2024 Bathing Season Report

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Contents

2024 Bathing Water Summary Report

1. Introduction

Dublin City Council (DCC) manages and monitors water quality at six bathing water locations. This function is delivered by the Water Pollution Control Section of the Protection of Water Bodies Office in accordance with the *Bathing Water Regulations, SI 79 of 2008* (Regulations).

Dollymount Strand, Sandymount Strand, and Half Moon are designated bathing waters, while the North Bull Wall, Shelley Banks, and Merrion Strand are recognised by the Environmental Protection Agency (EPA) as other monitored waters.

In 2024, the EPA identified the Half Moon as a newly designated bathing water. Furthermore, Sandymount Strand received a "Poor" classification from the EPA, based on results of the four preceding bathing seasons 2020 to 2023. As a result and in accordance with the Bathing Water Regulations, a season long prohibition was imposed on Sandymount Strand.

Bathing water information cabinets are installed at the entrances to all bathing locations as outlined in Figure 1 below. Statutory and supplementary bathing information are contained therein.

Figure 1 - Map of bathing locations and cabinets

The Bathing Water Regulation S.I No. 79 of 2008 was amended by the Minister Darragh O'Brien on the 28th June 2024. Amendment S.I No. 322/2024 (link here for reference) updated various articles of the 2008 Regulations, including the definition of bathing season and how it may be defined.

2. Bathing Water Sampling

2.1. Regulatory sampling requirements

Regulations require four samples to be taken per designated bathing water per season. DCC exceeds this requirement and monitors water quality at six locations on twenty separate occasions during the bathing season. The sampling programme is comprehensive and benefits for the citizens of the capital as well as visitors. The monitoring schedule is agreed with the EPA in advance of the season and is published online by Dublin City Council and the EPA. DCC monitors bathing water quality all year round, with water quality monitored on a fortnightly basis outside of the season.

DCC carries out investigative monitoring to further supplement scheduled sampling events. Investigative monitoring is conducted if a temporary deterioration in bathing water quality is expected or has been confirmed.

Photograph 1 - Water quality sampling at Merrion Strand

2.2. Parameters analysed and methodology

Samples are tested for two types of faecal indicator bacteria namely *Escherichia coli* (*E. coli*) and Intestinal Enterococci. *E.coli* results are available 21-24 hours following receipt of a sample. The exception to this would be where a sample is taken but held over night before being analysed e.g. a Sunday or weekend sample.

The Intestinal Enterococci results are generally available from 48 hours following receipt of the sample, once the various confirmation tests have been completed. Both results are required for compliance with the 2008 Regulations and HSE Guidelines. Physico-chemical parameters are also assessed on site to determine whether the aesthetic quality of the water is acceptable.

2.3. Assessment and Reporting

Bathing water samples are classified as *Excellent, Good, Sufficient* or *Poor* depending on the quantity of E.coli and Intestinal Enterococci counted therein. Table 1 details the thresholds for each classification group.

Excellent	Indicates excellent water quality – Samples should not exceed 250 MPN E. Coli and 100 CFU Intestinal Enterococci per 100 ml.
Good	Indicates good water quality – Samples should not exceed 500 MPN E. Coli and 200 CFU Intestinal Enterococci per 100 ml.
Sufficient	Indicates sufficient water quality - samples should not exceed 1,000 MPN E. coli and 250 CFU Intestinal Enterococci per 100 ml
Poor	Indictes poor water quality - samples exceed 1,000 MPN E. coli and 250 CFU Intestinal Enterococci per 100 ml
Date*	Additional Investigative Sampling carried out
MPN = Most Probable Number	
CFU = Colony Forming Unit	

Table 1 - Single sample assessment criteria

Sampling results are made available both online and in hardcopy format at the entrance to each bathing location. Softcopy results are available on the Dublin City Council website, www.dublincity.ie/bathingwater and on the EPA's National Bathing Water website www.beaches.ie.

