

Bathing water results 2011 – Finland

1. Reporting and assessment

This report gives a general overview of bathing water quality in Finland for the 2011 bathing season. Finland has reported under the Directive 2006/7/EC since 2008.

When samples of intestinal enterococci and *Escherichia coli* for bathing water are available for three or four consecutive years, the assessment is done according to assessment rules of Directive 2006/7/EC. The frequency of sampling is set out in Annex IV of the Directive. Including a sample to be taken shortly before the start of the bathing season, the minimum number of samples taken per bathing season is four. However, only three samples are sufficient when the bathing season does not exceed eight weeks or the region is subject to special geographical constraints. Sampling dates are to be distributed throughout the bathing season.

Strictly speaking, there should be one pre-season sample and the interval between sampling should not exceed one month. Since a late start of monitoring and/or low frequency do not necessarily indicate unsatisfactory bathing water quality, it has been accepted that the first sample in the 2011 season could be taken shortly after the start of the season (but within 10 days after the start), and the maximum interval between two samples taken into account is 41 days. The number of samples for the period 2008-2011 should be at least 16. These criteria are described as less strict. In the opposite, under the strict rules, pre-season samples should be available in all four years, the interval between sampling in the 2011 season should have not exceeded one month, but 41 days were acceptable for the 2008, 2009 and 2010 seasons. In this report a quality class under the strict rules and less strict criteria are presented.

Bathing waters quality classified according to the Directive 2006/7/EC are 'excellent', 'good', 'sufficient' and 'poor'. Some bathing waters cannot be classified according to their quality but are instead classified as 'closed', 'new' (classification not yet possible), 'insufficiently sampled' or 'changes' (bathing water is not new and classification not yet possible since a set of monitoring data is incomplete).

2. Length of bathing season and number of bathing waters

The bathing season started on 15 or 25 June 2011 and ended on 15 or 31 August 2011 for both coastal and inland bathing waters.

A total of 323 bathing waters were monitored in Finland during the 2011 bathing season, of which 85 were coastal bathing waters and 238 were inland bathing waters (14 on rivers; 224 on lakes). One coastal bathing water and seven inland bathing waters were reported as de-listed (permanently closed) compared to the previous year. No coastal bathing waters and one inland bathing water were added to the list.

With 323 reported bathing waters Finland accounts for about 1.5 % of the reported bathing waters of the European Union.

3. Bathing water quality

The results of the bathing water quality in Finland for the period 1995-2010 as reported in the past reporting years and for the bathing season of 2011 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/ Bathing Water/ 2005-2011 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 the 2008, 2009 and 2010 bathing seasons).

The graphs show the classification under the Directive 76/160/EEC and during transition period, for coastal and inland bathing waters from 1995 to 2010:

- 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, grey line).

The same graphs show the classification under the Directive 2006/7/EC, for coastal and inland bathing waters for 2011:

- 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 (grey bar);
- The percentage of bathing waters that are insufficiently sampled, new or with changes (orange bar).

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 2011 season. For the year 2010 results applying the less strict rules are presented if they differ from results applying the strict rules.

A map given in Appendix 1 shows the location and quality of the bathing waters.

Coastal bathing waters

For the purpose of commenting the improvement or deterioration of bathing water quality from 2010, excellent quality is compared with compliance with the guide values; good quality and sufficient quality are compared with compliance with the mandatory value for *Escherichia coli* and not the guide values; and poor quality is compared with not compliant with mandatory value for *Escherichia coli*.

In Finland, 70.6 % of the coastal bathing waters were of excellent quality in 2011. This is a decrease of 3.8 % compared to the previous year when 74.4 % of the bathing waters met the guide values. A total of 13 bathing waters (15.3 %) were of good quality and four bathing waters (4.7 %) were of sufficient quality compared to 21 bathing waters compliant with the mandatory value for *Escherichia coli* and not the guide values (24.4 %) in 2010. Three bathing waters (3.5 %) had poor quality compared to one bathing water non-compliant with the mandatory value for *Escherichia coli* (1.2 %) in 2010. No bathing waters (0.0 %) had to be closed during the season, the same as in 2010. Two bathing waters (2.4 %) were insufficiently sampled compared to none (0.0 %) in 2010. Three bathing waters (3.5 %) were classified as new bathing waters.

