

## **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, Heritage 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.

### NATIONAL ENVIRONMENTAL ENFORCEMENT

- Conducting over 2,000 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

A Report for the Year 2008

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### The Quality of Bathing Water in Ireland

A Report for the Year 2008

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The collation of data and preparation of this report was undertaken by Annmarie Tuohy (EPA).

### Note

A new Directive on bathing water (Directive 2006/7/EC) came into force on 24 March 2006 and will repeal the existing 1976 Directive with effect from 31 December 2014. The 2006 Directive establishes a new classification system for bathing water quality based on four classifications 'poor', 'sufficient', 'good' and 'excellent' and generally requires that a classification of sufficient be achieved by 2015 for all bathing waters. Transitional measures are in place until the new Bathing Water Quality Regulations 2008 (SI No. 79 of 2008) are fully implemented.

As part of these transitional measures, the 1992 Regulations (S.I 155 of 1992) governed the quality of bathing waters for the 2008 season. Reflecting the present period of transition between the two Directives, the format of this report differs somewhat from previous EPA reports on bathing water quality in Ireland. As part of this format the new classification system is introduced and related to current EU guide and mandatory standards specified in the 1976 EU Bathing Water Directive (76/160/EEC). The 'good' classification is related to compliance with guide and mandatory values, the 'sufficient' classification is related to compliance with the mandatory values only, whereas the 'poor' classification is non-compliance with mandatory values. Bathing areas are not classified as 'excellent' in this report as the 1976 Directive does not have bathing water standards that equate to an excellent classification.

# Acknowledgements

The bathing water information contained in the report was provided by eighteen local authorities responsible for monitoring the quality of designated bathing waters within their functional areas.

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# 1 Background

### 1.1 Legislation

The legislation governing the quality of bathing waters for the 2008 season is set out in the Quality of Bathing Waters Regulations, 1992 (S.I 155 of 1992) and amendments, which transposed the EU Directive 76/160/EEC concerning the quality of bathing water. The purpose is to ensure that bathing water quality is maintained and if necessary improved so that it complies with specified standards designated to protect health and the environment.

### 1.2 Designated Bathing Areas

A total of 131 designated bathing areas are monitored during the bathing season, of which 122 are seawater and nine are freshwater bathing areas on lakes. This accounts for about 0.6 per cent of the reported bathing waters of the EU. Seawater bathing areas increased from 65 in 1991 to 122 in 2001 and freshwater bathing areas increased from five in 1992 to nine in 1994.

# 1.3 Sampling

The responsibility for sampling (or arranging the sampling) at designated bathing areas lies with the relevant local authorities. Sampling at these bathing areas must be undertaken on a fortnightly basis during the bathing season which extends from the 1 June until the end of August each year. Monitoring commences two weeks before the start of the season. The minimum number of samples to be taken during the season is seven. Where bathing water quality is found to be consistently of a very good quality, the monitoring frequency may be reduced to a minimum of four times during the bathing season.

### 1.4 Compliance Assessment

EU bathing water compliance is currently based on a sub-set of the parameters specified in the EU Directive 76/160/EEC. The five microbiological and physicochemical parameters considered for EU compliance purposes are:

- Total coliforms
- Faecal coliforms
- Mineral oils
- Surface active substances
- Phenols

The results of samples analysed are assessed for compliance with two sets of EU standards specified in the Directive: minimum quality standards (EU mandatory values) and more stringent quality targets (EU guide values). Over the bathing season, water quality at each bathing area must comply with the minimum EU mandatory values. In addition, all bathing areas should endeavour to achieve the stricter EU guide values. The EU mandatory and guide values for the five EU compliance parameters are given in Table 1.

### 1.5 Water Quality Status

A new Directive on bathing water (Directive 2006/7/EC) came into force on 24 March 2006 and will repeal the existing 1976 Directive with effect from 31 December 2014. The new Directive establishes stricter microbiological standards for two new parameters, Intestinal enterococci and *Escherichia coli*, which will be used to classify bathing waters as 'poor', 'sufficient', 'good' and 'excellent' (see section 6).

The 'excellent' classification is approximately twice as stringent as the current EU guide values

while the 'good' classification is similar to the current EU guide values. The 'sufficient' classification is tighter than the current EU mandatory values whereas the 'poor' classification is noncompliant bathing water.

In this 2008 Bathing Water Quality report the current EU mandatory and guide values (1976 Directive) for the microbiological parameters total and faecal coliforms are used to classify the bathing areas as follows:

- Compliant with guide and mandatory values achieves good water quality status
- Compliant with mandatory values only achieves sufficient water quality status
- Noncompliant with mandatory values equates to poor water quality status.

Bathing areas are not classified as 'excellent' in this report as the 1976 Directive does not have bathing water standards that equate to an excellent classification.

