

Bathing water results 2012 – Belgium

1. Reporting and assessment

In 2012 the Belgian authorities reported under Directive 2006/7/EC provisions a list of their bathing waters, start and end of bathing season for each bathing water, short term pollution events, events impacting bathing water quality and measured values of concentrations of two microbiological parameters — intestinal enterococci and *Escherichia coli* (also known as *E. coli*). This report gives a general overview of bathing water quality in Belgium for the 2012 bathing season. The Walloon Region has reported under the Directive 2006/7/EC since 2010 and sent historical data with two parameters of this Directive for 2007-2009. The Flemish Region reported under the Directive 2006/7/EC in 2011 and sent historical data with two parameters of this Directive for 2008-2010.

When four consecutive years of samples of intestinal enterococci and *Escherichia coli* for bathing water are available, the assessment is done according to assessment rules of the new bathing water Directive 2006/7/EC. The Annex IV of the directive requires a sample to be taken shortly before the start of the bathing season. Sampling dates are to be distributed throughout the bathing season, with the interval between sampling dates never exceeding one month. Taking into account one pre-season sample, no fewer than four samples are to be taken and analysed per bathing season. Three samples need to be taken and analysed per bathing season in the case of bathing water with either bathing season not exceeding eight weeks or being situated in a region subject to special geographical constraints. The result of such monitoring is used to build up the sets of bathing water quality data. The number of samples for the assessment period should thus be at least 16 or 12 if season duration is less than eight weeks or the region is subject to special geographical constraints.

Bathing water quality in 2012 season in Belgium is assessed under the rules of the new bathing water Directive 2006/7/EC. The new Directive assessment provisions are transformed into the following technical rules: a) one pre-season sample should be available, b) the interval between sampling dates in 2012 should never exceed 35 days, provided that the next sampling is done according to the monitoring calendar; c) the yearly number of samples in the previous years should be four or three if bathing season does not exceed eight weeks.

Bathing waters quality classes according to the Directive 2006/7/EC are 'excellent', 'good', 'sufficient' and 'poor'. Bathing waters are classified on the basis of the percentile values for microbiological enumerations falling in the certain class given in Annex I of the Directive. Some bathing waters cannot be classified according to their quality but are instead classified as 'insufficiently sampled', 'new', 'changes' and 'closed'.

The bathing water is classified as 'insufficiently sampled' in 2012 if pre-season sample is missing, sampling frequency is not satisfied or the set of data is not complete. If the bathing water is newly identified and the data set is not complete yet, it is classified as 'new'. If changes occur that affect quality and the data set is not complete yet, it is classified as 'changes'. Temporarily closed bathing waters or closed bathing waters throughout 2012 season are classified if there is a complete set of data available. Otherwise, they are classified as 'closed'.

2. Length of bathing season and number of bathing waters

The bathing season started on 26 May or 9 June 2012 and ended on 15 September 2012 for coastal bathing waters. Inland bathing waters opened between 28 April and 15 June 2012 and closed on 15 September 2012.

