Annual Environmental Report

2021

Kinsale

D0132-01

CONTENTS

7.1 AMBIENT MONITORING SUMMARY

1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2021 AER

This Annual Environmental Report has been prepared for D0132-01, Kinsale, 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.

1.2 TREATMENT SUMMARY

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

- KINSALE WWTP with a Plant Capacity PE of 12500,* the treatment type is 3NP - Tertiary N&P removal

Plant Capacity PE was increased in 2021 based on a review by Irish Water Asset Planning.

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
TPEFF0500D0132SW001	KINSALE WWTP	Treated	Non-Compliant	Ammonia-Total (as N) mg/l BOD, 5 days with Inhibition (Carbonaceo mg/l COD-Cr mg/l ortho-Phosphate (as P) - unspecified mg/l Suspended Solids mg/l

1.4 LICENCE SPECIFIC REPORTING

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

2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

2.1 KINSALE WWTP - TREATED DISCHARGE

2.1.1 INFLUENT MONITORING SUMMARY - KINSALE 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
COD-Cr mg/l	8	1466	608
ortho-Phosphate (as P) - unspecified mg/l	7	1.43	0.916
Ammonia-Total (as N) mg/l	3	36	19
Suspended Solids mg/l	8	394	132
BOD, 5 days with Inhibition (Carbonaceo mg/l	8	178	90
Hydraulic Capacity	N/A	10140	3513

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 - TPEFF0500D0132SW001

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 exceedances with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
COD-Cr mg/l	125	250	N/A	16	5	3	230	Fail
Suspended Solids mg/l	35	87.5	N/A	16	2	2	62	Fail
BOD, 5 days with Inhibition (Carbonaceo mg/l	20	40	N/A	14	2	2	31	Fail
Total Oxidised Nitrogen (as N) mg/l	10	12	N/A	14	N/A	N/A	1.21	Pass
pH pH units	9.00	9.00	N/A	16	N/A	N/A	7.51	Pass
Ammonia-Total (as N) mg/l	5.00	6.00	N/A	15	10	8	5.31	Fail
ortho-Phosphate (as P) - unspecified mg/l	1.00	1.20	N/A	16	4	4	0.658	Fail
Benzo(g,h,i)perylene µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
1,2-Dichloroethane µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Faecal coliforms no./100mls	N/A	N/A	N/A	12	N/A	N/A	1627	

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 exceedances with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Hexachlorobenzene µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Enterococci (Intestinal) no./100mls	N/A	N/A	N/A	12	N/A	N/A	3654	
gamma-BHC / HCH (Lindane) µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Lead - unspecified µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Beta-BHC /Beta-HCH µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	
Tetrachloroethylene µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Trichlorobenzene (all isomers) µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Benzo(b)fluoranthene µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
alpha BHC / Alpha-HCH µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
E. Coli no./100mls	N/A	N/A	N/A	12	N/A	N/A	4668	
Benzo(k)fluoranthene µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	

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 exceedances with Condition 2 Interpretation included	Annual Mean	Overall Compliance (Pass/Fail)
Chloride mg/l	N/A	N/A	N/A	4	N/A	N/A	8081	
Benzo(a)pyrene µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Isodrin µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Total Phosphorus (as P) mg/l	N/A	N/A	N/A	16	N/A	N/A	0.880	
Trichloroethene (all isomers) µg/l	N/A	N/A	N/A	2	N/A	N/A	N/A	
Total Nitrogen mg/l	N/A	N/A	N/A	16	N/A	N/A	9.78	
Sum 3_IWW: HCHs µg/l	N/A	N/A	N/A	1	N/A	N/A	N/A	

Notes:
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 pH 6 - 9

Cause of Exceedance(s):

WwTP biological stage not operating at capacity, investigations into source of issue have commenced.

Significance of Results:

The WWTP is not 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 TPEFF0500D0132SW001

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 Ecological Status
Downstream	163204, 49049	TW05003167BN2007	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 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.

