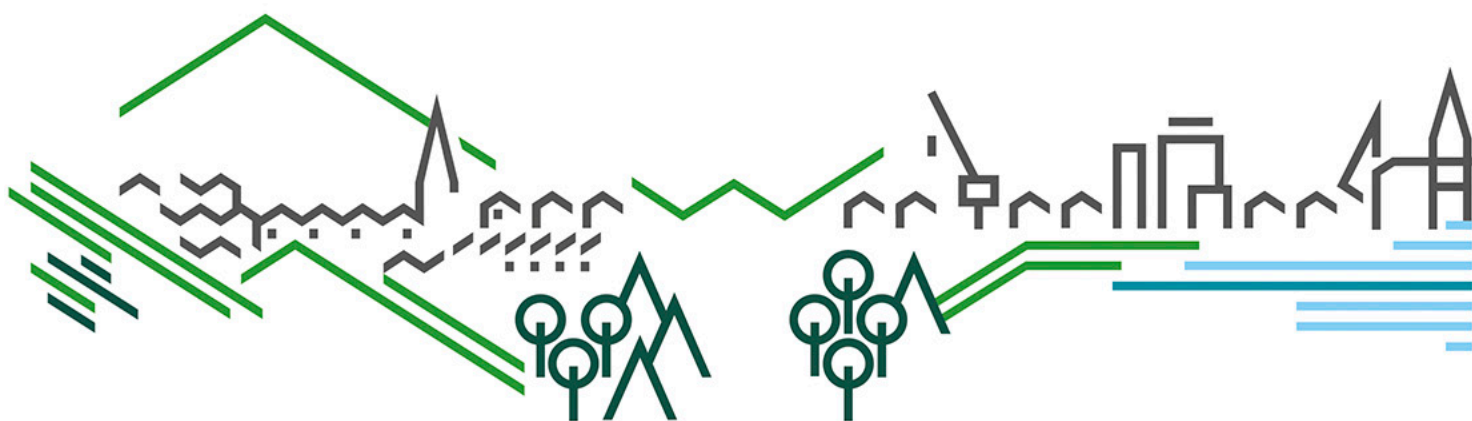


Wales Bathing Water Report 2013



Natural Resources Wales has taken over the functions of the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales, as well as some functions of Welsh Government.

We will work for communities in Wales to make sure people and their homes are protected from environmental incidents like flooding and pollution. We will provide opportunities for people to learn, use and benefit from Wales' natural resources.

We will work for Wales' economy and enable the sustainable use of natural resources to support jobs & enterprise. We will help businesses and developers to understand and consider environmental impacts when they make important decisions.

We will work to maintain and improve the quality of the environment for everyone. We will help make the environment and natural resources more resilient to climate change and other pressures.

We will use our knowledge, and learn from the knowledge of others, to make Natural Resources Wales an efficient, effective and capable organisation for the people and environment of Wales.

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Executive Summary

Bathing waters in Wales are monitored according to European Union law to protect public health and the environment.

In Wales during the 2013 bathing season 100 designated bathing waters were tested. Of these, 99 (99%) passed the mandatory European standard while 89 (89%) passed the tougher European guideline standard. Both these figures are an improvement on 2012 which was a much wetter than average year. Rainfall affects water quality by washing pollution from urban and agricultural areas into rivers and the sea. It also causes sewage systems to spill into rivers and the sea. Sewage systems are designed to do this to prevent them becoming overwhelmed and flooding homes and businesses. Lower than average levels of sunshine in the 2012 bathing season also contributed to the dip in results as the ultra-violet light from the sun normally kills bacteria in the water.

From 2012 to 2014, we are in a transition period between two pieces of European Union legislation. The revised Bathing Water Directive (rBWD) uses standards approximately twice as strict as the current Bathing Water Directive (cBWD) and classifies waters based on four years of data instead of one. 2012 was the first year of sampling for the rBWD so the first classifications will be published in 2015.

Projected classifications against the new rBWD standards have been calculated using the 2010-2013 data. Of the 100 designated bathing waters 97 (97%) met at least the Sufficient standard, 92 (92%) were at least Good and 70 (70%) achieved the toughest of the new standards, Excellent.

In Wales we also monitor some beaches (“non-designated beaches”) that do not come under the European Union bathing water law, largely to promote tourism and gain beach awards. Of the 53 non-designated beaches monitored in the 2013 season, 50 (94.3%) passed the mandatory standard with 26 (49.1%) also passing the guideline standard.

Bathing water awards are awarded on the previous season’s bathing water results, although there are many criteria other than water quality. In 2013 Wales had 33 Blue Flags. The Blue Flag is an international award which is only available to designated bathing waters. Welsh beaches also achieved 35 Green Coast Awards and 106 Seaside Awards. Green Coast Awards and Seaside Awards are available to both designated and non-designated bathing waters.

This report presents the results of the 2013 bathing water monitoring and discusses the reasons for failure for poorly performing bathing waters and improvement actions that can be taken.

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1 Bathing Water Legislation and Standards

Bathing water quality is monitored to protect human health and the environment. The countries of the European Union decide how monitoring should be carried out and what the bathing water standards should be, set out in pieces of European legislation called Directives. National governments are responsible for interpreting the Directives and translating them into national bathing water regulations. They are also accountable for compliance with the terms of the Directives. We are currently in a transition period between two European Commission (EC) bathing water directives.

1.1 The current Bathing Water Directive (cBWD)

Legislation

The EC Bathing Water Directive (76/160/EEC) was intended primarily to safeguard public health and the environment by reducing pollution of bathing waters and protecting bathing waters against further deterioration.

The Bathing Waters (Classification) Regulations 1991 were published as a statutory instrument on 9th August 1991, bringing the regulations into UK law. The "Notice" and "Directions" were received in 1992.

Under the Environment Act 1995, the Environment Agency (EA) inherited the responsibility for carrying out the necessary monitoring programmes in relation to certain water-related Directives, including the Bathing Water Directive, in England and Wales. In 2013 these responsibilities passed to Natural Resources Wales (NRW) for Wales.

When Directive 76/160/EEC was first adopted, only a limited number of bathing waters were identified, or designated, by the UK Government. A large number of bathing waters have since been added to the initial list and all these are included in the government's report to the EC. If bathing waters are not included in that report then they do not come within the terms of the Directive. Applications for designation are assessed by Welsh Government and must show evidence of bathers at the site.

The results from these monitoring programmes in Wales are submitted to Welsh Government and the Department for Environment, Food and Rural Affairs (Defra). Welsh Government and Defra are responsible for implementing European Directives in England and Wales, and so only they can assess 'compliance' or otherwise with the Directives.

Standards

The EC Bathing Water Directive (76/160/EEC) was in operation in its full form until the end of the 2011 season. The cBWD specifies a range of water quality standards that should be achieved in identified bathing waters and indicates the required monitoring frequency. These standards fall into two categories; mandatory (I [i.e. imperative]) and guideline (G) standards.

Until 2011 three microbiological parameters were sampled: faecal coliforms, total coliforms and faecal streptococci. The I standards for faecal coliforms and total coliforms were used by the government as the basis for determining UK compliance with the Directive. The details of the requirements for compliance with the I and G standards are given in [Appendix 1](#). There are additional microbiological I standards for the occurrence of salmonella and enteroviruses and I standards for various physico-chemical parameters. There is also a guideline standard for faecal streptococci. Wales has been granted a derogation for transparency at all its bathing waters from 1991.

Compliance with the G standards is not mandatory but the Directive states that member states should "endeavour" to observe them as guidelines.

1.2 The revised Bathing Water Directive (rBWD)

Legislation

The revised Bathing Water Directive (2006/7/EC) entered into European Union Law on 24th March 2006 and is due to replace the current Bathing Water Directive (76/160/EEC). The revised Bathing Water Directive (rBWD) was translated into UK law on 14th May 2008 and will be fully operational by 2015. The Government has set up a Policy Lead Group to introduce regulations and steer implementation of the Directive.

The rBWD makes changes to the monitoring and classification of bathing waters, the management of bathing water quality and the provision of information to the public. The rBWD requires close co-ordination with, and complements, the Water Framework Directive. The microbiological standards are stricter than those in the current Directive.

Standards

Sampling for the revised Bathing Water Directive began in 2012. Bathing water classifications under the rBWD are based on four years of data so the first official classification will be at the end of the 2015 season. The rBWD standards ([Appendix 2](#)) use two microbiological parameters - Escherichia coli (E. coli) and intestinal enterococci – and are to be based on 95th and 90th percentile values, which are calculated from four years of sampling data.

There will be 4 classes:

Excellent – approximately twice as stringent as the cBWD guideline standard

Good – similar to the cBWD guideline standard

Sufficient – approximately twice as strict as the cBWD mandatory standard

Poor – non-compliant; fails to meet the Sufficient, pass, standard.

An objective is set in the Directive for all bathing waters to achieve Sufficient status by 2015.

Provision of information to the public

In 2009 the process of gathering information for the Bathing Water profiles required under Article 6 of the revised Bathing Water Directive (2006/7/EC) began. Observational determinands are recorded each time a sample is taken, to gather information about the bathing water ([Appendix 3](#)). The Bathing Water

profiles were published online on 24th March 2011 in accordance with the Directive. The information gathered for the profiles was also used on signage at the beach, which was required to be in place before the 2012 season. The information will also be used in the periodic reviews of the profiles required by the Directive: every two years for Poor bathing waters, every three years for Sufficient and every four years for Good.

1.3 The transition period

There is a three year transition period between the current and revised Directives from 2012 - 2014. This is because an official rBWD classification cannot be calculated until the new parameters, E. coli and intestinal enterococci, have been sampled for four bathing seasons, which means the first classification will be at the end of the 2015 season. In the meantime Welsh Government and Defra must continue to report to compliance against the Imperative and Guideline standards of the cBWD to Europe using the sample data taken for the rBWD.

The Imperative standard will assess E. coli against the same microbiological I standard as previously used for faecal coliforms. The Guideline standard will use E. coli in place of faecal coliforms, and intestinal enterococci in place of faecal streptococci, assessed against the same microbiological standards as previously used ([Appendix 1](#)). There is no new parameter replacing total coliforms so these standards are dropped from 2012 onwards.

Prior to 2012 there were two Guideline assessments – EC Guideline and UK Guideline. EC Guideline was used for reporting compliance with the cBWD to Europe and UK Guideline was used as the water quality standard for Blue Flag and Green Coast awards. EC Guideline took into account only faecal and total coliforms. UK Guideline, took faecal streptococci into account as well. The Guideline standard we are reporting from 2012-2014 is closer to the stricter UK Guideline standard.

Salmonella monitoring and monitoring for the physico-chemical parameters shown in Appendix 1 were also dropped after the cBWD was rescinded following the 2011 season.

Until we have the first official rBWD classifications in 2015, projected classifications, for years leading up to 2015, are necessary as part of the procedures for checking for no deterioration and deciding when remedial action is required. For the 2013 reporting year, four years of sampling data (2010-2013) at identified bathing waters has been assessed against the rBWD standards to produce a projected classification. For 2010 and 2011 data, faecal coliforms results were used as a surrogate for E. coli and faecal streptococci were used as a surrogate for intestinal enterococci.

2 Monitoring programme for bathing waters identified under the Bathing Water Directive

2.1 Location

One hundred bathing waters in Wales are currently identified by the UK government as falling within the scope of the Directive. These EC identified bathing waters are shown on [Figure 1](#) and listed in [Appendix 4](#).

No new bathing waters were designated for the 2013 season and no bathing waters were dedesignated.

Borth was sampled at a temporary sample point in 2013 due to flood defence engineering works. It was the same temporary sample point that was used in 2011 during the first phase of the works. This was in agreement with Welsh Government because bathers were directed to the part of the beach with the temporary sample point while the part of the beach with the usual sample point was closed.

The government requires that these identified bathing waters are monitored in accordance with the requirements of the Bathing Water Directive and the data is reported to Welsh Government and Defra during October of each year. This report summarises the results of the monitoring carried out during the 2013 bathing season.

2.2 Monitoring

The Welsh Government/Defra identified bathing season runs from 15th May to 30th September each year. Sampling begins from 1st May as each bathing water has one pre-season sample taken. There is also a pre-season inspection to identify any issues. E. coli and intestinal enterococci are currently sampled 20 times per season, including the pre-season sample, five times as many samples as required by the rBWD.

Abnormal situations

Monitoring must follow a timetable, the monitoring calendar, determined before the start of the season ([Appendix 5](#)). The monitoring calendar may be suspended if an event occurs with an expected return period of one in four years or longer (an Abnormal Situation) as long as signs are placed at the beach to inform the public and a sample is taken immediately after the event to confirm the event is over before the monitoring calendar is reinstated ([Appendix 6](#)).

Prediction and Discounting

At some bathing waters short term pollution may be predicted by models. Beach operators then update a sign at the bathing water stating whether good or poor water quality is predicted that day. The prediction information is also shared online. If the model has predicted poor quality and the public have been informed then a scheduled bathing water sample taken that day may be discounted from the four year dataset, up to a maximum of 15% of samples.

In 2013 a prediction and discounting trial ran at three beaches in Wales: Aberdyfi, Rhyl and Swansea Bay. This led to Welsh Government deciding to discount two samples from Swansea Bay which were both taken on days when poor water quality had been predicted and the public had been informed by signs at the beach and online information including social media.

2.3 Results

In 2013, 99% of beaches passed the mandatory European standard. This is compared with 97% compliance in 2012. EC identified beaches' performance against guideline standards also improved compared with 2012: 89 out of 100 beaches (89%) met the standards in 2013 compared to 75% in 2012.

Summary table showing compliance with bathing water standards in 2013

Bathing Waters	Number of Bathing Waters	Number Complying with I Standard	Percentage I Compliance	Number Complying with G Standard	Percentage G Compliance
EC designated	100	99	99.0%	89	89.0%
Non-EC designated	53	50	94.3%	26	49.1%

[Table 1](#) shows compliance of EC identified bathing waters with the E. coli I and G standards, and with intestinal enterococci G standards as reported by Welsh Government and Defra in 2013. The number of samples taken at each beach, the number of exceedances against I and G standards and the compliance are given for each determinand at each beach, as well as the overall compliance of the beach.

[Table 2](#) shows compliance of EC identified bathing waters with I standards for faecal and total coliforms from 1992 to 2011 and E. coli for 2012 onwards. This information is illustrated in [Chart 1](#).

[Table 3](#) shows compliance of identified bathing waters with UK Guideline standards for faecal and total coliforms, and faecal streptococci, from 1992 to 2011 and for E. coli and intestinal enterococci for 2012 onwards. This was the water quality standard required for [Blue Flag and Green Coast beach awards](#) until 2012. [Chart 2](#) illustrates this information.

3 Monitoring programme for bathing waters not identified under the Bathing Water Directive

3.1 History

A number of non-identified bathing (non-EC) waters have, in the past, been routinely monitored by one of NRW and the EA's predecessor organisations, the National Rivers Authority (NRA). The NRA ceased all non-EC bathing water monitoring from 1994 because it considered that it had sufficient information to characterise these waters. The exceptions to this are any bathing waters nominated by local councils for consideration for EC Directive 'identification'. In Wales an initiative, co-ordinated by the Environment Agency and involving Welsh Government, Visit Wales (part of Welsh Government that replaced the Wales Tourist Board), Keep Wales Tidy (KWT), Dŵr Cymru Welsh Water (DCWW) and the coastal local authorities, was set up to collect the necessary data to enable local councils to continue to apply for the various bathing beach awards at non-EC bathing waters and to help target investigations and actions to reduce diffuse pollution. The results of this initiative are included in this report. Non-EC bathing waters cannot officially be said to comply, or fail to comply, with the Directive as they are not subject to it. The term "compliance" has been used throughout this report for convenience, as non-EC bathing waters are assessed against the same standards given in the Directive as part of the initiative described above.

3.2 Location

The non-identified bathing waters monitored by local authorities through the initiative are shown in [Figure 2](#) and listed in [Appendix 7](#).

3.3 Monitoring

In 2013, the initiative was funded by Green Sea Partnership members (Natural Resources Wales, Visit Wales, Local Authorities and Keep Wales Tidy). Local authorities carried out the sampling to NRW specifications. Samples from South Wales (Vale of Glamorgan, Carmarthenshire, Pembrokeshire and Ceredigion) were analysed at the EA's National Laboratory Service (NLS) at Starcross in Exeter and samples from North Wales (Gwynedd, Anglesey, Conwy, Denbighshire and Flintshire) were analysed at the Marine Biological and Chemical Consultants (MBCC) lab on Anglesey, in both cases under contract.

Swansea Council do not take part in this initiative although they collect samples and have them analysed at Carmarthen Public Health Laboratory. Swansea's samples have been analysed for the determinands of the revised Bathing Water Directive since 2006. All the other identified and non-identified beaches only started in 2012. This means that for 2006-2011 there are no results for Swansea comparable with any other beaches for those years as they did not sample total coliforms – therefore no results for Swansea's non-designated beaches from 2006-2011 are presented in this report. In 2012 Imperative and Guideline standards without total coliforms were introduced, allowing Swansea's non-EC

beaches to be assessed against these standards, like all the other beaches, as well as the rBWD standards.

A total of 53 non-identified bathing waters in Wales were monitored and assessed during 2013. These results have been provided to Welsh Government and the Green Sea Partnership.

3.4 Results

[Table 4](#) shows compliance of the non-EC bathing waters with the I and G standards, in 2013. The number of samples taken at each beach, the number of failures against I and G standards and the compliance are given for each determinand at each beach, as well as the overall compliance of the beach.

[Table 5](#) and [Table 6](#) show historical compliance of non-EC identified bathing waters with I and G standards respectively. Table 5 shows compliance with I standards for faecal and total coliforms from 1998 to 2011 and E. coli for 2012 onwards. Table 6 shows compliance with UK G standards for faecal and total coliforms and faecal streptococci from 1998 to 2011, and E. coli and intestinal enterococci for 2012 onwards. This information is illustrated in [Chart 3](#) and [Chart 4](#).

4 Risk of future non-compliance

4.1 Risk of non-compliance against the current Directive

At the end of each bathing season a percentage risk of non-compliance (%RNC) is calculated for each bathing water. This calculation uses all sample results taken for the purpose of bathing water compliance assessment at each beach for the past five years. A percentage risk of non-compliance is calculated for beaches where there is only two years of data available, but care should be taken when using it.

The data used to calculate this risk covers the period 2009 to 2013 (inclusive), where data is available. Where major work has been completed e.g. under Dŵr Cymru's Asset Management Plan (AMP), the risk of non-compliance is assessed using only data from after the completion date. These lists highlight which beaches in Wales are at risk of failing I and G standards in the future, and assign a percentage probability of this risk.

The risk assessment has been completed for all 100 EC designated bathing waters in Wales. For beaches designated less than five years ago data collected by the non-EC bathing water programme prior to designation was used to make up the full five year set where available. [Table 7](#) shows the EC identified beaches with a greater than 5% risk of future non-compliance with the I standard, and lists the likely sources of contamination. [Table 8](#) shows the EC identified beaches with a greater than 5% risk of future non-compliance with the G standard.

The risk assessment has also been completed for 53 non-EC bathing waters in Wales. [Table 9](#) shows the risk of future non-compliance (greater than 5% risk) with I standards for non-EC identified beaches. [Table 10](#) shows the risk of future non-compliance (greater than 5% risk) with G standards for non-EC identified beaches.

Annual compliance is considered an unreliable indication of trends. Variation in compliance from year to year is expected and does not necessarily indicate genuine improvement or deterioration, owing to the statistical limitations of using such a small data set. There will always be some beaches that change their status as a result of marginal failures or passes. The rBWD goes some way to mitigating these effects as classifications are based on four years of sampling data rather than just one.

[Appendix 8](#) gives further information on interpreting the risks of non-compliance shown in [Table 7](#), [Table 8](#), [Table 9](#) and [Table 10](#).

5 Reasons for failure and Improvement Actions

5.1 Reasons for failure

In wet years large amounts of rainwater affect bathing water quality by causing storm sewage systems to release diluted sewage into rivers to protect homes and businesses from flooding. Rainwater also washes animal waste from urban and rural areas into surface water drains and rivers. Poor water quality can also be caused by misconnected plumbing where foul water such as from bathrooms or washing machines enters the surface water drains, and from poorly maintained cesspits and septic tanks. In years with below average sunshine water quality is affected as the sun's ultra-violet (UV) rays kill fewer of the bacteria found in the sea.

The regional climate summaries available online from the Met Office show that in summer 2013 Wales had only 82% of the average rainfall for the time of year but 125% of the sunshine. This is the opposite pattern to 2012 when Wales had 170% of the long term average rainfall but only 80% of the long term average sunshine. It would therefore be expected that 2013's results would be better than 2012's, and this proved to be the case.

This is a general trend for Wales as a whole and local variations will affect different bathing waters. In 2013 it was also observed that there were a lot of failures during high spring tides in August as these high tides carried pollution towards the shore.

5.2 Remedial measures required to meet long term objectives

Current Directive

The long-term objective under the current Directive, which is in its penultimate year, was for all identified bathing waters to comply consistently with the mandatory standards laid down in the Directive and to endeavour to achieve compliance with the guideline standards. For bathing waters with a greater than 5% chance of failing the mandatory standards of the current Directive the sources contributing to the risk of failure, and actions being taken to reduce the risk, are shown in [Table 7](#).

The improvements necessary to achieve these objectives have been one of the main drivers behind DCWW's planned investment programme during recent years. Considerable progress has been made, but it is now clear that in some cases non-water company discharges, riverine and other diffuse inputs are causing problems for beach compliance. Natural Resources Wales is carrying out work to identify and reduce diffuse pollution affecting bathing waters, supported by the Welsh Government.

