

# Management Plan for Improving Bathing Water Quality Status at Sandymount Strand

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<b>Bathing Water Name:</b>	Sandymount Strand
<b>County:</b>	Dublin City
<b>River Basin District</b>	Eastern River Basin District
<b>Bathing Water ID (as per the WFD):</b>	IEEABWC090_0000_0300
<b>Year of Designation:</b>	1998
<b>Location of Sampling Point</b>	E319550; N232033
<b>Responsible Authority:</b>	Dublin City Council

Revision No	Status	Date	Prepared by	Reviewed by	Approved by
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**1. Introduction**

Dublin City Council (DCC) manages and monitors water quality at six bathing water locations. The Water Pollution Control Section of the Protection of Water Bodies Office delivers this function in accordance with the Bathing Water Regulations, S.I. No. 79 of 2008 and Amendment, S.I. No. 322 /2024 (Regulations).

Dollymount Strand, Sandymount Strand, and Half Moon are designated bathing waters, while the North Bull Wall, Shelley Banks, and Merrion Strand are recognised as other monitored waters.

A review of the 2024 bathing season results (single assessment) showed that 90% of scheduled samples met or exceeded *Sufficient* quality. However, based on the classification assessment criteria, Sandymount Strand will remain as *Poor* status for the 2025 season.

While DCC regret the static nature of the classification at Sandymount Strand, we are committed to restoring water quality at this valuable amenity for all to enjoy. In order to achieve this, significant on shore pressures need to be identified, investigated and addressed in order of priority. The management of Sandymount Strand and associated catchment pressures are set out accordingly in this plan.



Figure 1: Map of DCC bathing waters

## 2. Description of Sandymount Strand

Sandymount Strand is located between the Irishtown Nature Reserve to the North and Merrion Strand to the South. It runs parallel to the Strand road and lies adjacent to the village and suburb of Sandymount. The bathing location is approximately 2km long. Sandymount Strand is a shallow bathing water with a gradual slope and flat profile. It is not popular for sea swimming, rather for paddling and other recreational activities. It is a popular location for dog walking, with many enjoying the mudflats when the tide is out. Bait digging is another activity that is known to occur at Sandymount Strand.

The beach area is important from a natural heritage point of view and as such is contained within a Special Area of Conservation (South Dublin Bay cSAC ref. 000210) designated under the EU Habitats Directive (1992) and a Special Protection Area (Sandymount Strand/Tolka Estuary SPA ref. 004024) designated under the EU Birds Directive (1979). The site is of national importance for migrating wintering birds. In 2015, the entirety of Dublin Bay, including Sandymount Strand, was designated as a UNESCO Biosphere.

