# **Ballyholme – Bathing Water Profile**



### 6

### **Bathing Water Classification**

Ballyholme is one of six bathing waters in Northern Ireland for which daily bathing water quality predictions are being made as part of the SWIM NI project. SWIM NI is currently in the pilot stage, more information on which can be found at <u>Swim NI</u>

#### There is general advice not to bathe during or up to 48hrs after heavy or prolonged rainfall.

**Description** Located close to the city of Bangor the sandy beach is approximately 1.3km in length, with a rocky shore at each end, and a number of groynes crossing the beach. The bathing water is predominately backed by a seawall and promenade, with facilities such as a car park, public toilets and children's play area at the eastern end. Ballyholme Yacht Club, children's play area and public toilets are located at the western end and the residential suburb of Ballyholme surrounds the bathing water. 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.

Site Details Local council area – Ards and North Down Borough Council

Year of designation – 1988

Water sampling location - Lat 54.66563, Long -5.64829

### Potential Pollution and measures to reduce impact on site:

The potential sources of pollution have been split into three categories; wastewater (sewage) treatment works discharges, wastewater 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.

Ballyholme bathing water had an overall 'Sufficient' status from 2018 to 2021 but was 'Poor' in 2022 and 2023. To address this drop in annual classification, a collaborative partnership between DAERA, NI Water and a number of other stakeholders has instigated a thorough investigative programme for the whole catchment. The purpose of this Ballyholme study is to further identify key sources of pollution that are adversely impacting water quality so that remediation plans can be appropriately targeted.

This remains a complex catchment that is known to be vulnerable to pressures from both agriculture runoff and overflows from the wastewater treatment network.

### Wastewater (sewage) treatment works discharges.

There are no treated wastewater outfalls and wastewater treatment works located in the immediate vicinity of Ballyholme bathing water (Map 1). Wastewater from the wider Bangor area is pumped to a major wastewater 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 northeast of Brigg's Rocks. This is approximately 4.5km northeast of Ballyholme bathing water.

# Wastewater systems in urban areas.

An extensive upgrade to the sewerage system in and around the Bangor area is ongoing and due for completion by the end of 2025/2026. The programme of works has included the construction of a new WwPS and the upgrading of a number of Combined Sewer Overflows (CSO). The urbanisation associated with Ballyholme and nearby Bangor is a potential source of pollution especially during and after periods of prolonged/heavy rainfall.

In the event of prolonged/heavy rainfall the wastewater system may become overwhelmed leading to an overflow/discharge of wastewater. This is why there is a general advice not to bathe during or up to 48 hours after prolonged/heavy rainfall.

The collection and treatment of wastewater has the potential to cause pollution as all combined collection systems are designed to overflow in periods of extreme wet weather or following failure of the system. This prevents overflows into residential properties. Within the Ballyholme area there are combined sewer overflows (CSO) emergency overflows and wastewater pumping stations with associated emergency overflows, highlighted on Map 1.

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.

# Rural source pollution – agriculture.

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 subject to inputs from chemical fertilizers and organic wastes. 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.

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.

- Dogs
- Horses
- Litter
- Fly tipping

### Management measures:

You can find more information about Northern Ireland's water quality objectives and the protection of bathing waters in the North Eastern River Basin Management Plan, see below:

Draft 3rd cycle River Basin Management Plan for Northern Ireland 2021-2027 0.PDF (daerani.gov.uk)

Within the River Basin Management plan programme of measures there are several schemes to address sources of pollution:

- Nutrients Action Programme (NAP) 2019-2022
- Knowledge Advisory Service (KAS)
- Environmental Farming Scheme (EFS)
- Soil Nutrient Health Scheme (SNHS)

# 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).

### What should I do if I see a pollution incident?

If you see a water pollution incident, you should immediately contact NIEA through the <u>Emergency</u> <u>Water Pollution Hotline</u>, 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.

### **Contact details**

For general information about bathing waters: DAERA Marine and Fisheries Division Address: 17 Antrim Road, Tonagh, Lisburn, BT28 3AL Email: Marine.InfoRequests@daera-ni.gov.uk Website: DAERA Bathing Water Quality Local Authority Ards and North Down Borough Council

> Address: Town Hall, The Castle, Bangor, BT20 4BT Email: <u>enquiries@ardsandnorthdown.gov.uk</u> Phone: 0300 013 3333 Website: <u>Ards and North Down Borough Council</u>

### Map 1. Ballyholme Bathing Water