The overall objective of the Green Sea Partnership is to work together to improve the coastal environment including water quality around the Welsh coast. The Green Sea Initiative is co-ordinated by Visit Wales and comprises membership by bodies with an interest in the quality of the coastal environment around Wales. This includes Local Authorities, industry (including the water company Dŵr

Cymru), local environmental groups, charities such as the RNLI and Keep Wales Tidy, and Natural Resources Wales, along with several others. The organisation was formed in 1995 and has, as one of its objectives, to improve guideline compliance by tackling the issues of diffuse pollution. This will be achieved through continued work with local communities and local Green Sea groups.

Revised Directive

The priority now is for EC designated bathing waters to meet the Sufficient standard of the rBWD by 2015. This is now a major driver for improvement actions. To achieve this bathing waters currently classified as Poor need to improve from 2012 onwards, as the rBWD takes four years of sampling data into account. [Table 11](#) shows that at the end of the 2013 season three identified bathing waters in Wales failed to meet the Sufficient standard: Aberdyfi, Llandudno West, and Rhyl.

Further information on improvement actions for all of these beaches can also be found in [Table 7](#). As expected, the same beaches that perform poorly against the cBWD are also the worst performing against the rBWD. This means that there is no need to change the beaches targeted for improvement actions unless any newly designated bathing waters need to be added.

6 Beach awards

The monitoring data for the EC Bathing Water Directives can be used by local authorities to gain beach awards the following season.

6.1 Blue Flag Award

In Europe, the Blue Flag scheme is run by the Foundation of Environmental Education (FEE). It is administered in Wales by the charity Keep Wales Tidy (KWT). KWT was a part of the Environmental Campaigns (ENCAMS) group, but devolved to become a Wales-only organisation in April 2005. European Blue Flags are awarded to those EC identified beaches where an application has been made by the local authority, or another interested party such as a private beach operator, and which meet the strict water quality and land-based requirements of the award scheme.

The 2013 season is the first year that Blue Flags have used the rBWD standards. To meet the new water quality requirements a beach had to be classified Excellent at the end of the 2012 season. As the new standard is approximately twice as strict as the old one we expected to see a sharp decrease in the number of Blue Flags awarded this year. In Wales 33 Blue Flags were awarded in 2013 compared to 43 in 2012. These are listed in [Table 12](#) along with a history of Blue Flag awards in Wales since the start of the scheme. [Chart 5](#) shows the trend in the number of Blue Flag beaches in Wales from 1995 to 2013.

6.2 Green Coast Award

The Green Coast Award was piloted at nine beaches throughout Wales during 1998 and the first awards were made in 1999. It has been developed by the Green Sea Partnership, with the aim “to acknowledge those beaches which meet guideline water quality and are prized for their natural, unspoiled environment”. It is coordinated by KWT. Both EC identified and non-EC beaches are eligible to apply for these awards. The water quality requirements are exactly the same as for a Blue Flag, so they also became twice as strict in 2013 as they were previously. In 2013, 35 beaches in Wales were awarded the Green Coast Award, compared to 51 in 2012. These are listed in [Table 13](#). The trend in the number of Green Coast Award beaches in Wales is shown on [Chart 6](#).

As both identified and non-identified beaches can apply for Green Coast Awards rBWD classifications for non-identified beaches have been calculated and are shown in [Table 14](#).

6.3 Seaside Award

The Seaside Award scheme was introduced in 1992. Like the other awards it is administered in Wales by KWT. Both EC identified and non-EC beaches are eligible to apply for these awards. There are two categories of award – resort and rural – which have different land-based criteria depending on whether the beach is part of a managed tourist resort or is a smaller beach with limited facilities. A beach can switch between resort and rural awards each season depending on the facilities provided that year, such as lifeguards.

Water quality for both resort and rural Seaside Awards is judged on the results of the analyses of samples taken during the previous bathing season. In order to be

eligible for a Seaside Award, the water quality must meet at least the mandatory standard of the current Directive which in 2012 was for E. coli only.

In 2013, 106 bathing waters in Wales were awarded Seaside Awards: 49 resort and 57 rural. These are listed in [Table 15](#).

Figure 1: Location and compliance of EC identified bathing waters in 2013

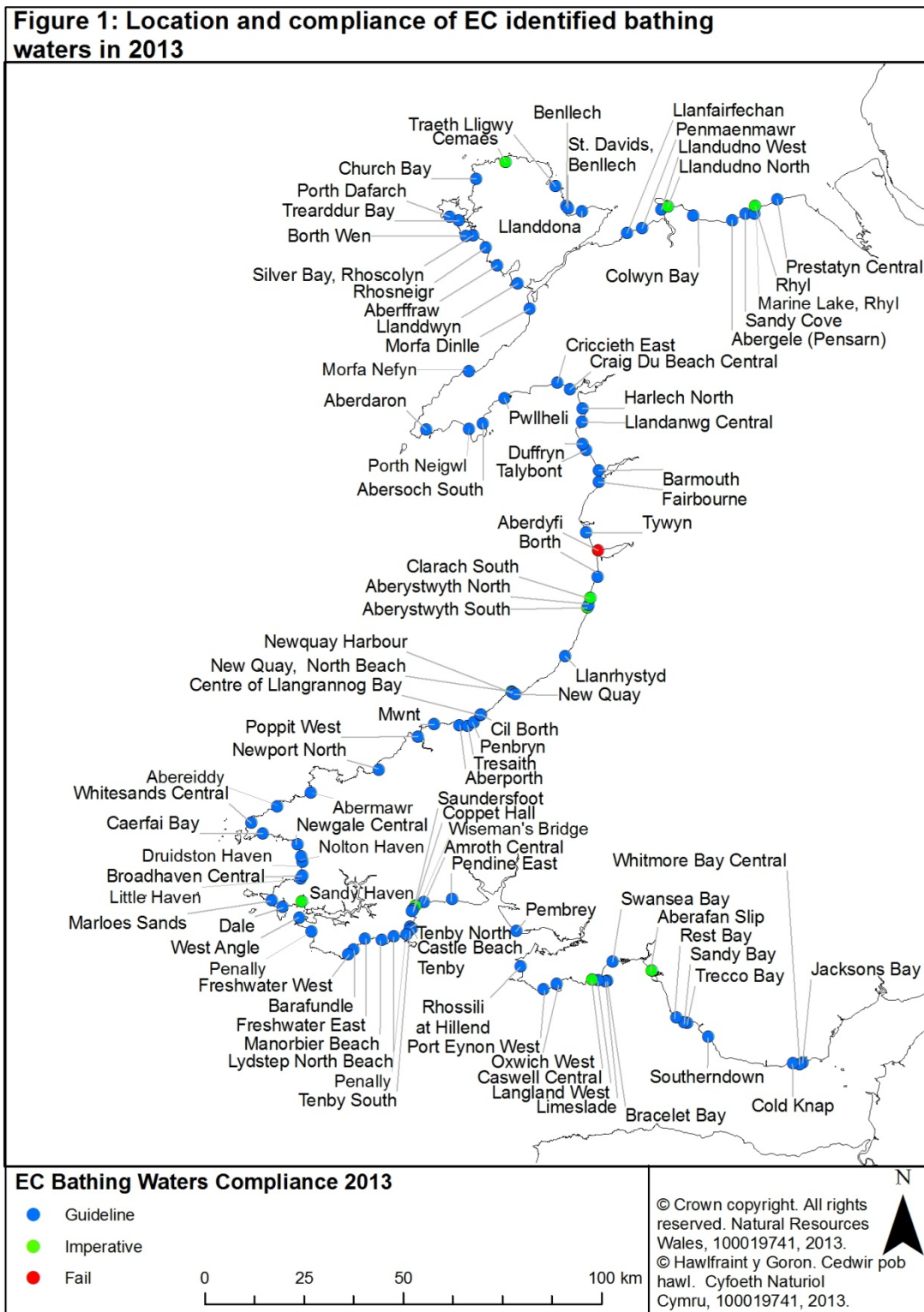


Figure 2: Location and compliance of non-EC identified bathing waters in 2013

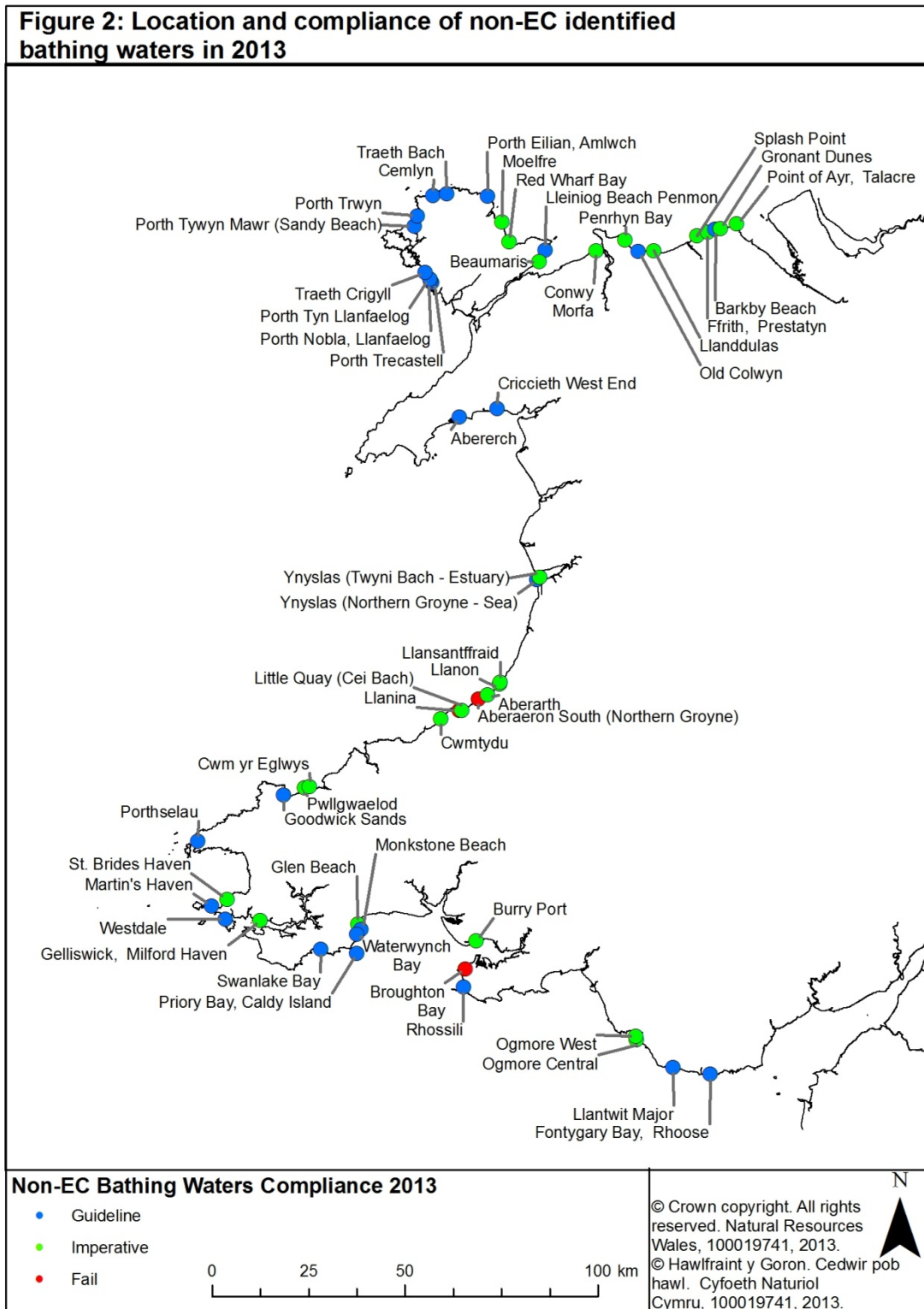


Table 1: EC identified bathing waters: compliance with Imperative and Guideline standards in 2013 for E. coli and intestinal enterococci.

Bathing Water	E. coli				Intestinal enterococci			Overall Compliance
	No. Samples	No. Fail "I"	No. fail "G"	Compliance	No. Samples	No. Fail "G"	Compliance	
Jackson's Bay Barry Island	20	0	0	G	20	1	G	Guideline
Whitmore Bay Barry Island	20	0	0	G	20	0	G	Guideline
Cold Knap Barry	20	0	1	G	20	0	G	Guideline
Southerndown	20	0	2	G	20	1	G	Guideline
Trecco Bay Porthcawl	20	0	1	G	20	1	G	Guideline
Sandy Bay Porthcawl	20	0	1	G	20	1	G	Guideline
Rest Bay Porthcawl	20	0	1	G	20	0	G	Guideline
Aberafan	20	1	5	I	20	3	I	Imperative
Swansea Bay	20	0	3	G	20	0	G	Guideline
Bracelet Bay	20	0	1	G	20	0	G	Guideline
Limeslade Bay	20	0	2	G	20	2	G	Guideline
Langland Bay	20	0	2	G	20	1	G	Guideline
Caswell Bay	20	0	1	G	20	3	I	Imperative
Oxwich Bay	20	0	0	G	20	0	G	Guideline
Port Eynon Bay	20	0	1	G	20	1	G	Guideline
Rhossili	20	0	1	G	20	0	G	Guideline
Pembrey	20	0	0	G	20	0	G	Guideline
Pendine	20	0	2	G	20	1	G	Guideline
Amroth Central	20	0	4	G	20	1	G	Guideline
Wiseman's Bridge	20	0	5	I	19	2	G	Imperative
Coppet Hall	20	0	3	G	20	2	G	Guideline
Saundersfoot	20	0	2	G	20	1	G	Guideline
Tenby North	20	0	2	G	20	1	G	Guideline
Castle Beach, Tenby	20	0	2	G	20	1	G	Guideline
Tenby South	20	0	2	G	20	1	G	Guideline
Penally	20	0	0	G	20	0	G	Guideline
Lydstep	20	0	0	G	20	0	G	Guideline
Manorbier	20	0	0	G	20	0	G	Guideline
Freshwater East	20	0	0	G	20	1	G	Guideline
Barafundle	20	0	0	G	20	0	G	Guideline
Broad Haven (South)	20	0	0	G	20	0	G	Guideline
Freshwater West	20	0	0	G	19	0	G	Guideline
West Angle	20	0	0	G	19	2	G	Guideline
Sandy Haven	20	0	4	G	19	4	I	Imperative
Dale	20	0	0	G	19	0	G	Guideline

Bathing Water	E. coli				Intestinal enterococci			Overall Compliance
	No. Samples	No. Fail "I"	No. fail "G"	Compliance	No. Samples	No. Fail "G"	Compliance	
Marloes Sands	20	0	0	G	19	0	G	Guideline
Little Haven	20	0	2	G	19	0	G	Guideline
Broad Haven (Central)	20	0	0	G	19	0	G	Guideline
Druidston Haven	20	0	2	G	19	1	G	Guideline
Nolton Haven	20	0	1	G	19	1	G	Guideline
Newgale	20	0	0	G	20	0	G	Guideline
Caerfai	20	0	0	G	20	0	G	Guideline
Whitesands	20	0	0	G	20	0	G	Guideline
Abereddy	20	0	0	G	20	0	G	Guideline
Abermawr	20	0	1	G	20	0	G	Guideline
Newport North	20	0	2	G	20	0	G	Guideline
Poppit West	20	1	3	G	20	1	G	Guideline
Mwnt	20	0	0	G	20	0	G	Guideline
Aberporth	20	0	2	G	20	1	G	Guideline
Tresaith	20	0	2	G	20	1	G	Guideline
Penbryn	20	0	0	G	20	0	G	Guideline
Llangrannog	20	0	3	G	20	2	G	Guideline
Cilborth	20	0	2	G	20	1	G	Guideline
New Quay North	20	0	1	G	20	3	I	Imperative
New Quay Harbour	20	0	1	G	20	1	G	Guideline
Traeth Gwyn New Quay	20	0	2	G	20	1	G	Guideline
Llanrhystud	20	0	2	G	20	1	G	Guideline
Aberystwyth South	20	0	5	I	20	1	G	Imperative
Aberystwyth North	20	0	2	G	20	0	G	Guideline
Clarach South	20	0	5	I	20	1	G	Imperative
Borth	20	0	2	G	20	1	G	Guideline
Aberdyfi	20	2	8	F	20	4	I	Fail
Tywyn	20	0	4	G	20	2	G	Guideline
Fairbourne	20	0	3	G	20	0	G	Guideline
Barmouth	20	0	0	G	20	0	G	Guideline
Tal-y-Bont	20	0	0	G	20	1	G	Guideline
Dyffryn (Llanendwyn)	20	0	0	G	20	0	G	Guideline
Llandanwg	20	0	4	G	20	1	G	Guideline
Harlech	20	0	0	G	20	0	G	Guideline
Craig Du Beach Central	20	0	0	G	20	0	G	Guideline
Criccieth	20	0	2	G	20	2	G	Guideline
Pwllheli	20	0	0	G	20	0	G	Guideline

Bathing Water	E. coli				Intestinal enterococci			Overall Compliance
	No. Samples	No. Fail "I"	No. fail "G"	Compliance	No. Samples	No. Fail "G"	Compliance	
Abersoch	20	0	1	G	20	1	G	Guideline
Porth Neigwl	20	0	1	G	20	1	G	Guideline
Aberdaron	20	0	2	G	20	2	G	Guideline
Morfa Nefyn	20	0	0	G	20	1	G	Guideline
Morfa Dinlle	20	0	0	G	20	0	G	Guideline
Llanddwyn	20	0	0	G	20	0	G	Guideline
Aberffraw	20	0	1	G	20	0	G	Guideline
Rhosneigr	20	0	0	G	20	0	G	Guideline
Silver Bay Rhoscolyn	20	0	1	G	20	0	G	Guideline
Borth Wen	20	0	1	G	20	1	G	Guideline
Trearddur Bay	20	0	0	G	20	0	G	Guideline
Porth Dafarch	20	0	0	G	20	0	G	Guideline
Church Bay	20	0	0	G	20	0	G	Guideline
Cemaes	20	0	6	I	20	4	I	Imperative
Traeth Lligwy	20	0	1	G	20	2	G	Guideline
Benllech	20	0	1	G	20	1	G	Guideline
St Davids - Benllech	20	0	0	G	20	2	G	Guideline
Llanddona	20	0	1	G	20	0	G	Guideline
Llanfairfechan	20	0	2	G	20	1	G	Guideline
Penmaenmawr	20	0	0	G	20	2	G	Guideline
Llandudno West Shore	20	0	2	G	20	0	G	Guideline
Llandudno North Shore	20	0	1	G	20	4	I	Imperative
Colwyn Bay	20	0	1	G	20	0	G	Guideline
Abergele (Pensarn)	20	0	2	G	20	0	G	Guideline
Kinmel Bay (Sandy Cove)	20	0	4	G	20	1	G	Guideline
Marine Lake, Rhyl	20	0	0	G	20	2	G	Guideline
Rhyl	20	0	8	I	20	6	I	Imperative
Prestatyn	20	0	3	G	20	2	G	Guideline

Number of bathing waters	100
Number failing I	1
Number passing I	99
Number passing G	89

Table 2: EC identified bathing waters: overall compliance with the Imperative standard 1992 to 2013.

For 1992-2011 the Imperative standard was for faecal and total coliforms; for 2012 and 2013, E. coli. P= Pass F = Fail

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jackson's Bay Barry Island	F	P	F	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Whitmore Bay Barry Island	F	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Cold Knap Barry	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Southerndown	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Trecco Bay Porthcawl	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Sandy Bay Porthcawl	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Rest Bay Porthcawl	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Aberafan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P	P	P
Swansea Bay	F	F	P	F	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Bracelet Bay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Limeslade Bay	P	P	F	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Langland Bay	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Caswell Bay	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Oxwich Bay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Port Eynon Bay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Rhossili	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrey	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pendine	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Amroth Central	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P	P
Wiseman's Bridge																					P	P
Coppet Hall									P	P	P	P	P	P	P	P	P	P	P	P	P	P
Saundersfoot	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Tenby North	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Castle Beach, Tenby								P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Tenby South	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Penally																					P	P

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Lydstep						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Manorbier						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Freshwater East								P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Barafundle									P	P	P	P	P	P	P	P	P	P	P	P	P	P
Broad Haven (South)						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Freshwater West																					P	P
West Angle									P	P	P	P	P	P	P	P	P	P	P	P	P	P
Sandy Haven																					P	P
Dale									P	P	P	P	P	P	P	P	P	P	P	P	P	P
Marloes Sands						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Little Haven																					P	P
Broad Haven (Central)	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Druidston Haven																					P	P
Nolton Haven																					P	P
Newgale	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Caerfai						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Whitesands	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Abereiddy																					P	P
Abermawr																					P	P
Newport North	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Poppit West					P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Mwnt																				P	P	P
Aberporth				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Tresaith				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Penbryn																				P	P	P
Llangrannog						P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P
Cilborth																				P	P	P
New Quay North																				P	P	P
New Quay Harbour							P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Traeth Gwyn New Quay	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Llanrhystud																				P	P	P
Aberystwyth South	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Aberystwyth North	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Clarach South							P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Borth *	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Aberdyfi	F	F	P	F	F	P	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P	F
Tywyn	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	#	P	P	P
Fairbourne	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Barmouth	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Tal-y-Bont				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Dyffryn (Llanendwyn)				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Llandanwg	P	P	P	P	P	P	P	P	F	P	P	P	P	P	P	P	F	P	P	P	P	P
Harlech	P	P	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Craig Du Beach Central	F	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Criccieth	F	P	F	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	F	P
Pwllheli	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Abersoch	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Porth Neigwl																					P	P
Aberdaron																				P	P	P
Morfa Nefyn																					P	P
Morfa Dinlle	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Llanddwyn						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Aberffraw									P	P	P	P	P	P	P	P	P	P	P	P	P	P
Rhosneigr	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Silver Bay Rhoscolyn														P	P	P	P	P	P	P	P	P
Borth Wen												P	P	P	P	P	P	P	P	P	P	P
Trearddur Bay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Porth Dafarch							P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Church Bay												P	P	P	P	P	P	P	P	P	P	P
Cemaes							P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Traeth Lligwy												P	P	P	P	P	P	P	P	P	P	P
Benllech	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
St Davids - Benllech														P	P	P	P	P	P	P	P	P
Llanddona						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Llanfairfechan																	P	P	P	P	P	P
Penmaenmawr				F	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Llandudno West Shore	F	F	F	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	F	F	P
Llandudno North Shore	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P
Colwyn Bay	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Abergele (Pensarn)																				P	P	P
Kinmel Bay (Sandy Cove)	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Marine Lake, Rhyl																					P	P
Rhyl	F	F	P	F	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	F	P
Prestatyn	P	P	F	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P
Total no. designated bathing waters in Wales	50	50	50	55	56	64	68	70	75	75	75	78	78	80	80	80	81	81	80	88	100	100
Total no. pass in Wales	39	42	38	49	52	60	64	69	74	70	75	77	78	80	79	78	80	81	80	87	97	99
% Imperative pass in Wales	78.0	84.0	76.0	89.1	92.9	93.8	94.1	98.6	98.7	93.3	100.0	98.7	100.0	100.0	98.8	97.5	98.8	100.0	100.0	98.9	97.0	99.0

Tywyn bathing water was closed to the public throughout the 2010 season due to flood defence works.