3. 2024 Bathing Water Results

A total of 120 scheduled and 2 investigative bathing water samples were analysed by the Central Laboratory between 22/05/24 and 09/09/24.
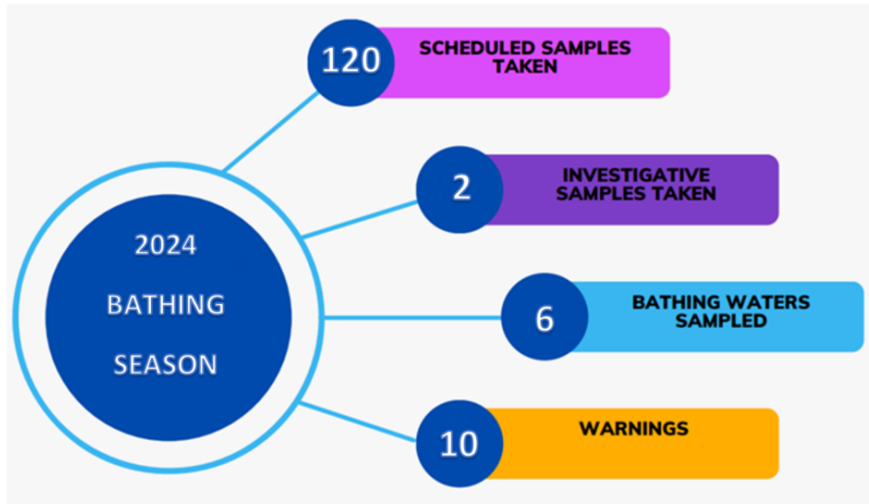

Figure 2 – Summary of 2024 Bathing Season

Table 2 below details the results of the single sample assessments conducted during the 2024 season.

	DATE OF SAMPLE	23/05	27/05*	05/06	10/06	12/06	18/06	24/06	02/07	08/07	15/07	21/07	22/07	30/07	06/08	14/08	18/08	20/08	25/08*	28/08	01/09	03/09	09/09
Designated Bathing Areas	DOLLYMOUNT	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Poor		Excellent	Excellent	Excellent	Excellent	Excellent
	SANDYMOUNT	Excellent		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Sufficient	Excellent		Poor	Poor	Good	Excellent
	HALF MOON	Excellent		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent		Excellent	Excellent	Excellent	Excellent
Non-Designated Bathing Areas	MERRION	Excellent		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Sufficient	Excellent	Good	Excellent	Excellent			Poor	Good	Excellent	Excellent
	SHELLEY BANKS	Excellent		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good	Sufficient	Good			Poor	Sufficient	Excellent	Excellent
	NORTH BULL WALL CAUSEWAY	Sufficient		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Sufficient	Excellent	Excellent	Excellent	Excellent	Good			Poor	Good	Poor	Excellent
	Date*	Additional Investigative Sampling carried out																					

Table 2 – 2024 Single sample assessment results

Table 3 below provides an overview of the 2024 single sample assessment results. At designated waters, 95%, 85% and 100% of Dollymount Strand, Sandymount Strand and Half Moons results returned as *Excellent* or *Good* respectively. While at other monitored waters, 90%, 85% and 80% of Merrion Strand, Shelley Banks and North Bull Wall results returned as *Excellent* or *Good* respectively.
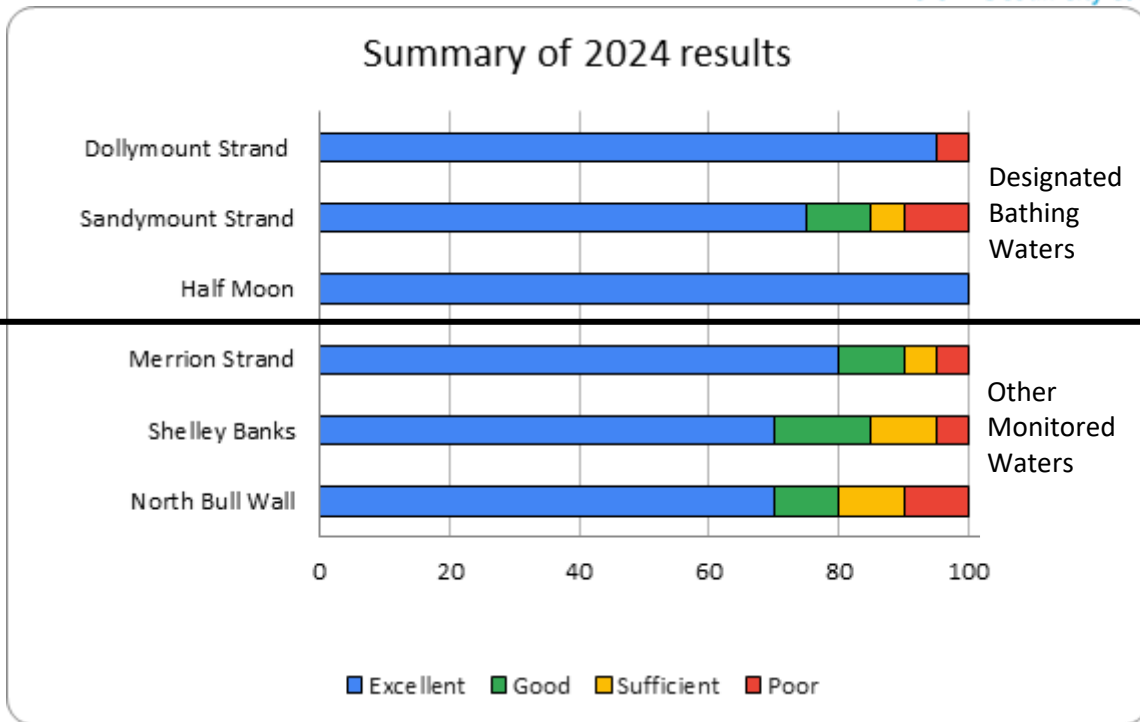
Table 3 - Summary of 2024 bathing water results expressed as percentage compliance