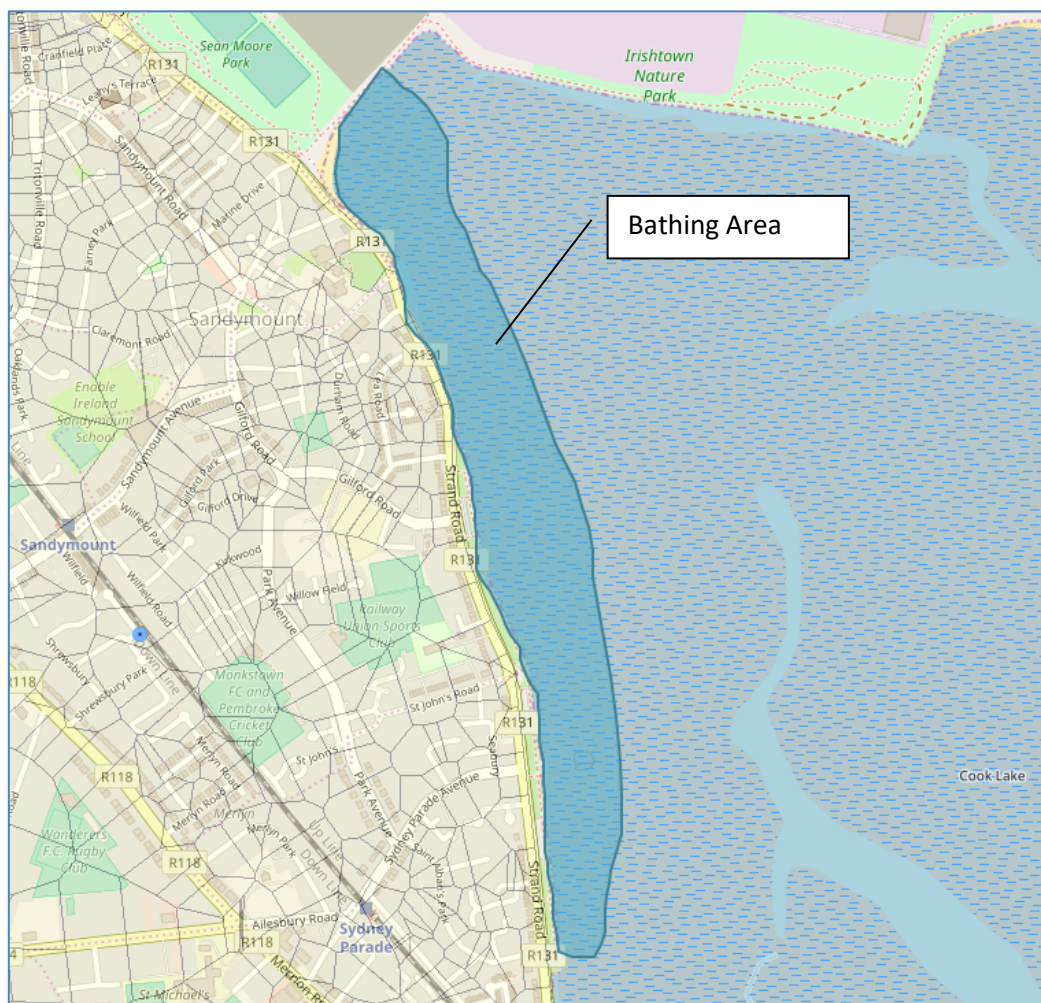


Figure 2: Map of bathing water

### 3. Description of Contributing Catchment

Sandymount Strand is one of the great amenities of the city. It stretches from Irishtown, through to the end of the promenade at Sandymount, where it merges with Merrion Strand. Communities directly adjacent to the beach comprise of Ringsend, Irishtown, Sandymount, Merrion village and Booterstown, however all of Dublin's South Central Area and South East area is in reality the contributing catchment area with an approximate area of approximately 2000 km<sup>2</sup>.

