

The Quality of Bathing Water in Ireland

A Report for the Year
2007



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

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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.

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- 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.
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- 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.

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

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- 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.

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Annmarie Tuohy and Tom Stafford.

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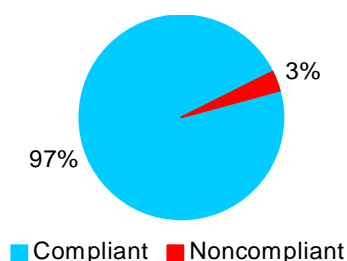
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Executive Summary

The European Union has prescribed mandatory and guide bathing water quality standards for the protection of public health. There are currently 131 designated bathing areas in Ireland, of which 122 are seawater and 9 are freshwater.

Results collated by the EPA for the 2007 season show that the quality of bathing water in Ireland is good with 97 per cent (127 of 131 areas) of bathing areas complying with the mandatory standards specified in the EU Bathing Water Directive (76/160/EEC). The bathing areas that failed to comply with the minimum EU mandatory standards were: Balbriggan (Dublin Fingal), Clifden (Galway County Council), Youghal (Cork County Council) and Na Forbacha (Galway County Council).

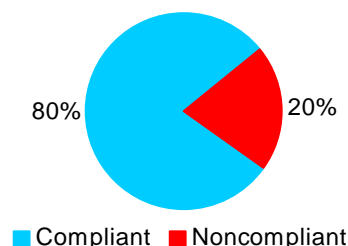
Fig 1 Compliance with EU Mandatory Values



80 per cent of bathing areas (105 of 131 areas) complied with the stricter guide values specified in the Directive. These guide values are quality objectives, which all bathing areas should endeavour to achieve.

The number of bathing areas complying with EU mandatory values in 2007 remains the same when compared with 2006. There was a 10 per cent decrease in guide compliance from 90 per cent in 2006 to 80 per cent in 2007 which was due, in general, to the higher than usual rainfall that occurred during the 2007 bathing season.

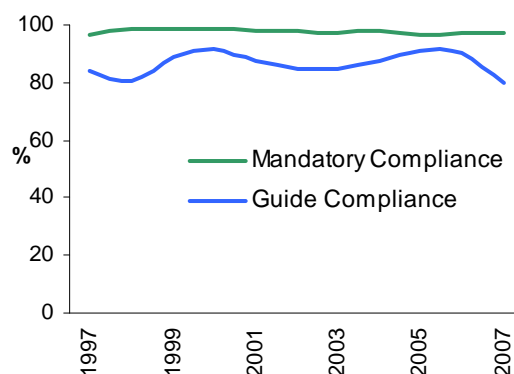
Fig 2 Compliance with EU Guide Values



Six local authorities complied fully with the EU guide and mandatory standards for all of the designated bathing areas within their functional areas. These were: Donegal County Council, Dun-Laoghaire/Rathdown County Council, Galway City Council, Kerry County Council, Mayo County Council and Westmeath County Council.

Over the past ten years the quality of water at designated bathing areas in Ireland has remained high. Compliance with EU mandatory values has remained very stable between 95 and 99 per cent while compliance with the more stringent guide values has fluctuated between 79 and 92 per cent.

Fig 3 Compliance with EU Values 1997-2007



1. Introduction

The quality requirements for bathing water areas in Ireland are set out in the Quality of Bathing Waters Regulations 1992 (S.I. No. 155 of 1992) and subsequent amendments. These Regulations transposed the requirements of the EC Directive concerning the quality of bathing waters (76/160/EEC), the purpose of which is to ensure that bathing water quality is maintained and if necessary improved so that it complies with specified standards designed to protect

public health and the environment. Details of the EU mandatory and guide values and national limit values are summarised in Table 1. There are currently 131 designated bathing areas in Ireland of which 122 are seawater bathing areas and 9 are freshwater bathing areas. These bathing areas are monitored to check the quality of the bathing water by the competent local authority on a fortnightly basis during the bathing season which extends from the 1st June until the

Table 1 Quality Requirements for Bathing Water

Parameters	EC Directive concerning the quality of Bathing Waters 76/160/EEC		National Limit Values (SI No. 155 of 1992)
	G (Guide)	I (Mandatory)	
Microbiological			
Total coliforms (Number/100ml)	$\leq 500^1$	$\leq 10,000^3$	$\leq 5,000^1$ $\leq 10,000^3$
Faecal coliforms (Number/100ml)	$\leq 100^1$	$\leq 2,000^3$	$\leq 1,000^1$ $\leq 2,000^3$
Faecal strep (Number/100ml) ⁴	$\leq 100^2$		$\leq 300^3$
Salmonella (Number/litre) ⁴		0 ³	0 ³
Enteric viruses (PFU/10 litres) ⁴		0 ³	0 ³
Physicochemical			
pH ⁴		6 to 9 ³	≥ 6 and $\leq 9^3$
Colour		No abnormal change in colour ³	No abnormal change in colour ³
Mineral oils (mg/l)	$\leq 0.3^2$	No film visible on the surface of the water & no odour ³	No film visible on the surface of the water & no odour ³
Surface active substances (mg/l)	$\leq 0.3^2$	No lasting foam ³	No lasting foam ³
Phenol (mg/l as C ₄ H ₃ OH)	$\leq 0.005^2$	No specific odour $\leq 0.05^3$	≤ 0.05 & no specific odour ³
Transparency (m)	$\geq 2^2$	$\geq 1^3$	$\geq 1^3$
DO (% saturation O ₂) ⁴	80 to 120 ²		≥ 70 and $\leq 120^3$
Tarry residues & floating material	Absence ²		No offensive presence ³

