low	Top	8.80	7.9	24.6	16.7	11.4	8.0	1.04	0.2180	1.50	46.0	0.046	2.1	4,352	1.10	73.3	8.01	10.93
	TW05003157LE4005	2020-25376	21/10/2020	End L. Mahon	201	C6	Low	Middle		8.0	30.9	21.5	11.0	8.4	0.82	0.1920	1.30	53.0	0.053	2.1	2,481	0.50	75.7	8.35	11.03
	TW05003157LE4005	2020-25377	21/10/2020	End L. Mahon	201	C6	Low	Bottom		8.0	36.3	25.7	10.8	8.7	0.53	0.1830	1.00	37.0	0.037	1.0	2,014	0.50	78.8	8.73	11.08
	TW04003159LE2005	2020-25378	21/10/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.8	7.0	4.3	12.1	8.5	1.50	0.1250	5.40	28.0	0.028	3.5	1,019	0.50	78.6	8.45	10.75
	TW04003159LE2005	2020-25379	21/10/2020	Blackrock Castle	201	C7	Low	Middle		7.9	36.6	25.9	11.6	7.7	0.48	0.2870	1.10	42.0	0.042	1.0	959	0.50	71.1	7.73	10.88
	TW04003159LE2005	2020-25380	21/10/2020	Blackrock Castle	201	C7	Low	Bottom		8.0	38.4	27.3	11.1	8.6	0.40	0.1890	1.00	35.0	0.035	1.0	1,071	0.50	77.7	8.55	11.00
	TW05003157LE4004	2020-25381	21/10/2020	Mid L. Mahon	201	C8	Low	Top	8.40	7.8	21.4	14.4	11.8	8.0	1.08	0.1910	1.50	40.0	0.040	1.0	2,098	0.50	74.1	8.02	10.83
	TW05003157LE4004	2020-25382	21/10/2020	Mid L. Mahon	201	C8	Low	Middle		8.0	39.3	28.1	11.2	8.4	0.52	0.2500	0.70	37.0	0.037	1.0	1,670	0.50	76.7	8.42	10.98
	TW05003157LE4004	2020-25383	21/10/2020	Mid L. Mahon	201	C8	Low	Bottom		8.0	41.9	30.1	10.7	9.0	0.32	0.1520	0.60	30.0	0.030	1.0	860	0.50	81.0	9.00	11.10
	TW04003159LE2006	2020-25384	21/10/2020	Tivoli	201	C9	Low	Top	6.80	7.7	4.0	2.4	12.4	7.7	1.58	0.1010	1.60	25.0	0.025	1.0	1,236	0.50	72.5	7.74	10.68
	TW04003159LE2006	2020-25385	21/10/2020	Tivoli	201	C9	Low	Bottom		7.9	39.9	28.5	11.8	8.0	0.45	0.3620	0.80	49.0	0.049	1.0	1,050	0.50	74.1	8.02	10.83
	CW05003150LE8004	2020-25386	21/10/2020	Haulbowline	301	C5	High	Top	15.60	8.0	36.9	26.2	11.8	9.1	0.55	0.1850	0.70	34.0	0.034	1.0	1,039	0.50	83.8	9.07	10.83
	CW05003150LE8004	2020-25387	21/10/2020	Haulbowline	301	C5	High	Middle		8.0	45.5	33.0	11.2	10.0	0.19	0.0850	0.60	17.0	0.017	1.0	305	0.50	91.2	10.01	10.98
	CW05003150LE8004	2020-25388	21/10/2020	Haulbowline	301	C5	High	Bottom		8.0	46.1	33.5	16.6	10.9	0.16	0.0820	0.70	17.0	0.017	1.0	160	0.50	111.3	10.85	9.75
	TW05003157LE4005	2020-25389	21/10/2020	End L. Mahon	201	C6	High	Top	11.80	8.0	32.9	23.0	11.7	8.7	0.63	0.1800	1.30	36.0	0.036	1.0	2,359	1.20	80.0	8.68	10.85
	TW05003157LE4005	2020-25390	21/10/2020	End L. Mahon	201	C6	High	Middle		8.0	43.0	31.0	11.2	9.0	0.31	0.1100	0.80	25.0	0.025	1.0	663	0.50	82.4	9.04	10.98
	TW05003157LE4005	2020-25391	21/10/2020	End L. Mahon	201	C6	High	Bottom		8.0	43.2	31.2	16.4	9.4	0.27	0.1040	0.90	23.0	0.023	1.0	512	0.50	96.1	9.41	9.79
	TW04003159LE2005	2020-25392	21/10/2020	Blackrock Castle	201	C7	High	Top	10.20	7.9	24.9	17.0	11.1	8.9	1.50	0.1300	1.60	34.0	0.034	1.0	1,153	1.10	81.3	8.94	11.00
	TW04003159LE2005	2020-25393	21/10/2020	Blackrock Castle	201	C7	High	Middle		8.0	33.7	23.7	10.7	9.5	0.51	0.2740	1.30	72.0	0.072	1.0	990	1.20	85.1	9.45	11.10
	TW04003159LE2005	2020-25394	21/10/2020	Blackrock Castle	201	C7	High	Bottom		8.0	37.3	26.5	10.2	9.5	0.44	0.2910	1.30	35.0	0.035	1.0	1,187	0.50	84.7	9.52	11.23
	TW05003157LE4004	2020-25395	21/10/2020	Mid L. Mahon	201	C8	High	Top	11.40	7.8	16.1	10.5	11.7	9.0	1.19	0.1950	1.80	44.0	0.044	1.0	1,616	0.50	83.1	9.02	10.85
	TW05003157LE4004	2020-25396	21/10/2020	Mid L. Mahon	201	C8	High	Middle		8.0	42.5	30.6	11.3	9.6	0.33	0.1480	0.90	28.0	0.028	1.0	471	0.50	87.2	9.55	10.95
	TW05003157LE4004	2020-25397	21/10/2020	Mid L. Mahon	201	C8	High	Bottom		8.0	43.6	31.5	10.7	10.8	0.30	0.1530	0.80	63.0	0.063	1.0	813	0.50	97.3	10.80	11.10
	TW04003159LE2006	2020-25398	21/10/2020	Tivoli	201	C9	High	Top	9.20	7.7	3.8	2.2	11.2	8.9	1.51	0.1340	2.00	30.0	0.030	1.0	985	0.50	81.4	8.94	10.98
	TW04003159LE2006	2020-25399	21/10/2020	Tivoli	201	C9	High	Bottom		7.9	39.5	28.2	10.8	9.6	0.50	0.2900	1.10	41.0	0.041	1.0	538	0.50	86.2	9.55	11.08
20-08993	CW05003150LE8004	2020-26523	12/11/2020	Haulbowline	301	C5	Low	Top	14.10	7.8	18.6	12.3	10.8	23.0	1.44	0.1120	2.00	71.0	0.071	3.5	4,106	1.10	207.6	23.00	11.08
	CW05003150LE8004	2020-26524	12/11/2020	Haulbowline	301	C5	Low	Middle		8.0	36.6	25.9	10.0	9.0	0.84	0.0880	1.10	41.0	0.041	8.5	1,430	1.20	79.5	8.97	11.29
	CW05003150LE8004	2020-26525	12/11/2020	Haulbowline	301	C5	Low	Bottom		8.0	35.8	25.3	9.2	9.8	0.31	0.0175	1.30	24.0	0.024	3.2	836	0.50	85.2	9.80	11.50
	TW05003157LE4005	2020-26526	12/11/2020	End L. Mahon	201	C6	Low	Top	8.80	7.8	14.5	9.4	10.7	8.5	1.57	0.1150	2.20	70.0	0.070	4.5	5,794	1.50	76.1	8.45	11.10
	TW05003157LE4005	2020-26527	12/11/2020	End L. Mahon	201	C6	Low	Middle		7.8	18.4	12.2	10.1	8.8	1.52	0.1280	2.00	69.0	0.069	4.5	3,255	1.10	78.4	8.83	11.26
	TW05003157LE4005	2020-26528	12/11/2020	End L. Mahon	201	C6	Low	Bottom		7.9	22.8	15.4	9.6	9.1	0.91	0.1090	1.80	46.0	0.046	2.7	3,654	0.50	79.9	9.10	11.40
	TW04003159LE2005	2020-26529	12/11/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.6	4.3	2.6	9.7	8.6	2.23	0.0700	2.60	58.0	0.058	2.7	1,515	0.50	75.5	8.58	11.37
	TW04003159LE2005	2020-26530	12/11/2020	Blackrock Castle	201	C7	Low	Middle		8.0	35.9	25.4	9.3	8.5	0.92	0.1200	1.20	48.0	0.048	2.9	1,430	1.30	74.3	8.53	11.48
	TW04003159LE2005	2020-26531	12/11/2020	Blackrock Castle	201	C7	Low	Bottom		8.0	37.4	26.5	9.1	8.8	0.63	0.1280	1.30	96.0	0.096	4.0	1,223	0.50	76.5	8.82	11.53
	TW05003157LE4004	2020-26532	12/11/2020	Mid L. Mahon	201	C8	Low	Top	8.40	7.8	10.8	6.8	9.4	8.3	1.91	0.1420	2.50	76.0	0.076	4.5	5,794	1.10	72.5	8.30	11.45
	TW05003157LE4004	2020-26533	12/11/2020	Mid L. Mahon	201	C8	Low	Middle		7.8	21.3	14.3	9.2	8.7	1.30	0.1130	2.00	58.0	0.058	5.6	2,987	0.50	75.6	8.70	11.50
	TW05003157LE4004	2020-26534	12/11/2020	Mid L. Mahon	201	C8	Low	Bottom		8.0	37.6	26.7	8.7	9.3	0.60	0.0720	1.20	37.0	0.037	1.0	1,597	0.50	79.4	9.25	11.64
