Addendum to the Environmental Impact Assessment Report

NISA

North Irish Sea Array

Volume 4 - Onshore Chapters

Chapter 22
Water (includes hydrology, surface water quality and flooding)

Statkraft

CIP
Copenhagen Infrastructure Partners

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22. Water

North Irish Sea Array Windfarm Ltd (NISA, hereafter referred to as 'the Developer') has been considering the Request for Further Information (RFI) issued by An Bord Pleanála (now An Coimisiún Pleanála) as well as the third-party submissions received following public consultation. At An Coimisiún Pleanála's behest, the Developer has also continued to consult with stakeholders in respect of the 2024 planning application throughout 2024-2026. The Developer has refined elements of the design to respond to the third-party submissions, the continued public and stakeholder consultation and the RFI. Amendments are therefore required to Chapter 22: Water of the 2024 Environmental Impact Assessment Report (EIAR). Full details of consultation undertaken can be found in Appendix A1.2 in the Addendum to the EIAR.

For the purposes of clarity, this document shall be read in conjunction with the Chapter 22 submitted as part of the 2024 EIAR.

Any cross reference to a chapter, section, table, image, figure or appendix within this document is to another location within the Addendum to the EIAR unless explicitly stated otherwise. Any cross reference to anything included in the 2024 EIAR will be clearly labelled as such.

Text in bold is only used throughout this document to indicate where changes are required, and why they are required. Text in italics is text from a section of the 2024 EIAR which is deleted, or quotations from other documents (as explicitly stated). Replacement text is in normal font.

Tables which have been updated from the 2024 EIAR, or entirely new tables, have been included in the Addendum to the EIAR. These tables can be identified by the "A" prefix in the table caption. Any changes within the updated table, in comparison to tables within the 2024 EIAR, are indicated by grey shading in the relevant cell, column or row, as necessary. The exception here is where a table has been replaced in its entirety.

The sections relevant to Chapter 22 in the RFI are included below.

RFI Section	RFI	Relevance to Chapter
1 (b)	The scientific information provided as part of the planning application documentation should be based on up-to-date survey reports and data. Accordingly, the applicant is requested to confirm/provide justification/verification that the information submitted in support of the planning application remains relevant and appropriate at the point of submitting further information or to update same as required.	The timeframes associated with the RFI have necessitated a review of the datasets previously used in the 2024 EIAR to ensure any necessary updates to the baseline environment are captured. Therefore, the third cycle River Basin Management Plan 2022-2027 has been included in this assessment. The update to this chapter in relation to this, is provided in Sections 22.2, 22.3, 22.5 and 22.10 and Appendix A22.1.
1 (c)	The applicant is requested to confirm whether any on-going or additional surveying has been carried out since the application was lodged and, if so, the applicant is invited to submit any further survey data results and analysis and update the planning application documentation, as appropriate.	Additional water quality sampling was undertaken in 2025 to inform the updated baseline information provided in this chapter. The results of these surveys are presented in Section 22.3.3.3 and Appendix A22.2.
5	The Marine Institute in their observation raises concerns in relation to the methodology applied in the submitted cumulative effects assessment and the manner in which the information is presented, noting the lack of a standard Irish methodology in relation to CEA. The applicant is advised that guidance exists in the UK, namely Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK, September 2024 (NSIP, 2024).	A revised CEA, which considers the methodology and template provided in the Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment – GOV.UK, September 2024 (NSIP, 2024), has been prepared. The revised CEA is provided in Chapter 38 Cumulative and Inter-Related Effects, Appendix 38.1 – Onshore Long List and

RFI Section	RFI	Relevance to Chapter
	The applicant is requested to revise the submitted cumulative assessment in line with NSIP (2024) and submit a standalone document to clearly demonstrate the CEA conclusions. In the interests of consistency and transparency, the applicant is requested to complete the assessment in accordance with the templates provided in the NSIP (2024), namely "Appendix 1: Matrix 1 – Identification of 'other development' for CEA" and "Appendix 2: Matrix 1 – Assessment matrix" (see attached Appendix B)…	Appendix A38.2 Offshore Long List. The update to this chapter in relation to this, is provided in Section 22.9.

22.1 Introduction

There are no changes required to this section. Refer to Section 22.1 in Chapter 22 of the 2024 EIAR.

