Country report

Maltese bathing water quality in 2017

Malta

May 2018

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European Environment Agency

BWD Report For the Bathing Season 2017
Malta

The report gives a general overview of information acquired from the reported data, based on provisions of the Bathing Water Directive[1]. The reporting process is described below, as well as state and trends of bathing water quality in Malta.

1. BWD reporting in the season 2017

In the 2017 bathing season, 87 bathing waters have been reported in Malta. For each bathing water, five groups of parameters have been delivered[2]:

- *identification data* – including name, location, coastal, inland or transitional type of bathing water and availability to bathers;
- *seasonal data* – including season start and end, national quality classification in the recent season, potential management measures and changes that are likely to affect the classification of the bathing water;
- *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 an event or combination of events impacting on bathing water quality, during which monitoring calendar may be suspended; reporting is optional;
- *short-term pollution periods* – measurable events of microbiological contamination; reporting is optional.

Bathing waters of Malta in 2017

Total reported	**87**
Coastal	87
Inland	0
Max season period	**151 days**
	25 May to 22 Oct
Samples taken	**2060**
Share of bathing waters with good or excellent water quality	**100 %**
Reporting under Directive 2006/7/EC since	**2009**

The authorities of Malta report data according to the new BWD (2006/7/EC) since the season 2009.

Altogether, **87 bathing waters** have been reported – 0.4% of all bathing waters in Europe. No bathing waters have been newly reported in the recent season. All bathing waters in Malta are of coastal type. **2060 samples** were taken at bathing waters throughout the season – 24 per bathing water on average.

The maximum bathing season period was from 25 May to 22 October for coastal bathing waters, i.e. 151 days altogether.

[1] Directive BWD 2006/7/EC, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF

[2] See the BWD Data Dictionary for detailed explanations: http://dd.eionet.europa.eu/datasets/3294#tables

Detailed information on bathing waters is available from national portal at https://deputyprimeminister.gov.mt/en/environmental/Health-Inspectorate/EHRM/Pages/Bathing-Water-Programme.aspx.

2. Assessment methodology[3]

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, livestock waste, bird faeces etc. 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 water in the bathing sites concerned.

The monitoring requirements under the Directive are:

- taking a pre-season sample (taken shortly before the start of the bathing season) [4];
- a minimum of four samples per season[5];
- a minimum of one sample per month[6].

If these rules are satisfied, the bathing water is categorised as 'sampling frequency satisfied'. If not all monitoring requirements are fulfilled the bathing water is categorised as 'not enough samples'. 100.0% of bathing waters met the described monitoring requirements set by the Directive, while the rest did not satisfy monitoring requirements for different reasons: being new; having changed environmental conditions that might affect water quality classification; closed; not monitored due to legal issues, physical inaccessibility to the site etc. Table 1 shows the statistics of bathing waters according to monitoring requirements.

Table 1: Bathing waters in 2017 according to compliance with BWD monitoring provisions

	Count	Share of total [%]
BWs with sampling frequency satisfied (and are not new, are not subject to changes or were not closed in 2017) These bathing waters have been monitored according to provisions and have complete dataset from the last assessment period. They have been quality-classified (excellent, good, sufficient, poor).	87	100.0%
BWs with sampling frequency not satisfied (and are not new, are not subject to changes or were not closed in 2017) These bathing waters exist throughout the last assessment period but have not been monitored throughout the period according to provisions for various individual reasons. They may be quality-classified if there is an adequate volume of samples available for credible classification.	0	0.0%
BWs that are new, subject to changes or closed in 2017	0	0.0%

[3] The methodology used by the EC and the EEA is described here, while results of assessment by national authorities may differ in individual cases.
[4] A pre-season sample is taken into a sum of samples per season.
[5] Three samples are sufficient if the season does not exceed eight weeks or the region is subject to special geographical constraints.
[6] If, for any reason, it is not possible to take the sample at the scheduled date, a delay of four extra days is allowed. Thus, the interval between two samples should not exceed 31 + 4 days.

