

# Annual Environmental Report

2019



Bray

D0005-01

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# 1 EXECUTIVE SUMMARY AND INTRODUCTION TO THE 2019 AER

This agglomeration is served by a wastewater treatment plant at Shanganagh-Bray D0038, in Co. Dublin with a Plant Capacity PE of 186,000. Wastewater is pumped from Bray Pumping Station to Shanganagh WWTP.

Please refer to the AER for D0038.

## 1.1 ANNUAL STATEMENT OF MEASURES

Please refer to the AER for D0038.

## 1.2 TREATMENT SUMMARY

Please refer to the AER for D0038.

## 1.3 ELV OVERVIEW

Please refer to the AER for D0038.

## 1.4 LICENCE SPECIFIC REPORTING INCLUDED IN AER

Assessment / Report	Included in AER
There are no Licence Specific Reports included in the AER. Please refer to the AER for D0038.	

## 2 TREATMENT PLANT PERFORMANCE AND IMPACT SUMMARY

This agglomeration is served by a wastewater treatment plant at Shanganagh-Bray D0038, in Co. Dublin with a Plant Capacity PE of 186,000. Wastewater is pumped from Bray Pumping Station to Shanganagh WWTP. **Please refer to the AER for D0038.**

No monitoring is carried out on the discharges from Bray Pumping Station.

### 2.3.1 AMBIENT MONITORING REPORT SUMMARY – BRAY PUMPING STATION

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	Code	Bathing Water	Drinking Water	FWPM	Shellfish	WFD Status	Does assessment of the ambient monitoring results indicate that the discharge is impacting on water quality?
<b>Within 200m radius of SW1</b>	328217E 220117N	IE EA 100 0000	*Note 1	N	N	N	High	No

\*Note 1:

SW001 is a storm water overflow and discharges offshore 1,700 metres from a Bathing Area known as South Promenade, Bray

SW002 is a storm water overflow and discharges offshore approximately 300 metres north of this Bathing Area

## 2.3.2 AMBIENT MONITORING PARAMETER SUMMARY – BRAY PUMPING STATION

The results of ambient data sets are included in the **Appendix 7.1- Ambient Monitoring Summary**.

### Significance of Results:

The discharges from SW001 and SW002 do not have an observable negative impact on the water quality.

The discharges from SW001 and SW002 do not have an observable negative impact on the Water Framework Directive status.

## 3 COMPLAINTS AND INCIDENTS

### 3.1 COMPLAINTS SUMMARY

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

No. 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	Cause	No. of incident occurrences	Recurring (Y/N)	Closed (Y/N)
Abatement Equipment offline	Plant or equipment breakdown at WWTP	1	No	Yes
Other	Plant or equipment calibration at WWTP	1	No	Yes
Uncontrolled release	Other	1	No	Yes

### 3.2.2 SUMMARY OF OVERALL INCIDENTS

Question	Answer
Number of Incidents in 2019	3
Number of Incidents reported to the EPA via EDEN in 2019	3
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

Please refer to the AER for D0038.

### 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
D0005-SIP:01	Installation of surge tank	C	30/04/2011	Yes	Works Completed		



Specified Improvement Programmes (under Schedule A and C of WWDL)	Description	Licence Schedule	Licence Completion Date	Date Expired? (N/NAY)	Status of Works	Timeframe for Completing the Work	Comments
<b>D0005-SIP:02</b>	Installation of transfer pipeline to Shanganagh WWTP	C	29/02/2012	Yes	Works Completed		
<b>D0005-SIP:03</b>	Pumping station upgrade	C	30/04/2011	Yes	Works Completed		
<b>D0005-SIP:04</b>	SW1 to Irish Sea to be discontinued	A	29/02/2012	Yes	Works Completed		
<b>D0005-SIP:05</b>	SW2 to Irish Sea to be discontinued	A	29/02/2012	Yes	Works Completed		
<b>D0005-SIP:06</b>	Upgrading of Storm Water Overflows to comply with the criteria outlined in the DoEHLG "Procedures and Criteria in relation to Storm Water Overflows, 1995"	C	31/12/2020	No	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
<b>Please refer to the AER for D0038.</b>				

### **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.

Licence Specific Report	Required by licence	Year included in AER	Included in this AER	Reference to relevant section of AER
<b>Please refer to the AER for D0038.</b>				

