

The Quality of Bathing Water in Ireland

An Overview for the Year 2009

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

The report was prepared under the direction of Dr Micheál Lehane, Programme Manager for Research & Assessment within the Office of Environmental Assessment.

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Background

The legislation governing the quality of bathing waters for the 2009 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. A total of 131 designated bathing areas were monitored during the bathing season, of which 122 are seawater and nine are freshwater bathing areas on lakes.

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. The frequency of bathing water sampling may be reduced to a minimum of four times during the bathing season when a bathing area is compliant with at least the EU mandatory bathing water standards for the two previous years and when no new factor likely to lower the quality of the water has arisen.

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

Compliance of water quality for the Blue Flag Awards requires that the bathing areas must also comply with the EU guide value for an additional microbiological parameter, faecal streptococci. The compliance status of the bathing areas with the EU guide value for faecal streptococci for the 2009 bathing season is given in Appendix 2.

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. 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 Office of Environmental Enforcement (OEE), within the EPA, follows up on the cause of any bathing area failing the minimum EU mandatory values and the measures being taken by the relevant local authority to bring the bathing area into compliance.

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 Quality of Bathing Waters Directive with effect from 31 December 2014. The 2006 Directive establishes a new classification system for bathing water quality based on four classifications: 'sufficient', 'good' and 'excellent', and 'poor'. It 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 Quality of Bathing Waters Regulations (S.I 155 of 1992) (S.I 155 of 1992) governed the quality of bathing waters for the 2009 season. Reflecting the present period of transition between the two Directives, the format of this overview report relates the new classification system to current EU guide and mandatory standards specified in the 1976 Quality of Bathing Waters Directive (76/160/EEC). The 'sufficient' classification is related to compliance with guide and mandatory values, 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.

The new Directive on bathing water (Directive 2006/7/EC) establishes tighter microbiological standards for two new parameters Intestinal enterococci and Escherichia coli. From the 2011 bathing season onwards, these two robust microbiological parameters will be monitored and used to classify bathing waters.

Online Bathing Water System óSplash

In July 2009, the EPA launched a new online map-based website (www.bathingwater.ie) that provides the public with bathing water quality information for the 131 designated bathing areas around Ireland. The website provides the latest bathing water sampling results for each bathing area during the bathing season and their compliance status with EU bathing water quality standards. It also provides information about the compliance history of these bathing areas from 2003 onwards. In addition, the website provides a description of the beach, aerial and ordinary photography, details of blue flag status and lifeguard availability, as well as current weather and tidal information. The national bathing water report which the EPA previously published annually has now been replaced by Splash, which provides in addition to other items, an overview of bathing water quality status at various levels: national, each relevant local authority, each river basin district and each designated bathing area.

Overview of Bathing Water Quality in 2009

Quality of All Bathing Waters

A total of 131 designated bathing areas, comprising 122 seawater and 9 freshwater, were monitored by local authorities throughout the 2009 bathing season. The results of samples analysed were assessed against two sets of EU standards:

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

- Dunmore Strand Dunmore East (Co. Waterford)
- Duncannon (Co. Wexford)
- Killala Ross Beach (Co. Mayo)
- Youghal Main Beach (Co. Cork)

Freshwater

- Lilliput, Lough Ennel (Co. Westmeath).

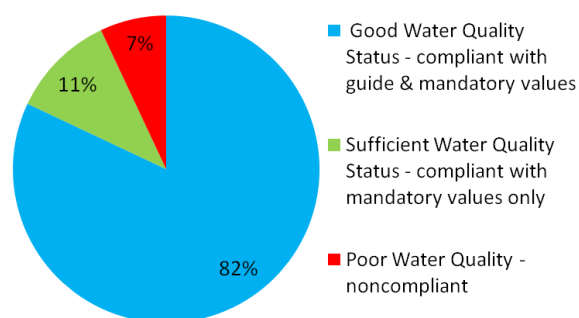
In 2009, 82 per cent of bathing areas (108 of 131 areas) also complied with the guide values and achieved good water quality status. From 2008 to 2009 the proportion of bathing areas of good water quality increased by 4 per cent (Table 1).

In 2009, the quality of Ireland's bathing waters remained 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 2008 to 2009, the proportion of bathing areas of sufficient water quality remained unchanged (Table 1). Of the nine bathing areas that failed to achieve sufficient water quality status, eight were seawater and one was freshwater as follows:

Seawater

- Balbriggan Front Strand, Skerries South Beach, Sutton Burrow Beach (Dublin Fingal)
- Clifden beach (Co. Galway)

Fig. 1, 2009 Water Quality Status of All Bathing Areas



The water quality status of 27 bathing areas changed between 2008 and 2009 as detailed in Table 2. Improvements in water quality were noted at 17 bathing areas which are to be commended. Deteriorations in water quality occurred at ten bathing areas.

