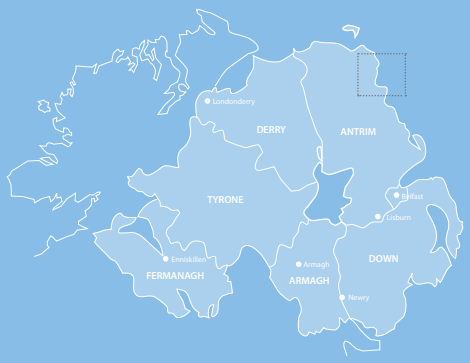
Bathing Water Profile

Waterfoot

May 2023



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Department of
Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

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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	Waterfoot Bathing Water
Location	UK/Northern Ireland/County Antrim/Antrim Coast
Year of identification	2006
Local council area	Causeway Coast and Glens Borough Council
Bathing Water Operator	Causeway Coast and Glens Borough Council
Description of bathing beach	Sand, approximately 1.0 km in length, bounded by a river to the north
Monitoring Point	Northern end of bathing water, D 24192560 (Map 2)

A Description of Waterfoot bathing water and the surrounding area

Waterfoot bathing water is a popular tourist destination located on the eastern coast of Northern Ireland. The beach is approximately one kilometre in length and is comprised entirely of sand.

The bathing area is backed by sand dunes which run the length of the beach and the village of Waterfoot (approx population 500) is at the northern end of the bathing water. However, the area is essentially rural. There are three caravan parks in the vicinity which cater for the influx of holidaymakers during the summer. The larger one of these backs onto the bathing water at the northern end. In addition there is a large car park and public toilet facilities located at the northern end with a smaller car park to the southern end.

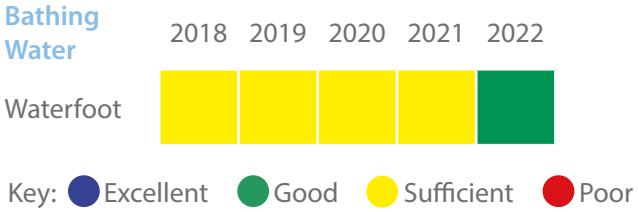
The land use within Waterfoot bathing water catchment area includes improved grassland, acid grass and dense dwarf. The geology of this region is igneous and sedimentary rock of Triassic/Cretaceous to Tertiary age

The Glenariff River flows onto the bathing area at the northern end. There is also the small port of Red Bay to the north of the river.

Bathing Water Quality at Waterfoot

Waterfoot bathing water was identified in 2006. Monitoring and reporting is carried out by DAERA Marine and Fisheries Division.

Waterfoot 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 past 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 Waterfoot bathing water is generally Excellent or Good.

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.

Waterfoot bathing water was identified as being at risk from likely water pollution based on summary analysis of bathing water results, monitoring of associated rivers and some investigative monitoring. The Department carried out investigative work in 2018, however these investigations proved inconclusive as to specific sources of pollution. DAERA Marine and Fisheries Division will continue to work with NIEA and other Departments to identify and resolve sources of pollution.

Waste Water

Waste waters from the Waterfoot area are pumped to Cushendall waste water treatment works, approximately 2 km to the north. The screened effluent is discharged via a long sea outfall more than 2 km to the north east of the Waterfoot bathing water.

Waterfoot is a popular holiday location attracting many visitors during the summer season. The urbanisation associated with Waterfoot, and in particular the caravan parks located near the bathing area, is a potential source of pollution, particularly during and after periods of prolonged or heavy rainfall. Inland from the coastal development many older properties are served by private septic tanks. 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 the wider Waterfoot and Cushendall 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) 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 catchment area of Waterfoot bathing water, through which the Glenariff river flows, has a significant amount of improved grassland.

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.