Note 1: $\geq 80\%$ of samples

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

Note 3: $\geq 95\%$ of samples

Note 4: To be sampled where investigations show or where there are grounds for believing that water quality has deteriorated in respect of this parameter.

Note 5 Additional parameters (Ammonia, Nitrogen (Kjeldahl), pesticides, heavy metals, cyanides, nitrates, phosphates)

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.

1.1 Compliance Assessment

The EPA assesses compliance with the National Regulations based on all the parameters, which are required to be monitored under the Regulations. While the sampling and analysis criteria are similar under EU legislation, there are differences in the way in which compliance with the results of these parameters is interpreted. As a result, compliance figures for the National Regulations and the EU Directive may differ.

1.1.1 National Compliance

The National Regulations stipulate that each sample obtained must be analysed for the following 8 microbiological and physicochemical parameters:

- Total coliforms
- Faecal coliforms
- Colour
- Mineral oils
- Surface active substances
- Phenols
- Transparency
- Tarry residues, floating materials

Under certain circumstances, in particular where there has been a deterioration of water quality, both the frequency of monitoring and range of analytes must be increased. Similarly, 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.

In addition to the 8 compulsory parameters, there are a number of additional parameters set out in

the Regulations, which must be sampled where there are grounds for believing that there has been deterioration in respect of the parameter or substance concerned at the bathing area.

Local authorities must report the results of sampling to the EPA at the end of each bathing season.

1.1.2 EU Compliance

The parameters which are required to be sampled and analysed under EU Directive (76/160/EEC) are the same as those prescribed under the National Regulations. However, unlike national compliance, which includes all parameters, EU bathing water compliance is based on a sub-set of these parameters. The 5 parameters considered for EU compliance purposes are:

- Total coliforms
- Faecal coliforms
- Mineral oils
- Surface active substances
- Phenol.

The parameters transparency and colour are omitted for compliance determination.

There may be good reason for disregarding transparency and colour at seawater sites as turbulent seas may lead to a deterioration in both of these parameters and, as such results may not be indicative of the water quality.

This argument however is less applicable at freshwater sites as colour and transparency are indicators of the possible trophic status of the water.

2. Seawater Bathing Areas

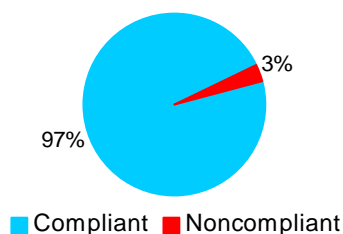
The number of designated seawater bathing areas remained at 122 during the 2007 bathing season.

2.1 Compliance with EU Directive

2.1.1 Mandatory Values

In total, 97 per cent of seawater bathing areas (118 of 122) complied with the mandatory values laid down for the five parameters required for EU compliance. There is no change on the compliance rate in 2006.

Fig 4 Seawater Bathing Areas Compliance with EU Mandatory Values



Four bathing areas failed to comply with the mandatory values specified in the EU Bathing Water Directive and were as follows:

- Balbriggan (Dublin Fingal)
- Clifden (Galway County Council)
- Na Forbacha (Galway County Council)
- Youghal (Cork County Council).

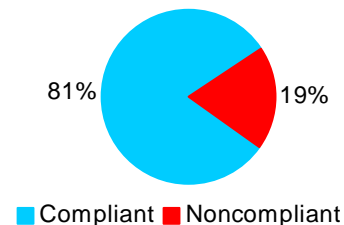
Balbriggan failed to meet the EU mandatory standards for both total and faecal coliforms, while Clifden, Youghal and Na Forbacha failed to meet the standard for faecal coliforms.

2.1.2 Guide Values

In total, 81 per cent of seawater bathing areas (99 of 122) complied with the guide values specified in the Directive. This represents a 10 per cent decrease compared to 2006, which was due, in general, to the higher than usual rainfall that occurred during the 2007 bathing season. A

list of seawater and freshwater bathing areas, which were noncompliant with mandatory and/or guide values in 2007 are outlined in Table 2.

