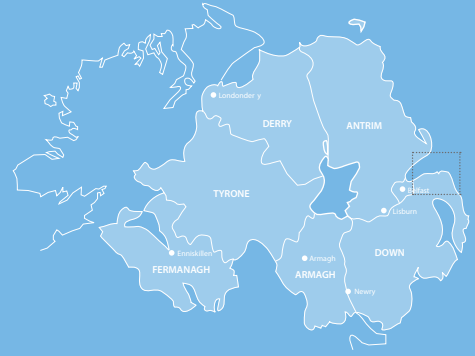


Northern Ireland
Environment Agency

Bathing Water Profile

Ballyholme

May 2012



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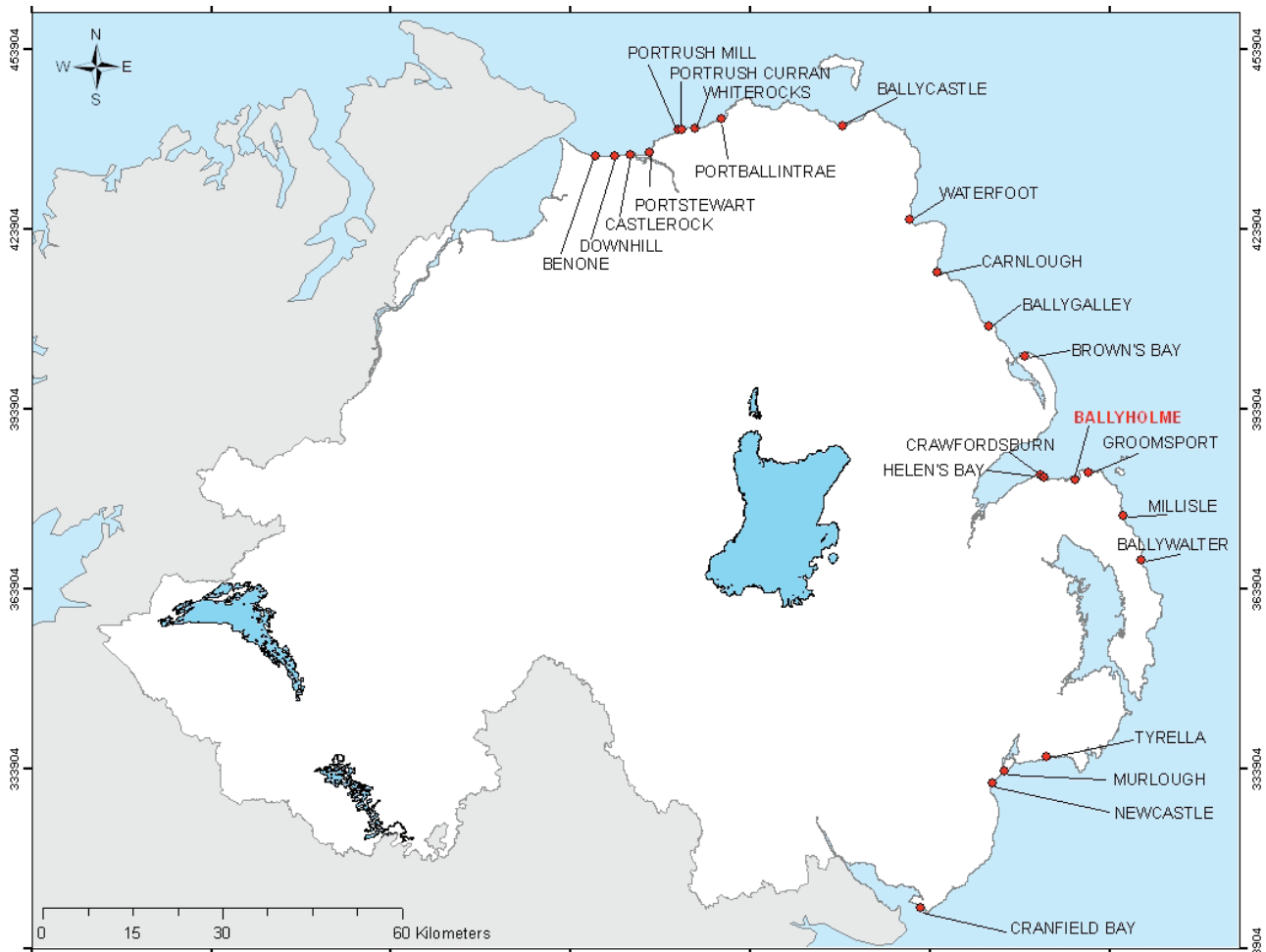


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Map of Northern Ireland's Bathing Waters



Background to Bathing Water Profiles

This is one of a series of profiles which cover all 23 of Northern Ireland's identified bathing waters. These are the most popular of our bathing areas and have been 'identified' as part of a network of European bathing sites.

