

# Irish bathing water quality in 2018



Ireland 

June 2019

Photo: © Peter Kristensen/EEA



# Bathing Water Quality in the Season 2018

## Ireland

Under the provisions of the [Bathing Water Directive](#), more than 21 000 bathing waters are monitored in Europe each season. The monitoring data and other information regarding bathing water management are reported to the European Environment Agency by 30 reporting countries in Europe, to be assessed for the annual European report and more detailed national reports.

### 1. BWD reporting in the season 2018

In the season 2018, Ireland identified and reported **145 bathing waters**, which is 0.7% of all bathing waters in Europe. Three bathing waters in Ireland have been newly identified for the season 2018.

Bathing waters of Ireland in the season 2018		Bathing water quality in the season 2018	
<b>Total reported</b>	145	<b>Excellent</b>	103 (71%)
Coastal	136	<b>Good</b>	22 (15.2%)
Inland	9	<b>Sufficient</b>	12 (8.3%)
<b>Total reported samples</b>	1526	<b>Poor</b>	5 (3.4%)
		<b>Not classified</b>	3 (2.1%)

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. 94.5% of reported bathing waters are in line with the minimum quality standards of the Directive, thus classified “sufficient” or better. Five bathing waters are of “poor” quality.

More detailed information on bathing waters of Ireland is available at the national bathing water portal <https://www.beaches.ie/>.

## 2. BWD monitoring

Each bathing water that is identified by the reporting country needs to have a monitoring calendar established before the bathing season. The monitoring calendar requirements can be summarised as follows: (1) a pre-season sample is to be taken shortly before the start of each bathing season; (2) no fewer than four (alternatively, three for specific cases) samples are to be taken and analysed per bathing season; and (3) an interval between sampling dates never exceeds one month.

From the reported data, the assessment also designates effective implementation of the monitoring calendar. In Ireland, monitoring calendar for 2018 was implemented at all bathing waters.

**Table 1: Bathing waters in 2018 according to implementation of the monitoring calendar**

	Count	Share of total [%]
<b>Monitoring calendar implemented</b> A bathing water satisfies monitoring calendar conditions listed above.	145	100%
<b>Monitoring calendar not implemented</b> A bathing water does not satisfy monitoring calendar conditions listed above. They may be quality-classified if enough samples are available in the last assessment period.	0	0%

In addition to the monitoring calendar, management specifics of the last assessment period of four years are also assessed. The status primarily indicates whether the complete dataset of four seasons is available, but also points out the reasons as to why the bathing waters do not have the complete last assessment period dataset. The latter may indicate developing conditions at the site – most importantly, whether the bathing water has been newly identified within the period, or any changes have occurred that are likely to affect the classification of the bathing water.