Table 1 Comparison of Bathing Water Quality Status in 2008 and 2009

	Seawater		Freshwater		Overall	
	2008	2009	2008	2009	2008	2009
Number of bathing areas	122	122	9	9	131	131
Number of bathing areas achieving sufficient water quality	116	114	6	8	122	122
Percentage of bathing waters of sufficient water quality	95%	93%	67%	89%	93%	93%
Number of bathing areas achieving good water quality	98	102	4	6	102	108
Percentage of bathing waters of good water quality	80%	84%	45%	67%	78%	82%

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

Donegal County Council, Dublin City Council, Dun Laoghaire Rathdown County Council, Galway City Council, Kerry County Council, Louth 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. Of particular concern are the bathing areas Clifden which failed to achieve sufficient water quality

status for the past five years and Balbriggan Front Strand which achieved sufficient water quality status only once in the last seven years.

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.

More information can be found on the Splash website (www.bathingwater.ie).

Table 2 Changes in Water Quality Status of Designated Bathing Areas between 2008 and 2009

Local Authority	Bathing Area	2008	2009	Trend	
Clare County	Ballyallia Lake, Ennis	P	S		
Cork County	Youghal, Claycastle	S	G		
	Coolmaine	G	S		
	Fountainstown	S	G		
	Youghal Main beach	S	P		
Dublin City	Merrion Strand	S	G		
	Sandymount Strand	S	G		
Dun Laoghaire Rathdown	Killiney	S	G		
Dublin Fingal	Loughshinny beach	P	S		
	Malahide beach	P	S		
	Portrane, Brook Beach	P	G		
	Skerries, South Beach	S	P		
	Sutton, Burrow Beach	S	P		
Galway County	Bathing Place at Portumna	S	G		
	Trá na mBan An Spidéal	S	G		
Leitrim County	Keeldra Lough	P	S		
Louth County	Seapoint	S	G		
Mayo County	Killala, Ross Beach	G	P		
	Louisburgh, Old Head Beach	G	S		
Sligo County	Enniscrone	G	S		
	Rosses Point	S	G		
Waterford County	Ardmore	P	S		
	Dunmore Strand, Dunmore East	G	P		
	Tramore beach	S	G		
Westmeath County	Portnashangan, Lough Owel	S	G		
Wexford County	Ballymoney	G	S		
	Duncannon	S	P		
G	Good Water Quality	S	Sufficient Water Quality	P	Poor Water Quality

Appendix 2 2009 Compliance & Water Quality Status of Designated Bathing Areas

Responsible Local Authority	Bathing Area	Water Quality Status	Compliance with EU		Compliance with Faecal Streptococci Guide Value	
			Mandatory	Guide		
Clare County Council	Ballyallia Lake, Ennis	Sufficient		X	X	
	Ballycuggeran	Good			ç	
	Bishopsquarter	Good			ç	
	Cappagh Pier, Kilrush	Good			ç	
	Fanore	Good			ç	
	Kilkee	Good			ç	
	Lahinch	Good			ç	
	Mountshannon, Lough Derg	Good			ç	
	Spanish Point	Good			ç	
	White Strand, Doonbeg	Good			ç	
	White Strand, Miltown Malbay	Good			ç	
	Cork County Council	Barley Cove	Good			ç
		Youghal, Claycastle	Good			ç
Coolmaine		Sufficient		X	ç	
Fountainstown		Good			ç	
Garretstown		Good			ç	
Garrylucas, White Strand		Good			ç	
Garryvoe		Good			ç	
Inchydoney		Good			ç	
Owenahincha		Good			ç	
Redbarn		Good			ç	
Tragumna		Good			ç	
Warren		Good			ç	
Youghal, Main Beach		Poor	X	X	ç	
Donegal County Council	Ballyhernan, Fanad	Good			ç	
	Bundoran	Good			ç	
	Carrickfinn	Good			ç	
	Culdaff	Good			ç	
	Downings	Good			ç	
	Drumatinny	Good			ç	
	Fintra	Good			ç	
	Killahoey	Good			ç	
	L a d y ' s B a y , B u n c r a	Good			ç	
	Lisfannon	Good			ç	
	Marble Hill	Good			ç	
	Murvagh	Good			ç	
	Naran, Portnoo	Good			ç	
	Port Arthur, Derrybeg	Good			ç	
	Portnablagh	Good			ç	
	Portsalon	Good			ç	
	Rathmullan	Good			ç	
Rossnowlagh	Good			ç		
Shroove	Good			ç		

Note: Good water quality status – compliant with EU guide & mandatory values; Sufficient water quality status – compliant with EU mandatory values only; Poor water quality status – noncompliant with EU guide and mandatory values; .The parameter faecal streptococci is not one of the five parameters used for EU compliance, however, compliance with the guide value for this parameter is considered for Blue Flag Awards.