	TW04003159LE2006	2020-26535	12/11/2020	Tivoli	201	C9	Low	Top	6.80	7.6	1.6	1.0	9.8	8.5	2.36	0.0570	2.90	54.0	0.054	2.1	1,187	0.50	74.8	8.48	11.34
	TW04003159LE2006	2020-26536	12/11/2020	Tivoli	201	C9	Low	Bottom		7.9	37.7	26.8	9.5	8.7	0.66	0.1370	1.30	46.0	0.046	3.5	2,723	0.50	76.2	8.70	11.42
	CW05003150LE8004	2020-26537	12/11/2020	Haulbowline	301	C5	High	Top	15.60	8.0	33.8	23.7	10.5	8.4	0.83	0.0600	1.30	44.0	0.044	2.9	1,793	0.50	74.8	8.35	11.16
	CW05003150LE8004	2020-26538	12/11/2020	Haulbowline	301	C5	High	Middle		8.1	41.9	30.1	10.0	8.6	0.56	0.0175	0.90	31.0	0.031	1.0	546	0.50	76.2	8.60	11.29
	CW05003150LE8004	2020-26539	12/11/2020	Haulbowline	301	C5	High	Bottom		8.1	43.0	31.0	9.6	9.0	0.27	0.0175	0.80	24.0	0.024	1.0	1,291	0.50	79.2	9.02	11.40
	TW05003157LE4005	2020-26540	12/11/2020	End L. Mahon	201	C6	High	Top	11.80	8.0	29.7	20.6	11.2	7.9	1.00	0.0900	1.60	48.0	0.048	1.0	3,448	1.20	71.6	7.86	10.98
	TW05003157LE4005	2020-26541	12/11/2020	End L. Mahon	201	C6	High	Middle		8.1	40.0	28.6	10.7	8.3	0.52	0.0175	1.00	31.0	0.031	1.0	571	0.50	74.3	8.25	11.10
	TW05003157LE4005	2020-26542	12/11/2020	End L. Mahon	201	C6	High	Bottom		8.1	42.3	30.4	10.2	9.5	0.40	0.0175	0.90	26.0	0.026	1.0	480	0.50	84.6	9.51	11.23
	TW04003159LE2005	2020-26543	12/11/2020	Blackrock Castle	201	C7	High	Top	10.20	7.5	6.6	4.1	10.2	7.8	2.17	0.0670	2.70	56.0	0.056	1.0	1,785	0.50	69.3	7.79	11.23
	TW04003159LE2005	2020-26544	12/11/2020	Blackrock Castle	201	C7	High	Middle		7.9	30.2	21.0	9.7	8.0	0.81	0.1040	1.60	44.0	0.044	1.0	3,282	0.50	70.5	8.01	11.37
	TW04003159LE2005	2020-26545	12/11/2020	Blackrock Castle	201	C7	High	Bottom		8.0	36.8	26.1	9.3	8.2	0.66	0.0790	1.20	39.0	0.039	1.0	1,722	0.50	71.7	8.23	11.48
	TW05003157LE4004	2020-26546	12/11/2020	Mid L. Mahon	201	C8	High	Top	11.40	7.9	19.0	12.6	11.3	8.1	1.50	0.1020	2.40	63.0	0.063	4.3	12,033	0.50	74.0	8.10	10.95
	TW05003157LE4004	2020-26547	12/11/2020	Mid L. Mahon	201	C8	High	Middle		8.0	36.3	25.7	10.7	8.3	0.67	0.0600	1.40	39.0	0.039	2.4	1,539	0.50	74.5	8.27	11.10
	TW05003157LE4004	2020-26548	12/11/2020	Mid L. Mahon	201	C8	High	Bottom		8.0	34.9	24.6	10.4	8.7	0.55	0.0440	1.30	34.0	0.034	1.0	1,396	0.50	77.4	8.66	11.18
	TW04003159LE2006	2020-26549	12/11/2020	Tivoli	201	C9	High	Top	9.20	7.7	6.1	3.7	10.2	7.9	2.18	0.0680	2.80	49.0	0.049	2.1	1,723	0.50	69.9	7.85	11.23
	TW04003159LE2006	2020-26550	12/11/2020	Tivoli	201	C9	High	Bottom		7.9	33.5	23.5	9.8	8.5	0.96	0.1240	1.40	47.0	0.047	1.0	1,720	0.50	74.9	8.50	11.34

Cork City Council D0033-01 — 31-Dec-20

435 473 525 566 73 564 414 999 250

Report No	Station Code	Sample No	Date	Station Name	Sample Purpose	Station Ref. No.	Tide	Sampled Depth	Measured Depth	pH	Conductivity	Salinity	Temp	DO	Total Oxidised Nitrogen	Ammonia	Total Nitrogen	Ortho-Phosphate		Chlorophyll-a	E. Coliforms	BOD	DO (% Saturation)	D.O.	100% DO (fresh)
									m	pH unit	mS/cm @ 20°C	PSU	°C	mg/l O2	mg/l N	mg/l N	mg/l N	µg/l P	mg/l P	µg/l	MPN/100mls	mg/l O2	%	mg/l	mg/l
20-09194	CW05003150LE8004	2020-27364	26/11/2020	Haulbowline	301	C5	Low	Top	14.10	8.0	29.5	20.4	8.7	7.8	1.68	0.1200	1.50	42.0	0.042	1.0	882	0.50	67.2	7.82	11.64
	CW05003150LE8004	2020-27365	26/11/2020	Haulbowline	301	C5	Low	Middle		8.0	42.1	30.3	8.3	8.3	0.48	0.0620	0.90	38.0	0.038	1.0	883	0.50	70.6	8.30	11.76
	CW05003150LE8004	2020-27366	26/11/2020	Haulbowline	301	C5	Low	Bottom		8.0	45.9	33.4	7.7	9.5	0.24	0.0175	0.70	30.0	0.030	1.0	75	0.50	79.6	9.50	11.93
	TW05003157LE4005	2020-27367	26/11/2020	End L. Mahon	201	C6	Low	Top	8.80	7.9	20.2	13.5	8.0	8.8	1.67	0.1200	2.10	38.0	0.038	2.1	1,396	0.50	74.1	8.78	11.84
	TW05003157LE4005	2020-27368	26/11/2020	End L. Mahon	201	C6	Low	Middle		7.9	28.8	19.9	7.8	8.1	1.05	0.1980	1.70	44.0	0.044	1.0	733	0.50	68.1	8.10	11.90
	TW05003157LE4005	2020-27369	26/11/2020	End L. Mahon	201	C6	Low	Bottom		8.0	37.9	26.9	7.2	8.5	0.57	0.1140	1.20	53.0	0.053	2.1	1,789	0.50	70.1	8.47	12.08
	TW04003159LE2005	2020-27370	26/11/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.8	13.3	8.6	8.3	6.9	1.85	0.1290	2.30	38.0	0.038	1.0	1,274	0.50	58.7	6.90	11.76
	TW04003159LE2005	2020-27371	26/11/2020	Blackrock Castle	201	C7	Low	Middle		8.0	41.3	29.6	7.9	7.6	0.60	0.1120	1.10	44.0	0.044	1.0	911	0.50	64.0	7.60	11.87
	TW04003159LE2005	2020-27372	26/11/2020	Blackrock Castle	201	C7	Low	Bottom		8.0	42.1	30.3	7.2	8.1	0.44	0.1010	1.00	46.0	0.046	1.0	1,153	0.50	66.9	8.08	12.08
	TW05003157LE4004	2020-27373	26/11/2020	Mid L. Mahon	201	C8	Low	Top	8.40	7.6	12.6	8.1	7.8	8.0	2.24	0.1020	2.70	38.0	0.038	1.0	833	0.50	66.8	7.95	11.90
	TW05003157LE4004	2020-27374	26/11/2020	Mid L. Mahon	201	C8	Low	Middle		7.9	39.6	28.3	7.6	8.1	0.64	0.1250	1.20	48.0	0.048	1.0	1,317	0.50	67.7	8.10	11.96
	TW05003157LE4004	2020-27375	26/11/2020	Mid L. Mahon	201	C8	Low	Bottom		7.9	43.0	31.0	7.2	8.5	0.41	0.0880	1.00	44.0	0.044	1.0	1,112	0.50	70.4	8.50	12.08
	TW04003159LE2006	2020-27376	26/11/2020	Tivoli	201	C9	Low	Top	6.80	7.7	5.6	3.4	8.0	7.8	2.87	0.1110	3.30	36.0	0.036	1.0	865	0.50	65.9	7.80	11.84
	TW04003159LE2006	2020-27377	26/11/2020	Tivoli	201	C9	Low	Bottom		7.9	41.9	30.1	7.8	8.1	0.52	0.1240	1.00	47.0	0.047	1.0	738	0.50	68.1	8.10	11.90
	CW05003150LE8004	2020-27378	26/11/2020	Haulbowline	301	C5	High	Top	15.60	8.0	34.6	24.4	9.1	9.0	1.02	0.0770	1.40	37.0	0.037	1.0	624	0.50	77.9	8.98	11.53
	CW05003150LE8004	2020-27379	26/11/2020	Haulbowline	301	C5	High	Middle		8.0	46.1	33.5	8.6	9.1	0.37	0.0175	0.60	28.0	0.028	1.0	86	0.50	77.5	9.05	11.67
	CW05003150LE8004	2020-27380	26/11/2020	Haulbowline	301	C5	High	Bottom		8.0	46.7	34.0	8.2	9.7	0.30	0.0175	0.60	29.0	0.029	1.0	31	0.50	82.1	9.68	11.79
	TW05003157LE4005	2020-27381	26/11/2020	End L. Mahon	201	C6	High	Top	11.80	7.9	32.7	22.9	9.2	8.5	1.19	0.1040	1.50	38.0	0.038	1.0	738	0.50	74.2	8.54	11.50