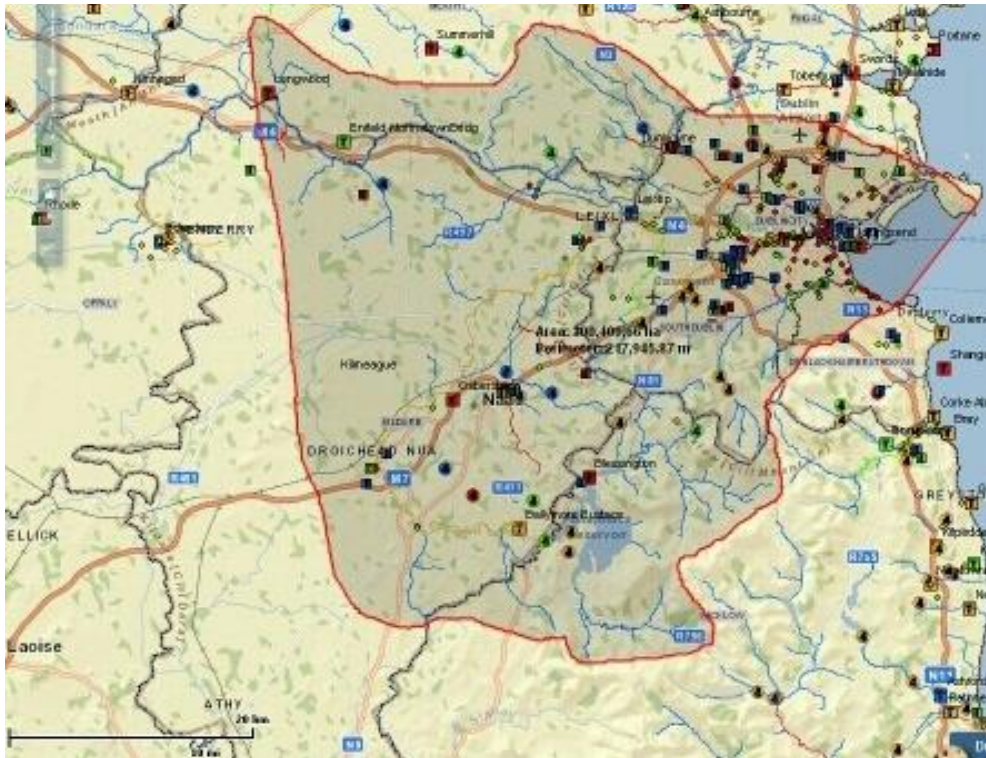


Figure 3: Map of contributing catchment

The Elm Park Stream discharges directly onto the adjacent Merrion Strand. However, embryonic sand dunes have formed near the river outfall, diverting the stream towards Sandymount Strand. Evidence to date suggests Sandymount Strand is influenced primarily by the Elm Park Stream and to a lesser extent the Trimleston and Nutley Streams which outfall to sea approximately 1000m downstream.

A number of medium to large sized rivers discharge to Dublin Bay and, therefore, may influence water quality on Sandymount Strand. However, due to the distance and tidal influences and movements in Dublin Bay this is unlikely.

Please refer to Section 5 for a breakdown of catchment pressures and associated management measures.

## 4. Bathing Water Quality Assessment

### 4.1. Bathing Water Quality 2024

#### 4.1.1. Sampling

In accordance with the Bathing Water Regulations, SI 79 of 2008, 4 no. samples (including a preseason sample), are required to be taken at designated waters during the bathing season. DCC exceeded the minimum requirement, and took 20 no. scheduled samples from all waters (designated and other monitored waters) during the 2024 season, supplemented further by additional investigative monitoring as required.

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

The 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.

Single Sample Assessment	2024	2023	2022	2021
Excellent	15	12	15	14
Good	2	6	3	0
Sufficient	1	2	0	1
Poor	2	0	2	5
Total samples	20	20*	20*	20

\*Samples were replaced under STP mechanism as approved by EPA.

**Table 1: Single Sample Assessment Results Summary 2021 - 2024**

The above table details the results of scheduled samples taken at Sandymount Strand between 2021 and 2024. In 2024, 90% of samples achieved at least *Sufficient* status. Of the remaining 10% which returned as *Poor*, PCR analysis identified the gull marker as the likely contributing factor.

#### 4.1.2. **Bathing Prohibition**

The EPA classified Sandymount Strand as "Poor" in 2024, based on results of the four preceding bathing seasons. As a result and in accordance with the Bathing Water Regulations, a season long Bathing Prohibition was imposed for the entire 2024 bathing season. A Bathing Prohibition Notice (Poor Bathing Water Prohibition Notice Entire, BN5) was displayed in all bathing water cabinets along Sandymount Strand. Additionally the prohibition notice was displayed on DCC's Bathing Water [website](#) and [beaches.ie](#).

#### 4.1.3. **Classification**

The EPA determines annual designated bathing water classifications, based on water quality results over the previous four bathing seasons. The bathing water are assigned a classification of *Excellent*, *Good*, *Sufficient* or *Poor* as set out in Schedule 4 of the Regulations. Table 2 details the classification status of Sandymount Strand for the four preceding seasons.

Year	Overall EPA Annual Status
2024	Poor
2023	Poor
2022	Sufficient
2021	Sufficient

Table 2: Classification status 2021-2024

The classification of Sandymount Strand remains unchanged from 2024, designated as Poor for the 2025 Bathing Water Season. As a result, a Bathing Prohibition (Poor Bathing Water Prohibition Notice Entire - BN5) will be posted on all bathing water cabinets along Sandymount Strand, as well as on DCC's Bathing Water website and beaches.ie.