4. Summary of warnings raised

DCC raise warnings when a temporary deterioration in bathing water quality has or is expected to occur. Warnings are put in place to prevent or limit bather exposure to suspected poor water quality. Warnings are only raised at designated bathing waters.

Depending on the type of incident, warnings can include prior warning notices or temporary bathing prohibitions. A prior warning notifies the public of a suspected deterioration in bathing water quality, typically prompted by poor weather. A temporary bathing prohibition advises swimmers of a confirmed or highly likely deterioration in bathing water quality. Bathers should take notice of such warnings which have been raised to protect their health. Both notices remain in place until the quality of water can be verified by scheduled or investigative sampling, as required. DCC are required to consult with the Health Service Executive prior to raising or lifting a prior warning or temporary bathing prohibition.

A total of 10 warnings on four occasions were raised during the 2024 bathing season. 50% of the warning raised were Prior Warnings, the other 50% were temporary prohibitions. The warnings were raised in response to incidents which may or had caused a deterioration in bathing water quality.
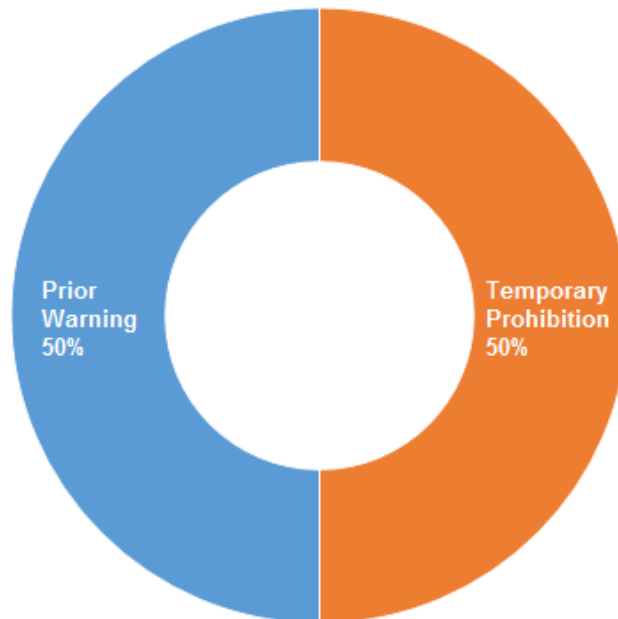
Figure 3 – Summary of 2024 bathing water warnings

5. PCR analysis

Dublin City Council continues to utilise Polymerase Chain Reaction (PCR) analysis to better inform pollution investigations triggered by bathing water failures. PCR analysis is used as an analytical tool in Microbial Source Tracking (MST) of faecal pollution. PCR analysis looks for species-specific genetic markers to identify human, canine and marine bird sources in bathing water samples with elevated faecal indicator bacteria.

This analysis complements DCC's scheduled monitoring programme, exceeding statutory testing obligations. The additional information has allowed DCC to identify the likely source or contributing factors leading to a failure where no obvious sources relating to rainfall or pollution events are present.

However, there are certain limitations to the analysis, where it is not yet possible to accurately apportion the contribution made by specific markers when a combination of markers are present. The results of PCR analysis of DCC bathing waters has successfully identified the likely contribution of non-human sources of pollution on our beaches.