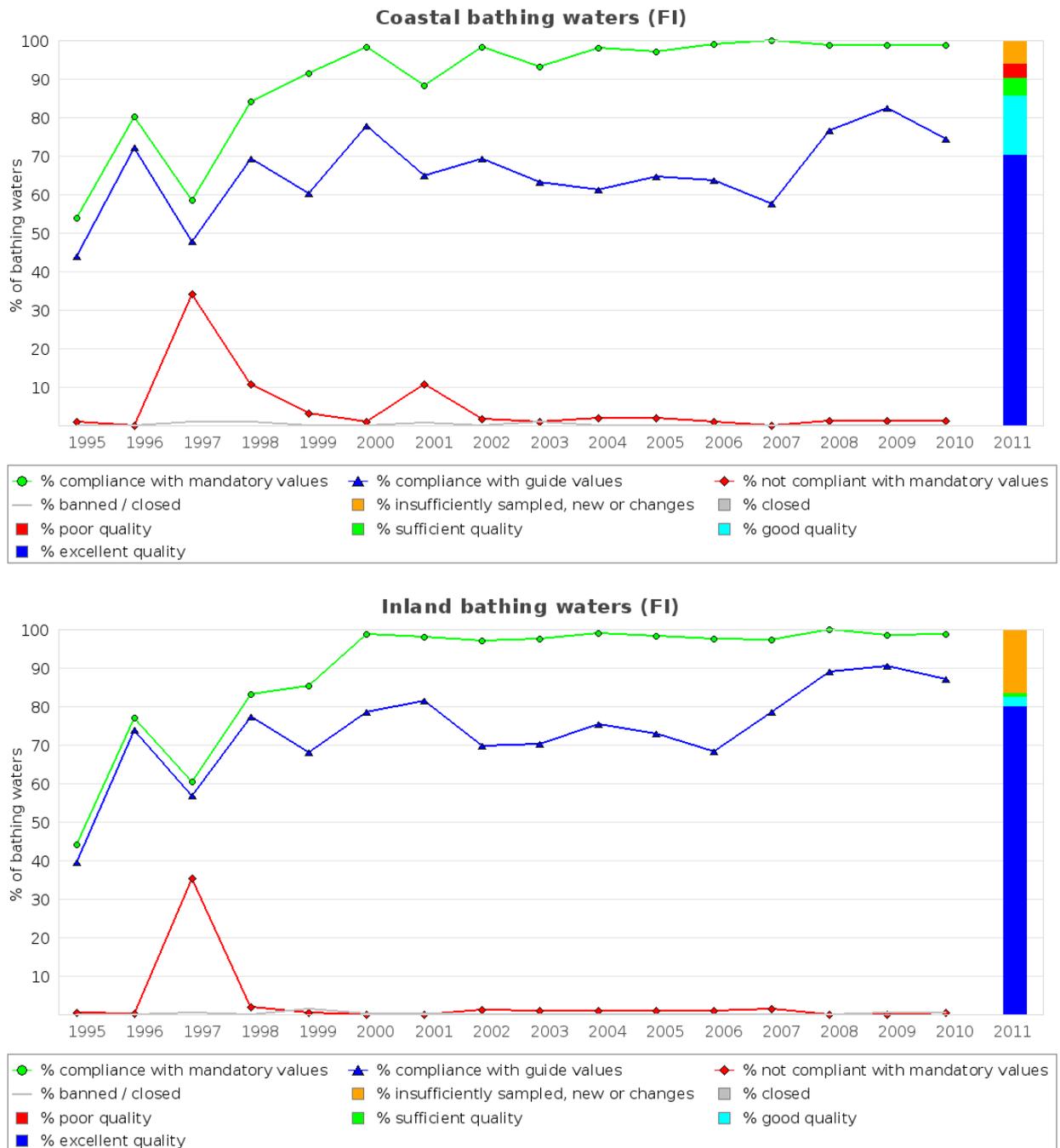
For comparison since the start of the reporting please see Figure 1.