#### 4.1.4. **Summary**

In 2024, 90% of the bathing water samples at Sandymount Strand met or exceeded the required *Sufficient* criteria. Two samples (10%) indicated *Poor* water quality during a short period at the end of August and the start of September. PCR analysis identified the gull marker as the likely contributing cause.

These overall results align closely with the 90% observed in 2022, though slightly lower than the 100% observed in 2023. This is an encouraging indicator, reinforcing the success of measures identified and implemented by the Dublin Bay Bathing Water Task Force, as discussed in the next section.



## 5. Review of pollution sources and management measures

In 2019, following a downward trend in South Dublin Bay bathing water quality, Dublin City Council (DCC) established the Dublin Bay Bathing Water Taskforce (BWTF). Consistent with the EU Water Framework and Bathing Water Directives, the scope of the taskforce has been to protect and restore water quality in a unified manner. This required the establishment of regular communications and collaborations with pertinent stakeholders who had a pivotal role in protecting and enhancing water quality. DCC is the lead authority and chairs monthly meetings with the taskforce to manage and coordinate actions arising.

Contributing members of the taskforce include Dun Laoghaire - Rathdown County Council (DLRCC), Uisce Éireann (UÉ), Central Laboratory, Fingal County Council and the Department of Housing, Local Government & Heritage. DCC and the BWTF have recorded meaningful successes, nonetheless various challenges to improve water quality remain. The pressures impacting Sandymount Strand and the actions required to mitigate priority pollution sources are set out in this management plan, and remain a focus of the BWTF.

The Dublin Bay Bathing Water Taskforce (BWTF) continues to study and identify existing and potential sources of pollution entering Dublin bay, particularly at Sandymount and Merrion Strands. A detail report on the activities being progressed under that platform are available for review at the following link [to Dublin Bay Bathing Waters Report – June 2023](#)

Dublin City Council is committed to restoring water quality at Sandymount Strand. It has identified various individual and multi-agency, short, medium and long-term actions to assist achieving this objective.

Specifically, the risk profile and thorough investigations to date via the BWTF and Acclimatize (II) project, have identified the following pressures impacting bathing water quality at Sandymount Strand.

### 1. The Elm Park and Trimleston Streams

The Elm Park Stream and to a lesser extent the Trimleston Stream have been identified as pressures on Sandymount Strand. The streams discharge onto Merrion Strand, however the Elm Park Stream is directed towards Sandymount Strand by the development of embryonic shifting dunes. The dunes are protected under the EU Habitats directive and are qualifying interests under the South Dublin Bay Special Area of Conservation (SAC) ([site code 000210](#)).

The streams are pathways for pollution and are impacted by a combination of emergency overflows, misconnections, urban runoff and unauthorised discharges. Approximately 1.5km of the Elm Park Stream lies within the DCC jurisdiction, with the remainder within the administrative area of Dun Laoghaire – Rathdown County Council (DLRCC). The Trimleston Stream is fully under the management of DLRCC.

**Management Measures**

Specific to the Elm Park Stream catchment, the BWTF identified and agreed a programme of works to address two priority storm water overflows. Upgrade works conducted in 2022 by Uisce Éireann permitted the removal of an overflow in the Dun Laoghaire catchment. This resulted in a positive environmental outcome for the Elm Park Stream. Further assessments and feasibility studies are being conducted on the remaining overflow by Uisce Éireann (the responsible authority), with updates provided to the BWTF accordingly.

The Acclimatize (I) project provided an in depth assessment and characterisation of the Elm Park Stream. Although a CSO was identified as a point source pollutant, further persistent pollution remains requiring further investigation.

In 2024, the [Acclimatize \(II\) Project](#) commenced, building on significant knowledge and robust datasets obtained through Acclimatize (I). A number of deliverables were agreed to address diffuse and point source pollution sources impacting bathing water quality in Dublin Bay. However, specific to the Elm Park stream and Sandymount Strand, a programme of works has commenced to identify and quantify the sources of pollution contributing to bathing water failures.