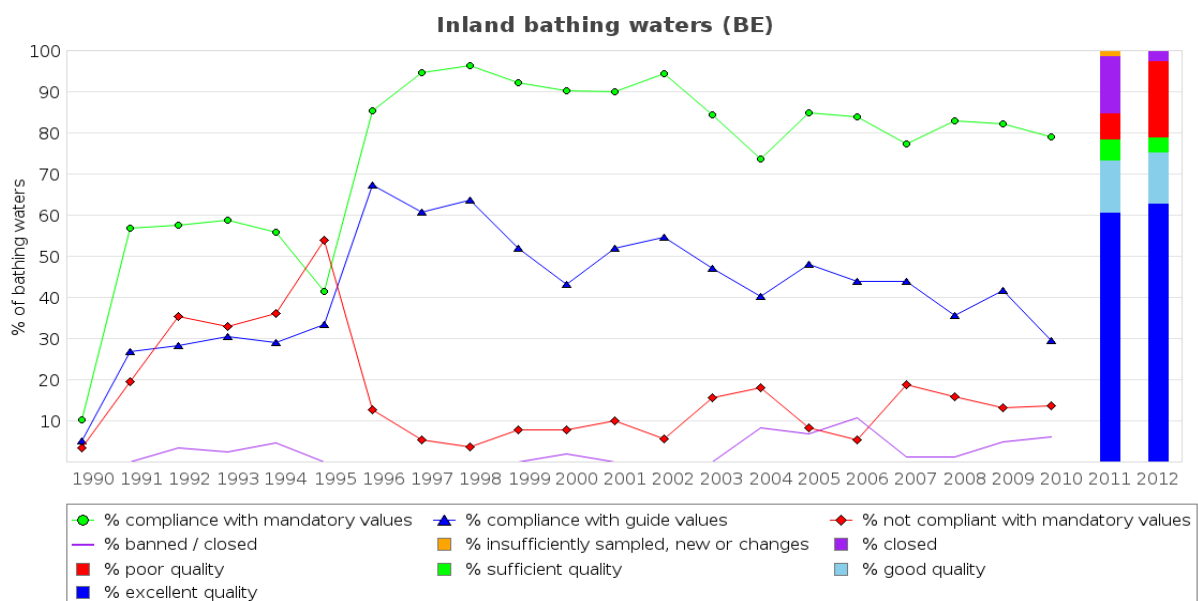
A total of 123 bathing waters were monitored in Belgium during the 2012 bathing season, of which 42 were coastal bathing waters and 81 were inland bathing waters (19 on rivers; 62 on lakes).

With 123 reported bathing waters Belgium accounts for about 0.6 % of the reported bathing waters of the European Union.

3. Bathing water quality

The results of inland and coastal bathing water quality in Belgium for the period 1990-2012 are presented in Figure 1¹. 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) and the European Environment Agency's bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>).

Figure 1: Results of bathing water quality in Belgium from 1990 to 2012.

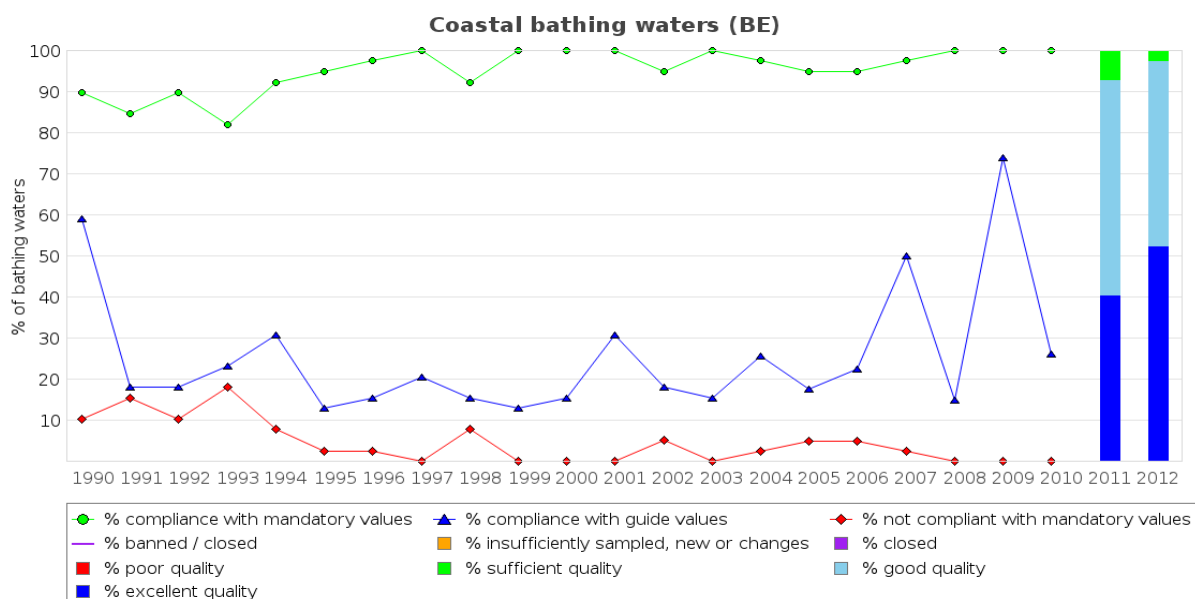


¹ The graph shows the classification under the Directive 76/160/EEC and during transition period, for inland bathing waters from 1990 to 2008:

- 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 (class B, violet line).

