Annual Environmental Report 2019



Killybegs

D0011-01

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7.1 AMBIENT MONITORING SUMMARY

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2019 AER

This Annual Environmental Report has been prepared for D0011-01, Killybegs, in Donegal 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.

There were no major capital or operational changes undertaken.

1.2 TREATMENT SUMMARY

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

• KILLYBEGS WWTP with a Plant Capacity PE of 4200, the treatment type is 2 - Secondary treatment

1.3 ELV OVERVIEW

SW100 is the discharge point reference for the municipal discharge. SW001 is the combined discharge between the treated municipal and industrial discharge (SW99) located at the outfall in the sea. 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
TPEFF0600D0011SW100	KILLYBEGS WWTP	Municipal discharge	Compliant	N/A

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 KILLYBEGS WWTP - COMBINED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - KILLYBEGS WWTP

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	26	8.86	3.16
COD-Cr mg/I	26	1228	229.53
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	26	275	89.91
Total Nitrogen mg/l	26	60.9	23
Suspended Solids mg/l	26	228	73.03
Hydraulic Capacity	N/A	5404	1169

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 greater than the peak Treatment Plant Capacity. Further details on the plant capacity and efficiency can be found under the sectional 'Operational Performance Summary'.

2.1.2 EFFLUENT MONITORING SUMMARY - TPEFF0600D0011SW100

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)
Temperature °C	25	25	0	26	0	0	4.96	Pass
Ammonia-Total (as N) mg/l	0	0	0	26	0	0	0.27	
ortho-Phosphate (as P) - unspecified mg/l	0	0	0	26	0	0	1.61	
Total Phosphorus (as P) mg/l	0	0	0	26	0	0	1.64	
pH (pH units)	6-9	9	0	26	0	0	7.11	Pass
Suspended Solids mg/l	35	35	0	26	0	0	3.19	Pass
Total Nitrogen mg/l	0	0	0	26	0	0	2.05	
COD-Cr mg/l	125	125	0	26	0	0	21.15	Pass
Nitrite (as N) mg/l	0	0	0	26	0	0	0.44	
Dissolved Inorganic Nitrogen (as N) mg/l	0	0	0	26	0	0	2.26	
Nitrate (as N) mg/l	0	0	0	26	0	0	2.05	

BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	25	25	0	26	30	30	1.15	Pass	
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1 – This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied 2 – For pH the WWDA specifies a range of pH6 - 9

Cause of Exceedance(s):

Not applicable

Significance of Results:

The WWTP is compliant with the ELV's set in the Wastewater Discharge Licence.

2.1.3 EFFLUENT MONITORING SUMMARY - COMBINED - TPEFF0600D0011SW001

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	N/A	N/A	N/A	26	N/A	N/A	810	
Suspended Solids mg/l	N/A	N/A	N/A	26	N/A	N/A	205	
Nitrate (as N) mg/l	N/A	N/A	N/A	26	N/A	N/A	2.15	
Total Nitrogen mg/l	N/A	N/A	N/A	26	N/A	N/A	88.17	
Temperature °C	25	N/A	N/A	26	N/A	N/A	7.33	Pass

Total Phosphorus (as P) mg/l	N/A	N/A	N/A	26	N/A	N/A	15.84	
Nitrite (as N) mg/l	(as N) mg/I N/A N/A N/A		N/A	26	N/A	N/A	1.61	
pH (pH units)	6-9	N/A	N/A	26	N/A	N/A	7.05	Pass
Conductivity 20 C µS/cm	N/A	N/A	N/A	26	N/A	N/A	9203.34	
ortho-Phosphate (as P) - unspecified mg/l	N/A	N/A	N/A	26	N/A	N/A	10.89	
Ammonia-Total (as N) Kg/h	25.2	30.24	0	26	0	0	2.55	Pass
Dissolved Inorganic Nitrogen (as N) Kg/h	27.15	32.5	0	26	0	0	2.87	Pass
BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	675	1350	0	26	0	0	39.63	Pass

Cause of Exceedance(s):

Not applicable

Significance of Results:

The WWTP is compliant with the ELV's set in the Wastewater Discharge Licence.

