

Bathing Water Directive report 2013

Ireland

The report gives a general overview of information acquired from the reported data, based on provisions of the Bathing Water Directive¹. The reporting process is described below, as well as state and trends of bathing water quality in Ireland.

1. BWD reporting in 2013 season

In 2013 bathing season, 135 bathing waters have been reported in Ireland. For each bathing water, five groups of parameters have been delivered:

- *basic identification data* – including name, location, geographic type of bathing water and availability to bathers;
- *seasonal data* – including season start and end, national quality classification in present season, potential management measures and changes in quality;
- *monitoring results* – disaggregated numerical values of two microbiological parameters – intestinal enterococci and *Escherichia coli* (also known as *E. coli*), recorded at each water sample taken;
- *abnormal situation periods* – periods of unexpected situations that have, or could reasonably be expected to have, an adverse impact on bathing water quality and on bathers' health; reporting is optional;
- *short-term pollution periods* – identifiable events that adversely affect water quality by faecal contamination; reporting is optional;

Total reported	135
Coastal	126
Inland	9
Season period	106 days
Coastal	1 Jun to 15 Sep
Inland	1 Jun to 15 Sep
Samples taken	1490
New BWD implemented in	2011

The authorities of Ireland initiated new BWD (2006/7/EC) reporting in 2011 season. The 2013 season data were delivered to the European Commission by **18 December 2013**.

Altogether, **135 bathing waters** have been reported – 0.6% of all bathing waters in Europe. Out of all bathing waters in Ireland, none have been newly identified in 2013 season. One bathing water has been delisted². 93% of bathing waters in Ireland are of coastal type; the other 7% are inland. **1490 samples** were taken at bathing waters throughout the season – 11 per bathing water on average.

The bathing season period was from 1 June to 15 September, i.e. 106 days altogether.

¹ Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>

² Bathing waters which were identified in 2012 season, but not in 2013 season

Detailed information on individual bathing waters is available from national bathing water profiles at <http://splash.epa.ie/BathingWaters>.

2. Assessment methodology

During the bathing season, water samples are taken and analysed for two bacteria, *Escherichia coli* and intestinal enterococci which may indicate the presence of pollution, usually originating in sewage or livestock waste. The results of the analysis are used to assess the quality of the bathing waters concerned and to provide information to the public on the quality of the water in the bathing sites concerned.

According to the BWD, the bathing water sample dataset should satisfy the following conditions:

- a minimum of one sample per month³
- a minimum of four samples per season⁴
- a minimum of 16 samples in total⁵
- four consecutive seasons⁶
- a pre-season sample⁷

The monitoring took place at 100% of total identified bathing waters, likewise all bathing waters satisfied the described sampling frequency rules set by the Directive. Table 1 shows the share of bathing waters that did not satisfy monitoring frequency, as well as corresponding reasons.

Table 1: Number of assessed bathing waters in 2013

Total number of bathing waters in 2013	Bathing waters with sampling frequency satisfied	Bathing waters with sampling frequency not satisfied			
		Insufficiently sampled	Closed	Not sampled	Total
135	135	0	0	0	0

Since the data series of four consecutive years has not been collected yet, the assessment of bathing waters has been done according to transitional rules. This means that only the most recent season's data have been considered, while quality classification is based on criteria of the old BWD (76/160/EEC).

Bathing waters are accordingly classified to one of the BWD quality classes:

- compliant with guide values
- compliant with mandatory values

³ The interval between two samples should not exceed 31 + 4 days, provided that the next sampling is done according to the monitoring calendar; exception applies for temporarily closed bathing waters

⁴ Three samples if the season does not exceed eight weeks or the region is subject to special geographical constraints

⁵ 12 samples if the season does not exceed eight weeks or the region is subject to special geographical constraints

⁶ The condition does not apply if the bathing water is newly identified or any changes have occurred that are likely to affect the classification

⁷ A pre-season sample is taken into account at total number of samples per season

- not compliant
- banned

The classification is based on pre-defined percentile values for microbiological enumerations, falling in the certain class given in Annex I of the Directive. This defines different limit values for coastal and inland waters.