The same graph shows the classification under the Directive 2006/7/EC, for inland bathing waters from 2009 to 2012:

- The percentage of bathing waters that have excellent quality (dark blue bar);
- The percentage of bathing waters that have good quality (light blue bar);
- The percentage of bathing waters that have sufficient quality (green bar);
- The percentage of bathing waters that have poor quality (red bar);
- The percentage of bathing waters that are closed (violet bar);
- The percentage of bathing waters that are insufficiently sampled, new or with changes (orange bar).



Note: Data until 2008 is available in the previous reports at http://ec.europa.eu/environment/water/water-bathing/index_en.html.

Table 1 and Table 2 show results of bathing water quality for coastal, inland and all bathing waters from 2008 on as assessed in the previous annual reports and under the Directive 2006/7/EC for the 2012 season. A map given in Appendix 1 shows the location and quality of all bathing waters.

Coastal bathing waters

In Belgium, 52.4 % of the coastal bathing waters were of excellent quality in 2012. This is an increase of 11.9 % compared to the previous year. A total of 19 bathing waters (45.2 %) were of good quality and one bathing water (2.4 %) was of sufficient quality compared to 25 bathing waters (59.5 %) in 2011. No bathing waters had poor quality and no bathing waters had to be closed during the season.

Inland bathing waters

63.0 % of the inland bathing waters were of excellent quality in 2012. This is an increase of 2.2 % compared to the previous year. A total of 10 bathing waters (12.3 %) were of good quality and three bathing waters (3.7 %) were of sufficient quality compared to 10 bathing waters of good quality (12.7 %) and four bathing waters of sufficient quality (5.1 %) in 2011. A total of 15 bathing waters (18.5 %) had poor quality and had to be closed at least temporarily if not for the whole 2012 bathing season. Two bathing waters that did not have enough samples to be classified into quality class were classified as closed in 2012. In 2011 there were five (6.3%) bathing waters classified as poor and 11 bathing waters (13.9 %) classified as closed.

Table 1: Results of bathing water quality in Belgium. Assessment during transition period.

BE												
		Total number of bathing waters	Compliance with guide and mandatory values*		Compliance with mandatory value		Not compliant		Banned/closed		Insufficiently sampled or not sampled	
			number	%	number	%	number	%	number	%	number	%
Coastal bathing waters	2008	40	6	15.0	40	100.0	0	0.0	0	0.0	0	0.0
	2009	42	31	73.8	42	100.0	0	0.0	0	0.0	0	0.0
	2010	42	11	26.2	42	100.0	0	0.0	0	0.0	0	0.0
	2011											
	2012											
Inland bathing waters	2008	76	27	35.5	63	82.9	12	15.8	1	1.3	0	0.0
	2009	84	35	41.7	69	82.1	11	13.1	4	4.8	0	0.0
	2010	81	24	29.6	64	79.0	11	13.6	5	6.2	1	1.2
	2011											
	2012											
All bathing waters	2008	116	33	28.4	103	88.8	12	10.3	1	0.9	0	0.0
	2009	126	66	52.4	111	88.1	11	8.7	4	3.2	0	0.0
	2010	123	35	28.5	106	86.2	11	8.9	5	4.1	1	0.8
	2011											
	2012											

*Bathing waters which were compliant with the guide values were also compliant with the mandatory values for five parameters under the Directive 76/160/EEC or the mandatory value for Escherichia coli in the Walloon Region.

