

Environmental Protection Agency

The Environmental Protection Agency (EPA) is a statutory body responsible for protecting the environment in Ireland. We regulate and police activities that might otherwise cause pollution. We ensure there is solid information on environmental trends so that necessary actions are taken. Our priorities are protecting the Irish environment and ensuring that development is sustainable.

The EPA is an independent public body established in July 1993 under the Environmental Protection Agency Act, 1992. Its sponsor in Government is the Department of the Environment, Community and Local Government.

OUR RESPONSIBILITIES

LICENSING

We license the following to ensure that their emissions do not endanger human health or harm the environment:

- waste facilities (e.g., landfills, incinerators, waste transfer stations);
- large scale industrial activities (e.g., pharmaceutical manufacturing, cement manufacturing, power plants);
- intensive agriculture;
- the contained use and controlled release of Genetically Modified Organisms (GMOs);
- large petrol storage facilities;
- waste water discharges;
- dumping at sea.

NATIONAL ENVIRONMENTAL ENFORCEMENT

- Conducting over 1200 audits and inspections of EPA licensed facilities every year.
- Overseeing local authorities' environmental protection responsibilities in the areas of - air, noise, waste, waste-water and water quality.
- Working with local authorities and the Gardaí to stamp out illegal waste activity by co-ordinating a national enforcement network, targeting offenders, conducting investigations and overseeing remediation.
- Prosecuting those who flout environmental law and damage the environment as a result of their actions.

MONITORING, ANALYSING AND REPORTING ON THE ENVIRONMENT

- Monitoring air quality and the quality of rivers, lakes, tidal waters and ground waters; measuring water levels and river flows.
- Independent reporting to inform decision making by national and local government.

REGULATING IRELAND'S GREENHOUSE GAS EMISSIONS

- Quantifying Ireland's emissions of greenhouse gases in the context of our Kyoto commitments
- Implementing the Emissions Trading Directive, involving over 100 companies who are major generators of carbon dioxide in Ireland.

ENVIRONMENTAL RESEARCH AND DEVELOPMENT

 Co-ordinating research on environmental issues (including air and water quality, climate change, biodiversity, environmental technologies).

STRATEGIC ENVIRONMENTAL ASSESSMENT

 Assessing the impact of plans and programmes on the Irish environment (such as waste management and development plans).

ENVIRONMENTAL PLANNING, EDUCATION AND GUIDANCE

- Providing guidance to the public and to industry on various environmental topics (including licence applications, waste prevention and environmental regulations).
- Generating greater environmental awareness (through environmental television programmes and primary and secondary schools' resource packs).

PROACTIVE WASTE MANAGEMENT

- Promoting waste prevention and minimisation projects through the co-ordination of the National Waste Prevention Programme, including input into the implementation of Producer Responsibility Initiatives.
- Enforcing Regulations such as Waste Electrical and Electronic Equipment (WEEE) and Restriction of Hazardous Substances (RoHS) and substances that deplete the ozone layer.
- Developing a National Hazardous Waste Management Plan to prevent and manage hazardous waste.

MANAGEMENT AND STRUCTURE OF THE EPA

The organisation is managed by a full time Board, consisting of a Director General and four Directors.

The work of the EPA is carried out across four offices:

- Office of Climate, Licensing and Resource Use
- Office of Environmental Enforcement
- Office of Environmental Assessment
- Office of Communications and Corporate Services

The EPA is assisted by an Advisory Committee of twelve members who meet several times a year to discuss issues of concern and offer advice to the Board.

The Quality of Bathing Water in Ireland

An Overview for the Year 2013

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The Quality of Bathing Water in Ireland

An Overview for the Year 2013

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The collation and summation of data for this report was undertaken by Brigid Flood and Annmarie Tuohy. The report was prepared by Mr. Peter Webster (Senior Scientist, Reporting & Assessment) under the direction of Dr Micheál Lehane, (Programme Manager, Environmental Monitoring & Assessment) within the Office of Environmental Assessment.

The bathing water information contained in this overview report and the EPA online bathing water system Splash (splash.epa.ie) is provided by eighteen local authorities responsible for monitoring the quality of identified bathing waters within their functional areas.

The assistance of EPA staff who contributed to the collation and validation of data used in Splash and in this assessment is acknowledged: to Deirdre Kirwan and Una Cullen for database management, to Melanie Mageean for the preparation of the Bathing Water Quality Map of Ireland 2013, to Tony Dolan, and to Brendan Wall, Brendan Kissane and their colleagues in the Office of Environmental Enforcement who assisted in the assessment of incident notifications during the year.

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Key Findings

- The quality of Ireland's bathing waters remains very high, with 97 per cent of identified bathing areas (131 of 135) meeting the EU mandatory standards and classed as being of 'sufficient' water quality status. This is comparable to previous years.
- ▶ 84.4 per cent of bathing waters (114 of 135) met the stricter EU guideline standards and were classified as being of 'good' status compared to just 67 per cent (91 of 136) in 2012.
- Six local authorities achieved 'good' status for all of their designated bathing areas accounting for 38.5 per cent (52 of 135) of bathing areas;
- > Just 4 bathing waters (1 inland and 3 coastal) failed to comply with the minimum mandatory standards and were classified as having 'poor' quality status.
- ➤ Projections of bathing water status from 2014 onwards, when the system of classification will introduce a new class of 'Excellent' water quality, suggests that around 2/3rd of Irish waters will meet this top category.

Introduction

Bathing waters have been extensively monitored throughout Europe since the introduction of the first Bathing Water Directive (76/160/EEC) in 1976. Significant improvements in water quality have been achieved, in particular over the last decade, due to improvements in wastewater treatment systems and general water quality management practices as a consequence of implementation of the Water Framework Directive.