* Borth was sampled at a temporary sample point in 2011 and 2013 due to flood defence engineering works.

Chart 1: EC identified bathing waters: overall compliance with the Imperative standard 1992 to 2013.
 For 1992-2011 the Imperative standard was for faecal and total coliforms; for 2012 and 2013, E. coli.

EC identified bathing waters passing the Imperative standard 1992 to 2013

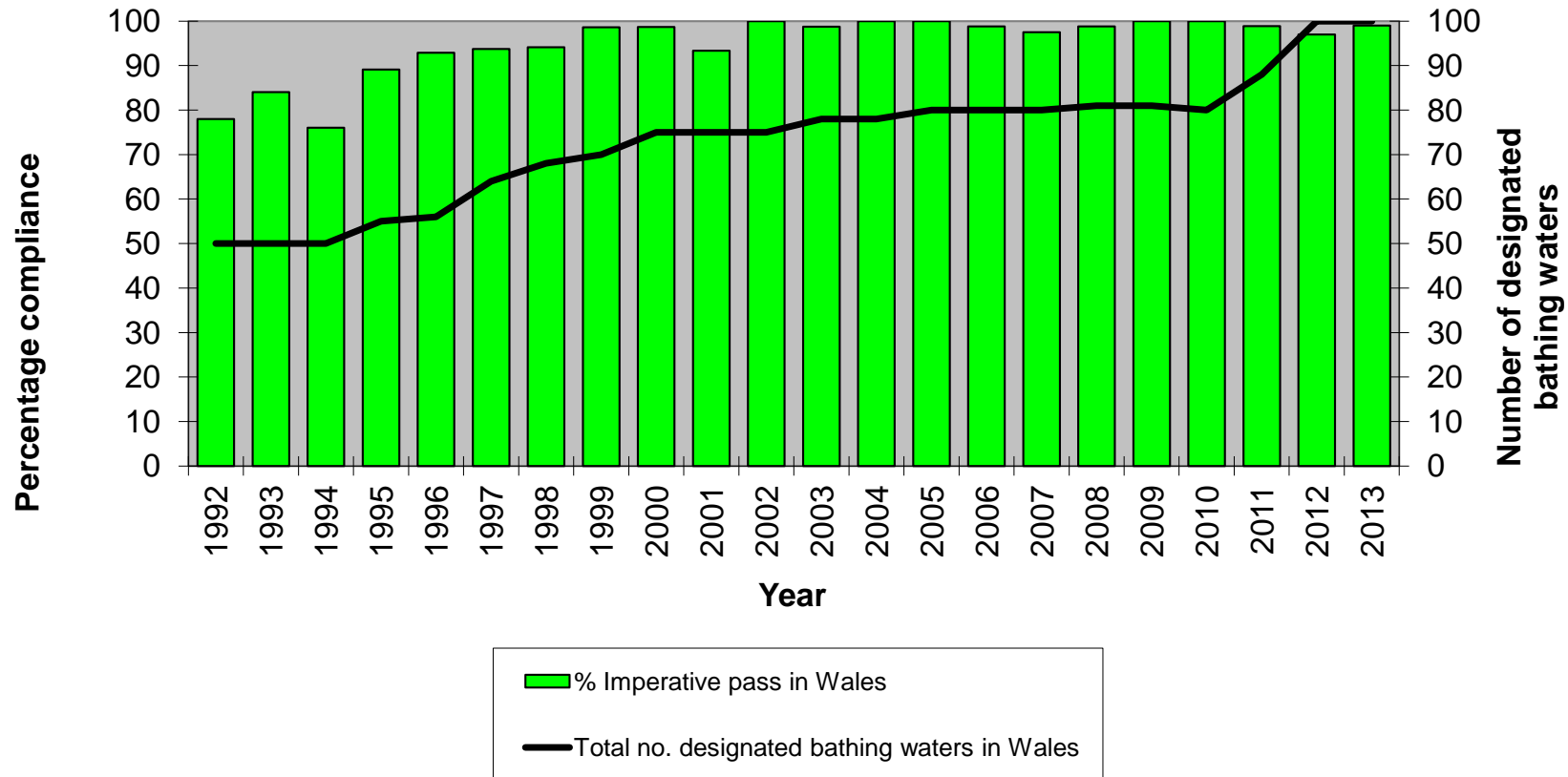


Table 3: EC identified bathing waters: overall compliance with the Guideline standard 1992 to 2013.

For 1992-2011 the Guideline standard was for faecal and total coliforms and faecal streptococci; for 2012 and 2013, E. coli and intestinal enterococci. P= Pass F = Fail

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jackson's Bay Barry Island	F	F	F	F	F	F	F	F	F	F	P	F	P	F	F	F	F	P	F	P	F	P
Whitmore Bay Barry Island	F	F	F	F	F	F	F	F	F	F	F	F	F	P	P	P	P	P	P	P	P	P
Cold Knap Barry	F	F	F	F	F	F	F	F	F	F	P	P	P	P	P	F	P	P	P	P	P	P
Southerndown	F	F	F	F	F	F	F	F	F	F	F	P	P	P	F	P	F	F	P	P	P	P
Trecco Bay Porthcawl	F	F	F	P	P	P	F	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P
Sandy Bay Porthcawl	F	F	F	P	F	F	F	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P
Rest Bay Porthcawl	F	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Aberafan	F	F	F	F	F	F	F	F	F	F	F	P	P	P	F	P	P	P	P	F	F	F
Swansea Bay	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	P	F	F	F	F	F	P
Bracelet Bay	F	F	F	F	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Limeslade Bay	F	F	F	F	F	F	F	P	F	F	P	P	P	P	P	P	P	F	P	P	P	P
Langland Bay	F	F	F	F	F	F	F	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Caswell Bay	F	F	F	F	F	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	F
Oxwich Bay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Port Eynon Bay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Rhossili	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrey	P	P	F	P	P	F	F	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P
Pendine	F	P	F	F	F	F	P	P	F	P	P	P	P	F	P	P	F	P	P	P	P	P
Amroth Central	P	F	F	P	F	F	P	P	F	P	P	P	P	P	P	F	F	P	P	P	P	P
Wiseman's Bridge																					F	F
Coppet Hall									F	P	P	P	P	P	P	P	P	P	P	P	P	P
Saundersfoot	F	F	F	F	F	F	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Tenby North	P	F	F	P	P	P	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Castle Beach, Tenby										P	P	P	P	P	P	P	P	P	P	P	P	P
Tenby South	F	F	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Penally																					P	P
Lydstep						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Manorbier						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Freshwater East								P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Barafundle									P	P	P	P	P	P	P	P	P	P	P	P	P	P
Broad Haven (South)						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Freshwater West																					P	P
West Angle									P	P	P	F	P	P	P	P	P	P	F	P	F	P
Sandy Haven																					P	F
Dale									P	P	P	P	P	P	P	P	P	P	P	P	P	P
Marloes Sands						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Little Haven																					F	P
Broad Haven (Central)	P	F	F	P	P	F	F	F	F	P	P	P	P	P	P	F	P	P	P	P	P	P
Druidston Haven																					P	P
Nolton Haven																					F	P
Newgale	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Caerfai						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Whitesands	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Abereiddy																					P	P
Abermawr																					P	P
Newport North	P	F	F	F	F	F	F	P	F	F	P	P	P	P	F	P	F	P	P	F	F	P
Poppit West					F	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	F	P
Mwnt																					P	P
Aberporth				P	F	F	F	P	P	P	P	P	P	P	P	F	P	P	P	P	P	P
Tresaith				F	F	P	F	P	P	P	P	P	F	P	P	F	P	P	P	P	P	P
Penbryn																					P	P
Llangrannog						F	F	F	F	F	F	F	P	P	P	F	P	P	P	P	P	P
Cilborth																					P	P
New Quay North																					P	F
New Quay Harbour							P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Traeth Gwyn New Quay	F	F	F	F	P	P	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Llanrhystud																				P	P	P
Aberystwyth South	F	F	F	F	P	P	F	F	F	F	P	P	F	P	P	P	F	F	P	F	F	F
Aberystwyth North	F	F	F	F	P	F	F	P	F	F	F	P	P	P	P	P	F	F	F	P	F	P
Clarach South							F	P	F	F	P	F	P	P	P	P	F	P	P	F	F	F
Borth *	P	F	P	F	F	F	F	P	F	P	F	P	P	P	P	P	P	P	P	P	P	P
Aberdyfi	F	F	F	F	F	F	F	F	F	F	F	F	F	P	P	F	F	F	F	F	F	F
Tywyn	F	F	F	F	P	F	F	F	F	F	F	P	P	P	P	P	P	P	#	P	F	P
Fairbourne	F	F	P	F	P	P	F	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P
Barmouth	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P
Tal-y-Bont				P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Dyffryn (Llanendwyn)				P	P	P	F	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Llandanwg	F	F	F	F	F	P	F	F	F	F	P	P	P	P	F	P	F	P	F	P	F	P
Harlech	F	P	F	F	F	P	F	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P
Craig Du Beach Central	F	F	F	F	P	P	F	P	F	F	P	P	P	P	P	P	P	P	P	P	P	P
Criccieth	F	F	F	F	F	F	F	F	F	F	P	P	P	P	P	F	F	P	P	F	F	P
Pwllheli	F	P	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Abersoch																					P	P
Porth Neigwl	F	F	F	P	F	P	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Aberdaron																					P	P
Morfa Nefyn																					P	P
Morfa Dinlle	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Llanddwyn						P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Aberffraw									F	P	P	P	P	P	P	P	P	P	P	P	P	P
Rhosneigr	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Silver Bay Rhoscolyn														P	P	P	P	P	P	P	P	P
Borth Wen												P	P	P	P	P	P	P	P	P	P	P
Trearddur Bay	F	F	P	P	F	F	P	F	F	P	P	F	P	P	P	P	P	P	P	P	P	P
Porth Dafarch							P	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Church Bay												P	P	P	P	P	P	P	P	P	P	P

Bathing Water	Year																					
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cemaes							F	F	F	F	F	P	F	F	F	F	F	F	F	P	F	F
Traeth Lligwy												P	F	P	P	P	P	P	P	P	F	P
Benllech	F	F	F	F	F	F	F	F	F	F	P	P	P	P	P	P	P	P	P	P	P	P
St Davids - Benllech														P	P	P	P	P	P	P	P	P
Llanddona						P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Llanfairfechan																	P	P	F	P	F	P
Penmaenmawr				F	F	F	F	F	P	F	F	F	P	P	P	P	P	P	F	P	F	P
Llandudno West Shore	F	F	F	F	F	F	F	F	F	F	P	F	F	P	P	P	F	P	F	F	F	P
Llandudno North Shore	F	F	F	P	F	F	F	F	F	F	P	F	F	P	P	P	P	P	P	F	P	F
Colwyn Bay	F	F	F	F	F	F	F	F	F	F	P	F	P	F	F	P	F	F	F	P	P	P
Abergele (Pensarn)																				P	F	P
Kinmel Bay (Sandy Cove)	F	F	F	F	P	F	F	F	P	F	P	P	F	P	P	F	P	P	P	P	P	P
Marine Lake, Rhyl																					P	P
Rhyl	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Prestatyn	F	F	F	F	F	F	F	F	F	F	F	P	P	F	P	P	P	P	P	P	F	P
Total no. designated bathing waters in Wales	50	50	50	55	56	64	68	70	75	75	75	78	78	80	80	80	81	81	80	88	100	100
Total no. pass in Wales	13	12	10	21	23	31	25	39	32	45	62	65	67	73	71	69	62	72	68	78	75	89
% UK Guideline pass in Wales	26.0	24.0	20.0	38.2	41.1	48.4	36.8	55.7	42.7	60.0	82.7	83.3	85.9	91.3	88.8	86.3	76.5	88.9	85.0	88.6	75.0	89.0

Tywyn bathing water was closed to the public throughout the 2010 season due to flood defence works.

* Borth was sampled at a temporary sample point in 2011 and 2013 due to flood defence engineering works.

Chart 2: EC identified bathing waters: overall compliance with the Guideline standard 1992 to 2013.

For 1992-2011 the Guideline standard was for faecal and total coliforms and faecal streptococci; for 2012 and 2013, E. coli and intestinal enterococci.

EC identified bathing waters passing the UK Guideline standard 1992 to 2013

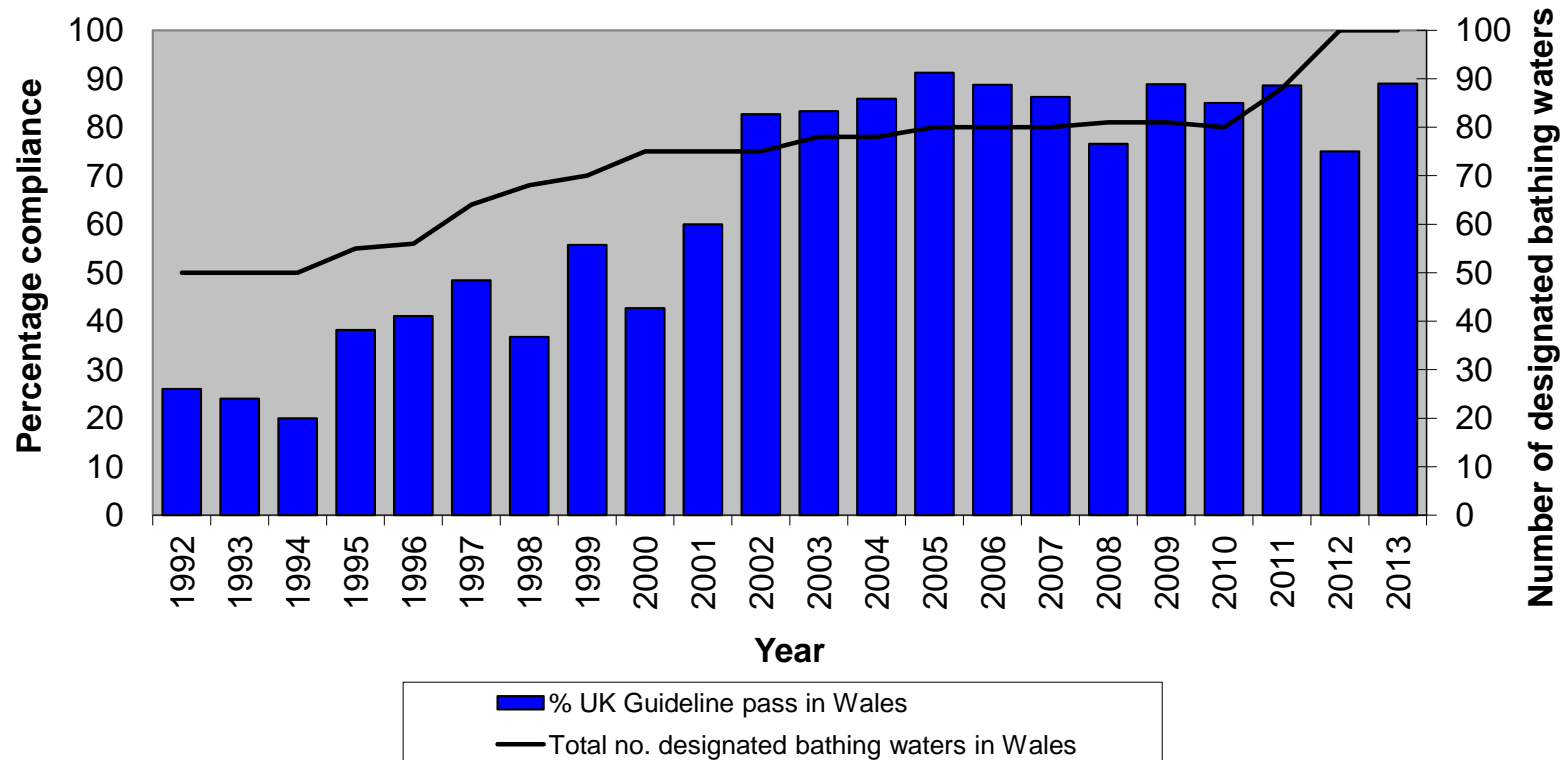


Table 4: Non-EC identified bathing waters: compliance with Imperative and Guideline standards in 2013 for E. coli and intestinal enterococci

Bathing Water	E. coli				Intestinal enterococci			Overall Compliance
	No. Samples	No. Fail "I"	No. fail "G"	Compliance	No. Samples	No. Fail "G"	Compliance	
Fontygary Bay, Rhoose	20	0	0	G	20	0	G	Guideline
Llantwit Major	20	0	1	G	20	0	G	Guideline
Ogmore Central	20	0	5	I	20	2	G	Imperative
Ogmore Slip	20	0	5	I	20	3	I	Imperative
Rhossili	21	0	4	G	20	0	G	Guideline
Broughton Bay	21	2	5	F	20	0	G	Fail
Burry Port	20	1	4	G	20	5	I	Imperative
Glen Beach	20	0	1	G	20	4	I	Imperative
Monkstone Beach (Nr Tenby)	20	0	2	G	20	2	G	Guideline
Waterwynch Bay	20	0	2	G	20	2	G	Guideline
Priory Bay, Caldy Island	20	0	0	G	20	0	G	Guideline
Swanlake Bay	20	0	0	G	20	0	G	Guideline
Gelliswick, Milford Haven	20	0	5	I	20	4	I	Imperative
Westdale	20	0	0	G	20	0	G	Guideline
Martin's Haven	20	0	0	G	20	0	G	Guideline
St. Brides Haven	20	0	4	G	20	4	I	Imperative
Porthselau	20	0	2	G	20	0	G	Guideline
Goodwick Sands	20	0	0	G	20	0	G	Guideline
Pwllgwaelod	20	0	12	I	20	8	I	Imperative
Cwm yr Eglwys	20	0	4	G	20	3	I	Imperative
Cwntydu	20	0	5	I	20	3	I	Imperative
Llanina	20	2	6	F	20	5	I	Fail
Little Quay (Cei Bach)	20	0	4	G	20	4	I	Imperative
Aberaeron South (Northern Groyne)	20	2	4	F	20	4	I	Fail
Aberarth	20	1	3	G	20	3	I	Imperative
Llanon	20	1	4	G	20	4	I	Imperative
Llansantffraid	20	0	6	I	20	4	I	Imperative
Ynyslas (Northern Groyne - Sea)	20	1	4	G	20	2	G	Guideline
Ynyslas (Twyni Bach - Estuary)	20	1	6	I	20	2	G	Imperative
Criccieth West End	20	1	2	G	20	1	G	Guideline
Abererch	20	1	1	G	20	1	G	Guideline
Porth Trecastell	20	0	1	G	20	0	G	Guideline
Porth Nobla, Llanfaelog	20	0	1	G	20	0	G	Guideline
Porth Tyn Llanfaelog	20	0	1	G	20	0	G	Guideline
Traeth Crigyll	20	0	2	G	20	1	G	Guideline
Porth Tywyn Mawr (Sandy Beach)	20	0	0	G	20	0	G	Guideline
Porth Trwyn	20	0	3	G	20	2	G	Guideline
Cemlyn	20	0	0	G	20	0	G	Guideline
Traeth Bach	20	0	2	G	20	0	G	Guideline
Porth Eilian, Amlwch	20	0	4	G	20	1	G	Guideline

Bathing Water	E. coli				Intestinal enterococci			Overall Compliance
	No. Samples	No. Fail "I"	No. fail "G"	Compliance	No. Samples	No. Fail "G"	Compliance	
Moelfre	20	0	6	I	20	2	G	Imperative
Red Wharf Bay	20	0	5	I	20	5	I	Imperative
Lleiniog Beach Penmon	20	1	3	G	20	2	G	Guideline
Beaumaris	20	0	5	I	20	2	G	Imperative
Conwy Morfa	20	0	3	G	20	4	I	Imperative
Penrhyn Bay	20	0	1	G	20	3	I	Imperative
Old Colwyn	20	0	4	G	20	1	G	Guideline
Llanddulas	20	0	5	I	20	5	I	Imperative
Splash Point	20	0	9	I	20	3	I	Imperative
Ffrith, Prestatyn	20	0	9	I	20	2	G	Imperative
Barkby Beach	20	0	4	G	20	2	G	Guideline
Gronant Dunes	20	0	5	I	20	1	G	Imperative
Point of Ayr, Talacre	20	0	5	I	20	1	G	Imperative

Total number of bathing waters	53
Number failing I	3
Number passing I	50
Number passing G	26

Table 5: Non-EC identified bathing waters: overall compliance with the Imperative standard 1998 to 2013.

