

Bathing water results 2009 – Ireland

1. Introduction

This report gives a general overview of bathing water quality in Ireland during the 2009 bathing season.

Ireland reported five parameters under the Directive 76/160/EEC (1 Total coliforms, 2 Faecal coliforms, 8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices)).

The parameters to be taken into account for assessment according to the assessment rules of the Directive 76/160/EEC are microbiological (1 Total coliforms, 2 Faecal coliforms) and physico-chemical (8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices)).

The bathing waters are classified in the following categories:

- Compliant with mandatory values of the Directive for the five parameters (class CI);
- Compliant with mandatory and more stringent guide values of the Directive for the five parameters (class CG);
- Not compliant with mandatory values of the Directive for the five parameters (class NC);
- Banned or closed (temporarily or throughout the season) (class B).

2. Length of bathing season and number of bathing waters

The bathing season lasted three months, from the 1 June until the end of August 2009.

A total of 131 bathing waters were monitored in Ireland during the 2009 bathing season, of which 122 were coastal bathing waters and nine freshwater bathing waters on lakes. Six bathing waters (five coastal and one freshwater) were monitored with reduced frequency according to the Directive 76/160/EEC.

With 131 bathing waters Ireland accounts for about 0.6% of the reported bathing waters of the European Union.

The evolution of the reported number of bathing waters since monitoring of the water quality began under the Directive 76/160/EEC is presented in Table 1. The number of coastal bathing waters increased significantly since the start of the reporting from 65 in 1991 to 122 in 2001. Since then, the number of coastal bathing waters has remained the same. At the beginning of reporting in 1992, there were five freshwater bathing waters. The number of freshwater bathing waters increased to nine in 1994 and remained the same afterwards.

3. Results of bathing water quality

The results of the bathing water quality in Ireland for the period 1991-2008 as reported in the past reporting years and for the bathing season of 2009 are presented in Figure 1. The previous reports are available on the European Commission's bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html; Water and Health/Bathing Water/2005-2009 reports) and the European Environment Agency's bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>; reports for 2008 bathing season).

The graphs show, for coastal and freshwater bathing waters separately:

- The percentage of bathing waters that comply with the guide values (class CG, blue line);
- The percentage of bathing waters that comply with the mandatory values (class CI, green line);

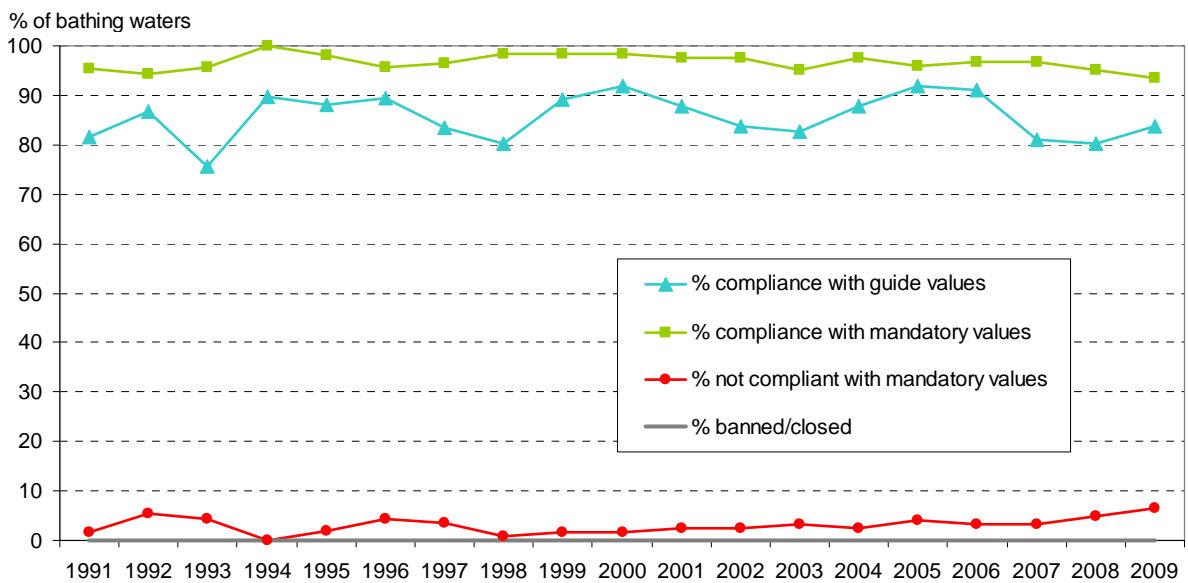
- The percentage of bathing waters that do not comply with the mandatory values (class NC, red line);
- The percentage of bathing waters that are banned or closed (temporarily or throughout the season) (class B, grey line).