The purpose of the bathing water profile is to help the bather to make an informed choice before bathing. The profile gives information on the physical, geographical and hydrological characteristics of the bathing water while assessing the possible pollution risk at the site. Bathing water profiles are a new European requirement, under the 2006 revised Bathing Waters Directive (www.doeni.gov.uk/niea/new-bathing-water-directive). It is our intention to review the profiles annually.

All of our bathing waters are monitored on 20 occasions during the bathing season. In Northern Ireland the season runs between 1st June and 15th September each year. Bathing waters are tested for bacteria which indicate faecal contamination. Results are published weekly to bathing water operators and to the NIEA web site. Waters are then classified annually as Excellent, Good or Poor, as defined by the European Bathing Water Directive, 1976.

In effect, this profile reflects a transition from the 1976 Directive to the 2006 Directive which must be fully implemented by 2015.

Key Information

Bathing Water Name	Ballyholme Bathing Water
EU bathing water ID number	UKNO2_52300
Location	UK/Northern Ireland/County Down/North Down Coast (Map 1)
Year of identification	1993
Local council area	North Down Borough Council
Bathing Water Operator	North Down Borough Council
Description of bathing beach	Sand, approximately 1.3 kilometres in length.
Monitoring Point	Western end of bathing water, J51788226 (Map 2)

A Description of Ballyholme bathing water and the surrounding area

Ballyholme bathing water is a popular visitor destination located on the North Down coast. Ballyholme is a suburb of the seaside town of Bangor which has a population of approximately 60,000. The beach is sandy and is approximately 1.3 km in length. There is a typical rocky shore at each end. The majority of the bathing water is backed by a seawall and promenade. The far eastern end of the bathing water is backed by a privately owned woodland area. A car park, public toilets and children's play area are also at the eastern end. Public toilets and a smaller children's play area are also located at the western end. The residential suburb of Ballyholme surrounds the bathing water and Ballyholme Yacht Club is adjacent to the bathing area at the western end. There are a number of groynes crossing the beach.

Inland from the urbanised area, the catchment for this bathing area consists of improved grassland, arable farming and dense dwarf shrub heath.

The Cotton River flows across the bathing water midway along the beach. This river flows through both urbanised and rural areas and may be influenced by pollution from all sources.

Bathing Water Quality History at Ballyholme

Ballyholme bathing water was identified in 1993. Monitoring and reporting is carried out by Northern Ireland Environment Agency (NIEA). Its history of compliance is displayed below and can also be viewed at www.doeni.gov.uk/niea/bathingqualityni

Ballyholme Bathing Water Quality 2006-2011



Key: Excellent ● Good ● Poor

The 1976 Directive classified bathing waters as Excellent, Good or Poor. In 2006 a new revised Bathing Water Directive replaced the 1976 Directive. Under a new system of bacterial monitoring bathing waters will, from 2015, be judged against more stringent standards and classified as Excellent, Good, Sufficient and Poor. Using the data collated over the past years, predictions have been made of the new water quality classification and can be seen at www.doeni.gov.uk/niea/new-bathing-water-directive. This new system of classification will become 'live' in 2015. NIEA will continue to display both classifications up until that time, although the old classification results will be based on equivalence calculations from the new measurement methodologies, agreed at a UK level.

All of Northern Ireland's water quality objectives are set out in River Basin Management Plans (www.doeni.gov.uk/niea/wfd) and detailed management activities are published within Local Management Area Plans (which can be viewed through the same link). These encompass agreed overall objectives for water quality including the quality of identified bathing waters.

Potential sources of pollution and measures to reduce the impact at the bathing water

It should be noted that weekly classification at Ballyholme bathing water is generally Excellent or Good. However, since 2006 the bathing water has failed the overall mandatory compliance standards of the 1976 Directive on three occasions (2007, 2008, 2010), recording 'Poor' water quality.

The potential sources of pollution have been split into three main categories. These are waste water (sewage) treatment works discharges, waste water systems in urban areas and rural source pollution, including agriculture.

Are there Waste Water Treatment Works in the vicinity of Ballyholme beach?

There are no treated waste water outfalls and waste water treatment works located in the immediate vicinity of Ballyholme bathing water (Map 1). Waste water from the wider Bangor area is pumped to a major waste water treatment facility between Bangor and Donaghadee. This facility was completed during 2009. It provides secondary treatment with UV disinfection during the bathing season. The treated effluent is discharged some 600m offshore, to the north east of Brigg's Rocks. This is approximately 4.5 km north east of the Ballyholme bathing water. The discharge location of the outfall was selected following extensive computational modelling designed to ensure protection of all of the bathing waters in the area. Upgrades to the entire sewerage system are ongoing to bring the entire area up to the requirements of the Urban Waste Water Treatment and Bathing Waters Directives.