These bathing waters do not have complete dataset for the last assessment period because they are new, have been subject to changes (that are likely to affect the classification of the bathing water) or have been closed. They cannot be quality-classified.		
Total number of bathing waters in 2017	**87**	**100%**

Bathing waters where sampling frequency was not satisfied can still be quality assessed if at least four samples per season (three samples if the season does not exceed eight weeks or the region is subject to special geographical constraints) are available and equally distributed throughout the season. Assessment of bathing water quality is possible when the bathing water sample dataset is available for four consecutive seasons. Bathing waters are accordingly classified to one of the bathing water quality classes (excellent, good, sufficient, or poor).

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

Quality assessment is not possible for all bathing waters. In these cases, they are instead classified as either:

- not enough samples[7];
- new[8];
- changes[9];
- closed[10].

[7] Not enough samples have been provided throughout the last assessment period (the last four bathing seasons or, when applicable, the period specified in Article 4.2 or 4.4).
[8] Classification not yet possible because bathing water is newly identified and a complete set of samples is not yet available.
[9] Classification is not yet possible after changes that are likely to affect the classification of the bathing water.
[10] Bathing water is closed temporarily or throughout the bathing season.

3. Bathing water quality

The results of the bathing water quality in Malta throughout the past period are presented in Figure 1. The previous reports are available on the European Commission's bathing water quality website[11] and the European Environment Agency's bathing water website[12].

3.1 Coastal bathing waters

In Malta, 100.0% of all existing coastal bathing waters met at least sufficient water quality standards in 2017. See Appendix 1 for numeric data.

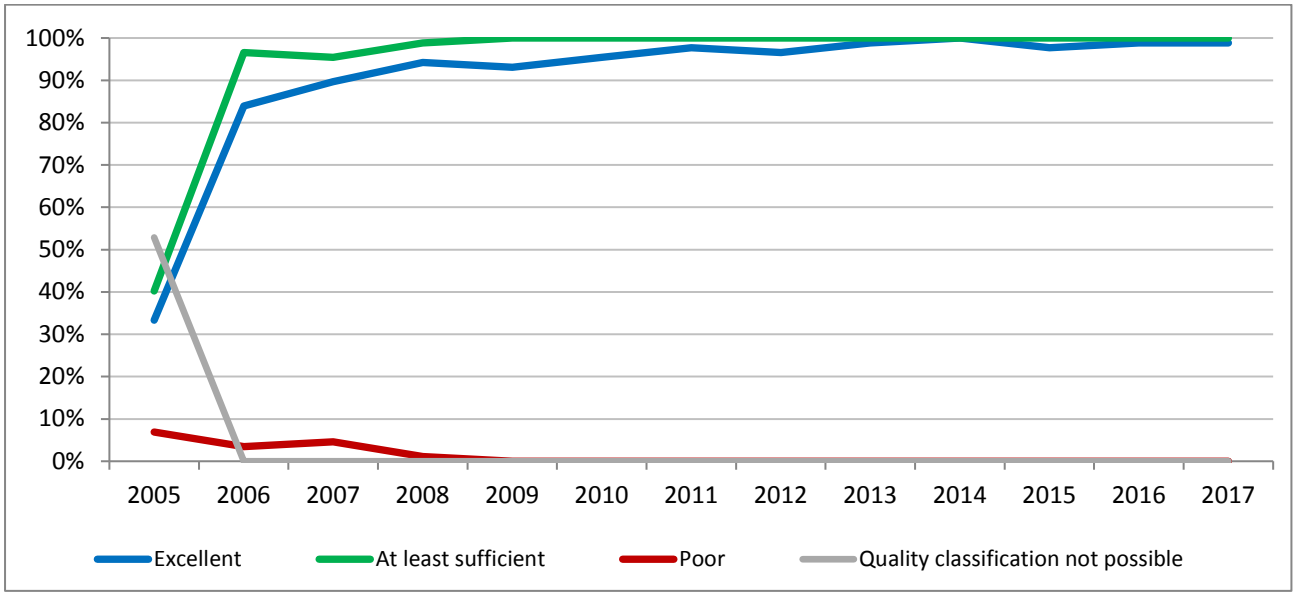


Figure 1: Coastal bathing water quality trend in Malta. Note: the "At least sufficient" class also includes bathing waters of "Excellent" quality class, the sum of shares is therefore not 100%.