Table 1 shows the same information in absolute numbers and in percentages, separately for coastal and freshwater bathing waters. Table 2 shows the bathing water quality results for 2009 season in Ireland for all bathing waters.

Map 1 shows the location of the reported bathing waters in Ireland. The location of the bathing waters is based on the geographic coordinates reported by the Irish authorities.

Figure 1: Results of bathing water quality in Ireland from 1991 to 2009

Coastal bathing waters (IE)



Freshwater bathing waters (IE)

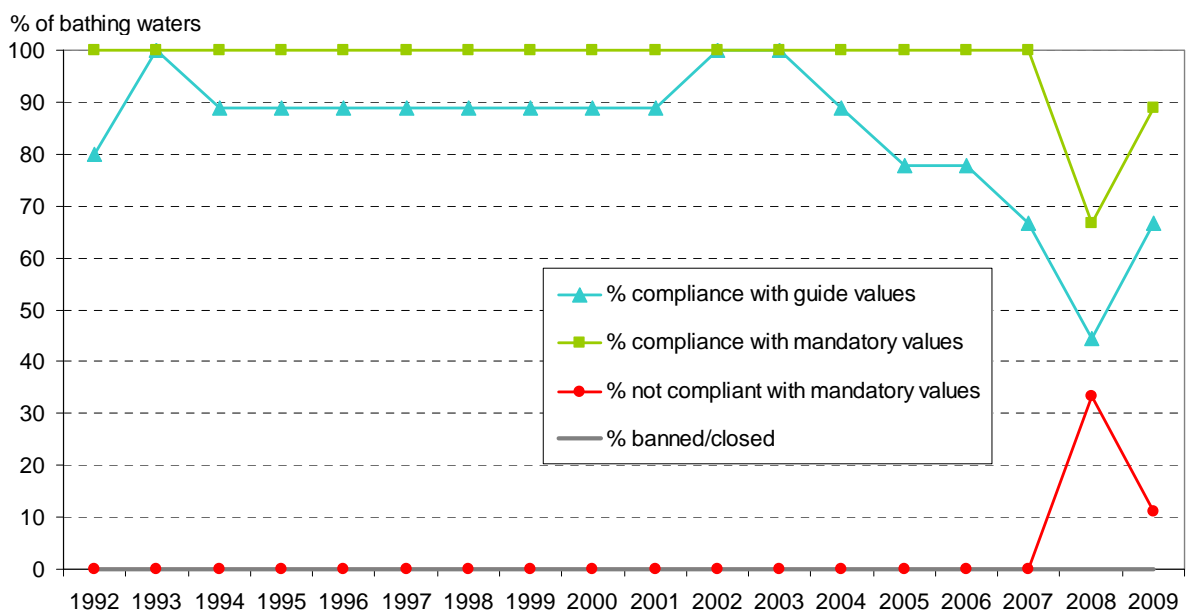


Table 1: Results of bathing water quality in Ireland from 1991 to 2009

IE										
		Total number of bathing waters	Compliance with guide values		Compliance with mandatory values		Not compliant		Banned/closed temporarily or throughout the season	
			Number	%	Number	%	Number	%	Number	%
Coastal bathing waters	1991	65	53	81.5	62	95.4	1	1.5	0	0.0
	1992	90	78	86.7	85	94.4	5	5.6	0	0.0
	1993	90	68	75.6	86	95.6	4	4.4	0	0.0
	1994	108	97	89.8	108	100.0	0	0.0	0	0.0
	1995	108	95	88.0	106	98.1	2	1.9	0	0.0
	1996	115	103	89.6	110	95.7	5	4.3	0	0.0
	1997	115	96	83.5	111	96.5	4	3.5	0	0.0
	1998	121	97	80.2	119	98.3	1	0.8	0	0.0
	1999	121	108	89.3	119	98.3	2	1.7	0	0.0
	2000	121	111	91.7	119	98.3	2	1.7	0	0.0
	2001	122	107	87.7	119	97.5	3	2.5	0	0.0
	2002	122	102	83.6	119	97.5	3	2.5	0	0.0
	2003	122	101	82.8	116	95.1	4	3.3	0	0.0
	2004	122	107	87.7	119	97.5	3	2.5	0	0.0
	2005	122	112	91.8	117	95.9	5	4.1	0	0.0
	2006	122	111	91.0	118	96.7	4	3.3	0	0.0
	2007	122	99	81.1	118	96.7	4	3.3	0	0.0
	2008	122	98	80.3	116	95.1	6	4.9	0	0.0
2009	122	102	83.6	114	93.4	8	6.6	0	0.0	
Freshwater bathing waters	1992	5	4	80.0	5	100.0	0	0.0	0	0.0
	1993	5	5	100.0	5	100.0	0	0.0	0	0.0
	1994	9	8	88.9	9	100.0	0	0.0	0	0.0
	1995	9	8	88.9	9	100.0	0	0.0	0	0.0
	1996	9	8	88.9	9	100.0	0	0.0	0	0.0
