

# Bathing Water Profile

## Cranfield Bay

May 2023



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



Department of  
**Agriculture, Environment  
and Rural Affairs**

[www.daera-ni.gov.uk](http://www.daera-ni.gov.uk)



## 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](http://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](http://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

<b>Bathing Water Name</b>	Cranfield (Cranfield Bay) Bathing Water
<b>Location</b>	UK/Northern Ireland/County Down/South Down Coast
<b>Year of identification</b>	1988
<b>Local council area</b>	Newry, Mourne and Down District Council
<b>Bathing Water Operator</b>	Newry, Mourne and Down District Council
<b>Description of bathing beach</b>	Sand and pebbles, approximately 1.5 kilometres in length
<b>Monitoring Point</b>	Middle of bathing water, J26371066 (Map 2)

## A Description of Cranfield Bay bathing water and the surrounding area

Cranfield Bay bathing water is a popular holiday destination located on the South Down coast at the mouth of Carlingford Lough. The beach is comprised mainly of sand and pebbles and is approximately 1.5 km in length. The bathing water is surrounded by a number of caravan parks. In the central area, a sea wall protects a car park, picnic area, children's play area and public toilets. The bathing area is popular for water based activities and the beach is zoned to accommodate bathers and boat users.

The immediate catchment for this bathing area is rural, and the majority of the land use is improved grassland, neutral grass, acid grass and dense dwarf shrub heathland. The main geology in the area is composed of lower Palaeozoic geology (Hawick Group), carboniferous geology of the Carlingford group (limestones) and tertiary geology of various intrusives.

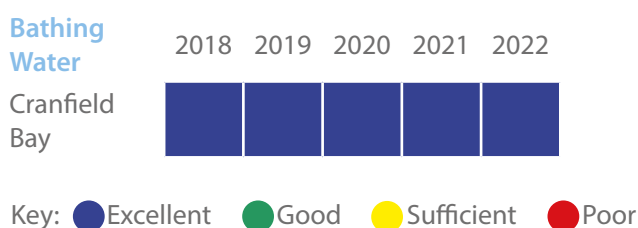
The bathing water is located at the foot of the Mourne Mountains, within the Mournes Area of Outstanding Natural Beauty (AONB) and the Mournes and Slieve Croob Environmentally Sensitive Area (ESA). Carlingford Lough Area of Special Scientific Interest (ASSI) adjoins the western end of the bathing water. Also the area immediately to the west of the bathing water is designated a Special Protection Area and a Ramsar site.

The small fishing town of Killeel has an approximate population of 7,000 and is 5 km to the north east of the bathing water.

## Bathing Water Quality at Cranfield Bay

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

### Cranfield Bay 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](http://www.daera-ni.gov.uk/topics/water/river-basin-management)). Within the Programme of Measures in the River Basin Management Plan there 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 Cranfield Bay bathing water is generally 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

Inland from the caravan parks and amenity area is a small waste water treatment works which serves the wider Cranfield area. Screened effluent is discharged to sea some 300m offshore, outside the bathing water area (Map 1).

Cranfield Bay is a popular seaside location during the summer season attracting large numbers of visitors to the surrounding caravan and holiday parks. The urbanisation associated with these parks is a potential source of pollution, especially during and after periods of prolonged or heavy rainfall. In the event of very heavy rainfall a collection system may not be able to deal with all the flow received. A portion of the contents of the collection system may overflow to a waterway under storm conditions. [This is why there is general advice not to bathe during or up to 2 days after such rain.](#)

The municipal collection and treatment of waste water has the potential to cause pollution because all combined collection systems must be designed to overflow in periods of extreme wet weather or following failure of the system. If systems are not designed in that way, then sewers may overflow into residential areas. Within the Cranfield Bay area there are wastewater pumping stations with associated emergency overflows as shown on Map 1.

In order to reduce the potential for pollution in the water environment from these systems NIEA requires that all current and proposed systems meet the requirements of the Urban Waste Water Treatment Regulations (Northern Ireland) 2007 ([www.daera-ni.gov.uk/articles/urban-waste-water](http://www.daera-ni.gov.uk/articles/urban-waste-water)) and the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017.

During the expansion of any urban area, there is the potential for misconnections between the

sewer system and surface drains, which may allow untreated wastewater to enter the water environment. When these become apparent, NIEA pursues them as pollution incidents.

A further measure in tackling urban pollution is through the use of sustainable urban drainage systems (SUDS), which NIEA encourages through its SUDS Strategy. Other measures include compliance with the Northern Ireland Water Order 1999 and implementation of Pollution Prevention Guidelines (<https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/>).

### 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 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 Cranfield Bay bathing water is improved grassland, neutral grass, acid grass and dense dwarf shrub heathland.