Surveillance of the Elm Park Stream includes FIB, MST and nutrient analysis. The primary objective of the works is to identify pollution hotspots, their respective loadings and inform corrective actions. Due to the uncertainty of the impact the Trimleston stream has on Sandymount Strand, the Acclimatize (II) project will assess this using modelling and possibly tracer studies depending on supply of appropriate bacteriophages.

**Timeline:**

Ongoing as part of BWTF work, which meets on a monthly basis to discuss progress on actions identified to improve water quality. Acclimatize (II) research will continue to inform the work of the BWTF for the next 5 years, and is supported by the Department of Housing, Local Government and Heritage.

**2. Dogs and marine birds:**

Sandymount Strand lies within the South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary Special Protection Area (SPA) ([site code 004024](#)). The site is of international importance for wintering birds with over 10,000 varying species and breeds visiting the location throughout the year. Birds by nature congregate in clusters, which can lead to localised contamination of waters.

Sandymount Strand is also a very popular location for dog walking, especially at low tide. Surveys conducted by UCD Acclimatize recorded up to 30 separate dog-fouling events along Sandymount Strand in one day. When quantified, these events amounted to approximately 2kg of dog foul deposited on the beach.

Dog faeces contain many dangerous pathogens that can pose a significant threat to public health. Studies have found that one dog poo has the potential to pollute a volume of water the size of a tennis court.

Humans and animals have specific gut bacteria, which can be identified and quantified using Polymerase Chain Reaction analysis. This supplementary analysis conducted by UCD Acclimatize (I and II) in collaboration with DCC provided scientific evidence and insight into the contributing sources of poor water quality at Sandymount Strand. The results confirmed that human, dog and marine bird fouling individually and/or in combination impacting bathing water quality and classification at Sandymount Strand.

### Management measures

Dog fouling is a significant issue at Sandymount Strand and was proven to impact bathing water quality previously. In an effort to mitigate this pollution source and to encourage responsible dog management, DCC installed poo bag dispensers at bathing water entrances along the coast. See below example of bag dispenser attached to dedicated bathing water cabinet.



Photograph 1: Dog foul mitigation measures

Additional improved signage highlighting dog fouling as an offence and the associated fines were also erected at Sandymount Strand. UCD Acclimatize in conjunction with the BWTF produced a short animation to highlight the impact of dog fouling has 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/>.

To further raise awareness, educational posters on dog fouling were widely disseminated across all bathing water cabinets and presented as a campaign shared on DCC's website and social media channels.

The 2024 PCR results from the Bathing Water season indicated a reduced prevalence of the dog faecal marker compared to previous years. This improvement may be linked to the success of the "Leave Only Paw Prints" initiative and the broader promotion of responsible dog management, particularly at Sandymount Strand. These efforts highlight the positive impact of dog fouling initiatives, which rely on continued responsible behaviour from dog owners. Additionally, DCC are collaborating internally with dog wardens to request increased patrols and conduct compliance reviews of byelaws.

All six samples sent for PCR testing from Sandymount Strand throughout the 2024 Bathing Water Season had a prevalence of the gull faecal marker, five resulted in a single source marker and one combination source marker; human and gull. There are very limited options available to manage bird fouling in the Bay. They and their habitats hold protected status under the EU Birds and Habitats directive. Hence, DCC plan is to focus on reducing pollution from dogs and humans.

**Timeline:**

Ongoing as part of BWTF work. PCR analysis to continue as part of the Acclimatize II project, research to better inform pollution investigations and origins of bathing water failures i.e. human, dog or gull.

**3. Ailesbury Pumping Station:**

There is an emergency overflow from Ailesbury Pumping Station, which activates during intense rainfall events. The overflow discharges directly onto Sandymount Strand opposite Saint Albans Park.

The pumping station serves as a critical flood defence mechanism, protecting the adjacent Ailesbury Gardens residential properties from flooding. During the 2024 bathing season, the station activated on two separate days in July and August, compared to six activations in 2023. This decrease reflects a downward trend in activations, likely linked to variations in rainfall intensity and cumulative volumes within the catchment. July 2023 was the wettest on record, which brought a significant challenge for water quality.