During the 2024 Bathing Season, a total of 24 samples were analysed using PCR analysis. Table 4 provides a summary of results received.
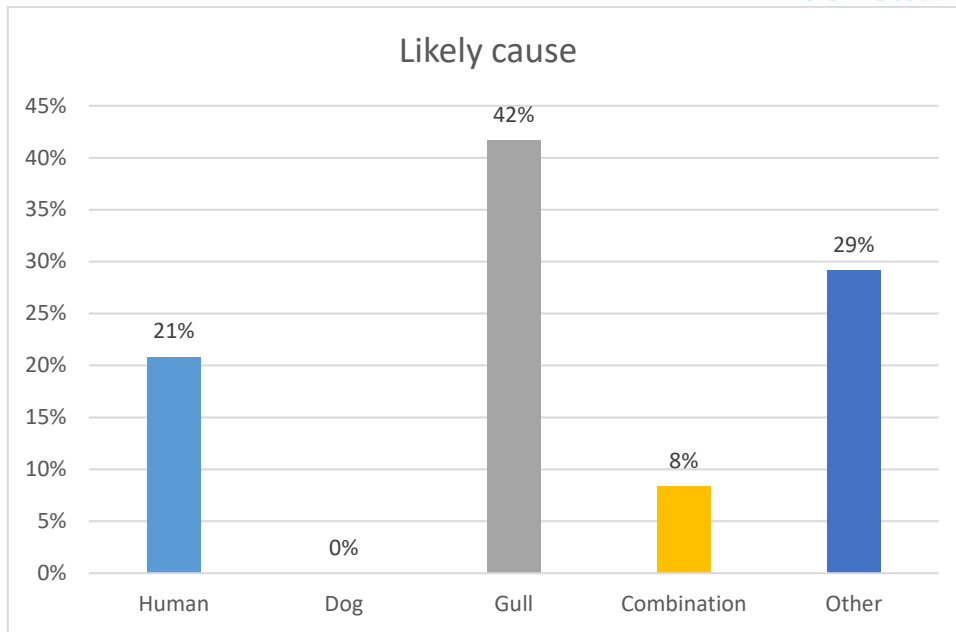
Table 4 - Summary of 2024 PCR analysis and attributable likely cause

Compared to last year, there has been a significant change in marker composition, likely aided by our "Leave Only Paw Prints" initiative, promotion of responsible dog management and deployment of poo-bag dispensers at the bathing waters. This positive development is welcomed by DCC, and we hope to build on the progress made.

Gull markers were the leading marker identified in 42% of samples, distributed throughout three bathing waters: Sandymount Strand, Merrion Strand and Shelley Banks, which based on routine swimmer counts throughout the bathing season were less popular locations to swim.

All six bathing waters are located within designated Special Conservation Areas (SCA) and Special Protection Areas (SPA). A large number (>10,000) of wintering birds are regularly observed at various locations within the Bay area, as the environment provides ideal conditions for nesting, feeding and roosting. Where birds congregate, fouling occurs, which can lead to temporary declines in water quality.

This issue is difficult to address, as both the birds and their habitat are protected under European law. Since the birds contributing to faecal contamination are part of the designated areas, there is limited scope to managing the bird fouling however, DCC will continue to monitor their impact.

The Other category includes results where the levels of bacteria are too low to measure accurately. BLD (Below Level of Detection) means the bacteria are present, but there's not enough to detect. BLQ (Below Level of Quantification) means the bacteria are detectable, but the amount is too small to give a reliable result.

6. Dog fouling and Public Information

Dog faeces has been found to contain many dangerous pathogens that can pose a significant threat to public health. The UCD Acclimatize Project found that one dog stool has the potential to pollute a volume of water the area of a tennis court.

Acclimatize in conjunction with Dublin City Council produced a short animation to highlight the impact of dog fouling on water quality. The campaign was supported and shared by DCC across various social media platforms. Further information can be found here - https://www.acclimatize.eu/dogs/.

Figure 4 - Acclimatize dog fouling campaign still

While dog fouling is not the only pressure on bathing water quality, it can be a significant contributor. Unlike other sources of pollution, dog foul can be easily removed by the pet owner to prevent contamination of a nearby waterbody. In an effort to encourage responsible dog management, Dublin City Council has installed poo bag dispensers on bathing water cabinets located at bathing water entrances, and installed stills from this animation to encourage dog owners to act responsibly.