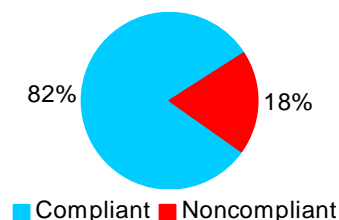
Fig 5 Seawater Bathing Areas Compliance with EU Guide Values



2.2 Compliance with National standards

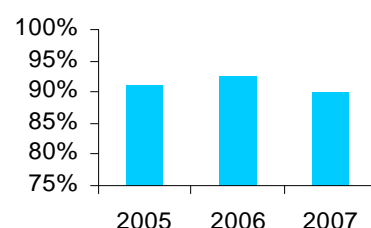
Of the 122 seawater bathing areas, 82 per cent (100 of 122) complied with the National standards in 2007. This represents a 4 per cent increase in compliance compared to 2006.

Fig 6 Seawater Bathing Areas Compliance with National Standards



In addition to the standards for the microbiological parameters total and faecal coliforms set out in the EU Bathing Water Directive, National standards include an additional microbiological parameter faecal streptococci.

Fig 7 Seawater Bathing Areas Compliance with National Standard for Faecal Streptococci



Twelve bathing areas failed to meet the National standard for faecal streptococci. These were:

- Claycastle, Fountainstown, Youghal (Cork)
- Balbriggan (Dublin Fingal)
- Clifden, Na Forbacha, Spiddal main beach (Galway)
- Laytown/Bettystown (Meath)
- Mullaghmore (Sligo)
- Dunmore East Counsellor's Strand (Waterford)
- Duncannon, Courtown (Wexford)

Table 2 Bathing Areas Failing Guide and/or Mandatory EU Directive Limit Values 2007

Bathing Area	Local Authority	Water Type	Parameters that failed relevant value
Failed EU Mandatory and Guide Limits			
Youghal	Cork County	Seawater	Faecal Coliforms
Balbriggan	Dublin Fingal	Seawater	Faecal Coliforms, Total Coliforms
Clifden	Galway County	Seawater	Faecal Coliforms
Na Forbacha	Galway County	Seawater	Faecal Coliforms, <i>Total Coliforms*</i>
Failed EU Guide Limits			
Ballyallia	Clare County	Freshwater	Faecal Coliforms, Total Coliforms
Merrion Strand	Dublin City	Seawater	Faecal Coliforms
Donabate	Dublin Fingal	Seawater	Faecal Coliforms, Total Coliforms
Malahide	Dublin Fingal	Seawater	Faecal Coliforms, Total Coliforms
Portmarnock	Dublin Fingal	Seawater	Faecal Coliforms, Total Coliforms
Skerries	Dublin Fingal	Seawater	Faecal Coliforms
Sutton, Burrow beach	Dublin Fingal	Seawater	Faecal Coliforms, Total Coliforms
Loughshinny	Dublin Fingal	Seawater	Faecal Coliforms
Spiddal (main beach)	Galway County	Seawater	Faecal Coliforms, Total Coliforms
Portumna	Galway County	Freshwater	Faecal Coliforms, Total Coliforms
Trá Chaladh bhFuinnse	Galway County	Seawater	Faecal Coliforms
Keeldra	Leitrim County	Freshwater	Total Coliforms
Seapoint	Louth County	Seawater	Faecal Coliforms, Total Coliforms
Laytown/Bettystown	Meath County	Seawater	Faecal Coliforms
Enniscrone	Sligo County	Seawater	Faecal Coliforms, Total Coliforms
Rosses Point	Sligo County	Seawater	Total Coliforms
Ardmore	Waterford County	Seawater	Faecal Coliforms, Total Coliforms
Bonmahon	Waterford County	Seawater	Faecal Coliforms
Dunmore East main strand	Waterford County	Seawater	Total Coliforms
Duncannon	Wexford County	Seawater	Faecal Coliforms, Total Coliforms
Bray	Wicklow County	Seawater	Faecal Coliforms, Total Coliforms
Greystones	Wicklow County	Seawater	Total Coliforms

* Note: The bathing area Na Forbacha failed the EU Guide limit only for the parameter total coliforms.

3. Freshwater Bathing Areas

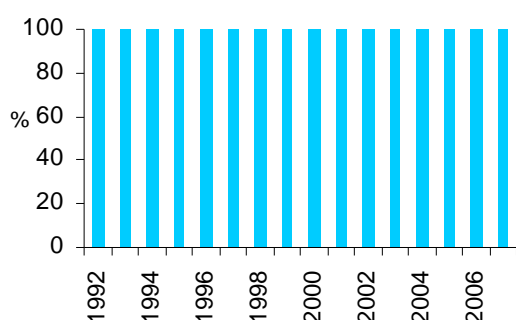
The number of designated inland bathing areas remained at nine in 2007.

3.1 Compliance with EU Directive

3.1.1 Mandatory Values

During the 2007 season all 9 freshwater bathing areas complied with EU mandatory limits set out for the five parameters required for EU compliance. Since the start of reporting in 1992 freshwater bathing areas have achieved 100 per cent compliance with EU mandatory limits.