**Management measures**

Interim upgrades to the Ailesbury pumping station were completed by Uisce Éireann in 2021, which included equipment upgrades to reduce the risk associated with pump failures. These will serve to reduce low rainfall spill events to Sandymount Strand but will not fully eliminate them.

In addition to the upgrades, UÉ has committed to carrying out an advanced optioneering and feasibility study to understand how to further improve the operational capacity of the station and network without increasing risk of flooding and/or overflows.

Currently UÉ is undertaking an assessment of the impacts of Ailesbury SWO Outfall as part of the Main Lift Drainage Area Plan. This study encompasses a large area and includes significant surveying and monitoring in order to build a drainage catchment model of the network. This model will be used to analyse the current and expected future flows and compare current and future performance to UÉ targets.

UÉ are responsible for notifying DCC of an incident, which may affect water quality. DCC must then decide whether a risk to bather health exists and warn the public accordingly, in consultation with the Health Service Executive and the EPA. Post activation clean ups will continue to be conducted at Sandymount Strand as soon as possible thereafter by UÉ.

**Timeline:**

DCC continues to engage and work with UÉ on pertinent drainage issues impacting bathing water quality. UÉ have advised the DAP will be completed shortly.

**4. Ringsend Wastewater Treatment Plant (RWWTP)**

The Wastewater Treatment Works is identified as a potential pressure on bathing water quality at Sandymount Strand due to the nature and scale of the plant. However, there is no evidence to suggest that the treatment works has an impact on the bathing location. This is supported by models developed by Uisce Éireann and studies by the UCD Acclimatize project. Further information on these studies may be viewed on [www.water.ie](http://www.water.ie).

**Management Measures**

DCC continues to monitor water quality at Sandymount on at least twenty occasions during the bathing season and on a fortnightly basis thereafter.

DCC will continue to monitor and evaluate the potential impact RWWTP has on the location. For a comprehensive overview of the progress and activities of Bathing Water Taskforce (including at Sandymount Strand), please see our published report on the Dublin City council website – [Link to Dublin Bay Bathing Waters Report – June 2023](#)

The Dublin Bay Taskforce is developing a predictive system to aid Local Authorities managing short term pollution incidents at bathing waters. The project is joint funded by members of the BWTF. Uisce Éireann is managing the procurement and delivery of the forecasting system on behalf of the Taskforce. This system combines daily rainfall forecasts from Met Éireann with a suite of river, sewer and coastal models to provide a forecast of the bathing water quality at designated bathing waters.

**Timeline:**

DCC continues to engage and work with UÉ on pertinent drainage issues impacting bathing water quality. Monitoring the impacts of RWWTP on bathing water quality is ongoing. The forecasting model is currently in the validation phase which will continue into the 2025 bathing water season, with an aim for implementation in 2026. The predictive system does not negate the council of its responsibilities under the Bathing Water Regulations. This includes the continued execution of physical sampling, laboratory testing, reporting, and incident management, all of which must be conducted in accordance with regulatory standards.

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No	Source Type	Pressure	Proposed Measure(s)	Key Stakeholders	Review Date	Outcome	Short Term Improvements ?
1	Freshwater	Elm Park and Trimleston Streams	Coordinated investigative monitoring programmes in the Elm Park Stream catchment. Investigations will supplement UCD Acclimatize research and inform pollution investigations.	DCC/DLR	Ongoing	Inform right measure in the right place to reduce pollution.	No
			Further assessments and feasibility studies are being conducted on the upstream contributing catchment impacting the Elm park overflow	Uisce Éireann	Ongoing	Reduction in overflows and contamination of the Elm Park stream.	No
			Acclimatize Project – identifying significant sources of faecal contamination impacting Bathing Water Quality – 1 work package specifically investigating Elm Park Stream quality.	BWTF / UCD Acclimatize	Quarterly	Inform LA investigative actions	No