In 1992 Ireland introduced the "*Quality of Bathing Waters Regulations 1992*" (S.I. 155 of 1992) which transposed Directive 76/160/EEC. This legislation required the monitoring of several microbiological and physico-chemical parameters but in 2004 the European Union (EU) commenced a major revision of the Bathing Water Directive following a number of studies establishing links between bathing waters and public health. The revised Bathing Water Directive (2006/7/EC) came into force on 24th March 2006 and was transposed into Irish law as the "*Bathing Water Quality Regulations 2008*" (SI No. 79 of 2008). This will fully replace the original Directive from 31st December 2014 and it places significantly greater emphasis on the development of systems for the management of bathing waters and of notification of bathing water quality to the public. Building on research into the health risks associated with bathing waters it focuses on tighter microbiological standards for two new parameters, *Escherichia coli (E. Coli)* and Intestinal enterococci (IE) whereas assessments prior to 2011 were based principally on results of Total and Faecal Coliforms analyses plus a range of physico-chemical parameters.

The purpose of the legislation is to ensure that bathing water quality is maintained and, where necessary, improved so that it complies with standards designed to protect public health and the environment.

Since 2011 transitional measures have been in place whereby bathing water quality is reviewed annually against the microbiological standards of the existing 1976 Directive but using the two new microbiological parameters. This is the last year whereby compliance will be assessed annually based on the percentage (number) of samples meeting the relevant microbiological standards and applying a three tier classification of 'Good', 'Sufficient' or 'Poor' in keeping with previous assessments.

Following the end of the 2014 bathing season *E.Coli* and Intestinal Enterococci will be used to classify bathing waters into four categories of 'Excellent', 'Good', 'Sufficient' and 'Poor' in accordance with the 2008 Regulations. These targets represent a further strengthening of measures to protect public health and amount to an almost two fold decrease in the levels of microbiological contamination deemed to be acceptable for bathing waters. In addition to this tightening of standards a minimum target of 'Sufficient' will be required to be achieved for all bathing waters. From 2014 onwards classification of status will be based on assessment of water quality data over a rolling 4 year period. The first assessment will use the data from 2011-2014 bathing seasons with compliance being assessed on a percentile (ranked) basis which takes greater account of the spread of the results rather than the current percentage pass / fail ratio.

Under the present (annual) classification system 'Good' water quality relates to compliance with both EU guide and mandatory values with 'Sufficient' relating to compliance with the mandatory values and 'Poor' reflecting non-compliance with mandatory values. Bathing waters are not currently classified as 'Excellent' in this report as the 1976 Directive does not have bathing water standards that equate to this classification.

Why monitor just E.Coli and Enterococci?

Following a series of extensive studies into the risks of bathing in polluted waters undertaken in the mid - 1990's it became evident that one particular form of faecal coliforms (*E.Coli*) showed very good correlation with illness in freshwater environments while Intestinal enterococci were more strongly correlated with illness from coastal waters than other organisms. It was observed that Total Coliforms were not as good an indicator of risk of illness as had previously been considered and the parameters listed in the 1976 Directive have consequently been superseded by *E.Coli* and Enterococci.

What are they and where do they come from?

Both *E.Coli* and Intestinal Enterococci are types of bacteria that live predominantly in the gut of warm blooded animals, including humans. They generally enter the water environment in run -off containing small amounts of faeces from deposition on agricultural land or urban areas, from the land-spreading of manures, or directly from wastewater treatment systems and overflows. Their lifetime outside the gut generally ranges from a few hours to a few days depending on sunlight, temperature, and other environmental conditions. Both animal and human faeces contain many millions of bacteria so it doesn't take much by way of pollution to reach the limits set within the bathing water regulations.

By themselves they present a relatively low risk of illness at the thresholds set in the regulations, however, because of their abundance they are used as indicators of the potential presence of other bacterial and

viral species which, though less abundant, may present a greater risk to health. These include organisms such as Campylobacter, Norovirus, Salmonella, and many other bacterial pathogens.

What do the numbers mean?

The 1976 Bathing Water Directive set microbiological criteria for Coliforms based on an estimated risk factor of approximately 5% (1 in 20) potential risk of contracting gastro-intestinal illness as a consequence of bathing in waters of Good quality, and 12-15% if waters were of Sufficient quality.

The revised bathing water standards have been developed on a significantly reduced risk of approximately 3% for Excellent waters, ca. 5% for Good, and ca. 8-9% for Sufficient waters thus strengthening the protection of public health by generally a factor of two-fold.

What is the historical trend?

Bathing water quality has been reported to the EC since the commencement of monitoring in 1991. The numbers of identified waters have risen from 59 in 1991 to 135 in 2013. Since 2011, assessments have been carried out using *E. Coli* and Intestinal Enterococci. Apart from a few dips – mainly due to weather influences - the overall quality has remained consistently high.

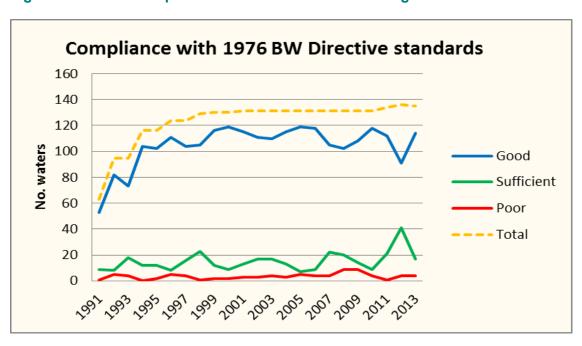


Figure 1: Historic compliance trends for Ireland's bathing waters

Overall levels of compliance with the mandatory bathing water standards are generally in excess of 90% of all waters. There is always some annual variation in classification but generally around 75% of all coastal waters would be expected to be of 'Good' quality.