^{1 –} This represents the Emission Limit Values after the Interpretation provided for under Condition 2 of the licence is applied 2 – For parameters where a mean ELV applies 3 – For pH the WWDA specifies a range of pH6-9

2.1.4 AMBIENT MONITORING SUMMARY FOR THE COMBINED DISCHARGE TPEFF0600D0011SW100

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 compliant with the ELV's set in the wastewater discharge licence.

The ambient monitoring results meet the required EQS.

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.

2.1.5 OPERATIONAL PERFORMANCE SUMMARY - KILLYBEGS WWTP

2.1.5.1 Treatment Efficiency Report - KILLYBEGS WWTP

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)		
cBOD	2549	24	99		
ТР	90	41	54		
TN	652	113	83		
COD	6509	496	92		
SS	2071	78	96		

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

2.1.5.2 Treatment Capacity Report Summary - KILLYBEGS WWTP

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.

KILLYBEGS WWTP						
Peak Hydraulic Capacity (m³/day) - As Constructed						
DWF to the Treatment Plant (m³/day)						
Current Hydraulic Loading - annual max (m³/day)	5404					
Average Hydraulic loading to the Treatment Plant (m³/day)						
Organic Capacity (PE) - As Constructed						
Organic Capacity (PE) - Collected Load (peak week)Note1	2252					
Organic Capacity (PE) - Remaining						
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.

2.1.6 SLUDGE / OTHER INPUTS - KILLYBEGS WWTP

'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	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		
1	Blocked Sewer	0	1		

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	ent Type Cause No. of incident occurrences		Recurring (Y/N)	Closed (Y/N)				
There were no reportable i	incidents in 20	19.						

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2019	0
Number of Incidents reported to the EPA via EDEN in 2019	0
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 2019 (No. of events)	Total volume discharged in 2019 (m3)	Monitoring Status
SW002	171767, 375722	Yes	Low	Meeting	Unknown	Unknown	Not Monitored
SW006	171346, 376461	No	Low	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
The SWO Assessment included the requirements of relevant of WWDL schedules?	Yes
Have the EPA been advised of any additional SWOs / changes to Schedule C3 and A4 under Condition 1.7?	N/A

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
D0011-SIP:06	Discharge to be discontinued: SW5 Manhole 3903	А	31/12/2011	Yes	Works Completed		
D0011-SIP:07	Elimination of all other SWOs on the collection network	С	31/12/2011	Yes	Works Completed		
D0011-SIP:09	New main pumping station (industrial & storm overflow pumping plant)	С	31/12/2010	Yes	Works Completed		
D0011-SIP:11	Provision of new storm water overflow (SW8) from main new pumping station in accordance with DoE SWO criteria	С	31/12/2010	Yes	Works Completed		
D0011-SIP:12	Separate industrial sewer network, including twin industrial rising mains & land based gravity outfall	С	31/12/2010	Yes	Works Completed		

	SW6 (pump station No.1, St					
D0011-SIP:13	Catherine's Road) to operate as an emergency overflow only	Α	31/12/2011	Yes	Works Completed	
D0011-SIP:01	Discharge to be discontinued: SW4 Manhole 2106	Α	31/12/2011	Yes	Works Completed	
D0011-SIP:02	Discharge to be discontinued: SW6 pump station No.1, St Catherine's Road	А	31/12/2011	Yes	Works Completed	
D0011-SIP:03	Discharge to be discontinued: SW7 Pump station No.2, Shore Road	А	31/12/2011	Yes	Works Completed	
D0011-SIP:04	Discharge to be discontinued: SW1 Rough Point (new harbour development)	А	31/12/2011	Yes	Works Completed	
D0011-SIP:05	Discharge to be discontinued: SW3 Manhole 6605	А	31/12/2011	Yes	Works Completed	
D0011-SIP:08	Municipal WWTP and ancillary work	С	31/12/2011	Yes	Works Completed	
D0011-SIP:10	New marine outfall at Killybegs outer harbour	С	31/12/2010	Yes	Works Completed	
D0011-SIP:14	Upgrade existing sewage collection network	С	31/12/2011	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 Improvem	ents 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	2015	No	
Toxicity of Final Effluent	Yes	2014	No	