Inland bathing waters

Some 80.3 % of the inland bathing waters were of excellent quality in 2011. This is a decrease of 6.9 % compared to the previous year when 87.2 % of the bathing waters met the guide values. Six bathing waters (2.5 %) were of good quality and two bathing waters (0.8 %) were of sufficient quality compared to 28 bathing waters compliant with the mandatory value for *Escherichia coli* and not the guide values (11.6 %) in 2010. No bathing waters (0.0 %) had poor quality and no bathing waters (0.0 %) had to be closed during the season compared to one bathing water non-compliant with the mandatory value for *Escherichia coli* (0.4 %) and one closed bathing water (0.4 %) in 2010 respectively. A total of 27 bathing waters (11.3 %) were insufficiently sampled compared to one (0.4 %) in 2010. A total of 10 bathing waters (4.2 %) were classified as new bathing waters and two bathing waters (0.8 %) were classified as bathing waters with changes.

For comparison since the start of the reporting please see Figure 1.

Figure 1: Results of bathing water quality in Finland from 1995 to 2011



Note: Data until 2008 is available in the previous reports at http://ec.europa.eu/environment/water/water-bathing/index_en.html; Water/Bathing Water/ 2005-2011 reports.

Table 1: Results of bathing water quality in Finland from 2008 to 2010. Assessment during transition period.

FI												
		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	85	65	76.5	84	98.8	1	1.2	0	0.0	0	0.0
	2009	85	70	82.4	84	98.8	1	1.2	0	0.0	0	0.0
	2010	86	64	74.4	85	98.8	1	1.2	0	0.0	0	0.0
	2011											
Inland bathing waters	2008	262	233	88.9	262	100.0	0	0.0	0	0.0	0	0.0
	2009	254	230	90.6	250	98.4	0	0.0	1	0.4	3	1.2
	2010	242	211	87.2	239	98.8	1	0.4	1	0.4	1	0.4
	2011											
All bathing waters	2008	347	298	85.9	346	99.7	1	0.3	0	0.0	0	0.0
	2009	339	300	88.5	334	98.5	1	0.3	1	0.3	3	0.9
	2010	328	275	83.8	324	98.8	2	0.6	1	0.3	1	0.3
	2011											

*Bathing waters which were compliant with the guide values were also compliant with the mandatory value for *Escherichia coli*.

Table 2: Results of bathing water quality in Finland for 2011. Assessment under Directive 2006/7/EC.

FI																		
	Year/Total number of bathing waters	Excellent quality		Good quality		Sufficient quality		Poor quality		Closed		Insufficiently sampled		New		Changes		
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Coastal bathing waters	2009																	
	2010																	
	2011	85	60	70.6	13	15.3	4	4.7	3	3.5	0	0.0	2	2.4	3	3.5	0	0.0
	2011 ^(s)	85	59	69.4	12	14.1	4	4.7	3	3.5	0	0.0	4	4.7	3	3.5	0	0.0
Inland bathing waters	2009																	
	2010																	
	2011	238	191	80.3	6	2.5	2	0.8	0	0.0	0	0.0	27	11.3	10	4.2	2	0.8
	2011 ^(s)	238	185	77.7	6	2.5	2	0.8	0	0.0	0	0.0	33	13.9	10	4.2	2	0.8
All bathing waters	2009																	
	2010																	
	2011	323	251	77.7	19	5.9	6	1.9	3	0.9	0	0.0	29	9.0	13	4.0	2	0.6
	2011 ^(s)	323	244	75.5	18	5.6	6	1.9	3	0.9	0	0.0	37	11.5	13	4.0	2	0.6

^(s)Strict rules applied (see Chapter 1 of this report).

4. Important information as provided by the Finnish authorities

The Finnish authorities have reported for some bathing waters also significant management measures and reasons for changes (Table 3). Information on public participation is provided together with a list of bathing waters before the start of the bathing season (http://cdr.eionet.europa.eu/fi/eu/bathing/envte8zjg/FI_BW_2011_IdentifiedBW.xls).