Overview of Bathing Water Quality in 2013

Quality of identified bathing waters

The results of samples at the 135 designated bathing areas were assessed against the standards defined in Directive 76/160/EEC:

- Compliance with stricter guide values indicating water of good quality status
- Compliance with minimum mandatory values indicating water of sufficient quality status
- Non-compliance with mandatory values equating to poor water quality status.

In 2012, 97.1 % of bathing waters (132 of 136) complied with the EU mandatory values and achieved at least 'Sufficient' water quality status. In 2013 a similar outcome was observed with 97% (131 of 135) bathing waters meeting the minimum criteria.

In contrast with 2012, where heavy rainfall events led to a drop in compliance with the stricter guideline values resulting in just 66.9% (91 of 136) of water achieving 'Good 'status, 2013 saw a welcome return to pre-2012 levels with 84.4% (114 of 135) achieving 'Good' status with a further 12.6% (17 of 135) meeting the mandatory standard thus achieving 'Sufficient' status. Only 4 bathing waters (3%) were rated as Poor quality. These were Clifden (Co. Galway), Lilliput (Co. Westmeath), Dugort (Achill, Co. Mayo), and Ballyloughane (Galway City).

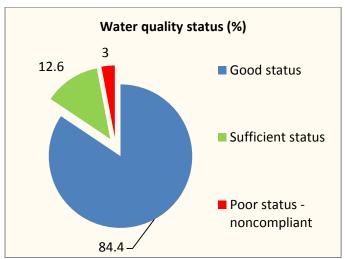


Figure 2: 2013 Water Quality status (%)

6 of the 18 local authorities achieved 'Good' status for all of their identified bathing waters: Dun Laoghaire-Rathdown, Meath, Clare, Kerry, Donegal and Louth County Councils accounting for 52 (38.5%) of the 135 bathing waters.

A summary of 2011 – 2013 data is provided in Table 1 below:

Table 1: Comparison of Bathing Water Quality Status in the years 2011 to 2013

Water type	Seawater			Freshwater			Overall		
Year	2011	2012	2013	2011	2012	2013	2011	2012	2013
No. of identified bathing waters	126	127	126	9	9	9	135	136	135
Poor quality (No.)	2	4	3	-	-	1	2	4	4
Poor Quality (%)	1.6	3.2	2.4	-	-	11.1	1.5	2.9	3.0
Sufficient quality (No.)	18	39	16	3	2	8	21	41	17
Sufficient quality (%)	14.3	30.7	12.7	33.3	22.2	11.1	15.5	30.1	12.6
Good Quality (No.)	106	84	107	6	7	7	112	91	114
Good quality (%)	84.1	66.1	84.9	66.7	77.8	77.8	83.0	66.9	84.4
Meets mandatory standard (No.)	124	123	123	9	9	8	133	132	131
Meets mandatory standard %	98.4	96.8	97.6	100	100	89.9	98.5	97.0	96.8

More information can be found on the Splash website (splash.epa.ie)

Poor Status Areas

Clifden continues to be subject to episodic pollution by the local WWTP effluent but work is now underway on improvements to the sewage infrastructure and treatment plant which it is hoped will bring about an improvement in water quality over the coming years and allow the beach to be reopened.

Lilliput (Lough Ennell) experienced a lengthy period of contamination late on in the season which is believed to have originated from a wastewater source though this was not conclusively proven. Dugort (Achill) was impacted by a rare pumping station malfunction causing it to exceed the mandatory *E.Coli* standard while Ballyloughane (Galway city) experienced two pollution incidents, one of which resulted in *E.Coli* exceeding the mandatory value.

Looking to the Future

The revised Bathing Water Regulations will be fully implemented on 31st December 2014. This will require that bathing water status is determined using a 4 year rolling assessment rather than the annual assessments as carried out up to 2013. A new category of 'Excellent' will be introduced into the classification. While the outcome of an assessment of the 2011-2014 combined data set will be clearly influenced by the quality of bathing waters during the 2014 season, current indications are that Ireland is expected to have around three quarters of designated bathing waters meeting the new 'Excellent' classification as shown below.

Assessments for both the 2009-2011 and 2010-2013 data sets were carried out by the EPA against the new percentile criteria. These indicated that around 95 - 100 waters (currently classified as Good), are expected to achieve 'Excellent' status with a further 20 (approximately) expected to achieve the new

stricter 'Good' status. What is less certain is the breakdown between those likely to meet the revised 'Sufficient' status – the required minimum standard, and those likely to be rated as 'Poor' and thus failing to meet the minimum required standard.

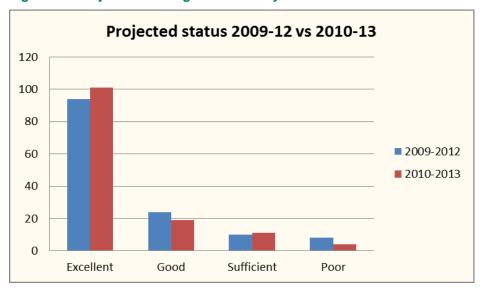


Figure 3: Projected Bathing Water Quality status

The EPA has identified a number of generally high-quality bathing waters which are subject to sporadic pollution events which could affect overall classification. There are also several with the potential to be of 'less than Sufficient status' particularly if the 2014 bathing season is similar to that experienced in 2012 (see Table 2 for list of these vulnerable areas). Most of these are adjacent to urban areas or are impacted by wastewater discharges (such as Clifden).

Although it is generally expected that some waters currently projected as likely to be 'Excellent' or 'Good' (based on 2010-2013 data) will be expected to meet, at the very least, the mandatory requirement of 'Sufficient', they do remain vulnerable to pollution events which could impact on their overall classification. Those currently projected as having classifications of 'Sufficient' or 'Poor' have the potential to fail to meet the new minimum required standard. A consequence of failing to meet the minimum standard of 'Sufficient' is that any such bathing water will require to be closed to bathers for the entire following season (2015) while still requiring to be monitored.