3.2 Inland bathing waters

There are no reported inland bathing waters in Malta.

4. Information regarding management and other issues

In 2017 the percentage of excellent quality sites remained as per 2016 bathing season (98.9%). During the bathing season, the Environmental Health Directorate issued two temporary closures – health warnings at five bathing waters. These bathing waters were temporary closed due to localised sewage overflows. Environmental Health Officers fixed information signs on-sites indicating that these sites were temporary closed for bathing until the health warning was lifted. In the case of short-term pollution, besides information signs being fixed at the affected sites, also a press release is issued

[11] http://ec.europa.eu/environment/water/water-bathing/index_en.html
[12] http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water

through the Department of Information and posted on the EHD website for the general public information https://deputyprimeminister.gov.mt/en/environmental/Health-Inspectorate/EHRM/Pages/Bathing-Water-Press-Releases.aspx

As part of the management programme, environmental health officers carry out routine site inspections so as to check for any possible sources of pollution. These officers also investigate any complaints made by the public and in case of doubt extra samples are collected and sent for analysis at the public health laboratory. In the case that visual evidence of pollution is noted, the effected site will be temporary closed for bathing.

During the bathing season, the Environmental Health Directorate issues a weekly report with the classification for each bathing water based on the Escherichia coli and Intestinal enterococci counts https://deputyprimeminister.gov.mt/en/environmental/Health-Inspectorate/EHRM/Pages/Bathing-Water-Programme.aspx Sampling results are also posted at some of the sites.

A weekly report with the new logos as per Commission Implementation Decision 2011/321/EU published on 27 May 2011 for the classification of sites is also issued. Officials from the Environmental Health Directorate participated on television and radio programmes discussing and giving information to the general public on bathing water quality. The Environmental Health Directorate also posted on its webpage the raw data on a weekly basis. Copies of these reports are sent by e-mail to all those who requested to be placed on the Directorate mailing list and to all local councils. All bathing waters monitored as part of the bathing water monitoring programme are clearly identified by fixed information signs indicating the site code and stating that the area is monitored by the Environmental Health Directorate on a regular basis. These information signs are in five languages. If there will be the need to temporary close any of these areas, a temporary closure sign is attached at the same site and again the information is provided in five languages, namely Maltese, English, French, German, and Italian. These information signs will be replaced with new information board so as to include further information on the classification of sites and beach profiles.

The Environmental Health Directorate has completed the compilation of 29 beach profiles covering all 87 bathing sites monitored as part of the annual bathing water monitoring programme in 2013. Following the publication of the official classification of bathing sites the Environmental Health Directorate published an up-date of all 29 beach profiles with data for 2016 season.

5. Bathing water quality assessment presentation in online viewers

The European bathing water legislation focuses on sound management of bathing waters, greater public participation and improved information dissemination. More on the bathing and other water legislation can be found on the European Commission's website: http://ec.europa.eu/environment/water/index_en.htm.

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 21 000 coastal and inland sites across Europe. The WISE bathing water quality data viewer combines text and graphical visualisation, providing a quick overview of the bathing water's locations and achieved quality. Having access to bathing water information, citizens are encouraged to make full use of it and participate with their comments.