2024 PCR results show that the dog faecal marker was not as prevalent compared to previous years. This may be attributed to the "Leave Only Paw Prints" initiative and promotion of responsible dog management across the beaches, particularly Sandymount Strand.

7. Communications with stakeholders

Dublin City Council continues to regularly update its dedicated bathing water webpage. An FAQ section was introduced in 2021 which has proved very popular and addresses most commonly received queries.

In conjunction with the DCC webpage, bathers are encouraged to visit the EPA's National Bathing Water webpage www.beaches.ie. The page contains most recent warnings and bathing water results for bathing waters across Ireland. The section liaised with the following stakeholders throughout the 2024 bathing season.

Stakeholder	Communication
Uisce Eireann	Wastewater reportable incidents
HSE	Consultation throughout bathing season
EPA	Reporting of bathing water incidents via BWIS which populates information for the EPA national bathing water website www.beaches.ie
Councillors	1 x Councillor question responded to, to date
Public	Statutory information provided in designated bathing water cabinets, and smart screens were applicable. Bathing water results available online at www.dublincity.ie/bathingwaters
Public	3 correspondences received during the season. It is believed the improved website and additional resources reduced the need for the public to contact the section directly.
Public participation	The 2024 public participation period was held from 13/05/24 to 26/09/24. Details of the participation were published on DCC's dedicated webpage and across social media platforms. Furthermore, a newspaper notice was published in the Irish Independent on the 13/05/24. No applications were received for consideration.

Table 5 - Breakdown of communications by stakeholder

8. Service Improvements

Each year DCC aims to make improve processes and engagement with the public. Following a successful pilot of smart screen technologies in 2023 at Sandymount and Dollymount Strands, DCC will continue utilising these smart screens and plans to expand their implementation to additional bathing water locations.

Photograph 2 - E-ink screen at Sandymount Strand

DCC set up an alert service including bathing water alerts which sends subscribers bathing water quality results and warning notifications when raised. Further information can be found on DCC's website.

DCC aim to retrofit bathing water cabinets at North Bull Wall and Dollymount Strand to increase reach and effective communications to the public along these area. Double sided bathing water display cabinets have been installed at Half Moon and Sandymount to increase display area, to better communication to the public.

DCC are leading the establishment of The Bathing Water National Signage Working Group, which held its inception meeting in September 2024, in conjunction with the Department of Housing, HSE, EPA, other stakeholders and local authorities. The group aims to standardise the display and format of statutory and supplementary bathing water information installed in the bathing water cabinets and/or electronic signage nationwide.

9. Bathing Water Task Force (BWTF)

In November 2019, Dublin City Council (DCC) set up the Bathing Water Task Force including representatives from Uisce Eireann, Department of Housing, Planning and Local Government (DHPLG), Dun Laoghaire Rathdown County Council (DLRCC) and Fingal County Council (FCC).

The mission of the BWTF is to identify, assess, remediate or eliminate sources of pollution entering Dublin Bay. Sources that specifically affect bathing water quality and ultimately public health. The BWTF holds monthly meetings chaired by Dublin City Council.

The meetings provide stakeholders with an opportunity to report on progress made, challenges faced, review progress and coordinate activities. It is also a platform for local authorities and the Department to discuss current bathing water management issues and knowledge sharing.

Work programmes and multiagency actions are set out in the published BWTP report. (Click here for reference). The BWTF engages in high-level meetings with the Environmental Protection Agency, Health Service Executive, the National Bathing Water Expert Group and the Department of Housing, Local Government & Heritage, including participation and contributions to the National Bathing Waters Expert Group.

10. Forecasted Annual designated bathing water classification

The EPA provide bathing water classifications to designated locations before the 31st December each year. The classification is an annual assessment that is based on water quality results over the previous four bathing seasons. Half Moon was a newly identified bathing location in 2024 and thus was unclassified for that season. A minimum of 16 samples is required for classification. A minimum of 20 no. samples were taken at each of our three locations throughout the 2024 season, which provided adequate sample results for Half Moons 2025 classification.

The bathing water can receive a classification as *Excellent, Good, Sufficient* or *Poor*. The below table details the current and predicted 2025 classification as set out in Schedule 4 of the bathing water regulations, https://www.irishstatutebook.ie/eli/2008/si/79/made/en/print.

Designated Bathing Water	2024 Classification	Predicted 2025 classification
Sandymount Strand	Poor	Poor
Dollymount Strand	Good	Good
Half Moon	Unclassified	Excellent

Table 6 - Current and predicated Annual classification