**Table 2: Management specifics in the last assessment period of 2015–2018**

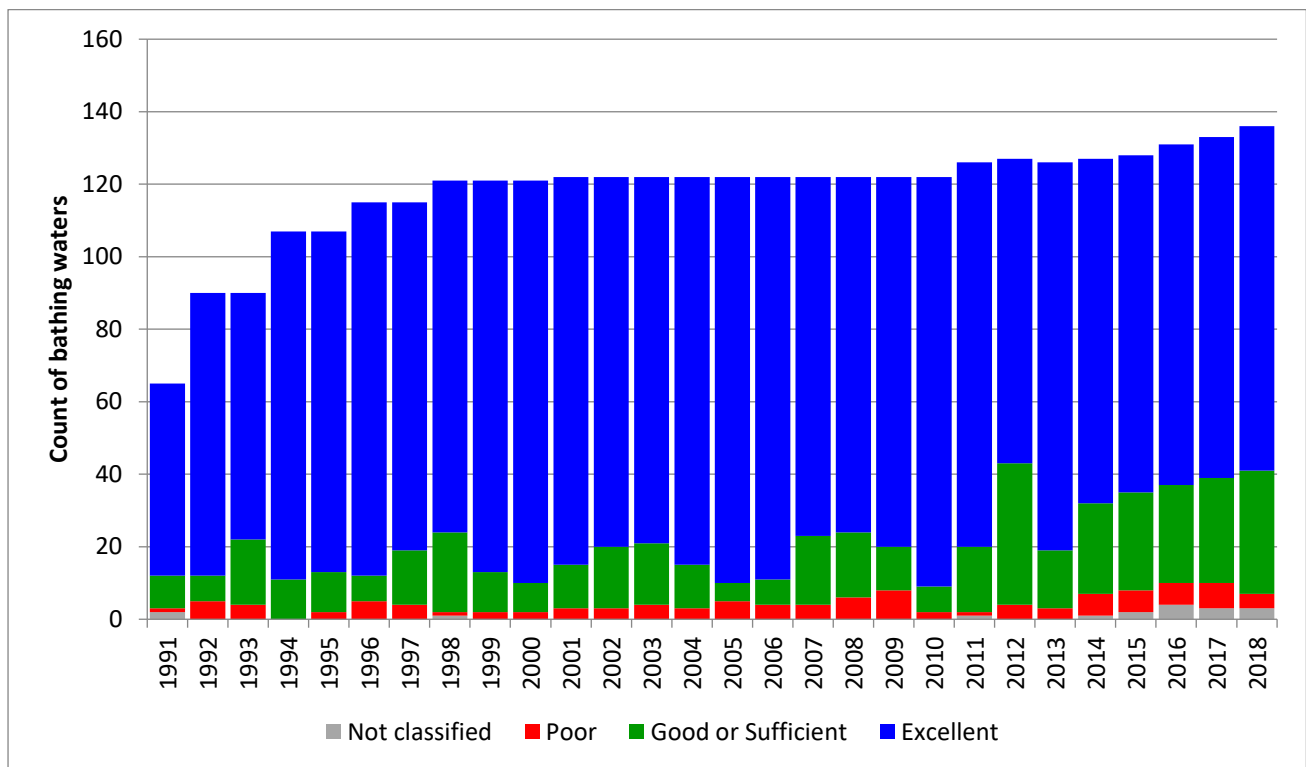
	Count	Share of total [%]
<b>Continuously monitored</b> A bathing water has been monitored in each bathing season in the last assessment period.	136	93.80%
<b>Newly identified</b> A bathing water was identified for the first time within the last assessment period. Such status is assigned until the complete four-year dataset is available, i.e. for three years after the first reporting.	8	5.50%
<b>Quality changes</b> A bathing water was subject to changes described in BWD Art. 4.4 within the last assessment period. Such status is assigned until the complete four-year dataset of samples taken after changes took effect is available.	1	0.70%
<b>Monitoring gap</b> A bathing water was not monitored for at least one season in the last assessment period. No quality	0	0%

classification is made if no samples are reported for the most recent season.

### 3. Bathing water quality

#### 3.1 Coastal bathing waters

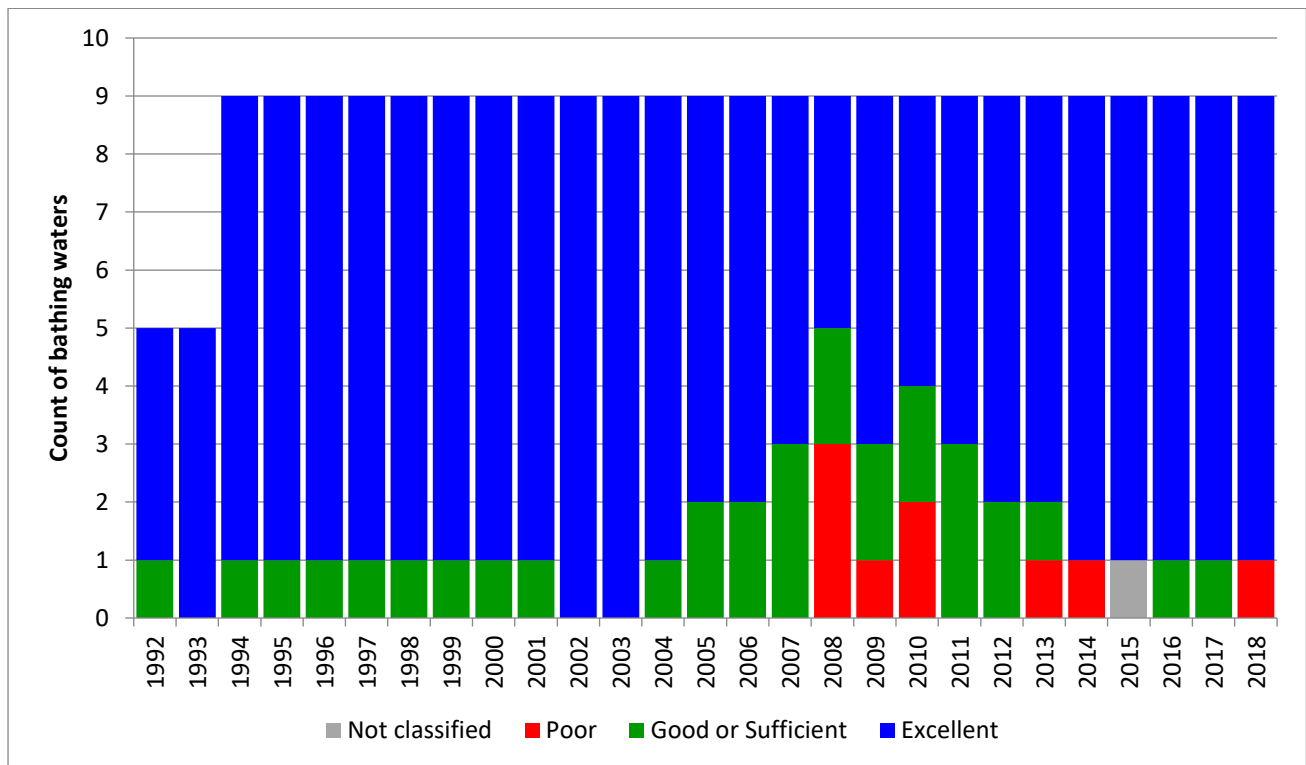
Coastal bathing waters are situated on the sea or transitional water coastline, with respective parameter thresholds defined in Annex I of the Directive. They are subject to more strict thresholds than the inland bathing waters. Quality trend in Ireland for the period 1990–2018 if historical data are available is shown in Figure 1. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I.



