Bathing Water Profile

Tyrella

May 2023



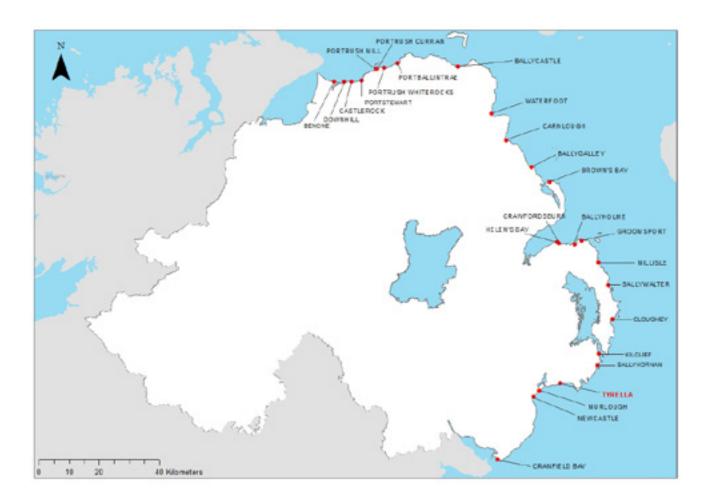


Sustainability at the heart of a living, working, active landscape valued by everyone.





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 web site (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 Tyrella Bathing Water

Location UK/Northern Ireland/County

Down/South Down Coast

Year of identification 1988

Local council area Newry, Mourne and Down

District Council

Bathing Water Newry, Mourne and Down

Operator District Council

Description of Sand, approximately 2 km in

bathing beach length

Monitoring Point Middle of bathing water,

J47123604 (Map 2)

A Description of Tyrella bathing water and the surrounding area

Tyrella is situated towards the north eastern end of Dundrum Bay and is very popular with day visitors. The beach is approximately 2km in length and is composed mainly of sand, with a rocky shoreline at each end. It is backed by a mature dune system. There are two groynes across bathing area.

The bathing area is approximately 8 kilometres from the seaside town of Newcastle. Although rural in nature, there are a number of residential properties in the area ranging from farms and private houses to holiday homes. In addition there are public toilet and car parking facilities at a small amenity centre.

The majority land use within the catchment area surrounding this bathing water is improved grassland and arable horticulture with smaller areas of dense shrub heath and acid grass. The geology of the region close to Tyrella bathing water is tertiary geology with various intrusives and lower Palaeozoic (Silurian) of the Hawick group.

Two minor rivers enter the bathing area; one at the eastern end and the other close to the main access point onto the beach.

The wider area is contained within the Strangford and Lecale Area of Outstanding Natural Beauty and the Murlough Special Area for Conservation. Tyrella bathing water and sand dunes are within Tyrella and Minerstown Area of Special Scientific Interest.

Bathing Water Quality at Tyrella

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

Tyrella 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). 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 Tyrella bathing water is typically 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

This is a rural area. There is no municipal waste water system.

There is housing in the immediate vicinity of the beach which is all served by private septic tanks. All sewerage systems must be appropriately maintained if nuisance and pollution are to be avoided. Septic tanks also have the potential to cause localised pollution, but there is no evidence to suggest that this is impacting Tyrella bathing water.

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 been 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 majority of land cover within the catchment area of Tyrella bathing water is improved grassland and arable horticulture. The two rivers which enter the bathing water flow through this agricultural area.

Prolonged periods of rainfall can cause surface runoff of organic wastes, such as animal slurries, contributing to the bacteria content in the water environment. This is why there is general advice not to bathe during or up to 2 days after such rain.

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.

Tyrella is located in the North Eastern River Basin District. A draft of the 2021-2027 river basin management plan can be found here: www.daerani.gov.uk/sites/default/files/consultations/daera/Draft%203rd%20cycle%20River%20Basin%20Management%20Plan%20for%20Northern%20Ireland%202021-2027_0.PDF

Pollution events

In the period 2019-2022 there was one confirmed pollution incident 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)

Tyrella 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

Bathing water sampling transect Tyrella bathing water area Rivers 0.75 9.0 0 0.125 0.25 Court Copyright and it reproduced with the permission of Land & Depeny Supervey and register under expensed amounts from the Controller of Mrk Majesty's Substance office of the Majesty's Substance of Coronal and delibera

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Potential Pollution Sources Tyrella Bathing Water -

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Map 2 Tyrella 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