### 1.6 Noncompliance of Bathing Waters

Local authorities are required to ensure when any bathing water sample fails the EU mandatory bathing water values that the public are made aware of this fact by means of information notices posted at the bathing area. Local authorities are required to take the necessary

measures to ensure that the standards are complied with.1.7 Enforcement Actions. The Office of Environmental Enforcement (OEE) within the EPA exercises a supervisory role in relation to the environmental protection activities of local authorities. In relation to bathing waters the OEE actively follows up on cases where bathing waters fail the minimum EU mandatory standards (see section 5).

### 1.8 Reporting

Local Authorities are required to report the results of sampling to the EPA at the end of each bathing season. The EPA is responsible for compiling the bathing water quality results and submitting this information to the European Commission. The EPA also prepares a national bathing water report, which is published prior to the start of the new bathing season.

### 1.9 Waste Water Discharge Regulations

The Waste Water Discharge Authorisation
Regulations came into effect on 27 September
2007 providing a system for the licensing or
certification of all discharges to the aquatic
environment from sewerage systems owned,
managed and operated by local authorities. This
provides a process for the EPA to place
conditions on the operation of such discharges to
secure improvements in the quality of effluents
from urban waste water treatment plants.

**Table 1 Quality Requirements for EU Compliance of Bathing Water** 

EC Directive concerning the Quality of Bathing Waters (76/160/EEC)					
Parameters	Guide	Mandatory			
Microbiological					
Total coliforms (Number/100ml)	≤ 500 <sup>1</sup>	≤ 10,000 <sup>3</sup>			
Faecal coliforms (Number/100ml)	≤ 100 <sup>1</sup>	≤ 2,000 <sup>3</sup>			
Physicochemical					
Mineral oils (mg/l)	$\leq 0.3^2$	No film visible on the surface of the water & no odour <sup>3</sup>			
Surface active substances (mg/l)	$\leq 0.3^2$	No lasting foam <sup>3</sup>			
Phenol (mg/l as C <sub>4</sub> H <sub>3</sub> OH)	≤ 0.005 <sup>2</sup>	No specific odour ≤ 0.05 <sup>3</sup>			

Note 1: ≥ 80% of samples

Note  $2: \ge 90\%$  of samples

Note 3:  $\geq$  95% of samples

# 2 Bathing Water Quality in 2008

### 2.1 Quality of All Bathing Waters

A total of 131 designated bathing areas, comprising 122 seawater and 9 freshwater, were monitored throughout the 2008 bathing season. The results of samples analysed were assessed with two sets of EU standards:

- Compliant with stricter guide values indicating water of good quality status
- Compliant with minimum mandatory values indicating water of sufficient quality status
- Noncompliant with mandatory values equates to poor water quality status.

In 2008, the quality of Ireland's bathing waters remains high with 93 per cent of bathing areas (122 of 131 areas) complying with the minimum EU mandatory values and achieving sufficient water quality status. From 2007 to 2008, the proportion of bathing areas of sufficient water quality decreased by four per cent (Table 2). Of the nine bathing areas that failed to achieve sufficient water quality status, six were seawater and three were freshwater:

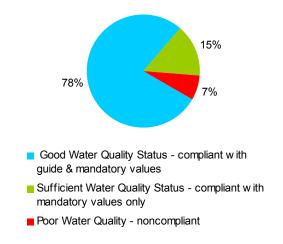
Seawater

- Balbriggan, Loughshinny, Malahide,
   Portrane (Dublin Fingal)
- Clifden (Co. Galway)
- Ardmore (Co. Waterford)
   Freshwater
- Ballyallia Lake (Co. Clare)
- Keeldra Lough (Co. Leitrim)
- Lilliput, Lough Ennel (Co. Westmeath).

Since reporting began in 1991, this is the highest number of bathing waters classified as poor and the first year all freshwater bathing areas did not achieve sufficient water quality status. The bathing areas Clifden and Balbriggan continue to be noncompliant with EU mandatory standards and are classified as poor. Clifden has failed to achieve sufficient water quality status for four consecutive years while Balbriggan achieved sufficient water quality status only once in the last six years. Four of the six seawater bathing areas classified as poor are within the administrative area of Fingal County Council.

In 2008, 78 per cent of bathing areas (102 of 131 areas) complied with the guide values and achieved good water quality status. From 2007 to 2008 the proportion of bathing areas of good water quality decreased by 2 per cent (Table 2).

Fig 1 2008 Water Quality Status of All Bathing Areas



The lower proportion of bathing areas achieving sufficient and good water quality status is due, in general, to the higher than usual rainfall that occurred during the summer of 2008.

Of particular note, all of the designated bathing areas within the following five local authority areas achieved good water quality status:

Donegal County Council, Galway City Council, Kerry County Council, Mayo County Council and Meath County Council.

While the overall level of bathing water quality remains acceptable, a small number of bathing areas are consistently classified as poor.