22.2 Methodology

22.2.1 Introduction

There are no changes required to this section. Refer to Section 22.2.1 in Chapter 22 of the 2024 EIAR.

22.2.2 Legislation and Guidelines

22.2.2.1 Water Framework Directive (WFD)

In accordance with RFI 1 (b), Appendix 22.2 Onshore Water Framework Directive Compliance Report and Appendix 11.1 Water Framework Directive Compliance Report of the 2024 EIAR have been updated.

Therefore, the following text in Section 22.2.2.1 in Chapter 22 of the 2024 EIAR shall be deleted:

"A separate Onshore WFD Compliance Report is included in Volume 10, Appendix 22.2 of the EIAR. An offshore WFD Compliance Report is included in Volume 9, Appendix 11.1. These reports provide an assessment focused on compliance with the WFD objectives."

And replaced with the following text:

A separate Onshore WFD Compliance Report is included in Volume 10, Appendix A22.1 of the EIAR. An offshore WFD Compliance Report is included in Volume 9, Appendix A11.1. These reports provide an assessment focused on compliance with the WFD objectives.

There are no other changes required to this section. Refer to Section 22.2.2.1 in Chapter 22 of the 2024 EIAR.

22.2.2.2 River Basin Management Plans

In accordance with RFI 1 (b), the reference to River Basin Management Plan is updated. The final version of the third cycle River Basin Management Plan for 2022-2027 was published in September 2024 following the submission of the 2024 EIAR. This report forms the basis of the assessment of WFD status and risk and subsequently necessitates an update to this section. For clarity, the reference to the River Basin Management Plan includes this updated report.

Therefore, the following text in Section 22.2.2.2 in Chapter 22 of the 2024 EIAR shall be deleted:

"*The RBMP 2018-2021 (2nd cycle), in line with its objective of meeting the objectives of the EU Water Framework Directive (WFD), required that proposed developments are to integrate into their design measures that:*

- *Ensure full compliance with relevant EU legislation;*
- *Prevent further deterioration as a minimum or enhance existing high-quality status; and*

- *Maintain or enhance surface water bodies to achieve good status by 2021 leading up to the 3rd RBMP.*

The third cycle RBMP 2022-2027 is published but in draft format and the Public Consultation Report was issued in July 2022. The above bullet point measures are carried forward in the Draft Plan 2022-2027 but with more ambition to reverse the declining water quality and put in place a specific plan for all the 46 river catchments in the country. Therefore, regardless of whether the second or third cycle RBMP plan is in place, the proposed development must not result in a deterioration of the status of the water body."

And replaced with the following text:

The Water Action Plan 2024: A River Basin Management Plan for Ireland (3rd cycle), in line with its objective of meeting the objectives of the EU Water Framework Directive (WFD), requires that proposed developments are to integrate into their design measures to:

- to prevent the deterioration of water bodies and to protect, enhance and restore them with the aim of achieving at least good status and;
- to achieve compliance with the water standards and objectives for designated protected areas.

The third cycle RBMP 2022-2027 carries forward the second cycle RBMP but with more ambition to reverse the declining water quality and put in place a specific integrated catchment plan for all the 46 river catchments in the country. The proposed development must not result in a deterioration of the status of a WFD water body and must adhere to the water standards and objectives for designate protected areas.

22.2.2.3 National Planning Framework

There are no changes required to this section. Refer to Section 22.2.2.3 in Chapter 22 of the 2024 EIAR.

22.2.2.4 Supplementary Legislation

There are no changes required to this section. Refer to Section 22.2.2.4 in Chapter 22 of the 2024 EIAR.

22.2.2.5 Guidelines and Plans

There are no changes required to this section. Refer to Section 22.2.2.5 in Chapter 22 of the 2024 EIAR.

22.2.3 Study Area and Baseline Data Collection

22.2.3.1 Study Area

There are no changes required to this section. Refer to Section 22.2.3.1 in Chapter 22 of the 2024 EIAR.

22.2.3.2 Data Sources

There are no changes required to this section. Refer to Section 22.2.3.2 in Chapter 22 of the 2024 EIAR.

22.2.3.3 Assessment Limitations

There are no changes required to this section. Refer to Section 22.2.3.3 in Chapter 22 of the 2024 EIAR.

