Bathing Water Profile

Ballyhornan

May 2020

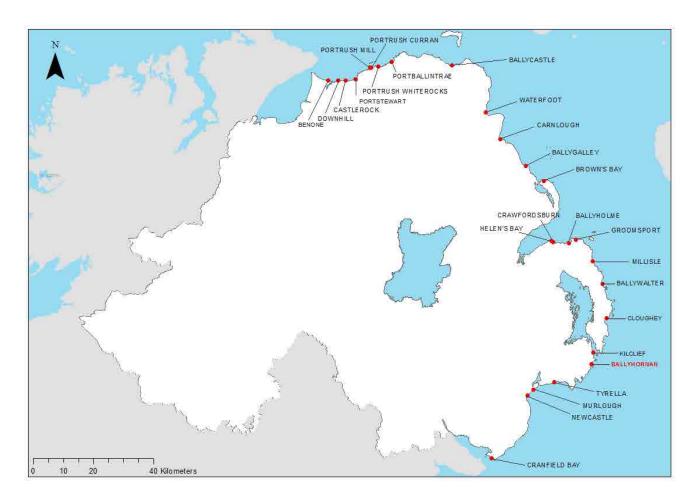








Map of Northern Ireland's Bathing Waters 2020



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 European requirement, under the 2006 Bathing Water Directive (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 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 NI Direct website (www.nidirect.gov.uk/articles/bathing-water-quality). Waters are then classified annually as Excellent, Good, Sufficient or Poor, as defined by the European Bathing Water Directive, 2006.

Key Information

Bathing Water Name Ballyhornan Bathing Water

Location UK/Northern Ireland/County

Down/South Down Coast

Year of identification 2018

Local council area Newry, Mourne and Down

District Council

Bathing Water Newry, Mourne and Down

Operator District Council

Description of Sand, approximately 0.25 **bathing beach** kilometres in length.

Monitoring Point Southern end of bathing

water, J59364196 (Map 2).

A Description of Ballyhornan bathing water and the surrounding area

Ballyhornan bathing water is located on the Lecale Peninsula in County Down. The bathing water is located at the southern end of Ballyhornan Bay, is approximately 250m in length and comprised of sand with a rocky outcrop at the southernmost end. The village of Ballyhornan, containing residential housing and a car park, is directly to the west and south of the bathing water. Housing previously utilised by the Royal Air Force and now either owner occupied, privately rented or used as holiday accommodation makes up a good portion of the residential properties in the area south of the bathing water.

Ballyhornan Bay is approximately 1km in length, the northern end of which is backed by sand dunes, a main road and agricultural land, with a few farms in the vicinity of the beach.

The catchment area for the bathing water is mainly improved grassland with arable farming.

The bathing area is within the following designated sites: Strangford Lough ASSI, Strangford Lough Special Area for Conservation, Strangford Lough Special Protected Area, Strangford and Lecale Area of Outstanding Natural Beauty and Strangford Lough RAMSAR site, all of which afford the area environmental protection.

Bathing Water Quality History at Ballyhornan

Ballyhornan bathing water was nominated for identification during a review of identified Bathing Waters in 2017. Monitoring of water quality was carried out in 2017 and preliminary results from Ballyhornan indicated Excellent water quality.

Ballyhornan bathing water was officially identified in May 2018 and is now included on the list of 26 identified bathing waters. Monitoring and reporting is carried out by DAERA Marine and Fisheries Division.

Ballyhornan Bathing Water Quality 2018-2019



In 2015 the 1976 Bathing Water Directive was replaced by the European Bathing Water Directive 2006/7/EC. This revised directive introduced more stringent bathing water standards. Bathing Waters are classified as Excellent, Good, Sufficient or Poor. Usually classification is based on a statistical assessment of results from the last four years. However the 2019 classification for this bathing water is based on results from the 2017-2019 bathing seasons.

All of Northern Ireland's water quality objectives are set out in River Basin Management Plans (www.daerani.gov.uk/topics/water/river-basin-management). Within the Programme of Measures in the River Basin Management Plans there 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 Ballyhornan bathing water is generally Good or Excellent. 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 remove sources of pollution.

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

There is one Northern Ireland Water (NIW) operated Waste Water Treatment Works approximately 0.6km to the south of Ballyhornan bathing water. The waste water from the Ballyhornan area is pumped to this Waste Water Treatment Works for treatment.

