

Bathing water results 2012 – Hungary

1. Reporting and assessment

In 2012 the Hungarian 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 Hungary for the 2012 bathing season. Hungary has reported under the Directive 2006/7/EC since 2008 and sent historical data with two parameters of this Directive for 2007.

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 Hungary 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'. By the Directive 2006/7/EC, bathing waters can be grouped if they have similar physical, hydrological and geographical characteristics and same risk of pollution and bathers exposure to health damage. Only when bathing water profiles are established assessment with bathing water groups is possible. Hungary grouped 54 % of the bathing waters (124 out of 232) into 44 groups in 2012 bathing season. The assessment of bathing water quality in 2012 is done by groups. The samples obtained during the season from any of the bathing waters in a group was treated as one set of samples for the group.

2. Length of bathing season and number of bathing waters

The bathing season opened between 28 April and 15 July 2012 and closed between 15 August and 30 September 2012. One bathing site was opened the whole year.

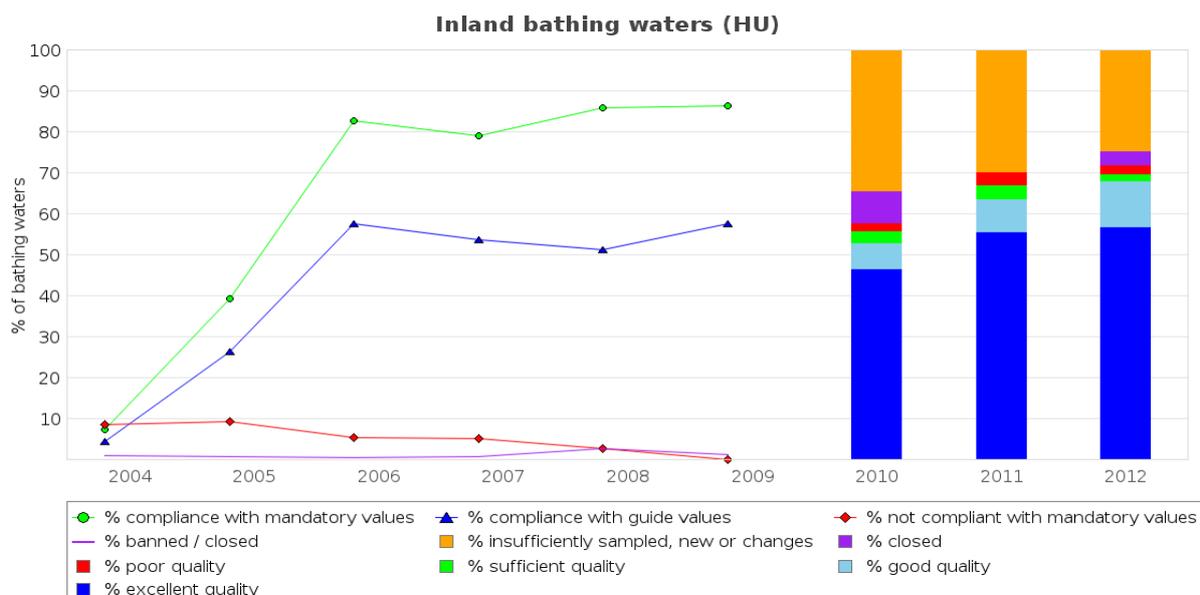
A total of 232 inland bathing waters (30 on rivers; 202 on lakes) were reported in Hungary during the 2012 bathing season. There are no coastal bathing waters in Hungary. Three bathing waters were reported as de-listed (permanently closed) compared to the previous year and two bathing waters were added to the list.

With 232 reported bathing waters Hungary accounts for about 1.1 % of the reported bathing waters of the European Union.

3. Bathing water quality

The results of the bathing water quality in Hungary for the period 2004-2012 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 Hungary from 2004 to 2012.



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 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 the bathing waters.

¹ The graph shows the classification under the Directive 76/160/EEC and during transition period, for inland bathing waters from 2004 to 2009:

- 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 2010 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).