3. Bathing water quality

The results of the bathing water quality in Ireland for the period of 2010–2013 as reported in the past reporting years and for the bathing season of 2013 are presented in Figure 1 (for coastal bathing waters) and Figure 2 (for inland bathing waters). The previous reports are available on the European Commission's bathing water quality website⁸ and the European Environment Agency's bathing water website⁹.

3.1 Coastal bathing waters

In Ireland, 97.6% of coastal bathing waters met at least sufficient water quality in 2013. No coastal bathing waters had to be closed during the bathing season. See Appendix 1 for numeric data.

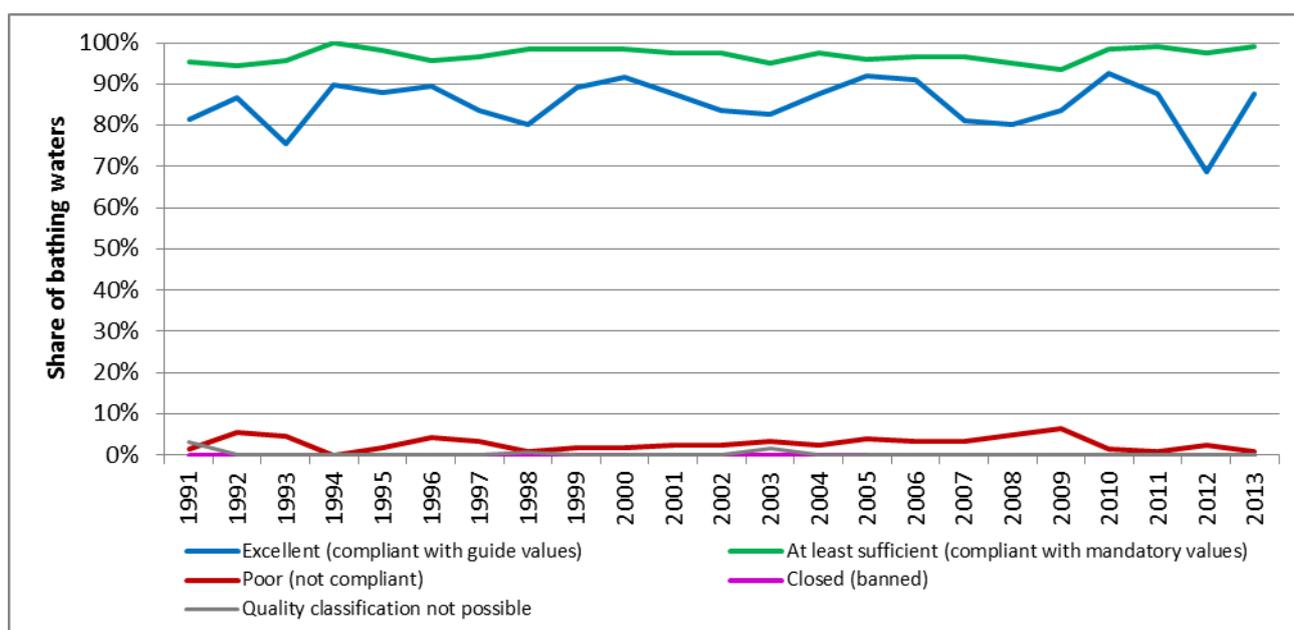


Figure 1: Coastal bathing water quality trend in Ireland. Note: the “At least sufficient” class also includes bathing waters of “Excellent” quality class, the sum of shares is therefore not 100%.

3.2 Inland bathing waters

⁸ http://ec.europa.eu/environment/water/water-bathing/index_en.html

⁹ <http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>

88.9% of the inland bathing waters met at least sufficient water quality in 2013. No bathing waters had to be closed during the bathing season. See Appendix 1 for numeric data.