**Figure 1: Trend of coastal bathing water quality in Ireland. Notes:** Each column represents an absolute count of bathing waters in the season. Quality classes “good” and “sufficient” are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

### 3.2 Inland bathing waters

Inland bathing waters are situated at rivers and lakes, featuring fresh water and with respective parameter thresholds defined in Annex I of the Directive. Quality trend in Ireland for the period 1990–2018 if historical data are available is shown in Figure 2. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I.



**Figure 2: Trend of inland bathing water quality in Ireland.** Notes: Each column represents an absolute count of bathing waters in the season. Quality classes “good” and “sufficient” are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

## 4. Bathing water management in Ireland

In addition to monitoring data, reporting countries also provide information on bathing water management in the country. The information is used to exchange good practices, discuss issues on the European level, and understand the specifics of implementation of the Directive.

In Ireland 18 Local Authorities reported information for 145 identified bathing waters to the EPA via BWIS. Three new bathing waters (Forty Foot Bathing Place, Sandycove Beach and White Rock Beach) were identified in 2018.

Many of Ireland’s bathing waters are known to be markedly affected by weather events, particularly by heavy rainfall. This is most evident in the waters close to urban areas such as greater Dublin and other major cities where the influence of wastewater discharges can be a crucial factor in the assessment of overall



quality. Rural bathing waters tend to be affected more by diffuse pollution from agricultural sources. Met Éireann, the Irish National Meteorological Service, reported that the summer of 2018 featured heat wave and drought conditions that affected many parts of the country. Rainfall amounts were below normal at most stations, and the total summer rainfall at one weather station, Cork Airport, was the lowest on record (56 years). ‘Absolute drought’ conditions were recorded at 21 weather stations and ‘partial drought’ conditions were recorded at 10 stations. (Met Éireann, ‘2018, A Summer of Heat Waves and Droughts’ <https://www.met.ie/cms/assets/uploads/2018/09/summerfinal3.pdf>). This is in contrast to the 2017 bathing season, when Met Éireann reported that most areas experienced above average rainfall and around half of Met Éireann’s weather stations had their wettest summer conditions in five years (Met Éireann Summer 2017).

### Bathing Water IT Systems

The Irish Environmental Protection Agency (EPA) has developed a suite of bathing water IT systems to support the reporting and assessment as required by the Bathing Water Directive (2006/7/EC) in Ireland. In 2018, local authorities continued to electronically report to the EPA. Bathing water monitoring results were reported via the Monitoring Data System and the identification of bathing waters, bathing water profiles (new & updates) and monitoring calendars, were reported via the Bathing Water Information System (BWIS). In addition, local authorities electronically notified bathing water incidents arising during the 2018 bathing season via BWIS to the EPA and to the public via the new national bathing water information website [beaches.ie](http://beaches.ie) and @EPABeaches twitter account. Customized CRM bathing water reports were used by the EPA to check and validate the reported 2018 bathing water information, to generate the four-year (or less) water quality assessments, and to generate the information required for WISE bathing water reporting purposes. The EPA bathing water IT systems allow specific information reported by the local authorities to be updated and made available to the public via [beaches.ie](http://beaches.ie).

