

# 19/062 - WO064 Marine Modelling Studies - Lot 1 Greater Dublin & Northeast Region

Compliance with Water Framework Directive

Uisce Éireann

July 2026

Quality Information

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Revision History

| Revision | Revision date | Details                           | Authorized | Name             | Position        |
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| P1       | 26 March 2026 | Draft for Client review           | SR         | Sundar Rangasamy | Project Manager |
| P3       | 22 July 2026  | Update report following UE review | SR         | Sundar Rangasamy | Project Manager |
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# 1. Compliance with Objectives of the Water Framework Directive

## 1.1 Introduction

This Attachment has been prepared in support of the Maritime Usage Licence (MUL) Application for marine surveys associated with the Marine Modelling Study (MMS) being undertaken by Uisce Éireann along the Irish coast, from Carlingford Lough to Kilcoole. The marine surveys comprise the deployment and recovery of Acoustic Doppler Current Profilers (ADCPs), bathymetric surveys, and passive water quality sampling (hereafter referred to as the Marine Surveys), within Proposed Licence Areas A–D. Further details of the marine surveys and Proposed Licence Areas A-D can be found in Part 3 of the MUL Application.

This attachment forms one of eleven attachments (the current attachment is highlighted in **bold**) submitted in support of included as part of the MUL Application:

- Attachment 3.1: Proposed Maritime Usage
- Attachment 3.4: MUL Map and GIS Shapefiles
- Attachment 3.5: Other Maps and Drawings
- Attachment 4.1: Compliance with Objectives of the National Marine Planning Framework (NMPF);
- Attachment 4.3.1: Supporting Information for Screening of Appropriate Assessment (SISAA);
- Attachment 4.4: Risk Assessment for Annex IV Species;
- **Attachment 4.5: Compliance with Objectives of the Water Framework Directive;**
- Attachment 4.6: Compliance with Marine Strategy Framework Directive;
- Attachment 4.7: Information for EIA Screening; and,
- Attachment 4.11: Compliance with National or European Strategic or Policy Objectives.

The purpose of this document is to provide a clear and proportionate assessment of compliance with the Water Framework Directive (2000/60/EC) (Hereafter referred to as 'WFD Directive') and its implementing Irish legislation. In particular, it demonstrates that the proposed Marine Surveys will not result in deterioration of any water body status and will not compromise the achievement of the Directive's environmental objectives.

## 1.2 Quality Assurance and Statement of Authority

This report, and the assessment described within it, has been completed in accordance with the AECOM Integrated Management System (IMS). AECOM's IMS places emphasis on professionalism, technical excellence, quality, as well as covering health, safety, environment and sustainability management. All AECOM staff members are committed to maintaining this accreditation to those parts of BS EN ISO 9001:2015 and 14001:2015, as well as BS OHSAS 18001:2007 that are relevant to the provision of consultancy services.

## 1.3 Water Framework Directive Objective

The key environmental objectives of the WFD Directive are set out in Article 4 and form the basis for assessing compliance of proposed activities with the WFD Directive. These objectives apply to all surface waters (including coastal and transitional waters) and groundwater bodies and are implemented through River Basin Management Plans and associated Programmes of Measures.

At their core, the objectives require Member States to prevent deterioration in the status of all water bodies and to protect, enhance and restore them with the aim of achieving at least Good Ecological Status (or Good Ecological Potential for heavily modified water bodies) and Good Chemical Status within defined timeframes. The key objectives of the WFD Directive are:

- Prevent deterioration in water body status, including both ecological and chemical status.
- Achieve and maintain Good Ecological Status or Good Ecological Potential, and Good Chemical Status, through the protection, enhancement and restoration of water bodies.

- Reduce water pollution from priority substances, including the progressive reduction and, where relevant, cessation or phasing out of discharges, emissions and losses of priority hazardous substances.
- Protect ecological and chemical quality elements, including biological, hydromorphological and physico-chemical components that underpin WFD classification.
- Promote the sustainable use of the water environment, ensuring that activities do not adversely affect the long-term quality or functioning of water bodies.

For the purposes of this assessment, the most relevant considerations are the prevention of deterioration in water body status, the protection of ecological and chemical quality elements, and the control of pollution from anthropogenic activities. These objectives are assessed in the context of the scale, duration and nature of the Marine Surveys.

## 1.4 Baseline Condition

The Proposed Licence Areas overlap several coastal water bodies defined under the WFD (Environmental Protection Agency, 2025a), including:

- Dublin Bay
- Irish Sea Dublin
- Southwestern Irish Sea – Killiney Bay
- Northwestern Irish Sea
- Malahide Bay
- Boyne Estuary Plume Zone
- Louth Coast
- Outer Dundalk Bay
- Mourne Coast
- Carlingford Lough

These waterbodies were all classed as having either a 'high' or 'good' status in the latest monitoring period of 2016 – 2021, except for Boyne Estuary Plume Zone and Malahide Bay, which are of 'moderate' status (Environmental Protection Agency, 2025a; 2025b). Mourne Coast and Carlingford Lough waterbodies have an 'unassigned' status. A status of 'high' indicates that the water is unpolluted and supports the normal functioning of ecological processes, with a 'good' status indicating only a slight change from the reference condition. A 'moderate' status indicates a moderate change in community structure and loss of some niche species, with reduced resilience and ability to absorb external 'shocks'. This baseline indicates that, while some water bodies require improvement, the overall receiving environment is of relatively good quality and is not currently subject to significant pressures that would be exacerbated by short-term survey activities.