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

2.1.4 OPERATIONAL PERFORMANCE SUMMARY - KINSALE WWTP

2.1.4.1 Treatment Efficiency Report - KINSALE 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)
TN	N/A	13258	N/A
TP	N/A	1194	N/A
COD	786256	311730	60
cBOD	116835	43059	63
SS	170919	84405	51

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

2.1.4.2 Treatment Capacity Report Summary - KINSALE 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.

KINSALE WWTP	
Peak Hydraulic Capacity (m^3/day) - As Constructed	6615
DWF to the Treatment Plant (m^3/day)	2205
Current Hydraulic Loading - annual max (m^3/day)	10140
Average Hydraulic loading to the Treatment Plant (m^3/day)	3513
Organic Capacity (PE) - As Constructed	12500
Organic Capacity (PE) - Collected Load (peak week)[Note1]	9005
Organic Capacity (PE) - Remaining	3495

KINSALE WWTP	
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 - KINSALE 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 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 related to the discharge(s) to water from the WWTP and network is included below.

Number of Complaints	Nature of Complaint	Number Open Complaints	Number Closed Complaints
There were no relevant environmental complaints in 2021.			

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)
Abatement Equipment offline	Plant or equipment maintenance at WWTP	1	No	Yes
Breach of ELV	Shock load to the WWTP	1	Yes	No
Breach of ELV	Inadequate Operational Procedures / Training	1	No	Yes

Incident Type	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Other	WWTP biological sludge issue	1	No	No

3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2021	4
Number of Incidents reported to the EPA via EDEN in 2021	4
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 (chamber) where applicable	Irish Grid Ref. (outfall)	Included in Schedule of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2021 (No. of events)	Total volume discharged in 2021 (m3)	Monitoring Status
TBC	164168, 50069	No	Low	Meeting	Unknown	Unknown	Not Monitored
TBC	163040, 49566	No	Low	Meeting	Unknown	Unknown	Monitored
TBC	164249, 49705	No	Low	Meeting	Unknown	Unknown	Not Monitored
TBC	164234, 49812	No	Medium	Not Meeting	Unknown	Unknown	Monitored
SW003	164251, 50249	Yes	Low	Meeting	Unknown	Unknown	Not Monitored
SW004	164253, 50250	Yes	Low	Meeting	Unknown	Unknown	Not Monitored

WWDL Name / Code for Storm Water Overflow (chamber) where applicable	Irish Grid Ref. (outfall)	Included in Schedule of the WWDL	Significance of the overflow(High / Medium / Low)	Assessed against DoEHLG Criteria	No. of times activated in 2021 (No. of events)	Total volume discharged in 2021 (m3)	Monitoring Status
SW2	165479, 49762	Yes	Low	Meeting	Unknown	Unknown	Not Monitored
SW6	164237, 49704	Yes	Low	Meeting	Unknown	Unknown	Not Monitored

Any TBC SWO(s) were identified as part of the on-going National SWO programme and will be updated in subsequent AER(s) once the information is confirmed.

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?	No
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?	Yes

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 a 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
There are no Specified Improvement Programmes for this Agglomeration.							

A summary of the status of any other improvements identified by under Condition 5 assessments- is included below.

4.2.2 IMPROVEMENT PROGRAMME SUMMARY

Improvement Identifier	Improvement Description / or any Operational Improvements	Improvement Source	Expected Completion Date	Comments
No additional improvements planned at this time.				

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 Tables 4.2.1 and 4.2.2.

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 a list of the various reports required for this agglomeration and a brief summary of their recommendations.