Table 3: Information on management measures and reasons for changes for the 2011 season as reported by the Finnish authorities

Unique Code of Bathing Water Bathing Water Name River Basin District Bathing Water Category	Measurement measures
FI118350001 CAMPINGEN Kymijoki-Gulf of Finland coastal	Short-term pollution (5 - 7 August) because of waste water overflow during bathing season 2011. Enhanced public information including a recommendation to avoid swimming and additional monitoring of bathing water were carried out. Investigations indicated that the concentration of E. coli had temporarily increased because of the accident. Samples taken two days after the start of the accident showed, however, that the quality of bathing water got back very soon, and the concentration of E. coli was again on a normal level, 10 cfu/100 ml. There was no need to replace any sample.
FI110910012 PIKKUKOSKI Kymijoki-Gulf of Finland river	Suspicion of a short term pollution (2 - 5 August) because of waste water overflow. The overflow was caused by power cut. Enhanced public information and additional monitoring of bathing water were carried out although the accident was predicted to cause no harmful effects on the quality of bathing water. Monitoring results showed that waste water overflow had no effects on the quality of bathing water i.e. the concentrations of intestinal enterococci and E. coli were on the normal level. There was no need to replace any sample.
FI121573001 NORRBY Kokemäenjoki-Archipelago Sea- Bothnian Sea coastal	Delisted. Low number of bathers. The number of bathers has been below 100 bathers in a day. According to the calculations, the maximum number of bathers has been approximately 50 bathers in a day. The quality of bathing water has been excellent for years, classified as CG(8). In Finland, there is a legislation for these small public bathing areas. The legislation includes e.g. obligations for frequent monitoring of the quality of bathing water, management actions to be taken if the threshold limit set for microbiological parameters, intestinal enterococci or Escherichia coli, is exceeded during the bathing season and if there is a risk for bathers health, and public information.
FI125098001 HAHMAJÄRVI Kymijoki-Gulf of Finland lake	Delisted. Low number of bathers. According to the calculations carried out during the last bathing seasons, the number of bathers has been below 100 bathers in a day. The quality of bathing water has been excellent for years, classified as CG(8). In Finland, there is a legislation for these small public bathing areas. The legislation includes e.g. obligations for frequent monitoring of the quality of bathing water, management actions to be taken if the threshold limit set for microbiological parameters, intestinal enterococci or Escherichia coli, is exceeded during the bathing season and if there is a risk for bathers health, and public information.
FI125098002 KOTOMÄKI Kymijoki-Gulf of Finland lake	Delisted. Low number of bathers. According to the calculations carried out during the last bathing seasons, the number of bathers has been below 100 bathers in a day. The quality of bathing water has been excellent for years, classified as CG(8). In Finland, there is a legislation for these small public bathing areas. The legislation includes e.g. obligations for frequent monitoring of the quality of bathing water, management actions to be taken if the threshold limit set for microbiological parameters, intestinal enterococci or Escherichia coli, is exceeded during the bathing season and if there is a risk for bathers health, and public information.
FI133309001 KOLMIKANNAN LEIRIKESKUS Vuoksi lake	Delisted. Kolmikanta bathing area is not anymore a public bathing area. The area has been fenced and it is only in a private use. The quality of bathing water has been excellent for years (class CG).
FI133848002 SÄRKIJÄRVI TIKKALA Vuoksi lake	Delisted. Low number of bathers. The number of bathers has been below 100 bathers in a day. The quality of bathing water has been excellent for years, classified as CG(8). In Finland, there is a legislation for these small public bathing areas. The legislation includes e.g. obligations for frequent monitoring of the quality of bathing water, management actions to be taken if the threshold limit set for microbiological parameters, intestinal enterococci or Escherichia coli, is exceeded during the bathing season and if there is a risk for bathers health, and public information.
FI141183002 RASUA Kymijoki-Gulf of Finland lake	Delisted. Low number of bathers. The number of bathers has been below 100 bathers in a day and the area is now a private area, not a public bathing area. The quality of bathing water has been excellent for years, classified as CG(8).
FI181505002 SÄÄKSJÄRVI Kymijoki-Gulf of Finland lake	Delisted. Low number of bathers. According to the calculations carried out during the last bathing seasons, the number of bathers has been below 100 bathers in a day. The quality of bathing water has been excellent for years, classified as CG(8). In Finland, there is a legislation for these small public bathing areas. The legislation includes e.g. obligations for frequent monitoring of the quality of bathing water, management actions to be taken if the threshold limit set for microbiological parameters, intestinal enterococci or Escherichia coli, is exceeded during the bathing season and if there is a risk for bathers health, and public information.
FI181505004 SAHAJÄRVI, VIRKISTYSALUE Kymijoki-Gulf of Finland lake	
FI186286002 VENNA, HAUKKAJÄRVI, UTTI Kymijoki-Gulf of Finland lake	New bathing area
FI133426001 KUORINGAN UIMARANTA Vuoksi	Re-opened bathing area. This area was delisted in 2010 because there was no administration for Kuorinka and it was decided that the area is not a public bathing area anymore. The municipality of Liperi has now, however, made another decision that the Kuorinka area will be maintained as a public bathing area and the municipality