	1997	9	8	88.9	9	100.0	0	0.0	0	0.0
	1998	9	8	88.9	9	100.0	0	0.0	0	0.0
	1999	9	8	88.9	9	100.0	0	0.0	0	0.0
	2000	9	8	88.9	9	100.0	0	0.0	0	0.0
	2001	9	8	88.9	9	100.0	0	0.0	0	0.0
	2002	9	9	100.0	9	100.0	0	0.0	0	0.0
	2003	9	9	100.0	9	100.0	0	0.0	0	0.0
	2004	9	8	88.9	9	100.0	0	0.0	0	0.0
	2005	9	7	77.8	9	100.0	0	0.0	0	0.0
	2006	9	7	77.8	9	100.0	0	0.0	0	0.0
	2007	9	6	66.7	9	100.0	0	0.0	0	0.0
2008	9	4	44.4	6	66.7	3	33.3	0	0.0	
2009	9	6	66.7	8	88.9	1	11.1	0	0.0	

Note: Bathing waters which were insufficiently sampled or not sampled according to the Bathing Water Directive were not included in this table. Therefore, in some cases, the sum of the different categories will not be equal to the total number of bathing waters. Bathing waters which were compliant with the guide values were also compliant with the mandatory values.

Table 2: Results of bathing water quality for all bathing waters in Ireland in 2009

IE										
		Total number of bathing waters	Compliance with guide values		Compliance with mandatory values		Not compliant		Banned/closed temporarily or throughout the season	
			Number	%	Number	%	Number	%	Number	%
Bathing waters	2009	131	108	82.4	122	93.1	9	6.9	0	0.0

Note: Bathing waters which were compliant with the guide values were also compliant with the mandatory values.

4. Development of bathing water quality

Coastal bathing waters

In Ireland, 93.4% of the coastal bathing waters met the mandatory values in 2009. This is a decrease of 1.7% compared to the previous year. 83.6% of the bathing waters met the more stringent guide values, which is an increase of 3.3%. The number of non-compliant bathing waters with the mandatory values increased from six (4.9%) to eight bathing waters (6.6%). Since the start of the reporting in 1991, no coastal bathing water had to be closed during the season.