### Open Data Project

As part of the Open Data Initiative in Ireland, the EPA has developed and recently released Open Data API’s (Application Programming Interfaces) and data portal (<https://data.epa.ie/>).

There are three Bathing Water datasets available from this location:

1. **Locations** (general information about identified and non-identified bathing waters e.g. co-ordinates, general description, RBD, waterbody, facilities available, annual classification for last 4 years, profiles, etc.)
2. **Measurements** (bathing water quality sample results)
3. **Alerts** (information on in-season bathing water pollution incidents while they are ‘open’ (before end date is reported by the local authority))

The API’s are primarily intended as a resource for software developers, etc. and the EPA hopes that the provision of these will encourage the reuse of this information by individuals, students, interest groups and companies.

## Bathing waters profiles

Bathing water profiles for the 145 identified bathing waters in Ireland are available to view, download and print (pdf format) from the mentioned [beaches.ie](https://beaches.ie) website. BWIS allows for efficient reviewing and updating of the profiles as required by the local authorities and formats the profile reports into a standard document layout. Updated versions of any profile documents, such as those required where waters have been assigned Poor status, are available directly from [beaches.ie](https://beaches.ie) once they have been submitted by local authorities and approved for release by the EPA.

## Incidents

2018 saw much less incidents reported than in 2017: 85 compared to 163 (in 2016, however, there were 81 incidents). These incidents were reported by local authorities to the EPA. The prior warnings were issued (part of early warning system) as a precautionary measure for the possible elevation of bacterial levels in the relevant bathing waters, which were generally in response to forecasted heavy rainfall or emergency discharge from waste water treatment plant/network. However, following analysis of scheduled or investigative samples, the majority of the prior warning STP incidents reported, showed no evidence of pollution and were deemed invalid incidents. The replacement of samples under STP requirements was granted for two bathing waters, where either exceedance occurred or bacterial levels were elevated above the 'norm' and STP criteria were met.

In general, management measures undertaken in relation to bathing water incidents included are: notifying the incidents to the Health Service Executive (HSE) and the EPA; notifying the incidents to Irish Water where appropriate; protecting the public by posting of temporary advice against bathing/bathing prohibition notices at the beach (as appropriate); informing the public of the incidents via webpage, Twitter and other media; resampling; site investigations; and corrective & preventative actions where applicable. Local authorities used 'trigger' thresholds for action, to ensure the protection of public health as agreed by the EPA in conjunction with the HSE.

## Poor bathing waters

Following assessment of identified bathing waters in Ireland in 2017, seven bathing waters were classed as poor. These bathing waters had bathing restrictions in place for the entire 2018 bathing season. 'Advice Not to Swim' notices were placed at four of these bathing waters and there were 'Bathing Prohibition' notices at three. 2018 Management Plans for improving the water quality at these bathing waters were provided to the EPA and all were monitored during the 2018 bathing season.

Bathing waters are assessed as poor in relation to a number of possible sources of pollution: dog walkers and subsequent dog fouling; the presence of gulls and migratory birds; domestic wastewater treatment systems, not functioning correctly; septic tanks discharging to the bathing waters; different polluted streams discharging onto bathing waters; storm water overflows; etc.