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

### 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.

Cranfield Bay is located in the Neagh Bann River Basin District. A draft of the the 2021-2027 river basin management plan can be found here: [www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%203rd%20cycle%20River%20Basin%20Management%20Plan%20for%20Northern%20Ireland%202021-2027\\_0.PDF](http://www.daera-ni.gov.uk/sites/default/files/consultations/daera/Draft%203rd%20cycle%20River%20Basin%20Management%20Plan%20for%20Northern%20Ireland%202021-2027_0.PDF)

### Pollution events

From 2019-2022 there were three confirmed incidents of water pollution 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)

Cranfield Bay bathing water is not at risk of a proliferation of macro-algae, phytoplankton or cyanobacteria (blue/green algae).

### Daily water quality forecasts

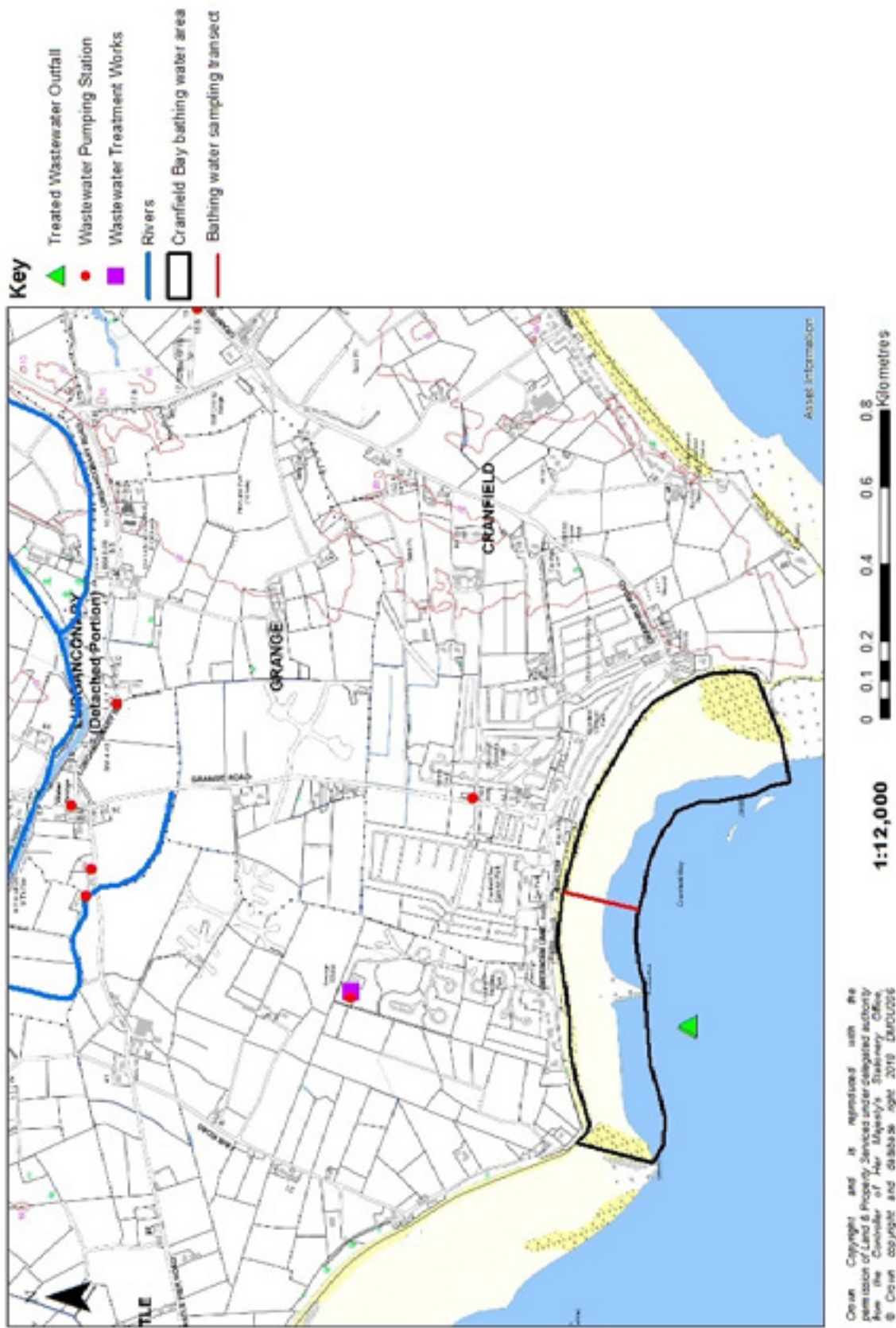
There is presently no facility to predict bathing water quality on a daily basis. However, the general advice remains: do not bathe during or for up to 2 days after heavy rainfall events.