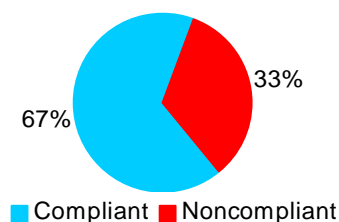
Fig 8 Freshwater Bathing Area Compliance with EU Mandatory Values 1992 - 1997



3.1.2 Guide Values

In total, 67 per cent of freshwater bathing areas (6 of 9) in 2007 complied with EU guide values specified in the Directive. Two of the bathing areas, Ballyallia (Co Clare) and Portumna (Co Galway), failed to meet the EU guide standard for faecal coliforms and total coliforms, while Keeldra (Co Leitrim) failed to meet the standard for total coliforms. Ballyallia and Keeldra have failed the EU guide standard since 2005.

Fig 9 Freshwater Bathing Area Compliance with EU Guide Values

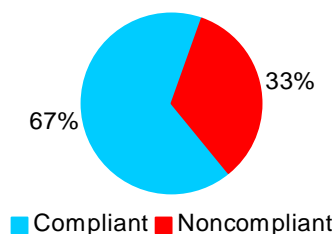


3.2 Compliance with National standards

In 2007, 67 per cent (6 of 9) of the freshwater bathing areas complied with the limit values set out in the National Regulations. The three non-compliant bathing areas were:

- Keeldra (Co Leitrim)
- Loughrea Lake (Co Galway))
- Portumna (Co Galway)

Fig 10 Freshwater Bathing Area Compliance with National Standards



Keeldra failed the National standard for dissolved oxygen while Portumna and Loughrea lake (Co Galway) failed on transparency. Transparency is more relevant to inland bathing sites as it may be indicative of the pollution status of the waterbody.

4. Discussion

4.1 Bathing Water Quality 2007

Overall, 97 per cent of the designated bathing areas (127 of 131) complied with the minimum mandatory standards specified in the EU Bathing Water Directive, while there was 80 per cent compliance (105 of 131) with the stricter EU guide values. These guide values can be regarded as quality objectives, which all bathing areas should endeavour to achieve. In comparison to 2006, the number of bathing

areas complying with EU mandatory values remained the same while there was a more significant decrease of 10 per cent in guide compliance. 81 per cent (106 of 131) of bathing areas complied with the National standards. This represents a 4 per cent increase in quality compared to 2006. A summary of results for the 2006 and 2007 bathing seasons is given in Table 3.

Table 3 EU Bathing Water Compliance Status in 2006 and 2007

	Seawater		Freshwater		Overall	
	2006	2007	2006	2007	2006	2007
Number of bathing areas	122	122	9	9	131	131
Number of bathing areas complying with EU mandatory values	118	118	9	9	127	127
Percentage compliant with EU mandatory values	97%	97%	100%	100%	97%	97%
Number of bathing areas complying with EU guide value	111	99	7	6	118	105
Percentage compliant with EU guide values	91%	81%	78%	67%	90%	80%
Number of bathing areas complying with National Limit values	95	100	6	6	101	106
Percentage compliant with National Limit values	78%	82%	67%	67%	77%	81%

4.1.1 Status Changes

The status of 18 bathing areas in relation to EU standards changed between 2006 and 2007 as outlined in Table 4. Deteriorations in water quality occurred at 15 bathing areas, with two bathing areas falling out of compliance with the EU standards (Youghal and Na Forbacha) and 13 bathing areas falling from guide compliance to

mandatory compliance. Improvements in water quality were noted at three bathing areas, with two of the areas being brought into compliance (Malahide and Dunmore East, main strand) and Dollymount Strand moving from the mandatory compliance category to the stricter guide compliance category.

Table 4 EU Standards Status Change of Bathing Areas between 2006 and 2007

Local Authority	Bathing Area	2006	2007	Trend
Cork County	Youghal	CG	NC	↓
Dublin City	Dollymount Strand	CI	CG	↑
	Merrion Strand	CG	CI	↓
Dublin Fingal	Skerries	CG	CI	↓
	Portmarnock	CG	CI	↓
	Donabate	CG	CI	↓
	Malahide	NC	CI	↑
Galway County	Na Forbacha	CI	NC	↓
	Trá Chaladh bhFuinnse	CG	CI	↓
	Portumna	CG	CI	↓
Louth County	Seapoint	CG	CI	↓
Meath County	Laytown/Bettystown	CG	CI	↓
Sligo County	Rosses Point	CG	CI	↓
Waterford County	Dunmore East, main strand	NC	CI	↑
	Bonmahon	CG	CI	↓
Wexford County	Duncannon	CG	CI	↓
Wicklow County	Bray	CG	CI	↓
Wicklow County	Greystones	CG	CI	↓
CG	Guide Compliant indicates water of good quality			
CI	Mandatory Compliant indicates water of acceptable quality			
NC	Noncompliant indicates water of insufficient quality & does not comply with EU mandatory and guide values.			