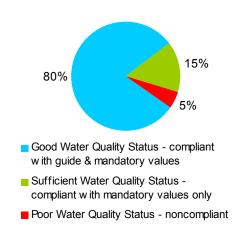
Adequate measures including the provision of

appropriate waste water treatment facilities are required if these bathing areas are to comply with EU standards. Furthermore, given the higher rainfall in recent summers, measures need to be taken to minimise its effects on bathing waters including adherence to good agricultural practices.

### 2.2 Seawater Bathing Areas

During the 2008 season, 122 designated seawater bathing areas were monitored in Ireland. 95 per cent of these seawater bathing areas (116 of 122 areas) complied with the minimum EU mandatory values and achieved sufficient water quality status. This is a decrease of 2 per cent when compared to 2007 (Table 2).

Fig 2 2008 Water Quality Status of Seawater Bathing Areas



Six seawater bathing areas had poor water status. Balbriggan failed to meet the mandatory standards for total and faecal coliforms while Clifden, Loughshinny, Malahide, Portrane and Ardmore failed to meet the mandatory standard for faecal coliforms (Table 3).

80 per cent of seawater bathing areas (98 of 131 areas) complied with the stricter EU guide values and achieved good water quality status. This is a decrease of 1 per cent when compared to 2007 (see Table 2).

### 2.3 Freshwater Bathing Areas

Nine designated freshwater bathing areas were monitored in Ireland during the 2008 season, of which six bathing areas (67%) were of sufficient water quality (met the minimum EU mandatory values) and the remaining three were of poor quality. From 2007 to 2008 the proportion of freshwater bathing areas achieving sufficient water quality status decreased significantly by 33 per cent (Table 2). Since reporting began in 1992, all freshwater bathing areas achieved sufficient water quality status except in 2008.

Fig 3 2008 Water Quality Status of Freshwater Bathing Areas

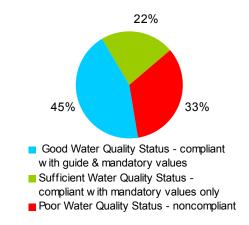


Table 2 Comparison of Bathing Water Quality Status in 2007 and 2008

	Seav	vater	Fresh	water	Ove	rall
	2007	2008	2007	2008	2007	2008
Number of bathing areas	122	122	9	9	131	131
Number of bathing areas achieving sufficient water quality	118	116	9	6	127	122
Percentage of bathing waters of sufficient water quality	97%	95%	100%	67%	97%	93%
Number of bathing areas achieving good water quality	99	98	6	4	105	102
Percentage of bathing waters of good water quality	81%	80%	67%	45%	80%	78%

Three freshwater bathing areas (Ballyallia Lake, Keeldra Lough and Lilliput Lough Ennel) had poor status as these bathing areas failed to meet the mandatory standard for faecal coliforms. (Table 3).

44 per cent of freshwater bathing areas (4 of 9 areas) complied with the stricter EU guide values and achieved good water quality status. This is a decrease of 22.2 per cent when compared to 2007.

### 2.4 Factors Influencing Water Quality

High rainfall can result in runoff of polluting matter from fields and farmyards or from built-up areas into the nearest watercourse, which then conveys the polluting material to bathing areas. High rainfall also has the effect of triggering combined sewer overflows as, in most collecting systems, rainwater flows into the same sewers as wastewater and so greatly increasing its volume.

Low pressure weather systems close to or over Ireland brought a succession of Atlantic frontal systems across the country during much of the summer in 2008, giving rise to significant rainfalls. Diffuse pollution arising from rainwater runoff and combined sewer overflows affected the quality of some bathing waters resulting in a lower number of bathing areas achieving sufficient and good water quality status in 2008.

Table 3 Overview of Bathing Areas failing EU Guide and/or Mandatory Values in 2008

Local Authority	Bathing Area	Water Type	Failing Parameter
	Failed EU Mandatory and G	uide Values	
Clare County Council	Ballyallia lake	Freshwater	Faecal Coliforms, Total Coliforms*
Fingal County Council	Balbriggan	Seawater	Faecal Coliforms, Total Coliforms
	Loughshinny	Seawater	Faecal Coliforms, Total Coliforms*
	Malahide	Seawater	Faecal Coliforms, Total Coliforms*
	Portrane	Seawater	Faecal Coliforms
Galway County Council	Clifden	Seawater	Faecal Coliforms, Total Coliforms*
Leitrim County Council	Keeldra Lough	Freshwater	Faecal Coliforms, Total Coliforms*
Waterford County Council	Ardmore	Seawater	Faecal Coliforms, Total Coliforms*
Westmeath County Council	Lilliput, Lough Ennel	Freshwater	Faecal Coliforms, Total Coliforms*
	Failed EU Guide Va	ues	
Cork County Council	Claycastle	Seawater	Faecal Coliforms
	Fountainstown	Seawater	Faecal Coliforms, Total Coliforms
	Youghal, main beach	Seawater	Faecal Coliforms, Total Coliforms
Dublin City Council	Merrion Strand	Seawater	Faecal Coliforms, Total Coliforms
	Sandymount Strand	Seawater	Faecal Coliforms
Fingal County Council	Donabate	Seawater	Faecal Coliforms, Total Coliforms
	Rush, South Beach	Seawater	Faecal Coliforms
	Skerries	Seawater	Faecal Coliforms
	Sutton, Burrow Beach	Seawater	Faecal Coliforms
Dun Laoghaire Rathdown	Killiney	Seawater	Faecal Coliforms
Galway County Council	Bathing Place at Portumna	Freshwater	Faecal Coliforms
	Na Forbacha	Seawater	Faecal Coliforms, Total Coliforms
	Spiddal, main beach	Seawater	Faecal Coliforms, Total Coliforms
Louth County Council	Seapoint	Seawater	Total Coliforms
Sligo County Council	Rosses Point	Seawater	Faecal Coliforms
Waterford County Council	Dunmore East, Counsellors Strand	Seawater	Faecal Coliforms
	Tramore, main strand	Seawater	Faecal Coliforms
Westmeath County Council	Portnashangan, Lough Ennel	Freshwater	Total Coliforms
Wexford County Council	Duncannon	Seawater	Faecal Coliforms, Total Coliforms
Wicklow County Council	Bray	Seawater	Total Coliforms