If bathing water is classified as 'Poor', and monitoring during 2015 shows that at least 'Sufficient' status has been achieved for the 4 year rolling period (2012-2015), then the bathing water can be re-opened in the following season (2016). A local authority will be required to issue a permanent bathing prohibition or advice against bathing in relation to any bathing water that has been classified as Poor for five consecutive years. (Regulation14 (3)). Though the overall numbers of bathing waters likely to be rated 'Poor' as a consequence of tightening of compliance standards may increase slightly from the 2 - 4 normally evident in previous annual classifications, Ireland should nonetheless be in a good position to retain its place as one of the best countries in northern Europe for bathing water quality.

Table 2: Waters identified as "vulnerable"

Local Authority	2010- 2013 status	Waters exhibiting periodic pollution events which could influence their overall status	2010 - 2013 status	Waters with the potential to be of less than Sufficient status
Clare County Council	Good	Ballyallia Lake		
Cork County Council	Excellent	Barley Cove	Sufficient Sufficient Sufficient	Youghal Front Strand Youghal, Claycastle Fountainstown
Dublin City Council	Good	Merrion Strand	Sufficient	Sandymount Strand
Fingal County Council	Excellent Excellent Good	Donabate, Balcarrick Beach Skerries Sutton, Burrow Beach	Sufficient Sufficient Sufficient	Balbriggan, Front Strand Loughshinny Beach Rush, South Beach
Galway City Council			Poor Sufficient	Ballyloughane Beach * Grattan Road Beach *
Galway County Council	Excellent	Traught, Kinvara	Poor Sufficient Sufficient	Clifden Beach Tra na bhForbacha, Na Forbacha Tra na mBan, An Spideal
Kerry Co. Co.	Good	Tran a hUine (Inny Strand, Waterville)		
Louth County Council	Excellent	Port, Lurganboy		
Waterford County Council	Excellent Excellent	Counsellors' Strand, Dunmore East Dunmore Strand, Dunmore East	Sufficient	Ardmore Beach
Westmeath County Council			Poor	Lilliput, Lough Ennell
Wexford County Council	Excellent Excellent	Morriscastle Rosslare Strand	Poor	Duncannon
Wicklow County Council	Excellent	Silver Strand		

Note: * Assessments for these waters are based on 3 years data following their identification in 2011

Conclusions and Recommendations

2013 saw a return to pre-2012 levels of compliance with the more stringent guideline values with 114 (84.4%) bathing waters achieving Good status. A further 17 (12.6%) achieved Sufficient status resulting in an overall compliance rate of 97% which is comparable to previous years.

It had been anticipated that the number of waters achieving 'Good' status might have been slightly higher; however, the presence of persistent but relatively low levels of bacterial pollution was observed in some waters, in particular some of the popular east coast bathing areas. This resulted in some of these waters being classified as 'Sufficient' when they might have been expected to achieve 'Good' status.

Designating New Bathing Areas

The number of bathing water areas designated under the Regulations has remained relatively static over the past decade. There are also very few inland bathing areas designated under the Regulations with no formally designated bathing areas in 10 local authorities. While the vast majority of heavily used bathing areas are covered by the Regulations, there are likely to be a number of other popular bathing areas that may merit consideration for designation and protection in the coming years.

 The EPA therefore recommends that all local authorities re-examine bathing habits and current designations in their areas to consider if other areas popular for bathing should be formally designated under the Regulations.

Use of Criteria for Short-Term Pollution

The status of some bathing waters could also have been improved had all of the criteria for short term pollution (STP) been adhered to by the respective local authorities, in particular the requirement for forecasting of possible pollution and communication by way of appropriate signage (see Appendix 2). Few local authorities availed of this approach in 2013 with the exception of Cork and Kerry County Councils who have developed protocols for dealing with projected rainfall events in accordance with EPA guidance.

The EPA therefore recommends that other local authorities adopt this approach and develop
protocols for forecasting of rainfall impacts on bathing water quality.

Sampling Frequency

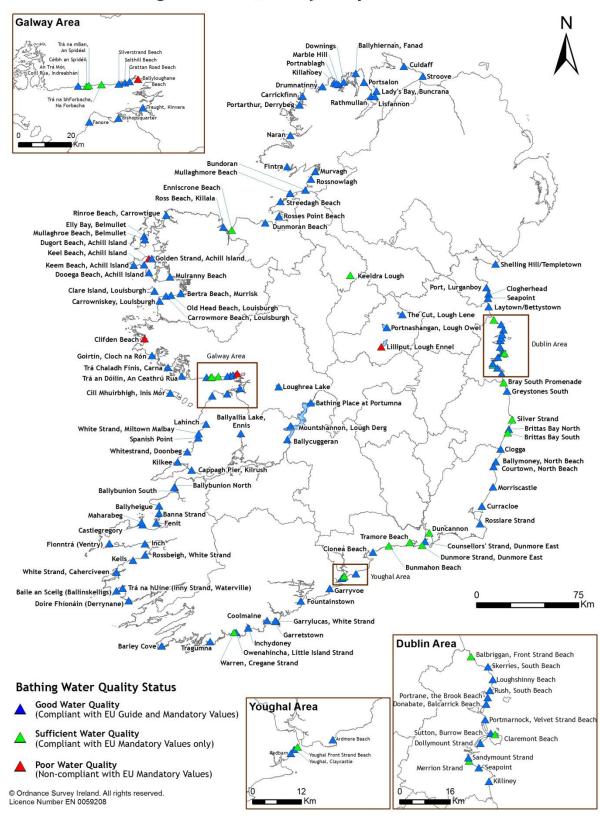
The number of compliance samples is shown in Appendix 2. Local authorities may have taken additional investigative samples following pollution events; however, these are not used for formal classification purposes. It was noted that some local authorities reduced their overall frequency of sampling in 2013. These reductions may have been influenced by staffing and / or financial constraints, as much as by any consideration of historical water quality. For bathing waters with a track record of maintaining high quality, reducing the frequency of sampling may have little overall impact on the overall distribution and range of

reported values, but for those waters where quality is more variable, taking fewer samples increases the likelihood of a poor sample impacting on the overall compliance. It was noted that several bathing waters failed to meet the required 90% compliance in respect of Enterococci because of a single sample exceeding the guide value of 100 organisms / 100ml. In most of these cases only 8 or 9 samples had been taken. If 10 or more had been reported it is likely that these waters would have met Good status.