Unique Code of Bathing Water Bathing Water Name River Basin District Bathing Water Category	Measurement measures
lake	will administrate the area. Signs and facilities will be restored to the area.
FI186909002 SÄRKÄT, LAPPALANJÄRVI Kymijoki-Gulf of Finland lake	Re-opened bathing area. This area was delisted in 2009 but according to the recent calculations the number of bathers is now above 100 bathers in a day.
FI183853004 SORTTAMÄKI Kokemäenjoki-Archipelago Sea- Bothnian Sea coastal	On 25-27 July 2011, there was a longlasting rain in Turku area, and in Sorttamäki bathing water it could be seen as increased microbial concentrations. Municipal authorities carried out additional monitoring of bathing water. According to the bathing water profile, surface run off because of heavy rains, and birds at the bathing area are identified as possible pollution sources which can temporarily decrease the quality of bathing water. There is no industrial or agricultural activity near the bathing area. Ship traffic considers in general only small boats. Waste water from municipalities of Turku and Kaarina are nowadays, after construction of a new waste water treatment plant, discharged far from the bathing area.
FI151255001 JÄÄLINRANTA Oulujoki-Iijoki lake	Enhanced public information was carried out because of the temporary occurrence of cyanobacteria in bathing water.
FI151564002 NALLIKARI Oulujoki-Iijoki coastal	Enhanced public information including a recommendation to avoid swimming and additional monitoring of bathing water were carried out because of high results of E. coli in samples taken on 11 August. The weather was very rainy a few days before sampling, so surface run off could explain the high microbiological concentrations. Nallikari has very shallow shore and water is typically low-salty. According to the bathing water profile, surface run offs caused by rainy events has been identified as possible sources of pollution, as detected during the last bathing season 2011, but also during previous bathing seasons, especially 2008 and 2010. An expert group has been established in the municipality of Oulu to evaluate the possible pollution sources near the bathing area of Nallikari and possible management actions to be carried out to improve the quality of bathing water. However, bathing water profile and previous investigations and studies already carried out could not identify any certain pollution source that could explain the temporary high microbial concentrations in bathing water of Nallikari. Further plans for renovation and construction activities in Nallikari are under discussions.
FI118350003 KNIPAN Kymijoki-Gulf of Finland coastal	Enhanced public information including a recommendation to avoid swimming and additional monitoring of bathing water were carried out because of a high results of intestinal enterococci and E. coli in a sample taken on 21 June. Investigations indicated no clear reasons to the temporarily increased microbial concentrations. The weather was windy and powerful wind had probably roiled the water.
FI143545001 FAGERÖ Kokemäenjoki-Archipelago Sea- Bothnian Sea coastal	Enhanced public information including a bathing prohibition (10 - 31 August 2011) and additional monitoring of bathing water were carried out because of high results of intestinal enterococci in samples taken on 1 and 3 August. The reason to the high concentrations of intestinal enterococci remained unknown.
FI195280003 HARRSTRÖM Kokemäenjoki-Archipelago Sea- Bothnian Sea coastal	Enhanced public information including a bathing prohibition (10 - 19 August 2011) and additional monitoring of bathing water were carried out because of high results of intestinal enterococci in samples taken on 1 and 3 August. The reason to the high concentrations of intestinal enterococci remained unknown.
FI121738001 SARAPISTO Kokemäenjoki-Archipelago Sea- Bothnian Sea coastal	Enhanced public information and additional monitoring of bathing water were carried out because of the temporary occurrence of cyanobacteria in bathing water.
FI124864001 SATAMA Kokemäenjoki-Archipelago Sea- Bothnian Sea lake	
FI124908002 HAKALANRANTA Kokemäenjoki-Archipelago Sea- Bothnian Sea lake	
FI110910009 MUSTIKKAMAA Kymijoki-Gulf of Finland coastal	Enhanced public information and additional monitoring of bathing water were carried out because of a high result of E. coli in a sample taken on 4 July. Investigations indicated that a broken sewer was the reason to the increased microbial concentrations. The quality of bathing water got back after repairing the sewer.
FI122609002 KIRJURINLUOTO	Enhanced public information (internet, beach area, newspaper, radio) and additional monitoring of bathing water were carried out because of the temporary occurrence of cyanobacteria in bathing water.

