Portrush Mill – Bathing Water Profile

Portrush Mill (West Strand), County Antrim, 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.

Historical and Current bathing water compliance classifications for Portrush Mill can be found at – Bathing Water Compliance

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

Description Portrush Mill bathing water is a very popular tourist destination located in the coastal town of Portrush on the north coast of Northern Ireland. The beach is approximately 0.9km in length, comprised predominantly of sand and bounded by a high cement wall, upon which the promenade runs. There is a large car park and toilet facilities adjacent to the bathing water. The immediate catchment for this bathing water is urban, however areas of improved grassland and arable horticulture can be found further inland. There is one minor river that flows across Portrush Mill bathing water, travelling through both urban and agricultural areas, and subject to bacterial influences from a number of sources.

Site Details Local council area – Causeway Coast and Glens Borough Council

Year of designation – 1988

Water sampling location – Lat 55.20540, Long -6.65625

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 major wastewater treatment facility between Portrush and Portstewart with an outfall approximately 1km off the coast of Portstewart. The treated wastewater outfall is approximately 3.5km to the west of Portrush Mill bathing water. The works treats wastewater from the wider Portrush, Portstewart, Castlerock and Coleraine areas.

Wastewater systems in urban areas.

Portrush is a popular seaside location attracting large numbers of visitors during the summer season. The urbanisation associated with Portrush is a potential source of pollution, especially during 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 Portrush 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

Although Portrush Mill bathing water's immediate catchment is mainly urban, further inland the catchment consists of improved grassland with neutral grass and arable horticulture. 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.

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.

Portrush Mill 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 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)

Portrush Mill bathing water may be subject to the presence of Cyanobacteria (blue-green algae). Blue-green algal blooms which form in Lough Neagh can be transported via the River Bann and affect the bathing water at Portrush Mill. 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. More information can be found at Blue-Green Algae Infographic | Department of Agriculture, 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:

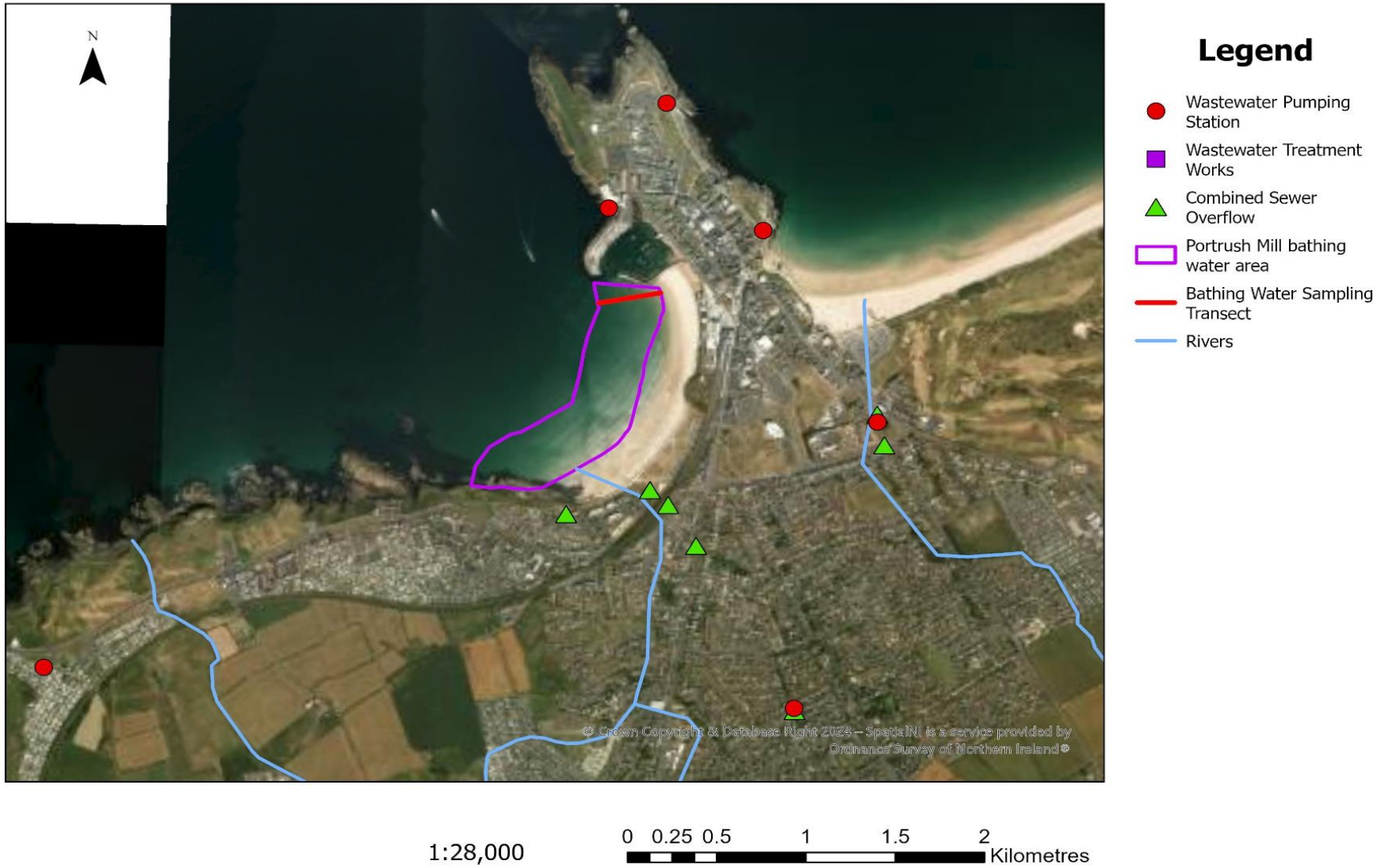
Phone: 0800 807060

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
Causeway Coast and Glens Borough Council
Address: Cloonavin, 66 Portstewart Road, Coleraine, BT52 1EY
Email: info@causewaycoastandglens.gov.uk
Phone: + 44 (0) 28 7034 7034
Website: Causeway Coast and Glens Borough Council

Map 1. Portrush Mill Bathing Water