	TW05003157LE4005	2020-27382	26/11/2020	End L. Mahon	201	C6	High	Middle		8.0	44.3	32.1	9.1	8.8	0.47	0.0420	0.80	32.0	0.032	1.0	563	0.50	75.9	8.75	11.53
	TW05003157LE4005	2020-27383	26/11/2020	End L. Mahon	201	C6	High	Bottom		7.9	45.5	33.0	8.8	9.0	0.39	0.0175	0.70	33.0	0.033	1.0	161	0.50	77.8	9.04	11.62
	TW04003159LE2005	2020-27384	26/11/2020	Blackrock Castle	201	C7	High	Top	10.20	7.8	15.2	9.9	9.2	8.4	2.71	0.1080	2.80	40.0	0.040	1.0	1,178	0.50	73.4	8.44	11.50
	TW04003159LE2005	2020-27385	26/11/2020	Blackrock Castle	201	C7	High	Middle		7.9	39.2	28.0	8.9	8.7	0.69	0.1410	1.20	53.0	0.053	1.0	2,187	0.50	74.8	8.67	11.59
	TW04003159LE2005	2020-27386	26/11/2020	Blackrock Castle	201	C7	High	Bottom		7.9	42.2	30.4	8.6	9.6	0.56	0.1120	1.10	47.0	0.047	1.0	2,603	0.50	82.2	9.59	11.67
	TW05003157LE4004	2020-27387	26/11/2020	Mid L. Mahon	201	C8	High	Top	11.40	7.9	35.2	24.8	9.2	8.5	1.02	0.1050	1.40	42.0	0.042	1.0	1,092	0.50	73.9	8.50	11.50
	TW05003157LE4004	2020-27388	26/11/2020	Mid L. Mahon	201	C8	High	Middle		8.0	42.9	30.9	8.9	9.0	0.54	0.0720	0.90	42.0	0.042	4.0	1,246	0.50	77.6	9.00	11.60
	TW05003157LE4004	2020-27389	26/11/2020	Mid L. Mahon	201	C8	High	Bottom		8.0	44.3	32.1	8.7	9.0	0.46	0.0730	0.80	39.0	0.039	1.0	1,162	0.50	77.6	9.03	11.64
	TW04003159LE2006	2020-27390	26/11/2020	Tivoli	201	C9	High	Top	9.20	7.8	4.9	2.9	8.5	8.0	3.46	0.0660	3.30	32.0	0.032	1.0	794	0.50	67.9	7.95	11.70
	TW04003159LE2006	2020-27391	26/11/2020	Tivoli	201	C9	High	Bottom		7.9	36.9	26.2	8.0	8.1	0.64	0.1340	1.30	49.0	0.049	1.0	1,274	0.50	68.4	8.10	11.84
20-09360	CW05003150LE8004	2020-27991	07/12/2020	Haulbowline	301	C5	Low	Top	14.10	8.0	44.1	31.9	7.5	7.4	0.58	0.0670	0.80	38.0	0.038	2.1	288	1.00	61.3	7.35	11.99
	CW05003150LE8004	2020-27992	07/12/2020	Haulbowline	301	C5	Low	Middle		8.0	44.0	31.8	7.8	8.0	0.52	0.0175	0.90	32.0	0.032	1.0	187	0.50	67.4	8.02	11.90
	CW05003150LE8004	2020-27993	07/12/2020	Haulbowline	301	C5	Low	Bottom		8.0	43.7	31.6	8.1	8.0	0.30	0.0175	0.80	28.0	0.028	1.0	153	0.50	67.8	8.01	11.81
	TW05003157LE4005	2020-27994	07/12/2020	End L. Mahon	201	C6	Low	Top	8.80	8.0	36.8	26.1	7.1	7.5	1.03	0.0930	1.40	41.0	0.041	1.0	537	0.50	61.9	7.50	12.11
	TW05003157LE4005	2020-27995	07/12/2020	End L. Mahon	201	C6	Low	Middle		8.0	42.8	30.8	7.1	7.0	0.53	0.0540	0.90	34.0	0.034	1.0	450	0.50	57.8	7.00	12.11
	TW05003157LE4005	2020-27996	07/12/2020	End L. Mahon	201	C6	Low	Bottom		8.0	44.2	32.0	7.2	8.3	0.40	0.0175	0.90	31.0	0.031	1.0	295	0.50	68.9	8.32	12.08
	TW04003159LE2005	2020-27997	07/12/2020	Blackrock Castle	201	C7	Low	Top	4.10	7.9	20.3	13.6	7.7	7.2	1.92	0.0810	2.30	36.0	0.036	1.0	712	0.50	60.4	7.21	11.93
	TW04003159LE2005	2020-27998	07/12/2020	Blackrock Castle	201	C7	Low	Middle		8.0	41.6	29.9	8.1	7.6	0.61	0.0950	1.10	44.0	0.044	1.0	663	0.50	64.4	7.61	11.81
	TW04003159LE2005	2020-27999	07/12/2020	Blackrock Castle	201	C7	Low	Bottom		8.0	41.7	30.0	8.3	8.0	0.59	0.0840	1.10	59.0	0.059	1.0	331	0.50	68.2	8.02	11.76
	TW05003157LE4004	2020-28000	07/12/2020	Mid L. Mahon	201	C8	Low	Top	8.40	7.9	23.3	15.8	6.7	7.3	1.35	0.0910	2.20	62.0	0.062	1.0	959	0.50	59.9	7.33	12.23
	TW05003157LE4004	2020-28001	07/12/2020	Mid L. Mahon	201	C8	Low	Middle		8.0	42.5	30.6	7.6	7.3	0.59	0.0780	0.90	40.0	0.040	1.0	960	0.50	61.1	7.31	11.96
	TW05003157LE4004	2020-28002	07/12/2020	Mid L. Mahon	201	C8	Low	Bottom		8.0	42.7	30.8	8.2	8.5	0.51	0.0640	0.90	39.0	0.039	1.0	667	0.50	71.9	8.47	11.79
	TW04003159LE2006	2020-28003	07/12/2020	Tivoli	201	C9	Low	Top	6.80	7.8	4.4	2.6	7.1	7.4	2.10	0.0630	3.00	35.0	0.035	1.0	1,178	0.50	60.9	7.37	12.11
	TW04003159LE2006	2020-28004	07/12/2020	Tivoli	201	C9	Low	Bottom		7.9	41.8	30.0	8.3	7.6	0.53	0.1100	1.00	46.0	0.046	1.0	279	0.50	64.5	7.58	11.76
	CW05003150LE8004	2020-28005	07/12/2020	Haulbowline	301	C5	High	Top	15.60	8.0	36.7	26.0	8.3	7.2	1.02	0.0980	1.40	45.0	0.045	1.0	906	0.50	61.5	7.23	11.76
	CW05003150LE8004	2020-28006	07/12/2020	Haulbowline	301	C5	High	Middle		8.0	42.2	30.4	7.9	7.4	0.59	0.0680	0.90	37.0	0.037	1.0	813	0.50	62.6	7.43	11.87
	CW05003150LE8004	2020-28007	07/12/2020	Haulbowline	301	C5	High	Bottom		8.0	42.9	30.9	8.3	8.5	0.48	0.0440	0.90	33.0	0.033	1.0	624	0.50	72.6	8.53	11.76
	TW05003157LE4005	2020-28008	07/12/2020	End L. Mahon	201	C6	High	Top	11.80	8.0	28.9	20.0	7.2	7.2	1.43	0.1080	1.90	44.0	0.044	1.0	794	0.50	59.8	7.22	12.08
	TW05003157LE4005	2020-28009	07/12/2020	End L. Mahon	201	C6	High	Middle		8.0	36.1	25.5	7.8	7.6	1.05	0.1140	1.40	49.0	0.049	1.0	1,785	0.50	63.7	7.58	11.90
	TW05003157LE4005	2020-28010	07/12/2020	End L. Mahon	201	C6	High	Bottom		8.0	40.0	28.6	8.3	8.6	0.74	0.1170	1.20	45.0	0.045	1.0	1,259	0.50	73.3	8.62	11.76
	TW04003159LE2005	2020-28011	07/12/2020	Blackrock Castle	201	C7	High	Top	10.20	7.9	25.8	17.6	7.1	7.4	2.70	0.0670	2.00	37.0	0.037	1.0	1,233	0.50	60.9	7.37	12.11
	TW04003159LE2005	2020-28012	07/12/2020	Blackrock Castle	201	C7	High	Middle		8.0	41.3	29.6	8.2	7.6	0.63	0.0780	1.00	46.0	0.046	1.0	738	0.50	64.5	7.60	11.79
	TW04003159LE2005	2020-28013	07/12/2020	Blackrock Castle	201	C7	High	Bottom		8.0	41.8	30.0	8.6	8.6	0.59	0.0960	1.00	45.0	0.045	1.0	341	0.50	74.0	8.64	11.67
	TW05003157LE4004	2020-28014	07/12/2020	Mid L. Mahon	201	C8	High	Top	11.40	7.9	25.8	17.6	6.5	7.1	1.84	0.0980	2.00	42.0	0.042	1.0	581	0.50	57.8	7.11	12.29
	TW05003157LE4004	2020-28015	07/12/2020	Mid L. Mahon	201	C8	High	Middle		8.0	40.7	29.2	7.7	7.7	0.77	0.1290	1.20	49.0	0.049	1.0	1,607	0.50	64.1	7.65	11.93
	TW05003157LE4004	2020-28016	07/12/2020	Mid L. Mahon	201	C8	High	Bottom		8.0	42.7	30.8	8.2	8.1	0.58	0.0940	1.00	43.0	0.043	1.0	908	0.50	68.5	8.07	11.79
	TW04003159LE2006	2020-28017	07/12/2020	Tivoli	201	C9	High	Top	9.20	7.8	12.7	8.1	6.8	7.5	3.06	0.0610	3.10	36.0	0.036	1.0	1,553	0.50	61.6	7.51	12.20