<sup>\*</sup>Note: These bathing areas failed the EU mandatory value for the parameter faecal coliforms only; they failed to meet the EU guide value for both parameters.

# 3 Changes in the Quality of Bathing Waters

The water quality status of 24 bathing areas changed between 2007 and 2008 (Table 4). Deteriorations in water quality occurred at 15 bathing areas, with seven of these bathing areas of poor water quality status and the remaining eight bathing areas falling from good water quality status to sufficient status.

Improvements in water quality were noted at nine bathing areas, of which two, Na Forbacha (Co.

Galway) and Youghal (Co. Cork) were brought into compliance achieving sufficient water quality status and seven bathing areas moved from sufficient status to good water quality status. These bathing areas were Portmarnock (Dublin Fingal), Trá Chaladh bhFuinnse (Co. Galway), Laytown/Bettystown (Co Meath), Enniscrone (Co. Sligo), Bonmahon (Co. Waterford), Dunmore East main strand (Co. Waterford) and Greystones (Co. Wicklow).

Table 4 Changes in Water Quality Status of Designated Bathing Areas between 2007 and 2008

Local Authority	Bathing Area	2007	2008	Trend
Clare County	Balllyallia Lake, Ennis	S	Р	$\downarrow$
Cork County	Claycastle	G	S	J
	Fountainstown	G	S	J
	Youghal	Р	S	<b>↑</b>
Dublin City	Sandymount Strand	G	S	<b></b>
Dun Laoghaire Rathdown	Killiney	G	S	<b></b>
Dublin Fingal	Loughshinny	S	Р	J
	Malahide	S	Р	J
	Portmarnock	S	G	<b>↑</b>
	Portrane	G	Р	J
	Rush, South beach	G	S	J
Galway County	Na Forbacha	Р	S	<b>↑</b>
	Trá Chaladh bhFuinnse	S	G	<u> </u>
Leitrim County	Keeldra Lough	S	Р	j
Meath County	Laytown/Bettystown	S	G	<b>↑</b>
Sligo County	Enniscrone	S	G	<u>†</u>
Waterford County	Ardmore	S	Р	j
	Bonmahon	S	G	<b>↑</b>
	Dunmore East, Counsellor's strand	G	S	Ţ
	Dunmore East, main strand	S	G	<b>↑</b>
	Tramore, main strand	G	S	Ţ
Westmeath County	Lilliput, Lough Ennel	G	Р	j
<u> </u>	Portnashangan, Lough Owel	G	S	j
Wicklow County	Greystones	S	G	1
0 0 1 1 1 - 1 - 1 - 1 - 1 - 1 - 1	O O Wining A Maker C . I''		DW (	0 - 114
G Good Water Quality	S Sufficient Water Quality	Р	Poor Wate	r Quality

# 4 Recurring Failures

An analysis of water quality status for all designated bathing areas over the period 2003-2008 ranks the following bathing areas as the poorest performers in terms of overall compliance with the bathing water standards (Table 5):

- Balbriggan (Dublin Fingal)
- Clifden (Co. Galway)
- Ardmore (Co. Waterford)
- Malahide (Dublin Fingal)
- Na Forbacha (Co. Galway)
- Dunmore East main strand (Co. Waterford).

Of particular concern are the bathing areas Clifden and Balbriggan, which were of poor status for four and three consecutive years respectively. Indeed over the period 2003-2008 Balbriggan achieved sufficient water quality only in 2005.

Under the new Directive on bathing water (Directive 2006/7/EC), a local authority is required to issue a permanent bathing prohibition or advice against bathing in relation to a bathing area that has been classified as poor for five consecutive years. The area concerned would be declassified and no longer deemed a bathing water. Following the implementation of the 2006 Directive, if the water quality of Clifden continues to be poor then the bathing area would be declassified.