5.1 PRIORITY SUBSTANCES ASSESSMENT

The Priority Substances Assessment Report has been included in the AER 2015

5.2 TOXICITY OF FINAL EFFLUENT

The Toxicity of Final Effluent Report has been included in the AER 2014

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: 21/07/2020

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

Entity	Category	монтн	Location	Lab Ref	Date	Ammonia (as N)	BOD	Chlorophyll	COD	Dissolved Inorganic Nitrogen (as N)	Dissolved Oxygen % Saturation	E coli	Intestinal Enterococci	Faecal Coliforms (E. coli)	Orthoph osphate	pН	Suspended Solids	Temperature	Total Nitrogen N	Salinity	Total Oxidised Nitrogen N
Donegal Bay	Coastal Water Body Coastal Water Body	January January	Killybegs - Asw-2 (Sea 1) Killybegs - Asw-2 (Sea 2)	192500018 192500019		<0.01	<1	2.1297 4.21	NT NT	<0.1 <0.1	99.8	NT NT	NT NT	NT NT	0.02	NT NT	NT NT	9.9	NT NT	NT NT	NT NT
	Coastal Water Body Coastal Water Body Coastal Water Body	January January January	Killybegs - Asw-2 (Sea 3) Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Sea 5)	192500020 192500021 192500022	22-Jan-19 22-Jan-19 22-Jan-19	<0.01 <0.01 <0.01	<1	4.21 2.81 3.13	NT NT	<0.1 <0.1 <0.1	100.6 101.5 102.1	NT NT NT	NT NT NT	NT NT NT	0.02 0.02 0.02	NT NT	NT NT NT	9.9 9.9 9.9	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	January January	Killybegs - Asw-2 (Sea 6) Killybegs - Asw-2 (Shore 1)	192500023 192500024	22-Jan-19 22-Jan-19	<0.01	<1	1.75	NT NT	<0.1	101.5	NT NT	NT NT	NT NT	0.02	NT NT	NT NT	9.9	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	January January	Killybegs - Asw-2 (Shore 2) Killybegs - Asw-2 (Shore 3)	192500025 192500026	22-Jan-19 22-Jan-19	<0.01 0.05	<1	3.29 5.64	NT NT	<0.1 <0.1	99.6 99.1	NT NT	NT NT	NT NT	0.03	NT NT	NT NT	9.9 9.9	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	January	Killybegs - Asw-8 (1)	192500027 192500028 192500029	22-Jan-19 29-Jan-19 29-Jan-19	0.01 0.24 0.163	<1	4.31 30.62 40.83	NT NT	<0.1 0.24 0.16	99.5 96.5 93.4	NT NT	NT NT NT	NT NT NT	0.06	NT NT	NT NT NT	9.9 9.9 9.9	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	January February February	Killybegs - Asw-8 (2) Killybegs - Asw-2 (Sea 1) Killybegs - Asw-2 (Sea 2)	192500029 192500410 192500411	13-Feb-19 13-Feb-19	<0.01 <0.01	<1	40.83 6.15 4.63	NT NT	<0.1 <0.1	104.6 105.2	NT NT	NT NT	NT NT	<0.01 <0.01	NT NT	NT NT	8.9 8.9	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	February February	Killybegs - Asw-2 (Sea 3) Killybegs - Asw-2 (Sea 4)	192500412 192500413	13-Feb-19 13-Feb-19	<0.01 <0.01	<1	6.56 6.76	NT NT	<0.1 <0.1	104.1 103.5	NT NT	NT NT	NT NT	<0.01 <0.01	NT NT	NT NT	8.9 8.9	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	February February	Killybegs - Asw-2 (Sea 5) Killybegs - Asw-2 (Sea 6)	192500414 192500415	13-Feb-19 13-Feb-19	<0.01 <0.01	<1	4.46 5.57	NT NT	<0.1 <0.1	103.8 104.2	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	8.9 8.9	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	February February February	Killybegs - Asw-2 (Shore 1) Killybegs - Asw-2 (Shore 2) Killybegs - Asw-2 (Shore 3)	192500416 192500417 192500418	13-Feb-19 13-Feb-19 13-Feb-19	<0.01 <0.01 <0.01	<1	4.62 7.65 4.82	NT NT	<0.1 <0.1 <0.1	104.4 104.5 104.9	NT NT	NT NT NT	NT NT	<0.01 <0.01 <0.01	NT NT	NT NT NT	8.9 8.9 8.9	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	