## 1.5 Compliance Check

The Marine Surveys have limited interaction with the water environment and are restricted to short-term, localised activities, including the temporary deployment and recovery of seabed-mounted instruments and vessel-based survey operations. These activities may result in minor, localised disturbance to seabed sediments and very small, short-lived increases in suspended sediment concentrations in the immediate vicinity of works.

Given the scale and nature of the surveys, any disturbance to the seabed or water column will be temporary and rapidly reversible, with no potential to result in measurable changes to water quality or benthic conditions at the scale of the relevant water bodies. The receiving environment is already subject to routine maritime activity, and the Marine Surveys are consistent with this baseline.

There is a very low risk of accidental pollution associated with vessel operations; however, no discharges are proposed. Only one vessel will be required for the Marine Surveys, in an area with several ports and a large commercial fishing industry. Therefore, the addition of one extra vessel during the Marine Surveys is not expected to increase the risk of pollution events from accidental spills above baseline conditions. This vessel will operate in accordance with the International Convention for the Prevention of Marine Pollution from Ships (MARPOL) Convention and standard industry controls. As such, the likelihood of any pollution event is minimal, and any effects would be localised and short-term.

Overall, the scale, duration and nature of the Marine Surveys are such that no deterioration in ecological or chemical status of any WFD water body is anticipated. The works are therefore consistent with the objectives of the Water Framework Directive (2000/60/EC). A summary of compliance with the relevant WFD objectives is provided in Table 1.

**Table 1. WFD Compliance Assessment**

| <b>WFD Objective</b>                             | <b>Potential Interaction</b>                                                                                                           | <b>Potential Effects</b>                                                                                                                                                                                                                                          | <b>Compliance Check</b>                |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Prevent deterioration in water body status       | Localised seabed disturbance, temporary increases in suspended sediments, vessel presence, and a very low risk of accidental pollution | All identified effects are temporary, spatially limited, and reversible. They do not affect water body status at the scale relevant to WFD classification, nor do they alter any biological, chemical or hydromorphological quality elements in a measurable way. | No deterioration predicted – compliant |
| Achieve and maintain Good Ecological Status      | Short-term disturbance to sediments and the water column                                                                               | The scale and duration of the activities are insufficient to influence ecological status or interfere with ongoing recovery objectives in Moderate status water bodies.                                                                                           | Compliant                              |
| Reduce pollution from priority substances        | Potential for accidental fuel or oil release                                                                                           | No routine discharges are proposed. With standard controls in place (e.g. MARPOL), the likelihood of a pollution event is very low, and any accidental release would be small in scale and rapidly dispersed.                                                     | Compliant                              |
| Protect ecological and chemical quality elements | Sediment disturbance, SSC increases, and vessel-related pressures                                                                      | Effects are below thresholds that would influence WFD quality elements such as benthic communities, fish, or physico-chemical parameters.                                                                                                                         | Compliant                              |
| Promote sustainable water use                    | Temporary survey activities                                                                                                            | The Marine Surveys are non-extractive, short-term, and do not affect water availability or long-term resource use.                                                                                                                                                | Compliant                              |

## 1.6 Conclusion

Having regard to the scale, nature and duration of the proposed Marine Surveys, and taking into account the baseline conditions of the receiving environment, it is concluded that the proposed activities will not result in deterioration of any WFD water body and will not compromise the achievement of Good Ecological Status.

**The Marine Surveys are therefore considered to be fully compliant with the requirements and objectives of the Water Framework Directive (2000/60/EC).**

## 1.7 References

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. [Online]. Available at: <https://www.legislation.gov.uk/ukxi/2017/407/contents>. [Accessed: 30 March 2026].

Environmental Protection Agency (EPA). (2025a). EPA Online Map Viewer. [Online]. Available at: <https://gis.epa.ie/EPAMaps/>. [Accessed: 10 February 2025].

Environmental Protection Agency (EPA). (2025b). Conditions of our water - How we assess the health of our waters. [Online]. Available at: <https://www.epa.ie/our-services/monitoring--assessment/freshwater--marine/conditions-of-our-water/#:~:text=Our%20surface%20waters%20are%20classified%20into%20five%20quality,classes%20%28status%29%20under%20the%20WFD%3A%20%27Good%E2%80%99%20and%20%E2%80%98Poor%E2%80%99..> [Accessed: 11 February 2025].