Table 5 Bathing Areas failing to achieve Sufficient Water Quality over the period 2003 - 2008

Bathing Area	2003	2004	2005	2006	2007	2008	No of Failures
Balbriggan	Р	Р	S	Р	Р	Р	5
Clifden	G	S	Р	Р	Р	Р	4
Ardmore	S	G	Р	S	S	Р	2
Malahide	G	G	G	Р	S	Р	2
Na Forbacha	G	G	Р	S	Р	S	2
Dunmore East, main strand	S	Р	G	Р	S	G	2
Ballyallia Lake	G	G	S	S	S	Р	1
Loughshinny	G	S	S	S	S	Р	1
Portrane	G	G	G	G	G	Р	1
Keeldra Lough	G	G	S	S	S	Р	1
Lilliput, Lough Ennel	G	G	G	G	G	Р	1
Skerries	S	Р	G	G	S	S	1
Bray Beach	Р	S	G	G	S	S	1
Keem Achill	Р	G	G	G	G	G	1
Spiddal (main beach)	Р	S	S	S	S	S	1
Merrion Strand	G	S	Р	G	S	S	1
Sutton, Burrow Beach	S	S	Р	S	S	S	1
Youghal	G	G	G	G	Р	S	1
G Good Water Quality	S	Sufficient	: Water Qu	ality	P P	oor Water	Quality

### 5 Enforcement Actions

The Office of Environmental Enforcement (OEE) within the EPA exercises a supervisory role as provided for under Section 63 of the EPA Acts, in relation to the environmental protection activities of local authorities. This ranges from providing advice and guidance, through to auditing performance, and where necessary, issuing legally binding Directions. In relation to bathing waters the OEE actively follows up on cases where bathing waters fail the minimum EU mandatory standards. This section outlines enforcement actions taken further to the previous bathing water report, which dealt with the 2007 bathing season.

In 2007, four bathing areas Balbriggan (Co. Dublin), Clifden (Co. Galway), Na Forbacha, (Co. Galway) and Youghal (Co. Cork) were of poor status. Balbriggan failed to meet the EU mandatory standards for total and faecal coliforms, while Clifden, Na Forbacha and Youghal failed the mandatory standards for faecal coliforms.

In relation to the Balbriggan bathing area, Fingal County Council reported to the EPA that the upgrading of the urban waste water treatment plant and associated works was necessary in order to improve the quality of the bathing water. The waste water treatment plant upgrade has been completed at Barnageera. Additional works on the sewer network are due to be completed in 2011. Following a recommendation from the EPA, Fingal County Council has agreed in the interim to erect notices posted at the beach to advice bathers on the quality of the bathing water area. A waste water discharge licence application in respect of Balbriggan/Skerries agglomeration (Ref: D00023-01) has been

received from the local authority and this is currently being considered by the EPA.

The EPA issued a Direction, under Section 63(6) of the EPA Acts, directing Galway County Council to carry out specified works at the wastewater treatment plant at Clifden in order to improve the effluent from the works, which was the main factor contributing to the poor quality of the bathing water. A new waste water treatment plant is required if Clifden is to comply with EU bathing water standards. Galway County Council has indicated that they expect the construction of the waste water treatment plant to be completed by the end of 2010. Following a recommendation from the EPA, Galway County Council has agreed in the interim to erect notices posted at the beach to advice bathers on the quality of the bathing water. A waste water discharge licence application in respect of this agglomeration (Ref: D0198-01) has been received from the local authority and this is currently being considered by the EPA.

The EPA also requested Galway County Council, under Section 63(1) of the EPA Acts, to report on the cause of the non-compliance and on the actions taken and proposed actions to address the bathing water failure at Na Forbacha in 2007. Galway County Council carried out investigative monitoring and undertook septic tank surveys in the catchment. On foot of the investigations the local authority also issued a Section 12 Notice under the Water Pollution Acts to a local authority licensed facility adjacent to the bathing area, instructing them to install a new waste water treatment plant to include U.V. treatment. This treatment works has been put in place by the licensed facility.

In the case of Youghal, the EPA under Section 63(1) of the EPA Acts, requested that Cork County Council furnish a report on the cause of the non-compliance and on the actions taken and proposed actions to address the bathing water failure of Youghal in 2007. Cork County Council reported to the EPA that the upgrading of the waste water treatment plant was necessary in order to improve the quality of the bathing water. The construction of Youghal sewerage scheme is scheduled for completion by the end of 2011. A waste water discharge licence application in respect of this agglomeration (Ref: D0139-01) has been received from the local authority and this is currently being considered by the EPA.

The OEE is also following up with the relevant local authorities on the cause of the bathing water failures and the measures being taken to address the issues in relation to the following bathing areas which failed the EU mandatory standards in 2008: Loughshinny (Co. Dublin); Malahide (Co. Dublin); Portrane (Co. Dublin); Ballyallia Lake (Co. Clare); Keeldra Lough (Co. Leitrim); Ardmore (Co. Waterford) and Lilliput/Lough Ennel (Co. Westmeath).