4.1.2 Recurring Failures

An analysis of returns for all bathing areas over the period 2003-2007 ranks the following bathing areas as the poorest performers in terms of overall compliance with the bathing water standards:

Bathing Area	Years Noncompliant with EU Standards
Balbriggan (Dublin Fingal)	2003, 2004, 2006, 2007
Clifden (Galway)	2005, 2006, 2007
Na Forbacha (Galway)	2005, 2007
Dunmore East main strand (Waterford County)	2004, 2006

The Quality of Bathing Waters Regulations 1992 require that where waters at a bathing area do not comply with the standards the local authority shall “*give such public notice of that fact as it considers appropriate*” and “*take the necessary measures to ensure that the standards are complied with..*”.

As the purpose of the Bathing Water Regulations is the protection of human health, local authorities should ensure that where any bathing water sample fails the mandatory bathing water standards that the public are made aware of this

fact by means of information notices posted at the bathing area. Such notices should be conspicuous and alert the public of risks posed to their health by bathing in these waters. Alerts may also be provided on local radio and the local authorities website where deemed appropriate.

4.2 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. 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 also actively follows up on cases where bathing waters fail the EU mandatory standards.

In 2006, the bathing areas Balbriggan, Malahide (Co Dublin) and Clifden (Co Galway) failed the EU mandatory standards for total and faecal coliforms and the bathing area Dunmore East main strand (Co Waterford) failed the mandatory standards for faecal coliforms. Both Clifden and Balbriggan also failed the mandatory standards in 2007 as did the bathing areas Youghal (Co Cork) and Na Forbacha (Co Galway).

The OEE requested Fingal County Council under Section 63 of the EPA Acts to investigate and report on the breaches of EU mandatory standards at the bathing areas, Balbriggan and Malahide. Fingal County Council reported that sewage was discharged untreated to the sea 2km south of Balbriggan beach and in addition, overflows from the pumping station adjacent to the beach contributed to the breach of standards. The OEE audited Barnageeragh waste water treatment plant and recommended that Fingal County Council upgrade works to eliminate

sewage discharges to the bathing area. Fingal County Council plans to increase the capacity of the plant by June 2008. The OEE also recommended that the County Council provide the public with clear information on the risk to public health and whether it is safe to bathe.

Fingal County Council reported that there were problems with the Malahide sewer network resulting from the amount of fats, oils and grease being discharged to the sewer system and in relation to the operation of sewage overflows. The OEE audited Malahide waste water treatment plant and recommended that Fingal County Council take measures to ensure that the number of sewage overflows are reduced and the discharge of fats, oils and greases are licensed as a priority. The County Council was also advised to provide clear information on the risks posed to public health from bathing at this bathing area.

The existing waste water treatment plant in Clifden is the most significant source of contamination of bathing waters and there is a permanent notice at Clifden beach informing the public that it is unsafe for bathing. The OEE directed Galway County Council to address a number of issues to improve the operation of the Clifden waste water treatment plant. Galway County Council has undertaken remediation works including sludge removal, installation of screens and plant repairs. A larger waste water treatment plant is required if Clifden is to comply with the EU bathing water standards. Construction of a new plant is expected to commence in 2009. Pending the completion of the new plant, the OEE has recommended that Galway County Council install temporary waste water treatment in order to improve the quality of the effluent being discharged.

Since 2005 the OEE has been investigating the causes of breaches of EU standards at the bathing area Dunmore East (main strand). Advice and Recommendations were issued (under Section 63 of the EPA Act) in June 2005 and again in May 2007 advising Waterford County Council to erect appropriate signage at the beach indicating that the stream is chlorinated and the reasons for such chlorination. In August 2007 the OEE inspected the bathing area and recommended that the stream be culverted and that upgrade works on the treatment plant be expedited. Waterford County Council's plan to build a treatment plant in Dunmore East and to divert the stream away from the bathing area have been delayed pending a decision on a Foreshore Licence.

In relation to the bathing areas Youghal and Na Forbacha, which failed the EU mandatory standards in 2007, the OEE is following up with the relevant local authorities on the cause of the failures and the measures being taken to address the issues.

4.3 New Bathing Water Legislation

4.3.1 Bathing Water Directive, 2006

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.

4.3.2 Bathing Water Regulations, 2008

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. The Regulations incorporate suggestions made during public consultation

including the extension of the bathing season from 31 August to 15 September. The Regulations allow provision for the EPA to issue advice, recommendations and directions to local authorities, where required, for the consistent and effective implementation of the Regulations and facilitate the coordinated monitoring and management of bathing waters.

The following is a summary of the main provisions of the new Bathing Water Quality Regulations.

Bathing Season and Bathing Waters

- Bathing season to run from 1 June to 15 September.
- The identification of bathing waters to be undertaken by local authorities by 24 March 2011 and subsequently by 24 March each year.
- The establishment of a bathing water profile by local authorities by 24 March 2011 for each bathing water and subsequent updating as required.

Monitoring of Bathing Waters

- The establishment of a monitoring calendar by local authorities for each bathing water by 24 March 2011 and subsequently by 24 March each year.
- Monitoring of bathing waters by local authorities to commence by 2011 bathing season in relation to microbiological parameters Intestinal enterococci and *Escherichia coli*.
- The monitoring point to be located where most bathers are expected or where the greater risk of pollution is expected.