## Annex I Bathing water quality in Ireland in 2015–2018

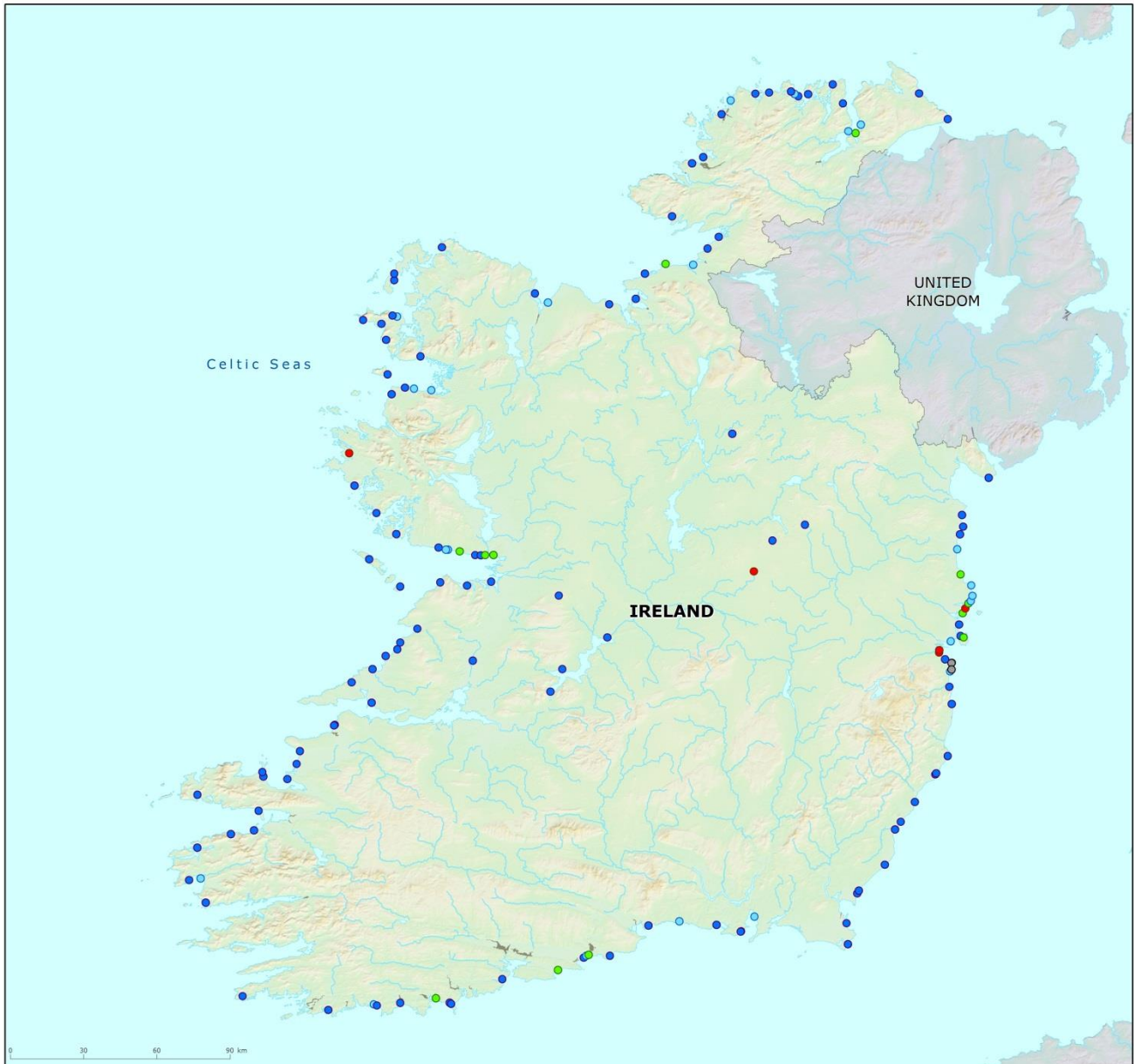
Table 3: Bathing water quality by water category and season

		Total count of bathing waters	Excellent		Good		Sufficient		Poor		Not classified	
			Count	%	Count	%	Count	%	Count	%	Count	%
Coastal	2015	128	93	72.7	13	10.2	14	10.9	6	4.7	2	1.6
	2016	131	94	71.8	17	13.0	10	7.6	6	4.6	4	3.1
	2017	133	94	70.7	17	12.8	12	9.0	7	5.3	3	2.3
	2018	136	95	69.9	22	16.2	12	8.8	4	2.9	3	2.2
Inland	2015	9	8	88.9	0	0.0	0	0.0	0	0.0	1	11.1
	2016	9	8	88.9	1	11.1	0	0.0	0	0.0	0	0.0
	2017	9	8	88.9	1	11.1	0	0.0	0	0.0	0	0.0
	2018	9	8	88.9	0	0.0	0	0.0	1	11.1	0	0.0
Total	2015	137	101	73.7	13	9.5	14	10.2	6	4.4	3	2.2
	2016	140	102	72.9	18	12.9	10	7.1	6	4.3	4	2.9
	2017	142	102	71.8	18	12.7	12	8.5	7	4.9	3	2.1
	2018	145	103	71.0	22	15.2	12	8.3	5	3.4	3	2.1



## Annex II Bathing water quality map

**Map 1: Bathing waters reported during the 2018 bathing season in Ireland**



**Bathing water quality**

- Excellent water quality
- Good water quality
- Sufficient water quality
- Poor water quality
- Quality classification not possible
- No data
- Outside data coverage (data available, not presented on the map)

**Source:** National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Irish authorities; Digital Elevation Model over Europe (EU-DEM): EEA.