	TW04003159LE2006	2020-28018	07/12/2020	Tivoli	201	C9	High	Bottom		7.9	42.3	30.4	8.5	7.5	0.63	0.1110	1.00	43.0	0.043	1.0	292	0.50	64.4	7.53	11.70

Station No.	Station Name	SampleCode	Irish Grid Reference		StationCode	DATE Sampled	pH	D.O. - Sat	B.O.D.	Temp.	Ortho-Phosphate (as P)	TON	Total Nitrogen	Ammonia - N	Ammonia - NH4	Total Coliform	Faecal Coliform (E.Coli)	S.Solids	Cond.	Analyst	D.O.	100% DO (fresh)
			Easting:	Northing:			pH units	%	mg/l	C	mg/l	mg/l N	mg/l N	mg/l N	mg/l	Bacteria / 100mls	Bacteria / 100mls	mg/l	uS/cm		mg/l	mg/l
M01	Curragheen Road Bridge	CCRW/20/10001	162,843	69,176	RS19T050890	25/03/2020 00:00	7.3	82.5	1.2	9.7	0.036	3.29	3.42	0.04	0.056			1.2	277	Pat Foley	9.38	11.368
M01	Curragheen Road Bridge	CCRW/20/10002	162,843	69,176	RS19T050890	21/04/2020 00:00	7.4	80.9	1.3	8.9	0.048	4.74	5.14	0.19	0.245	**7,308**	**1,588**	2.4	292	Pat Foley	9.38	11.588
M01	Curragheen Road Bridge	CCRW/20/10003	162,843	69,176	RS19T050890	19/05/2020 00:00	7.1	82.3	2.1	11.9	0.068	3.29	3.70	0.05	0.067			3.2	287	Pat Foley	8.89	10.802
M01	Curragheen Road Bridge	CCRW/20/10004	162,843	69,176	RS19T050890	16/06/2020 00:00	7.3	86.6	0.8	13.7	0.051	4.12	4.56	0.04	0.054			1.2	333	Pat Foley	8.98	10.374
M01	Curragheen Road Bridge	CCRW/20/10005	162,843	69,176	RS19T050890	14/07/2020 00:00	7.3	80.0	0.7	13.5	0.066	2.99	3.39	0.02	0.023	**7,646**	**1,632**	2.0	335	Pat Foley	8.34	10.420
M01	Curragheen Road Bridge	CCRW/20/10006	162,843	69,176	RS19T050890	18/08/2020 00:00	7.1	82.5	0.8	15.4	0.076	0.21	0.29	0.00	0.005			5.2	339	Pat Foley	8.25	9.998
M01	Curragheen Road Bridge	CCRW/20/10007	162,843	69,176	RS19T050890	15/09/2020 00:00	7.3	64.6	0.6	14.7	0.056	0.30	0.32	0.00	0.001			0.4	318	Pat Foley	6.56	10.150
M01	Curragheen Road Bridge	CCRW/20/10008	162,843	69,176	RS19T050890	13/10/2020 00:00	7.4	77.8	0.7	10.7	0.063	0.42	0.54	0.00	0.001			2.4	330	Pat Foley	8.64	11.104
M01	Curragheen Road Bridge	CCRW/20/10009	162,843	69,176	RS19T050890	24/11/2020 00:00	7.4	75.4	1.2	11.5	0.073	0.24	0.27	0.06	0.073			3.6	313	Pat Foley	8.22	10.901
M01	Curragheen Road Bridge	CCRW/20/10010	162,843	69,176	RS19T050890	08/12/2020 00:00	7.7	79.4	0.5	6.8	0.050	0.29	0.33	0.01	0.018			0.8	319	Pat Foley	9.69	12.200
M02	Carrigrohane Bridge	CCRW/20/10011	162,863	71,034	RS19C120110	25/03/2020 00:00	7.3	76.6	1.0	9.6	0.053	3.19	3.36	0.05	0.060			2.8	325	Pat Foley	8.73	11.395
M02	Carrigrohane Bridge	CCRW/20/10012	162,863	71,034	RS19C120110	21/04/2020 00:00	7.4	78.4	1.1	9.7	0.043	4.74	5.04	0.17	0.213	**5,705**	**1,050**	0.4	353	Pat Foley	8.91	11.368
M02	Carrigrohane Bridge	CCRW/20/10013	162,863	71,034	RS19C120110	19/05/2020 00:00	7.2	77.8	1.0	12.4	0.046	3.40	3.65	0.04	0.053			2.0	346	Pat Foley	8.31	10.680
M02	Carrigrohane Bridge	CCRW/20/10014	162,863	71,034	RS19C120110	16/06/2020 00:00	7.4	76.6	0.7	14.0	0.023	3.60	3.84	0.03	0.033			0.4	411	Pat Foley	7.89	10.306
M02	Carrigrohane Bridge	CCRW/20/10015	162,863	71,034	RS19C120110	14/07/2020 00:00	7.4	75.0	0.8	13.9	0.065	3.09	3.41	0.01	0.017	**19,253**	**4,160**	1.6	408	Pat Foley	7.75	10.329
M02	Carrigrohane Bridge	CCRW/20/10016	162,863	71,034	RS19C120110	18/08/2020 00:00	7.1	76.2	0.9	15.8	0.085	0.21	0.29	0.01	0.007			2.4	370	Pat Foley	7.55	9.912
M02	Carrigrohane Bridge	CCRW/20/10017	162,863	71,034	RS19C120110	15/09/2020 00:00	7.3	58.8	0.6	14.8	0.053	0.38	0.40	0.00	0.001			0.8	366	Pat Foley	5.96	10.128
M02	Carrigrohane Bridge	CCRW/20/10018	162,863	71,034	RS19C120110	13/10/2020 00:00	7.5	80.2	1.0	10.8	0.050	0.43	0.49	0.07	0.094			0.8	394	Pat Foley	8.89	11.079
M02	Carrigrohane Bridge	CCRW/20/10019	162,863	71,034	RS19C120110	24/11/2020 00:00	7.4	74.5	0.9	11.0	0.066	0.14	0.15	0.06	0.072			4.0	353	Pat Foley	8.22	11.027
M02	Carrigrohane Bridge	CCRW/20/10020	162,863	71,034	RS19C120110	08/12/2020 00:00	7.7	78.9	0.8	6.8	0.050	0.46	0.47	0.02	0.020			1.6	374	Pat Foley	9.62	12.200
M03	County Hall	CCRW/20/10021	165,003	71,212	RS19C120740	25/03/2020 00:00	7.3	74.2	1.4	9.7	0.040	3.40	3.72	0.12	0.150			2.0	342	Pat Foley	8.44	11.368
M03	County Hall	CCRW/20/10022	165,003	71,212	RS19C120740	21/04/2020 00:00	7.6	71.9	1.4	9.7	0.043	4.12	4.47	0.51	0.659	**3,385**	**720**	2.4	375	Pat Foley	8.17	11.368
M03	County Hall	CCRW/20/10023	165,003	71,212	RS19C120740	19/05/2020 00:00	7.3	68.6	1.5	12.4	0.035	2.99	3.40	0.20	0.257			2.0	369	Pat Foley	7.33	10.680
M03	County Hall	CCRW/20/10024	165,003	71,212	RS19C120740	16/06/2020 00:00	7.4	61.2	0.7	14.3	0.035	3.40	3.95	0.31	0.404			0.4	440	Pat Foley	6.27	10.238
M03	County Hall	CCRW/20/10025	165,003	71,212	RS19C120740	14/07/2020 00:00	7.4	56.2	1.0	13.9	0.055	2.99	3.50	0.31	0.401	**19,253**	**2,398**	2.0	419	Pat Foley	5.80	10.329
M03	County Hall	CCRW/20/10026	165,003	71,212	RS19C120740	18/08/2020 00:00	7.4	57.0	1.8	15.5	0.101	0.21	0.34	0.03	0.033			4.0	372	Pat Foley	5.69	9.976
M03	County Hall	CCRW/20/10027	165,003	71,212	RS19C120740	15/09/2020 00:00	7.4	56.6	0.7	14.7	0.055	0.32	0.33	0.10	0.126			1.6	385	Pat Foley	5.74	10.150
M03	County Hall	CCRW/20/10028	165,003	71,212	RS19C120740	13/10/2020 00:00	7.6	72.3	1.5	11.1	0.048	0.76	0.83	0.18	0.230			0.8	419	Pat Foley	7.95	11.002
M03	County Hall	CCRW/20/10029	165,003	71,212	RS19C120740	24/11/2020 00:00	7.5	67.2	1.3	11.2	0.071	0.13	0.16	0.17	0.219			3.6	377	Pat Foley	7.38	10.976
M03	County Hall	CCRW/20/10030	165,003	71,212	RS19C120740	08/12/2020 00:00	7.8	71.7	1.0	6.9	0.053	0.16	0.20	0.14	0.182			2.0	395	Pat Foley	8.72	12.170
M04	Bandon Road	CCRW/20/10031	164,101	68,782	RS19G040140	25/03/2020 00:00	6.4	79.0	0.8	10.3	0.036	4.63	4.79	0.04	0.049			0.8	393	Pat Foley	8.86	11.209
M04	Bandon Road	CCRW/20/10032	165,003	71,212	RS19G040140	21/04/2020 00:00	6.5	81.5	1.0	9.7	0.043	0.41	0.50	0.14	0.184	**720**	**32**	0.4	430	Pat Foley	9.26	11.368