## 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?	See D0038
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	See D0038
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: 05/03/2020

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

Appendix 7.2 - Bray PS Flows to Shanganagh WWTP 2019

## 2019 Ambient Monitoring Data

Ambient Monitoring Point from WWDL (or as agreed with EPA)	Irish Grid Reference	EPA Feature Coding Tool code	Receiving Waters Designation (Y/N)				WFD Status
			Bathing Water	Drinking Water	FWPM	Shellfish	
Within 200m radius of SW1	328217E 220117N	IE EA 100 0000	*Note 1	N	N	N	High

\*Note 1:

SW001 is a storm water overflow and discharges offshore 1,700m from a Bathing Area known as South Promenade, Bray  
 SW002 is a storm water overflow and discharges offshore approximately 300m north of this Bathing Area

### Ambient monitoring results for the parameters as set out in Schedule B.1

The sampling point is within a 200 m radius of SW1.

Sampling Date	pH	Dissolved Oxygen	Dissolved Oxygen	BOD	Total Nitrogen (as N)	Dissolved Inorganic Nitrogen (as N)	E.Coli	Intestinal Enterocci
		mg/l	% Sat	mg/l	mg/l	mg/l	cfu /100ml	cfu /100ml
22/05/2019	8.3	6.92	110.6	<2	<0.2	<0.3	0	0

## **Bathing Water Monitoring Results 2018 at South Promenade, Bray**

327295 Easting/ 218538 Northing

<b>Date</b>	<b>E-Coli Result</b>	<b>Intestinal Enteroccci Result</b>	<b>Water Sample Status</b>
02/09/2019	121	12	Excellent
19/08/2019	41	<10	Excellent
12/08/2019	256	15	Good
29/07/2019	63	101	Good
15/07/2019	121	33	Excellent
01/07/2019	<10	<10	Excellent
24/06/2019	315	159	Good
17/06/2019	20	<10	Excellent
10/06/2019	20	<10	Excellent
27/05/2019	<10	<10	Excellent

**Appendix**

**Appendix 7.2 – Bray PS Flows to Shanganagh WWTP 2019**



## 2019 Flows from Bray Pumping Station to Shanganagh WWTP

### DAILY FLOW for JANUARY 2019

	Flow from Bray PS to the Long Sea Outfall  SW001	Flow from Bray PS to the Short Sea Outfall  SW002	Flow from Bray PS to Shanganagh WWTP
Day	m <sup>3</sup> /day	m <sup>3</sup> /day	m <sup>3</sup> /day
01/01/2018	0	0	11,010
02/01/2018	0	0	10,760
03/01/2018	0	0	10,600
04/01/2018	170	0	10,470
05/01/2018	0	0	10,300
06/01/2018	0	0	10,200
07/01/2018	0	0	10,090
08/01/2018	0	0	9,910
09/01/2018	0	0	9,750
10/01/2018	0	0	10,210
11/01/2018	0	0	9,790
12/01/2018	0	0	9,770
13/01/2018	780	0	9,540
14/01/2018	0	0	9,130
15/01/2018	0	0	9,160
16/01/2018	0	0	9,540

	<b>Flow from Bray PS to the Long Sea Outfall  SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall  SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
17/01/2018	0	0	8,900
18/01/2018	0	0	16,480
19/01/2018	0	0	9,730
20/01/2018	3270	470	9,320
21/01/2018	15890	6920	10,660
22/01/2018	0	0	9,450
23/01/2018	0	0	9,220
24/01/2018	0	0	10,250
25/01/2018	0	0	9,220
26/01/2018	0	0	11,610
27/01/2018	0	0	10,110
28/01/2018	0	0	9,190
29/01/2018	0	0	9,180
30/01/2018	0	0	8,800
31/01/2018	0	0	10,950

**DAILY FLOW for FEBRUARY 2019**

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/02/2018	0	0	8,640
02/02/2018	0	0	9,800
03/02/2018	0	0	9,080
04/02/2018	0	0	9,240
05/02/2018	0	0	10,410
06/02/2018	0	0	11,860
07/02/2018	0	0	19,580
08/02/2018	0	0	17,140
09/02/2018	0	0	11,290
10/02/2018	0	0	11,830
11/02/2018	0	0	9,920
12/02/2018	0	0	9,800
13/02/2018	0	0	9,670
14/02/2018	0	0	9,460
15/02/2018	0	0	9,340
16/02/2018	0	0	9,330
17/02/2018	0	0	11,960
18/02/2018	0	0	9,440
19/02/2018	0	0	9,680

