

Revision	Status	Date	Prepared by	Reviewed by	Approved by
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#### 1. Introduction

#### 1.1. Bathing water legislation

The 2008 Bathing Water Regulations (SI No 79 of 2008) transpose the Bathing Water Directive (2006/7/EC) into Irish law. These regulations apply much more stringent criteria than preceding bathing water legislation to the bacteriological quality of bathing waters and demand a strong focus on the management of pollution sources for the purpose of reducing the risk to public health from bathing waters. The bathing water season in any year means the period from 1 June to 15 September in that year.

The Local Authority is the body responsible for the designation and management of bathing waters. Article 17 of the regulations require the Local Authority to encourage public participation in relation to the establishment, review and updating of lists of bathing waters.

The reader is referred to EPA document 'Public advice on identifying new bathing waters' for more information on the governing legislation, the role of the Local Authority and procedures relating to the designation of bathing waters.

#### 1.2. What is a bathing water?

Article 4(2) of the 2008 Bathing Water Regulations states that;

"The bathing waters to be identified by a local authority shall be all elements of surface water where the authority expects a large number of people to bathe."

The Regulations do not specify what constitute 'bathers' or 'large numbers'. While the European Commission considers that 'bathers' constitutes all users of a beach, Member States have generally interpreted 'bathers' as people in direct contact with the water for recreational use. The exception here is for water sports such as kayaking, surfing, wind surfing, etc. Areas where these activities occur should be considered for identification as a bathing water *only* if bathing is also occurring at that location.

It is challenging to determine what constitutes 'large numbers'. In the Irish context, it is very difficult to put a figure on this, as factors such as weather, accessibility and popularity influence when and how many people use a beach. For the current designated Irish bathing waters, 'large numbers' can range from 5 upwards, depending on the location.

#### 2. 2020 Period of Public Participation

Each year, a notice is placed in a national newspaper and on Dublin City Council's website informing the public that a period of public participation, whereby members of the public are invited to make submissions, is underway. These submissions allow members of the public to comment on the existing bathing waters and/or to propose new bathing waters to be considered for designation.

Any person, community body, public body or third party can make a submission to the relevant Local Authority requesting that a body of water, either inland or coastal, be designated as an EU identified bathing water if bathing is known to be carried out there. However, the Local Authority must be satisfied that it meets the relevant criteria for classification as a bathing water. Applications may also come from within the Local Authority.

The Water Pollution Control Section manages this process on behalf of Dublin City Council. The closing date for the 2020 period of public participation was 22<sup>nd</sup> June 2020.

Forty-four submissions were received during the 2020 consultation, compared with two in 2019 and one in 2018. All submissions were acknowledged by email, typically on the same day it was received by Dublin City Council, or the next working day. The factors submitted for consideration did not differ greatly from what was submitted in previous years however all submissions were considered in the subsequent assessment of the North Bull Wall. Refer to Appendix 1 for a summary of submissions.

The 2019 assessment of the designation of the North Bull Wall recommended no designation be given following an assessment of the water quality at this location over the preceding 4 year bathing seasons. In view of the fact that this bathing area was thoroughly assessed in the last year, it was decided that water quality was the only influencing factor that could have changed sufficiently in such a relatively short period, to alter the findings of any reappraisal. All other criteria examined, such as location, bather numbers, facilities, community support and safety had scored high enough to support designation.

#### 3. North Bull Wall and the area proposed for designation

The North Bull Wall forms the southern end of the North Bull Island (see Figure 1 below). A wooden bridge connects this end of the island to the mainland at Clontarf. A roadway for vehicular access and a footpath for pedestrian access are located on the wall. The roadway facilitates access to Bull Wall Cottages and The Royal Dublin Golf Course. There is a second access route to the North Bull Wall from the causeway to the island, opposite Watermill Road, and via the Royal Dublin Golf Course, but this is not typically available to members of the public to access the area.



Figure 1 North Bull Wall

The roadway ends at a car park about half way along the wall. Another roadway extends from this car park allowing vehicular access onto Dollymount Strand. The footpath continues along the wall for approximately 700 metres where it terminates at a statue known as 'Our Lady, Star of the Sea'. This is a very popular walk for members of the public.

There are four changing shelters, two for males and two for females, situated along the wall, each with steps down to the water. These are the primary locations where people access the water for bathing.