For 1998-2011 the Imperative standard was for faecal and total coliforms; for 2012 and 2013, E. coli. P= Pass F = Fail

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Vale of Glamorgan	Penarth Yacht Club	P	F	F	P	P	P	F	P	P	P	F					
Vale of Glamorgan	Watch House Bay, Barry	P	P	F	P	P	P	P	P	P	P	P	P	F	P		
Vale of Glamorgan	Fontygary Bay, Rhoose	P	F	P	P	P	P	P	P	P	P	F	P	P	P	P	P
Vale of Glamorgan	Limpert Bay, Aberthaw	P	P	P	P	P	P	P	P	P	P	P					
Vale of Glamorgan	Llantwit Major	P	P	P	P	P	P	P	F	P	P	F	P	P	P	P	P
Vale of Glamorgan	Ogmore Central				P	P	P	P	P	P	P	F	P	P	P	P	P
Vale of Glamorgan	Ogmore West *												F	F	P	F	P
Bridgend	Newton Bay, Porthcawl	P	P	P	P	P	P	P	P	P	P	P	F				
Neath Port Talbot	Aberafan East	F	P	P	F	P	P	P	P	P							
Neath Port Talbot	Jersey Marine West	P	F	P	F	P	P	P	P	P	P	F					
Swansea	Swansea Bay - County Hall	F	P	P	P	F	P	F	P	**	**	**	**	**			
Swansea	Swansea Bay - Sketty Lane	F	P	F	P	F	P			**	**	**	**	**			
Swansea	Swansea Bay - Black Pill	F	P	F	P	F	P	P	P	**	**	**	**	**			
Swansea	West Cross		F	F	F	F	P										
Swansea	Norton Road		F	F	P	F	P										
Swansea	Mumbles - Knab Rock	P	P	F	P	P	P	P	P	**	**	**	**	**			
Swansea	Mumbles Head Pier	P	P	F	P	P	P										
Swansea	Pwll Du	P	P	P	P	P	P	P	P	**	**	**	**	**			
Swansea	Three Cliffs Bay	F	P	P	P	P	P										
Swansea	Torbay/Crawley Woods		P	P	P	P	P	P	P	**	**	**	**	**			
Swansea	Mewslade East		P	P	P#	P	P	P	P	**	**	**	**	**			
Swansea	Rhossili		P	P	P	P	P	P	P	**	**	**	**	**	**	P	P
Swansea	Broughton Bay	F	P	F	P	P	P	P	F	**	**	**	**	**	**	P	F
Carmarthenshire	Llanelli & Loughor Estuary	P	P	P	F	P	P	P	F	F	F	F	F				
Carmarthenshire	Burry Port	P	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P
Carmarthenshire	St Ishmael	P	P	F	P	F	P	P	P	P							
Carmarthenshire	Gwendraeth Estuary North										P	F	F				

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Carmarthenshire	Llanstephan & Tywi Estuary	F	F	F	F	P	P	P	P	P	F	F	F				
Carmarthenshire	Ferryside Beach	F	P	F	P	F	P	F	F	P	P	F	F				
Carmarthenshire	Morfa Bychan (Pendine)	P	P	F	F	P	P	P	P	P	P	P	P				
Pembrokeshire	Wisemans Bridge [designated 2012]	P	P	F	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Coppet Hall Beach [designated 2000]	P	P														
Pembrokeshire	Glen Beach			P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Monkstone Beach (Nr Tenby)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Tenby South [designated 1999]	P															
Pembrokeshire	Waterwynch Bay		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Penally [designated 2012]		P	P	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Priory Bay, Caldy Island	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Swanlake Bay			P	##	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Freshwater East [designated 1999]	P															
Pembrokeshire	Barafundle [designated 2000]	P	P														
Pembrokeshire	Freshwater West [designated 2012]	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	West Angle [designated 2000]	P	P														
Pembrokeshire	Gelliswick, Milford Haven	P	P	P	F	P	P	P	P	P	P	F	P	P	P	P	P
Pembrokeshire	Sandy Haven [designated 2012]	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Dale [designated 2000]	P	P														
Pembrokeshire	Watwick	P	P	P	P	P	P	P	P	P	P	P					
Pembrokeshire	Westdale	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Martin's Haven	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	St. Brides Haven	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Little Haven [designated 2012]	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Druidston Haven [designated 2012]		P	P	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Nolton Haven [designated 2012]	P	P	F	P	P	P	P	P	P	P	F	P	P	P		
Pembrokeshire	Porthselau			P	P	P	P	P	P	P	P	P	P	P	P	P	P

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pembrokeshire	Aberiddy [designated 2012]	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Blue Lagoon Aberiddy					P	P	P	P	P	P	P	P	P			
Pembrokeshire	Abercastle			P	F	F	F	F	P	F	F	P					
Pembrokeshire	Abermawr [designated 2012]		P	P	P	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Goodwick Harbour South	P	P	P	P	P	P	P	P	P	P	P					
Pembrokeshire	Goodwick Sands		P	P	P	F	P	P	P	P	P	P	F	P	P	P	P
Pembrokeshire	Pwllgwaelod	F	P	F	P	P	P	P	P	F	F	P	P	F	F	F	P
Pembrokeshire	Cwm yr Eglwys	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Ceredigion	Patch	F	P	F	F	P	P	F	F								
Ceredigion	Mwnt [designated 2011]	P	P	P	P	P	P	P	P	P	P	P	P	P			
Ceredigion	Penbryn [designated 2011]	P	P		P	P	P	P	P	P	P	P	P	P			
Ceredigion	Cil Borth [designated 2011]	P	P	P	P	P	P	P	P	P	F	P	P	P			
Ceredigion	Cwmtydau	P	P	P	F	P	P	P	P	P	P	F	P	P	P	P	P
Ceredigion	New Quay, North Beach [designated 2011]	P	P	P	P	P	P	P	F	P	P	P	P	F			
Ceredigion	Llanina	F	F	P	F	P	F	F	P	P	F	F	P	F	P	P	F
Ceredigion	Little Quay (Cei Bach)	P	P	P	F	P	P	P	P	P	F	P	P	P	P	P	P
Ceredigion	Gilfach yr Halen	P	F	P	F	P	P	P	P	P	P	F					
Ceredigion	Aberaeron South (Northern Groyne)	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	F
Ceredigion	Aberaeron Harbour (Fourth Groyne North)	P	P	P	P	F	P	P	P	P	P	P	P	P			
Ceredigion	Aberaeron North (North of Groynes)	P	F	P	P	P	P	P	P								
Ceredigion	Aberarth	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Ceredigion	Llanon	P	P	P	P	P	P	P	P	P	P	P	P	F	P	P	P
Ceredigion	Llansantffraid	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Ceredigion	Llanrhystyd [designated 2011]	P	P	P	P	P	P	P	P	P	P	P	P	P			
Ceredigion	Ynyslas (Northern Groyne - Sea)	P	P	P	P	P	P	F	P	P	P	P	P	F	P	P	P
Ceredigion	Ynyslas (Twyni Bach - Estuary)	F	P	F	F	P	P	P	P	P	P	F	P	F	P	P	P
Gwynedd	Carreg Wen	F	F	F	F	P	F	F	F	P	P	P					

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Gwynedd	Criccieth West End	F	P	F	P	P	P	F	P	P	P	P	P	P	P	P	P
Gwynedd	Abererch	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P
Gwynedd	Llanbedrog	P	P	F	P	F	P	P	P	F	P	F	F	F		P	
Gwynedd	Llanbedrog Beach North							P	P	F	P						
Gwynedd	Porth Neigwl	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Gwynedd	Aberdaron [designated 2011]	P	P	P	P	P	P	P	P	P	P	F	P	F			
Gwynedd	Porth Oer											F					
Gwynedd	Porth Nefyn	P	P	P	P	P	F	P	P	F	P	P	P	P			
Gwynedd	Port Dinorwic (Felinheli)	P	P	P	P	P	P	F	P	P	P	F					
Gwynedd	Plas Menai	F	P	P	F	P	P	P	P	F	P	P	P	P			
Anglesey	Aberffraw [designated 2000]	P	P														
Anglesey	Porth Trecastell	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Porth Nobla, Llanfaelog	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Porth Tyn Llanfaelog	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Traeth Crigyll	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Silver Bay, Rhoscolyn [designated 2005]	P	P	P	P	P	P	P									
Anglesey	Borth Wen [designated 2003]	P	P	P	P	P											
Anglesey	Porth Tywyn Mawr (Sandy Beach)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Porth Trwyn	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Church Bay [designated 2003]	P	P	P	P	P											
Anglesey	Cemlyn	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Traeth Bach	P	P	P	P	P	P	F	P	P	P	P	P	P	P	P	P
Anglesey	Porth Eilian, Amlwch	F	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Traeth Lligwy [designated 2003]	F	P	P	P	P											
Anglesey	Moelfre	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	St. David's, Benllech [designated 2005]	P	P	P	P	P	P	P									
Anglesey	Red Wharf Bay			P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Lleiniog Beach Penmon	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Beaumaris	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Conwy	Llanfairfechan [designated 2008]	F	P	P	P	P	P	P	P	P	P						
Conwy	Conwy Morfa	P	P	P	P	P	P	P	P	P	F	P	P	P	P	P	P
Conwy	Deganwy	P	P	F	P	P	P	P	P	P	F	P					
Conwy	Penrhyn Bay	F	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Conwy	Colwyn Bay Cayley Promenade	P	P	P	P	P	P	P	P	P	P	P					
Conwy	Colwyn Bay Marine Road	P	P	P	P	P	P	P	P	P	P	P					
Conwy	Old Colwyn	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Conwy	Llanddulas	F	P	P	P	P	P	P	P				P	P	P	P	P
Conwy	Abergele (Pensarn) [designated 2011]	P	P	P	P	P	P	P	P	P	P	P	P	P			
Conwy	Towyn	P	P	F	P	P	P	F	P	P	P	P					
Denbighshire	Marine Lake, Rhyl [designated 2012]								P	P	P	P	P	P	P		
Denbighshire	Splash Point	P	P	F	P	P	P	P	P	P	F	P	P	P	P	P	P
Denbighshire	Ffriith, Prestatyn	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Denbighshire	Barkby Beach	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Denbighshire	Gronant Dunes							P	P	P	P	P	P	P	P	P	P
Denbighshire	Gronant						P										
Flintshire	Point of Ayr, Talacre	P	P	P	P	F	P	P	P	P	P	P	P	P	P	P	P

Total Number of Bathing Waters Sampled	116	116	114	111	113	111	107	106	95	94	93	81	75	63	54	53
Number meeting I standards	92	100	89	95	100	107	94	99	88	84	73	73	65	62	52	50
% Meeting I standards	79.3	86.2	78.1	85.6	88.5	96.4	87.9	93.4	92.6	89.4	78.5	90.1	86.7	98.4	96.3	94.3

compliance calculated using a reduced number of samples as a consequence of restricted access due to Foot and Mouth disease

no samples taken in 2001 season due to Foot and Mouth restrictions

* Ogmor West moved from sample point 19108 in 2010 to sample point 19044 in 2011

** Swansea's non-EC bathing waters have been sampled for the determinands for the revised Bathing Water Directive 2006; they could not be classified against the current Bathing Water Directive from 2006 to 2011 as they do not have any results for total coliforms. The cBWD transitional standards without total coliforms did not exist until 2012.

Note: Only beaches that were monitored in 2003 onwards are shown, along with those designated after 1990. The totals for each year include all beaches monitored in that year.

Chart 3: Non-EC identified bathing waters: overall compliance with the Imperative standard 1992 to 2013.
 For 1998-2011 the Imperative standard was for faecal and total coliforms; for 2012 and 2013, E. coli.

Non-EC identified bathing waters passing the Imperative standard 1998 to 2013

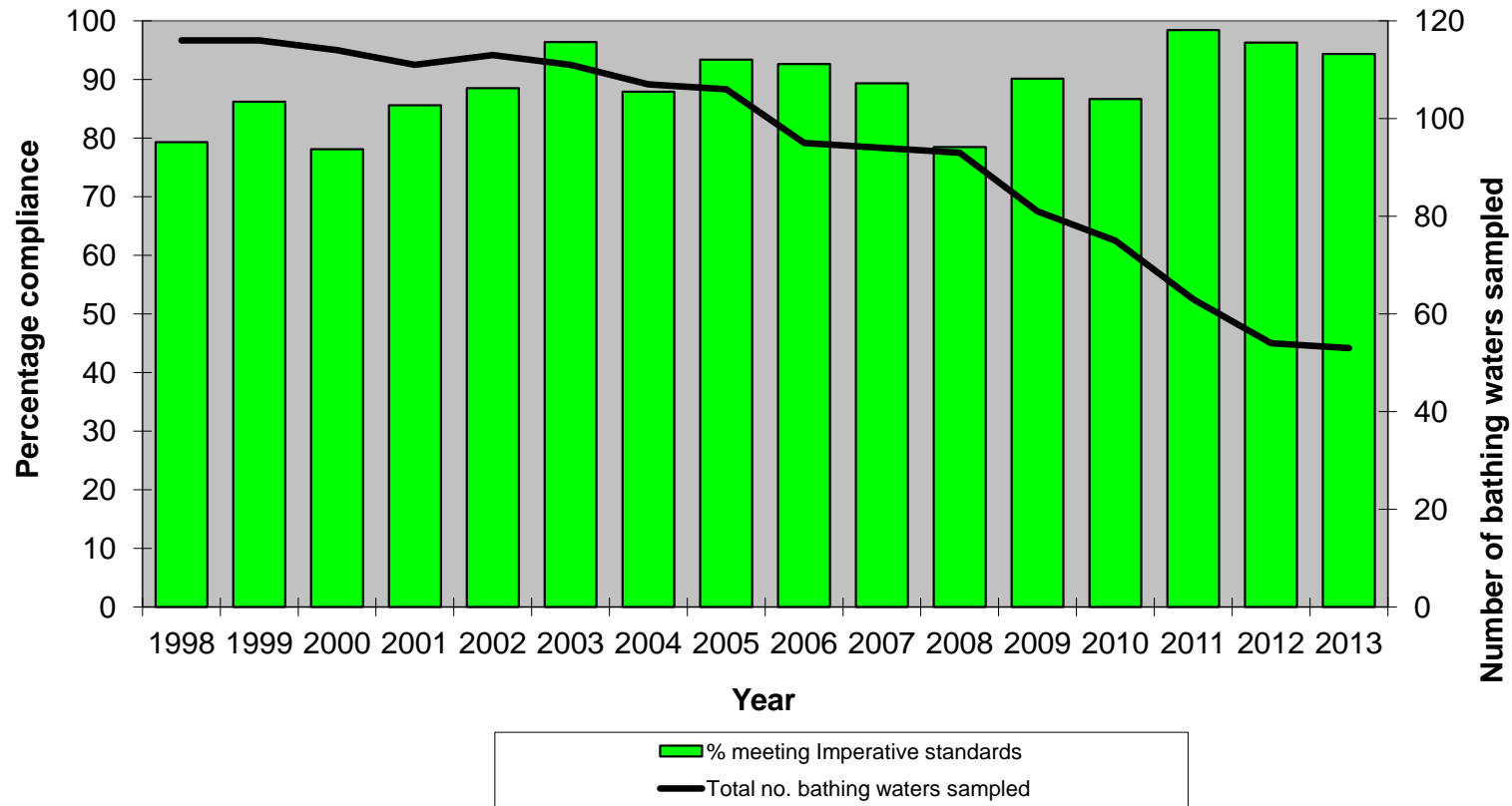


Table 6: Non-EC identified bathing waters: overall compliance with the Guideline standard 1998 to 2013.

For 1998-2011 the Guideline standard was for faecal and total coliforms and faecal streptococci; for 2012 and 2013, E. coli and intestinal enterococci. P= Pass F = Fail

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Vale of Glamorgan	Penarth Yacht Club	F	F	F	F	F	F	F	F	F	F	F					
Vale of Glamorgan	Watch House Bay, Barry	F	F	F	F	F	F	F	F	F	F	F	F	F	P		
Vale of Glamorgan	Fontygary Bay, Rhoose	F	F	F	P	P	P	P	F	P	P	F	P	P	P	P	P
Vale of Glamorgan	Limpert Bay, Aberthaw	P	F	F	F	P	P	F	F	F	P	F					
Vale of Glamorgan	Llantwit Major	F	P	F	F	P	P	F	F	F	P	F	F	F	P	F	P
Vale of Glamorgan	Ogmore Central				F	F	F	F	F	F	F	F	F	F	P	F	F
Vale of Glamorgan	Ogmore West *												F	F	F	F	F
Bridgend	Newton Bay, Porthcawl	F	F	F	F	F	F	F	F	F	F	F	F				
Neath Port Talbot	Aberafan East	F	F	F	F	F	F	F	P	F							
Neath Port Talbot	Jersey Marine West	F	F	F	F	F	F	F	P	F	F	F					
Swansea	Swansea Bay - County Hall	F	F	F	F	F	F	F	F	**	**	**	**	**			
Swansea	Swansea Bay - Sketty Lane	F	F	F	F	F	F			**	**	**	**	**			
Swansea	Swansea Bay - Black Pill	F	F	F	F	F	F	F	F	**	**	**	**	**			
Swansea	West Cross		F	F	F	F	P										
Swansea	Norton Road		F	F	F	F	F										
Swansea	Mumbles - Knab Rock	F	P	F	P	F	P	P	P	**	**	**	**	**			
Swansea	Mumbles Head Pier	F	F	F	F	P	F										
Swansea	Pwll Du	F	P	P	P	P	P	P	P	**	**	**	**	**			
Swansea	Three Cliffs Bay	F	P	P	P	P	P										
Swansea	Torbay/Crawley Woods		P	P	P	P	P	P	P	**	**	**	**	**			
Swansea	Mewslade East		P	P	P#	P	P	P	F	**	**	**	**	**			
Swansea	Rhossili		P	P	P	P	P	P	P	**	**	**	**	**	**	P	P
Swansea	Broughton Bay	F	F	F	F	F	F	P	F	**	**	**	**	**	**	P	F
Carmarthenshire	Llanelli & Loughor Estuary	P	P	P	F	P	P	P	F	F	F	F	F				
Carmarthenshire	Burry Port	F	P	P	F	F	P	F	F	P	F	F	F	P	F	F	F
Carmarthenshire	St Ishmael	F	F	F	F	F	F	F	F	F							
Carmarthenshire	Gwendraeth Estuary North										F	F	F				
Carmarthenshire	Llanstephan & Tywi Estuary	F	F	F	F	F	F	F	F	F	F	F	F				

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Carmarthenshire	Ferryside Beach	F	F	F	F	F	F	F	F	F	F	F	F				
Carmarthenshire	Morfa Bychan (Pendine)	F	F	F	F	F	F	F	P	P	P	F	P				
Pembrokeshire	Wisemans Bridge [designated 2012]	F	F	F	F	P	F	F	P	F	F	F	F	F	F		
Pembrokeshire	Coppet Hall Beach [designated 2000]	F	F														
Pembrokeshire	Glen Beach			F	P	P	P	F	P	P	F	P	P	F	F	P	F
Pembrokeshire	Monkstone Beach (Nr Tenby)	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Tenby South [designated 1999]	F															
Pembrokeshire	Waterwynch Bay		F	P	P	P	P	P	P	P	P	P	F	F	P	P	P
Pembrokeshire	Penally [designated 2012]		F	P	P	P	P	F	P	P	P	P	P	P	P		
Pembrokeshire	Priory Bay, Caldy Island	P	F	F	F	P	P	F	P	P	P	P	P	P	P	P	P
Pembrokeshire	Swanlake Bay			P	##	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Freshwater East [designated 1999]	F															
Pembrokeshire	Barafundle [designated 2000]	P	P														
Pembrokeshire	Freshwater West [designated 2012]	P	P	P	P	P	F	P	P	P	P	P	P	P	P		
Pembrokeshire	West Angle [designated 2000]	F	F														
Pembrokeshire	Gelliswick, Milford Haven	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Pembrokeshire	Sandy Haven [designated 2012]	F	F	F	P	P	F	F	F	F	F	F	F	F	P		
Pembrokeshire	Dale [designated 2000]	F	F														
Pembrokeshire	Watwick	P	P	P	P	P	P	P	P	P	P	P					
Pembrokeshire	Westdale	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	Martin's Haven	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pembrokeshire	St. Brides Haven	F	P	P	F	P	P	P	P	F	P	P	F	F	F	F	F
Pembrokeshire	Little Haven [designated 2012]	F	F	F	F	F	F	P	F	F	F	F	P	F	P		
Pembrokeshire	Druidston Haven [designated 2012]		F	P	F	P	P	P	P	P	P	P	P	P	P		
Pembrokeshire	Nolton Haven [designated 2012]	F	F	F	F	F	P	P	P	F	F	F	F	F	F		
Pembrokeshire	Porthselau			P	P	P	P	F	P	P	P	P	P	P	P	P	P
Pembrokeshire	Abereiddy [designated 2012]	P	P	P	P	P	P	F	P	P	P	P	P	P	P		
Pembrokeshire	Blue Lagoon Abereiddy					P	P	P	P	P	P	P	P	P			