- Suspension of monitoring in abnormal situations.
- Water samples to be analysed by local authorities and results sent to the EPA by 15 October each year.

Water Quality

- Water quality to be assessed and classified by the EPA by 31 December each year based on data for four preceding bathing seasons and reported to the EU Commission.
- Bathing waters to be classified as 'excellent', 'good', 'sufficient' or 'poor' and the first classification to be undertaken by 2015 in relation to four years 2011 to 2014.
- Bathing waters must achieve 'sufficient' or better status by 2015.
- Local authorities must take measures to increase the number of bathing waters classified as 'good' or 'excellent'.
- Local authorities must take management measures in relation to 'poor' waters.
- Local authorities must issue permanent advice against bathing in the case of waters that cannot achieve 'sufficient' status.

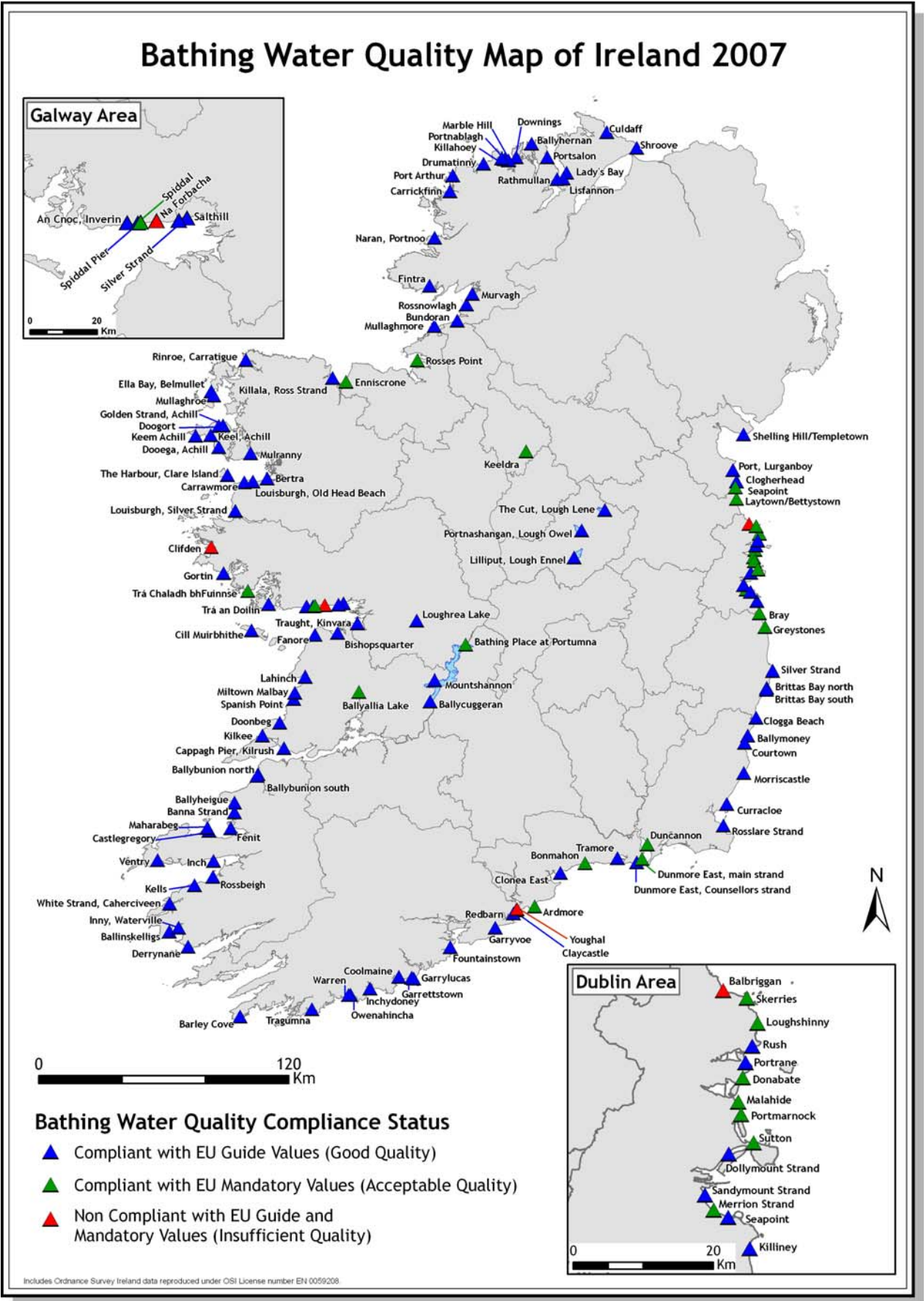
Public Participation and Information

- Public participation to be encouraged in implementation.
- Information for the public to be provided near bathing waters and on website by local authorities and/or by the EPA.

4.3.3 Transitional Measures

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) to 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 1 Bathing Water Quality Map of Ireland 2007



Appendix 2 Roles and Responsibilities

The Local Authorities, the Environmental Protection Agency (EPA) and the Department of Environment, Heritage and Local Government each have specified roles in the administration of the legislation concerning the quality of bathing waters.