Table 2: Results of bathing water quality in Belgium from 2010 to 2012. Assessment under Directive 2006/7/EC.

		Total number of bathing waters	Excellent quality		Good quality		Sufficient quality		Poor quality		Closed		Insufficiently sampled		New		Changes	
			number	%	number	%	number	%	number	%	number	%	number	%	number	%	number	%
Coastal bathing waters	2009																	
	2010																	
	2011	42	17	40.5	22	52.4	3	7.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	2012	42	22	52.4	19	45.2	1	2.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inland bathing waters	2009																	
	2010																	
	2011	79	48	60.8	10	12.7	4	5.1	5	6.3	11	13.9	0	0.0	0	0.0	1	1.3
	2012	81	51	63.0	10	12.3	3	3.7	15	18.5	2	2.5	0	0.0	0	0.0	0	0.0
All bathing waters	2009																	
	2010																	
	2011	121	65	53.7	32	26.4	7	5.8	5	4.1	11	9.1	0	0.0	0	0.0	1	0.8
	2012	123	73	59.3	29	23.6	4	3.3	15	12.2	2	1.6	0	0.0	0	0.0	0	0.0

4. Important information as provided by the Belgian authorities

In 2011, the Walloon region has started a large programme of waste-water treatment estimated at 62 million EUR altogether. Among others, the construction of five new waste-water treatment installations began.

The authorities of the Walloon Region provided a public website (<http://aquabact.environnement.wallonie.be/login.do>) with data on bathing water quality on Belgian at bathing sites in the Walloon Region. Other detailed data on bathing water monitoring and reasons for changes was made available together with BWD datasheets (in French; http://cdr.eionet.europa.eu/be/eu/nbwd/envummbbw/Annex_to_ManMeas_corrige.doc; http://cdr.eionet.europa.eu/be/eu/nbwd/envt9w1fq/Annex_to_Change_2012.doc).

Monitoring of cyanobacteria was performed visually every week on bathing areas of lake and pond types. The presence of cyanobacteria was analyzed in the laboratory. In this sense, from 2011, the analysis became more extensive, including the quantification of chlorophyll to determine algal biomass, and quantification of toxins (microcystins type) in the case of biomass important cyanobacteria. Based on the results, the bathing may be disadvised or prohibited. Acceptable thresholds and cyanobacteria toxins are based on the recommendations of the World Health Organization. In 2012, the presence of cyanobacteria was identified on six bathing waters.

The authorities of the Flemish Region also provided a public website (www.kwaliteitzwemwater.be) with data on bathing water quality at bathing sites in the Flemish Region. Other detailed Additional information data on bathing water monitoring was made available together with BWD datasheets (in French; http://cdr.eionet.europa.eu/be/eu/nbwd/envummsxq/Annex_to_ManMeas.doc; http://cdr.eionet.europa.eu/be/eu/bathing/envt55pig/Verklarende_brief_aanduiding_zwemwateren_2012.doc).

There were 15 bathing waters classified as poor quality in 2012, listed in Table 3.

Table 3: Poor quality bathing waters and bathing waters that were classified as closed in 2012

BWID	BW name	2012 status
BE3200012000000E05	LE PLAN D'EAU DE LA MARLETTE	poor
BE4200003000000F10	L'AMBLČVE Ř NONCEVEUX	poor
BE4300009000000F05	LA HOĚGNE Ř ROYOMPRÉ	poor
BE4300020000000F18	L'AMBLČVE Ř COO	poor
BE4300027000000F06	L'OUR Ř OUREN	poor
BE6300003000000H35	L'OURTHE Ř HOTTON	poor
BE6400007000000H03	LE LAC DE NEUFCHĀTEAU	poor
BE6500001000000H07	LA SEMOIS Ř CHINY	poor
BE6500003000000H10	LA SEMOIS Ř LACUISINE	poor
BE7100005000000I14	LA LESSE Ř PONT-Ř-LESSE	poor
BE7100009000000I15	LA LESSE Ř HULSONNIAUX	poor
BE7100009000000I16	LA LESSE Ř HOUYET	poor
BE7100011000000I20	LA LESSE Ř BELVAUX	poor
BE7100012000000I13	L'OURTHE Ř NOISEUX	poor
BE7100015000000I12	LA SEMOIS Ř VRESSE-SUR-SEMOIS	poor
BE6400002000000H19	LA SEMOIS Ř BOUILLON (PONT DE LA POULIE)	closed
BE7100015000000I09	LA SEMOIS Ř MEMBRE	closed

