Bathing Water Profile

Millisle

May 2023



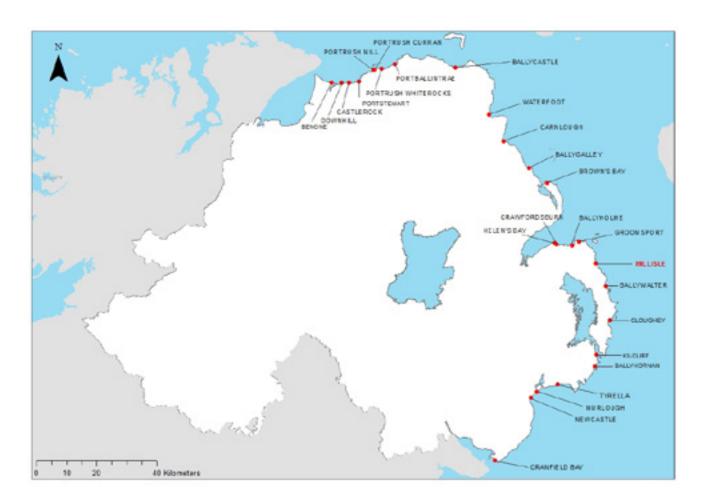


Sustainability at the heart of a living, working, active landscape valued by everyone.





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). 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). 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

Bathing Water Name Millisle Bathing Water

Location UK/Northern Ireland/County

Down/North Down Coast

Year of identification 1988

Local council area Ards and North Down

Borough Council

Bathing Water Ards and North Down

Operator Borough Council

Description of Sand, approximately 1.8 kilometres in length.

Monitoring Point Millisle Lagoon, J 59817618

(Map 2)

Two rivers enter the bathing water, the Mill Burn at the northern end and the Ballyrolly Burn at the southern end.

Inland from the urbanised coastal strip, the land usage is predominately improved grassland, along with arable farming.

Bathing Water Quality at Millisle

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

Millisle Bathing Water Quality 2018-2022



A Description of Millisle bathing water and the surrounding area

Millisle bathing water is located on the Irish Sea coast of the Ards Peninsula in North Down. The bathing water is approximately 1.8 km in length. The southern half of the bathing water is comprised mainly of sand while the northern half consists of a rocky shoreline either side of a man-made lagoon (Map 1). The area is popular with both day visitors and holiday makers.

The village of Millisle is located at the northern end of the bathing area. The population is around 1,000 in the winter rising to over 2,000 in the summer. A main road runs through the town parallel to the coast. There are extensive caravan parks to the north and to the south of the town.

Between the road and the beach are a range of amenity facilities. To the south there is car parking, public toilets and an open play area. To the north is the extensive, man made Millisle Lagoon. Further inland is the village of Millisle. Millisle Lagoon is a purpose built area consisting of approximately 150m of sand and an enclosed seawater lagoon with adjoining children's paddling pool. Both of these are refreshed with seawater every high tide. In addition, the lagoon area also contains a picnic area, a play area, a jetty, slipways and a pier and car park. The Lagoon is where most bathing takes place and this is where water quality is monitored.

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). Within the Programme of Measures in the River Basin Management Plan 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 Millisle 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 resolve sources of pollution.

Waste Water

Millisle sewerage system is part of an extensive network serving the greater Bangor (North Down and Ards) area and is currently being upgraded. A major waste water treatment works for the area 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 9 km north of the Millisle 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.

The urbanisation associated with the village of Millisle, 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.

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 Millisle bathing area there are several 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) 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.

The land cover within the catchment area of Millisle bathing water is predominately grassland with arable farming.

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

Millisle is located in the North Eastern River
Basin District A draft of the 2021-2027 river basin
management plan can be found here: www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%203rd%20cycle%20River%20Basin%20
<a href="mailto:mail

Pollution events

From 2019-2022 there were six confirmed incidents of pollution 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)

Millisle 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

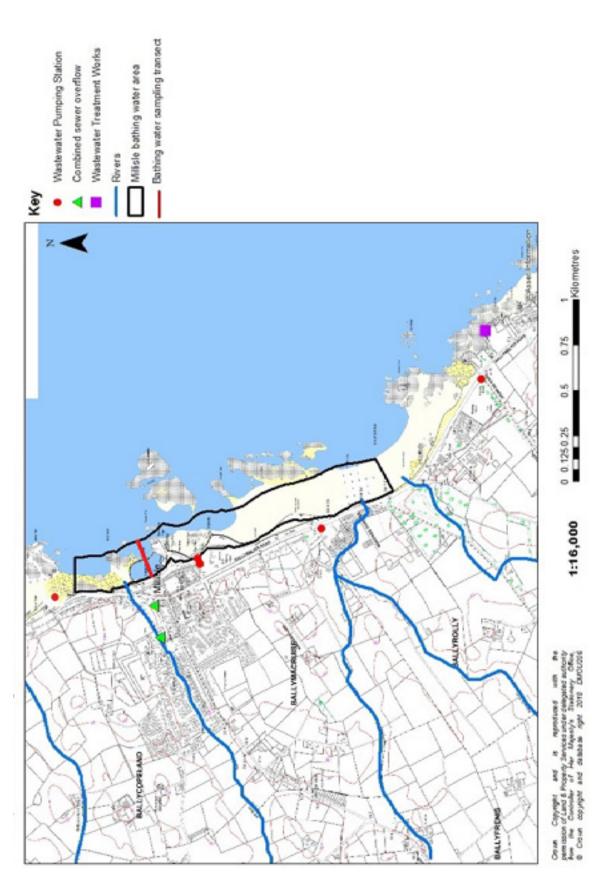
Phone: 0800 807060

Local Authority Ards and North Down Borough

Council Town Hall The Castle Bangor BT20 4BT

Phone: 0300 013 3333

Millisle Bathing Water -Potential Pollution Sources



Millsle Lagoon Bathing water area - Bathing water sampling transect 1 Kilometers Ř 0.25 0.125 0 1:10,000 © Crown copyright and database right 2013 DMOU 206

Map 2 Millisle Bathing Water -EC Bathing Water Sample Location

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