From 1991 onwards, the compliance with the mandatory values remained rather stable above 95% with a small drop in 1992 and 2009. Overall, the compliance with the more stringent guide values fluctuated between 75.6% in 1993 and 91.8% in 2005, which is also a good result.

Freshwater bathing waters

Eight out of nine freshwater bathing waters (88.9%) met the mandatory values and six bathing waters (66.7%) met the more stringent guide values in 2009. This is an increase of two bathing waters compared to the previous year in terms of both the mandatory values (+ 22.2%) and the guide values (+ 22.3%). Only one bathing water (11.1%) was not compliant with the mandatory values compared to three (33.3%) in 2008. Since the start of the reporting in 1992, no freshwater bathing water had to be closed during the season.

All reported freshwater bathing waters have been compliant with the mandatory values since 1992, except in 2008 and 2009. From 1993 till 2004, the number of bathing waters that complied with the more stringent guide values remained at the same high level (88.9%), with two peaks of 100% compliance in 1993 and from 2002 until 2003. This trend doesn't continue for the period from 2005 till 2009 as there was a slight decrease in the freshwater quality. The lower compliance rate with the guide values in 2007 and with both the mandatory and guide values in 2008 and 2009 was due to the higher than usual rainfall that occurred during the summer periods.

5. General information as provided by the Irish authorities

In Ireland, the legislation governing the quality of bathing waters for the 2009 season is set out in the Quality of Bathing Waters Regulations, 1992 (S.I 155 of 1992) and amendments, which transposed the EU Directive 76/160/EC concerning the quality of bathing water.

Sampling

Responsibility for sampling (or arranging the sampling) at designated bathing areas lies with the relevant local authorities. Sampling at these bathing areas must be undertaken on a fortnightly basis during the bathing season which extends from the 1 June until the end of August each year. Monitoring of the bathing waters commenced two weeks before the start of the season (May) and continued during the bathing season. The minimum number of samples to be taken during the season is seven. Under certain circumstances, in particular where there has been a deterioration in water quality, both the frequency of monitoring and range of analytes must be increased. Similarly, where

bathing water quality has at least complied with the mandatory standards for the previous two seasons then the monitoring frequency may be reduced to a minimum of four times during the bathing season.

The analytical methods used to assess compliance as listed in the Annex of Directive 76/160/EC have been transposed into the Irish Regulations. Under Irish legislation additional national standards have also been established for a number of parameters.

Local Authorities are required to report the results of sampling to the Environmental Protection Agency at the end of each bathing season. The Environmental Protection Agency is responsible for compiling the bathing water quality results and submitting this information to the European Commission in the specified formats.

Results

In 2009 93 per cent of bathing areas in Ireland complied with the minimum EU mandatory values. In addition, 82 per cent of the bathing areas also complied with the guide values for the parameters total and faecal coliforms, mineral oils, surface active substances and phenols. From 2008 to 2009 the proportion of bathing areas complying with the mandatory values remained unchanged and the proportion of areas complying with the guide values increased by 4 per cent.

Weather conditions in 2009 bathing season

In Ireland, rainfall totals were above normal everywhere for the third successive summer. A total of between 43 and 52 wet days was recorded across the country for the period June to August, compared with the normal range for summer of between 32 and 38 wet days; in parts of the south and west of Ireland there were between 57 and 63 wet days recorded. There were some heavy daily falls throughout the season, often associated with thunderstorms.

Information to the Public

On the 30 July 2009, the Environmental Protection Agency launched a new online map-based website "Splash" (www.bathingwater.ie) that provides the public with bathing water quality information for the 131 designated bathing areas around Ireland. The website provides the latest bathing water sampling results for each bathing area and their compliance status with EU bathing water quality standards, and for 2003 onwards provides information about the compliance history of these bathing areas. The Splash website also provides a description of the beach, aerial and ordinary photography, details of blue flag status and lifeguard availability, as well as current weather and tidal information.