5. General information on bathing water quality in Europe in 2012

From more than 22 000 bathing areas monitored throughout Europe in 2012, around two thirds were in coastal waters and the rest were in rivers and lakes. In the 2012 bathing season, the monitoring of bathing sites has been adjusted to the provisions in the EU's new bathing water directive (Directive 2006/7/EC). The sampling of water quality in most of the bathing water sites meets the frequency standards (this involves a pre-season sample of the water quality, followed up by monthly samples thereafter). As regards assessment, the provisions in the new bathing water directive have been applied in 19 European countries (Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Spain, Spain, Sweden). This involved taking data from four years of monitoring to make the 2012 assessment. For the remaining ten countries, the 2012 assessment has been carried out under a set of transitional rules that do not yet meet all the requirements of the new directive using the results from the 2012 monitoring.

In 2012, the quality of 94 % of all bathing waters met at least the minimum 'mandatory' level (corresponding to a rating of sufficient quality under the new directive). Bathing water quality improved at 1.8 % of sites in 2012 compared with 2011, and at 2.5 % of sites compared with 2010. There has also been a marked decline compared with 2011 in the number of bathing waters that were closed or that prohibited bathing.

In 2012, 95.3 % of coastal bathing waters in the EU-27 achieved the minimum quality standards requested by the EU directives — an increase of 2.0 % compared with 2011. The share of coastal bathing waters with excellent quality (or complying with the guide values) in 2012 reached 81.2 % (an increase of 0.9 % from 2011).

The percentage of inland bathing waters with excellent quality is 72 % in 2012, a 1.6 % increase from 2011. In 2012, 91 % of inland bathing waters in the European Union had good or sufficient quality. This is a 1.0 % point increase from 2011. Only 2.3 % of inland bathing waters in the EU did not satisfy the minimum quality level. This is 0.1 % decrease from the previous year, continuing the slow but steady reduction in the percentage of poor quality bathing waters.

The "European bathing water quality in 2012" report presents the results and trends in bathing water quality in 2012 in Europe (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>). More information on bathing water quality as prepared for all reporting countries can be found on the European Environment Agency's bathing water website. The reports for the 2012 season have been produced by TC Vode, European Topic Center ICM Waters partner with support of the Institute for Water of the Republic of Slovenia (IWRS). Countries have collaborated in the assessment of bathing water quality and supplied additional information when needed.