The area proposed to be designated is shown in Figure 2 below. It extends for a distance of approximately 2 km along the Bull Wall, ending at *Our Lady, Star of the Sea* statue. The area proposed to be designated extends outwards from the wall a distance of approximately 50 metres.



Figure 2 Proposed area of designation (note: not to scale)

#### 4. EPA assessment criteria

#### 4.1. Assessment Criteria

The EPA has issued a report 'A framework to assist Local Authorities in the assessment of submissions for the identification of new bathing waters' which provides guidance on how to assess submissions in relation to the designation of new bathing waters. This is in accordance with the requirements of the Bathing Water Regulations (SI No. 79 of 2008) which transpose Directive 2006/7/EC into Irish Law.

While it is not a requirement for the Local Authority to assess submissions received in accordance with the guidance document, the EPA recommends it be taken into account when considering submissions for new bathing waters received from the public. Dublin City Council included all the criteria in the document when assessing the submissions.

The criteria are summarised in Table 1 below. For a full description of the criteria, the reader is referred to EPA's framework document referred to above.

Criteria	Brief Description
Location	<ul> <li>Bathing area should be easily and readily accessible to the anticipated number of beach users/bathers without causing environmental damage.</li> <li>NPWS must be consulted where the proposed bathing area is within a designated natural heritage area (i.e. SAC, NHA, SPA, Natura 2000).</li> </ul>
Beach Users/Bather Numbers	<ul> <li>At least 2 survey days are required to assess bather numbers.</li> <li>Dublin City Council conducted user number surveys on 4 non-consecutive days during the 2016 bathing season.</li> <li>For this assessment, 'bathers' are anybody interacting with the water, whether physically immersed, actually swimming or simply paddling.</li> </ul>
Car Parking/Facilities	<ul> <li>The beach should be adequately signposted</li> <li>There should be sufficient car parking</li> <li>Picnic facilities should be considered</li> <li>Toilets should be available at the beach</li> <li>Adequate litter management should be in place</li> <li>The Local Authority should give consideration as to whether animal access should be restricted</li> </ul>
Commercial Impacts	Consideration should be given to whether designation would impact negatively or positively on commercial activities.
Local Community Support	The extent of local community support should be considered and an assessment of community support should ideally be included with submissions.

Water Quality	Dublin City Council assessed water quality in the area and identified potential pollution sources. It is neither practicable nor reasonable to expect members of the public to carry out such an assessment.
Signage/Other Information	An assessment of available bathing water information signage or the installation of same should be considered.
Safety	Safety is a key consideration, not only in respect of the management of safe access to the bathing water and overall water safety, but also in respect of issues such as traffic management on access routes or in car parks as well as the safety of Local Authority staff when carrying out water quality monitoring.
Planned infrastructure/WWTP developments	Consideration must be given to the potential positive or negative impacts of any known or proposed environmental, urban, or infrastructural changes on the proposed bathing area.
Costs	Consideration should be given to the costs associated with designation, including management of bathing water quality, installation of signage, safety equipment, lifeguards (where deemed necessary).

Table 1 Criteria for the assessment of new bathing waters

#### 4.2. Overall Assessment

Dublin City Council review submissions for the identification of a new bathing water in line with the general advice provided in the EPA guidance document and make an assessment of the relative strength of each of the 10 criteria.

Each of the above 10 factors is rated on a scale of 1 to 5, as follows:

- 1 not suitable/low/expensive
- 5 very suitable/high/inexpensive

The weighted score is the product of the Dublin City Council overall rating of each of the criteria (A) x the Weighting factor provided by the EPA for each (B).

The EPA has proposed that a weighted score of 65 or higher is required for accepting the proposed location as an EU identified bathing area and a score of at least 50 is required for acceptance as an 'other monitored water.'

However, the EPA has stated that the Local Authority may apply other criteria to the assessment, provided these additional criteria are fully justified. Dublin City Council has opted to apply greater emphasis to water quality, based on many years of water quality assessment as well as local knowledge of pressures, both human and animal, on water quality. Consistently poor water quality poses a significant risk to bather health. Refer to Section 5 for the assessment for further information.

#### 5. 2020 Assessment

#### 5.1. Bathing water quality in 2020

Dublin City Council (DCC) has monitored water quality at the proposed location since 2008. Initially, the parameters assessed were faecal streptococci, faecal coliforms and total coliforms. As required by the Bathing Water Regulations, 2008, the use of these parameters ceased on the 31<sup>st</sup> December 2014 and, since then, the parameters assessed have been *E coli* and Intestinal Enterococci.

