

Bathing Water Profile

# Ballyholme

May 2023



*Sustainability at the heart of a living, working, active landscape valued by everyone.*



Department of  
**Agriculture, Environment  
and Rural Affairs**

[www.daera-ni.gov.uk](http://www.daera-ni.gov.uk)



## Map of Northern Ireland's Bathing Waters 2023



## Background to Bathing Water Profiles

This is one of a series of profiles which cover all 26 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 requirement, under the Quality of Bathing Water Regulations (Northern Ireland) 2008 ([www.daera-ni.gov.uk/articles/bathing-water-quality](http://www.daera-ni.gov.uk/articles/bathing-water-quality)). It is our intention to review the profiles annually.

All of our bathing waters are monitored 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 NI Direct website ([www.nidirect.gov.uk/articles/bathing-water-quality](http://www.nidirect.gov.uk/articles/bathing-water-quality)). Waters are then classified annually as Excellent, Good, Sufficient or Poor, as defined by the Quality of Bathing Water Regulations (Northern Ireland) 2008.

## Key Information

<b>Bathing Water Name</b>	Ballyholme Bathing Water
<b>Location</b>	UK/Northern Ireland/County Down/North Down Coast
<b>Year of identification</b>	1988
<b>Local council area</b>	Ards and North Down Borough Council
<b>Bathing Water Operator</b>	Ards and North Down Borough Council
<b>Description of bathing beach</b>	Sand, approximately 1.3 kilometres in length.
<b>Monitoring Point</b>	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.

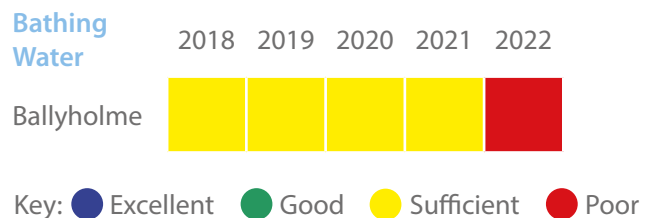
Inland from the urbanised area, the catchment for this bathing area consists of improved grassland, arable farming and dense dwarf shrub heath.

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 at Ballyholme

Ballyholme bathing water was identified in 1988. Monitoring and reporting is carried out by DAERA Marine and Fisheries Division.

### Ballyholme Bathing Water Quality 2018-2022



Bathing Waters are classified as Excellent, Good, Sufficient or Poor (see above). This classification is based on a statistical assessment of results from the last four years.

All of Northern Ireland's water quality objectives are set out in the River Basin Management Plan ([www.daera-ni.gov.uk/topics/water/river-basin-management](http://www.daera-ni.gov.uk/topics/water/river-basin-management)). Within the Programme of Measures in the River Basin Management are a number of measures which relate directly to the protection of 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 in 2022 water quality was reported as 'poor' with the bathing area failing to meet the mandatory compliance of the Quality of Bathing Water Regulations (Northern Ireland) 2008.

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.

DAERA Marine and Fisheries Division work with NIEA and other Departments to identify and resolve sources of pollution.

Over the past number of years Ballyholme bathing water catchment was been prioritised for investigation by DAERA staff to determine outstanding sources of pollution. The investigations have determined that this remains to be a complex catchment which is vulnerable to pressures from both agricultural run-off and overflows from the wastewater treatment network. Proposed improvement actions are underway and further actions are currently being considered.

Northern Ireland Water have undertaken an extensive programme of works in the Bangor area, with work due for completion in 2023.

## Waste Water

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. 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 4.5km north east of the Ballyholme bathing water. A programme of improvement work is currently underway to upgrade the sewerage infrastructure, Combined Sewer Overflows (CSOs) and Wastewater Pumping Stations (WwPSs) in the Bangor area. At an estimated £15 million total investment by NI Water, the project aims to provide greater protection of the water quality in Ballyholme.

The work at Castle Park which included the upgrading of 8 CSOs and the construction of a new Wastewater Pumping Station is now complete. A further schedule of work is currently underway and due for completion in 2023.