Licence Specific Report	Required by licence	Year included in AER	Included in this AER
Priority Substances Assessment	Yes	2015	No

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
Has a Technical amendment/licence review application been submitted to the Agency by IW?	Yes
List reason e.g. additional SWO identified	To include additional SWOs identified
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?	Yes
Are all outstanding reports and assessments from previous AERs included as an appendix to this AER	N/A

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

Date: 28/04/2022

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

Ambeint Monitoring Results & Data

			Designations					cBOD	o-Phosphate (as P)	Ammonia (as N)
Ambient monitoring point/Coastal Monitoring Code	Irish Grid Reference	Bathing Water	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Status	Results	Results	Results
Upstream Monitoring Point	161854.74, 50048.75	TW05003167BN2006					Moderate	1.28	0.0158	0.038
Downstream Monitoring Point	163204.61, 49048.98	TW05003167BN2007	No	No	Yes	No	Moderate	1.16	0.0123	0.0324
Difference								-0.12	-0.0035	-0.0056
EQS								4	0.04	N/A
% of EQS								-3	-8.75	

Upstream Monitoring

WaterbodyName	WaterbodyCode	MonitoringStationCod	MonitoringS	SampleDate	SampleMe	ParameterNa	ParameterUn	Parameter	Result	TextResult	ResultStrir	LimitOfDe	ReportRes	ReportTex	ReportRes	ReportLimit
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.015		OK	0.01	0.015		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.014		OK	0.01	0.014		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.055		OK	0.01	0.055		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.046		OK	0.01	0.046		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.03		OK	0.01	0.03		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.042		OK	0.01	0.042		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.062		OK	0.01	0.062		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams	1.4		OK	1	1.4		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams	1.1		OK	1	1.1		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	BOD - 5 days	mg/l	milligrams	1.4		OK	1	1.4		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams	2		OK	1	2		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	BOD - 5 days	mg/l	milligrams per litre		<1	OK	1	0.5	<1	OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	8.4		OK	0.01	8.4		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	0.36		OK	0.01	0.36		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Depth	m	Metres	0		OK		0		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	12		OK	0.01	12		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Depth	m	Metres	0.3		OK		0.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Depth	m	Metres	0		OK		0		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Depth	m	Metres	5.5		OK		5.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Depth	m	Metres	0.3		OK		0.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Depth	m	Metres	5.8		OK		5.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Depth	m	Metres	5		OK		5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Depth	m	Metres	4.5		OK		4.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	103		OK	1	103		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentag	102		OK	1	102		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentag	86		OK	1	86		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	ortho-Phosp	mg/l	milligrams	0.03		OK	0.005	0.03		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	ortho-Phosp	mg/l	milligrams per litre		<0.005	OK	0.005	0.0025	<0.005	OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	ortho-Phosp	mg/l	milligrams per litre		<0.005	OK	0.005	0.0025	<0.005	OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentag	107		OK	1	107		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	ortho-Phosp	mg/l	milligrams	0.013		OK	0.005	0.013		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	ortho-Phosp	mg/l	milligrams	0.015		OK	0.005	0.015		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	pH	pH units	pH Units	8.2		OK	2	8.2		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	pH	pH units	pH Units	8		OK	2	8		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	pH	pH units	pH Units	8		OK	2	8		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	0.28		OK	0.01	0.28		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	1.3		OK	0.01	1.3		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	1.5		OK	0.01	1.5		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Salinity	PSU	Practical sa	22.1		OK	0.1	22.1		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	ortho-Phosp	mg/l	milligrams	0.011		OK	0.005	0.011		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Salinity	PSU	Practical sa	29.6		OK	0.1	29.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	ortho-Phosp	mg/l	milligrams	0.045		OK	0.005	0.045		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Salinity	PSU	Practical sa	29		OK	0.1	29		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Salinity	PSU	Practical sa	31.6		OK	0.1	31.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	32.3		OK	0.1	32.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	pH	pH units	pH Units	8.3		OK	2	8.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	19.8		OK	0.1	19.8		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	1.8		OK	0.01	1.8		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	12.3		OK	0.1	12.