February February	Killybegs - Asw-2 (Shore 4) Killybegs - Asw-8 (1)	192500419 192500420	13-Feb-19 15-Feb-19	<0.01	3	6.08	NT NT	<0.1 0.16	105.8 96.3	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	8.9 8.9	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	February March	Killybegs - Asw-8 (2) Killybegs - Asw-2 (Sea 1)	192500421 192500816	15-Feb-19 05-Mar-19	0.12 0.02	2 <1	3.27 3.4	NT NT	0.12 <0.1	99.6 101.1	NT NT	NT NT	NT NT	0.01	NT NT	NT NT	8.9 10.1	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	March March	Killybegs - Asw-2 (Sea 2) Killybegs - Asw-2 (Sea 3)	192500817 192500818 192500819	05-Mar-19 05-Mar-19 05-Mar-19	0.02 0.01 0.02	<1	4.6 5.57	NT NT	<0.1 <0.1 <0.1	101.1 101.4 102.9	NT <1 <1	NT <1	NT <1 <1	< 0.01	NT NT	NT NT	10.1 10.1 10.1	NT NT	NT NT	NT NT
	Coastal Water Body Coastal Water Body Coastal Water Body	March March March	Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Sea 5) Killybegs - Asw-2 (Sea 6)	192500819 192500820 192500821	05-Mar-19 05-Mar-19	0.02 0.02 0.01	<1	4.15 5.14 3.66	NT NT	<0.1 <0.1 <0.1	103.3 104.2	NT NT	<1 NT NT	NT NT	< 0.01	NT NT	NT NT NT	10.1 10.1 10.1	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	March March	Killybegs - Asw-2 (Shore 1) Killybegs - Asw-2 (Shore 2)	192500822 192500823	05-Mar-19 05-Mar-19	0.16 0.01	<1	6.93 7.75	NT NT	<0.1 <0.1	97.3 100.5	5	5	<1	0.03	NT NT	NT NT	10.1	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	March March	Killybegs - Asw-2 (Shore 3) Killybegs - Asw-2 (Shore 4)	192500824 192500825	05-Mar-19 05-Mar-19	0.08 0.02	1 <1	6.78 4.05	NT NT	<0.1 <0.1	92.8 99.4	<1 5	<1 5	<1	< 0.01	NT NT	NT NT	10.1 10.1	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	March March	Killybegs - Asw-8 (1) Killybegs - Asw-8 (2)	192500826 192500827	20-Mar-19 20-Mar-19	0.23	30	48.85 13.87	NT	0.37	78.5 97.8	85 5	85 5	160 <1	0.03	NT	NT NT	9.8	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	April April April	Killybegs - Asw-2 (Sea 1) Killybegs - Asw-2 (Sea 2) Killybegs - Asw-2 (Sea 3)	192501412 192501413 192501414	16-Apr-19 16-Apr-19 16-Apr-19	<0.01 0.06 0.03	<1 <1	7.53 8.77 9.86	NT NT	<0.1 <0.1 <0.1	106.3 105.6 105.6	NT NT	NT NT NT	NT NT NT		NT NT	NT NT NT	8 8 8	NT NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	April April	Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Sea 5)	192501415 192501416	16-Apr-19 16-Apr-19	0.04	<1	7.98 8.27	NT NT	<0.1 <0.1	107.2 108.2	NT NT	NT NT	NT NT	<0.01 <0.01	NT NT	NT NT	8	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	April April	Killybegs - Asw-2 (Sea 6) Killybegs - Asw-2 (Shore 1)	192501417 192501418	16-Apr-19	0.01	<1	8.76 6.98	NT NT	<0.1 0.17	111.7 102.2	NT NT	NT NT	NT NT	0.02	NT NT	NT NT	8	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	April April April	Killybegs - Asw-2 (Shore 2) Killybegs - Asw-2 (Shore 3) Killybegs - Asw-2 (Shore 4)	192501419 192501420 192501421	16-Apr-19 16-Apr-19 16-Apr-19	<0.01 0.15 0.12	<1	8.39 5.16 6.33	NT NT	<0.1 0.15 0.12	105.8 99.5 102.9	NT NT	NT NT NT	NT NT		NT NT	NT NT NT	8 8 8	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	April April	Killybegs - Asw-8 (1) Killybegs - Asw-8 (2)	192501422 192501423		0.3	2	14.19 10.35	NT NT	0.42	91.1 87.2	NT NT	NT NT	NT NT	0.01	NT NT	NT NT	8.4 8.2	NT NT	NT NT	NT NT
