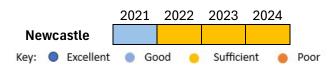
# Newcastle - Bathing Water Profile

Newcastle beach, County Down, Northern Ireland



Bathing Water Profiles are designed to help the public make an informed choice before bathing, providing detailed information on the physical characteristics of each bathing water as well as assessing the pollution risk to each site. They are a requirement of The Quality of Bathing Water Regulations (Northern Ireland) 2008 and are reviewed in line with these regulations.

Current bathing water classification for Newcastle can be found at - Bathing Water Classification

Newcastle 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 Swim NI

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

Description Located on the South Down coast and approximately 2.5km in length, this bathing water is comprised of sand, pebbles, and larger stones and is contiguous with Murlough bathing water. A large part of the bathing water is backed by a promenade and Newcastle town. However, the northern section of the beach is backed by a sand dune system and golf course. The entire area is within the Mournes and Slieve Croob Area of Outstanding Natural Beauty (ANOB) and the Murlough Special Area of Conservation (SAC). The immediate catchment for this bathing water is urban however further inland the catchment consists of acid grass, improved grassland, and dense dwarf shrub heath. There are two rivers which flow across the bathing water. The Shimna River flows out to the sea near the middle of the bathing water, having flowed through a rural environment and the town of Newcastle. Before entering the bathing water, the Shimna converges with several other rivers that have also flowed through both rural and urban areas. The Glen River flows out to sea at the south eastern end of the bathing water, having originated in the Mourne Mountains.

Site Details Local council area – Newry Mourne and Down District Council

Year of designation – 1988

Water sampling location - Lat 54.21392, Long -5.88492

#### 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 the Northern Ireland Environment Agency (NIEA) and other departments to identify and resolve sources of pollution.

## Wastewater (sewage) treatment works discharges.

The Newcastle area is served by a combined sewerage system which delivers wastewaters to a Wastewater Treatment Works adjacent to the harbour. Wastewater receives secondary treatment with bacterial reduction during the bathing season. The treated effluent is discharged some 300m from the shoreline, approximately 1km south of the bathing water.

#### Wastewater systems in urban areas.

Newcastle town and the Murlough/Dundrum area are popular seaside locations attracting large numbers of visitors during the summer season. This urbanisation is a potential source of pollution, especially during and after periods of prolonged or 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 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 Newcastle area there are combined sewer overflows (CSO), emergency overflows and wastewater pumping stations with associated emergency overflows, highlighted on Map 1.

There is also the potential for misconnections between the sewer system and surface drains, which may allow untreated wastewater to enter the water environment. Misconnections are not obvious, but when these become apparent NIEA pursues them as pollution incidents.

## Rural source pollution – agriculture

The majority of the land cover within the catchment area of Newcastle bathing water is acid grass, improved grassland and dense dwarf shrub heath. Areas within the catchment where agriculture is the dominant land use may be subject to inputs from chemical fertilisers 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 Newcastle bathing water.

## Other potential sources of pollution.

- Dogs
- Horses
- Litter
- Fly tipping

#### Management measures:

The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017, take an integrated approach to the protection, improvement and sustainable use of the water environment. River Basin Management Plans (RPMP) are produced which detail all of Northern Ireland's water quality objectives and a programme of measures to achieve these objectives. Within these 'Programme of Measures' in each River Basin Management Plan are a number of measures which relate directly to the protection of bathing waters.

Newcastle bathing water is located in the North Eastern River Basin District. You can find more information about the North Eastern River Basin Management Plan below:

Draft 3rd cycle River Basin Management Plan for Northern Ireland 2021-2027

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)

Newcastle bathing water is not at risk of 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 **24 hr** Emergency Water Pollution Hotline:

#### Phone: 0800 807060

When pollution is reported or found to be affecting the water quality of a bathing water, an immediate investigation is instigated. All possible sources of pollution are checked and the bathing water is monitored until the effects of the incident have passed. During this time, bathing waters may be temporarily 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

17 Antrim Road, Tonagh, Lisburn, BT28 3AL Email: Marine.InfoRequests@daera-ni.gov.uk Website: DAERA Bathing Water Quality

Local Authority Newry, Mourne and Down District Council

Address: Downpatrick Office, Downshire Civic Centre, Ardglass Road, BT30 6GQ

Newry Office, Monaghan Row, Newry, BT35 8DJ

Email: <u>info@mnandd.org</u> Phone: 0330 137 4000

Website: Newry, Mourne and Down District Council

Map 1 Newcastle Bathing Water