Unique Code of Bathing Water Bathing Water Name River Basin District Bathing Water Category	Measurement measures
Kokemäenjoki-Archipelago Sea- Bothnian Sea river	
FI110910022 TUORINNIEMI Kymijoki-Gulf of Finland coastal	Enhanced public information (internet, beach area) including a recommendation to avoid swimming and additional monitoring of bathing water were carried out because of a high result of <i>E. coli</i> in a sample taken on 29 August. Investigations indicated that birds and surface run off because of heavy rain were possible reasons to the increased microbial concentration.
FI132749001 SIILINLAHDEN RANTAUIMALA Vuoksi lake	Enhanced public information (internet and beach area) and additional monitoring of bathing water were carried out because of the occurrence of cyanobacteria in bathing water.
FI121853002 ISPOINEN Kokemäenjoki-Archipelago Sea- Bothnian Sea coastal	Additional monitoring of bathing water was carried out because of rather high results of intestinal enterococci and <i>E. coli</i> in a sample taken on 25 July. The concentrations, however, decreased within a few days. The reason to the high microbial concentrations was most probably surface run off because of heavy rains on 25-27 July.
FI151582001 OLKIJOKISUU Oulujoki-Iijoki coastal	Additional monitoring of bathing water was carried out because of a high result of <i>E. coli</i> in a sample taken on 10 August. The quality of bathing water got back quite soon being 12 cfu/100 ml on 15 August. Bathing area of Olkijokisuu has a shallow shore and water is typically low-salty. According to the bathing water profile, surface run off because of heavy rains, floods, run off from rivers located near Olkijokisuu, and birds can temporarily increase microbial concentrations in bathing water. Powerful wind can also roll bathing water. There are no man-made waste water or rain water systems near Olkijokisuu.
FI125398003 MERRASJÄRVI Kymijoki-Gulf of Finland lake	Additional monitoring of bathing water was carried out because of a high result of <i>E. coli</i> in a sample taken on 10 August. The concentration decreased within a few days being 20 mpn/100 ml on 15 August. The reason to the high <i>E. coli</i> concentration remained unknown.

5. More information on bathing water quality in Europe

Of the more than 21 000 bathing areas monitored throughout the European Union in 2011, two thirds were in coastal waters and the rest in rivers and lakes. The largest numbers of coastal bathing waters can be found in Italy, Greece, France and Spain, while Germany and France have the highest numbers of inland bathing waters.

During recent years, including the 2011 bathing season, majority of Member States have adjusted their monitoring programmes to meet the requirements of the new bathing water directive (2006/7/EC). Luxembourg was the first country to report under this Directive in 2007. Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Slovakia, Spain and Sweden started to report under the new directive in 2008. Malta and the Netherlands started to report in 2009. Austria, Belgium - Walloon Region, France, Greece, Italy, Portugal and Slovenia reported under the new directive for the first time in 2010, while Belgium - Flemish Region, Bulgaria, Ireland and Poland reported under this Directive for the first time in 2011. Historical data of two microbiological parameters, *Escherichia coli* and intestinal enterococci were sent by Sweden (2005-2007), Luxembourg (2006), Malta (2006-2008), Belgium - Walloon Region (2007-2009), Belgium - Flemish Region (2008-2010), Greece (2007-2009), Hungary (2007) and Portugal (2007-2009).

Three non-EU countries, Croatia, Montenegro and Switzerland have reported monitoring results under the new directive. Croatia and Switzerland started to report in 2009, while Montenegro reported for the first time in 2010. Switzerland sent data on *Escherichia coli* for all bathing waters but only for some data on intestinal enterococci.

For the 2011 season, bathing water quality has been assessed under the new bathing water directive in 16 European countries. This is 13 more than for 2010 bathing season. Only three countries - the Czech Republic, Romania and the United Kingdom - are still assessed under the old bathing water directive. Eleven countries are assessed under the transition period rules.

