

# 2023 SUMMARY REPORT SANDYMOUNT STRAND



Water Pollution Control Section, Protection of Water Bodies Office, Dublin City Council

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#### Introduction

The Environmental Protection Agency (EPA) is responsible for assigning an annual bathing water classification to designated waters, in accordance with the Bathing Water Regulations SI 79 of 2008. The classification assessment considers the four preceding bathing season's results which are assessed against stringent bacterial limits. The assessment provides an overall bathing quality rating of *Excellent, Good, Sufficient* or *Poor*.

Sandymount Strand was classified as *Sufficient* from 2019 to 2022, however will be classified as *Poor* in 2023. As a result, a season long bathing prohibition will be erected at Sandymount Strand for the 2024 bathing season. This will remain in place until the bathing classification improves to at least *Sufficient*.

Dublin City Council (DCC) is preparing a comprehensive management plan for Sandymount Strand, which will set out in detail ongoing and proposed actions to improve bathing water quality. However, prior to this and at the request of the EPA, a summary report has been prepared to briefly outline bathing water pressures and associated management measures in place at Sandymount Strand.

## Bathing quality pressures at Sandymount Strand

The risk profile for Sandymount Strand has identified the following as the primary pressures on bathing water quality:

#### 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**

In 2019, Dublin City Council (DCC) established the Dublin Bay Bathing Water Taskforce (BWTF).

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The scope of the taskforce is to identify and mitigate pollution sources impacting bathing water quality in Dublin Bay. This required the establishment of regular communications and collaborations with pertinent stakeholders who had a pivotal role in protecting and enhancing bathing water quality.

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.

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 other overflow by Uisce Éireann.

An in depth assessment of the Elm Park Stream catchment was conducted collaboratively by University College Dublin (UCD), DCC and DLRCC as part the <u>Acclimatize Project</u>. Catchment pressures were identified and confirmed by river walks and routine monitoring programmes. In 2023, DLRCC and DCC commenced a coordinated monitoring programme of the Elm Park Stream which is ongoing. It provides a holistic overview of the rivers quality and identifies any upwards or downward trends prompting further investigation as required.

Furthermore, intensive misconnection programmes are ongoing in both the DLRCC and DCC catchments. The purpose of the misconnection programme is to identify misconnected foul appliances or cross connections causing surface water pollution. In 2023, DCC identified a private complex which had a significant number of misconnected appliances discharging to the Elm Park Stream. Following instruction from DCC, the misconnected appliances were removed from the surface water system, removing pollution from the stream.

#### 2. Birds and Dogs:

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 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 bird fouling individually and/or in combination impact bathing water quality and classification at Sandymount Strand.

#### **Management measures**

Dog fouling is a significant issue at Sandymount Strand and has been proven to impact bathing water quality. In an effort to encourage responsible dog management, DCC installed poo bag dispensers at bathing water entrances along the coast. 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.

There is 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 to focus on reducing pollution from dogs and humans.

#### 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 is a critical flood defence mechanism and prevents flooding of the adjacent Ailesbury Gardens catchment. The station activated on six separate days during July and August of the 2023 bathing season. Met Éireann reported July 2023 as the wettest on record, followed by two named storms (Antoni and Betty) in August, which resulted in pluvial and fluvial flooding which necessitated the engagement of the Ailesbury pumping station on those occasions.

#### **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.

DCC will continue to monitor the activations 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.

# 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 the BWTF and studies by the UCD Acclimatize project.

### **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.

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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 recently published report on the Dublin City council website –

Link to Dublin Bay Bathing Waters Report - June 2023