Local Authorities

Sampling and Investigations

Local authorities are required to sample (or arrange for the sampling of) waters at the bathing areas for which they are responsible. These samples must be taken at specified locations, at a required frequency and as far as possible, analysed using specified methodologies. Local Authorities are also responsible for conducting periodic investigations of conditions, which may affect the quality of bathing waters for the purpose of determining the volume, nature and effect of all potentially polluting discharges at the bathing areas. Where bathing waters do not comply with the specified standards, Local Authorities are required to give public notice of this fact and to undertake the necessary measures to ensure compliance with standards. However, deviations of water quality standards caused by floods, other natural disasters or abnormal weather conditions should not be taken into consideration in determining compliance with the standards.

Access to Information

Each local authority involved in sampling of water at the designated bathing areas must establish and maintain a register of sampling results, which should be made available for inspection by any person during office hours.

During the bathing season, the results of sampling should be displayed at or near the bathing area or alternative arrangements should be made for their availability to the public at the area concerned. The results displayed should be updated regularly at least every four weeks and the location of the sampling point(s) should be indicated on a map displayed at or near the bathing area.

Reporting of Results

Local authorities are required to forward monitoring results and reports annually to the EPA at the end of the bathing season. A web based reporting system was set up in 2003 to help streamline this reporting process.

Environmental Protection Agency

The role of the EPA is to collate the water quality results from each local authority involved and to compile a national report, which is sent to the European Commission. This national overview, together with similar reports from other member states are assembled into one single European-wide document, which is published annually by the Commission.

The results for the 2007 bathing season that were sent to the European Commission are incorporated in this report and also includes additional explanatory material for the general reader.

An additional role extended to the EPA in 2001 is the authorisation of departures from bathing water quality standards under specific circumstances. Prior to 2001, the Minister for the Environment, Heritage and Local Government

had this responsibility. A departure may be granted on condition that it does not constitute a public health hazard. The granting of the departure may also be subject to conditions specified by the EPA and may be restricted to a specified time period. In addition, the Office of Environmental Enforcement (OEE) within the EPA exercises a supervisory role in relation to the environmental protection activities of local authorities. In this regard, the OEE may as part of their enforcement activities, issue notices under Section 63 of the EPA Acts 1992 and 2003 for bathing sites that do not meet specified standards.

Department of Environment, Heritage & Local Government

The role of the Minister for Environment, Heritage and Local Government includes the preparation of the National Regulations and their updating according as the need arises.

An Taisce

The Blue Flag Scheme is a voluntary scheme administered in Ireland by An Taisce and at an International level by the Foundation for Environmental Education (FEE). To receive a blue flag, a bathing site, in addition to maintaining a high standard of water quality, must meet specified objectives with regard to the provision of safety services and facilities, environmental management of the beach area and environmental education. The EPA has cooperated with An Taisce to check that all water quality results obtained by both organisations for the 2007 bathing season are comparable. The analysis of bathing water in respect of the Directive is separate from, although complementary to, the European Blue Flag Scheme.

Appendix 3 Compliance Status of Designated Bathing Areas in 2007

Responsible Local Authority	Bathing Area	Compliance with:		
		EU Mandatory	EU Guide	NLV
Clare County Council	Ballyallia Lake, Ennis	√	✗	√
	Ballycuggeran	√	√	√
	Bishopsquarter	√	√	√
	Cappagh Pier, Kilrush	√	√	√
	Fanore	√	√	√
	Kilkee	√	√	√
	Lahinch	√	√	√
	Mountshannon, Lough Derg	√	√	√
	Spanish Point	√	√	√
	White Strand, Doonbeg	√	√	√
	White Strand, Miltown Malbay	√	√	√
Cork County Council	Barley Cove	√	√	√
	Claycastle, Youghal	√	√	✗
	Coolmaine	√	√	√
	Fountainstown	√	√	✗
	Garretstown	√	√	√
	Garrylucas, White Strand	√	√	√
	Garryvoe	√	√	√
	Inchydoney	√	√	√
	Owenahincha	√	√	√
	Redbarn	√	√	√
	Tragumna	√	√	√
	Warren	√	√	√
	Youghal, Main Beach	✗	✗	✗
Donegal County Council	Ballyhernan, Fanad	√	√	√
	Bundoran	√	√	√
	Carrickfinn	√	√	√
	Culdaff	√	√	√
	Downings	√	√	√
	Drumatinny	√	√	√