# 6 Bathing Water Quality Trend 1998-2008

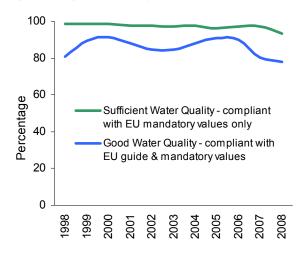
Over the past ten years the quality of water at designated bathing areas in Ireland has remained high. The percentage of bathing areas that are of sufficient water quality has remained very stable at between 92 and 99 per cent while the percentage of bathing areas of good water quality has fluctuated between 77 and 92 per cent.

Over the same period, seawater bathing areas of sufficient water quality has remained rather stable between 95 and 99 per cent while bathing areas of good water quality varied between 80 and 92 per cent.

All freshwater bathing areas achieved sufficient water quality status until 2008. Freshwater bathing areas of good water quality remained at a high level of 88.9 per cent until 2004, with a

peak of 100 per cent from 2002 to 2003. This trend does not continue from 2005 to 2008 as there was a decrease in water quality. The deterioration in bathing water quality in 2007 and 2008 is due to the higher than usual rainfall that occurred during these summer periods.

Fig 4 Bathing Water Quality 1998-2008



**Table 6 Bathing Water Quality Trend (1998-2008)** 

	<u>Seawater</u>				<u>Freshwater</u>			
	Bathing	Sufficient Water	Good Water	Bathing	Sufficient Water	Good Water		
	Areas	Quality (%)	Quality (%)	Areas	Quality (%)	Quality (%)		
1998	121	98.4	80.2	9	100	88.9		
1999	121	98.3	89.3	9	100	88.9		
2000	121	98.3	91.7	9	100	88.9		
2001	122	97.5	87.7	9	100	88.9		
2002	122	97.5	83.6	9	100	100		
2003	122	96.7	83.6	9	100	100		
2004	122	97.5	87.7	9	100	88.9		
2005	122	95.9	91.8	9	100	77.7		
2006	122	96.7	90.9	9	100	77.7		
2007	122	96.7	81.1	9	100	66.7		
2008	122	95.1	80.3	9	66.7	44.4		

Note: Sufficient water quality status – compliant with EU mandatory values only.

Good water quality status – compliant with EU guide and mandatory values.

# 7 New Bathing Water Legislation

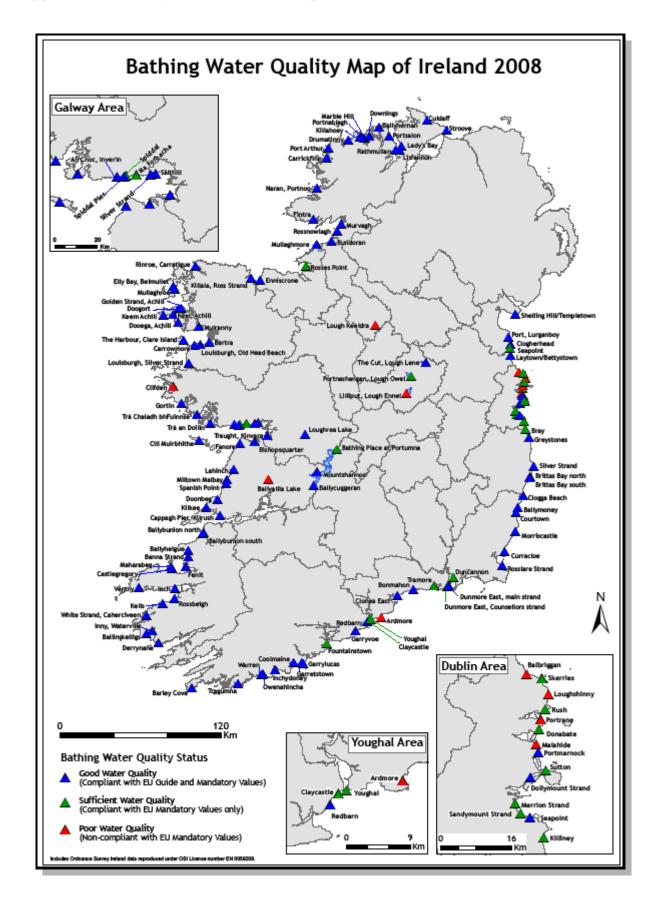
A new Directive on bathing water (Directive 2006/7/EC) came into force on 24 March 2006 and will repeal the existing 1976 Directive with effect from 31 December 2014. The new Directive gives a stronger focus to the protection of public health.