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
20/02/2018	0	0	9,330
21/02/2018	0	0	9,220
22/02/2018	10	0	9,020
23/02/2018	0	0	8,990
24/02/2018	0	0	8,910
25/02/2018	0	0	8,760
26/02/2018	0	0	8,700
27/02/2018	0	0	8,660
28/02/2018	0	0	8,460

**DAILY FLOW for MARCH 2019**

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/03/2018	0	0	9,620
02/03/2018	0	0	11,010
03/03/2018	0	0	16,320
04/03/2018	1300	0	17,270
05/03/2018	0	0	8,710
06/03/2018	0	0	27,160
07/03/2018	0	0	17,120
08/03/2018	0	0	13,040
09/03/2018	0	0	13,130
10/03/2018	0	0	24,000
11/03/2018	0	0	14,060
12/03/2018	0	0	15,490
13/03/2018	0	0	12,850
14/03/2018	19850	29700	16,890
15/03/2018	23180	7810	14,700
16/03/2018	6000	2470	19,340
17/03/2018	0	0	13,420
18/03/2018	0	0	12,150
19/03/2018	0	0	11,610

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
20/03/2018	0	0	11,190
21/03/2018	0	0	10,760
22/03/2018	0	0	10,640
23/03/2018	0	0	10,420
24/03/2018	0	0	10,290
25/03/2018	0	0	9,900
26/03/2018	0	0	9,670
27/03/2018	0	0	9,440
28/03/2018	0	0	8,860
29/03/2018	0	0	9,250
30/03/2018	0	0	9,250
31/03/2018	0	0	8,850

**DAILY FLOW for APRIL 2019**

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/04/2018	0	0	9,000
02/04/2018	2690	0	8,930
03/04/2018	170	0	13,290
04/04/2018	1210	0	15,570
05/04/2018	10	0	13,440
06/04/2018	8230	670	11,150
07/04/2018	0	0	9,730
08/04/2018	0	0	11,830
09/04/2018	0	0	11,550
10/04/2018	0	0	9,500
11/04/2018	0	0	8,570
12/04/2018	0	0	8,870
13/04/2018	0	0	8,860
14/04/2018	0	0	8,530
15/04/2018	0	0	11,110
16/04/2018	0	0	12,140
17/04/2018	0	0	9,230
18/04/2018	0	0	8,890
19/04/2018	0	0	8,800

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
20/04/2018	0	0	8,720
21/04/2018	0	0	8,580
22/04/2018	0	0	8,600
23/04/2018	0	0	8,450
24/04/2018	0	0	9,920
25/04/2018	0	0	11,500
26/04/2018	0	0	9,940
27/04/2018	0	0	20,300
28/04/2018	0	0	9,300
29/04/2018	0	0	8,940
30/04/2018	0	0	9,350



**DAILY FLOW for MAY 2019**

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/05/2018	0	0	8,740
02/05/2018	0	0	8,540
03/05/2018	0	0	8,450
04/05/2018	0	0	8,890
05/05/2018	0	0	8,230
06/05/2018	0	0	8,450
07/05/2018	0	0	8,260
08/05/2018	0	0	10,360
09/05/2018	0	0	12,470
10/05/2018	0	0	11,080
11/05/2018	0	0	8,990
12/05/2018	0	0	8,550
13/05/2018	0	0	8,360
14/05/2018	0	0	8,200
15/05/2018	0	0	8,280
16/05/2018	0	0	8,130
17/05/2018	0	0	8,300
18/05/2018	0	0	8,260
19/05/2018	0	0	8,180

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
20/05/2018	0	0	8,030
21/05/2018	0	0	8,070
22/05/2018	0	0	7,930
23/05/2018	0	0	7,850
24/05/2018	0	0	7,800
25/05/2018	0	0	7,780
26/05/2018	0	0	7,790
27/05/2018	90	0	7,850
28/05/2018	0	0	7,560
29/05/2018	0	0	8,890
30/05/2018	0	0	7,640
31/05/2018	0	0	7,650