Are there other risks of pollution from waste water systems?

The urbanisation associated with Ballyholme and Bangor is a potential source of pollution, especially during and after periods of prolonged or heavy rainfall. In the event of very heavy rainfall a collection system may not be able to deal with all the flow received. A portion of the contents of the collection system may overflow to a waterway under storm conditions. [This is why there is general advice not to bathe during or up to 2 days after such rain.](#) There have been water quality problems associated to storm discharges in the past.

The municipal collection and treatment of waste water has the potential to cause pollution because all combined collection systems must be designed to overflow in periods of extreme wet weather or following failure of the system. If systems are not designed in that way, then sewers may overflow into residential areas. Within the area there are combined sewer overflows (CSO), emergency overflows and sewage pumping stations (SPS) with associated emergency overflows as shown on Map 1.

In order to reduce the potential for pollution in the water environment from these systems NIEA requires that all current and proposed systems meet the requirements of the Urban Wastewater Treatment Directive (www.doeni.gov.uk/niea/uwwt_gid2_2002.doc) and the Water Framework Directive (WFD) (www.doeni.gov.uk/niea/wfd).

During the expansion of any urban area, there is the potential for misconnections between the sewer system and surface drains, which may allow untreated wastewater to enter the water environment. When these become apparent, NIEA pursues them as pollution incidents.

A further measure in tackling urban pollution is through the use of sustainable urban drainage systems (SUDS), which NIEA encourages through its SUDS Strategy. Other measures include compliance with the Northern Ireland Water Order 1999 and implementation of Pollution Prevention Guidelines (www.doeni.gov.uk/niea/potential-polluters.htm#vehiclewashoperators).

Are there risks from agriculture and rural activities?

Agriculture is a major industry in Northern Ireland and although the bathing water is located in a highly urban area, the Cotton River, which flows across the bathing water, passes through both urban and agricultural land. The land cover within the catchment area of Ballyholme bathing water is improved grassland, arable farming and dense dwarf shrub heath. Areas within the catchment where agriculture is the dominant land use may be subjected to inputs from chemical fertilisers and organic wastes which can contribute to pollution problems in the surrounding area. Prolonged periods of rainfall can cause surface runoff of these organic wastes, such as animal slurries, contributing to the bacteria content in the water environment. There have been water quality problems associated to agricultural pollution in the Cotton River in the past.

The Nitrates Action Programme Regulations (Northern Ireland) 2010 (previously the Nitrates Action Programme Regulations (Northern Ireland) 2006) and the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006 were introduced to improve the use of nutrients on farms and as a result improve water quality throughout Northern Ireland. The effectiveness of these regulations is continually reviewed through monitoring, enforcement and education.

Septic tanks also have the potential to cause localised pollution, but there is no evidence to suggest that this is impacting Ballyholme bathing water.

Are there other potential sources of pollution?

Other sources of pollution exist in this bathing area, these include;

- Dogs
- Horses
- Litter
- Fly tipping

All issues have been addressed through local signage to ensure that these controllable causes of pollution do not affect the bacteria content of the water.

NIEA have compiled River Basin Management Plans, these take an integrated approach to the protection, improvement and sustainable use of the water environment. Each plan identifies existing pollution reduction programmes and additional measures which could be implemented to maintain or improve the water quality.

Ballyholme is located in the North Eastern River Basin Management Plan within the Belfast Lough local management plan - further details can be found at www.doeni.gov.uk/niea/belfast-lough_lma_actionplan.pdf

Is there evidence of short term water pollution events at Ballyholme?

From 2008-2011 there were forty-three confirmed pollution events within 3kms of the bathing water. Twenty-two of these occurred during the bathing seasons. Four of these incidents were a deterioration in bathing water quality.

What should I do if I see a pollution incident?

If you see a water pollution incident, you should immediately contact NIEA through the Emergency Water Pollution Hotline, which is operated 24 hours.

Phone: 0800 807060

When a pollution incident is reported or pollution is found to be affecting the water quality of a bathing water, an immediate investigation is instigated. All possible sources of pollution are checked. In addition, a resample will be collected to monitor whether the beach is still polluted. Bathing waters may be closed (by local authority or controlling body) until the water quality has improved and levels of bacteria are within mandatory standards.

Macro-Algae, Phytoplankton and Cyanobacteria (blue-green algae)

Ballyholme bathing water is not at risk of a proliferation of macro-algae, phytoplankton or cyanobacteria (blue/green algae).