DCC monitors bathing water quality at six locations throughout the year. Two bathing waters are designated, namely Sandymount and Dollymount Strands, whereas the North Bull Wall, the Half Moon, Shelley Banks and Merrion Strand are undesignated and are classified as "other monitored waters". DCC takes 20 samples at each location during the bathing season, and samples on a fortnightly basis thereafter.

The results of each sampling event are posted in hardcopy format at the bathing water entrances and are available online at <a href="https://www.dublincity.ie/bathingwater">www.dublincity.ie/bathingwater</a>. They are also submitted to the EPA who populate the national bathing water website <a href="https://www.beaches.ie">www.beaches.ie</a> during the bathing season. The EPA provide a bathing water classification of Excellent, Good, Sufficient or Poor each year to designated bathing waters. This annual classification is based on results from the previous four bathing seasons.

Dublin City Council assessed bathing water quality using the EPA criteria for the period 2017 to 2020 for the North Bull Wall. The analysis indicated that water quality was such that the bathing water would be classified as 'Poor'. A summary of bathing water quality at this location since 2017 is detailed in Table 2, which demonstrates consistently poor quality at this location.

Assessed Season	Period	E Coli (90 %ile)	I.E. (90 %ile)	E Coli Classification	I.E. Classification	Overall Classification
2020	2017- 2020	581	137	Poor	Sufficient	Poor
2019	2016- 2019	604	133	Poor	Sufficient	Poor
2018	2015 - 2018	553	151	Poor	Poor	Poor
2017	2014 - 2017	652	198	Poor	Poor	Poor

Table 2 Water Quality Assessments, 2017 to 2020

An EPA classification of "Poor" at the North Bull Wall would result in the bathing water being subject to an immediate seasonal bathing water prohibition. Refer to Figure 3 for an example of the prohibition that would be immediately required at the North Bull

Wall should it be designated by Dublin City Council. This would continue until water quality returned a classification of at least "Sufficient". It is evident from Table 2 that this has not been possible for at least the last 4 years.



Figure 3 Example of bathing prohibition

Failure to achieve a classification better than "Poor" over five consecutive years would result in the mandatory loss of designation, similar to that of Merrion Strand in 2020. As the bathing water quality at the proposed location is not reaching a consistently acceptable standard (better than 'Poor'), the City Council does not consider it appropriate at this time to designate the North Bull Wall as a bathing area. However, due the regular number of people choosing to use the location for bathing, the City Council considers it appropriate to continue to categorise this location as 'other monitored water.'

A review of the 2020 water quality results for North Bull Wall indicated a steady improvement in water quality compared to that four years previous. The 90 percentile value for E.Coli in 2017 was 652 whereas in 2020 it was 581. Similarly, an improvement is noted for Intestinal Enterococci, which was 198 in 2017 and 137 in 2020. Further consideration of the designated bathing water status of the North Bull Wall can be revisited at any point. Should the water quality continue to improve, designation of the bathing water as EU identified water may be achieved in the coming years. However, protecting bather health remains the primary priority of Dublin City Council.

Under the classification of "other monitored water" the Council commits to continue monitoring the water quality at the North Bull Wall and to maintaining information boards at the location. These will provide useful information, for individuals who choose to use the location for bathing, including the most up to date water quality information available.

#### 5.2. Assessment of Submission – Scoring of each criterion

The submission to have North Bull Wall designated as an EU identified bathing water has been assessed using the EPA document "A framework to assist Local Authorities in the assessment of submissions for the identification of new bathing waters". Bathing water quality remains at poor status and so the overall assessment for designation remains unchanged and the comments made in 2019 as shown in Table 3 remain valid for 2020.

Factor	Rating (A) (1-5)	Weighting (B) (1-5)	Weighted score (A x B)	Comments
Location	5	3	15	Easily accessible
Beach users / Bather numbers	5	4	20	History of bathing at this location. Approximately 10 – 30 people bathe daily all year round at this location. Bather numbers are elevated further during the bathing season and recently during Covid-19 lockdown.
Car Parking / Facilities	2	2	4	There is limited car parking in the area. Small car park in place, shared by Dollymount Strand, and most people park along the causeway.
Commercial impacts	4	1	4	Designation would not create any commercial impacts.
Local Support	5	1	5	There is very strong local support for designation.
Water Quality	1	5	5	Under the current EPA classification method, water quality would be classified as poor. Poor water quality poses a significant risk to bather health.
Signage	1	2	2	Signage would have to be installed for bathing water monitoring purposes.
Safety	1	5	5	A risk assessment report was received from Irish Water Safety.