• The EPA therefore recommends that local authorities should aim for at least 10 compliance samples per season to ensure a good coverage of water quality over the 4 year period.

Appendix 1: Bathing Water Quality Map of Ireland 2013

Bathing Water Quality Map of Ireland 2013



Appendix 2: EU Directive requirements

The EU Bathing Water Directive and the revised Bathing Water Regulations place a significant and increased obligation on both Local authorities and the EPA for the provision of information to the public in a timely manner. Among the key requirements are;

- Identification of bathing waters involving public consultation.
- Preparation of Bathing Water Profiles requiring a thorough assessment of the catchment characteristics with consideration and risk assessment of possible pollution sources (pressures) together with management measures necessary for their control.
- Provision of appropriate signage and up to date bathing water information at the beach.
- Monitoring Calendars: involving details of monitoring programs for each bathing water.
- Notification to the public, the Agency, and the HSE of any event or pollution incident where there is
 a risk that bathing water quality may have deteriorated due e.g. to heavy rainfall or where a health
 risk has been identified.
- Management measures involving the reporting of any planned activity to reduce the potential pollution or any actions taken to reduce its impact in the event of a pollution incident.

The bathing season in Ireland, is designated as being from 1st June to 15Th September. Each year, in advance of commencement of the bathing season, Local Authorities are required to submit to the EU, via the EPA, details of all identified bathing waters, their planned monitoring calendars, and any updated bathing water profiles. A pre-season sample is required in late May approximately 10 days before the start of the season with a minimum requirement for at least four samples to be taken during the bathing season at the point of greatest bather density, or where the greatest risk of pollution is expected in accordance with the bathing water profile.

Local authorities will generally take more than this minimum with 8-10 samples per season (approximately every two weeks) being the most common frequency of monitoring. More intensive programs of e.g. weekly sampling are evident for many East coast bathing waters reflecting the potential for pollution from urban sources. Should a bathing water sample fail to meet the EU mandatory values, that the public are required to be notified immediately. This would generally be by means of advisory notices posted at the bathing area together with the use of appropriate signage and flags at the beach, but other media may also be used. Notifications are also issued via the Splash bathing water online system.

Sample results are provided to the EPA during, and at the end of, each bathing season. These are assessed by EPA for compliance with all aspects of the Bathing Water Regulations. Data is reported to the EU together with information on any bathing water restrictions and management measures taken for inclusion in the annual report on Europe's bathing waters prepared by the European Environment Agency. European Bathing Water report The EPA's Office of Environmental Assessment follows up on the cause of any bathing area failing the EU mandatory values, or where instances of pollution have been identified as arising e.g. from municipal wastewater treatment plants and their related infrastructure. They also monitor the measures being taken by the relevant local authority to bring the bathing area into compliance.

The 2008 Bathing Water Regulations aim to characterize the "typical" water quality based on regular sampling over several bathing seasons. It recognizes that there may be periods when water quality can be temporarily impacted by weather events such as heavy rainfall or as a result of planned maintenance of wastewater outfalls etc. In the event of such "Short Term Pollution" (STP) incidents the Bathing Water Regulations make provision for Local Authorities to request of the EPA that any planned compliance samples taken during such periods be replaced by samples taken after the impact has receded. Prior notification of risk to the public is a key requirement of the criteria for STP events and there are limits to the number of such events that will be allowed in any assessment period.

In more extreme cases application may be made for the discounting of planned compliance samples due to an "Abnormal situation" which is defined as "an event not likely to recur more than once in any 4 year period". Such circumstances would normally be reserved for physical impacts such as sewage infrastructure defects / unplanned impacts due e.g. to power failures etc. As a consequence of the exceptionally poor weather during 2012 a numbers of events were recorded as abnormal situations however none were recorded in 2013.

A total of 135 identified bathing waters were monitored during the 2013 bathing season, of which 126 were coastal seawaters and 9 were on freshwater lakes. Malahide (Fingal County Council) was delisted for the 2013 bathing season following concerns over water safety rather than its microbiological quality. The identified bathing waters represent the most popular bathing areas nationally, having been formally designated as such to the EU, however many local authorities also monitor a number of less well used bathing waters. These waters may be being monitored in connection with coastal award schemes such as Green Coast Award and details can be obtained from each Local Authority.

EPA online Bathing Water System

Since July 2009 the EPA has had in place an online map-based website entitled "SPLASH" which provides the public with bathing water quality information for all of the identified bathing waters. (splash.epa.ie) The website provides the latest bathing water sampling results during the bathing season together with their compliance with EU bathing water quality standards, their overall water quality status, lifeguard availability, weather and tidal information. It was extensively updated during 2013 to provide additional information including public access to bathing water profiles and incident notifications together with provision for Twitter TM message alerts.