Daily water quality forecasts

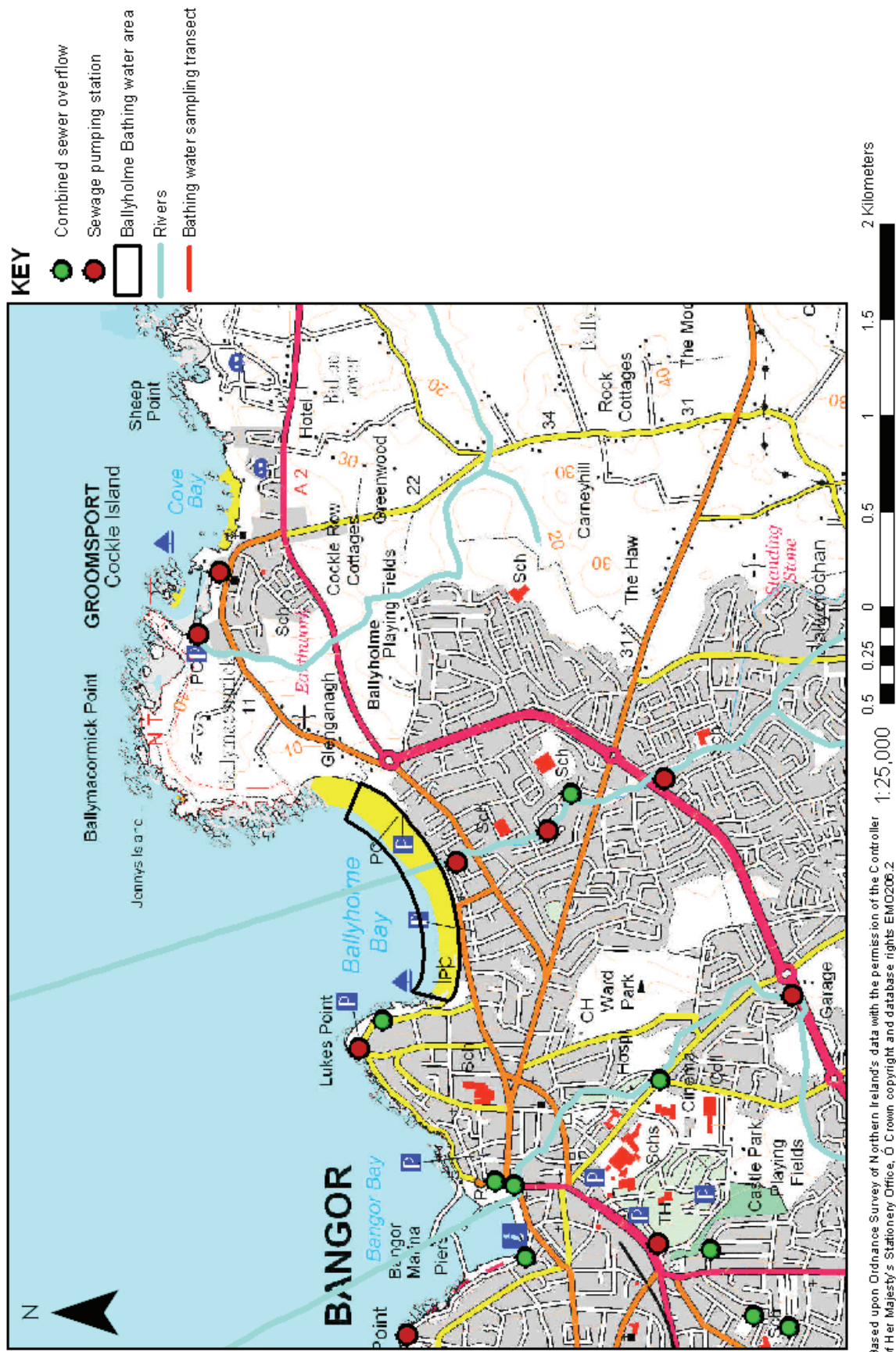
There is presently no facility to predict bathing water quality on a daily basis. However, the general advice remains: do not bathe during or for up to 2 days after heavy rainfall events.

Contact details

For general information about bathing waters:

NIEA	Water Management Unit General Enquiries 17 Antrim Road Tonagh Lisburn, BT28 3AL Email: WaterInfo@doeni.gov.uk
NIEA Water Quality	Phone: 028 9262 3100
NIEA Water Pollution Enquiries	Phone: 0800 807060
Local Authority	North Down Borough Council Town Hall The Castle Bangor, BT20 4BT Phone: 028 9127 0371

Map 1
Ballyholme Bathing Water -
Potential Pollution Sources



Map 2
Ballyholme Bathing Water -
EC Bathing Water Sample Location



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Our aim is to protect, conserve and promote the natural environment and built heritage for the benefit of present and future generations.

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Email: WaterInfo@doeni.gov.uk