M04	Bandon Road	CCRW/20/10033	165,003	71,212	RS19G040140	19/05/2020 00:00	6.1	77.3	1.3	11.6	0.035	4.22	4.38	0.03	0.044			1.2	429	Pat Foley	8.41	10.876
M04	Bandon Road	CCRW/20/10034	165,003	71,212	RS19G040140	16/06/2020 00:00	6.5	80.2	0.2	13.3	0.020	1.96	2.09	0.02	0.032			0.4	489	Pat Foley	8.39	10.466
M04	Bandon Road	CCRW/20/10035	165,003	71,212	RS19G040140	14/07/2020 00:00	6.4	84.3	0.3	13.4	0.065	3.29	3.34	0.01	0.019	**2,897**	**677**	4.0	500	Pat Foley	8.80	10.443
M04	Bandon Road	CCRW/20/10036	165,003	71,212	RS19G040140	18/08/2020 00:00	6.4	81.6	0.3	14.6	0.060	0.82	0.88	0.00	0.001			0.8	491	Pat Foley	8.30	10.172
M04	Bandon Road	CCRW/20/10037	165,003	71,212	RS19G040140	15/09/2020 00:00	6.6	63.7	0.3	14.3	0.035	0.53	0.55	0.00	0.001			0.4	464	Pat Foley	6.52	10.238
M04	Bandon Road	CCRW/20/10038	165,003	71,212	RS19G040140	13/10/2020 00:00	6.8	80.9	0.6	11.6	0.043	0.63	0.70	0.00	0.001			2.4	490	Pat Foley	8.80	10.876
M04	Bandon Road	CCRW/20/10039	165,003	71,212	RS19G040140	24/11/2020 00:00	6.6	74.4	0.6	12.3	0.056	0.25	0.31	0.07	0.084			2.4	420	Pat Foley	7.96	10.704
M04	Bandon Road	CCRW/20/10040	165,003	71,212	RS19G040140	08/12/2020 00:00	7.4	73.8	0.4	9.4	0.035	0.29	0.30	0.02	0.025			0.4	451	Pat Foley	8.45	11.450
M05	Woodhaven Estate	CCRW/20/10041	164,344	69,415	RS19G040190	25/03/2020 00:00	7.0	76.6	1.2	10.0	0.078	3.91	4.37	0.09	0.120			19.6	392	Pat Foley	8.65	11.288
M05	Woodhaven Estate	CCRW/20/10042	164,344	69,415	RS19G040190	21/04/2020 00:00	6.8	77.5	1.8	10.1	0.041	4.12	4.37	0.23	0.300	**14,136**	**1,210**	8.4	389	Pat Foley	8.73	11.261
M05	Woodhaven Estate	CCRW/20/10043	164,344	69,415	RS19G040190	19/05/2020 00:00	6.7	82.0	2.2	12.1	0.041	2.78	3.03	0.06	0.080			8.8	382	Pat Foley	8.82	10.753
M05	Woodhaven Estate	CCRW/20/10044	164,344	69,415	RS19G040190	16/06/2020 00:00	7.1	72.7	0.9	13.7	0.036	2.68	3.00	0.11	0.145			0.8	403	Pat Foley	7.54	10.374
M05	Woodhaven Estate	CCRW/20/10045	164,344	69,415	RS19G040190	14/07/2020 00:00	7.0	72.6	1.7	14.3	0.101	2.47	2.99	0.02	0.027	**19,863**	**1,565**	30.8	395	Pat Foley	7.43	10.238
M05	Woodhaven Estate	CCRW/20/10046	164,344	69,415	RS19G040190	18/08/2020 00:00	6.8	69.0	0.7	16.1	0.063	0.31	0.34	0.00	0.002			5.6	430	Pat Foley	6.80	9.849
M05	Woodhaven Estate	CCRW/20/10047	164,344	69,415	RS19G040190	15/09/2020 00:00	7.0	58.3	0.7	15.2	0.040	0.26	0.31	0.01	0.011			2.0	421	Pat Foley	5.85	10.041
M05	Woodhaven Estate	CCRW/20/10048	164,344	69,415	RS19G040190	13/10/2020 00:00	7.3	73.1	1.6	12.7	0.048	0.53	0.58	0.09	0.110			2.0	406	Pat Foley	7.75	10.608
M05	Woodhaven Estate	CCRW/20/10049	164,344	69,415	RS19G040190	24/11/2020 00:00	7.0	69.4	1.0	11.9	0.066	0.11	0.15	0.06	0.074			7.2	443	Pat Foley	7.50	10.802
M05	Woodhaven Estate	CCRW/20/10050	164,344	69,415	RS19G040190	08/12/2020 00:00	7.5	75.4	2.8	8.9	0.033	0.38	0.40	0.04	0.052			3.6	472	Pat Foley	8.74	11.588

Station No.	Station Name	SampleCode	Irish Grid Reference		StationCode	DATE Sampled	pH	D.O. - Sat	B.O.D.	Temp.	Ortho-Phosphate (as P)	TON	Total Nitrogen	Ammonia - N	Ammonia - NH4	Total Coliform	Faecal Coliform (E.Coli)	S.Solids	Cond.	Analyst	D.O.	100% DO (fresh)
			Easting:	Northing:			pH units	%	mg/l	C	mg/l	mg/l N	mg/l N	mg/l N	mg/l	Bacteria / 100mls	Bacteria / 100mls	mg/l	uS/cm		mg/l	mg/l
M06	Sandbrook Estate	CCRW/20/10051	165,278	69,503	RS19G040300	25/03/2020 00:00	7.6	63.7	1.6	10.1	0.051	2.88	3.29	0.25	0.320			1.6	443	Pat Foley	7.17	11.261
M06	Sandbrook Estate	CCRW/20/10052	164,344	69,415	RS19G040300	21/04/2020 00:00	8.0	47.1	3.5	9.9	0.178	2.16	4.06	1.58	2.030	**397,260**	**61,520**	2.8	451	Pat Foley	5.33	11.315
M06	Sandbrook Estate	CCRW/20/10053	164,344	69,415	RS19G040300	19/05/2020 00:00	7.4	39.5	2.3	12.5	0.075	2.99	3.62	0.32	0.412			4.4	455	Pat Foley	4.21	10.656
M06	Sandbrook Estate	CCRW/20/10054	164,344	69,415	RS19G040300	16/06/2020 00:00	7.6	33.8	1.2	14.6	0.080	2.26	2.89	0.33	0.428			2.0	438	Pat Foley	3.44	10.172
M06	Sandbrook Estate	CCRW/20/10055	164,344	69,415	RS19G040300	14/07/2020 00:00	7.6	35.2	1.2	14.3	0.106	1.45	1.91	0.34	0.436	**10,170**	**910**	3.2	485	Pat Foley	3.60	10.238
M06	Sandbrook Estate	CCRW/20/10056	164,344	69,415	RS19G040300	18/08/2020 00:00	7.5	42.2	2.2	16.5	0.095	0.72	0.85	0.39	0.502			9.6	473	Pat Foley	4.12	9.767
M06	Sandbrook Estate	CCRW/20/10057	164,344	69,415	RS19G040300	15/09/2020 00:00	7.5	38.6	0.7	15.6	0.065	0.39	0.48	0.15	0.192			6.4	499	Pat Foley	3.84	9.955
M06	Sandbrook Estate	CCRW/20/10058	164,344	69,415	RS19G040300	13/10/2020 00:00	7.6	31.7	4.0	12.6	0.195	0.60	0.90	1.63	2.098			6.8	493	Pat Foley	3.37	10.632
M06	Sandbrook Estate	CCRW/20/10059	164,344	69,415	RS19G040300	24/11/2020 00:00	7.6	66.7	2.4	12.8	0.081	0.11	0.14	0.20	0.256			8.4	435	Pat Foley	7.06	10.584
M06	Sandbrook Estate	CCRW/20/10060	164,344	69,415	RS19G040300	08/12/2020 00:00	7.7	48.0	1.6	8.8	0.071	0.22	0.29	0.23	0.291			6.4	528	Pat Foley	5.57	11.616
M07	Clashduv Road	CCRW/20/10061	165,697	70,336	RS19G040490	25/03/2020 00:00	7.6	52.3	1.6	10.2	0.070	2.99	3.31	0.31	0.400			4.0	459	Pat Foley	5.88	11.235
M07	Clashduv Road	CCRW/20/10062	165,697	70,336	RS19G040490	21/04/2020 00:00	7.8	35.3	5.2	10.7	0.150	2.47	3.77	1.94	2.500	**23,055**	**2,100**	6.4	482	Pat Foley	3.92	11.104
M07	Clashduv Road	CCRW/20/10063	165,697	70,336	RS19G040490	19/05/2020 00:00	7.4	33.9	2.3	12.8	0.081	3.19	3.89	0.33	0.418			5.2	471	Pat Foley	3.59	10.584
M07	Clashduv Road	CCRW/20/10064	165,697	70,336	RS19G040490	16/06/2020 00:00	7.6	27.6	1.7	15.2	0.106	1.85	2.53	0.36	0.460			3.2	401	Pat Foley	2.77	10.041
M07	Clashduv Road	CCRW/20/10065	165,697	70,336	RS19G040490	14/07/2020 00:00	7.5	29.1	1.2	14.3	0.133	1.75	2.30	0.38	0.491	**25,860**	**2,560**	1.6	480	Pat Foley	2.98	10.238