### Contact details

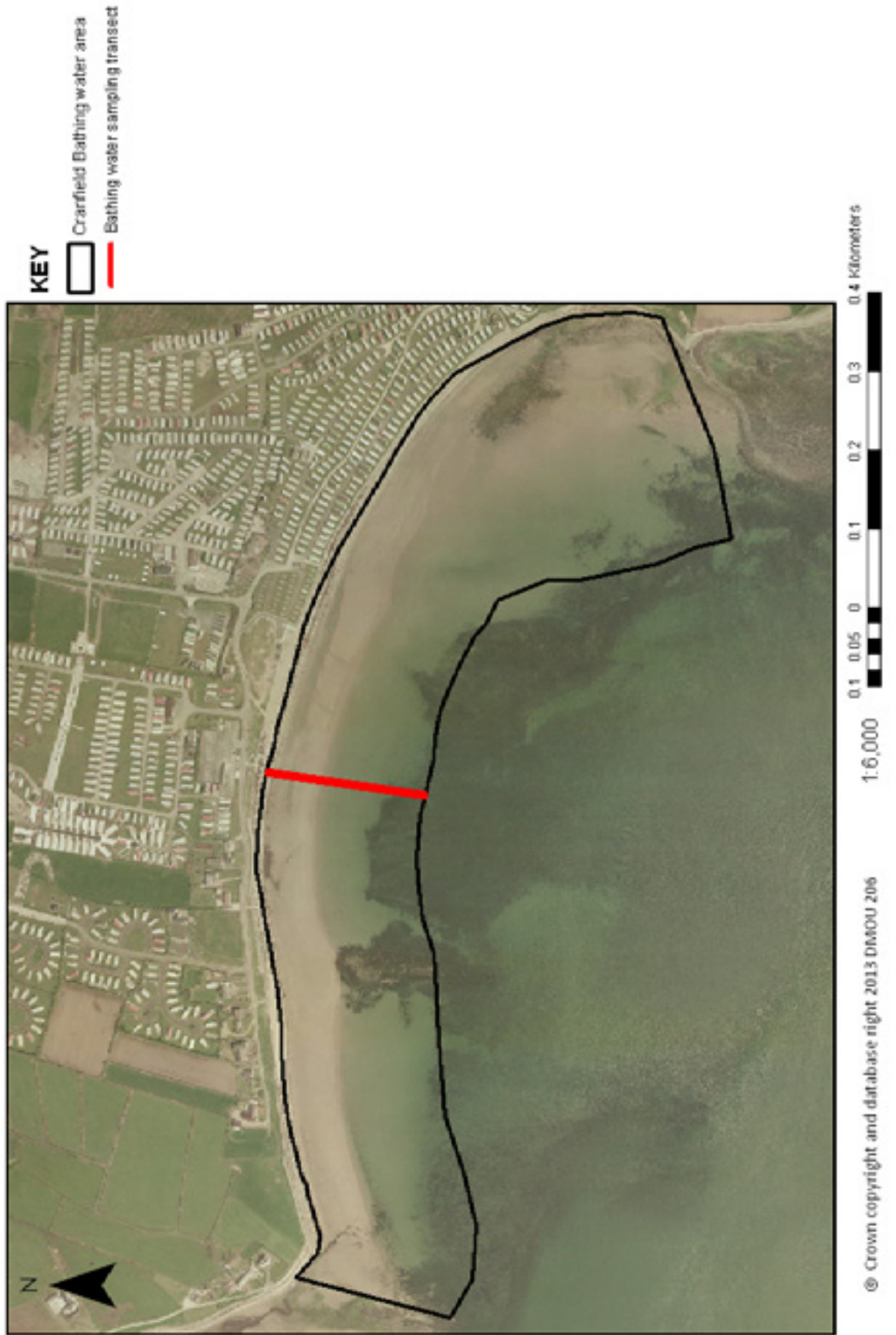
For general information about bathing waters:

<b>DAERA</b>	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> Phone: 028 9262 3244
<b>Water Pollution 24hr Hotline</b>	Phone: 0800 807060
<b>Local Authority</b>	Newry, Mourne and Down District Council Newry Office Monaghan Row Newry BT35 8DJ Phone: 0300 013 2233

Map 1  
Cranfield Bay Bathing Water -  
Potential Pollution Sources



Map 2  
Cranfield Bay Bathing Water -  
EC Bathing Water Sample Location



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Marine and Fisheries Division  
17 Antrim Road  
Tonagh  
Lisburn  
BT28 3AL

Water Pollution Hotline: 0800 807060  
Email: [Marine.InfoRequests@daera-ni.gov.uk](mailto:Marine.InfoRequests@daera-ni.gov.uk)



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