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	27		OK	0.1	27		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	0.61		OK	0.1	0.61		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.18		OK	0.1	0.18		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Salinity	PSU	Practical sa	11.3		OK	0.1	11.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	2.4		OK	0.1	2.4		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	StationDepth	m	Metres	5.9		OK	0.1	5.9		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	StationDepth	m	Metres	5.6		OK	0.1	5.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	StationDepth	m	Metres	5		OK	0.1	5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	StationDepth	m	Metres	5		OK	0.1	5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	29.1		OK	0.1	29.1		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	28.7		OK	0.1	28.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Temperature	Â°C	Degrees ce	12		OK		12		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Temperature	Â°C	Degrees ce	17.4		OK		17.4		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Temperature	Â°C	Degrees ce	12.3		OK		12.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Temperature	Â°C	Degrees ce	16.3		OK		16.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Temperature	Â°C	Degrees ce	17.2		OK		17.2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Temperature	Â°C	Degrees ce	10.8		OK		10.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.37		OK	0.1	0.37		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams per litre		<0.1	OK	0.1	0.05	<0.1	OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	0.25		OK	0.1	0.25		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	1.1		OK	0.1	1.1		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	StationDepth	m	Metres	5		OK	0.1	5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	StationDepth	m	Metres	5		OK	0.1	5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.2		OK	0.01	0.2		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	1.6		OK	0.01	1.6		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.081		OK	0.01	0.081		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Temperature	Â°C	Degrees ce	17		OK		17		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Transparenc	m	Metres	0.8		OK		0.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Transparenc	m	Metres	0.8		OK		0.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Transparenc	m	Metres	1.5		OK		1.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Transparenc	m	Metres	0.5		OK		0.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.47		OK	0.01	0.47		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.55		OK	0.01	0.55		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Transparenc	m	Metres	2		OK		2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Transparenc	m	Metres	2		OK		2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Transparenc	m	Metres	0.5		OK		0.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.042		OK	0.01	0.042		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	BOD - 5 days	mg/l	milligrams	2.1		OK	1	2.1		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams per litre		<1	OK	1	0.5	<1	OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	1.7		OK	0.01	1.7		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	111		OK	1	111		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	106		OK	1	106		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	115		OK	1	115		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	86		OK	1	86		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	ortho-Phosp	mg/l	milligrams	0.0074		OK	0.005	0.0074		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	pH	pH units	pH Units	8.2		OK	2	8.2		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	pH	pH units	pH Units	8.3		OK	2	8.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Surf	pH	pH units	pH Units	7.6		OK	2	7.6		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/11/2021	TRaC Bott	pH	pH units	pH Units	7.8		OK	2	7.8		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Salinity	PSU	Practical sa	31.3		OK	0.1	31.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Salinity	PSU	Practical sa	33.3		OK	0.1	33.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Salinity	PSU	Practical sa	27.7		OK	0.1	27.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	25		OK	0.1	25		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	27.2		OK	0.1	27.2		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	0.13		OK	0.1	0.13		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	StationDepth	m	Metres	5.6		OK	0.1	5.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Surf	StationDepth	m	Metres	5.9		OK	0.1	5.9		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Temperature	Â°C	Degrees ce	13.3		OK		13.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.21		OK	0.01	0.21		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	01/07/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.051		OK	0.01	0.051		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	25/08/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.13		OK	0.01	0.13		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2006	BN080 - Whi	17/05/2021	TRaC Surf	Transparenc	m	Metres	1.5		OK		1.5		OK	