Are there other risks of pollution from waste water systems?

Ballyhornan bathing water does not have a large urban area and therefore may not be affected by this source of diffuse pollution. However the nearby residential area of Ballyhornan village has the potential to effect water quality 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.

The municipal collection and treatment of waste water has the potential to cause pollution because all collection systems must be designed to overflow in periods of extreme wet weather or following failure of the pump system. If systems are not designed in that way, then sewers may overflow into residential areas. Within the Ballyhornan area there are 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 Wastewater Treatment Directive (www.daera-ni.gov.uk/publications/waste-

water-treatment-works-discharges-and-ec-urbanwaste-water-treatment-directive) and the Water Framework Directive (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.netregs.org.uk/library_of_topics/pollution_prevention_guides.aspx).

Are there risks from 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 2014-2020. EFS has been designed to address specific environmental needs, primarily relating to biodiversity and water.

The **Sustainable Agricultural Land Management Strategy** for Northern Ireland was published in 2016 and contains further recommendations aimed at reducing phosphorus levels and managing agricultural land more effectively.

The majority of land cover within the catchment area of Ballyhornan bathing water is predominately improved grassland, along with arable farming.

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

Ballyhornan is located in the North Eastern River Basin Management Plan - further details can be found at www.daera-ni.gov.uk/publications/north-easternriver-basin-management-plan-2015-2021

Water Pollution Incidents

From 2016-2019 there were two confirmed incidents of water pollution within 3kms of the bathing water. One of these incidents occurred during the bathing season.

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)

Ballyhornan 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:

DAERA Marine and Fisheries Division

17 Antrim Road, Tonagh Lisburn, BT28 3AL

Email: Marine.InfoRequests.

daera-ni.gov.uk

Phone: 028 9262 3244

Water Pollution 24hr Hotline

Phone: 0800 807060

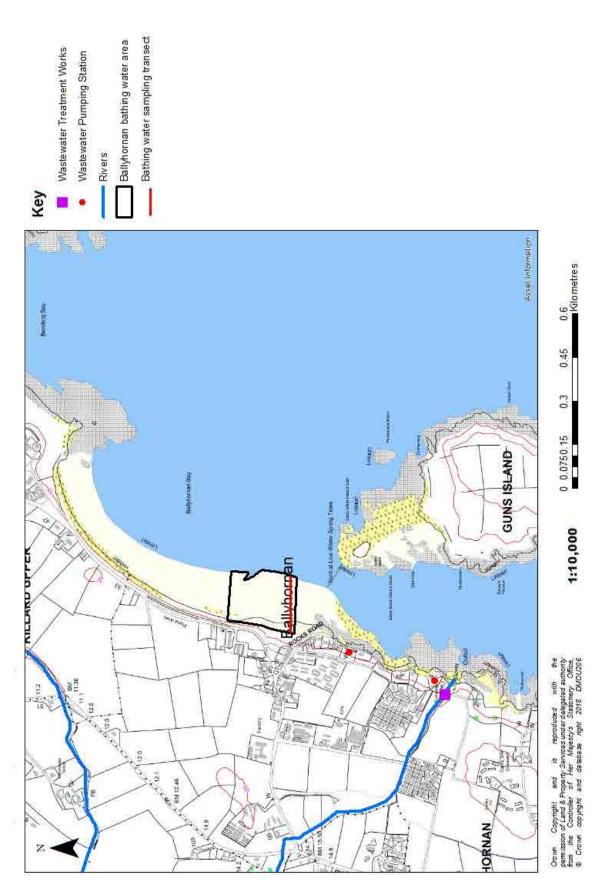
Local Authority Newry, Mourne and Down

District Council
Downpatrick Office
Downshire Civic Centre
Downshire Estate
Ardglass Road
Downpatrick
Co. Down

BT30 6GQ

Phone: 0300 013 2233

Map 1 Ballyhornan Bathing Water -Potential Pollution Sources



Map 2 Ballyhornan Bathing Water -EC Bathing Water Sample Location



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Department of Agriculture, Environment and Rural Affairs Marine and Fisheries Division 17 Antrim Road Tonagh Lisburn BT28 3AL

Water Pollution Hotline: 0800 807060

Email: Marine.InfoRequests@daera-ni.gov.uk