22.2.4 Impact Assessment Methodology

There are no changes required to this section. Refer to Section 22.2.4 in Chapter 22 of the 2024 EIAR.

22.3 Baseline Environment

22.3.1 Regional Overview of Hydrology

There are no changes required to this section. Refer to Section 22.3.1 in Chapter 22 of the 2024 EIAR.

22.3.2 Local Hydrological Drainage Features

There are no changes required to this section. Refer to Section 22.3.2 in Chapter 22 of the 2024 EIAR.

22.3.3 Water Quality

22.3.3.1 WFD Status

This section is updated to account for the third cycle River Basin Management Plan. The only change resulting from the review of the third cycle River Basin Management Plan is a status change for Ward_040 from 'poor' to 'moderate'. in Table 22.7.

Therefore, the following text shall be deleted:

The 2016-2021 WFD Status of the rivers and streams within the study area of the onshore development area of the proposed development are detailed in Table 22.7.

And replaced with:

The 2019-2024 WFD Status of the rivers and streams within the study area of the onshore development area of the proposed development are detailed in Table A22.1.

Therefore, Table 22.7 in Chapter 22 of the 2024 EIAR shall be deleted and replaced with Table A22.1 below.

Table A22.1 Surface Water WFD Status (replacing Table 22.7)

WFD Sub Catchment	WFD Waterbody name	Type	Status (2019-2024	Key Pressures	Risk Category
Broadmeadow Estuary (inner)	Broadmeadow_040	River	Poor	Agriculture, Hydromorphology	At Risk
Palmertown_SC_010	Matt_010	River	Poor	Hydromorphology, Urban Runoff	At Risk
08_6 Ballough[Stream]_SC_010	Ballough Stream_020	River	Moderate	Agriculture, Urban Wastewater	At Risk
08_6 Ballough[Stream]_SC_010	Ballough Stream_010	River	Poor	Agriculture	At Risk
08_6 Ballough[Stream]_SC_010	Ballyboughill_010	River	Poor	Agriculture	At Risk
08_6 Ballough[Stream]_SC_010	Turvey_010	River	Poor	Urban Runoff, Urban Wastewater	At Risk
08_3 Broadmeadow_SC_010	Broadmeadow_040	River	Poor	Urban Runoff, Hydromorphology, Urban Wastewater	At Risk
08_3 Broadmeadow_SC_010	Ward_040	River	Moderate	Urban Runoff, Hydromorphology, Urban Wastewater	At Risk
09_17 Mayne_SC_010	Gaybrook_010	River	Poor	Anthropogenic Pressures	Review
09_17 Mayne_SC_010	Sluice_010	River	Poor	Anthropogenic Pressures	Review
09_17 Mayne_SC_010	Mayne_010	River	Poor	Urban Runoff	At Risk

22.3.3.2 EPA Surface Water Monitoring

There are no changes required to this section. Refer to Section 22.3.3.2 in Chapter 22 of the 2024 EIAR.

22.3.3.3 Site Specific Water Quality Survey

In response to RFI 1 (c), the baseline water quality for six watercourses was supplemented with another round of sampling in October to November 2025. The six watercourses remain unchanged from the 2024 EIAR and are replicated in Table A22.2 below. Therefore, Table 22.10 (replaced by Table A22.3 below) has been updated with the results from the water quality sampling highlighted in grey. Results in 2025 followed a similar trend as 2022.

The Developer also notes that a minor administrative error occurred in the 2024 EIAR in which Appendix 22.3 was not submitted with the EIAR. This has been amended and Appendix A22.2 now includes all lab analysis sheets from the 2024 EIAR and those included from the 2025 survey effort.

The following text shall therefore be deleted from Section 22.3.3.3 in Chapter 22 of the 2024 EIAR:

"Site specific water quality monitoring was conducted from early September to mid-October 2022 at six water crossing locations where EPA data was not available at all or inadequate / obsolete, as detailed in Table 22.9."

And replaced with the following text:

Site specific water quality monitoring was conducted from early September to mid-October in 2022 and from early October to November 2025 at six water crossing locations where EPA data was not available at all or inadequate / obsolete, as detailed in Table 22.9.