Overall in 2011, 92.1 % of bathing waters in the EU met the minimum water quality standards set by the bathing water directives. Bathing water quality increased at 0.6 % of sites in 2011 compared to

2010. The proportion of bathing waters with excellent quality (or complying with the more stringent guide values) increased by 3.5 percentage points compared to 2010, reaching 77.1 %. The share of non-compliant bathing waters was 1.8 %, which was a 0.1 percentage point increase from 2010. In 2011, 207 bathing waters were banned or closed (1 %), which was 57 more than in the 2010 bathing season.

More information on bathing water quality in the European Member States, including the EU summary report, the reports for 27 Member States, Croatia, Montenegro 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 Institute for Water of the Republic of Slovenia (IWRS), a partner in the EEA European Topic Centre on Inland, Coastal and Marine Waters (ETC/ICM) has produced the reports for the bathing seasons from the 2008 bathing season on. Countries have collaborated in the assessment of bathing water quality and supplied additional information when needed.

Interactive information on bathing water quality

The bathing water section of the Water Information System for Europe (WISE), which is accessible at the EEA bathing water website, 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 or can download data for a selected country or region and make comparisons with previous years.

The WISE map viewer (<http://www.eea.europa.eu/themes/water/interactive//bathing>) is an online map viewer for visualising European spatial water data. It includes a lot of interactive layers, allowing water themes to be visualised at different scales. Broad resolutions display the aggregated data by Member State. At finer resolutions the locations of monitoring stations are displayed.

The WISE bathing water quality data viewer (<http://www.eea.europa.eu/themes/water/status-and-monitoring/bathing-water-data-viewer>) combines text and graphical visualisation, providing a quick check on locations and statistics on the quality of coastal and inland bathing waters. It also documents how bathing waters have changed throughout Europe in recent years and provides a full summary of Europe's bathing water quality. Users can search information at three spatial levels - country, region and province - and observe specific bathing water locations on Google Earth, Google maps or Bing maps.

The Eye on Earth - Water Watch application (<http://www.eea.europa.eu/data-and-maps/explore-interactive-maps/eye-on-earth>) allows users to zoom in on a section of the coast, riverbank or lake, both in street map or, where available, bird's eye viewing formats. A 'traffic-light' indicator (red, amber, green) of bathing water quality, based on the official bathing water data, is put alongside the ratings of people who have visited the bathing site, including any comments added by users. For historical data Water Watch uses a simplified index of bathing water quality data. The Czech Republic, Croatia, Denmark, Estonia, Finland (one municipality), Greece, Hungary, Lithuania, Luxembourg, Malta, Slovakia, Slovenia, England and Wales were also sending near real time information on bathing water quality to the Eye on Earth application. The bathing water quality for Austria, Belgium, Bulgaria, France, Germany, Iceland, Italy, Ireland, the Netherlands, Portugal, Sweden, Scotland and Northern Ireland was also presented on the Eye on Earth - Water Watch.

National and local information on bathing water quality

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. Websites generally include a map search function and public access to the monitoring results both in real time and for previous seasons.