Downstream Monitoring

WaterbodyName	WaterbodyCode	MonitoringStationCod	MonitoringS	SampleDate	SampleMe	ParameterNa	ParameterU	Parameter	Result	TextResult	ResultStrir	LimitOfDe	ReportRes	ReportTex	ReportRes	ReportLimit
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Ammonia-To	mg/l	milligrams	0.044			0	0.044			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.023		OK	0.01	0.023		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Ammonia-To	mg/l	milligrams per litre			<0.035	0	0.0175	<0.035		0.035
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.014		OK	0.01	0.014		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.052		OK	0.01	0.052		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.03		OK	0.01	0.03		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.015		OK	0.01	0.015		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.012		OK	0.01	0.012		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	BOD - 5 days	mg/l	milligrams	1.7			1	1.7			1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.046		OK	0.01	0.046		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.025		OK	0.01	0.025		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.023		OK	0.01	0.023		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	Ammonia-To	mg/l	milligrams per litre			<0.035	0	0.0175	<0.035		0.035
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Ammonia-To	mg/l	milligrams	0.052			0	0.052			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams	1.1		OK	1	1.1		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	BOD - 5 days	mg/l	milligrams	1.7		OK	1	1.7		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	BOD - 5 days	mg/l	milligrams	1.4		OK	1	1.4		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams per litre		<1	OK	1	0.5	<1	OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	BOD - 5 days	mg/l	milligrams	1.4			1	1.4			1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams per litre		<1	OK	1	0.5	<1	OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	BOD - 5 days	mg/l	milligrams per litre			<1.0	1	0.5	<1.0		1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	BOD - 5 days	mg/l	milligrams	2.2			1	2.2			1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams	1.6		OK	1	1.6		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams per litre		<1	OK	1	0.5	<1	OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams	1.5		OK	1	1.5		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	BOD - 5 days	mg/l	milligrams	1.4		OK	1	1.4		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	BOD - 5 days	mg/l	milligrams per litre		<1	OK	1	0.5	<1	OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	2.9		OK	0.01	2.9		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	8.4		OK	0.01	8.4		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	1.1		OK	0.01	1.1		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Depth	m	Metres	3.1		OK		3.1		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Depth	m	Metres	0.3		OK		0.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Depth	m	Metres	0.3		OK		0.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Depth	m	Metres	0		OK		0		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Depth	m	Metres	11		OK		11		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	1.6		OK	0.01	1.6		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	5.8		OK	0.01	5.8		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Depth	m	Metres	0.3		OK		0.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Depth	m	Metres	0		OK		0		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Dissolved Ox	% Saturation	Percentag	99.1			0	99.1			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	110		OK	1	110		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Depth	m	Metres	4.4		OK		4.4		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	85		OK	1	85		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	E. Coli	no./100mls	Number per one hundred millilitres			<10	0	5	<10		10
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Depth	m	Metres	6.1		OK		6.1		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	E. Coli	no./100mls	Number pe	31			0	31			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	E. Coli	no./100mls	Number per one hundred millilitres			<10	0	5	<10		10
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Enterococci (	no./100mls	Number pe	146			0	146			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Faecal colifor	no./100mls	Number pe	63			0	63			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Faecal colifor	no./100mls	Number pe	20			0	20			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	103		OK	1	103		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentag	79		OK	1	79		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Enterococci (	no./100mls	Number pe	108			0	108			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Enterococci (	no./100mls	Number pe	52			0	52			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Faecal colifor	no./100mls	Number pe	213			0	213			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	ortho-Phospl	mg/l	milligrams per litre		<0.005	OK	0.005	0.0025	<0.005	OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	ortho-Phospl	mg/l	milligrams per litre		<0.005	OK	0.005	0.0025	<0.005	OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	ortho-Phospl	mg/l	milligrams	0.0085		OK	0.005	0.0085		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	ortho-Phospl	mg/l	milligrams	0.0085		OK	0.005	0.0085		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	ortho-Phospl	mg/l	milligrams	0.022		OK	0.005	0.022		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	ortho-Phospl	mg/l	milligrams per litre		<0.005	OK	0.005	0.0025	