The EPA has also developed an on-line Bathing Water Implementation system (BWIS) to assist Local Authorities in uploading bathing water information together with a parallel Compliance Risk Identification System (CRIS). A key feature of the CRIS system is the ability to provide real-time notification of any incidents affecting bathing water quality directly via a link to the SPLASH website

Appendix 3: 2013 Compliance & Quality Status of Identified Bathing Waters

Responsible		Bathing Area	Water	Compliance			
Local Authority			Quality	with mandatory			
			Status	/ guide			
(No. of EU samples) No.				values			
(No. of EU Samples)	NO.					es	
			2013	E.C	Coli	I.E.	
				M	G	Guide	
Clare County Council	10	Ballyallia Lake, Ennis	Good	√	√	√	
	10	Ballycuggeran	Good	√	√	√	
	10	Bishopsquarter	Good	√	√	√	
	10	Cappagh Pier, Kilrush	Good	√	√	√ .	
	10	Fanore	Good	√	√	√ .	
	10	Kilkee	Good	√	√ .	√ .	
	10	Lahinch	Good	√	√	√ .	
	10	Mountshannon, Lough Derg	Good	√	√ .	√ .	
	10	Spanish Point	Good	√	√ .	√	
	10	White Strand, Doonbeg	Good	√	√ .	√ .	
0	10	White Strand, Miltown Malbay	Good	√	√.	√ .	
Cork County Council	10	Barley Cove	Good	√	√ .	√	
	10	Youghal, Claycastle	Good	√	√	√	
	10	Coolmaine	Good	√	√	√ .	
	10	Fountainstown	Good	√	√ .	√ .	
	10	Garretstown	Good	√	√	√ .	
	10	Garrylucas, White Strand	Good	√	√,	√ .	
	10	Garryvoe	Good	√	√	√ .	
	10	Inchydoney	Good	√	√	√	
	10	Owenahincha, Little Island Strand Redbarn	Good Good	√	√ ,	√	
	10		Good	√	√ ,	√	
	10	Tragumna Warran Cragana Strand		√	√ X	√	
	10	Warren, Cregane Strand Youghal, Front strand beach	Sufficient	√	X	√	
Donegal County Council	6	Ballyhiernan, Fanad	Sufficient	√		√	
Donegal County Council	11	Bundoran	Good	√	√	√	
	11	Carrickfinn	Good	1	1	√	
	11	Culdaff	Good	√	1	1	
	11	Downings	Good	√ ,	√ ,	√	
	6	Drumnatinny	Good	1	1	1	
	11	Fintra	Good	1	1	√ √	
	11	Killahoey	Good	1	1		
	11	Lady's Bay, Buncrana	Good	√ √	√ √	1	
	11	Lisfannon	Good	\ √	\ √	√ √	
	11	Marble Hill	Good Good	\ √	2/	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	11	Murvagh	Good	\ √	\ √	$\sqrt{}$	
	11	Naran	Good	√ √	2/	$\sqrt{}$	
	6	Portarthur, Derrybeg	Good	√ √	√ √	$\sqrt{}$	
	6	Portnablagh	Good	√ √	√ √	\ \ \ \ \	
	11	Portsalon	Good	√	1	1	
	11	Rathmullan	Good	√ √	√ √	\ √	
	11	Rossnowlagh		N 1	2/	$\frac{1}{}$	
	1 ''	1 to oo no widgii	Good	<u> </u>	I V		

Responsible	Responsible No. Bathing Area		Water	Compliance			
Local Authority			Quality	with mandatory			
+			Status	/ guide			
(No. of EU samples)				values		S	
			2013	E.C	Coli	I.E.	
				M	G	Guide	
	11	Stroove	Good	V	V	√	
Dublin City Council	19	Dollymount Strand	Good	V	1	√	
	19	Merrion Strand	Sufficient	V	X	\checkmark	
	19	Sandymount Strand	Good	V	1	\checkmark	
Dun Laoghaire /	19	Killiney	Good	√	1	√	
Rathdown County Council	19	Seapoint	Good	√	1	√	
Fingal County Council	8	Balbriggan, Front Strand Beach	Sufficient	√	Х	Х	
	8	Claremont Beach	Sufficient		Χ	X	
	8	Donabate, Balcarrick Beach	Good	√	1	√	
	8	Loughshinny Beach	Good	√	1	√	
	8	Portmarnock, Velvet Strand Beach	Good	√	1	√	
	8	Portrane, the Brook Beach	Good	√	1	√	
	8	Rush, South Beach	Good	√	1	√	
	8	Skerries, South Beach	Good	√	1	√	
	8	Sutton, Burrow Beach	Good	√	1	√	
Galway County Council	8	An Trá Mór, Coill Rua, Indreabhán	Good	V	V	√	
	8	Loughrea Lake	Good	V	V	√	
	5	Bathing Place at Portumna	Good	V	V	√	
	8	Céibh an Spidéil	Sufficient	√	Х	Х	
	8	Cill Mhuirbhigh, Inis Mór	Good	V	V	√	
	5	Clifden Beach	Poor	Χ	Χ	Χ	
	5	Goirtín, Cloch Na Rón	Good	V	V	√	
	5	Trá na bhForbacha, Na Forbacha	Sufficient	V	X	√	
	5	Trá na mBan, An Spidéal	Sufficient	√	X	√	
	8	Trá an Dóilín, An Ceathrú Rua	Good	√	1	√	
	5	Trá Chaladh Fínis, Carna	Good	√	1	√	
	8	Traught, Kinvara	Good	V	1	√	
Galway City Council	8	Ballyloughane Beach	Poor	Χ	Χ	X	
	8	Grattan Road Beach	Good	√	1	√	
	8	Salthill Beach	Good	V	V	√	
	8	Silverstrand Beach	Good	V	V	√	
Kerry County Council	14	Baile an Sceilg (Ballinskelligs)	Good	V	1	√	
	14	Ballybunion North	Good	V	√	√	
	14	Ballybunion South	Good	V	V	√	
	14	Ballyheigue	Good	V	V	√	
	9	Banna Strand	Good	V	V	√	
	9	Castlegregory	Good	V	1	√	
	9	Doire Fhíonáin (Derrynane)	Good	V	V	√	
	14	Fenit	Good	V	√	√	
	9	Inch	Good	V	V	√	
	12	Trá na hUíne (Inny, Waterville)	Good	V	V	√	
	14	Kells	Good	V	V	√	
	9	Maharabeg	Good	V	V	√	
	9	Rossbeigh, White Strand	Good	V	V	1	
	14	Fionntrá (Ventry)	Good	V	V	√	