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. There have been water quality problems associated to storm discharges in the past. [This is why there is general advice not to bathe during or up to 2 days after such rain.](#) 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 wastewater pumping stations 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 Waste Water Treatment Regulations (Northern Ireland) 2007 ([www.daera-ni.gov.uk/articles/urban-waste-water](http://www.daera-ni.gov.uk/articles/urban-waste-water)) and the

Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017.

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 (<https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/>).

## Agriculture and rural activities

Agriculture accounts for approximately 70% of the total Northern Ireland land area of 1.4 million hectares, and characterises much of the rural landscape. The agricultural industry is predominately grass based, with grazing livestock accounting for more than two-thirds of the gross industry output. Agriculture and the agri-food sector makes a very important contribution to the economy of Northern Ireland.

The most significant pressures on water quality are from the release of the nutrients phosphorous and nitrogen from agricultural sources. Agriculture can also give rise to sediment entering waters due to the damage caused to river banks and lake shores by livestock trampling and from other types of land disturbance e.g. ploughing and overgrazing. Agricultural activities are also a source of certain microbial vectors causing human illnesses including cryptosporidium and e-coli bacteria which can be an issue in bathing water areas. Other pressures from agriculture include the contamination of waters from hazardous chemicals, such as pesticides and sheep dip.

The Nitrates Action Programme and the Phosphorous Regulations have been revised and combined into the **Nutrients Action Programme (NAP) 2019-2022**. The Nutrient Action Programme (Amendment) Regulations (Northern Ireland) 2019 came into operation on 15 October 2019. The revised NAP has new measures to promote more efficient nutrient management and best practice.

The **Knowledge Advisory Service (KAS)** was set up in April 2018 as a single advisory service aimed at supporting Northern Ireland's farm and food businesses.

The **Environmental Farming Scheme (EFS)** is DAERA's agri-environment scheme under the Rural Development Programme 2014-2022. EFS has been designed to address specific environmental needs, primarily relating to biodiversity and water.

A **Soil Nutrient Health Scheme (SNHS)** for Northern Ireland was launched in 2022 and will run for 4 years. The Scheme is a soil sampling and carbon analysis scheme that will provide farmers with nutrient levels in their soils across all fields as well as providing an accurate estimate of the carbon stored in the soils, hedgerows and trees on their farms. The scheme will benefit farmers in management of their nutrient applications which will help improve water quality and manage agricultural land more effectively.

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.

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

## 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 the River Basin Management Plan, which takes an integrated approach to the protection, improvement and sustainable use of the water environment. This 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 District. A draft of the 2021-2027 river basin management plan can be found here: [https://www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%203rd%20cycle%20River%20Basin%20Management%20Plan%20for%20Northern%20Ireland%202021-2027\\_0.PDF](https://www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%203rd%20cycle%20River%20Basin%20Management%20Plan%20for%20Northern%20Ireland%202021-2027_0.PDF)

## Pollution events

From 2019-2022 there were forty-one confirmed pollution incidents within 3kms of the bathing water.

## 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

Ballyholme is one of six bathing waters in Northern Ireland with daily bathing water quality prediction modelling. The model has been developed under the [Swim NI](#) programme with predictions available to the public during the bathing season. The project was originally funded by the EU's INTERREG VA programme, managed by the Special EU Programmes Body (SEUPB), and match-funded by the Department of Agriculture, Environment and Rural Affairs in Northern Ireland (DAERA), and the Department of Housing, Planning and Local Government in Ireland. This model is currently in the pilot stage and daily water quality predictions are based on forecasted weather. Results are updated daily at 09:00. The predictions can be found on electronic signage or QR codes displayed at the bathing water and on the [Swim NI](#) webpage or App. This system provides members of the public with a warning when there may be poor water quality brought about by short-term pollution events, enabling them to make an informed choice about bathing. As weather forecasts are not always accurate DAERA advice remains not to bathe during or up to 2 days after prolonged or heavy rain.