<0.005	OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	ortho-Phospl	mg/l	milligrams	0.0055		OK	0.005	0.0055		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentag	112		OK	1	112		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentag	113		OK	1	113		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentag	79		OK	1	79		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	ortho-Phospl	mg/l	milligrams	0.041		OK	0.005	0.041		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	Dissolved Ox	% Saturation	Percentag	106.4			0	106.4			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Dissolved Ox	% Saturation	Percentag	111.9			0	111.9			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	E. Coli	no./100mls	Number pe	146			0	146			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	Enterococci (	no./100mls	Number pe	30			0	30			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	Faecal colifor	no./100mls	Number pe	52			0	52			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	pH	pH units	pH Units	8.2		OK	2	8.2		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	pH	pH units	pH Units	7.9		OK	2	7.9		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	0.54		OK	0.01	0.54		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	pH	pH units	pH Units	8.1		OK	2	8.1		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	pH	pH units	pH Units	8.3		OK	2	8.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	pH	pH units	pH Units	7.6		OK	2	7.6		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	pH	pH units	pH Units	8.1			2	8.1			2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	1.7		OK	0.01	1.7		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	0.32		OK	0.01	0.32		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	1.3		OK	0.01	1.3		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Salinity	PSU	Practical sa	33.6		OK	0.1	33.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Salinity	PSU	Practical sa	28.7		OK	0.1	28.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Salinity	PSU	Practical sa	23.2		OK	0.1	23.2		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Salinity	PSU	Practical sa	30.6		OK	0.1	30.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	ortho-Phospl	mg/l	milligrams	0.0086		OK	0.005	0.0086		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	ortho-Phospl	mg/l	milligrams	0.011		OK	0.005	0.011		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	pH	pH units	pH Units	7.9			2	7.9			2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Salinity	PSU	Practical sa	11.2		OK	0.1	11.2		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Salinity	PSU	Practical sa	33		OK	0.1	33		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Salinity	PSU	Practical sa	29.7		OK	0.1	29.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Salinity	PSU	Practical sa	31.5		OK	0.1	31.5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	29.9		OK	0.1	29.9		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	30		OK	0.1	30		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	pH	pH units	pH Units	8.3		OK	2	8.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	pH	pH units	pH Units	8.3		OK	2	8.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	pH	pH units	pH Units	8.3		OK	2	8.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	pH	pH units	pH Units	8.2		OK	2	8.2		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	pH	pH units	pH Units	8.1		OK	2	8.1		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	24.6		OK	0.1	24.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	23.1		OK	0.1	23.1		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	31.7		OK	0.1	31.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	29.6		OK	0.1	29.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	3.2		OK	0.01	3.2		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	0.47		OK	0.1	0.47		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams per litre		<0.1	OK	0.1	0.05	<0.1	OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Salinity	PSU	Practical sa	26.2		OK	0.1	26.2		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.4		OK	0.1	0.4		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Salinity	PSU	Practical sa	34.7		OK	0.1	34.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Salinity	PSU	Practical sa	30.1		OK	0.1	30.1		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams per litre		<0.1	OK	0.1	0.05	<0.1	OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Salinity	PSU	Practical sa	33.6		OK	0.1	33.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.11		OK	0.1	0.11		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.64		OK	0.1	0.64		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	StationDepth	m	Metres	3.2		OK	0.1	3.2		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	StationDepth	m	Metres	8.5		OK	0.1	8.5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	StationDepth	m	Metres	7.7		OK	0.1	7.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	StationDepth	m	Metres	11.8		OK	0.1	11.8		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	StationDepth	m	Metres	11.8		OK	0.1	11.8		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Suspended S	mg/l	milligrams	16			2.5	16			2.5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	StationDepth	m	Metres	4.5		OK	0.1	4.5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	StationDepth	m	Metres	3.2		OK	0.1	3.2		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	StationDepth	m	Metres	8.5		OK	0.1	8.5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Suspended S	mg/l	milligrams per litre		<7	OK	4	3.5	<7	OK	7
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Suspended S	mg/l	milligrams per litre		<4	OK	4	2	<4	OK	4

Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Suspended S	mg/l	milligrams per litre		<6	OK	4	3	<6	OK	6
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Suspended S	mg/l	milligrams	5		OK	4	5		OK	4
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Suspended S	mg/l	milligrams	7		OK	4	7		OK	4
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	33.8		OK	0.1	33.8		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	StationDepth	m	Metres	7.7		OK	0.1	7.7		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	Suspended S	mg/l	milligrams	27			2.5	27			2.5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Suspended S	mg/l	milligrams	30			2.5	30			2.5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Suspended S	mg/l	milligrams	24			2.5	24			2.5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	31.3		OK	0.1	31.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	11.2		OK	0.1	11.2		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	31.4		OK	0.1	31.4		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Temperature	Â°C	Degrees ce	12.8			0	12.8			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Temperature	Â°C	Degrees ce	16.9		OK		16.9		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Temperature	Â°C	Degrees ce	12		OK		12		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Temperature	Â°C	Degrees ce	18.9			0	18.9			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Temperature	Â°C	Degrees ce	12.6		OK		12.6		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Temperature	Â°C	Degrees ce	16.4		OK		16.4		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Temperature	Â°C	Degrees ce	16.5		OK		16.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.19		OK	0.1	0.19		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Temperature	Â°C	Degrees ce	14.8			0	14.8			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.64		OK	0.1	0.64		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	TOC (as NPOI	mg/l	milligrams	3.4		OK	2	3.4		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	TOC (as NPOI	mg/l	milligrams	6		OK	2	6		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Total Nitroge	mg/l	milligrams	1.4			0	1.4			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	Total Nitroge	mg/l	milligrams	1			0	1			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	TOC (as NPOI	mg/l	milligrams	2.3		OK	2	2.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	StationDepth	m	Metres	4.5		OK	0.1	4.5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	StationDepth	m	Metres	6.3		OK	0.1	6.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Suspended S	mg/l	milligrams per litre		<5	OK	4	2.5	<5	OK	5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.014		OK	0.01	0.014		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.18		OK	0.01	0.18		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.056		OK	0.01	0.056		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.21		OK	0.01	0.21		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.38		OK	0.01	0.38		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Temperature	Â°C	Degrees ce	10.8		OK		10.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Transparency	m	Metres	2.5		OK		2.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Transparency	m	Metres	0.8		OK		0.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	TOC (as NPOI	mg/l	milligrams	2		OK	2	2		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	TOC (as NPOI	mg/l	milligrams	2.8		OK	2	2.8		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	TOC (as NPOI	mg/l	milligrams	2.6		OK	2	2.6		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	20/10/2021	Grab	Total Oxidise	mg/l	milligrams	1.13			0	1.13			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Transparency	m	Metres	1.5		OK		1.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Transparency	m	Metres	2.5		OK		2.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Transparency	m	Metres	2		OK		2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Transparency	m	Metres	0.8		OK		0.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	True Colour	mg/litre Pt C	Milligrammes per litre Colour		<5	OK	5	2.5	<5	OK	5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.34		OK	0.01	0.34		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	1.6		OK	0.01	1.6		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.32		OK	0.01	0.32		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Total Oxidise	mg/l	milligrams	0.22			0	0.22			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Total Oxidise	mg/l	milligrams	0.06			0	0.06			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Transparency	m	Metres	2		OK		2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Transparency	m	Metres	2		OK		2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Transparency	m	Metres	1.5		OK		1.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Transparency	m	Metres	0.8		OK		0.8		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	True Colour	mg/litre Pt C	Milligramm	6		OK	5	6		OK	5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	True Colour	mg/litre Pt C	Milligramm	28		OK	5	28		OK	5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.014		OK	0.01	0.014		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.044		OK	0.01	0.044		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Ammonia-To	mg/l	milligrams	0.064		OK	0.01	0.064		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Ammonia-To	mg/l	milligrams	0.058		OK	0.01	0.058		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	BOD - 5 days	mg/l	milligrams	1		OK	1	1		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Chlorophyll a	Âµg/l	Microgram	15		OK	0.01	15		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Depth	m	Metres	8.5		OK		8.