M07	Clashduv Road	CCRW/20/10066	165,697	70,336	RS19G040490	18/08/2020 00:00	7.4	38.8	1.1	16.5	0.131	0.41	0.54	0.28	0.356			4.4	459	Pat Foley	3.79	9.767
M07	Clashduv Road	CCRW/20/10067	165,697	70,336	RS19G040490	15/09/2020 00:00	7.6	32.9	1.0	15.6	0.083	0.29	0.35	0.17	0.213			1.6	517	Pat Foley	3.28	9.955
M07	Clashduv Road	CCRW/20/10068	165,697	70,336	RS19G040490	13/10/2020 00:00	7.6	34.9	1.0	12.0	0.116	0.45	0.63	0.96	1.240			2.8	505	Pat Foley	3.76	10.777
M07	Clashduv Road	CCRW/20/10069	165,697	70,336	RS19G040490	24/11/2020 00:00	7.5	55.1	2.0	12.9	0.108	0.16	0.20	0.27	0.349			6.8	450	Pat Foley	5.82	10.560
M07	Clashduv Road	CCRW/20/10070	165,697	70,336	RS19G040490	08/12/2020 00:00	7.7	41.2	2.4	8.3	0.106	0.20	0.25	0.28	0.362			11.2	533	Pat Foley	4.84	11.757
M08	Glasheen Bridge	CCRW/20/10071	165,401	70,768	RS19G040700	25/03/2020 00:00	7.4	56.5	5.8	10.1	0.160	2.57	3.74	0.70	0.900			6.4	463	Pat Foley	6.36	11.261
M08	Glasheen Bridge	CCRW/20/10072	165,401	70,768	RS19G040700	21/04/2020 00:00	7.6	39.0	7.4	10.7	0.323	2.68	6.91	2.45	3.150	**223,980**	**55,100**	1.2	488	Pat Foley	4.33	11.104
M08	Glasheen Bridge	CCRW/20/10073	165,401	70,768	RS19G040700	19/05/2020 00:00	7.3	57.7	2.1	12.8	0.101	2.26	3.02	0.33	0.429			5.6	470	Pat Foley	6.11	10.584
M08	Glasheen Bridge	CCRW/20/10074	165,401	70,768	RS19G040700	16/06/2020 00:00	7.6	44.9	2.4	15.2	0.126	2.57	3.36	0.35	0.453			6.4	385	Pat Foley	4.51	10.041
M08	Glasheen Bridge	CCRW/20/10075	165,401	70,768	RS19G040700	14/07/2020 00:00	7.4	50.5	1.7	14.4	0.145	1.85	2.51	0.29	0.373	**43,320**	**3,945**	4.8	468	Pat Foley	5.16	10.216
M08	Glasheen Bridge	CCRW/20/10076	165,401	70,768	RS19G040700	18/08/2020 00:00	7.3	51.4	1.4	16.5	0.148	0.62	0.75	0.20	0.251			9.2	438	Pat Foley	5.02	9.767
M08	Glasheen Bridge	CCRW/20/10077	165,401	70,768	RS19G040700	15/09/2020 00:00	7.4	43.5	1.6	15.6	0.103	0.29	0.38	0.19	0.250			8.0	514	Pat Foley	4.33	9.955
M08	Glasheen Bridge	CCRW/20/10078	165,401	70,768	RS19G040700	13/10/2020 00:00	7.6	54.9	2.3	12.2	0.123	0.42	0.58	0.65	0.840			7.2	464	Pat Foley	5.89	10.728
M08	Glasheen Bridge	CCRW/20/10079	165,401	70,768	RS19G040700	24/11/2020 00:00	7.5	52.9	2.2	12.2	0.113	0.41	0.46	0.23	0.302			6.4	456	Pat Foley	5.68	10.728
M08	Glasheen Bridge	CCRW/20/10080	165,401	70,768	RS19G040700	08/12/2020 00:00	7.7	50.1	2.2	7.9	0.118	0.11	0.18	0.19	0.244			19.2	531	Pat Foley	5.95	11.872
M09	Blackstone Bridge	CCRW/20/10081	165,691	74,463	RS19B140110	24/03/2020 00:00	7.9	75.7	1.0	9.8	0.055	3.60	3.85	0.05	0.070			9.0	298	Liz O'Leary	8.59	11.341
M09	Blackstone Bridge	CCRW/20/10082	165,691	74,463	RS19B140110	27/04/2020 00:00	7.8	94.6	1.5	13.5	0.047	3.19	3.57	0.10	0.130	**30,083**	**3,668**	4.0	311	Liz O'Leary	9.86	10.420
M09	Blackstone Bridge	CCRW/20/10083	165,691	74,463	RS19B140110	13/05/2020 00:00	7.7	82.9	1.9	9.9	0.038	3.40	3.78	0.03	0.040			4.0	316	Liz O'Leary	9.38	11.315
M09	Blackstone Bridge	CCRW/20/10084	165,691	74,463	RS19B140110	23/06/2020 00:00	7.6	70.0	3.0	14.4	0.057	2.57	3.15	0.03	0.040	**26,155**	**1,625**	14.0	331	Liz O'Leary	7.15	10.216
M09	Blackstone Bridge	CCRW/20/10085	165,691	74,463	RS19B140110	07/07/2020 00:00	7.6	72.6	3.6	13.4	0.042	5.25	5.58	0.05	0.060			6.5	360	Liz O'Leary	7.58	10.443
M09	Blackstone Bridge	CCRW/20/10086	165,691	74,463	RS19B140110	18/08/2020 00:00	7.6	84.9	3.4	16.6	0.080	0.10	0.24	0.04	0.050			14.0	380	Liz O'Leary	8.27	9.746
M09	Blackstone Bridge	CCRW/20/10087	165,691	74,463	RS19B140110	01/09/2020 00:00	7.6	67.1	1.0	14.1	0.043	1.30	1.36	0.02	0.020			2.5	338	Liz O'Leary	6.90	10.283
M09	Blackstone Bridge	CCRW/20/10088	165,691	74,463	RS19B140110	06/10/2020 00:00	7.7	66.9	1.3	12.0	0.038	0.57	0.63	0.04	0.050			7.0	370	Liz O'Leary	7.21	10.777
M09	Blackstone Bridge	CCRW/20/10089	165,691	74,463	RS19B140110	17/11/2020 00:00	7.2	66.3	0.5	12.0	0.063	0.26	0.30	0.03	0.040			2	330	Liz O'Leary	7.15	10.777
M09	Blackstone Bridge	CCRW/20/10090	165,691	74,463	RS19B140110	01/12/2020 00:00	7.5	83.6	1.0	11.0	0.042	0.30	0.33	0.04	0.050			2	346	Liz O'Leary	9.22	11.027
M10	Kilnap	CCRW/20/10091	166,291	74,796	RS19G880990	24/03/2020 00:00	7.7	72.2	1.0	9.2	0.062	2.88	3.16	0.05	0.060			3.0	266	Liz O'Leary	8.31	11.505
M10	Kilnap	CCRW/20/10092	166,291	74,796	RS19G880990	27/04/2020 00:00	7.7	83.9	1.6	12.8	0.060	2.99	3.27	0.05	0.070	**3,255**	**565**	4.0	282	Liz O'Leary	8.88	10.584
M10	Kilnap	CCRW/20/10093	166,291	74,796	RS19G880990	13/05/2020 00:00	7.7	87.8	2.0	9.6	0.050	2.37	2.72	0.02	0.020			4.0	285	Liz O'Leary	10	11.395
M10	Kilnap	CCRW/20/10094	166,291	74,796	RS19G880990	23/06/2020 00:00	7.6	78.9	3.7	14.4	0.127	2.99	3.75	0.03	0.040	**14,485**	**2,703**	10.0	313	Liz O'Leary	8.06	10.216
M10	Kilnap	CCRW/20/10095	166,291	74,796	RS19G880990	07/07/2020 00:00	7.6	82.5	1.3	13.7	0.090	5.04	5.26	0.04	0.050			3.0	330	Liz O'Leary	8.56	10.374
M10	Kilnap	CCRW/20/10096	166,291	74,796	RS19G880990	18/08/2020 00:00	7.8	82.3	4.3	16.7	0.217	0.21	0.37	0.04	0.050			26.0	285	Liz O'Leary	8.00	9.726
M10	Kilnap	CCRW/20/10097	166,291	74,796	RS19G880990	01/09/2020 00:00	7.7	86.7	1.2	14.4	0.075	0.21	0.30	0.02	0.020			13.5	292	Liz O'Leary	8.86	10.216
M10	Kilnap	CCRW/20/10098	166,291	74,796	RS19G880990	06/10/2020 00:00	7.7	81.7	2.5	12.1	0.252	0.39	0.48	0.02	0.030			94.5	322	Liz O'Leary	8.79	10.753
M10	Kilnap	CCRW/20/10099	166,291	74,796	RS19G880990	17/11/2020 00:00	7.5	91.9	1.1	11.9	0.077	0.38	0.45	0.04	0.050			5.5	291	Liz O'Leary	9.93	10.802
M10	Kilnap	CCRW/20/10100	166,291	74,796	RS19G880990	01/12/2020 00:00	7.6	84.4	1.3	10.9	0.075	0.25	0.32	0.04	0.050			6	303	Liz O'Leary	9.33	11.053

Station No.	Station Name	SampleCode	Irish Grid Reference		StationCode	DATE Sampled	pH	D.O. - Sat	B.O.D.	Temp.	Ortho-Phosphate (as P)	TON	Total Nitrogen	Ammonia - N	Ammonia - NH4	Total Coliform	Faecal Coliform (E.Coli)	S.Solids	Cond.	Analyst	D.O.	100% DO (fresh)