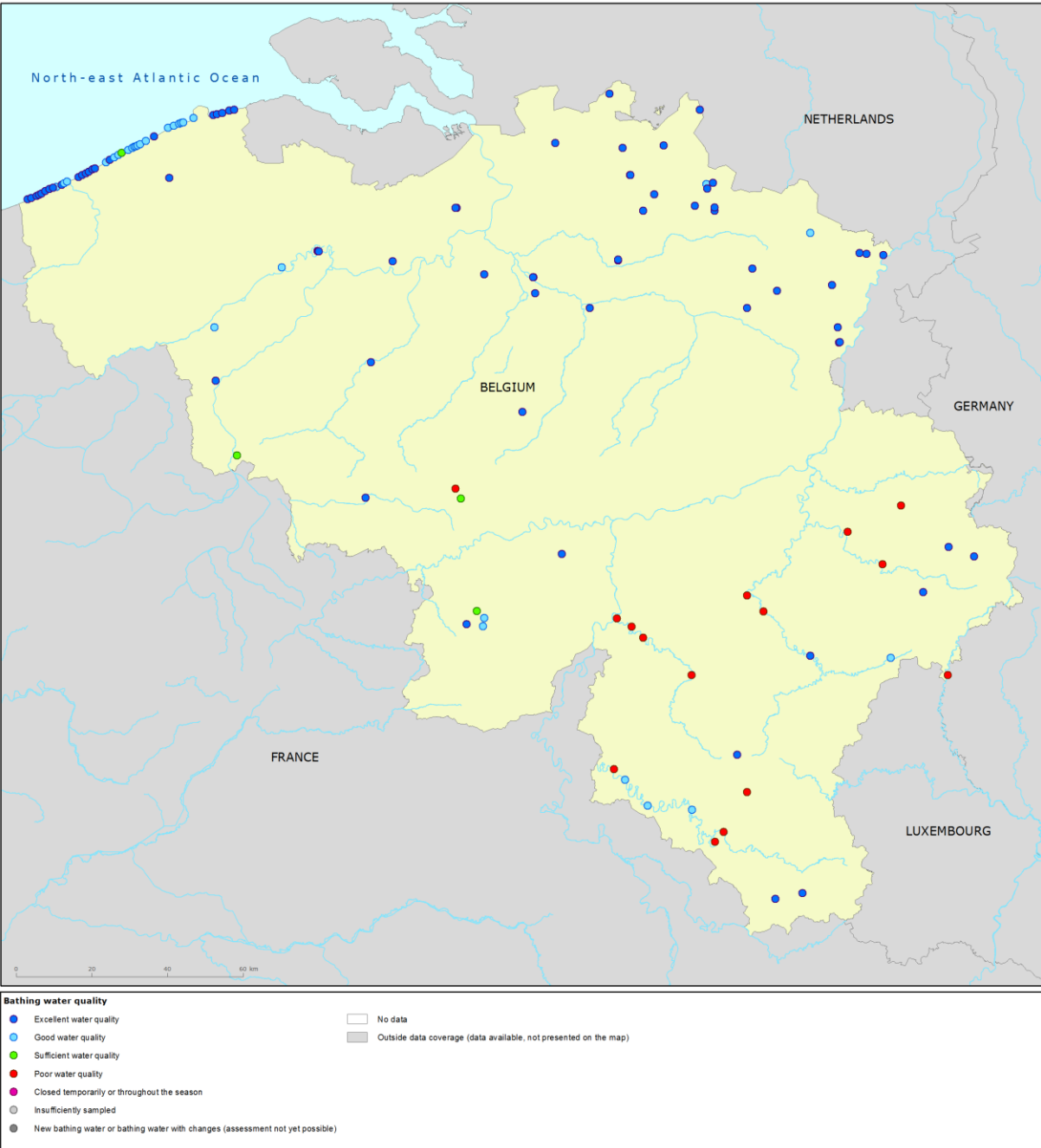
6. Interactive information on bathing water quality in Europe

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/status-and-monitoring/state-of-bathing-water>), allows users to view the bathing water quality at more than 22 000 coastal beaches and inland sites across Europe. Users can check bathing water quality on an interactive map, download data for a selected country or region, and make comparisons with previous years. The Eye on Earth — Water Watch application (<http://eyeonearth.org/map/WaterWatch/>) allows users to zoom in on a section of coast, riverbank or lake, both in street map or, where available, bird's eye viewing formats. The data on bathing water quality in 2012 and previous years can also be viewed in WISE bathing water data viewer, an application prepared by TC Vode (<http://bwd.eea.europa.eu/>).

In order to make information to the public more effective, all EU countries have national or local web portals with detailed information for each bathing water site. Websites generally include a map search function and public access to the monitoring results both in real time and for previous seasons. Citizens now have access to more bathing water information than ever, giving them the tools to become more actively involved in protecting the environment and helping to improve Europe's bathing areas.

Appendix 1

Map 1: Bathing waters reported during the 2012 bathing season in Belgium



Source: National boundaries: GISCO; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Belgian authorities