It establishes stricter microbiological standards for two new parameters, Intestinal enterococci and *Escherichia coli*, which will be used to classify bathing waters as 'poor', 'sufficient', 'good' and 'excellent'. The classification of bathing waters will be assessed on the basis of monitoring results for four consecutive bathing seasons. This means the classification will be less susceptible to bad weather or one-off incidents. A classification of at least 'sufficient' will generally be required for all bathing waters by 2015.

The Directive requires a more proactive approach to the management of bathing water quality, requiring the preparation of bathing water profiles and assessing the causes of pollution

that might affect bathing waters and impair bathers' health. The Directive also requires the increased provision of public participation, allowing the public to make informed choices about when and where to bathe and require that public involvement in implementation be encouraged.

The new Bathing Water Quality Regulations 2008 (SI No. 79 of 2008) transposed the EU Bathing Water Directive 2006 into Irish Law on 24 March 2008. Transitional measures will be in place until the Regulations are fully implemented. The existing designated bathing waters will be regarded as 'identified bathing waters' pending the identification of bathing waters by 2011. The existing bathing season and monitoring calendar (fortnightly) will continue pending the establishment of new monitoring calendars. The existing monitoring arrangements such as microbiological and physicochemical parameters will continue until new arrangements are established.



# Appendix 2 2008 Compliance & Water Quality Status of Designated Bathing Areas

Responsible	Bathing Area	Water	Compliance with EU		
Local Authority		Quality	Mandatory	Guide	
		Status			
Clare County Council	Ballyallia Lake, Ennis	Poor	X	Х	
	Ballycuggeran	Good	√	<b>√</b>	
	Bishopsquarter	Good	√	<b>√</b>	
	Cappagh Pier, Kilrush	Good	<b>√</b>	V	
	Fanore	Good	√	<b>√</b>	
	Kilkee	Good	√	<b>√</b>	
	Lahinch	Good	√	<b>√</b>	
	Mountshannon, Lough Derg	Good	V	V	
	Spanish Point	Good	V	V	
	White Strand, Doonbeg	Good	V	√ V	
	White Strand, Miltown Malbay	Good	V	V	
Cork County Council	Barley Cove	Good	V	√ √	
<u> </u>	Claycastle, Youghal	Sufficient	V	X	
	Coolmaine	Good	√ √	V	
	Fountainstown	Sufficient	V	X	
	Garretstown	Good	√ √	V	
	Garrylucas, White Strand	Good	<b>√</b>	V	
	Garryvoe	Good	<b>√</b>	V	
	Inchydoney	Good	<b>√</b>	V	
	Owenahincha	Good	<b>√</b>	\ \ \	
	Redbarn	Good	<b>√</b>	V	
	Tragumna	Good	<b>√</b>	<b>√</b>	
	Warren	Good	<b>√</b>	1	
	Youghal, Main Beach	Sufficient	<b>√</b>	X	
Donegal County Council	Ballyhernan, Fanad	Good	<b>√</b>	<b>√</b>	
	Bundoran	Good	<b>√</b>	<b>√</b>	
	Carrickfinn	Good	7	1	
	Culdaff	Good	<b>√</b>	<b>√</b>	
	Downings	Good	7	<b>√</b>	
	Drumatinny	Good	J	\ \ \ \	
	Fintra	Good	<b>√</b>	\ \ \ \ \	
	Killahoey	Good	<b>√</b>	<b>√</b>	
	Lady's Bay, Buncrana	Good	<b>√</b>	<b>√</b>	
	Lisfannon	Good	<b>√</b>	<b>√</b>	
	Marble Hill	Good	2	<b>√</b>	
	Murvagh	Good	<b>√</b>	<b>√</b>	
	Naran, Portnoo	Good	<b>√</b>	<b>√</b>	
	Port Arthur, Derrybeg	Good	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	Portnablagh	Good	\ \ \ \ \	\ \ \ \ \	
	Portsalon	Good	\ \ \ \ \	1	
	Rathmullan		\ \ \ \ \	√ √	
	Rossnowlagh	Good	\ \ \ \ \	,	
	Shroove	Good	N C	\ \ \	
		Good	l V	<b>√</b>	