Appendix 1: Results of bathing water quality in Malta from 2014 to 2017

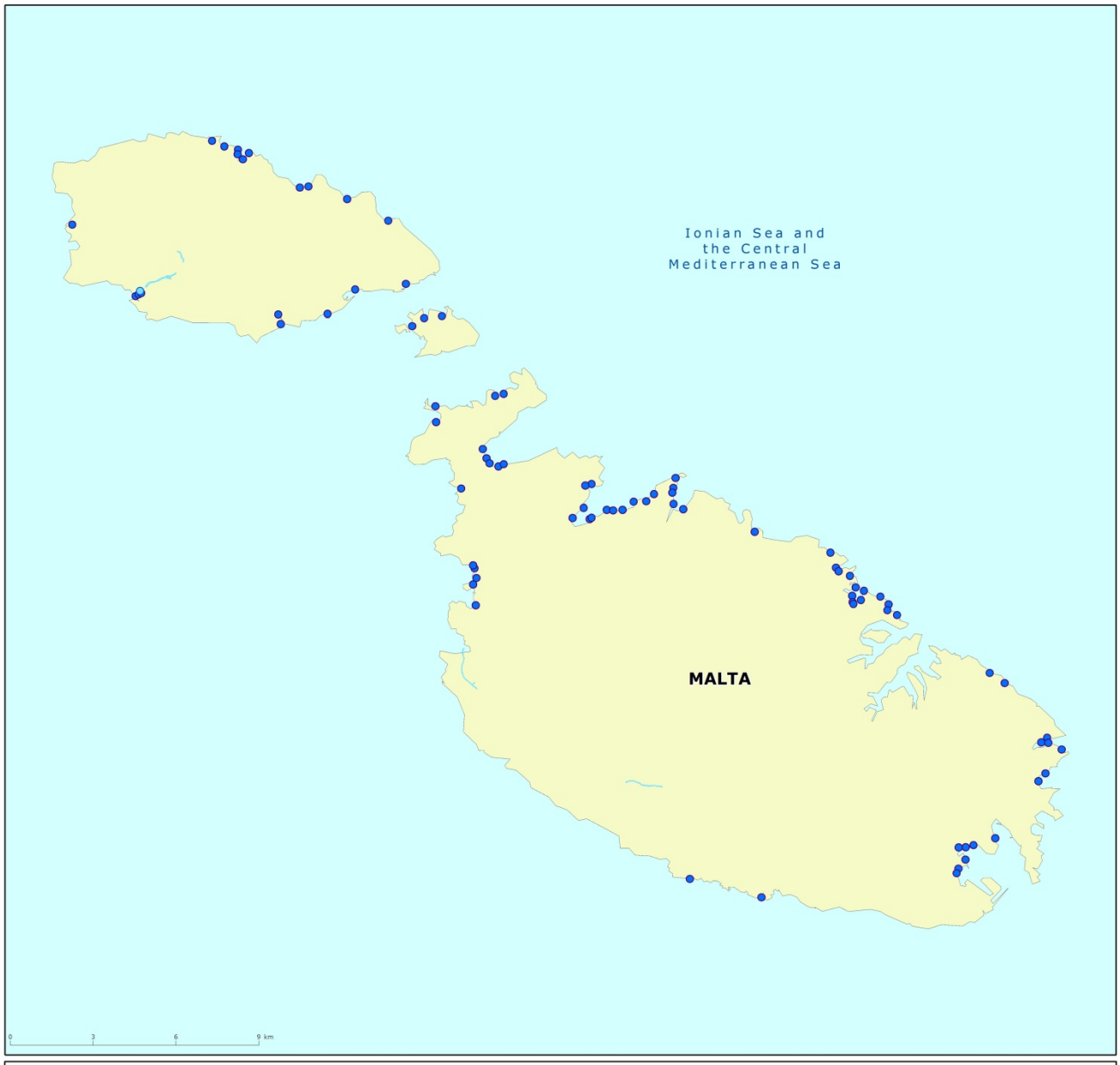
Table 2: Bathing waters in the season 2017 according to quality

		Total number of bathing waters	Excellent quality		At least sufficient quality		Poor quality		Quality classification not possible: not enough samples /new bathing waters/bathing waters subject to changes/closed	
			Count	%	Count	%	Count	%	Count	%
Total	2014	87	87	100.0	87	100.0	0	0.0	0	0.0
	2015	87	85	97.7	87	100.0	0	0.0	0	0.0
	2016	87	86	98.9	87	100.0	0	0.0	0	0.0
	2017	87	86	98.9	87	100.0	0	0.0	0	0.0

Note: the class “At least sufficient” also includes bathing waters which are of excellent quality, the sum of shares is therefore not 100%.

Appendix 2: Bathing water quality map

Map 1: Bathing waters reported during the 2017 bathing season in Malta



Bathing water quality

- Excellent water quality
- Good water quality
- Sufficient water quality
- Poor water quality
- Quality classification not possible: not enough samples / new bathing waters / bathing waters with changes / closed
- No data
- Outside data coverage (data available, not presented on the map)

Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Maltese authorities; Digital Elevation Model over Europe (EU-DEM): EEA.