In Hungary, 56.9 % of the inland bathing waters had excellent quality in 2012. This is an increase of 1.2 % compared to the previous year. A total of 26 bathing waters (11.2 %) had good quality and four bathing waters (1.7 %) had sufficient quality compared to 18 (7.9 %) and eight (3.5 %) in 2011 respectively. Five bathing waters had poor quality (2.2 %) and eight bathing waters (3.4 %) were classified as closed during the 2012 bathing season. In 2011 there were seven (3.1 %) poor bathing waters and none was closed.

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

HU													
		Total number of bathing waters	Compliance with guide and mandatory values*		Compliance with mandatory values		Not compliant		Banned/closed		Insufficiently sampled or not sampled		
			number	%	number	%	number	%	number	%	number	%	
All bathing waters	2008	256	131	51.2	220	85.9	7	2.7	7	2.7	22	8.6	
	2009	177	102	57.6	153	86.4	0	0.0	2	1.1	22	12.4	
(Inland bathing waters)	2010												
	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*.

Table 2: Results of bathing water quality in Hungary 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	%
All bathing waters (Inland bathing waters)	2009																	
	2010	251	117	46.6	16	6.4	7	2.8	5	2.0	20	8.0	86	34.3	0	0.0	0	0.0
	2011	228	127	55.7	18	7.9	8	3.5	7	3.1	0	0.0	54	23.7	9	3.9	5	2.2
	2012	232	132	56.9	26	11.2	4	1.7	5	2.2	8	3.4	46	19.8	7	3.0	4	1.7

4. Important information as provided by the Hungarian authorities

Regional public health offices reported on the management of bathing waters and gave information to public. Some information as reported by the Hungarian authorities is presented below:

Bács-Kiskun County (HUBW_00301-00314): water quality was posted on the beaches, updated regularly. List and classification of the BWs, and BW profiles were published in the official monthly journal of the County Government Office. In the beginning of the season, public was informed through the local media. There was no abnormal situation in the current season on the vulnerable sites.

Borsod-Abaúj-Zemplén County (HUBW_00501-00503): there are 3 identified BWs in the County, all operated without problems in 2012. Public was informed on BWs and BW quality, hygienic requirements, and advices for bathing through the local media.

Csongrád County (HUBW_00601-00616): public was informed through the website of the County Government Office on the list and quality of BWs. List was modified in August when a new BW was identified (HUBW_00616). Two beaches were only opened to the public at the end of July, one due to conflicts concerning operation (HUBW_00614), one because of water quality improvement interventions (HUBW_00604). Water quality and seasonal information was posted on the beaches. The public health office informed the written and electronic media on various issues concerning BW operation and quality. The local online journal also posted the list and water quality of BWs.

Hajdú-Bihar County (HUBW_00901): there is only one BW in the County, which operated without problems in 2012. Public was informed through the local media.

Jász-Nagykun-Szolnok County (HUBW_01101-01107): list and classification of BWs was published. There was no inquiry or complaint from the public.

Komárom-Esztergom County (HUBW_01201): the only identified BW in the County did not operate in the season due to conflict concerning operation. Its BW was published on the public health office's website.

Pest County (HUBW_01402-01421): public was informed on the list and classification of the beaches through public health office website. Further information was given upon request. BW quality was posted at the entrance of the beaches.

Szabolcs-Szatmár-Bereg County (HUBW_01601-01615): list of BWs, BW classification and profiles were published through the County Government Office website. Water quality was posted at the entrance of the beaches by the operators.

Tolna County (HUBW_01701-1705): list and classification of BWs was published on the County Government Office website. Water quality was posted at the beach entrances. Both the operators and the public health office were interviewed by the local media (journal and TV).

Non-identified (and not monitored) natural beaches are also used for bathing. The public health office advised the public to refrain from this activity because of the hygienic and accidental hazard.

Vas County (HUBW_01803-1805): three BWs operated in the 2012 season. Official visits to the sites shown improvement of hygiene and services at the beaches. Water quality and rules of use were posted at the beach entrances. There were no inquiries or complaints from the public.

Zala County (HUBW_02002_02021): there were no unexpected events or interventions in the season. Complaints or inquiries were not received from the public.

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

Out of 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.