Waterfoot is located in the North Eastern River Basin Management 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%20Management%20Plan%20for%20Northern%20Ireland%202021-2027_0.PDF

Pollution events at Waterfoot

From 2019-2022 there were three 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)

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

Daily water quality forecasts

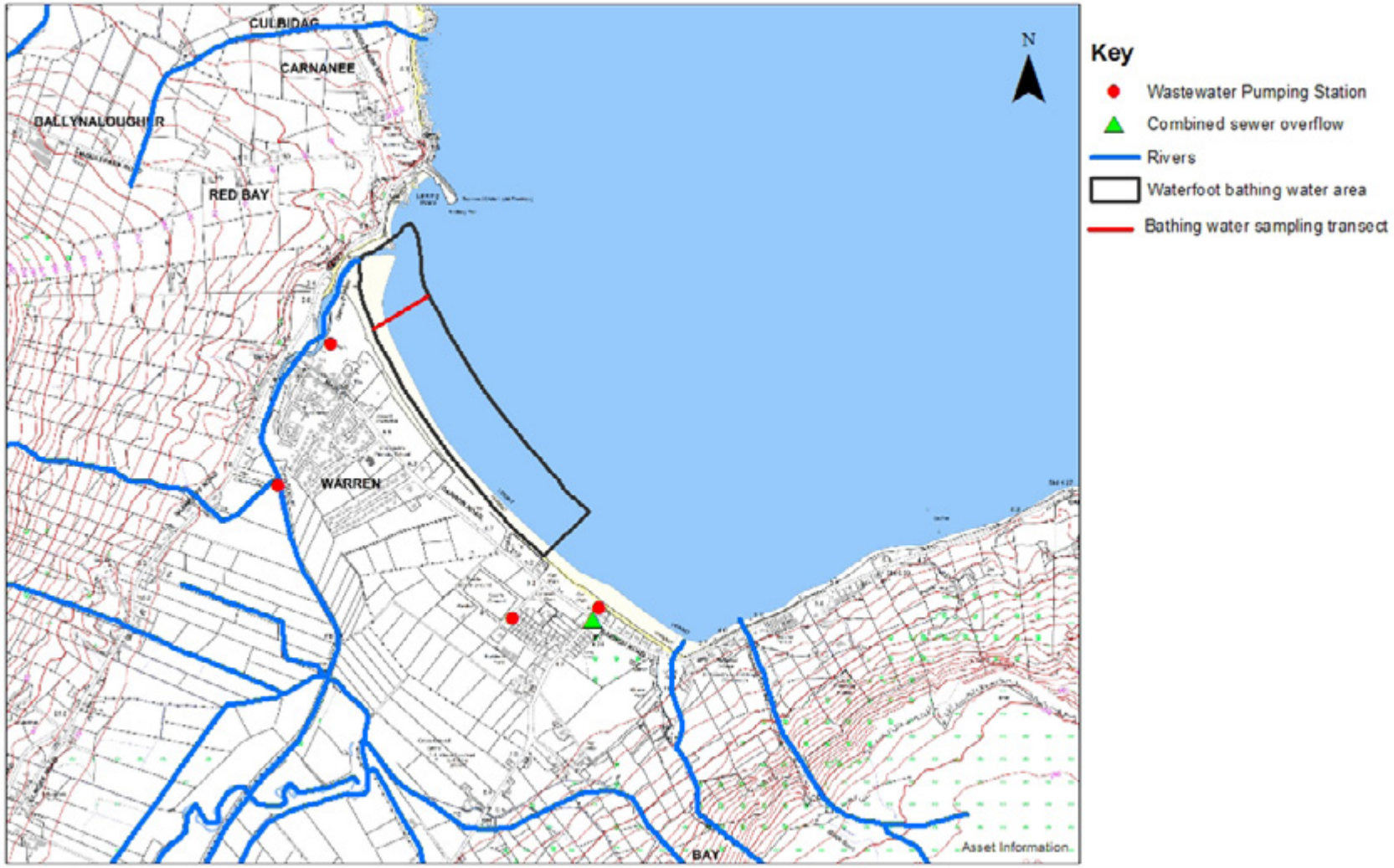
Waterfoot is one of six bathing waters in Northern Ireland with daily bathing water quality prediction modelling. The model has been developed under the SWIM NI programme with predictions available to the public during the bathing season. The project was originally funded by the EU's INTERREG VA programme, 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 water

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	Causeway Coast and Glens Borough Council Sheskburn House 7 Mary Street Ballycastle BT54 6QH Phone: 028 2076 2225

Map 1
Waterfoot Bathing Water - Potential Pollution Sources



1:15,000

0 0.125 0.25 0.5 0.75 1 Kilometres

Map 2
Waterfoot Bathing Water -
EC Bathing Water Sample Location

1:6,000

0.1 0.05 0 0.1 0.2 0.3 0.4 Kilometers

Department of Agriculture, Environment and
Rural Affairs
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17 Antrim Road
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BT28 3AL

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