The following text shall also be deleted from Section 22.3.3.3:

"Three samples were taken with approximately three weeks interval between September 5th, 2022, and October 17th, 2022. The sampling was completed during low flow periods to ensure highest concentration of parameters tested were captured, due to low dilution in the watercourses during that period. The results are presented in Table 22.10, and the lab analysis sheets are included in Appendix 22.3."

And replaced with the following text

Three samples were taken with approximately three weeks interval between September 5th, 2022, and October 17th, 2022, as well as between October 6th and November 21st, 2025. The sampling was completed during low flow periods to ensure highest concentration of parameters tested were captured, due to low dilution in the watercourses during that period. The results are presented in Table A22.2 and the lab analysis sheets are included in Appendix A22.2.

Table A22.2 Water Quality Analysis Results 05/09/22-17/10/22, and 06/10/25-21/11/25 with thresholds as per the Surface Water Regulations (replacing Table 22.10 of the 2024 EIAR)

Crossing Location	Water Crossing Ref. No.	Parameter	Threshold Limits	unit	05th Sept 2022	26th Sept 2022	17th Oct 2022	6th Oct 2025	29th Oct 2025	21st Nov 2025
Gaybrook Stream	Wx20	Conductivity	N/A	mscm - 1@25°C	630	750	470	810	830	940
		Dissolved Oxygen	95%ile <120% saturation	mg/L	7.20mg/l = 78.9 DO% saturation	6.40 mg/l = 62.9 DO% saturation	7.04 mg/l = 66.2 DO% saturation	6.69 mg/l = 69.2 DO% saturation	8.64 mg/l = 77.4 DO% saturation	9.42 mg/l = 80.9 DO% saturation
		pH	Hard Water 6.0< pH < 9.0; Soft Water 4.5< pH < 9.0	pH units	8.80	7.42	8.00	7.6	7.8	7.9
		Temperature	Not greater than a 1.5°C rise in ambient temperature outside the mixing zone	°C	19.80	14.60	12.60	17.3	11.5	8.7
		Turbidity	N/A*	NTU	0.30	1.70	2.80	<0.1	0.2	1.8
		Water Level	N/A*	m	0.19	0.19	0.25	0.2	0.2	0.2
Seapoint Stream	Wx18	Conductivity	N/A	mscm - 1@25°C	530	1470	500	780	870	1140
		Dissolved Oxygen	95%ile <120% saturation	mg/L	7.20 mg/l = 77.9 DO% saturation	5.20 mg/l = 51.21 DO% saturation	6.57 mg/l = 63.16 DO% saturation	6.94 mg/l = 71.77 DO% saturation	8.29 mg/l = 78.3 DO% saturation	8.77 mg/l = 78.59 DO% saturation
		pH	Hard Water 6.0< pH < 9.0; Soft Water 4.5< pH < 9.0	pH units	8.60	7.78	7.78	7.8	7.9	7.8
		Temperature	Not greater than a 1.5°C rise in ambient temperature outside the mixing zone	°C	19.20	14.70	13.60	17	12.8	10.5

Crossing Location	Water Crossing Ref. No.	Parameter	Threshold Limits	unit	05th Sept 2022	26th Sept 2022	17th Oct 2022	6th Oct 2025	29th Oct 2025	21st Nov 2025
		Turbidity	N/A*	NTU	0.90	0.50	4.80	0.4	0.7	0.8
		Water Level	N/A*	m	0.20	0.21	0.13	0.6	0.1	0.2
Staffordstown Stream	Wx15	Conductivity	N/A	mscm - 1@25°C	540	860	420	690	830	910
		Dissolved Oxygen	95%ile <120% saturation	mg/L	6.70 mg/l = 70.2 DO% saturation	5.30 mg/l = 49.3 DO% saturation	5.59 mg/l = 50.9 DO% saturation	5.01 mg/l = 50.41 DO% saturation	7.58 mg/l = 70.79 DO% saturation	8.09 mg/l = 68.98 DO% saturation
		pH	Hard Water 6.0< pH < 9.0; Soft Water 4.5< pH < 9.0	pH units	8.40	7.45	7.54	7.8	7.7	7.7
		Temperature	Not greater than a 1.5°C rise in ambient temperature outside the mixing zone	°C	17.60	12.10	11.20	15.7	12.3	8.4
		Turbidity	N/A*	NTU	2.80	0.60	1.30	0.2	<0.1	1.4
		Water Level	N/A*	m	0.18	0.16	0.21	0.2	0.4	0.4
Aldrumman Stream*	Wx10	Conductivity	N/A	mscm - 1@25°C	Not Available	710	450	630	700	790
		Dissolved Oxygen	95%ile <120% saturation	mg/L	Not Available**	5.00 mg/l = 46.5 DO% saturation	4.97 mg/l = 44.6 DO% saturation	5.81 mg/l = 59.96 DO% saturation	9.27 mg/l = 88.53 DO% saturation	8.38 mg/l = 75.62 DO% saturation
		pH	Hard Water 6.0< pH < 9.0; Soft Water 4.5< pH < 9.0	pH units	Not Available**	7.50	7.62	7.7	7.5	7.7
		Temperature	Not greater than a 1.5°C rise in ambient	°C	Not Available**	12.10	10.60	16.9	13.3	10.8

