# Murlough (Co Down) – Bathing Water Profile

Murlough 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 Murlough (Co Down) can be found at - <u>Bathing Water</u> <u>Classification</u>

There are currently no daily water quality predictions (forecasts) available at Murlough (Co Down).

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

Description Located on the outskirts of Newcastle this beach is approximately 3km in length and is comprised mostly of sand. It is contiguous with Newcastle bathing water giving a total length of 5.5km. Murlough bathing water is backed by extensive sand dunes, the Murlough Nature Reserve; a dynamic system over 5000 years old which is owned and managed by the National Trust. The beach and sand dunes are within the Murlough Special Area of Conservation (SAC) and are also designated an Area of Special Scientific Interest (ASSI). The beach is sandy but the area between the high tide line and the dunes is comprised of pebbles. Facilities within the vicinity of the bathing water include car parking, picnic tables and public toilets. Inland there are several caravan parks, farms and private houses. The entire area is within the Mournes and Slieve Croob Area of Outstanding Natural Beauty (ANOB).

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

Year of designation – 2006

Water sampling location – Lat 54.23076, Long -5.85310

## 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 are no direct discharges into the Murlough bathing water. The wider Newcastle area, including the Murlough area, is served by a combined sewerage systems which delivers wastewaters to a treatment facility adjacent to Newcastle harbour. Wastewater receives secondary treatment with bacterial reduction throughout the bathing season. The treated effluent is discharged approximately 4km south west of the bathing water. There is also a small wastewater treatment works serving the

Dundrum area which discharges secondary treated effluent to Inner Dundrum Bay some 2km from 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 wider Murlough area there are a number of combined sewer overflows (CSO) 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

The wider catchment area of Murlough bathing water has significant amounts of 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. Although there are no rivers flowing directly onto the bathing area, the entrance of Dundrum Bay is the end point for a number of rivers that flow through the catchment.

Septic tanks also have the potential to cause localised pollution, but there is no evidence to suggest that this is impacting Murlough 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.

Murlough 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)

Murlough 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: <a href="mailto:Marine.InfoRequests@daera-ni.gov.uk">Marine.InfoRequests@daera-ni.gov.uk</a>

Website: <u>DAERA Bathing Water Quality</u>

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: <a href="mailto:info@mnandd.org">info@mnandd.org</a>
Phone: 0330 137 4000

Website: Newry, Mourne and Down District Council

Map 1 Murlough (Co Down) Bathing Water