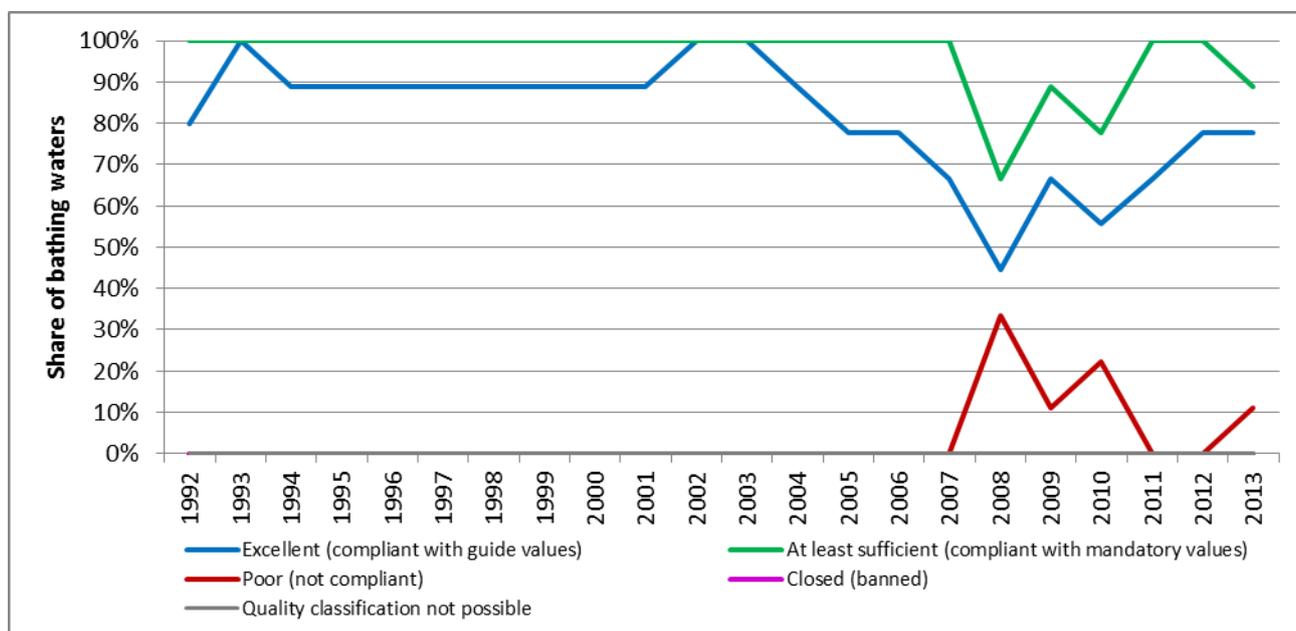


Figure 2: Inland bathing water quality trend in Ireland. Note: the “At least sufficient” class also includes bathing waters of “Excellent” quality class, the sum of shares is therefore not 100%.

4. Information regarding management and other issues

In 2013 the Environmental Protection Agency of Ireland (EPA) developed a suite of bathing water systems to support the implementation of the BWD (2006/7/EC) in Ireland. The EPA developed a Bathing Water Information System (BWIS) to allow local authorities to electronically report the identification of bathing waters, bathing water profiles (new & update existing) and monitoring calendars to the Agency. The EPA developed a new Compliance & Risk Information System (CRIS) to allow local authorities to electronically notify bathing water incidents, in a timely manner, to the Agency and to the public via Splash and EPA Twitter account. The national bathing water information website Splash (splash.epa.ie) was redeveloped with a new design to inform the public of any current bathing water incidents, bathing water monitoring results for all the season, bathing water profiles, public participation information and other information as required under the Directive. The bathing water systems have been developed to allow specified information submitted via BWIS and CRIS to update, in a streamlined process, specific information available to the public via Splash.

Bathing water profiles for the 135 identified bathing waters in Ireland are available from the Splash website at <http://splash.epa.ie/BathingWaters>. Local authorities are currently resubmitting the bathing water profiles via the BWIS to facilitate their inclusion in a standard document layout and allow for efficient reviewing and updating of the profiles in the future. Updated versions of the profile documents will be available from Splash.