2	Animals	Dogs/Birds	Campaign to highlight the impact dog fouling has on water quality through short animation and educational posters i.e. leave only paw prints campaign.	BWTF/UCD Acclimatize	Ongoing	To provide awareness and educational measures, to encourage responsible dog management and highlight the impact of dog fouling has on water quality.	Yes
			Installation of poo bag dispensers and improved signage at bathing water entrances along the coast.	DCC	Ongoing	Encourage responsible dog management.	Yes
			Additional improved signage highlighting dog fouling as an offence and the associated fines were also erected at Sandymount Strand.	DCC	Ongoing	Encourage responsible dog management.	Yes
			PCR analysis on non-compliant bathing water samples (less than excellent) to understand faecal contamination source origin.	BWTF/UCD Acclimatize	Ongoing (Upon receipt of samples)	To better understand bathing water pressures, inform pollution investigations and required mitigation measures.	Yes



3	Human	Ailesbury Pumping Station	Continued alarmed telemetry of sensitive overflows and notification of incidents to DCC.	Uisce Éireann	Ongoing	Perform clean up as required at Sandymount Strand.  Notify DCC as required to protect public health.	Yes
4	Human	Ringsend WWTP	Developing a predictive system to aid Local Authority Beach Managers to assess the daily pollution risk at designated bathing waters in Dublin Bay.	UÉ/BWTF	Q2 2025	Assist LA in managing STP events	No
			Continued monitoring of bathing water quality at Sandymount and evaluate the potential impact RWWTP has on the location.	DCC	Ongoing	Provide bathing water quality data.	No

Table 3: Potential measures and pressures (Section 5)

## 6. 2025 Bathing Season

DCC confirms that Sandymount will remain as a designated bathing water. It is acknowledged that while bathing does not occur at the location, paddling and other recreational activities do. The quality of the bathing water is also a good indicator of the quality of the catchments discharging therein. DCC is committed to improving water quality of surface waters under the Water Framework Directive and bathing water quality under the Bathing Water Directive.

Sandymount Strand will remain as *Poor* status for the 2025 season. DCC regret that Sandymount bathing water quality has not improved sufficiently in 2024 to remove the bathing prohibition necessary for the forthcoming 2025 season. However, our assessment of the current trajectory and incremental improvements being recorded at Sandymount Strand is encouraging.

With the expected progression of the aforementioned actions, which are ongoing to further improve water quality at Sandymount, we are cautiously optimistic that current season long prohibition at Sandymount Strand may be rescinded in the near future.

To ensure adequate bather protection, DCC proposes to update the season long bathing prohibition at Sandymount Strand at the start of the 2025 bathing season. The below table outlines DCC's strategy for communicating the change in classification to the public as follows;

<p><b>Causes and reasons for Poor Classification</b></p>	<ul style="list-style-type: none"> <li>• Coordinate communications strategy with DCC media department to ensure consistent and clear messaging pertaining to the Poor status</li> <li>• Ensure consistency with EPA communications, 2024 Bathing Report and <a href="http://www.beaches.ie">www.beaches.ie</a></li> <li>• Publish 2024 Sandymount Summary report on DCC website for further information</li> </ul>
<p><b>Measures undertaken and planned to improve water quality</b></p>	<ul style="list-style-type: none"> <li>• Summary report contains overview of pressures and management measures proposed.</li> <li>• Publish report on DCC website for further information</li> <li>• Link to <a href="http://www.beaches.ie">www.beaches.ie</a> and bathing water profile</li> </ul>
<p><b>Implications on bather health</b></p>	<ul style="list-style-type: none"> <li>• Bathing prohibition warning highlights risks and implications for bather health. Warning will be erected across 4 bathing water</li> </ul>

	<p>cabinets at entrances to Sandymount Strand.</p> <ul style="list-style-type: none"> <li>• Implications of the <i>Poor</i> status on bather health will be featured on DCC’s bathing webpage, FAQ page and social media posts.</li> </ul>
<b>Where/who to contact for more info</b>	<ul style="list-style-type: none"> <li>• This will be included on warning notices and is available on the DCC and beaches.ie webpages.</li> </ul>

Table 4: DCC's Communication Strategy