			Easting:	Northing:			pH units	%	mg/l	C	mg/l	mg/l N	mg/l N	mg/l N	mg/l	Bacteria / 100mls	Bacteria / 100mls	mg/l	uS/cm		mg/l	mg/l
M11	Fitz's Boreen	CCRW/20/10101	166,925	74,246	RS19B140300	24/03/2020 00:00	7.5	84.0	1.0	9.5	0.065	4.01	4.20	0.06	0.080			5.0	288	Liz O'Leary	9.6	11.422
M11	Fitz's Boreen	CCRW/20/10102	166,925	74,246	RS19B140300	27/04/2020 00:00	7.9	83.6	1.9	12.9	0.052	2.99	3.34	0.05	0.060	**14,485**	**1,055**	3.0	297	Liz O'Leary	8.83	10.560
M11	Fitz's Boreen	CCRW/20/10103	166,925	74,246	RS19B140300	13/05/2020 00:00	7.6	102.1	1.9	10	0.047	2.78	3.18	0.03	0.040			4.0	302	Liz O'Leary	11.52	11.288
M11	Fitz's Boreen	CCRW/20/10104	166,925	74,246	RS19B140300	23/06/2020 00:00	7.5	73.3	4.0	14.6	0.117	3.40	4.10	0.05	0.060	**26,155**	**1,625**	23.0	326	Liz O'Leary	7.46	10.172
M11	Fitz's Boreen	CCRW/20/10105	166,925	74,246	RS19B140300	07/07/2020 00:00	7.6	82.4	1.1	13.6	0.072	2.78	3.08	0.04	0.050			2.0	350	Liz O'Leary	8.57	10.397
M11	Fitz's Boreen	CCRW/20/10106	166,925	74,246	RS19B140300	18/08/2020 00:00	7.5	88.3	2.0	16.6	0.150	0.10	0.26	0.04	0.050			9.2	304	Liz O'Leary	8.61	9.746
M11	Fitz's Boreen	CCRW/20/10107	166,925	74,246	RS19B140300	01/09/2020 00:00	7.6	87.7	1.0	14.4	0.062	0.21	0.27	0.02	0.030			2.4	306	Liz O'Leary	8.96	10.216
M11	Fitz's Boreen	CCRW/20/10108	166,925	74,246	RS19B140300	06/10/2020 00:00	7.6	81.4	1.0	12.5	0.063	0.38	0.42	0.05	0.060			2.4	338	Liz O'Leary	8.67	10.656
M11	Fitz's Boreen	CCRW/20/10109	166,925	74,246	RS19B140300	17/11/2020 00:00	7.4	79.3	1.0	12.5	0.073	0.59	0.64	0.04	0.050			3.2	307	Liz O'Leary	8.45	10.656
M11	Fitz's Boreen	CCRW/20/10110	166,925	74,246	RS19B140300	01/12/2020 00:00	7.4	81.2	1.1	11.1	0.060	0.26	0.31	0.05	0.070			4	321	Liz O'Leary	8.93	11.002
M12	Blackpool	CCRW/20/10111	167,422	73,340	RS19B140800	24/03/2020 00:00	7.3	80.0	1.0	9	0.053	3.81	4.06	0.04	0.050			5.0	298	Liz O'Leary	9.25	11.560
M12	Blackpool	CCRW/20/10112	167,422	73,340	RS19B140800	27/04/2020 00:00	7.7	98.6	1.6	12.6	0.050	2.57	2.85	0.03	0.040	**21,760**	**3,665**	4.0	313	Liz O'Leary	10.48	10.632
M12	Blackpool	CCRW/20/10113	167,422	73,340	RS19B140800	13/05/2020 00:00	7.3	84.3	1.5	9.7	0.095	5.04	5.42	0.02	0.020			3.0	319	Liz O'Leary	9.58	11.368
M12	Blackpool	CCRW/20/10114	167,422	73,340	RS19B140800	23/06/2020 00:00	7.2	77.4	2.0	14.3	0.092	2.78	3.36	0.02	0.030	**77,655**	**8,905**	4.0	327	Liz O'Leary	7.92	10.238
M12	Blackpool	CCRW/20/10115	167,422	73,340	RS19B140800	07/07/2020 00:00	7.7	80.0	1.8	13.9	0.092	6.90	7.12	0.03	0.040			6.4	385	Liz O'Leary	8.26	10.329
M12	Blackpool	CCRW/20/10116	167,422	73,340	RS19B140800	18/08/2020 00:00	7.3	80.0	2.3	16.3	0.162	0.10	0.26	0.04	0.050			8.0	310	Liz O'Leary	7.85	9.808
M12	Blackpool	CCRW/20/10117	167,422	73,340	RS19B140800	01/09/2020 00:00	7.2	81.6	1.0	13.9	0.077	0.82	0.85	0.02	0.020			2.4	319	Liz O'Leary	8.43	10.329
M12	Blackpool	CCRW/20/10118	167,422	73,340	RS19B140800	06/10/2020 00:00	7.1	78.5	1.0	11.9	0.068	0.39	0.47	0.03	0.040			2.0	357	Liz O'Leary	8.48	10.802
M12	Blackpool	CCRW/20/10119	167,422	73,340	RS19B140800	17/11/2020 00:00	7.4	81.6	1.0	12.4	0.068	0.42	0.49	0.03	0.040			5.2	314	Liz O'Leary	8.71	10.680
M12	Blackpool	CCRW/20/10120	167,422	73,340	RS19B140800	01/12/2020 00:00	7.3	87.6	2.8	10.9	0.117	0.24	0.28	0.03	0.040			30	327	Liz O'Leary	9.68	11.053
M13	Glen Rec. Park	CCRW/20/10121	168,942	73,453	RS19G090400	24/03/2020 00:00	7.5	69.7	1.3	9.1	0.078	3.81	4.21	0.12	0.160			4.0	306	Liz O'Leary	8.04	11.532
M13	Glen Rec. Park	CCRW/20/10122	168,942	73,453	RS19G090400	27/04/2020 00:00	7.4	75.9	3.1	12	0.115	2.99	3.65	0.17	0.220	**86,645**	**27,375**	7.2	339	Liz O'Leary	8.18	10.777
M13	Glen Rec. Park	CCRW/20/10123	168,942	73,453	RS19G090400	13/05/2020 00:00	7.4	80.5	2.0	10.1	0.112	1.54	1.98	0.13	0.170			4.0	330	Liz O'Leary	9.07	11.261
M13	Glen Rec. Park	CCRW/20/10124	168,942	73,453	RS19G090400	23/06/2020 00:00	7.5	69.8	2.8	14.3	0.180	1.54	2.52	0.10	0.130	**135,400**	**77,655**	18.0	327	Liz O'Leary	7.15	10.238
M13	Glen Rec. Park	CCRW/20/10125	168,942	73,453	RS19G090400	07/07/2020 00:00	7.1	71.8	2.0	13.0	0.123	2.16	2.54	0.09	0.110			9.2	402	Liz O'Leary	7.57	10.537
M13	Glen Rec. Park	CCRW/20/10126	168,942	73,453	RS19G090400	18/08/2020 00:00	7.4	79.9	2.5	15.9	0.249	0.10	0.29	0.09	0.110			14.4	332	Liz O'Leary	7.90	9.891
M13	Glen Rec. Park	CCRW/20/10127	168,942	73,453	RS19G090400	01/09/2020 00:00	7.5	81.1	1.0	14.1	0.102	0.21	0.27	0.04	0.050			4.4	341	Liz O'Leary	8.34	10.283
M13	Glen Rec. Park	CCRW/20/10128	168,942	73,453	RS19G090400	06/10/2020 00:00	7.4	74.7	1.8	12.0	0.108	0.39	0.46	0.10	0.130			4.4	376	Liz O'Leary	8.05	10.777
M13	Glen Rec. Park	CCRW/20/10129	168,942	73,453	RS19G090400	17/11/2020 00:00	7.2	82.7	1.1	12.1	0.092	0.49	0.56	0.09	0.120			9.2	328	Liz O'Leary	8.89	10.753
M13	Glen Rec. Park	CCRW/20/10130	168,942	73,453	RS19G090400	01/12/2020 00:00	7.2	80.5	1.2	10.8	0.082	0.38	0.44	0.11	0.140			5	353	Liz O'Leary	8.92	11.079
M14	Spring Lane	CCRW/20/10131	167,868	73,539	RS19G090800	24/03/2020 00:00	7.5	72.5	1.0	9.1	0.078	3.09	3.56	0.08	0.100			5.0	314	Liz O'Leary	8.36	11.532
M14	Spring Lane	CCRW/20/10132	167,868	73,539	RS19G090800	27/04/2020 00:00	7.2	77.5	2.0	11.9	0.102	2.16	2.60	0.07	0.090	**77,010**	**5,898**	4.0	345	Liz O'Leary	8.37	10.802
M14	Spring Lane	CCRW/20/10133	167,868	73,539	RS19G090800	13/05/2020 00:00	7.7	79.0	2.6	10.3	0.095	2.78	3.27	0.05	0.070			6.0	334	Liz O'Leary	8.86	11.209
M14	Spring Lane	CCRW/20/10134	167,868	73,539	RS19G090800	23/06/2020 00:00	7.4	82.1	3.0	14.3	0.112	4.01	4.61	0.06	0.080	**86,645**	**8,320**	6.0	319	Liz O'Leary	8.41	10.238