**DAILY FLOW for JUNE 2019**

	<b>Flow from Bray PS to the Long Sea Outfall  SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall  SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/06/2018	0	0	7,510
02/06/2018	0	0	8,170
03/06/2018	0	0	6,710
04/06/2018	0	0	16,200
05/06/2018	0	0	10,900
06/06/2018	0	0	8,230
07/06/2018	0	0	7,840
08/06/2018	0	0	7,890
09/06/2018	0	0	11,590
10/06/2018	0	0	11,450
11/06/2018	0	0	7,830
12/06/2018	0	0	10,630
13/06/2018	0	0	9,400
14/06/2018	0	0	8,520
15/06/2018	0	0	21,110
16/06/2018	0	0	9,880
17/06/2018	0	0	8,950
18/06/2018	0	0	8,580

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
19/06/2018	0	0	8,370
20/06/2018	0	0	8,280
21/06/2018	0	0	8,010
22/06/2018	0	0	7,970
23/06/2018	0	0	10,650
24/06/2018	0	0	11,450
25/06/2018	0	0	9,390
26/06/2018	0	0	8,650
27/06/2018	0	0	7,830
28/06/2018	0	0	7,720
29/06/2018	0	0	8,130
30/06/2018	0	0	7,960

**DAILY FLOW for JULY 2019**

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/07/2018	0	0	7,220
02/07/2018	0	0	7,380
03/07/2018	0	0	7,220
04/07/2018	0	0	8,260
05/07/2018	0	0	7,580
06/07/2018	0	0	8,510
07/07/2018	0	0	7,220
08/07/2018	0	0	7,130
09/07/2018	0	0	15,080
10/07/2018	0	0	10,750
11/07/2018	0	0	16,890
12/07/2018	0	0	8,950
13/07/2018	0	0	8,590
14/07/2018	0	0	11,960
15/07/2018	0	0	8,390
16/07/2018	0	0	13,290
17/07/2018	0	0	8,840
18/07/2018	0	0	8,270
19/07/2018	0	0	7,940

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
20/07/2018	0	0	9,430
21/07/2018	0	0	8,320
22/07/2018	0	0	8,020
23/07/2018	0	0	7,720
24/07/2018	0	0	7,580
25/07/2018	0	0	7,560
26/07/2018	0	0	7,620
27/07/2018	0	0	7,480
28/07/2018	0	0	7,610
29/07/2018	1340	0	7,450
30/07/2018	0	0	7,550
31/07/2018	0	0	11,120

## DAILY FLOW for AUGUST 2019

\*Note: No flow data recorded for Bray PS to Shanganagh WwTP for August 2019

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/08/2018	0	0	
02/08/2018	0	0	
03/08/2018	0	0	
04/08/2018	0	0	
05/08/2018	0	0	
06/08/2018	0	0	
07/08/2018	0	0	
08/08/2018	0	0	
09/08/2018	0	0	
10/08/2018	0	0	
11/08/2018	0	0	
12/08/2018	0	0	
13/08/2018	0	0	
14/08/2018	0	0	
15/08/2018	0	0	
16/08/2018	0	0	

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
17/08/2018	0	0	
18/08/2018	0	0	
19/08/2018	0	0	
20/08/2018	0	0	
21/08/2018	0	0	
22/08/2018	0	0	
23/08/2018	0	0	
24/08/2018	0	0	
25/08/2018	0	0	
26/08/2018	910	0	
27/08/2018	0	0	
28/08/2018	0	0	
29/08/2018	0	0	
30/08/2018	0	0	



**DAILY FLOW for SEPTEMBER 2019**

	<b>Flow from Bray PS to the Long Sea Outfall  SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall  SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
31/08/2018	0	0	
01/09/2018	0	0	7,770
02/09/2018	0	0	7,520
03/09/2018	0	0	7,540
04/09/2018	0	0	7,440
05/09/2018	0	0	7,280
06/09/2018	0	0	7,290
07/09/2018	0	0	7,300
08/09/2018	0	0	7,210
09/09/2018	0	0	10,720
10/09/2018	0	0	7,300
11/09/2018	670	0	7,300
12/09/2018	0	0	7,170
13/09/2018	0	0	7,150
14/09/2018	0	0	7,360
15/09/2018	0	0	9,710
16/09/2018	0	0	11,650
17/09/2018	0	0	7,680

