

Uisce Éireann

# Marine environmental surveys for Dundalk WWTP upgrade

Attachment 4.10 Consistency of the proposed Maritime Usage  
with the 4th National Biodiversity Action Plan 2023 – 2030

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## List of Abbreviations

<b>Abbreviation</b>	<b>Spelled Out</b>
NBAP	National Biodiversity Action Plan
EPA	Environmental Protection Agency
WWTP	Wastewater Treatment Plant
SAC	Special Area of Conservation
PSA	Particle Size Analysis
TOC	Total Organic Carbon
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
WFD	Water Framework Directive
BCI	Biotope/Feature of Conservation Interest

## 1. Introduction

The Fourth National Biodiversity Action Plan (NBAP) 2023–2030 sets out Ireland’s strategic framework for halting and reversing biodiversity loss, while ensuring that the sustainable use of natural resources underpins social and economic well-being. The Plan is structured around five overarching objectives:

- Conserve and restore biodiversity
- Improve the evidence base for biodiversity action
- Enhance Ireland’s contribution to global biodiversity
- Mainstream biodiversity into decision-making
- Secure nature’s contribution to people.

Any marine activity proposed within Irish waters, including the marine environmental surveys outlined below, must be considered in the context of these objectives and demonstrate consistency with them. The proposed Maritime Usage in Castletown Estuary and Inner Dundalk Bay is a temporary, local scale activity aimed at informing the environmental impact assessment of an upgrade to existing wastewater infrastructure in Dundalk which will reduce potential impacts on the environment, human health, and sensitive communities and habitats. The Dundalk WWTP upgrade project aims to address existing pressures on receiving waters, mainly the risk of pollution as Dundalk WWTP is listed for on the EPA Priority list (August 2025 - D0053-01). The Proposed Maritime Usage is therefore well-aligned with the NBAP through evidence-based decision-making, and by contributing to the long-term conservation and restoration of biodiversity and the securing of nature’s contribution to people. The consistency of the proposed Maritime Usage with the five main objectives of the NBAP are outlined below.

## 2. Mainstream Biodiversity into Decision-Making

In line with the NBAP objective to mainstream biodiversity across sectors and decision-making, the proposed marine surveys have been designed specifically to ensure that decisions for the Dundalk WWTP upgrade are informed by defensible ecological data in the receiving environment. The survey design focuses on baseline characterisation of intertidal and subtidal habitats and benthic communities within Inner Dundalk Bay and the Castletown Estuary, in an area identified as environmentally sensitive and supporting designated features (including mudflat and sandflat habitats and associated communities). This ensures biodiversity considerations

are integrated at the earliest stage of EIA, aligning with the NBAP emphasis on embedding biodiversity protection into infrastructure planning.

### **3. Improve the Evidence Base for Biodiversity Action**

The NBAP highlights the need to strengthen Ireland's biodiversity knowledge base and improve the evidence underpinning policy and planning. The proposed benthic grab surveys directly support this objective by generating high-quality baseline data on sediment characteristics (including PSA/TOC where required) and macrofaunal community composition across the intertidal and subtidal zones within the project receiving environment. These data will provide the core evidence needed for the EIAR marine biodiversity chapter, enabling transparent, evidence-led assessment of potential effects, the identification of sensitive biotopes or features of conservation interest (if present), and the development of proportionate mitigation and monitoring measures if necessary. By producing structured baseline outputs, the surveys also contribute to improved site-specific understanding of benthic habitats in Dundalk Bay SAC, consistent with NBAP ambitions for better monitoring, data quality, and evidence-based biodiversity management.

### **4. Conserve and Restore Biodiversity**

In support of the NBAP objective to conserve and restore biodiversity, the proposed maritime usage is designed to avoid any habitat loss or degradation. Sampling is limited to discrete grab deployments (0.025 m<sup>2</sup> per replicate) at 17 stations and is undertaken over a short operational window. Seabed disturbance is therefore localised and temporary, with physical recovery expected within less than 12 months. The survey outputs are intended to support long-term conservation outcomes by enabling the WWTP upgrade EIAR to properly characterise existing conditions, identify ecological sensitivities, and assess how the upgraded wastewater infrastructure can be designed and operated in a manner that minimises risks to benthic habitats, protected-site features, and ecosystem functioning in Dundalk Bay.

### **5. Secure Nature's Contribution to People**

This objective focuses on protecting and enhancing the ecosystem services and natural benefits that biodiversity provides to people. Inner Dundalk Bay and the Castletown Estuary support ecosystem services that underpin local well-being and economic activity, including water quality regulation, nutrient cycling, recreational amenity, and the maintenance of biodiversity that supports wider coastal resilience. The

proposed surveys contribute to securing these benefits by providing the evidence base necessary to support a robust EIAR and to inform future design decisions aimed at improving wastewater treatment outcomes and protecting the receiving environment. Importantly, Dundalk is identified as an EPA Priority Area where wastewater treatment must improve to address national environmental priorities, including risk of pollution to the receiving environment. The Proposed Maritime Usage supports the NBAP objective by enabling a development pathway that is informed by biodiversity evidence and oriented toward improved environmental performance, thereby helping to safeguard ecosystem services relied upon by communities.

## 6. Enhance Ireland’s Contribution to Global Biodiversity

Although the surveys are local in scale, they demonstrate Ireland’s commitment to international biodiversity objectives and pollution-reduction priorities that underpin the NBAP, including alignment with EU environmental directives and broader biodiversity frameworks. By supporting robust baseline assessment and evidence-based planning for improved wastewater infrastructure in a nationally prioritised area, the proposed maritime usage contributes indirectly to wider goals to reduce pollution pressures on marine ecosystems, protect habitats and species, and maintain ecosystem health consistent with Good Environmental Status objectives of the Water Framework Directive (see Attachment 4.5 Consistency of the Proposed Maritime Usage with the Objectives of the WFD for more). This exemplifies the NBAP principle that biodiversity outcomes can be advanced through well-governed, evidence-led decision-making at project level, thereby reinforcing Ireland’s contribution to global biodiversity targets.

## 7. Conclusion

As described above, the proposed marine environmental surveys in Inner Dundalk Bay and the Castletown Estuary will provide essential baseline environmental evidence for the Dundalk WWTP EIA, enabling improved integration of biodiversity considerations into critical infrastructure decision-making. As such, the proposed Maritime Usage is consistent with the Fourth National Biodiversity Action Plan 2023–2030.