	Coastal Water Body Coastal Water Body	April April	Killybegs - Asw-8 (1) Killybegs - Asw-8 (2)	192502054 192502055	18-Jun-19 18-Jun-19	NT NT	3	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT		NT NT	NT NT	12.2 12.2	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	May	Killybegs - Asw-2 (Sea 1) Killybegs - Asw-2 (Sea 2)	192501791 192501792	14-May-19 14-May-19	<0.01	<1	5.72	NT	<0.1	112.9 107.1	NT	NT NT	NT NT		NT	NT NT	13	NT NT	NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	May May May	Killybegs - Asw-2 (Sea 3) Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Sea 5)	192501793 192501794 192501795	14-May-19 14-May-19 14-May-19	<0.01 <0.01 <0.01	<1	8.81 6.86 6.93	NT NT	<0.1 <0.1 <0.1	106.2 106.1 106.4	NT NT	NT NT NT	NT NT NT	0.04	NT NT	NT NT NT	13 13 13	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	May	Killybegs - Asw-2 (Sea 6) Killybegs - Asw-2 (Shore 1)	192501796 192501797	14-May-19 14-May-19	<0.01	<1	6.42	NT NT	<0.1	108.3	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	13	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	May May	Killybegs - Asw-2 (Shore 2) Killybegs - Asw-2 (Shore 3)	192501798 192501799	14-May-19 14-May-19	<0.01 <0.01	<1	8.29 38.05	NT NT	<0.1 <0.1	112.1 114.9	NT NT	NT NT	NT NT	<0.01 <0.01	NT NT	NT NT	13 13	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	May	Killybegs - Asw-2 (Shore 4) Killybegs - Asw-8 (1)	192501800	14-May-19 21-May-19	<0.01	<1 2	33.72 14.65	NT	<0.1	110	NT NT	NT NT	NT NT	< 0.01	NT	NT NT	13	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	June June	Killybegs - Asw-8 (2) Killybegs - Asw-2 (Sea 1) Killybegs - Asw-2 (Sea 2)	192501802 192502044 192502045	21-May-19 11-Jun-19 11-Jun-19	<0.01 <0.01 <0.01	2	15.27 8.04 7.92	NT NT	<0.1 <0.1 <0.1	117.9 101.2 98.9	NT NT	NT NT NT	NT NT NT		NT NT	NT NT NT	13.7 12 12	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	June June	Killybegs - Asw-2 (Sea 3) Killybegs - Asw-2 (Sea 4)	192502046 192502047	11-Jun-19 11-Jun-19	<0.01 <0.01	1 2	6.51 8.82	NT NT	<0.1 <0.1	99.9 99.7	5 <1	<1	5 <1	< 0.01	NT NT	NT NT	12	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	June June	Killybegs - Asw-2 (Sea 5) Killybegs - Asw-2 (Sea 6)	192502048 192502049	11-Jun-19 11-Jun-19	<0.01	2	8.09 6.85	NT NT	<0.1 <0.1	99.5 99.6	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	12 12	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	June June June	Killybegs - Asw-2 (Shore 1) Killybegs - Asw-2 (Shore 2)	192502050 192502051 192502052	11-Jun-19 11-Jun-19 11-Jun-19	<0.01 <0.01 <0.01	2 2	8.01 6.93 7.56	NT NT	<0.1 <0.1	99.8 98.4 99.4	10 <1 <1	15 <1	10 <1 <1		NT NT	NT NT	12 12 12	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	June June	Killybegs - Asw-2 (Shore 3) Killybegs - Asw-2 (Shore 4) Killybegs - Asw-8 (1)	192502053 192502054	11-Jun-19 11-Jun-19 18-Jun-19	<0.01	1 3	8.04 36.99	NT NT	<0.1	100.4	<1 365	5 205	<1 365	< 0.01	NT NT	NT NT	12	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	June July	Killybegs - Asw-8 (2) Killybegs - Asw-2 (Sea 1)	192502055 192502675	18-Jun-19 16-Jul-19	0.02 <0.01	1 <1	8.62 6.15	NT NT	<0.1 <0.1	101.8 108.5	65 NT	15 NT	65 NT	0.01 <0.01	NT NT	NT NT	12.2 17.5	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	July July	Killybegs - Asw-2 (Sea 2) Killybegs - Asw-2 (Sea 3)	192502676 192502677		<0.01	<1	6.83 5.35	NT	