Management measures undertaken for 26 bathing water incidents arising during the 2013 bathing season are reported in the EC “2013 Bathing Water Monitoring and Classification for Ireland” reporting file. Of these, six were short term pollution (STP) events and the other incidents were addressed as Regulation 15 events. The six STP events adhered to STP management and sampling requirements such as prior warning of possible STP to the public and the STP events and management measures are detailed in the “Seasonal Information on Bathing Waters” table in the reporting file. Management measures, in general, undertaken for the other bathing water incidents included notifying the incidents to the Health Executive Service (HSE) and the EPA, protecting the public by posting of temporary advice against bathing/bathing prohibition notices at the beach where advised by HSE, informing the public of the incidents at the beach, via the national bathing water website & other media, resampling, site investigations and corrective & preventative actions where applicable. These incidents and their management measures are detailed in the “Seasonal Information on Bathing Waters” table in the 2013 EC reporting file.

2013 was the first bathing season that bathing water incidents were notified by local authorities via CRIS which facilitated their timely notification to EPA bathing water reporting & enforcement teams and to the public via Splash and EPA Twitter account. The public were informed of the start date, nature & duration of incidents and the public could view bathing water warnings/notifications where applied. When local authorities reported an incident had ended via CRIS this triggered the automatic removal of the incident from Splash and the sending of a tweet from EPA Twitter account that the incident had ended (EPA, 2013).

5. Interactive information on bathing water quality in Europe

The bathing water section of the Water Information System for Europe (WISE), which is accessible at the EEA bathing water website (<http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters>), allows users to view the bathing water quality at more than 22 000 coastal beaches and inland sites across Europe. Data is aggregated and visualized on national and station level. Detailed information regarding specific bathing site are given in pop-up windows (can be activated with a click on a selected bathing location) and bathing water profiles which can be opened through hyperlinks in pop-up windows.

The data on bathing water quality in 2013 and previous years can also be viewed in WISE bathing water data viewer, an application prepared by TC Vode (<http://bwd.eea.europa.eu/>). The WISE bathing water quality data viewer combines text and graphical visualisation, providing a quick overview of the locations of coastal and inland bathing waters, as well as statistics on their quality. Specific bathing water locations can be observed on Google Earth, Google maps or Bing maps.

Appendix 1: Results of bathing water quality in Ireland from 2010 to 2013

		Total	Excellent (compliant with guide values)		At least sufficient (compliant with mandatory values)		Poor (not compliant)		Closed (banned)		Quality classification not possible*	
			No	%	No	%	No	%	No	%	No	%
Coastal	2010	122	113	92.6	120	98.4	2	1.6	0	0.0	0	0.0
	2011	126	106	84.1	124	98.4	1	0.8	1	0.8	0	0.0
	2012	127	84	66.1	123	96.9	4	3.1	0	0.0	0	0.0
	2013	126	107	84.9	123	97.6	3	2.4	0	0.0	0	0.0
Inland	2010	9	5	55.6	7	77.8	2	22.2	0	0.0	0	0.0
	2011	9	6	66.7	9	100.0	0	0.0	0	0.0	0	0.0
	2012	9	7	77.8	9	100.0	0	0.0	0	0.0	0	0.0
	2013	9	7	77.8	8	88.9	1	11.1	0	0.0	0	0.0
Total	2010	131	118	90.1	127	96.9	4	3.1	0	0.0	0	0.0
	2011	135	112	83.0	133	98.5	1	0.7	1	0.7	0	0.0
	2012	136	91	66.9	132	97.1	4	2.9	0	0.0	0	0.0
	2013	135	114	84.4	131	97.0	4	3.0	0	0.0	0	0.0

Note: the "At least sufficient" class also includes bathing waters which are of excellent quality, the sum of shares is therefore not 100%. * This includes new bathing waters, bathing waters with changes that affect or could have affected bathing water quality, and bathing waters that do not have enough samples.

Appendix 2: Bathing water quality map

Map 1: Bathing waters reported during the 2013 bathing season in Ireland