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pembrokeshire	Abercastle			F	F	F	F	F	F	F	F	F					
Pembrokeshire	Abermawr [designated 2012]	F	P	F	P	P	P	P	P	P	P	P	F	P	P		
Pembrokeshire	Goodwick Harbour South	P	P	F	P	P	P	P	P	P	F	P					
Pembrokeshire	Goodwick Sands		F	F	F	F	F	P	F	F	F	F	F	P	P	P	P
Pembrokeshire	Pwllgwaelod	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Pembrokeshire	Cwm yr Eglwys	F	F	F	F	F	P	P	F	P	P	P	P	P	P	P	F
Ceredigion	Patch	F	F	F	F	F	F	F	F								
Ceredigion	Mwnt [designated 2011]	F	F	P	F	P	P	F	P	P	P	P	P	P			
Ceredigion	Penbryn [designated 2011]	F	F	F	F	P	F	F	P	P	P	F	P	F			
Ceredigion	Cil Borth [designated 2011]	F	P	F	F	P	F	F	P	F	F	P	F	P			
Ceredigion	Cwmttydu	F	F	F	F	F	F	P	P	F	P	F	F	F	P	F	F
Ceredigion	New Quay, North Beach [designated 2011]	F	F	F	F	F	F	F	F	F	F	F	F	F			
Ceredigion	Llanina	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Ceredigion	Little Quay (Cei Bach)	F	F	F	F	F	F	F	P	F	F	F	F	F	P	P	F
Ceredigion	Gilfach yr Halen	F	F	F	F	F	F	F	F	F	F	F					
Ceredigion	Aberaeron South (Northern Groyne)	F	F	F	P	F	P	P	P	P	F	P	P	F	P	F	F
Ceredigion	Aberaeron Harbour (Fourth Groyne North)	F	F	F	F	F	P	F	P	F	F	F	F	F			
Ceredigion	Aberaeron North (North of Groynes)	F	F	F	F	F	P	F	P								
Ceredigion	Aberarth	F	F	F	F	F	F	F	F	F	F	F	F	F	F	P	F
Ceredigion	Llanon	F	F	F	F	F	F	F	F	F	F	F	F	F	P	F	F
Ceredigion	Llansantffraid	P	P	F	F	P	P	F	P	P	P	F	F	P	P	P	F
Ceredigion	Llanrhystyd [designated 2011]	F	P	P	P	P	P	P	P	P	F	P	P	P			
Ceredigion	Ynyslas (Northern Groyne - Sea)	F	F	F	F	F	F	F	P	P	P	P	P	F	P	P	P
Ceredigion	Ynyslas (Twyni Bach - Estuary)	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Gwynedd	Carreg Wen	F	F	F	F	F	F	F	F	F	F	F					
Gwynedd	Criccieth West End	F	F	F	F	P	F	F	F	P	F	F	P	F	F	F	P
Gwynedd	Abererch	F	P	P	P	P	F	F	P	P	P	P	P	P	F	P	P
Gwynedd	Llanbedrog	F	F	F	F	F	F	F	F	F	F	F	F	F		F	

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Gwynedd	Llanbedrog Beach North							P	P	F	F						
Gwynedd	Porth Neigwl [designated 2012]	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Gwynedd	Aberdaron [designated 2011]	P	P	F	F	P	F	F	P	P	F	F	F	F			
Gwynedd	Porth Oer											F					
Gwynedd	Porth Nefyn	F	F	F	F	F	F	F	F	F	F	P	F	F			
Gwynedd	Port Dinorwic (Felinheli)	F	F	F	F	F	F	F	F	F	F	F					
Gwynedd	Plas Menai	F	F	F	F	F	F	F	F	F	F	F	F	F			
Anglesey	Aberffraw [designated 2000]	F	F														
Anglesey	Porth Tre Castell	F	P	F	P	P	P	P	P	P	P	F	P	P	P	P	P
Anglesey	Porth Nobla, Llanfaelog	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Porth Tyn Llanfaelog	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Traeth Crigyll	F	F	F	F	P	F	P	F	F	P	P	P	P	P	P	P
Anglesey	Silver Bay, Rhoscolyn [designated 2005]	P	P	P	P	P	P	P									
Anglesey	Borth Wen [designated 2003]	F	P	F	P	P											
Anglesey	Porth Tywyn Mawr (Sandy Beach)	P	P	F	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Porth Trwyn	P	P	P	F	F	P	F	P	F	P	P	P	P	P	F	P
Anglesey	Church Bay [designated 2003]	P	P	P	P	P											
Anglesey	Cemlyn	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Anglesey	Traeth Bach	F	F	F	F	F	F	F	F	F	F	F	F	F	P	F	P
Anglesey	Porth Eilian, Amlwch	F	F	F	F	P	P	F	F	F	F	F	F	F	P	F	P
Anglesey	Traeth Lligwy [designated 2003]	F	F	F	P	P											
Anglesey	Moelfre	F	F	F	F	P	F	P	P	P	F	F	F	P	P	F	F
Anglesey	St. David's, Benllech [designated 2005]	F	P	P	F	P	F	P									
Anglesey	Red Wharf Bay			F	F	F	F	F	P	F	P	P	P	F	P	F	F
Anglesey	Lleiniog Beach Penmon	P	F	P	F	P	F	F	F	P	P	F	F	P	F	P	P
Anglesey	Beaumaris	F	F	F	F	P	F	F	F	P	P	F	F	P	P	P	F
Conwy	Llanfairfechan [designated 2008]	F	F	F	F	P	P	F	F	F	F						
Conwy	Conwy Morfa	F	F	F	F	F	F	F	P	F	F	F	F	P	P	F	F
Conwy	Deganwy	F	F	F	F	F	P	F	F	F	F	F					

Local Authority	Bathing Water	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Conwy	Penrhyn Bay	F	F	F	F	F	F	P	F	P	F	F	F	F	P	F	F
Conwy	Colwyn Bay Cayley Promenade	F	F	F	F	F	F	F	F	F	F	F					
Conwy	Colwyn Bay Marine Road	F	F	F	F	P	P	F	P	F	P	F					
Conwy	Old Colwyn	F	F	F	F	P	F	F	F	F	P	F	P	P	P	F	P
Conwy	Llanddulas	F	F	F	F	P	F	F	F				F	P	P	F	F
Conwy	Abergele (Pensarn) [designated 2011]	F	F	F	F	P	F	F	P	F	F	P	P	F			
Conwy	Towyn	F	F	F	F	P	F	F	P	P	P	P					
Denbighshire	Marine Lake, Rhyl [designated 2012]								P	P	P	P	P	P	P		
Denbighshire	Splash Point	F	F	F	F	F	F	F	F	F	F	P	P	F	F	F	F
Denbighshire	Ffrith, Prestatyn	F	F	F	F	F	F	F	P	P	F	P	F	P	P	F	F
Denbighshire	Barkby Beach	F	F	F	F	P	F	P	P	P	F	P	F	P	P	P	P
Denbighshire	Gronant Dunes							P	P	F	F	P	P	P	P	P	F
Denbighshire	Gronant						F										
Flintshire	Point of Ayr, Talacre	F	F	F	F	F	F	F	P	F	F	F	P	F	P	F	F

Total Number of Bathing Waters Sampled	116	116	114	111	113	111	107	106	95	94	93	81	75	63	54	53
Number meeting G standards	22	36	32	33	59	46	39	57	43	41	40	38	39	48	28	26
% Meeting G standards	19.0	31.0	28.1	29.7	52.2	41.4	36.4	53.8	45.3	43.6	43.0	46.9	52.0	76.2	51.9	49.1

compliance calculated using a reduced number of samples as a consequence of restricted access due to Foot and Mouth disease

no samples taken in 2001 season due to Foot and Mouth restrictions

* Ogmores West moved from sample point 19108 in 2010 to nearby sample point 19044 in 2011

** Swansea's non-EC bathing waters have been sampled for the determinands for the revised Bathing Water Directive 2006; they could not be classified against the current Bathing Water Directive from 2006 to 2011 as they do not have any results for total coliforms. The cBWD transitional standards without total coliforms did not exist until 2012.

Note: Only beaches that were monitored in 2003 onwards are shown, along with those designated after 1990. The totals for each year include all beaches monitored in that year.

Chart 4: Non-EC identified bathing waters: overall compliance with the Guideline standard 1998 to 2013.

For 1998-2011 the Guideline standard was for faecal and total coliforms and faecal streptococci; for 2012 and 2013, E. coli and intestinal enterococci

Non-EC identified bathing waters passing the Guideline standard 1998 to 2013

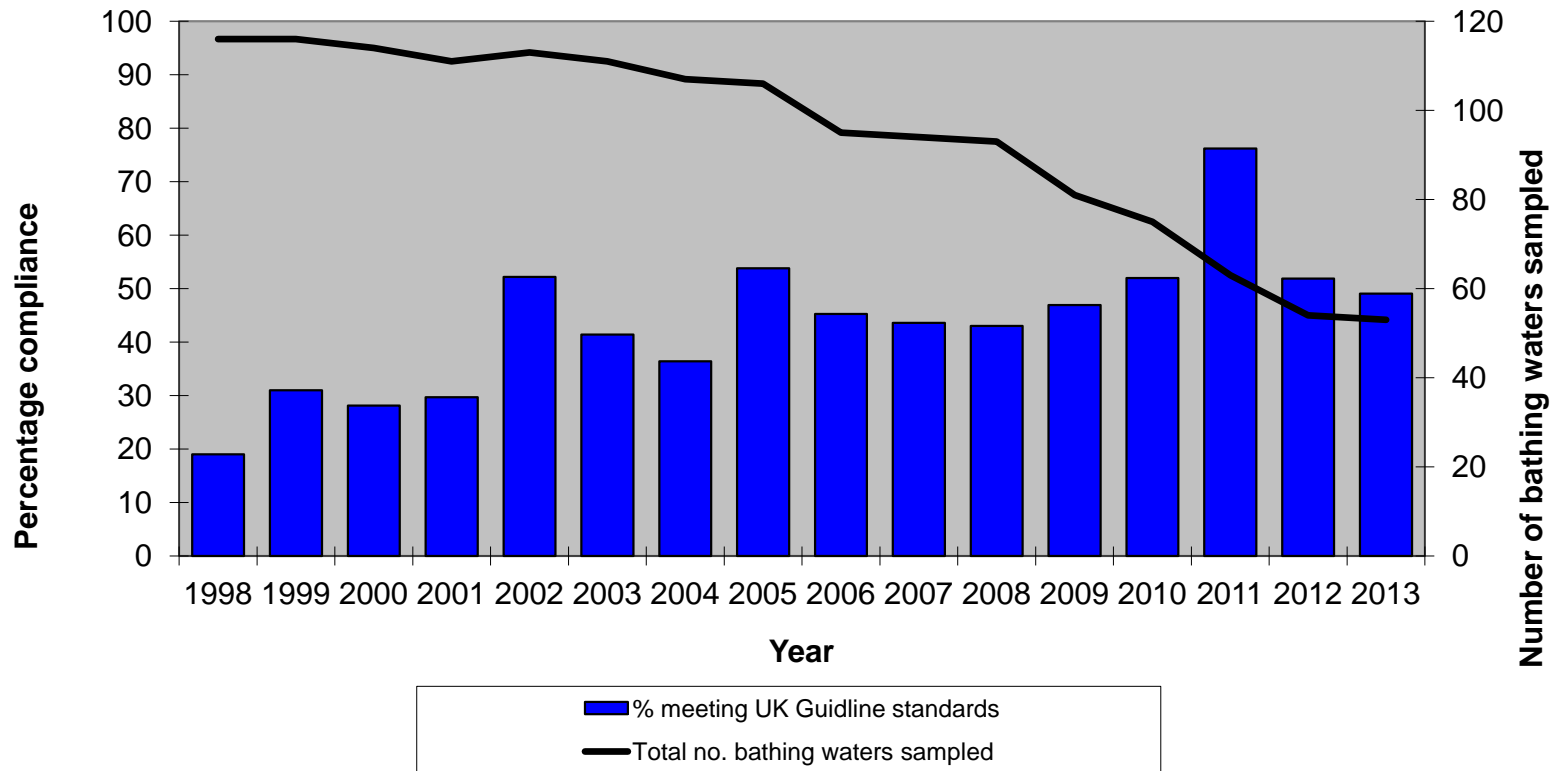


Table 7: EC identified bathing waters at risk (>5%) of future non-compliance with the Imperative standard at the end of the 2013 bathing season, based on historical compliance data.

EC Bathing Water	Percentage Risk of Non-Compliance 2013	Data period	Percentage Risk of Non-Compliance 2012	Likely Source of Microbial Contamination and NRW Actions
Llandudno West	33.95%	2009-2013	33.95%	<p>Sources: The sources of potential pollution continue to be from point discharges (private and water company) and also diffuse agricultural inputs from the wider Conwy catchment. For the majority of the 2013 bathing season, West Shore's bathing water quality was excellent with very little bacteria present. There were only two instances of guideline exceedances during the whole bathing water season, and these occurred within 72 hours of each other in late August. Both exceedances were for E.coli and were comparatively low at <200 colony forming units (cfu) per 100ml compared to a guideline limit of 100 cfu/100ml. There was a telemetry fault in 2012 at Dŵr Cymru Welsh Water (DCWW)'s Rhoslan Pumping Station which led to it discharging at the top of West Shore beach and contributing to the Imperative failures.</p> <p>Actions: Work has focussed on resolving misconnected drainage systems within the catchment, and also the operation of DCWW assets. DCWW are continuing work to resolve the issues at Rhoslan Pumping Station and are undertaking a large scale misconnection survey and dual chamber surveys to identify sources of contamination and then remove them. This will reduce the amount of water being pumped down the outfall from Rhoslan and reduce the risk of the pumping station failing again. Nets have been installed into surface water lines to catch any rags, to aid in identifying problematic properties as part of a major clean up of surface water systems. By autumn 2013, DCWW had almost completed phase 1 of identifying the issues and were starting the process of rectifying problems.</p>
Aberdyfi	26.42%	2009-2013	11.98%	<p>Sources: The start of the 2013 season at Aberdyfi was excellent with very little bacteria present in the samples, however this changed at the start of August when the catchment experienced significant rainfall. Aberdyfi was one of three sites where Natural Resources Wales (NRW) trialled Prediction and Discounting procedures although initial results were inconsistent. Failed samples were taken near to the low tide mark, with low salinities suggesting that contamination is from an upstream freshwater source.</p> <p>Actions: We have carried out audits on public (DCWW) and private sewage works this year and have investigated bacterial levels in the surface water system in the town in conjunction with DCWW. Problematic stretches of surface water drainage have been identified which will now be checked for misconnections and leaking sewers by DCWW. We are also working with DCWW to complete camera surveys in three stretches of surface water drains.</p> <p>DCWW are examining whether Ultra Violet (UV) disinfection is appropriate at any of their</p>

EC Bathing Water	Percentage Risk of Non-Compliance 2013	Data period	Percentage Risk of Non-Compliance 2012	Likely Source of Microbial Contamination and NRW Actions
				<p>assets. Given NRW concerns regarding the operation of storm discharges from Machynlleth Sewage Treatment Works, DCWW are reviewing their 2010 Aberdyfi Bathing Water Compliance Assessment report. NRW prosecuted DCWW for offences at Machynlleth Sewage Treatment Works (STW) in June 2012 (not thought be a contributory factor for 2013).</p> <p>Caravan sites in the catchment are due to be visited in 2013 under the Shellfish Project to investigate any issues with their private STWs. Areas without septic tank registrations are to be visited where no mains exists.</p> <p>Diffuse pollution from agricultural sources is also still being investigated. A desktop study is underway to narrow down tributaries in the catchment with high bacterial loadings and the farms that are linked to them, prior to instigating a programme of visits.</p>
Aberdaron	26.42%	2009-2013	41.31%	<p>Sources: The main sources of pollution are diffuse agricultural inputs, and inappropriate treatment and disposal of private sewage.</p> <p>In 2013, Aberdaron experienced two guideline exceedances each for E. coli and intestinal enterococci, spread over three different days. The season started well in terms of water quality, and the exceedances did not occur until the second half of the summer, when heavy rainfall was a likely contributing factor to at least one exceedence.</p> <p>Actions: Bacterial monitoring in 2011 / 2012 showed that the main contributor of bacteria to the beach was from Aberdaron STW. In early 2013 DCWW installed UV treatment at Aberdaron STW and also reviewed the spill management of their storm and emergency discharges in the sewer network.</p> <p>Following reports of sewage in Afon Cyllyfelin NRW staff visited nearby properties with private septic tanks and soakaway systems. No issues were found.</p>
Criccieth East	18.97%	2009-2013	26.42%	<p>Sources: The sources of potential pollution are mainly diffuse urban inputs with some possible agricultural sources further up the catchment. During 2013, Criccieth experienced two guideline exceedances each for E. coli and intestinal enterococci, spread over three different days in the latter half of the season.</p> <p>Actions: Officers carried out pollution prevention visits to caravan parks in the area to check for appropriate treatment and disposal of sewage effluent. No issues were found to cause concern. Work was also undertaken to follow up sampling investigations from 2012, focusing, in particular, around specific farms and the Waen Helyg housing estate. CCTV surveys of sewers and surface water culverts were undertaken by DCWW to try to identify sources of contamination. This included trying to find a source of contamination in one culvert where sewage fungus was found.</p> <p>DCWW found two long sections of sewer in poor condition in 2012 and carried out repairs in 2013. Gwynedd Council highways gave permission for the work to be done as</p>

EC Bathing Water	Percentage Risk of Non-Compliance 2013	Data period	Percentage Risk of Non-Compliance 2012	Likely Source of Microbial Contamination and NRW Actions
				a matter of urgency because of the bathing water risk. This was a good example of working together to get the beach to achieve the European standards.
Wisemans Bridge	12.18%	2009-2013	19.26%	Sources: Private misconnections and poorly managed sewage treatment systems. Diffuse and point source sources from agriculture. Overflows from DCWW pumping stations and sewage treatment works. Actions: Continue to monitor compliance at known discharges. Carry out further investigations of caravan parks for misconnections. Undertake agricultural farm visits.
Aberafan Slip	11.98%	2009-2013	5.99%	Sources: Multiple sources via freshwater and direct inputs including Combined Sewer Overflows (CSOs), misconnections, agriculture, STWs, private and trade discharges. There is a strong relationship between storm events and bathing water sample failures. Actions: Tracing sources of pollution impacting on the bathing water. Resolving misconnections in Neath Port Talbot. Continued monitoring and regulation of sewerage assets within the catchment. Undertake monitoring/sampling to determine if the bathing water responds predictably to the Swansea Bay bathing water prediction model.
New Quay North	11.98%	2009-2013	18.68%	Sources: We have identified numerous sites that are incorrectly connected to the local drainage system, or are not connected at all ('misconnections'). These have been identified and repaired in the culvert which discharges onto the beach. Further misconnections are yet to be identified. Other potential sources include agricultural and local industry/business inputs. Actions: A significant multi-agency effort has been employed to identify misconnections in the culvert, including dye tracing, camera surveys and sonde deployment. Additional investigations are required to identify further sources of bacteria in the culvert. A boat survey was undertaken in 2013 to help to determine effects from local industries on water quality in the bay. All results taken in the survey were low and did not exceed Guideline standards. We are working closely with local businesses in New Quay to reduce bacteria levels in the bay and this work will continue into 2014. We also undertook the Yellow Fish campaign in New Quay in 2013, to raise awareness with the local community about tipping pollutants down surface water drains and into rivers and streams.
Rhyl	11.98%	2009-2013	11.98%	Sources: Rhyl bathing water failed guideline standards on eight different days and consequently exceeded the official Guideline standard for the season. Contamination continues to be from a combination of point and diffuse sources, both from urban areas and also the extensively farmed catchment of the River Clwyd. Actions: During site visits NRW officers identified issues at Dyserth STW with the operation of the storm tanks, and DCWW were required to resolve these.

EC Bathing Water	Percentage Risk of Non-Compliance 2013	Data period	Percentage Risk of Non-Compliance 2012	Likely Source of Microbial Contamination and NRW Actions
				<p>NRW officers have continued to work with DCWW as they review the integrity of the long sea outfall and rising main from Rhyl to Kinmel Bay Wastewater Treatment Works (WwTW). The rising main currently presents a risk to bathing water quality as it crosses the Clwyd and has historically had a number of breaches along its length due to poor condition in places. Work/liaison will continue until all necessary remedial actions have been completed.</p> <p>Bacterial monitoring continued along the coast to assess the impact of the improvements to the 'training wall' at Rhyl on the bathing water quality.</p> <p>NRW officers continue in their membership of Denbighshire Water Quality Working Group the purpose of which is to look at strategies to improve water quality in the Clwyd and consequently improve overall water quality at Rhyl bathing waters.</p> <p>In 2013, Rhyl was used by NRW as one of three sites to trial 'prediction and discounting' as a method of managing bathing water quality. The trial saw NRW checking predicted compliance on the days of sampling, and then working with Denbighshire CC who put up signage as required. The model still needs refining to improve its accuracy.</p> <p>Work also continued in the Clwyd catchment in 2013 to tackle point and diffuse sources of pollution - for example :</p> <ul style="list-style-type: none"> - NRW initiated a catchment wide project looking at the integration of land and water management in the Clwyd, - NRW officers continue to work specifically with farmers to provide pollution prevention guidance, including advice on clean and dirty water management, methods to minimise runoff, and also to help identify opportunities for partnership working with third sector organisations e.g stock fencing in sub-catchments to restrict stock access to watercourses and consequently reduce potential sources of pollution.
Morfa Nefyn	8.82%	2012-2013	Not enough samples for statistically valid calculation	<p>Sources: Morfa Nefyn only recorded one Guideline exceedence during the 2013 season. The failure was for intestinal enterococci, and was attributed to poor weather and sea conditions. The main sources of pollution at this bathing water are considered to be point source from private sewage disposal and also general diffuse sources in the mainly agricultural catchment.</p> <p>Actions: Morfa Nefyn has a projected classification of Excellent under the revised Bathing Water Directive (rBWD), which in conjunction with the single guideline exceedence from 2013 does not make this a high priority site for work. However work has been undertaken in the catchment to ensure all obvious sources of pollution are resolved and to prevent deterioration in the future.</p> <p>Four properties in Porth Dinllaen have crude discharges into the sea. In order to meet legal requirements the owners of these properties have been instructed to connect to the</p>

EC Bathing Water	Percentage Risk of Non-Compliance 2013	Data period	Percentage Risk of Non-Compliance 2012	Likely Source of Microbial Contamination and NRW Actions
				mains sewer or upgrade their sewage treatment systems.
Swansea Bay	6.21%	2009-2013	11.98%	<p>Sources: Multiple sources via freshwater and direct inputs including CSOs, misconnections, agricultural and urban diffuse pollution, STWs, private and trade discharges. There is a strong relationship between storm events and bathing water sample failures.</p> <p>Actions: Tracing sources of pollution impacting on the bathing water is critical in order to target resources in appropriate areas. Working with Swansea Council, thousands of properties have been visited and misconnections rectified. Monitoring and regulation of sewerage assets within the catchment is on-going. A complex water quality prediction model has been developed for Swansea Bay by the INTERREG (European Regional Development Fund) funded Smart Coasts = Sustainable Communities project and this continues to be refined.</p>
Nolton Haven	6.10%	2009-2013	26.80%	<p>Sources: Sewerage system weaknesses, for example pumping station storm overflow, and sewer blockages. Private misconnections. Diffuse and point sources from agriculture in the catchment.</p> <p>Actions: Investigate caravan parks for misconnections and sources of pollution. Continued monitoring of DCWW work at sewage pumping station. Farm visits within the catchment to identify and rectify livestock and land management poor practices.</p>
Barmouth	5.99%	2009-2013	11.98%	<p>Sources: Barmouth bathing water had no exceedences during the 2013 season, and based on results of the previous four years has a projected class of Excellent under the rBWD, an improvement from the previous year's projected compliance. The main sources of possible contamination are general point and diffuse pollutants.</p> <p>Actions: Work has continued in 2013 to follow up findings from investigations in 2012, and also to prevent future deterioration. Aberamfra Terrace in Barmouth was found to still have a number of crude discharges of sewage, and officers are working with residents to implement a solution that meets statutory requirements.</p>
Porth Neigwl	5.89%	2009-2013	5.99%	<p>Sources: One Guideline exceedence each for E. coli and intestinal enterococci were recorded during the 2013 season, both on the same day in August, and likely to have been influenced by the rain that was noted at the time of sampling. Point and diffuse sources continue to be the main issue with regards any exceedences and officers continue to tackle these, following up investigations started in 2012.</p> <p>Actions: No issues were found here last year after extensive investigations, and so no further work has been carried out to date.</p> <p>No work was planned or undertaken this year. Rhiw STW (DCWW) is about 4km away and discharges into the bay and is a compliant site under UWWTD.</p>

Table 8: EC identified bathing waters at risk (>5%) of future non-compliance with the UK Guideline standard at the end of the 2013 bathing season, based on historical compliance data.

