Rea's Wood – Bathing Water Profile

Rea's Wood, Antrim, County Antrim, Northern Ireland, United Kingdom



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 Rea's Wood can be found at - Bathing Water Classification

There are currently no daily water quality predictions (forecasts) available at Rea's Wood.

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

Description This freshwater inland bathing site is located on the north eastern corner of Lough Neagh. The bathing area is approximately 330m in length and comprised of organic material and sand. A pathway runs parallel to the bathing water, through a grass and wooded area, behind which is a golf course and then the town of Antrim. Loughshore Park is located to the north of the bathing water, containing car parking, public toilet facilities and amenities for camping and caravans. To the south of the bathing area is Rea's Wood Nature Reserve, a Special Area of Conservation (SAC). The Sixmilewater river flows into Lough Neagh close to the northern end of the bathing water, having travelled primarily through a rural area but also a portion of Antrim town and so may be subject to inputs from various sources.

Lough Neagh is an Area of Special scientific Interest (ASSI) and a Special Protected Area (SPA).

Site Details Local council area – Antrim and Newtownabbey Borough Council

Year of designation – 2025

Water sampling location – Lat 54.71391, Long -6.23713

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.

There is a wastewater treatment works approximately 2kms north of Rea's Wood bathing water. This provides tertiary treatment, with the treated effluent being discharged approximately 1.5kms from the bathing water.

Wastewater systems in urban areas.

Urbanisation associated with the nearby town of Antrim and its suburbs is a potential source of pollution, especially during or after periods of prolonged/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 area of Rea's Wood bathing water there are combined sewer overflows (CSO), a number of wastewater pumping stations and 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

Rea's Wood bathing water is backed by the well maintained and popular Massereene Golf Club. Further inland the catchment area consists of areas of woodland, neutral grassland and improved grassland. 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 Rea's Wood 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.

Rea's Wood bathing water is located in the Neagh Bann River Basin District. You can find more information about the Neagh Bann River Basin Management Plan below:

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

Within the River Basin Management plans 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)

Rea's Wood bathing water may be subject to the presence of Cyanobacteria (blue-green algae) due to the occurrence of blue-green algal blooms which form in Lough Neagh. Blue-green algae can be toxic, and harmful if swallowed and may cause skin rashes. If the presence of blue-green algae is confirmed the public shall be informed, and if levels exceed health guidelines the public will be advised not to bathe through signage at the bathing water and through relevant local media posts.

During both the 2023 and 2024 bathing seasons 'advice against bathing' signage was erected at Rea's Wood bathing water due to the presence of Cyanobacteria.

More information can be found at <u>Blue-Green Algae Infographic | Department of Agriculture,</u> Environment and Rural Affairs (daera-ni.gov.uk)

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 Antrim and Newtownabbey Borough Council

Address: Antrim Civic Centre, 50 Stiles Way, Antrim, BT41 2UB

Email: info@antrimandnewtownabbey.gov.uk

Phone: 0300 123 4568

Website: Antrim and Newtownabbey Borough Council

Map 1 Rea's Wood Bathing Water