Responsible Local Authority	Bathing Area	Compliance with:		
		EU Mandatory	EU Guide	NLV
Donegal County Council	Fintra	√	√	√
	Killahoey	√	√	√
	Lady's Bay, Buncrana	√	√	√
	Lisfannon	√	√	√
	Marble Hill	√	√	√
	Murvagh	√	√	√
	Naran, Portnoo	√	√	√
	Port Arthur, Derrybeg	√	√	√
	Portnablagh	√	√	√
	Portsalon	√	√	√
	Rathmullan	√	√	√
	Rossnowlagh	√	√	√
	Shroove	√	√	√
Dublin City Council	Dollymount Strand	√	√	√
	Merrion Strand	√	✗	√
	Sandymount Strand	√	√	√
Dun Laoghaire Rathdown	Killiney	√	√	√
	Seapoint	√	√	√
Fingal County Council	Balbriggan	✗	✗	✗
	Donabate	√	✗	√
	Loughshinny	√	✗	✗
	Malahide	√	✗	√
	Portmarnock	√	✗	√
	Portrane	√	√	✗
	Rush, South Beach	√	√	√
	Skerries	√	✗	✗
	Sutton, Burrow Beach	√	✗	✗
Galway County Council	An Cnoc, Inverin	√	√	√
	Bathing Place at Loughrea Lake	√	√	✗
	Bathing Place at Portumna	√	✗	✗
	Beach at Spiddal Pier	√	√	✗

Responsible Local Authority	Bathing Area	Compliance with:		
		EU Mandatory	EU Guide	NLV
Galway County Council	Cill Muirbhte, Inis Mór	√	√	√
	Clifden	✗	✗	✗
	Gortin, Cloch Na Rón	√	√	√
	Na Forbacha	✗	✗	✗
	Spiddal, Main Beach	√	✗	✗
	Trá An Dóilín, Ceathrú Rua	√	√	√
	Trá Chaladh bhFuinnse	√	✗	√
	Traught, Kinvara	√	√	✗
Galway City Council	Salthill	√	√	√
	Silver Strand	√	√	√
Kerry County Council	Ballinskelligs	√	√	√
	Ballybunion North	√	√	√
	Ballybunion South	√	√	√
	Ballyheigue	√	√	√
	Banna Strand	√	√	√
	Castlegregory	√	√	√
	Derrynane	√	√	√
	Fenit	√	√	✗
	Inch	√	√	√
	Inny, Waterville	√	√	√
	Kells	√	√	√
	Maharabeg, Castlegregory	√	√	✗
	Rossbeigh, White Strand	√	√	√
	Ventry	√	√	√
	White Strand, Caherciveen	√	√	√
Leitrim County Council	Keeldra, Cloone	√	✗	✗
Louth County Council	Clogherhead	√	√	√
	Port, Lurganboy	√	√	√
	Seapoint	√	✗	√
	Shelling Hill/Templetown	√	√	√

Responsible Local Authority	Bathing Area	Compliance with:		
		EU Mandatory	EU Guide	NLV
Mayo County Council	Bertra	√	√	√
	Carrawmore	√	√	√
	Doogort	√	√	√
	Dooega, Achill	√	√	√
	Elly Bay, Belmullet	√	√	√
	Golden Strand, Achill	√	√	✗
	Keel, Achill	√	√	√
	Keem, Achill	√	√	√
	Killala, Ross Strand	√	√	√
	Louisburgh, Old Head Beach	√	√	√
	Louisburgh, Silver Strand	√	√	√
	Mullaghroe, Belmullet	√	√	√
	Mulranny	√	√	√
	Rinroe, Carratigue	√	√	√
	The Harbour, Clare Island	√	√	√
Meath County Council	Laytown/Bettystown	√	✗	✗
Sligo County Council	Enniscrone	√	✗	√
	Mullaghmore	√	√	✗
	Rosses Point	√	✗	√
Waterford County Council	Ardmore	√	✗	√
	Bonmahon	√	✗	√
	Clonea, East	√	√	√
	Dunmore East, Counsellors Strand	√	√	✗
	Dunmore East, Main Strand	√	✗	√
	Tramore, Main Strand	√	√	√
Westmeath County Council	Lilliput, Lough Ennel	√	√	√
	Portnashangan, Lough Owel	√	√	√
	The Cut, Lough Lene	√	√	√
Wexford County Council	Ballymoney	√	√	√
	Courtown, North Beach	√	√	✗
	Curraclloe	√	√	√

Responsible Local Authority	Bathing Area	Compliance with:		
		EU Mandatory	EU Guide	NLV
Wexford County Council	Duncannon	√	✗	✗
	Morriscastle	√	√	√
	Rosslare Strand	√	√	√
Wicklow County Council	Bray Beach	√	✗	✗
	Brittas Bay North	√	√	√
	Brittas Bay South	√	√	√
	Clogga Beach	√	√	√
	Greystones	√	✗	√
	Silver Strand	√	√	√

Appendix 4 EU Compliance Rates for Bathing Areas in Ireland (1995 – 2007)

	Seawater			Freshwater		
	Bathing Areas	C(I)%	C(G)%	Bathing Areas	C(I)%	C(G)%
1995	108	98.1	87.9	9	100	88.9
1996	115	95.6	89.5	9	100	88.9
1997	115	96.5	83.5	9	100	88.9
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

C(G) - Guide Compliant indicates water of good quality

C(I) - Mandatory Compliant indicates water of acceptable quality