M14	Spring Lane	CCRW/20/10135	167,868	73,539	RS19G090800	07/07/2020 00:00	6.7	72.3	6.0	13.7	0.466	1.96	2.40	0.06	0.080			180.0	378	Liz O'Leary	7.50	10.374
M14	Spring Lane	CCRW/20/10136	167,868	73,539	RS19G090800	18/08/2020 00:00	8.0	84.7	2.5	18.5	0.210	0.10	0.26	0.05	0.070			6.0	334	Liz O'Leary	7.94	9.371
M14	Spring Lane	CCRW/20/10137	167,868	73,539	RS19G090800	01/09/2020 00:00	7.3	83.5	1.0	14.4	0.100	0.21	0.27	0.03	0.040			2.0	345	Liz O'Leary	8.53	10.216
M14	Spring Lane	CCRW/20/10138	167,868	73,539	RS19G090800	06/10/2020 00:00	7.3	77.6	2.4	11.7	0.105	0.50	0.58	0.06	0.080			5.0	376	Liz O'Leary	8.42	10.851
M14	Spring Lane	CCRW/20/10139	167,868	73,539	RS19G090800	17/11/2020 00:00	7.1	76.4	1.1	12.2	0.090	0.46	0.51	0.05	0.070			3.2	333	Liz O'Leary	8.20	10.728
M14	Spring Lane	CCRW/20/10140	167,868	73,539	RS19G090800	01/12/2020 00:00	7.1	78.0	1.2	10.8	0.080	0.21	0.24	0.06	0.080			4	360	Liz O'Leary	8.64	11.079
M15	Leitrim St.	CCRW/20/10141	167,496	72,342	RS19K750900	24/03/2020 00:00	6.5	82.3	1.3	8.9	0.078	3.40	3.67	0.05	0.070			10.0	296	Liz O'Leary	9.54	11.588
M15	Leitrim St.	CCRW/20/10142	167,496	72,342	RS19K750900	27/04/2020 00:00	7.1	68.9	4.4	12.5	0.108	2.99	3.65	0.13	0.170	**86,640**	**12,360**	3.0	708	Liz O'Leary	7.34	10.656
M15	Leitrim St.	CCRW/20/10143	167,496	72,342	RS19K750900	13/05/2020 00:00	6.7	86.5	2.1	9.7	0.092	4.01	4.48	0.02	0.030			6.4	338	Liz O'Leary	9.83	11.368
M15	Leitrim St.	CCRW/20/10144	167,496	72,342	RS19K750900	23/06/2020 00:00	6.9	64.6	3.0	14.6	0.149	3.09	3.66	0.07	0.090	**141,360**	**20,460**	6.0	2540	Liz O'Leary	6.57	10.172
M15	Leitrim St.	CCRW/20/10145	167,496	72,342	RS19K750900	07/07/2020 00:00	7.3	46.9	38.0	14.5	0.132	1.54	2.68	0.16	0.210			8.4	11020	Liz O'Leary	4.78	10.194
M15	Leitrim St.	CCRW/20/10146	167,496	72,342	RS19K750900	18/08/2020 00:00	7.3	88.9	2.9	16.1	0.187	0.10	0.29	0.02	0.030			6.0	337	Liz O'Leary	8.76	9.849
M15	Leitrim St.	CCRW/20/10147	167,496	72,342	RS19K750900	01/09/2020 00:00	6.9	83.4	1.3	14.5	0.083	0.41	0.46	0.02	0.020			2.8	326	Liz O'Leary	8.50	10.194
M15	Leitrim St.	CCRW/20/10148	167,496	72,342	RS19K750900	06/10/2020 00:00	6.9	63.0	1.7	12.2	0.143	0.51	0.62	0.09	0.120			2.0	468	Liz O'Leary	6.76	10.728
M15	Leitrim St.	CCRW/20/10149	167,496	72,342	RS19K750900	17/11/2020 00:00	6.9	83.6	1.0	12.1	0.093	0.26	0.32	0.04	0.050			4	320	Liz O'Leary	8.99	10.753
M15	Leitrim St.	CCRW/20/10150	167,496	72,342	RS19K750900	01/12/2020 00:00	7.2	78.1	1.5	11.0	0.087	0.16	0.17	0.04	0.050			3	341	Liz O'Leary	8.61	11.027

Ambient River Monitoring 2020								Curraheen River			Glasheen Stream					Bride River				Glen River		Kiln River
		SI 272 of 2009	WFD					Curraghe en Road Bridge	Carrigroh ane Bridge	County Hall	Bandon Road	Woodhav en Estate	Sandbroo k Estate	Clashduv Road	Glasheen Bridge	Blackston e Bridge	Kilnap	Fitz's Boreen	Blackpool	Rec Park	Spring Lane	Leitrim Street
Licence	Parameter	Threshold	High	Good	Moderate	Poor	Bad	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11	M12	M13	M14	M15
10 /yr	Samples Taken						Number of Samples	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
pH	pH - Max	9.0						7.7	7.7	7.8	7.4	7.5	8.0	7.8	7.7	7.9	7.8	7.9	7.7	7.5	8.0	7.3
	pH - Min	6.0						7.1	7.1	7.3	6.1	6.7	7.4	7.4	7.3	7.2	7.5	7.4	7.1	7.1	6.7	6.5
DO	DO % Sat. - 5%ile Lower	80						69.5	65.9	56.3	68.2	63.1	32.7	28.3	41.0	66.6	75.2	76.0	77.9	69.8	72.4	54.1
	DO % Sat - 95%ile Upper	120						84.7	79.6	73.4	83.1	80.0	65.3	53.9	57.2	90.2	90.1	95.9	93.6	82.0	84.2	87.8
BOD	BOD - Annual Mean	1.5 (Good)	<1.4	1.4-2.0	2.0-4.0	4.0-5.0	>5.0	0.99	0.9	1.2	0.6	1.5	2.1	1.9	2.9	1.8	2.0	1.6	1.6	1.9	2.3	5.7
	BOD - 95%ile	2.6 (Good)						1.8	1.1	1.7	1.2	2.5	3.8	3.9	6.7	3.5	4.0	3.1	2.6	3.0	4.7	22.9
Temp.	Temp. - Max	Not > 1.5C rise mixing zone						15.4	15.8	15.5	14.6	16.1	16.5	16.5	16.5	16.6	16.7	16.6	16.3	15.9	18.5	16.1
	Temp. - Min							6.8	6.8	6.9	9.4	8.9	8.8	8.3	7.9	9.8	9.2	9.5	9.0	9.1	9.1	8.9
Orthophosphate (as P)	MRP-P - Annual Mean	0.035 (Good)	<0.02	0.02-0.05	0.05-0.1	0.1-0.2	0.2-0.4	0.059	0.053	0.054	0.043	0.055	0.100	0.108	0.146	0.051	0.109	0.076	0.087	0.124	0.144	0.115
	MRP-P - 95%ile	0.075 (Good)						0.075	0.076	0.088	0.063	0.091	0.187	0.142	0.250	0.072	0.236	0.135	0.142	0.218	0.351	0.170
TON (as N)	TON - N (Annual Mean)							2.0	2.0	1.8	1.7	1.8	1.4	1.4	1.4	2.1	1.8	1.8	2.3	1.4	1.5	1.6
	TON - N 95%ile							4.5	4.2	3.8	4.4	4.0	2.9	3.1	2.6	4.5	4.1	3.7	6.1	3.4	3.6	3.7
	Nitrate - N (Annual Mean)		<0.8	0.8-2.0	2.0-3.6	3.6-5.6	5.6-11.3															
Total Nitrogen (as N)	Total N - N (Annual Mean)							2.2	2.1	2.1	1.8	2.0	1.8	1.8	2.2	2.3	2.0	2.0	2.5	1.7	1.8	2.0
	Total N - N 95%ile							4.9	4.5	4.2	4.6	4.4	3.9	3.8	5.5	4.8	4.6	4.2	6.4	4.0	4.1	4.1
Ammonia	Ammonia N (Annual Mean)	0.065 (Good)	<0.04	0.04-0.1	0.1-0.2	0.2-0.4	>0.4	0.042	0.044	0.207	0.034	0.072	0.542	0.528	0.559	0.043	0.034	0.043	0.029	0.104	0.059	0.065
	Ammonia-N - 95%ile	0.14 (Good)						0.130	0.124	0.423	0.108	0.179	1.608	1.503	1.663	0.080	0.051	0.059	0.039	0.154	0.074	0.149
S.Solids	S.Solids - Annual Mean	< or = 25						2.2	1.7	2.1	1.3	8.9	5.2	4.7	7.4	6.5	17.0	5.8	7.0	8.0	22.1	5.2
	S.Solids - 95%ile	< or = 25						4.5	3.5	3.8	3.3	25.8	9.1	9.2	14.7	14.0	63.7	16.8	20.1	16.4	101.7	9.3
Total Coliform	(1 test/yr)		Bathing < or = 5,000			A3 <or =100,000		7,477	12,479	11,319	1,808	17,000	203,715	24,458	133,650	28,119	8,870	20,320	49,708	111,023	81,828	114,000
Faecal Coliform	(E.Coli) (1 test/yr)		Bathing < or = 1,000			A3 <or =40,000		1,610	2,605	1,559	354	1,388	31,215	2,330	29,523	2,647	1,634	1,340	6,285	52,515	7,109	16,410
Conductivity	Conductivity - Annual Mean					A1 <or =1,000		314	370	389	456	413	470	476	468	338	297	314	327	343	344	1,669
	Conductivity - 95%ile					Tidal		337	410	431	496	459	515	526	523	376	326	345	372	390	377	7,204