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Depth	m	Metres	0.3		OK		0.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Depth	m	Metres	7.4		OK		7.4		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Depth	m	Metres	11		OK		11		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentage	106		OK	1	106		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentage	113		OK	1	113		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentage	98		OK	1	98		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentage	107		OK	1	107		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Dissolved Ox	% Saturation	Percentage	118		OK	1	118		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Dissolved Ox	% Saturation	Percentage	102		OK	1	102		OK	1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Dissolved Ox	% Saturation	Percentage	111.8			0	111.8			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	ortho-Phospl	mg/l	milligrams per litre		<0.005	OK	0.005	0.0025	<0.005	OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	ortho-Phospl	mg/l	milligrams	0.0056		OK	0.005	0.0056		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	ortho-Phospl	mg/l	milligrams	0.022		OK	0.005	0.022		OK	0.005
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	ortho-Phospl	mg/l	milligrams	0.03			0	0.03			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	pH	pH units	pH Units	8.3		OK	2	8.3		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	pH	pH units	pH Units	8.1		OK	2	8.1		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	pH	pH units	pH Units	7.9		OK	2	7.9		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	pH	pH units	pH Units	8.3			2	8.3			2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	pH	pH units	pH Units	8.2			2	8.2			2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Pheophytin a	Âµg/l	Microgram	1.2		OK	0.01	1.2		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Salinity	PSU	Practical sa	33.6		OK	0.1	33.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	29.6		OK	0.1	29.6		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Salinity(Lab)	0/oo	0/oo	25.9		OK	0.1	25.9		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Salinity(Lab)	0/oo	0/oo	31.4		OK	0.1	31.4		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	0.36		OK	0.1	0.36		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Silica (as SiO2	mg/l	milligrams	0.11		OK	0.1	0.11		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams per litre		<0.1	OK	0.1	0.05	<0.1	OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	0.14		OK	0.1	0.14		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Surf	Silica (as SiO2	mg/l	milligrams	2.5		OK	0.1	2.5		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	StationDepth	m	Metres	6.3		OK	0.1	6.3		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	StationDepth	m	Metres	11.8		OK	0.1	11.8		OK	0.1
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Temperature	Â°C	Degrees ce	11.6		OK		11.6		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Temperature	Â°C	Degrees ce	13		OK		13		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	Temperature	Â°C	Degrees ce	13.3		OK		13.3		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Temperature	Â°C	Degrees ce	15.4		OK		15.4		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Temperature	Â°C	Degrees ce	17.2		OK		17.2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Temperature	Â°C	Degrees ce	17.7		OK		17.7		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/12/2021	TRaC Bott	Temperature	Â°C	Degrees ce	12		OK		12		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	03/03/2021	Grab	Temperature	Â°C	Degrees ce	8.7			0	8.7			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Surf	TOC (as NPOI	mg/l	milligrams	2.4		OK	2	2.4		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	TOC (as NPOI	mg/l	milligrams per litre		<2	OK	2	1	<2	OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	TOC (as NPOI	mg/l	milligrams per litre		<2	OK	2	1	<2	OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	TOC (as NPOI	mg/l	milligrams	2.4		OK	2	2.4		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	TOC (as NPOI	mg/l	milligrams	2.6		OK	2	2.6		OK	2
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	12/05/2021	Grab	Total Nitroge	mg/l	milligrams	0.8			0	0.8			
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	07/07/2021	Grab	Total Nitroge	mg/l	milligrams per litre		<0.50		0	0.25	<0.50		0.5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.15		OK	0.01	0.15		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.1		OK	0.01	0.1		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Total Oxidise	mg/l	milligrams	0.16		OK	0.01	0.16		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.074		OK	0.01	0.074		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/11/2021	TRaC Bott	Total Oxidise	mg/l	milligrams	0.32		OK	0.01	0.32		OK	0.01
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Surf	Transparency	m	Metres	2		OK		2		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	Transparency	m	Metres	1.5		OK		1.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Bott	Transparency	m	Metres	1.5		OK		1.5		OK	
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	17/05/2021	TRaC Bott	True Colour	mg/litre Pt C	Milligrammes per litre Colour		<5	OK	5	2.5	<5	OK	5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	01/07/2021	TRaC Bott	True Colour	mg/litre Pt C	Milligrammes per litre Colour		<5	OK	5	2.5	<5	OK	5
Lower Bandon Estuary	IE_SW_080_0100	TW05003167BN2007	BN090 - Kins	25/08/2021	TRaC Surf	True Colour	mg/litre Pt C	Milligrammes per litre Colour		<5	OK	5	2.5	<5	OK	5