EC Bathing Water	Percentage Risk of Non-compliance	Determinand Most at Risk	Data period
Rhyl	96.51%	E. coli	2009-2013
Aberdyfi	86.26%	E. coli	2009-2013
Swansea Bay	85.58%	E. coli	2009-2013
Wisemans Bridge	82.52%	E. coli	2009-2013
New Quay North	82.30%	Intestinal enterococci	2009-2013
Cemaes	79.39%	Intestinal enterococci	2009-2013
Nolton Haven	64.93%	Intestinal enterococci	2009-2013
Sandy Haven	60.24%	Intestinal enterococci	2009-2013
Llandudno West	50.14%	E. coli	2009-2013
Aberdaron	49.20%	Intestinal enterococci	2009-2013
Aberystwyth South	45.80%	E. coli	2009-2013
Aberystwyth North	41.42%	E. coli	2009-2013
Aberafan Slip	38.02%	Intestinal enterococci	2009-2013
Jacksons Bay	32.71%	E. coli	2009-2013
Clarach South	32.71%	E. coli	2009-2013
Traeth Lligwy	32.31%	Intestinal enterococci	2009-2013
Penmaenmawr	32.31%	Intestinal enterococci	2009-2013
Colwyn Bay	32.31%	Intestinal enterococci	2009-2013
Abergele (Pensarn)	32.31%	Intestinal enterococci	2009-2013
Prestatyn Central	32.31%	Intestinal enterococci	2009-2013
Llandanwg Central	28.49%	E. coli	2009-2013
Criccieth East	28.49%	E. coli	2009-2013
Llanfairfechan	28.49%	E. coli	2009-2013
West Angle	27.16%	Intestinal enterococci	2009-2013
Tywyn	26.44%	E. coli	2009, 2011-2013
Newport North	24.43%	E. coli	2009-2013
Little Haven	21.64%	Intestinal enterococci	2009-2013
Southerndown	21.21%	Intestinal enterococci	2009-2013
Limeslade	21.21%	Intestinal enterococci	2009-2013
Morfa Nefyn	18.60%	Intestinal enterococci	2012-2013
Poppit West	17.02%	E. coli	2009-2013
Cilborth	16.10%	Intestinal enterococci	2009-2013
Llandudno North	16.10%	Intestinal enterococci	2009-2013
Centre of Llangrannog Bay	13.75%	E. coli	2009-2013
Pendine East	11.50%	Intestinal enterococci	2009-2013
Aberporth	11.50%	Intestinal enterococci	2009-2013
Amroth Central	10.83%	E. coli	2009-2013
Fairbourne	10.83%	E. coli	2009-2013
Sandy Cove	10.83%	E. coli	2009-2013
Trecco Bay	8.27%	E. coli	2009-2013
Porth Neigwl	7.99%	E. coli	2009-2013

EC Bathing Water	Percentage Risk of Non-compliance	Determinand Most at Risk	Data period
Druidston Haven	7.73%	Intestinal enterococci	2009-2013
Whitmore Bay Central	7.55%	Intestinal enterococci	2009-2013
Saundersfoot	7.55%	Intestinal enterococci	2009-2013
Castle Beach Tenby	7.55%	Intestinal enterococci	2009-2013
Barmouth	7.55%	Intestinal enterococci	2009-2013
Llanrhystud	6.10%	E. coli	2009-2013

Table 9: Non-EC identified bathing waters at risk (>5%) of future non-compliance with the Imperative standard at the end of the 2013 bathing season, based on historical compliance data.

Bathing Water	Percentage Risk of Non-compliance with Mandatory Standard	Determinand Most at Risk	Data Period
Pwllgwaelod	47.25%	E. coli	2009-2013
Ogmore Slip	41.31%	E. coli	2009-2013
Llanina	41.31%	E. coli	2009-2013
Ynyslas (Twyni Bach - Estuary)	33.95%	E. coli	2009-2013
Llanon	26.42%	E. coli	2009-2013
Burry Port	18.40%	E. coli	2009-2013
Cwmttydu	11.98%	E. coli	2009-2013
Aberaeron South (Northern Groyne)	11.98%	E. coli	2009-2013
Ynyslas (Northern Groyne - Sea)	11.98%	E. coli	2009-2013
Criccieth West End	11.98%	E. coli	2009-2013
Goodwick Sands	11.60%	E. coli	2009-2013
Ogmore Central	5.99%	E. coli	2009-2013
Gelliswick, Milford Haven	5.99%	E. coli	2009-2013
Little Quay (Cei Bach)	5.99%	E. coli	2009-2013
Abererch	5.99%	E. coli	2009-2013
Penrhyn Bay	5.99%	E. coli	2009-2013
Broughton Bay	5.89%	E. coli	2009-2013
Traeth Bach	5.89%	E. coli	2009-2013

Table 10: Non-EC identified bathing waters at risk (>5%) of future non-compliance with the UK Guideline standard at the end of the 2013 bathing season, based on historical compliance data.

Bathing Water	Percentage Risk of Non-compliance with Guideline Standard	Determinand Most at Risk	Data Period
Pwllgwaelod	99.84%	E. coli	2009-2013
Llanina	98.48%	Intestinal enterococci	2009-2013
Ynyslas (Twyni Bach - Estuary)	97.67%	E. coli	2009-2013
Ogmore Slip	93.90%	E. coli	2009-2013
Ogmore Central	88.18%	E. coli	2009-2013
Gelliswick, Milford Haven	84.11%	E. coli	2009-2013
St. Brides Haven	72.52%	Intestinal enterococci	2009-2013
Red Wharf Bay	71.84%	Intestinal enterococci	2009-2013
Llanon	69.81%	E. coli	2009-2013
Splash Point	68.85%	E. coli	2009-2013
Cwmtedu	68.54%	Intestinal enterococci	2009-2013
Little Quay (Cei Bach)	68.54%	Intestinal enterococci	2009-2013
Criccieth West End	66.25%	E. coli	2009-2013
Aberarth	64.20%	Intestinal enterococci	2009-2013
Moelfre	63.48%	Intestinal enterococci	2009-2013
Burry Port	60.48%	E. coli	2009-2013
Traeth Bach	58.79%	Intestinal enterococci	2009-2013
Conwy Morfa	54.50%	Intestinal enterococci	2009-2013
Broughton Bay	53.39%	E. coli	2009-2013
Ffrith, Prestatyn	50.14%	E. coli	2009-2013
Point of Ayr, Talacre	50.14%	E. coli	2009-2013
Aberaeron South (Northern Groyne)	49.20%	Intestinal enterococci	2009-2013
Penrhyn Bay	49.20%	Intestinal enterococci	2009-2013
Llanddulas	49.20%	Intestinal enterococci	2009-2013
Llansantffraid	43.69%	Intestinal enterococci	2009-2013
Glen Beach	38.02%	Intestinal enterococci	2009-2013
Waterwynch Bay	38.02%	Intestinal enterococci	2009-2013
Llantwit Major	32.31%	Intestinal enterococci	2009-2013
Porth Eilian, Amlwch	31.74%	Intestinal enterococci	2009-2013
Beaumaris	27.75%	E. coli	2009-2013
Old Colwyn	26.66%	Intestinal enterococci	2009-2013
Barkby Beach	26.66%	Intestinal enterococci	2009-2013
Lleiniog Beach Penmon	26.16%	Intestinal enterococci	2009-2013
Monkstone Beach (Nr Tenby)	21.21%	Intestinal enterococci	2009-2013
Ynyslas (Northern Groyne - Sea)	21.21%	Intestinal enterococci	2009-2013
Porth Trwyn	20.79%	Intestinal enterococci	2009-2013
Abererch	17.02%	E. coli	2009-2013
Gronant Dunes	13.75%	E. coli	2009-2013
Goodwick Sands	11.24%	Intestinal enterococci	2009-2013
Cwm yr Eglwys	11.24%	Intestinal enterococci	2009-2013
Rhossili	7.99%	E. coli	2009-2013

Table 11: EC identified bathing waters: projected revised Bathing Water Directive classifications using 2010 to 2013 data, compared to previous years.

Bathing Water	Welsh Government Number	2004 (2001 to 2004)	2005 (2002 to 2005)	2006 (2003 to 2006)	2007 (2004 to 2007)	2008 (2005 to 2008)	2009 (2006 to 2009)	2010 (2007 to 2010)	2011 (2008 to 2011)	2012 (2009 to 2012)	2013 (2010 to 2013)
Jackson's Bay Barry Island	36100	Sufficient	Sufficient	Sufficient	Sufficient	Sufficient	Sufficient	Sufficient	Sufficient	Good	Good
Whitmore Bay Barry Island	36200	Sufficient	Good	Good	Good	Good	Good	Good	Good	Good	Good
Cold Knap Barry	36300	Excellent	Excellent	Excellent	Excellent	Good	Good	Excellent	Excellent	Excellent	Excellent
Southerndown	36400	Good	Excellent	Excellent	Excellent	Good	Good	Good	Good	Excellent	Excellent
Trecco Bay Porthcawl	36500	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Excellent	Excellent
Sandy Bay Porthcawl	36600	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Rest Bay Porthcawl	36700	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Aberafan	36800	Good	Good	Good	Good	Good	Good	Good	Sufficient	Sufficient	Sufficient
Swansea Bay	36900	Sufficient	Sufficient	Sufficient	Sufficient	Poor	Poor	Poor	Poor	Poor	Sufficient
Bracelet Bay	37000	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Limeslade Bay	37100	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Langland Bay	37200	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Caswell Bay	37300	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Oxwich Bay	37400	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Port Eynon Bay	37500	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Rhossili	37600	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Pembrey	37700	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Excellent	Excellent
Pendine	37800	Excellent	Excellent	Good	Good	Good	Good	Good	Good	Good	Excellent
Amroth Central	37900	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Excellent	Excellent	Excellent
Wiseman's Bridge	37940									Sufficient	Sufficient
Coppet Hall	37980	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Saundersfoot	38000	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Tenby North	38100	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent

Bathing Water	Welsh Government Number	2004 (2001 to 2004)	2005 (2002 to 2005)	2006 (2003 to 2006)	2007 (2004 to 2007)	2008 (2005 to 2008)	2009 (2006 to 2009)	2010 (2007 to 2010)	2011 (2008 to 2011)	2012 (2009 to 2012)	2013 (2010 to 2013)
Castle Beach, Tenby	38150	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Good
Tenby South	38200	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Penally	38210									Excellent	Excellent
Lydstep	38220	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Manorbier	38230	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Freshwater East	38235	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Barafundle	38238	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Broad Haven (South)	38240	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Freshwater West	38248									Excellent	Excellent
West Angle	38250	Good	Good	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good
Sandy Haven	38255									Good	Good
Dale	38260	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Marloes Sands	38280	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Little Haven	38295									Excellent	Excellent
Broad Haven (Central)	38300	Excellent	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Excellent	Excellent	Excellent
Druidston Haven	38340									Excellent	Excellent
Nolton Haven	38380									Sufficient	Excellent
Newgale	38400	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Caerfai	38460	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Whitesands	38500	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Abereddy	38520									Excellent	Excellent
Abermawr	38540									Excellent	Excellent
Newport North	38600	Good	Good	Sufficient	Good	Sufficient	Good	Good	Good	Good	Good
Poppit West	38630	Excellent	Excellent	Excellent	Good	Good	Good	Excellent	Excellent	Good	Good
Mwnt	38640								Not classified	Excellent	Excellent
Aberporth	38660	Excellent	Good	Good	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Excellent
Tresaith	38670	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Penbryn	38675								Not	Excellent	Excellent

Bathing Water	Welsh Government Number	2004 (2001 to 2004)	2005 (2002 to 2005)	2006 (2003 to 2006)	2007 (2004 to 2007)	2008 (2005 to 2008)	2009 (2006 to 2009)	2010 (2007 to 2010)	2011 (2008 to 2011)	2012 (2009 to 2012)	2013 (2010 to 2013)
									classified		
Llangrannog	38680	Poor	Poor	Sufficient	Good	Good	Good	Good	Good	Good	Good
Cilborth	38685								Not classified	Excellent	Excellent
New Quay North	38688								Not classified	Sufficient	Sufficient
New Quay Harbour	38690	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Traeth Gwyn New Quay	38700	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Llanrhystud	38750								Not classified	Excellent	Excellent
Aberystwyth South	38800	Sufficient	Good	Good	Good	Good	Sufficient	Sufficient	Sufficient	Good	Good
Aberystwyth North	38900	Good	Good	Excellent	Excellent	Good	Good	Sufficient	Sufficient	Good	Good
Clarach South	38920	Sufficient	Good	Excellent	Excellent	Excellent	Good	Good	Good	Good	Good
Borth	39000	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Aberdyfi	39050	Poor	Poor	Sufficient	Sufficient	Sufficient	Poor	Poor	Sufficient	Poor	Poor
Tywyn	39100	Sufficient	Good	Excellent	Excellent	Excellent	Good	Not classified	Not classified	Good	Good
Fairbourne	39200	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Barmouth	39300	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good	Good	Good	Excellent
Tal-y-Bont	39350	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Excellent
Dyffryn (Llanendwyn)	39360	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Excellent
Llandanwg	39400	Sufficient	Good	Good	Good	Sufficient	Sufficient	Sufficient	Sufficient	Good	Good
Harlech	39500	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Craig Du Beach Central	39600	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Criccieth	39700	Good	Excellent	Excellent	Excellent	Good	Good	Good	Good	Sufficient	Good
Pwllheli	39800	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Abersoch	39900	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Porth Neigwl	39920									Excellent	Excellent

Bathing Water	Welsh Government Number	2004 (2001 to 2004)	2005 (2002 to 2005)	2006 (2003 to 2006)	2007 (2004 to 2007)	2008 (2005 to 2008)	2009 (2006 to 2009)	2010 (2007 to 2010)	2011 (2008 to 2011)	2012 (2009 to 2012)	2013 (2010 to 2013)
Aberdaron	39950								Not classified	Good	Excellent
Morfa Nefyn	39960									Excellent	Excellent
Morfa Dinlle	39970	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Llanddwyn	39980	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Aberffraw	39985	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Rhosneigr	39990	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Silver Bay Rhoscolyn	39993		Not classified	Not classified	Not classified	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Borth Wen	39995	Not classified	Not classified	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Trearddur Bay	40000	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Porth Dafarch	40010	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Church Bay	40030	Not classified	Not classified	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Cemaes	40050	Sufficient	Sufficient	Sufficient	Poor	Poor	Poor	Poor	Sufficient	Sufficient	Sufficient
Traeth Lligwy	40085	Not classified	Not classified	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good
Benllech	40100	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
St Davids - Benllech	40105		Not classified	Not classified	Not classified	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Llanddona	40140	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Llanfairfechan	40170					Not classified	Not classified	Not classified	Good	Good	Good
Penmaenmawr	40180	Sufficient	Good	Good	Excellent	Excellent	Excellent	Excellent	Good	Good	Good
Llandudno West Shore	40200	Sufficient	Good	Good	Good	Good	Good	Good	Good	Poor	Poor
Llandudno North Shore	40300	Sufficient	Sufficient	Sufficient	Good	Good	Good	Excellent	Good	Excellent	Good
Colwyn Bay	40400	Poor	Sufficient	Sufficient	Good	Sufficient	Sufficient	Sufficient	Good	Good	Good
Abergele (Pensarn)	40450								Not classified	Good	Good
Kinmel Bay (Sandy Cove)	40500	Sufficient	Good	Good	Sufficient	Good	Good	Good	Excellent	Excellent	Good

Bathing Water	Welsh Government Number	2004 (2001 to 2004)	2005 (2002 to 2005)	2006 (2003 to 2006)	2007 (2004 to 2007)	2008 (2005 to 2008)	2009 (2006 to 2009)	2010 (2007 to 2010)	2011 (2008 to 2011)	2012 (2009 to 2012)	2013 (2010 to 2013)
Marine Lake, Rhyl	40550									Good	Excellent
Rhyl	40600	Poor	Sufficient	Poor	Poor	Poor	Poor	Sufficient	Sufficient	Poor	Poor
Prestatyn	40700	Sufficient	Good	Good	Good	Good	Good	Good	Good	Good	Good
Excellent		49	53	58	60	55	52	53	56	68	70
Good		9	14	11	12	17	20	17	15	22	22
Sufficient		13	6	8	4	5	4	6	8	6	5
Poor		4	2	1	2	3	4	3	1	4	3
Total		75	75	78	78	80	80	79	80	100	100

Up until 2011 bathing waters were not classified unless they had four years of data (for example if they had been closed for a season or designated for less than four years). This ceased to apply in 2012 when the rBWD came in as a bathing water can now be classified if it has at least 16 samples.

Borth was sampled at a temporary sample point in 2011 and 2013; data from the permanent sample point were used for 2010 and 2012 and from the temporary one for 2011 and 2013.

Colwyn Bay's sample point moved in 2011; data from the old sample point were used for 2010 and from the new one for 2011-2013.