<0.1	109	NT	NT NT	NT NT		NT	NT NT	17.5 17.5	NT NT	NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	July July July	Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Sea 5) Killybegs - Asw-2 (Sea 6)	192502678 192502679 192502680	16-Jul-19 16-Jul-19 16-Jul-19	<0.01 0.011 <0.01	1 <1	5.67 6.64 6.86	NT NT	<0.1 <0.1 <0.1	107.9 109 108	NT NT	NT NT NT	NT NT		NT NT	NT NT NT	17.5 17.5 17.5	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	July	Killybegs - Asw-2 (Shore 1) Killybegs - Asw-2 (Shore 2)	192502681 192502682	16-Jul-19	<0.01	<1	11.21 10.85	NT NT	<0.1	110.7 108.6	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	17.5 17.5	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	July July	Killybegs - Asw-2 (Shore 3) Killybegs - Asw-2 (Shore 4)	192502683 192502684	16-Jul-19 16-Jul-19	0.014 <0.01	2 <1	11.01 7.5	NT NT	<0.1 <0.1	111.4 109.1	NT NT	NT NT	NT NT	<0.01	NT NT	NT NT	17.5 17.5	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	July	Killybegs - Asw-8 (1) Killybegs - Asw-8 (2)	192502685 192502686	02-Jul-19 02-Jul-19	<0.01	1	10.89	NT	<0.1	102.5	NT NT	NT NT	NT NT	< 0.01	NT	NT NT	17.1	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	August August August	Killybegs - Asw-2 (Sea 1) Killybegs - Asw-2 (Sea 2) Killybegs - Asw-2 (Sea 3)	192503207 192503208 192503209	13-Aug-19 13-Aug-19 13-Aug-19	<0.01 <0.01 <0.01	<1 <1	9.9 13.78 18.89	NT NT	<0.1 <0.1 <0.1	96.6 96.6 99.3	NT NT	NT NT NT	NT NT NT	<0.01 <0.01 <0.01	NT NT	NT NT NT	16.5 16.5 16.5	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	August August	Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Sea 5)	192503210 192503211	13-Aug-19	<0.01 <0.01	<1	12.18 10.03	NT NT	<0.1 <0.1	97.6 97	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	16.5 16.5	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	August August	Killybegs - Asw-2 (Sea 6) Killybegs - Asw-2 (Shore 1)	192503212 192503213	13-Aug-19 13-Aug-19	<0.01 0.01	<1	13.46 48.86	NT NT	<0.1 <0.1	97.4 97	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	16.5 16.5	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	August August	Killybegs - Asw-2 (Shore 2) Killybegs - Asw-2 (Shore 3) Killybegs - Asw-2 (Shore 4)	192503214 192503215 192503216	13-Aug-19 13-Aug-19 13-Aug-19	<0.01 <0.01 <0.01	<1 <1	18.35 11.65 10.46	NT NT	<0.1 <0.1 <0.1	96.9 95.9 97.7	NT NT	NT NT NT	NT NT	< 0.01	NT NT	NT NT	16.5 16.5 16.5	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	August August August	Killybegs - Asw-8 (1) Killybegs - Asw-8 (2)	192503217 192503218	26-Aug-19 26-Aug-19	0.01	2	10.33	NT NT	<0.1	98.3 98.7	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	17.4 16.6	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	September September	Killybegs - Asw-2 (Sea 1) Killybegs - Asw-2 (Sea 2)	192503640 192503641	10-Sep-19 10-Sep-19	<0.01 <0.01	<1	8.61 17.94	NT NT	<0.1 <0.1	97.2 97.3	NT NT	NT NT	NT NT	<0.01 <0.01	NT NT	NT NT	15 15	NT NT	NT NT	NT NT