Responsible Local Authority	Bathing Area	Water Quality Status	Compliance with EU		Compliance with Faecal Streptococci Guide Value	
			Mandatory	Guide		
Dublin City Council	Dollymount Strand	Good			ç	
	Merrion Strand	Good			ç	
	Sandymount Strand	Good			X	
Dun Laoghaire Rathdown	Killiney	Good			ç	
	Seapoint	Good			ç	
Fingal County Council	Balbriggan, Front Strand Beach	Poor	X	X	X	
	Donabate, Balcarrik Beach	Sufficient		X	X	
	Loughshinny beach	Sufficient		X	X	
	Malahide beach	Sufficient		X	X	
	Portmarnock beach	Good			ç	
	Portrane, the Brook Beach	Good			ç	
	Rush, South Beach	Sufficient		X	X	
	Skerries, South Beach	Poor	X	X	X	
	Sutton, Burrow Beach	Poor	X	X	X	
	Galway County Council	An Trá Mór, Coill Rua, Indreabhán	Good			ç
Bathing Place at Loughrea Lake		Good			ç	
Bathing Place at Portumna		Good			ç	
Céibh an Spidéil		Good			X	
Cill Mhuirbhigh, Inis Mór		Good				
Clifden Beach		Poor	X	X	X	
Goirtín, Cloch Na Rón		Good			ç	
Trá na bhForbacha		Sufficient		X	ç	
Trá na mBan, An Spidéal		Good			ç	
Trá an Dóilín, An Ceathrú Rua		Good			ç	
Trá Chaladh Fínis, Carna		Good			ç	
Traught, Kinvara		Good			X	
Galway City Council		Salthill	Good			ç
		Silver Strand	Good			ç
Kerry County Council	Ballinskelligs, Baile an Sceilge	Good			ç	
	Ballybunion North	Good			ç	
	Ballybunion South	Good			ç	
	Ballyheigue	Good			ç	
	Banna Strand	Good			ç	
	Castlegregory	Good			ç	
	Derrynane	Good			ç	
	Fenit	Good			ç	
	Inch	Good			ç	
	Inny, Waterville	Good			ç	
	Kells	Good			ç	
	Maharabeg, Castlegregory	Good			ç	
	Rossbeigh, White Strand	Good			ç	
	Ventry, Ceann Trá	Good			ç	
Leitrim County Council	White Strand, Caherciveen	Good			ç	
	Keeldra Lough	Sufficient		X	ç	

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Responsible Local Authority	Bathing Area	Water Quality Status	Compliance with EU Mandatory Guide		Compliance with Faecal Streptococci Guide Value
Louth County Council	Clogherhead	Good			ç
	Port, Lurganboy	Good			ç
	Seapoint	Good			ç
	Shelling Hill/Templetown	Good			ç
Mayo County Council	Bertra	Good			ç
	Carrowmore	Good			ç
	Dugort	Good			ç
	Doega, Achill	Good			ç
	Elly Bay, Belmullet	Good			ç
	Golden Strand, Achill	Good			ç
	Keel, Achill	Good			ç
	Keem, Achill	Good			ç
	Killala, Ross Beach	Poor	X	X	ç
	Louisburgh, Old Head Beach	Sufficient		X	ç
	Louisburgh, Silver Strand	Good			ç
	Mullaghroe, Belmullet	Good			ç
	Mulranny	Good			ç
	Rinroe, Carratigue	Good			ç
	The Harbour, Clare Island	Good			ç
	Meath County Council	Laytown/Bettystown	Good		
Sligo County Council	Enniscrone	Sufficient		X	ç
	Mullaghmore	Good			ç
	Rosses Point	Good			ç
Waterford County Council	Ardmore Beach	Sufficient		X	X
	Bonmahon Beach	Good			ç
	Clonea Beach	Good			ç
	Counsellors' Strand	Sufficient		X	X
	Dunmore Strand, Dunmore East	Poor	X	X	X
	Tramore Beach	Good			ç
Westmeath County Council	Lilliput, Lough Ennel	Poor	X	X	ç
	Portnashangan, Lough Owel	Good			ç
	The Cut, Lough Lene	Good			ç
Wexford County Council	Ballymoney, North Beach	Sufficient		X	ç
	Courtown, North Beach	Good			ç
	Curracloe	Good			ç
	Duncannon	Poor	X	X	X
	Morriscastle	Good			ç
	Rosslare Strand	Good			ç
Wicklow County Council	Bray Beach	Sufficient		X	ç
	Brittas Bay North	Good			ç
	Brittas Bay South	Good			X
	Clogga Beach	Good			ç
	Greystones	Good			ç
	Silver Strand	Good			ç

Note: Good water quality status – compliant with EU guide & mandatory values; Sufficient water quality status – compliant with EU mandatory values only; Poor water quality status – noncompliant with EU guide and mandatory values; .The parameter faecal streptococci is not one of the five parameters used for EU compliance, however, compliance with the guide value for this parameter is considered for Blue Flag Awards.