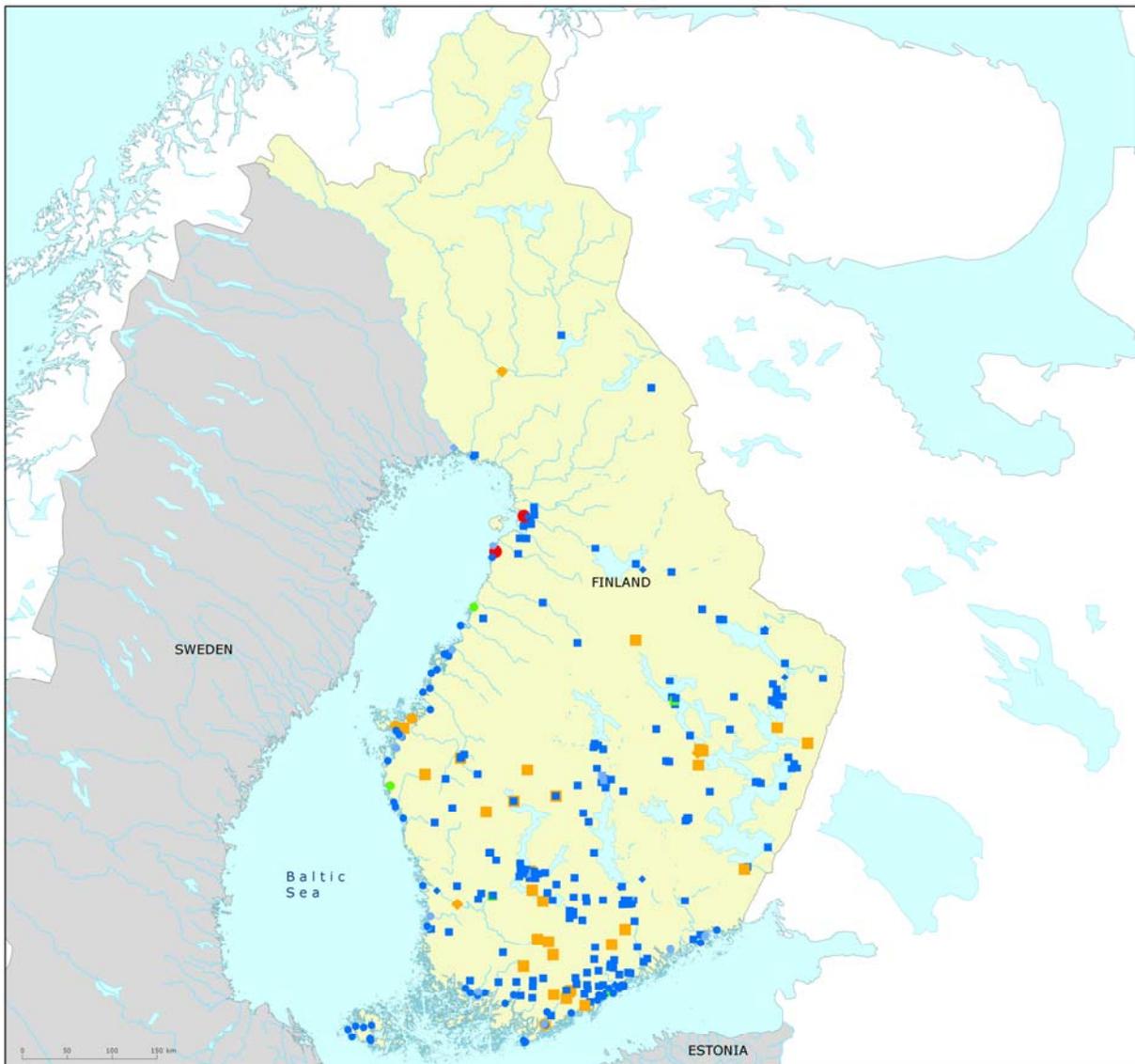
Information on EU bathing water legislation

EU Member States will have to comply with the stricter and more ambitious requirements laid out in Directive 2006/7/EC by 2015 at the latest. The new legislation requires more effective monitoring and management of bathing waters, greater public participation and improved information dissemination.

By March 2011 Member States have to have established bathing water profiles. More on the new legislation can be found on the European Commission's websites and on <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>.

Appendix 1

Map 1: Bathing waters reported during the 2011 bathing season in Finland



Bathing water quality			
Bathing waters on rivers	Bathing waters on lakes	Coastal/transitional bathing waters	Sampling interval not in full compliance with the Directive 2006/7/EC and/or pre-season sample in previous years missing.
◆ Excellent quality	■ Excellent quality	● Excellent quality	◇ No data
◆ Good quality	■ Good quality	● Good quality	◇ No data
◆ Sufficient quality	■ Sufficient quality	● Sufficient quality	◇ No data
◆ Poor quality	■ Poor quality	● Poor quality	◇ No data
◆ Insufficiently sampled	■ Insufficiently sampled	● Insufficiently sampled	◇ No data
◆ Closed	■ Closed	● Closed	◇ No data
◆ New	■ New	● New	◇ No data
◆ Changes*	■ Changes*	● Changes*	◇ No data

Note: * Changes (bathing water where changes occur that affect the classification of a bathing water)
 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: Finnish authorities