Donegal Bay		September September	Killybegs - Asw-2 (Sea 3) Killybegs - Asw-2 (Sea 4)	192503642 192503643		<0.01	<1	17.58 20.84	NT NT	<0.1	97.9 97.6	10 5	<1 5 NT	<1 <1	< 0.01		NT NT	15 15	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	September September September	Killybegs - Asw-2 (Sea 5) Killybegs - Asw-2 (Sea 6) Killybegs - Asw-2 (Shore 1)	192503644 192503645 192503646	10-Sep-19	<0.01 <0.01 0.01	<1	13.39 16.27 19.27	NT NT	<0.1 <0.1 <0.1	97.7 98.7 97.6	NT NT 20	NT NT 20	NT NT 10	<0.01	NT NT	NT NT NT	15 15 15	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body	September September	Killybegs - Asw-2 (Shore 2) Killybegs - Asw-2 (Shore 3)	192503647 192503648	10-Sep-19	0.01	<1	16.59 15.63	NT NT	<0.1 <0.1	96.8 93.9	5 15	5 15	5 <1	<0.01 <0.01	NT NT	NT NT	15 15	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	September September	Killybegs - Asw-2 (Shore 4) Killybegs - Asw-8 (1)	192503649 192503650	10-Sep-19 23-Sep-19	0.01	<1 1	15.04 11.94	NT NT	<0.1 <0.1	95.3 99.2	10	10 <1	<1	<0.01 <0.01	NT NT	NT NT	15 15.6	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	October October	Killybegs - Asw-8 (2) Killybegs - Asw-2 (Sea 1)	192503651 192504221	23-Sep-19 22-Oct-19	0.04	1	15.96 8.42	NT NT	<0.1	98.4 87.1	NT NT	10 NT	20 NT	< 0.01	NT NT	NT NT	15.5 11.7	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	October October October	Killybegs - Asw-2 (Sea 2) Killybegs - Asw-2 (Sea 3) Killybegs - Asw-2 (Sea 4)	192504222 192504223 192504224	22-Oct-19	0.01 <0.01 0.01	<1	7.08 8.7 8.96	NT NT	<0.1 <0.1 <0.1	86.7 87.9 87	NT NT	NT NT NT	NT NT NT		NT NT	NT NT NT	11.7 11.7 11.7	NT NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	October October	Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Sea 5) Killybegs - Asw-2 (Sea 6)	192504225 192504226		<0.01 <0.01	1 <1	9.9 8.11	NT NT	<0.1 <0.1	89.3 89.4	NT NT	NT NT	NT NT	< 0.01	NT NT	NT NT	11.7	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	October October	Killybegs - Asw-2 (Shore 1) Killybegs - Asw-2 (Shore 2)	192504227 192504228	22-Oct-19 22-Oct-19	<0.01 <0.01	1 <1	12.63 8.79	NT NT	<0.1 <0.1	87.8 87.7	NT NT	NT NT	NT NT	<0.01 <0.01	NT NT	NT NT	11.7 11.7	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body	October October	Killybegs - Asw-2 (Shore 3) Killybegs - Asw-2 (Shore 4)	192504229 192504230		<0.01 0.01	<1	7.99 3.9	NT NT	<0.1	86.5 86.2	NT NT	NT NT	NT NT		NT NT	NT NT	11.7 11.7	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	October October November	Killybegs - Asw-8 (1) Killybegs - Asw-8 (2) Killybegs -Asw-2 (Sea 3)	192504231 192504232 192504646	17-Oct-19	0.05 0.03 NT	1 1 NT	31.96 34.88 NT	NT NT	<0.1 <0.1 NT	99.7 99.1 NT	NT NT <1	NT NT <1	NT NT <1	< 0.01	NT NT	NT NT	11.6 11.3 NT	NT NT	NT NT	NT NT
Donegal Bay	Coastal Water Body Coastal Water Body Coastal Water Body	November November	Killybegs - Asw-2 (Sea 4) Killybegs - Asw-2 (Shore 1)	192504647 192504650	19-Nov-19 19-Nov-19	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT	<1 <1 5	<1	<1 <1 5	NT	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	November November	Killybegs - Asw-2 (Shore 2) Killybegs - Asw-2 (Shore 3)	192504651 192504652	19-Nov-19 19-Nov-19	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT	5 <1	<1 <1	5 <1	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT
Donegal Bay Donegal Bay	Coastal Water Body Coastal Water Body	November November	Killybegs - Asw-2 (Shore 4) Killybegs - Asw-8 (1)	192504653 192504654		NT NT	NT NT	NT NT	NT NT	NT NT	NT NT	5	<1 <1	5	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT	NT NT
	Coastal Water Body	November	Killybegs - Asw-8 (2)	192504655	19-Nov-19	NT	NT	NT	NT	NT	NT	<1	10	<1	NT	NT	NT	NT	NT	NT	NT