To allow for the timely availability of bathing water quality results from the Splash website, the relevant local authorities in Ireland submit sampling results using a new electronic reporting system EDEN, an infrastructure the Environmental Protection Agency has built to share environmental data between public bodies. The Splash website fulfils some of the main requirements of Regulation 18 of the Bathing Water Quality regulations 2008 (S.I. No. 79 of 2008) regarding the provision of information to the public.

Follow-up Actions

The Office of Environmental Enforcement within the Environmental Protection Agency has been notified of all the bathing areas, which have failed to meet the mandatory standards as prescribed in the Directive. Follow up audits will be undertaken with each of the responsible local authorities, such that a programme of improvements can be put in place to bring these bathing areas back into compliance.

Waste Water Treatment and Regulation

Ireland's National Development Plan (NDP) 2007-2013 includes an investment of €4.7 billion in urban waste water infrastructure and water services. A new Water Services Investment Programme for the period 2010-2012, outlining the countrywide water and sewerage schemes to be undertaken over the next few years, is to be published shortly. It will include the progression of works to provide the

necessary infrastructural improvements, where required, at areas identified as failing mandatory bathing water standards.

Furthermore, the Waste Water Discharge Authorisation Regulations came into effect on 27 September 2007 providing a system for the licensing or certification of all discharges to the aquatic environment from sewerage systems owned, managed and operated by local authorities. This provides a process for the Environmental Protection Agency to place conditions on the operation of such discharges to secure improvements in the quality of effluents from urban waste water treatment plants.

The report by the Irish authorities in regard to bathing water quality in Ireland for 2009 bathing season can be obtained from

http://cdr.eionet.europa.eu/ie/eu/bathing/envs2ggwg/2009_Quality_of_Bathing_Water_in_Ireland.doc.

6. More information on bathing water quality in the European Union

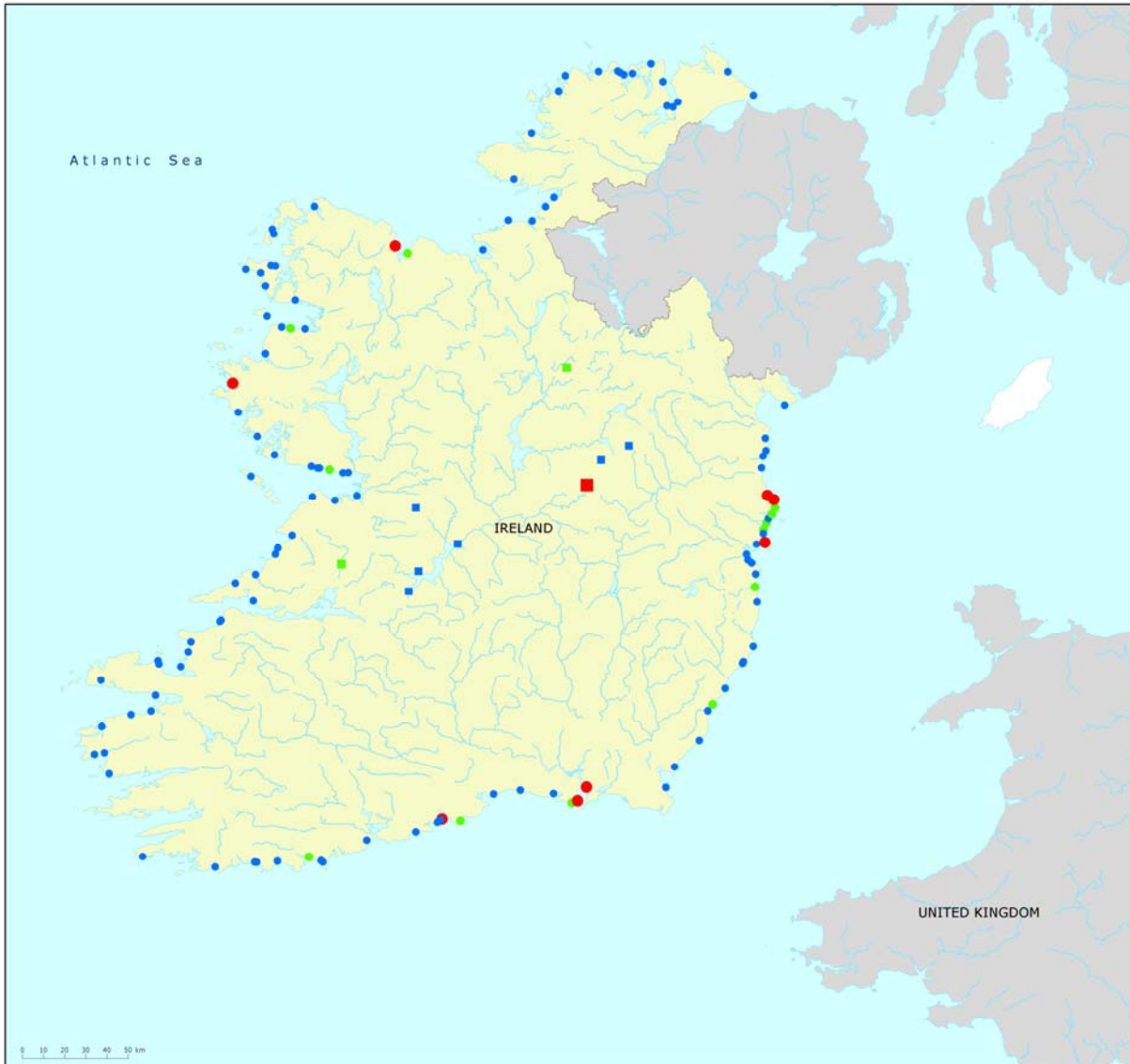
More information on bathing water quality in the European Member States, including the EU summary report, the reports for 27 Member States, Croatia and Switzerland, can be found on the European Commission's bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html) and the European Environment Agency's bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>). The reports for the bathing seasons of 2008 and 2009 have been produced by the Institute for Water of the Republic of Slovenia (IWRS), a partner in the EEA European Topic Centre on Water (ETC/W). Countries have collaborated in the assessment of bathing water quality and supplied additional information when needed.