Responsible	Bathing Area	Water	Compliance	with EU
Local Authority		Quality	Mandatory	Guide
		Status		
Dublin City Council	Dollymount Strand	Good	V	V
	Merrion Strand	Sufficient	√	Х
	Sandymount Strand	Sufficient	<b>√</b>	Х
Dun Laoghaire Rathdown	Killiney	Sufficient	<b>√</b>	Х
	Seapoint	Good	V	<b>√</b>
Fingal County Council	Balbriggan	Poor	X	X
	Donabate	Sufficient	√	Х
	Loughshinny	Poor	X	Х
	Malahide	Poor	Х	Х
	Portmarnock	Good	<b>√</b>	<b>√</b>
	Portrane	Poor	X	X
	Rush, South Beach	Sufficient	<b>√</b>	Χ
	Skerries	Sufficient	J	Х
	Sutton, Burrow Beach	Sufficient	\ \ \	X
Galway County Council	An Cnoc, Inverin	Good	<b>√</b>	<b>√</b>
	Bathing Place at Loughrea Lake	Good	J	<b>√</b>
	Bathing Place at Portumna	Sufficient	J	X
	Beach at Spiddal Pier	Good	<b>√</b>	√
	Cill Muirbhthe, Inis Mór	Good	2/	
	Clifden	Poor	X	X
	Gortin, Cloch Na Rón	Good		√ √
	Na Forbacha	Sufficient	\ \ \ \ \	X
	Spiddal, Main Beach	Sufficient	2/	X
	Trá An Dóilín, Ceathrú Rua	Good	2/	√
	Trá Chaladh bhFuinnse	Good	<b>√</b>	
	Traught, Kinvara	Good	<b>√</b>	
Galway City Council	Salthill	Good	2/	<b>√</b>
Cannaly only coannon	Silver Strand	Good	2/	2
Kerry County Council	Ballinskelligs		2/	\ √
rtorry country countries	Ballybunion North	Good Good	2/	\ √
	Ballybunion South	Good	2/	,
	Ballyheigue	Good	N al	√ √
	Banna Strand	Good	N al	√ √
	Castlegregory		N al	,
	Derrynane	Good Good		N N
	Fenit		-1	\ √
	Inch	Good	-1	1
	Inny, Waterville	Good	-1	√ -/
	Kells	Good	\ -1	√ 
	Maharabeg, Castlegergory	Good	N	√ √
	Rossbeigh, White Strand	Good	- N	N N
	Ventry	Good	N -1	√ √
	White Strand, Caherciveen	Good	.1	.1
Louth County Council	Clogherhead	Good	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>N</b>
Louis County Council	Port, Lurganboy	Good	N . I	√ 
	Seapoint	Good	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	X
	Shelling Hill/Templetown	Sufficient	<b>V</b>	.1
	Guennia i ini/ i embieromi	Good	ν ν	<b>√</b>

Responsible	Bathing Area	Water	Compliance	with EU
Local Authority		Quality	Mandatory	Guide
		Status		
Leitrim County Council	Keeldra Lough	Poor	Х	Х
Mayo County Council	Bertra	Good	√	<b>V</b>
	Carrawmore	Good	<b>√</b>	V
	Doogort	Good	<b>√</b>	V
	Dooega, Achill	Good	V	V
	Elly Bay, Belmullet	Good	<b>√</b>	V
	Golden Strand, Achill	Good	√	<b>V</b>
	Keel, Achill	Good	√	<b>√</b>
	Keem, Achill	Good	√	<b>V</b>
	Killala, Ross Strand	Good	√	<b>√</b>
	Louisburgh, Old Head Beach	Good	√	<b>√</b>
	Louisburgh, Silver Strand	Good	√	<b>√</b>
	Mullaghroe, Belmullet	Good	<b>√</b>	V
	Mulranny	Good	<b>√</b>	V
	Rinroe, Carratigue	Good	<b>√</b>	1
	The Harbour, Clare Island	Good	<b>√</b>	<b>V</b>
Meath County Council	Laytown/Bettystown	Good	<b>√</b>	V
Sligo County Council	Enniscrone	Good	<b>√</b>	1
	Mullaghmore	Good	√	<b>√</b>
	Rosses Point	Sufficient	<b>√</b>	X
Waterford County Council	Ardmore	Poor	X	Х
	Bonmahon	Good	√	<b>V</b>
	Clonea, East	Good	√	<b>V</b>
	Dunmore East, Counsellors Strand	Sufficient	<b>√</b>	X
	Dunmore East, Main Strand	Good	√	<b>V</b>
	Tramore, Main Strand	Sufficient	√	X
Westmeath County Council	Lilliput, Lough Ennel	Poor	X	Х
	Portnashangan, Lough Owel	Sufficient	<b>√</b>	X
	The Cut, Lough Lene	Good	√	<b>√</b>
Wexford County Council	Ballymoney	Good	√	<b>V</b>
	Courtown, North Beach	Good	√	<b>V</b>
	Curracloe	Good	√	<b>√</b>
	Duncannon	Sufficient	√	Х
	Morriscastle	Good	√	<b>V</b>
	Rosslare Strand	Good	√	<b>√</b>
Wicklow County Council	Bray Beach	Sufficient	√	X
	Brittas Bay North	Good	√	<b>√</b>
	Brittas Bay South	Good	√	<b>V</b>
	Clogga Beach	Good	√	V
	Greystones	Good	√	<b>V</b>
	Silver Strand	Good	√	<b>√</b>

### Note:

- Good water quality status compliant with EU guide and mandatory values.
- Sufficient water quality status compliant with EU mandatory values only.
- Poor water quality status noncompliant EU guide and mandatory values

### 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 príomh-nithe 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 agus Rialtais Áitiúil a dhéanann urraíocht uirthi.

### ÁR hhFRFAGRACHTAÍ

### 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

### 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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