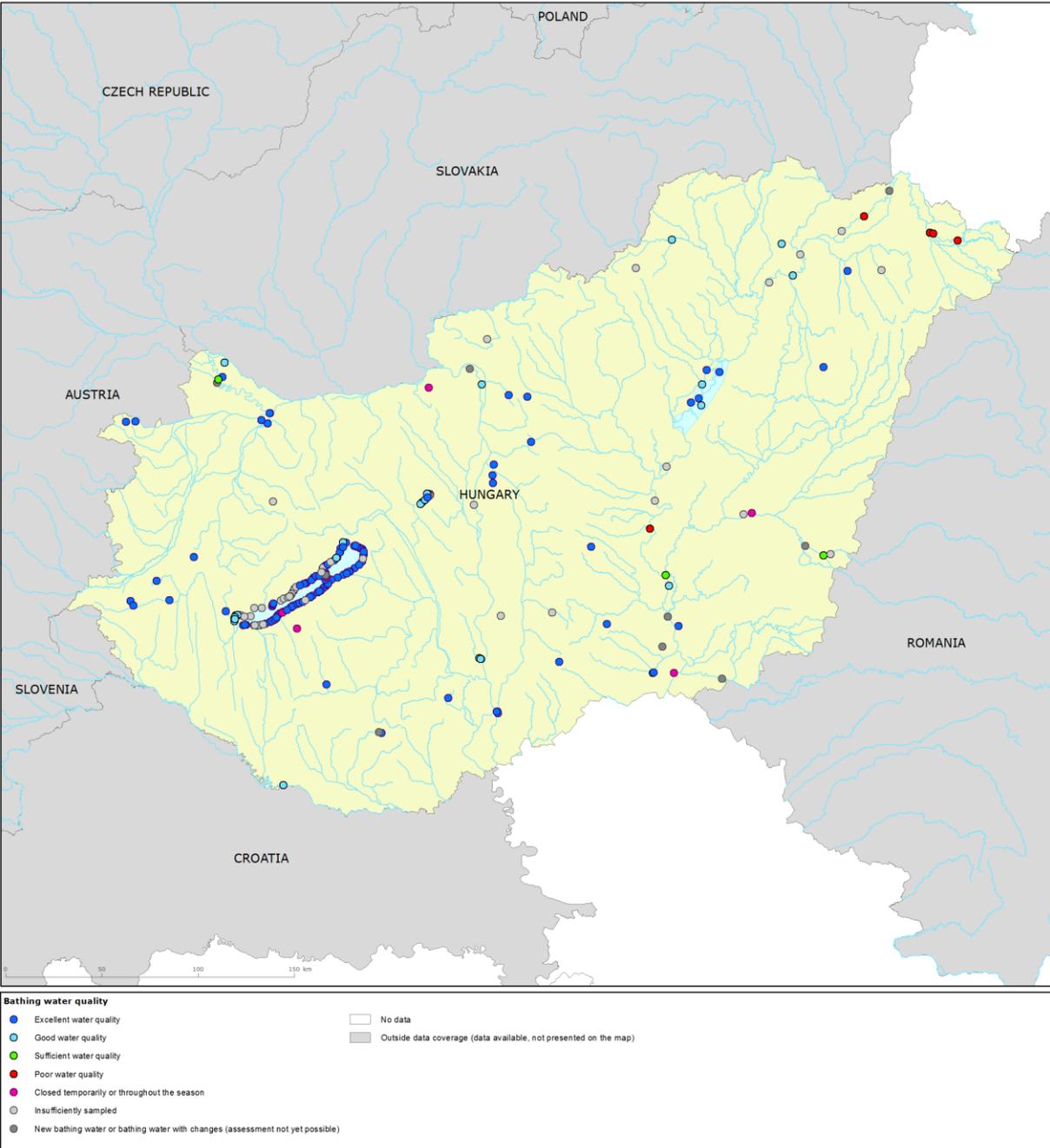
The Eye on Earth — Water Watch application (<http://eyeonearth.org/map/WaterWatch/>) allows users to zoom in on a section of coast, riverbank or lake, both in street map or, where available, bird's eye viewing formats.

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 Hungary



Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD article 3; Bathing waters data and coordinates: Hungarian authorities