Responsible	No.	Bathing Area	Water	Compliance			
Local Authority			Quality	with	man	datory	
+				/ guide		le	
(No. of EU samples)		Status			values		
(110. of 20 samples)							
			2013		Coli	I.E.	
	14	White Strand, Caherciveen		M	G	Guide	
Leitrim County Council	9	Keeldra Lough	Good	√	√ ,	X	
Louth County Council	20	Clogherhead	Sufficient	1	1		
Louin County Council	20	Port, Lurganboy	Good	√	1	√	
	20	Seapoint	Good	√ √	√ √	√ √	
	20	Shelling Hill / Templetown	Good		√ √	\ √	
Mayo County Council	16	Bertra Beach, Murrisk	Good		√ √	√ √	
Iviayo County Council	16	Carrowmore Beach, Louisburgh	Good		√ √	√ √	
	5	Carrowniskey, Louisburgh	Good		√ √	√ √	
	16	Dugort Beach, Achill Island	Good	X	X	√ √	
	16	Dooega Beach, Achill Island	Poor Good	√	√	√ √	
	16	Elly Bay, Belmullet	Good		√ √	√ √	
	16	Golden Strand, Achill Island			\ √	√ √	
	16	Keel Beach, Achill Island	Good		\ √	√ √	
	16	Keem Beach, Achill Island	Good Good		\ √	√ √	
	16	Ross Beach, Killala	Good		\ √	√ √	
	16	Old Head Beach, Louisburgh			√ √	√ √	
	16	Mullaghroe Beach, Belmullet	Good Good		\ √	√ √	
	16	Mulranny Beach	Good		√ √	1	
	5	Rinroe Beach, Corrowtigue	Good	√	√ √	√	
	6	Clare Island, Louisburgh	Good	√	1	1	
Meath County Council	16	Laytown / Bettystown	Good	1	1	1	
Sligo County Council	9	Dunmoran Beach	Good	√	√	1	
	15	Enniscrone Beach	Sufficient	1	X	1	
	9	Mullaghmore Beach	Good	√	√	1	
	15	Rosses Point Beach	Good	√	1	1	
	9	Streedagh Beach	Good	√	1	1	
Waterford County Council	9	Ardmore Beach	Good	√	1	V	
,	9	Bunmahon Beach	Sufficient	√	X	X	
	9	Clonea Beach	Good	√ √	V	V	
	9	Counsellors' Strand Dunmore E.	Good	√ √	1	V	
	9	Dunmore Strand, Dunmore East	Sufficient	√ √	Х	Х	
	9	Tramore Beach	Sufficient	√	V	Χ	
Westmeath County	16	Lilliput, Lough Ennel	Poor	Χ	Χ	X	
Council	16	Portnashangan, Lough Owel	Good	V	V	V	
	16	The Cut, Lough Lene	Good	√	1	V	
Wexford County Council	15	Ballymoney, North Beach	Good	√	V	√	
	15	Courtown, North Beach	Good	V	V	√	
	15	Curracloe	Good	V	V	V	
	15	Duncannon	Sufficient	V	Χ	V	
	15	Morriscastle	Good	V	V	√	
	14	Rosslare Strand	Good	V	V	√	
Wicklow County Council	8	Bray South Promenade	Sufficient	V	Х	√	
	8	Brittas Bay North	Good	V	V	√	
	8	Brittas Bay South	Sufficient	V	Χ	Х	

Responsible Local Authority + (No. of EU samples)		Bathing Area	Water Quality Status	with	ance datory de es	
			2013	Е.С м	Coli G	I.E. Guide
	6	Clogga	Good	√	V	√
	8	Greystones South	Good	V	V	√
	7	Silver Strand	Sufficient	V	Χ	

Note: The 1976 Bathing Water Directive standards, against which the current assessment is being undertaken, set Mandatory values (denoted as M) for Coliforms (E.Coli) only at 2000 /100ml. Both Coliforms and Enterococci parameters have stricter guide values (denoted as G) of 100 / 100ml.

Further information

Further information and links to bathing water information are provided below:

EEA Water Information System for Europe (WISE)

http://www.water.europa.eu/

European Environment Agency

http://www.eea.europa.eu

Water Quality in Ireland 2007 -2009 (EPA)

http://www.epa.ie/pubs/reports/water/waterqua/waterqualityinireland2007-2009.html

Ireland's Environment 2012 : An Assessment (EPA)

http://www.epa.ie/irelandsenvironment/irelandsenvironment2012/

An Taisce (National Trust for Ireland)

www.antaisce.org

Foundation for Environmental Education (FEE)

www.fee-international.org

Clean Coasts Ireland

www.cleancoastsireland.org

Details of the Blue Flag and Green Coast schemes are available at www.blueflagireland.org www.blueflagireland.org<

Scottish Environmental Protection Agency

http://www.sepa.org.uk/water/bathing_waters.aspx

Environmental Agency (England & Wales)

http://www.environment-agency.gov.uk/homeandleisure/recreation/142937.aspx

Department of Environment, Food & Rural Affairs (UK)

GOV.UK - Bathing Waters

Department of Environment (Northern Ireland)

http://www.doeni.gov.uk/index/protect_the_environment/water/bathing_water.htm

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An Ghníomhaireacht um Chaomhnú Comhshaoil

Is í an Gníomhaireacht um Chaomhnú Comhshaoil (EPA) comhlachta reachtúil a chosnaíonn an comhshaol do mhuintir na tíre go léir. Rialaímid agus déanaimid maoirsiú ar ghníomhaíochtaí a d'fhéadfadh truailliú a chruthú murach sin. Cinntímid go bhfuil eolas cruinn ann ar threochtaí comhshaoil ionas go nglactar aon chéim is gá. Is iad na príomhnithe a bhfuilimid gníomhach leo ná comhshaol na hÉireann a chosaint agus cinntiú go bhfuil forbairt inbhuanaithe.