Planned Developments	1	1	1	There are no known planned developments for the proposed designated area. However, both Dublin Port and Irish Water, subject to ABP approval, may be carrying out works in the future that may impact water quality.
Costs	3	3	9	As water quality is already monitored at this location, there would be minimal additional cost associated with monitoring the location as a designated bathing water.  However, due to the extent and complexity of the various pressures impacting on water quality, the level of resources required to address these
				would be prohibitive and unsustainable.

Overall weighted score	70	Exceeds the minimum recommended scoring for designation. However, satisfactory water quality cannot be guaranteed at this location.
Deferred pending additional data	Y / N	
Accepted as an EU identified BW	Y / N	
Accepted as 'other monitored water'	Ŷ/ N	On the basis that water quality is classified as Poor.
Rejected	Y / N	
General summary of the proposal and assessment outcome	Wall indic 'Poor' for Poor wate health and the North water'. Th	onitoring of the waters at the North Bull ate that it would have a classification of 2020 under EPA assessment criteria. It quality poses a significant risk to bather d, therefore, it is not recommended that Bull Wall be designated as a 'bathing e status of 'other monitored water' would appropriate designation.

Table 3 Assessment of Submissions

Signed: <u>Emma Finlay</u>
Position: <u>Executive Engineer</u>
Date: <u>30/10/20</u>

#### 6. Conclusion and Recommendation

During the 2020 period of public consultation, Dublin City Council received forty-four submissions requesting that the North Bull Wall be designated as an EU identified bathing water.

The submissions were assessed in accordance with EPA guidance, with greater consideration given to water quality based on historical monitoring and local knowledge of pressures.

The result is that, while a score in excess of 65 was achieved using the EPA assessment, in light of consistent issues with poor water quality, Dublin City Council cannot designate North Bull Wall as an EU identified bathing area at this time. Instead, it is appropriate to continue to categorise the location as 'other monitored water'.

Therefore Dublin City Council will continue to take samples at this location on a regular basis, on 20 occasions during the Bathing Season (1st June to 15th September) and approximately twice a month during the rest of the year. Analysis results will be available on the City Council's website for all samples, in a cabinet located on North Bull Wall, and on the EPA website for Bathing Season samples (www.beaches.ie).

It must be emphasised that bathers should not assume that an area used for bathing, that is *not* a designated bathing water under the 2008 Regulations, is suitable for bathing simply on the basis that it is monitored as an 'other monitored water.'

Signed:	fidy was	Date: 3 Nov 2020
_	Andy Walsh	
	Executive Manager (Engineering)	

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## **Appendix 1**

Name	Received by	Factors submitted for consideration
Member of the public - AH  Member of the public - AF  Member of the public - BK  Member of the public - BR  Member of the public - CD  Cllr Donna Cooney	All submissions were received by e-mail on 22/06/2020	<ul> <li>Bathing has taken place at the North Bull wall since the wall was built</li> <li>Most popular bathing area on Bull Island/Ireland</li> <li>The Bull Wall has 3 bathing shelters</li> <li>Used by the elderly, families with young children, triathlon and sea</li> </ul>
Member of the public - DC  Member of the public - DM  Member of the public - FM  Member of the public - FF  Member of the public - GP  Member of the public - GOR  Member of the public - GK  Member of the public - JOH  Member of the public - JK  Member of the public - JK  Member of the public - JK  Member of the public - KM  Member of the public - KT  Member of the public - KF  Member of the public - LF  Member of the public - LK  Member of the public - MOB  Member of the public - MOB		<ul> <li>swim clubs</li> <li>Safe for swimming, no gradients or rip tides</li> <li>+/- 3 hour window at high tide making it possible to swim in daylight even in winter</li> <li>Public toilets and parking nearby</li> <li>Swimming all year round</li> <li>Lifeguards in Summer</li> <li>Accessible by public transport, foot, bike or car</li> <li>Water quality monitored by DCC</li> <li>Number bathing daily this Summer in their thousands whilst in period Dec to March est 30-40</li> <li>Use of the location has significantly increased this year</li> </ul>

lember of the public – MS
lember of the public - ML
lember of the public -MC
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lember of the public - OJ
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