Crossing Location	Water Crossing Ref. No.	Parameter	Threshold Limits	unit	05th Sept 2022	26th Sept 2022	17th Oct 2022	6th Oct 2025	29th Oct 2025	21st Nov 2025
			temperature outside the mixing zone							
		Turbidity	N/A*	NTU	Not Available**	1.90	24.10	1.5	5.9	1.1
		Water Level	N/A*	m	Not Available**	0.17	0.24	0.2	0.1	0.2
Oberstown Stream	Wx9	Conductivity	N/A	mscm - 1@25ºC	710	690	510	560	630	710
		Dissolved Oxygen	95%ile <120% saturation	mg/L	7.1 mg/l = 74.4 DO% saturation	7.10 mg/l = 67.4 DO% saturation	8.39 mg/l = 74.8 DO% saturation	6.32 mg/l = 63.86 DO% saturation	8.75 mg/l = 83.38 DO% saturation	10.47 mg/l = 90.78 DO% saturation
		pH	Hard Water 6.0< pH < 9.0; Soft Water 4.5< pH < 9.0	pH units	8.30	7.57	7.52	7.8	7.7	7.8
		Temperature	Not greater than a 1.5°C rise in ambient temperature outside the mixing zone	ºC	17.60	11.00	10.3	15.9	13.2	9.1
		Turbidity	N/A*	NTU	3.90	1.60	47.50	2.4	1.0	2.1
		Water Level	N/A*	m	0.22	0.23	0.20	0.1	0.1	0.2
Balrickard Stream	Wx05	Conductivity	N/A	mscm - 1@25ºC	710	670	450	480	550	480
		Dissolved Oxygen	95%ile <120% saturation	mg/L	4.3 mg/l = 45.2 DO% saturation	5.2 mg/l = 48.2 DO% saturation	5.76 mg/l = 51.6 DO% saturation	6.74 mg/l = 69.27 DO% saturation	8.43 mg/l = 80.33 DO% saturation	9.85 mg/l = 82.97 DO% saturation

Crossing Location	Water Crossing Ref. No.	Parameter	Threshold Limits	unit	05th Sept 2022	26th Sept 2022	17th Oct 2022	6th Oct 2025	29th Oct 2025	21st Nov 2025
		pH	Hard Water 6.0< pH < 9.0; Soft Water 4.5< pH < 9.0	pH units	7.80	7.15	6.79	7.9	7.7	7.8
		Temperature	Not greater than a 1.5°C rise in ambient temperature outside the mixing zone	°C	17.80	12.00	10.50	16.7	13.2	7.9
		Turbidity	N/A*	NTU	2.90	1.20	8.90	5.1	4.0	3.2
		Water Level	N/A*	m	0.25	0.22	0.22	0.3	0.7	0.6

* Turbidity and water level are site specific parameters therefore will not have upper or lower limits.

**Water quality information for Aldrumman Stream was not available on 5th September 2022. However, the results for consecutive dates do not show significant variation in water quality and thus can be relied upon as representative water quality for this stream.

There are no other changes required to this section. Refer to Section 22.3.3.3 of Chapter 22 of the 2024 EIAR.

22.3.4 Known Pressures

There are no changes required to this section. Refer to Section 22.3.4 of Chapter 22 of the 2024 EIAR.