Table 12: Blue Flag award beaches 1988 to 2013. (Y indicates that the beach was awarded a Blue Flag in that year)

Welsh Government Number	Bathing Water	Local Authority	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
36100	Jackson's Bay Barry Island	Vale of Glamorgan																										
36200	Whitmore Bay Barry Island	Vale of Glamorgan																			Y	Y	Y	Y	Y	Y	Y	
36300	Cold Knap Barry	Vale of Glamorgan																										
36400	Southerndown	Vale of Glamorgan																	Y	Y	Y							
36500	Trecco Bay Porthcawl	Bridgend																	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
36600	Sandy Bay Porthcawl	Bridgend																										
36700	Rest Bay Porthcawl	Bridgend											Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
36800	Aberafan	Neath Port Talbot																					Y	Y	Y	Y		
36900	Swansea Bay	Swansea																										
37000	Bracelet Bay	Swansea													Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
37100	Limeslade Bay	Swansea																										
37200	Langland Bay	Swansea													Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
37300	Caswell Bay	Swansea											Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
37400	Oxwich Bay	Swansea																										
37500	Port Eynon Bay	Swansea										Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
37600	Rhossili	Swansea																										
37700	Pembrey	Carmarthenshire	Y		Y		Y	Y	Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y
37800	Pendine	Carmarthenshire																				Y	Y		Y			
37900	Amroth Central	Pembrokeshire												Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y
37940	Wiseman's Bridge	Pembrokeshire																										
37980	Coppet Hall	Pembrokeshire																						Y	Y	Y	Y	Y
38000	Saundersfoot	Pembrokeshire											Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38100	Tenby North	Pembrokeshire				Y				Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38150	Castle Beach, Tenby	Pembrokeshire													Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38200	Tenby South	Pembrokeshire													Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38210	Penally	Pembrokeshire																										
38220	Lydstep	Pembrokeshire											Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38230	Manorbier	Pembrokeshire																										

Welsh Government Number	Bathing Water	Local Authority	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
38235	Freshwater East	Pembrokeshire																										
38238	Barafundle	Pembrokeshire																										
38240	Broad Haven (South)	Pembrokeshire																										
38248	Freshwater West	Pembrokeshire																										
38250	West Angle	Pembrokeshire																										
38255	Sandy Haven	Pembrokeshire																										
38260	Dale	Pembrokeshire																		Y	Y	Y	Y	Y	Y	Y	Y	Y
38280	Marloes Sands	Pembrokeshire																										
38295	Little Haven	Pembrokeshire																										
38300	Broad Haven (Central)	Pembrokeshire																		Y	Y	Y	Y		Y	Y	Y	Y
38340	Druidston Haven	Pembrokeshire																										
38380	Nolton Haven	Pembrokeshire																										
38400	Newgale	Pembrokeshire										Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38460	Caerfai	Pembrokeshire																										
38500	Whitesands	Pembrokeshire					Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38520	Aberiddy	Pembrokeshire																										
38540	Abermawr	Pembrokeshire																										
38600	Newport North	Pembrokeshire																					Y		Y	Y		
38630	Poppit West	Pembrokeshire												Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
38640	Mwnt	Ceredigion																										
38660	Aberporth	Ceredigion												Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
38670	Tresaith	Ceredigion												Y	Y	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y
38675	Penbryn	Ceredigion																										
38680	Llangrannog	Ceredigion																			Y	Y		Y	Y	Y	Y	
38685	Cilborth	Ceredigion																										
38688	New Quay North	Ceredigion																										
38690	New Quay Harbour	Ceredigion												Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38700	Traeth Gwyn New Quay	Ceredigion																										
38750	Llanrhystud	Ceredigion																										
38800	Aberystwyth South	Ceredigion																Y	Y		Y	Y	Y			Y		

Welsh Government Number	Bathing Water	Local Authority	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
38900	Aberystwyth North	Ceredigion									Y			Y					Y	Y	Y	Y	Y				Y		
38920	Clarach South	Ceredigion																											
39000	Borth	Ceredigion													Y		Y		Y	Y	Y	Y	Y	Y	Y		Y	Y	
39050	Aberdyfi	Gwynedd																			Y	Y							
39100	Tywyn	Gwynedd									Y								Y	Y	Y	Y	Y	Y			Y		
39200	Fairbourne	Gwynedd																Y	Y	Y	Y	Y	Y	Y	Y	Y			
39300	Barmouth	Gwynedd									Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y		
39350	Tal-y-Bont	Gwynedd																											
39360	Dyffryn (Llanendwyn)	Gwynedd																											
39400	Llandanwg	Gwynedd																											
39500	Harlech	Gwynedd																											
39600	Craig Du Beach Central	Gwynedd																										Y	
39700	Criccieth	Gwynedd																Y	Y	Y	Y	Y			Y	Y			
39800	Pwllheli	Gwynedd									Y	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
39900	Abersoch	Gwynedd										Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
39920	Porth Neigwl	Gwynedd																											
39950	Aberdaron	Gwynedd																									Y		
39960	Morfa Nefyn	Gwynedd																											
39970	Morfa Dinlle	Gwynedd								Y		Y						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
39980	Llanddwyn	Anglesey									Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
39985	Aberffraw	Anglesey																											
39990	Rhosneigr	Anglesey																											
39993	Silver Bay Rhoscolyn	Anglesey																											
39995	Borth Wen	Anglesey																											
40000	Trearddur Bay	Anglesey								Y	Y		Y			Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
40010	Porth Dafarch	Anglesey											Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
40030	Church Bay	Anglesey																					Y	Y	Y	Y	Y	Y	
40050	Cemaes	Anglesey																Y											
40085	Traeth Lligwy	Anglesey																											
40100	Benllech	Anglesey																Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

Welsh Government Number	Bathing Water	Local Authority	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
40105	St Davids - Benllech	Anglesey																										
40140	Llanddona	Anglesey										Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40170	Llanfairfechan	Conwy																					Y	Y		Y		
40180	Penmaenmawr	Conwy													Y				Y	Y	Y	Y	Y	Y	Y		Y	
40200	Llandudno West Shore	Conwy															Y			Y	Y	Y		Y				
40300	Llandudno North Shore	Conwy															Y			Y	Y	Y	Y	Y	Y	Y		Y
40400	Colwyn Bay	Conwy															Y		Y			Y				Y		
40450	Abergele (Pensarn)	Conwy																									Y	
40500	Kinmel Bay (Sandy Cove)	Conwy																										
40550	Marine Lake, Rhyl	Denbighshire																										
40600	Rhyl	Denbighshire																										
40700	Prestatyn	Denbighshire																		Y		Y	Y	Y	Y	Y	Y	
Total Number of Blue Flags			1	0	1	0	2	2	2	2	4	9	13	12	22	18	26	33	35	38	43	44	42	38	45	41	43	33

Chart 5: Blue Flag awards 1995 to 2013

Blue Flag Beaches in Wales 1995-2013

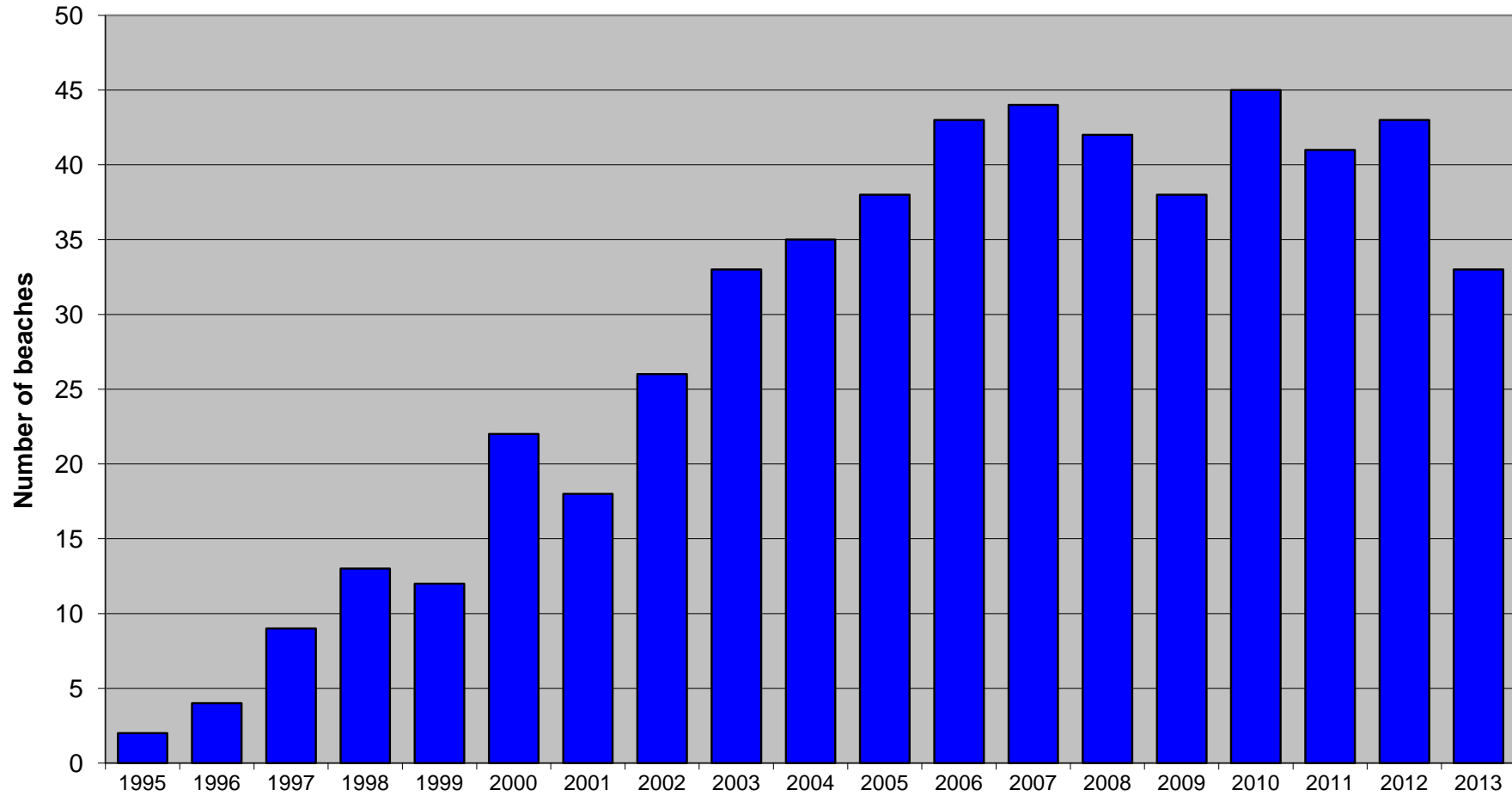


Table 13: Green Coast Award beaches 2013.

Bathing Water	Council	Designated?
Cold Knap Barry	Vale of Glamorgan	Yes
Southerndown	Vale of Glamorgan	Yes
Limeslade Bay	Swansea	Yes
Rhossili	Swansea	No
Penally	Pembrokeshire	Yes
Priory Bay, Caldy Island	Pembrokeshire	No
Manorbier	Pembrokeshire	Yes
Freshwater East	Pembrokeshire	Yes
Barafundle	Pembrokeshire	Yes
Broadhaven South	Pembrokeshire	Yes
Marloes	Pembrokeshire	Yes
Martin's Haven	Pembrokeshire	No
Druidston Haven	Pembrokeshire	Yes
Caerfai	Pembrokeshire	Yes
Abereiddy	Pembrokeshire	Yes
Cwm yr Eglwys	Pembrokeshire	No
Mwnt	Ceredigion	Yes
Penbryn	Ceredigion	Yes
Cil Borth	Ceredigion	Yes
Llanrhystyd	Ceredigion	Yes
Fairbourne	Gwynedd	Yes
Dyffryn (Llanendwyn)	Gwynedd	Yes
Harlech	Gwynedd	Yes
Porth Neigwl	Gwynedd	Yes
Aberffraw	Anglesey	Yes
Porth Tre Castell	Anglesey	No
Porth Nobla, Llanfaelog	Anglesey	No
Porth Tyn Llanfaelog	Anglesey	No
Rhosneigr	Anglesey	Yes
Traeth Crigyll	Anglesey	No
Silver Bay Rhoscolyn	Anglesey	Yes
Borth Wen	Anglesey	Yes
Porth Tywyn Mawr (Sandy Beach)	Anglesey	No
Cemlyn	Anglesey	No
Red Wharf Bay	Anglesey	No

Green Coast Awards

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of Green Coast Awards	9	24	21	26	44	40	41	50	46	46	44	48	47	51	35

Chart 6: Green Coast Awards 1999 to 2013

Green Coast Award Beaches in Wales 1999-2013

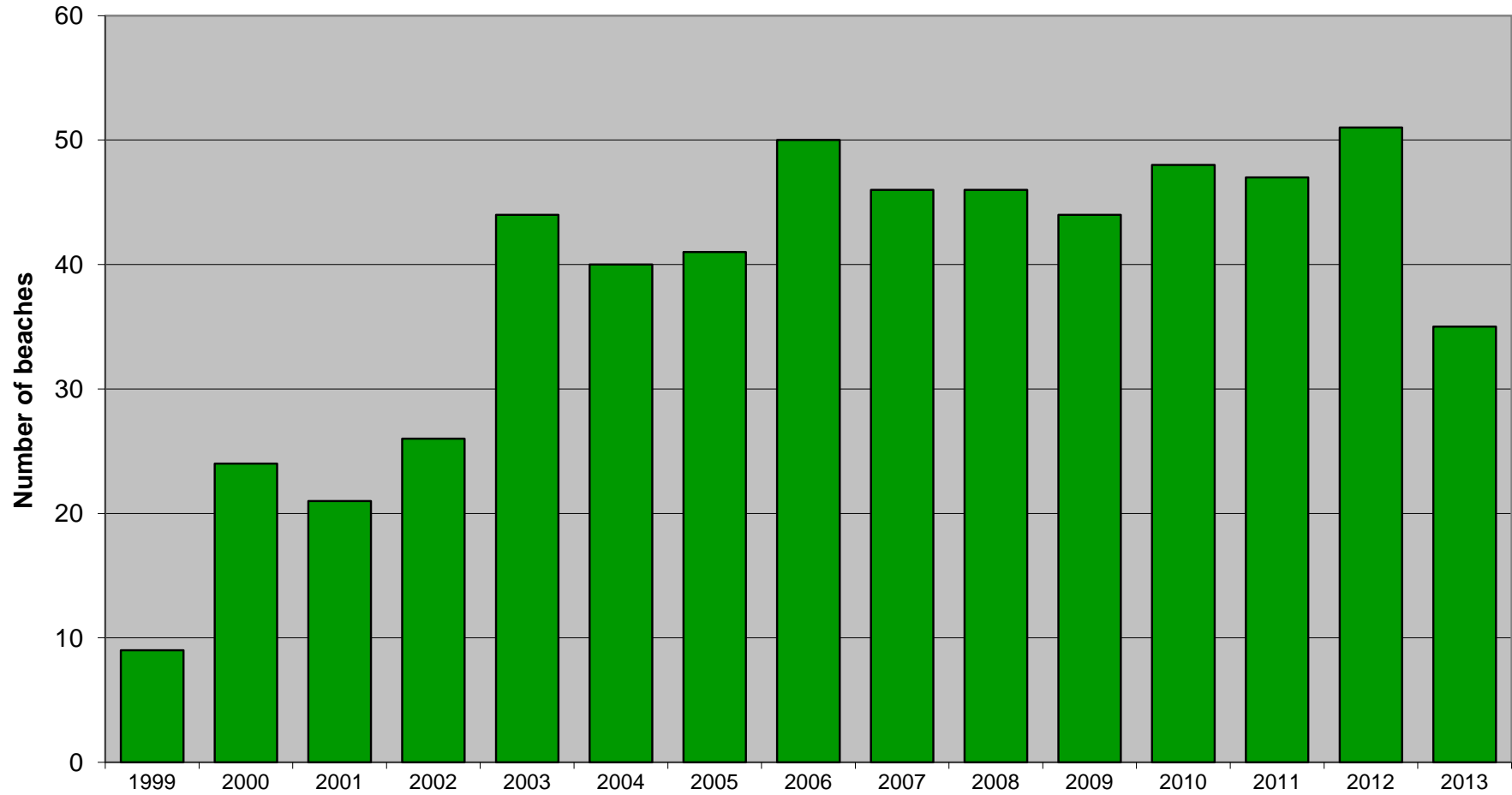


Table 14: Non-EC identified bathing waters: indicative projected revised Bathing Water Directive classifications using 2010 to 2013 data.

Sample Point Number	Bathing Water	Indicative rBWD classification 2009-2012	Indicative rBWD classification 2010-2013
19038	Fontygary Bay, Rhoose	EXCELLENT	EXCELLENT
74050	Llantwit Major	GOOD	GOOD
19043	Ogmore Central	POOR	POOR
19044	Ogmore Slip	POOR	POOR
39161	Rhossili	EXCELLENT	EXCELLENT
74025	Broughton Bay	SUFFICIENT	SUFFICIENT
39003	Burry Port	SUFFICIENT	SUFFICIENT
83777	Glen Beach	SUFFICIENT	SUFFICIENT
39574	Monkstone Beach (Nr Tenby)	EXCELLENT	EXCELLENT
83616	Waterwynch Bay	GOOD	GOOD
39573	Priory Bay, Caldy Island	EXCELLENT	EXCELLENT
83776	Swanlake Bay	EXCELLENT	EXCELLENT
39037	Gelliswick, Milford Haven	POOR	POOR
39571	Westdale	EXCELLENT	EXCELLENT
39041	Martin's Haven	EXCELLENT	EXCELLENT
39042	St. Brides Haven	SUFFICIENT	POOR
83778	Porthselau	EXCELLENT	EXCELLENT
83613	Goodwick Sands	SUFFICIENT	EXCELLENT
32790	Pwllgwaelod	POOR	POOR
32791	Cwm yr Eglwys	EXCELLENT	EXCELLENT
32426	Cwmttydu	POOR	SUFFICIENT
39146	Llanina	POOR	POOR
39081	Little Quay (Cei Bach)	POOR	POOR
39082	Aberaeron South (Northern Groyne)	SUFFICIENT	SUFFICIENT
32428	Aberarth	SUFFICIENT	GOOD
32429	Llanon	POOR	SUFFICIENT
32430	Llansantffraid	GOOD	GOOD
20022	Ynyslas (Northern Groyne - Sea)	GOOD	GOOD
20399	Ynyslas (Twyni Bach - Estuary)	POOR	POOR
23141	Criccieth West End	SUFFICIENT	SUFFICIENT
22545	Abererch	GOOD	GOOD
22549	Llanbedrog	POOR	NOT SAMPLED
27539	Porth Trecastell	EXCELLENT	EXCELLENT
27540	Porth Nobla, Llanfaelog	EXCELLENT	EXCELLENT
23476	Porth Tyn Llanfaelog	EXCELLENT	EXCELLENT
23477	Traeth Crigyll	EXCELLENT	EXCELLENT
27547	Porth Tywyn Mawr (Sandy Beach)	EXCELLENT	EXCELLENT

Sample Point Number	Bathing Water	Indicative rBWD classification 2009-2012	Indicative rBWD classification 2010-2013
23480	Porth Trwyn	GOOD	GOOD
27531	Cemlyn	EXCELLENT	EXCELLENT
23481	Traeth Bach	SUFFICIENT	SUFFICIENT
27549	Porth Eilian, Amlwch	SUFFICIENT	SUFFICIENT
27561	Moelfre	POOR	SUFFICIENT
25806	Red Wharf Bay	SUFFICIENT	POOR
27564	Lleiniog Beach Penmon	GOOD	GOOD
27757	Beaumaris	EXCELLENT	GOOD
23246	Conwy Morfa	SUFFICIENT	SUFFICIENT
25045	Penrhyn Bay	SUFFICIENT	SUFFICIENT
23492	Old Colwyn	GOOD	GOOD
3597	Llanddulas	GOOD	SUFFICIENT
3610	Splash Point	SUFFICIENT	SUFFICIENT
3611	Ffrith, Prestatyn	GOOD	GOOD
3614	Barkby Beach	EXCELLENT	GOOD
26311	Gronant Dunes	EXCELLENT	EXCELLENT
3617	Point of Ayr, Talacre	GOOD	GOOD

Excellent	18	17
Good	11	13
Sufficient	14	14
Poor	11	9
Total	54	53

Table 15: Seaside Award beaches 2013

Bathing Water	Local Authority	Designated?	Seaside Award 2013
Jacksons Bay Barry	Vale of Glamorgan	Yes	Resort
Whitmore Bay Barry	Vale of Glamorgan	Yes	Resort
Trecco Bay Porthcawl	Bridgend	Yes	Resort
Rest Bay Porthcawl	Bridgend	Yes	Resort
Aberafan	Neath Port Talbot	Yes	Resort
Bracelet Bay	Swansea	Yes	Resort
Limeslade Bay	Swansea	Yes	Rural
Langland Bay	Swansea	Yes	Resort
Caswell Bay	Swansea	Yes	Resort
Port Eynon Bay	Swansea	Yes	Resort
Pembrey	Carmarthenshire	Yes	Resort
Amroth	Pembrokeshire	Yes	Resort
Wisemans Bridge	Pembrokeshire	Yes	Rural
Coppet Hall	Pembrokeshire	Yes	Resort
Saundersfoot	Pembrokeshire	Yes	Resort
Tenby North	Pembrokeshire	Yes	Resort
Castle Beach, Tenby	Pembrokeshire	Yes	Resort
Tenby South	Pembrokeshire	Yes	Resort
Penally	Pembrokeshire	Yes	Rural
Lydstep	Pembrokeshire	Yes	Resort
Manorbier	Pembrokeshire	Yes	Rural
Freshwater East	Pembrokeshire	Yes	Rural
Barafundle	Pembrokeshire	Yes	Rural
Broadhaven South	Pembrokeshire	Yes	Rural
West Angle	Pembrokeshire	Yes	Rural
Gelliswick, Milford Haven	Pembrokeshire	No	Rural
Sandy Haven	Pembrokeshire	Yes	Rural
Dale	Pembrokeshire	Yes	Resort
Marloes	Pembrokeshire	Yes	Rural
Martin's Haven	Pembrokeshire	No	Rural
St. Brides Haven	Pembrokeshire	No	Rural
Little Haven	Pembrokeshire	Yes	Rural
Broadhaven	Pembrokeshire	Yes	Resort
Druidston Haven	Pembrokeshire	Yes	Rural
Nolton Haven	Pembrokeshire	Yes	Rural
Newgale	Pembrokeshire	Yes	Resort
Caerfai	Pembrokeshire	Yes	Rural
Whitesands	Pembrokeshire	Yes	Resort
Abereiddy	Pembrokeshire	Yes	Rural
Goodwick Sands	Pembrokeshire	No	Rural
Cwm yr Eglwys	Pembrokeshire	No	Rural

Bathing Water	Local Authority	Designated?	Seaside Award 2013
Newport	Pembrokeshire	Yes	Rural
Poppit Sands	Pembrokeshire	Yes	Rural
Mwnt	Ceredigion	Yes	Rural
Aberporth	Ceredigion	Yes	Resort
Tresaith	Ceredigion	Yes	Resort
Penbryn	Ceredigion	Yes	Rural
Llangrannog	Ceredigion	Yes	Resort
Cil Borth	Ceredigion	Yes	Rural
Cwmtedu	Ceredigion	No	Rural
New Quay North	Ceredigion	Yes	Rural
Newquay Harbour	Ceredigion	Yes	Resort
Aberaeron South (Northern Groyne)	Ceredigion	No	Rural
Llanrhystyd	Ceredigion	Yes	Rural
Aberystwyth South	Ceredigion	Yes	Resort
Aberystwyth North	Ceredigion	Yes	Resort
Clarach South	Ceredigion	Yes	Rural
Borth	Ceredigion	Yes	Resort
Aberdyfi	Gwynedd	Yes	Resort
Tywyn	Gwynedd	Yes	Resort
Fairbourne	Gwynedd	Yes	Resort
Barmouth	Gwynedd	Yes	Resort
Llandanwg	Gwynedd	Yes	Rural
Harlech	Gwynedd	Yes	Rural
Craig Du Beach Central	Gwynedd	Yes	Resort
Criccieth West End	Gwynedd	No	Rural
Abererch	Gwynedd	No	Rural
Pwllheli	Gwynedd	Yes	Resort
Llanbedrog	Gwynedd	No	Rural
Abersoch	Gwynedd	Yes	Resort
Aberdaron	Gwynedd	Yes	Resort
Morfa Dinlle	Gwynedd	Yes	Resort
Llanddwyn	Anglesey	Yes	Resort
Aberffraw	Anglesey	Yes	Rural
Porth Trecastell	Anglesey	No	Rural
Porth Nobla, Llanfaelog	Anglesey	No	Rural
Porth Tyn Llanfaelog	Anglesey	No	Rural
Rhosneigr	Anglesey	Yes	Rural
Traeth Crigyll	Anglesey	No	Rural
Silver Bay Rhoscolyn	Anglesey	Yes	Rural
Borth Wen	Anglesey	Yes	Rural
Trearddur Bay	Anglesey	Yes	Resort
Porth Dafarch	Anglesey	Yes	Resort

Bathing Water	Local Authority	Designated?	Seaside Award 2013
Porth Tywyn Mawr (Sandy Beach)	Anglesey	No	Rural
Porth Trwyn	Anglesey	No	Rural
Church Bay	Anglesey	Yes	Resort
Cemlyn	Anglesey	No	Rural
Traeth Bach	Anglesey	No	Rural
Cemaes	Anglesey	Yes	Resort
Porth Eilian, Amlwch	Anglesey	No	Rural
Traeth Lligwy	Anglesey	Yes	Rural
Moelfre	Anglesey	No	Rural
Benllech	Anglesey	Yes	Resort
St Davids - Benllech	Anglesey	Yes	Rural
Red Wharf Bay	Anglesey	No	Rural
Llanddona	Anglesey	Yes	Resort
Lleiniog Beach Penmon	Anglesey	No	Rural
Beaumaris	Anglesey	No	Rural
Llanfairfechan	Conwy	Yes	Resort
Penmaenmawr	Conwy	Yes	Resort
Llandudno North Shore	Conwy	Yes	Resort
Colwyn Bay	Conwy	Yes	Resort
Old Colwyn	Conwy	No	Rural
Abergele (Pensarn)	Conwy	Yes	Rural
Kinmel Bay (Sandy Cove)	Conwy	Yes	Rural
Prestatyn	Denbighshire	Yes	Resort

RESORT	49
RURAL	57
TOTAL	106

Appendix 1: Criteria for assessing compliance with current Bathing Water Directive (cBWD) standards

Article 3 of the EC Directive on the quality of bathing waters (76/160/EEC) requires member states to set bathing water quality standards no less stringent than those specified as "Mandatory" (or Imperative, I) values in the annex to the Directive. Article 3 also requires member states to endeavour to observe "Guideline" (G) values as guidelines, whether or not there is a corresponding "I" value.