By 2015, Member States will have to comply with the stricter and more ambitious requirements laid out in the New Bathing Water Directive (Directive 2006/7/EC). This Directive requires more effective monitoring and management of bathing waters, greater public participation and improved information. More information on the new Directive can be found on the bathing water quality website and on <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>.

Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Slovakia, Spain and Sweden started to report according to more stringent new requirements in 2008 bathing season. Malta and the Netherlands started to report in 2009 bathing season under the new requirements. Sweden and Malta also sent data for three previous bathing seasons under the new requirements. Luxembourg started to monitor under the new requirements in 2006 bathing season, while reported for the first time in 2007 bathing season.

WISE - Water Information System for Europe (www.water.europa.eu) is a gateway to all water related information. Among other water related data, information on individual bathing water quality can be found in the WISE map viewer and WISE Bathing Water Quality data viewer through interactive maps and graphs (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>).

Map 1: Bathing waters reported during the 2009 bathing season in Ireland



Bathing water quality			
Bathing waters on rivers	Bathing waters on lakes	Coastal/transitional bathing waters	No data
▲ Compliant with guide values	■ Compliant with guide values	● Compliant with guide values	□ No data
▲ Compliant with mandatory values	■ Compliant with mandatory values	● Compliant with mandatory values	■ Outside data coverage (data available, not presented on the map)
▲ Closed*	■ Closed*	● Closed*	
▲ Insufficiently sampled or not sampled	■ Insufficiently sampled or not sampled	● Insufficiently sampled or not sampled	
▲ Not compliant with mandatory values	■ Not compliant with mandatory values	● Not compliant with mandatory values	

Note: * banned or closed (temporarily or throughout the season)
 More data on bathing water quality on: <http://www.eea.europa.eu/themes/water/mapviewers/bathing>
Source: National boundaries: GISCO; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Irish authorities