Is comhlacht poiblí neamhspleách í an Ghníomhaireacht um Chaomhnú Comhshaoil (EPA) a bunaíodh i mí Iúil 1993 faoin Acht fán nGníomhaireacht um Chaomhnú Comhshaoil 1992. Ó thaobh an Rialtais, is í an Roinn Comhshaoil, Pobal agus Rialtais Áitiúil.

ÁR bhfreagrachtaí

CEADÚNÚ

Bíonn ceadúnais á n-eisiúint againn i gcomhair na nithe seo a leanas chun a chinntiú nach mbíonn astuithe uathu ag cur sláinte an phobail ná an comhshaol i mbaol:

- áiseanna dramhaíola (m.sh., líonadh talún, loisceoirí, stáisiúin aistrithe dramhaíola);
- gníomhaíochtaí tionsclaíocha ar scála mór (m.sh., déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta);
- diantalmhaíocht;
- úsáid faoi shrian agus scaoileadh smachtaithe Orgánach Géinathraithe (GMO);
- mór-áiseanna stórais peitreail;
- scardadh dramhuisce;
- dumpáil mara.

FEIDHMIÚ COMHSHAOIL NÁISIÚNTA

- Stiúradh os cionn 2,000 iniúchadh agus cigireacht de áiseanna a fuair ceadúnas ón nGníomhaireacht gach bliain
- Maoirsiú freagrachtaí cosanta comhshaoil údarás áitiúla thar sé earnáil - aer, fuaim, dramhaíl, dramhuisce agus caighdeán uisce
- Obair le húdaráis áitiúla agus leis na Gardaí chun stop a chur le gníomhaíocht mhídhleathach dramhaíola trí comhordú a dhéanamh ar líonra forfheidhmithe náisiúnta, díriú isteach ar chiontóirí, stiúradh fiosrúcháin agus maoirsiú leigheas na bhfadhbanna.
- An dlí a chur orthu siúd a bhriseann dlí comhshaoil agus a dhéanann dochar don chomhshaol mar thoradh ar a ngníomhaíochtaí.

MONATÓIREACHT, ANAILÍS AGUS TUAIRISCIÚ AR AN GCOMHSHAOL

- Monatóireacht ar chaighdeán aeir agus caighdeáin aibhneacha, locha, uiscí taoide agus uiscí talaimh; leibhéil agus sruth aibhneacha a thomhas.
- Tuairisciú neamhspleách chun cabhrú le rialtais náisiúnta agus áitiúla cinntí a dhéanamh.

RIALÚ ASTUITHE GÁIS CEAPTHA TEASA NA HÉIREANN

- Cainníochtú astuithe gáis ceaptha teasa na hÉireann i gcomhthéacs ár dtiomantas Kyoto.
- Cur i bhfeidhm na Treorach um Thrádáil Astuithe, a bhfuil baint aige le hos cionn 100 cuideachta atá ina mór-ghineadóirí dé-ocsaíd charbóin in Éirinn.

TAIGHDE AGUS FORBAIRT COMHSHAOIL

 Taighde ar shaincheisteanna comhshaoil a chomhordú (cosúil le caighdéan aeir agus uisce, athrú aeráide, bithéagsúlacht, teicneolaíochtaí comhshaoil).

MEASÚNÚ STRAITÉISEACH COMHSHAOIL

 Ag déanamh measúnú ar thionchar phleananna agus chláracha ar chomhshaol na hÉireann (cosúil le pleananna bainistíochta dramhaíola agus forbartha).

PLEANÁIL, OIDEACHAS AGUS TREOIR CHOMHSHAOIL

- Treoir a thabhairt don phobal agus do thionscal ar cheisteanna comhshaoil éagsúla (m.sh., iarratais ar cheadúnais, seachaint dramhaíola agus rialacháin chomhshaoil).
- Eolas níos fearr ar an gcomhshaol a scaipeadh (trí cláracha teilifíse comhshaoil agus pacáistí acmhainne do bhunscoileanna agus do mheánscoileanna).

BAINISTÍOCHT DRAMHAÍOLA FHORGHNÍOMHACH

- Cur chun cinn seachaint agus laghdú dramhaíola trí chomhordú An Chláir Náisiúnta um Chosc Dramhaíola, lena n-áirítear cur i bhfeidhm na dTionscnamh Freagrachta Táirgeoirí.
- Cur i bhfeidhm Rialachán ar nós na treoracha maidir le Trealamh Leictreach agus Leictreonach Caite agus le Srianadh Substaintí Guaiseacha agus substaintí a dhéanann ídiú ar an gcrios ózóin.
- Plean Náisiúnta Bainistíochta um Dramhaíl Ghuaiseach a fhorbairt chun dramhaíl ghuaiseach a sheachaint agus a bhainistiú.

STRUCHTÚR NA GNÍOMHAIREACHTA

Bunaíodh an Ghníomhaireacht i 1993 chun comhshaol na hÉireann a chosaint. Tá an eagraíocht á bhainistiú ag Bord lánaimseartha, ar a bhfuil Príomhstiúrthóir agus ceithre Stiúrthóir.

Tá obair na Gníomhaireachta ar siúl trí ceithre Oifig:

- An Oifig Aeráide, Ceadúnaithe agus Úsáide Acmhainní
- An Oifig um Fhorfheidhmiúchán Comhshaoil
- An Oifig um Measúnacht Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáide

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag ball air agus tagann siad le chéile cúpla uair in aghaidh na bliana le plé a dhéanamh ar cheisteanna ar ábhar imní iad agus le comhairle a thabhairt don Bhord.



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