The standards given in the Directive are as follows:

Parameter up to 2011	Equivalent Parameter from 2012 onwards in Directive 2006/7/EC	Imperative Standard	Guideline Standard
Microbiological			
Faecal coliforms	E. Coli	2000/100 ml	100/100 ml
Total coliforms	None	10000/100 ml	500/100 ml
Faecal streptococci	Intestinal Enterococci		100/100 ml
Salmonella	None		0 / litre
Enteroviruses	None		0 PFU/10 litres
Physico-chemical			
pH	None	6 to 9	
Colour	None	No abnormal change in colour	
Mineral Oils	None	No film visible on water surface and no odour	0.3 mg/ litre
Surface Active Substances	None	No lasting foam	0.3 mg/ litre
Phenols	None	No specific odour (0.005 mg / litre)	0.005 mg / litre
Transparency *	None	Extinction depth of 1 m for Secchi disc - equivalent to 6.665 ftu (turbidity)	Extinction depth of 2 m for Secchi disc - turbidity value not yet calculated
Tarry Residues and Persistent Floating Materials	None		Must be absent

* Wales was granted derogation for transparency at all its bathing waters so was not required to comply with these standards.

Article 5 sets out the detailed requirements for compliance.

For "I" value determinands:

- a) 95% of the samples must comply with the "I" value
- b) The 5% not complying with the "I" value must not allow consecutive samples taken at statistically valid intervals to exceed the "I" value, i.e. "I" value failures must be of short duration.

For "G" value determinands:

- a) 90% of the samples must conform with the "G" value for faecal streptococci; 80% of the samples must conform with the "G" value for total and faecal coliforms.
- b) The 10 or 20% not complying with the "G" value must not allow consecutive samples taken at statistically valid intervals to exceed the "G" value, i.e. "G" value failures should be of short duration.

Appendix 2: Criteria for assessing compliance with the revised Bathing Water Directive (rBWD) standards

Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 is known as the revised Bathing Water Directive. Classifications are based on four years of sampling data. The standards that must not be exceeded for each class are given as follows in Annex II of the Directive for coastal waters and transitional waters (such as estuarine bathing waters):

Parameter	Excellent quality	Good quality	Sufficient quality	Reference methods of analysis
Intestinal enterococci (colony forming units (cfu)/100ml)	100 (*)	200 (*)	185 (**)	ISO 7899-1 or ISO 7899-2
Escherichia coli (colony forming units (cfu)/100ml)	250 (*)	500 (*)	500 (**)	ISO 9308-3 or ISO 9308-1

(*) based upon a 95-percentile evaluation

(**) based upon a 90-percentile evaluation

The percentiles are a statistical measure calculated using the mean and standard deviation of the log₁₀ values of the results in the four year calculation period, and do not refer to values complied with by 90% or 95% of samples.

Bathing waters failing to meet these standards are classified as Poor.

Appendix 3: In-situ determinands

The observations of in-situ determinands for the Bathing Water profile are taken from the normal sampling line, at the same time as bathing water samples. The parameters examined are listed below:

Number of Bathers per 100m
Number of Beach Users

Bathers means people in contact with the water within 50m either side of the sampling location; beach users means people 50m either side of the sampling location but not in contact with the water.

Macroalgae
Algal Bloom
Oil and Tar
Other Litter
Animal Faeces
Dead Marine Life
Sewage Debris

The determinands above are measured on a coded scale of 0 – 3. The quantification of coded materials is clearly subjective but to attempt some standardisation the following has been suggested:

- 0 No material present
- 1 Trace present;
- 2 Some at intervals;
- 3 Sufficient to be objectionable (unable to walk to sea without coming into contact with any).

In this case photographs would be taken by the sampler.

The determinands for the Bathing Water profile examine the following:

Macroalgae	Refers to seaweed which may be stranded, floating or attached to rocks or sediment. However it does not include seaweed attached to rocks that is always present.
Algal blooms	A further sample is taken for analysis when algal blooms are present.
Oil and tar	Refers to diesel and lubricating oil and the washings from seagoing tankers, either semi-solid or globules. If an oil sheen is present on the water surface, a further sample is taken for analysis.
Animal faeces	Mainly dog, horse, bird, donkey and sheep.
Dead marine life	Includes crabs, lug worms, heart urchins, jellyfish, sea birds (but not land birds) and fish.

Sewage debris refers to items such as:

- human faeces
- contraceptives
- tampon applicators and sanitary towels

- cotton buds
- toilet paper

Other litter refers to terrestrially derived litter and debris that is not likely to have been discharged from a sewage outfall including:

- cans
- plastic containers
- paper
- wood
- rope

If wood is present the sampler records whether it is from marine or terrestrial origins.

Data on the following determinands were also collected for some samples in 2011, although there is no requirement to do so:

Wind direction (Degrees)
 Water Temperature (Celsius)
 Salinity (ppt)
 Wind Speed (Beaufort scale)
 State of Sea
 Sunshine

State of Sea is coded as follows:

0	Calm (Glassy)	Wave height 0 m
1	Calm (Rippled)	Wave height 0 - 0.1 m
2	Smooth (Wavelets)	Wave height 0.1 - 0.5 m
3	Light Waves	Wave height 0.5 - 1.25 m
4	Moderate (White Horses)	Wave height 1.25 - 2 m
5	Rough Waves	Wave height 2.5 - 5.0 m
6	Very Rough Waves	Wave height 4.0 - 6.0 m

Beaufort scale wind force for bathing water samples is coded as follows:

0	Calm
1	Light airs
2	Light breeze
3	Gentle breeze
4	Moderate breeze
5	Fresh breeze
6	Strong breeze

Sunshine is coded as follows:

0	Sun obscured
1	Weak, no shadow
2	Weak shadows
3	Briefly obscured
4	Bright sun
5	Below horizon

Appendix 4: EC identified bathing water sample point details 2013

Bathing Water	Sample Point National Grid Reference (NGR)	Sample Point Number	Welsh Government/ Defra Number	Year of Designation
Jackson's Bay Barry Island	ST1220066570	19055	36100	1988
Whitmore Bay Barry Island	ST1145066250	19034	36200	1988
Cold Knap Barry	ST0985466455	19037	36300	1988
Southerndown	SS8846573155	19100	36400	1988
Trecco Bay Porthcawl	SS8309176675	19114	36500	1988
Sandy Bay Porthcawl	SS8244876839	19117	36600	1988
Rest Bay Porthcawl	SS8039478054	19122	36700	1988
Aberafan	SS7418789841	19051	36800	1988
Swansea Bay	SS6433692137	74006	36900	1988
Bracelet Bay	SS6296487262	39105	37000	1988
Limeslade Bay	SS6254687124	39106	37100	1988
Langland Bay	SS6073287391	39109	37200	1988
Caswell Bay	SS5920387608	39111	37300	1988
Oxwich Bay	SS5031986448	39123	37400	1988
Port Eynon Bay	SS4694785099	39127	37500	1988
Rhossili	SS4112590857	74010	37600	1988
Pembrey	SS4007899784	39005	37700	1988
Pendine	SN2381807854	39010	37800	1988
Amroth Central	SN1682107137	39013	37900	1988
Wiseman's Bridge	SN1465506133	32797	37940	2012
Coppet Hall	SN1403505352	32421	37980	2000
Saundersfoot	SN1372804848	39017	38000	1988
Tenby North	SN1330400845	39020	38100	1988
Castle Beach, Tenby	SN1372800431	39022	38150	1999
Tenby South	SN1315000022	39024	38200	1988
Penally	SS1230198934	83617	38210	2012
Lydstep	SS0919298393	39570	38220	1997
Manorbier	SS0609797507	39027	38230	1997
Freshwater East	SS0185297878	39029	38235	1999
Barafundle	SR9905795048	39136	38238	2000
Broad Haven (South)	SR9773993967	32422	38240	1997
Freshwater West	SR8848399739	39031	38248	2012
West Angle	SM8534903183	39032	38250	2000
Sandy Haven	SM8593307248	39192	38255	2012
Dale	SM8118505860	39040	38260	2000
Marloes Sands	SM7836607479	32788	38280	1997
Little Haven	SM8567612936	39043	38295	2012

Bathing Water	Sample Point National Grid Reference (NGR)	Sample Point Number	Welsh Government/ Defra Number	Year of Designation
Broad Haven (Central)	SM8608513801	84231	38300	1988
Druidston Haven	SM8613817238	39141	38340	2012
Nolton Haven	SM8589018569	39046	38380	2012
Newgale	SM8498921689	39048	38400	1988
Caerfai	SM7612524371	39142	38460	1997
Whitesands	SM7334027087	84232	38500	1988
Abereiddy	SM7972131264	39053	38520	2012
Abermawr	SM8827434642	39144	38540	2012
Newport North	SN0537140473	39065	38600	1988
Poppit West	SN1520648712	39067	38630	1996
Mwnt	SN1936951909	32425	38640	2011
Aberporth	SN2576351582	39072	38660	1995
Tresaith	SN2777951558	39073	38670	1995
Penbryn	SN2927652472	39147	38675	2011
Llangrannog	SN3104454193	39075	38680	1997
Cilborth	SN3113654411	32851	38685	2011
New Quay North	SN3895260148	39077	38688	2011
New Quay Harbour	SN3903159952	39079	38690	1998
Traeth Gwyn New Quay	SN3972859488	39080	38700	1988
Llanrhystud	SN5241769067	39087	38750	2011
Aberystwyth South	SN5794281314	39091	38800	1988
Aberystwyth North	SN5823881898	39093	38900	1988
Clarach South	SN5870483751	39095	38920	1998
Borth (southern end) *	SN6062089011	28540	39000	1988
Aberdyfi	SN6071995765	20171	39050	1990
Tywyn	SH5767000320	20019	39100	1988
Fairbourne	SH6091013070	20402	39200	1988
Barmouth	SH6084015900	20014	39300	1988
Tal-y-Bont	SH5775021100	20026	39350	1995
Dyffryn (Llanendwyn)	SH5671022580	20027	39360	1995
Llandanwg	SH5669028180	20028	39400	1988
Harlech	SH5676031480	22596	39500	1988
Craig Du Beach Central	SH5362036410	22593	39600	1988
Criccieth	SH5033338075	23142	39700	1988
Pwllheli	SH3710034070	22589	39800	1988
Abersoch	SH3168027720	22552	39900	1988
Porth Neigwl	SH2808026310	25437	39920	2012
Aberdaron	SH1733026260	22553	39950	2011
Morfa Nefyn	SH2823040910	22559	39960	2012
Morfa Dinlle	SH4349056690	22564	39970	1988
Llanddwyn	SH4034063050	27537	39980	1997
Aberffraw	SH3524067640	27538	39985	2000

Bathing Water	Sample Point National Grid Reference (NGR)	Sample Point Number	Welsh Government/ Defra Number	Year of Designation
Rhosneigr	SH3237072120	27536	39990	1990
Silver Bay Rhoscolyn	SH2925075160	27541	39993	2005
Borth Wen	SH2732075000	27542	39995	2003
Trearddur Bay	SH2556078910	27532	40000	1988
Porth Dafarch	SH2330079900	27546	40010	1998
Church Bay	SH2997089400	27548	40030	2003
Cemaes	SH3732093620	27529	40050	1998
Traeth Lligwy	SH4990087520	27528	40085	2003
Benllech	SH5268082560	27551	40100	1988
St Davids - Benllech	SH5307082040	23491	40105	2005
Llanddona	SH5660081210	27562	40140	1997
Llanfairfechan	SH6802075810	23245	40170	2008
Penmaenmawr	SH7180076930	22995	40180	1995
Llandudno West Shore	SH7655081650	25032	40200	1988
Llandudno North Shore	SH7832082490	23486	40300	1988
Colwyn Bay	SH8463480141	28409	40400	1988
Abergele (Pensarn)	SH9445079000	3601	40450	2011
Kinmel Bay (Sandy Cove)	SH9780080600	3604	40500	1988
Marine Lake, Rhyl	SJ0010080600	26434	40550	2012
Rhyl	SJ0020082600	3608	40600	1988
Prestatyn	SJ0585084200	3612	40700	1988

* Borth was sampled at a temporary sample point in 2013 due to flood defence engineering works. Its usual sample point is number 20023 at National Grid Reference SN6060490085. This is the same temporary sample point used for earlier works in 2011.

Appendix 5: The Monitoring Calendar

Although the rBWD specifies that at least four samples per season must be taken, in England and Wales the decision has been made to carry on taking 20 samples, as under the cBWD. The sampling frequency will be reviewed after the end of the transition period between the current and revised Directives.

Samples are taken according to a monitoring calendar set out in advance of the season. Twenty dates are selected for each designated bathing water. Each sample must be taken on the specified date or up to four days afterwards (“the five day window”), or the sampling opportunity is lost because samples taken outside the five day window do not count for the compliance dataset. Delaying a sample within the five day window would be due to unforeseen circumstances such as vehicle breakdown, staff sickness absence, or health and safety issues at the sampling point such as rock falls or sea conditions dangerous for the sampler.

If a sample does not arrive at the lab in time for analysis to start within 24 hours, or if there is a lab error which means the sample cannot be used, the sample can be retaken as long as it is still taken within the five day window. If it is not possible to retake the sample within the five day window then that sample is lost from the dataset with no replacement. For this reason samples would not normally be postponed within the five day window through choice, as these opportunities to retake would be lost.

The main exception to this would be to make sure there are enough weekend or bank holiday samples at the end of the season. The Directive specifies that two samples per season must be taken on a weekend or bank holiday and this is written into the monitoring calendar before the start of the season. However if any of those planned samples end up being taken (or retaken) on a weekday for any of the reasons above, another sample later in the season would need to be moved within the five day window onto a weekend or bank holiday to make sure there are still the right number.

Appendix 6: Abnormal Weather Waivers and Abnormal Situations

We are now in the transitional phase between the current and revised Bathing Water Directives. Abnormal Weather Waivers ceased to exist when the cBWD was rescinded prior to the 2012 season.

The rBWD contains a provision for Abnormal Situations. An Abnormal Situation is not expected to occur on average more than once every four years. If the beach operator places signs at the bathing water advising the public that an Abnormal Situation is taking place and that water quality may be affected then the monitoring calendar can be suspended. Ongoing Abnormal Situations are also displayed online on the Bathing Water Data Explorer. A sample must be taken as soon as the Abnormal Situation is over to confirm the end of the event. The reasons for suspending the monitoring calendar form part of the submission to the EC at the end of the season.

Abnormal Situations are not the same as Abnormal Weather Waivers as there is no legal provision for discounting a sample because of an Abnormal Situation after the sample has already been taken. Abnormal Situations cannot include rainfall or weather events as we would have to know in advance that the return period of the rainfall was less frequent than 1 in 4 years. Abnormal situations could be water quality related events such as a pumping station failure, or events preventing sampling such as rockfalls at the beach.

There were no Abnormal Situations in Wales during the 2013 season.

Appendix 7: Non-EC identified bathing water sample point details 2013

Bathing Water	Sample Point Number	Sample Point National Grid Reference (NGR)	Local Authority
Fontygary Bay, Rhoose	19038	ST0525065750	Vale of Glamorgan
Llantwit Major	74050	SS9566267424	Vale of Glamorgan
Ogmore Central	19043	SS8617074650	Vale of Glamorgan
Ogmore Slip	19044	SS8606875470	Vale of Glamorgan
Rhossili	39161	SS4135988416	Swansea
Broughton Bay	74025	SS4180293145	Swansea
Burry Port	39003	SN4460000200	Carmarthenshire
Glen Beach	83777	SN1400004500	Pembrokeshire
Monkstone Beach (Nr Tenby)	39574	SN1480003100	Pembrokeshire
Waterwynch Bay	83616	SN1370001900	Pembrokeshire
Priory Bay, Caldy Island	39573	SS1380097000	Pembrokeshire
Swanlake Bay	83776	SS0450098000	Pembrokeshire
Gelliswick, Milford Haven	39037	SM8880005500	Pembrokeshire
Westdale	39571	SM7980005800	Pembrokeshire
Martin's Haven	39041	SM7610009200	Pembrokeshire
St. Brides Haven	39042	SM8020010900	Pembrokeshire
Porthselau	83778	SM7260026000	Pembrokeshire
Goodwick Sands	83613	SM9480037900	Pembrokeshire
Pwllgwaelod	32790	SN0030039900	Pembrokeshire
Cwm yr Eglwys	32791	SN0149040130	Pembrokeshire
Cwmtedu	32426	SN3555057650	Ceredigion
Llanina	39146	SN4030059800	Ceredigion
Little Quay (Ceibach)	39081	SN4100059800	Ceredigion
Aberaeron South (Northern Groyne)	39082	SN4530062800	Ceredigion
Aberarth	32428	SN4765063870	Ceredigion
Llanon	32429	SN5067066750	Ceredigion
Llansantffraid	32430	SN5086067180	Ceredigion
Ynyslas (Northern Groyne - Sea)	20022	SN6040093750	Ceredigion
Ynyslas (Twyni Bach - Estuary)	20399	SN6120094300	Ceredigion
Criccieth West End	23141	SH5017537967	Gwynedd
Abererch	22545	SH4031035790	Gwynedd
Porth Treacastell	27539	SH3321070660	Anglesey
Porth Nobla, Llanfaelog	27540	SH3292071160	Anglesey
Porth Tyn Llanfaelog	23476	SH3274071580	Anglesey
Traeth Crigyll	23477	SH3143073240	Anglesey

Bathing Water	Sample Point Number	Sample Point National Grid Reference (NGR)	Local Authority
Porth Tywyn Mawr (Sandy Beach)	27547	SH2867085160	Anglesey
Porth Trwyn	23480	SH2950087800	Anglesey
Cemlyn	27531	SH3356093160	Anglesey
Traeth Bach	23481	SH3710093600	Anglesey
Porth Eilian, Amlwch	27549	SH4768092960	Anglesey
Moelfre	27561	SH5133086250	Anglesey
Red Wharf Bay	25806	SH5320081200	Anglesey
Lleiniog Beach Penmon	27564	SH6250079020	Anglesey
Beaumaris	27757	SH6095076000	Anglesey
Conwy Morfa	23246	SH7574078840	Conwy
Penrhyn Bay	25045	SH8312081630	Conwy
Old Colwyn	23492	SH8662078750	Conwy
Llanddulas	3597	SH9070078800	Conwy
Splash Point	3610	SJ0190082700	Denbighshire
Ffrith, Prestatyn	3611	SJ0460083600	Denbighshire
Barkby Beach	3614	SJ0653084500	Denbighshire
Gronant Dunes	26311	SJ0790084600	Denbighshire
Point of Ayr, Talacre	3617	SJ1210085900	Flintshire

Appendix 8: Interpretation of Percentage Risk of Non-compliance

The percentage risk of non-compliance against Imperative and Guideline standards (shown in [Table 7](#), [Table 8](#), [Table 9](#) and [Table 10](#)) can be interpreted as follows:

%age Risk of Non-Compliance	Predicted Compliance
< 10	Would be expected to achieve the I or G standard 9 out of 10 bathing seasons on average
10-20	Would be expected to achieve the I or G standard 8 out of 10 bathing seasons on average

The above should be considered as the relatively consistent compliance achievers – for example, for G compliance this will include the bathing waters which usually achieve Blue Flags year on year.

%age Risk of Non-Compliance	Predicted Compliance
21-50	Would be expected to achieve the I or G standard 5 to 7 times out of 10 bathing seasons. Could reasonably be expected to improve with investment and other measures to achieve consistent compliance
> 50	Would be expected to achieve the I or G standard < 5 times out of 10 bathing seasons. None or only occasional compliance achieved