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
18/09/2018	240	0	7,540
19/09/2018	10	0	7,310
20/09/2018	7120	4890	7,410
21/09/2018	130	0	9,580
22/09/2018	0	0	17,250
23/09/2018	0	0	15,210
24/09/2018	0	0	15,420
25/09/2018	0	0	8,840
26/09/2018	0	0	8,250
27/09/2018	0	0	8,610
28/09/2018	0	0	10,480
29/09/2018	0	0	21,750
30/09/2018	0	0	11,480

**DAILY FLOW for OCTOBER 2019**

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/10/2018	0	0	20,260
02/10/2018	0	0	18,320
03/10/2018	0	0	13,620
04/10/2018	0	0	13,940
05/10/2018	0	0	15,170
06/10/2018	0	0	11,550
07/10/2018	0	0	16,940
08/10/2018	0	0	11,810
09/10/2018	0	0	9,980
10/10/2018	0	0	9,640
11/10/2018	0	0	9,310
12/10/2018	3920	5450	9,210
13/10/2018	4890	2430	12,750
14/10/2018	0	0	21,480
15/10/2018	0	0	6,990
16/10/2018	0	0	19,560
17/10/2018	0	0	12,790
18/10/2018	0	0	10,720
19/10/2018	0	0	14,520

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
20/10/2018	0	0	10,740
21/10/2018	0	0	9,750
22/10/2018	10	0	9,330
23/10/2018	0	0	9,350
24/10/2018	0	0	9,170
25/10/2018	0	0	17,700
26/10/2018	0	0	15,440
27/10/2018	0	0	12,350
28/10/2018	0	0	9,980
29/10/2018	0	0	9,700
30/10/2018	0	0	9,550
31/10/2018	0	0	10,720

**DAILY FLOW for NOVEMBER 2019**

	<b>Flow from Bray PS to the Long Sea Outfall  SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall  SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/11/2018	0	0	14,210
02/11/2018	0	0	15,880
03/11/2018	0	0	20,790
04/11/2018	250	0	12,560
05/11/2018	6040	3910	23,600
06/11/2018	2540	1400	14,900
07/11/2018	10640	4400	12,370
08/11/2018	0	0	21,040
09/11/2018	11490	18780	21,760
10/11/2018	1680	530	22,930
11/11/2018	0	0	23,400
12/11/2018	0	0	15,660
13/11/2018	0	0	13,740
14/11/2018	0	0	23,810
15/11/2018	0	0	16,920
16/11/2018	0	0	14,690
17/11/2018	0	0	13,290
18/11/2018	0	0	12,370

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
19/11/2018	0	0	12,070
20/11/2018	0	0	20,490
21/11/2018	14970	1440	25,520
22/11/2018	0	0	21,130
23/11/2018	0	0	5,290
24/11/2018	0	0	26,190
25/11/2018	0	0	28,760
26/11/2018	0	0	9,910
27/11/2018	8490	8220	19,890
28/11/2018	1600	210	24,030
29/11/2018	5500	4110	20,670
30/11/2018	0	0	16,100

**DAILY FLOW for DECEMBER 2019**

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
01/12/2018	530	0	14,990
02/12/2018	10	0	13,990
03/12/2018	0	0	13,300
04/12/2018	0	0	12,850
05/12/2018	5020	350	12,210
06/12/2018	0	0	12,040
07/12/2018	0	0	12,990
08/12/2018	0	0	16,110
09/12/2018	0	0	12,240
10/12/2018	0	0	16,350
11/12/2018	0	0	12,170
12/12/2018	2800	1300	16,020
13/12/2018	0	0	13,850
14/12/2018	0	0	12,250
15/12/2018	20010	31320	11,620
16/12/2018	3440	0	11,000
17/12/2018	420	0	10,710
18/12/2018	23850	15650	10,300

	<b>Flow from Bray PS to the Long Sea Outfall SW001</b>	<b>Flow from Bray PS to the Short Sea Outfall SW002</b>	<b>Flow from Bray PS to Shanganagh WWTP</b>
<b>Day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>	<b>m<sup>3</sup>/day</b>
19/12/2018	780	0	6,580
20/12/2018	0	0	20,210
21/12/2018	0	0	22,590
22/12/2018	0	0	15,740
23/12/2018	10860	290	14,240
24/12/2018	0	0	13,810
25/12/2018	0	0	12,290
26/12/2018	0	0	17,560
27/12/2018	0	0	12,650
28/12/2018	0	0	12,080
29/12/2018	0	0	11,560
30/12/2018	0	0	11,190
31/12/2018	0	0	10,850