22.3.5 Protected features

There are no changes required to this section. Refer to Section 22.3.5 of Chapter 22 of the 2024 EIAR.

22.3.5.1 Ecological Designated Sites

There are no changes required to this section. Refer to Section 22.3.5.1 of Chapter 22 of the 2024 EIAR.

22.3.5.2 Drinking Water Supply

There are no changes required to this section. Refer to Section 22.3.5.2 of Chapter 22 of the 2024 EIAR.

22.3.6 Summary of the receptors to be assessed

The only change required to this section is to replace Table 22.12 with Table A22.3 to account for the updated WFD status of Ward River (Ward_040) from 'poor' to 'moderate' in the third cycle River Basin Management Plan. For ease of reference, this change has been highlighted in grey below.

Table A22.3 Summary of the Receptors to be Assessed (replacing Table 22.12 of the 2024 EIAR)

Feature	ID	Description	Importance (Sensitivity) ranking
Bremore Stream	Matt_010	Attribute has a low quality or value on a local scale. Poor WFD Status. Watercourse at Risk. >5km from SAC/SPA	Low
Bracken (Matt) River	Matt_010	Attribute has a low quality or value on a local scale. Poor WFD Status. Watercourse at Risk. >5km from SAC/SPA	Low
Knock Stream	Matt_010	Attribute has a low quality or value on a local scale. Poor WFD Status. Watercourse at Risk. >5km from SAC/SPA	Low
Balrothery Stream	Matt_010	Poor WFD Status. Watercourse at Risk. >5km from SAC/SPA	Low
Balrickard Stream	Matt_010	Poor WFD Status. Watercourse at Risk. >5km from SAC/SPA	Low
Rowans Big Stream	Matt_010	Poor WFD Status. Watercourse at Risk. >5km from SAC/SPA	Low
Rowans Little Stream	Matt_010	Poor WFD Status. Watercourse at Risk. >5km from SAC/SPA	Low
Courtlough Stream	Ballough_Stream_010	Attribute has a high quality or value on a local scale. Quality class B (Q3-Q4 Biotic index) Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Rogerstown SAC/SPA	High
Oberstown Stream	Ballough_Stream_010	Attribute has a high quality or value on a local scale. Quality class B (Q3-Q4 Biotic index) Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Rogerstown SAC/SPA	High
Aldrumman Stream	Ballough_Stream_010	Attribute has a high quality or value on a local scale. Quality class B (Q3-Q4 Biotic index) Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Rogerstown SAC/SPA	High
Ballough Stream	Ballough_Stream_020	Attribute has a high quality or value on a local scale. Quality class B (Q3-Q4 Biotic index). Moderate WFD Status. Watercourse at Risk. Direct Hydrological Connection to Rogerstown SAC/SPA	High
Deanestown Stream	Ballyboghill_010	Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Rogerstown SAC/SPA	Low
Ballyboghill Stream	Ballyboghill_010	Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Rogerstown SAC/SPA	Low