## Contact details

For general information about bathing waters:

### DAERA

Marine and Fisheries Division  
17 Antrim Road,  
Tonagh,  
Lisburn,  
BT28 3AL

Email: [Marine.InfoRequests@daera-ni.gov.uk](mailto:Marine.InfoRequests@daera-ni.gov.uk)

Phone: 028 9262 3244

### Water Pollution 24hr Hotline

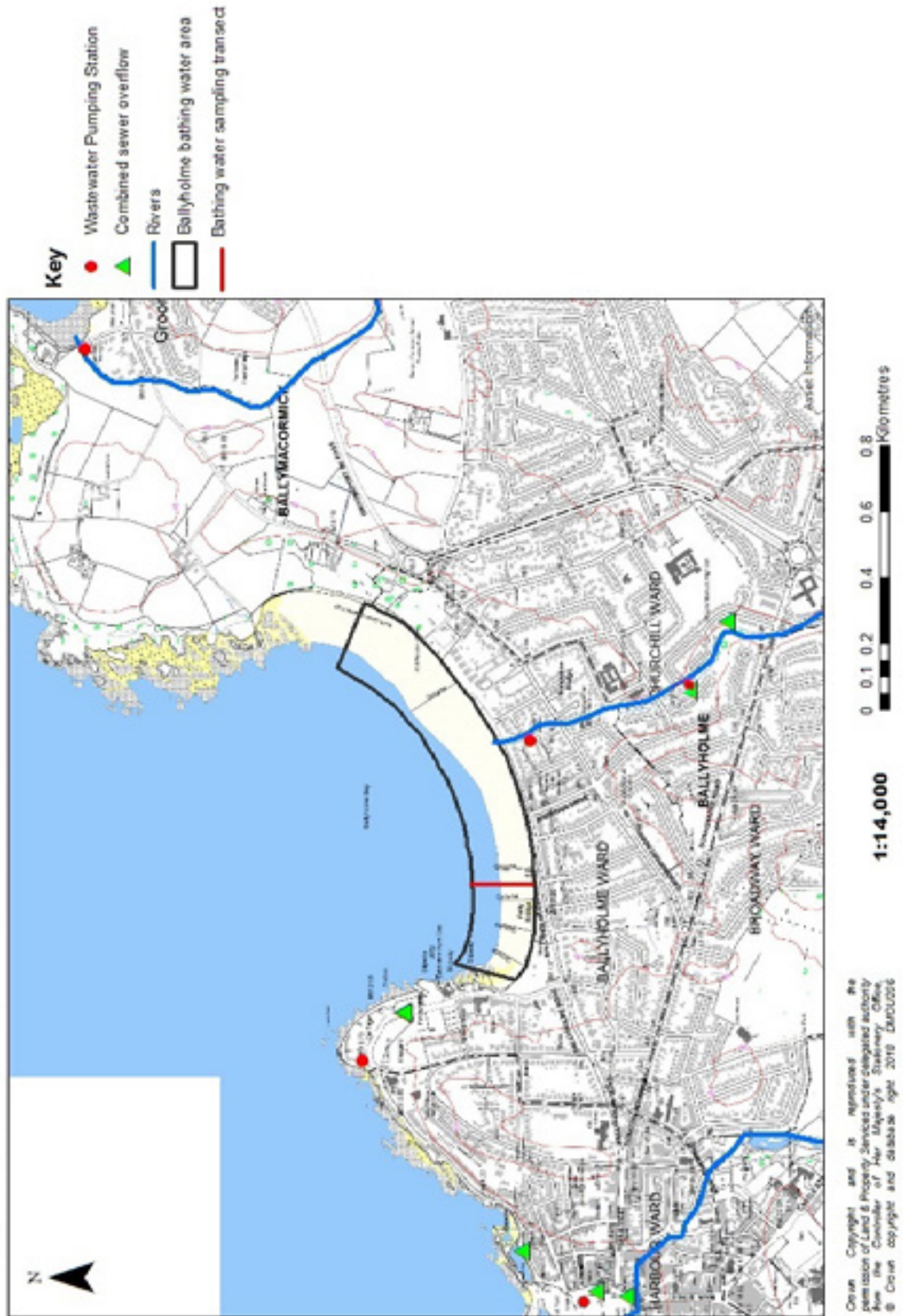
Phone: 0800 807060

### Local Authority

Ards and North Down Borough  
Council,  
Town Hall  
The Castle,  
Bangor,  
BT20 4BT

Phone: 0300 013 3333

Map 1  
Ballyholme Bathing Water -  
Potential Pollution Sources



Map 2  
Ballyholme Bathing Water -  
EC Bathing Water Sample Location





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