Feature	ID	Description	Importance (Sensitivity) ranking
Turvey Stream	Turvey_010	Attribute has a medium quality or value on a local scale. Quality class C (Q3 Biotic index). Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Malahide Estuary SAC/SPA	Medium
Staffordstown Stream	Turvey_010	Attribute has a medium quality or value on a local scale. Quality class C (Q3 Biotic index). Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Malahide Estuary SAC/SPA	Medium
Broadmeadow River	Broadmeadow_040	Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Malahide Estuary SAC/SPA	Low
Ward River	Ward_040	Moderate WFD Status. Watercourse at Risk. Direct Hydrological Connection to Malahide Estuary SAC/SPA	Low
Seapoint Stream	Gaybrook_010	Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Malahide Estuary SAC/SPA	Low
Greenfields Stream	Gaybrook_010	Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Malahide Estuary SAC/SPA	Low
Gaybrook Stream	Gaybrook_010	Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Malahide Estuary SAC/SPA	Low
Hazelbrook Stream	Sluice_010	Attribute has a high quality or value on a local scale. Quality class B (Q3-Q4 Biotic index). Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Baldoyle SAC/SPA	High
Sluice Stream	Sluice_010	Attribute has a high quality or value on a local scale. Quality class B (Q3-Q4 Biotic index). Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Baldoyle SAC/SPA	High
Cuckoo Stream	Mayne_010	Attribute has a medium quality or value on a local scale. Quality class C (Q3 Biotic index). Poor WFD Status. Watercourse at Risk. Direct Hydrological Connection to Baldoyle SAC/SPA	Medium
Mayne Stream	Mayne_010	Attribute has a medium quality or value on a local scale. Quality class C (Q3 Biotic index). Poor WFD Status. Watercourse at Risk. Baldoyle Direct Hydrological Connection to SAC/SPA	Medium
Baldoyle Bay pNHA & SAC	000199	pNHA and SAC site. Connection via Hazelbrook Stream, Sluice Stream, Cuckoo Stream and Mayne Stream listed above	Extremely High
Sluice River Marsh pNHA	001763	pNHA site. Connection via Sluice River	Very High
Malahide Estuary pNHA & SAC	000205	pNHA and SAC site – also overlaps with Broadmeadow Estuary UWWTD site. Connection via Turvey Stream, Staffordshire Stream, Broadmeadow Stream, Ward River, Seapoint Stream, Greenfields Stream and Gaybrook Stream listed above	Extremely High
Rogerstown Estuary pNHA & SAC	000208	pNHA and SAC site – also includes 2 shellfish areas in Balbriggan / Skerries & Malahide. Connection via watercourses above	Extremely High
Knock Lake pNHA	001203	pNHA site. Located upstream of crossing at Wx03 Knock stream	Very High
Bog of the Ring pNHA	001204	pNHA site. Located upstream of crossing at Wx04 Balrothery Stream	Very High

22.3.7 Flood Risk

There are no changes required to this section, or Sections 22.3.7.1 to 22.3.7.5. Refer to Section 22.3.7, and Sections 22.3.7.1 to 22.3.7.5 of Chapter 22 of the 2024 EIAR.

22.4 Characteristics of the Proposed Development

There are no changes required to this section. Refer to Section 22.4 of Chapter 22 of the 2024 EIAR.

22.5 Potential Effects

There are no changes required to the introductory text of this Section. Refer to Section 22.5 of Chapter 22 of the 2024 EIAR.

22.5.1 Do-Nothing Scenario

There are no changes required to this section. Refer to Section 22.5.1 of Chapter 22 of the 2024 EIAR.

22.5.2 Construction Phase

There are no changes required to the introductory text of this Section. Refer to Section 22.5.2 of Chapter 22 of the 2024 EIAR.

22.5.2.1 Potential Construction Phase Impacts

The Developer notes that despite the change of WFD status to the Ward River from 'poor' to 'moderate (see Table A22.3), there are no changes to the significance rating of potential impacts to this watercourse. Therefore, there are no changes required to this section. Refer to Section 22.5.2.1 of Chapter 22 of the 2024 EIAR.

Therefore, the significance of effect remains unchanged from the 2024 EIAR with no significant effects arising from the construction phase of the proposed development.

22.5.3 Operational Phase

There are no changes required to the introductory text of this section. Refer to Section 22.5.3 of Chapter 22 of the 2024 EIAR.

Therefore, the significance of effect remains unchanged and is negative and slight, which is not significant in EIA terms.

22.5.3.1 Justification test (Flooding)

There are no changes required to this section. Refer to Section 22.5.3.1 of Chapter 22 of the 2024 EIAR which notes that a Justification Test is not required as the proposed development is considered appropriate within Flood Zones A, B and C.

22.5.4 Decommissioning

There are no changes required to this section. Refer to Section 22.5.3 of Chapter 22 of the 2024 EIAR.

Therefore, the significance of effect remains unchanged with no likely significant effects arising from the decommissioning phase of the proposed development.

22.5.5 Summary of Impact Assessment

As there are no changes required to potential effects arising from the construction, operational and decommissioning phases of the proposed development, there are no changes required to this section. Therefore, the significance of effects for the construction, operational and decommissioning phases remain unchanged and there are no likely significant effects arising from the proposed development.

22.6 Mitigation and Monitoring Measures

22.6.1 Construction Phase

There are no changes required to the introductory text of this section. Refer to Section 22.5.3 of Chapter 22 of the 2024 EIAR.

22.6.1.1 Project Wide Mitigation Measures

There are no changes required to this section. Refer to Section 22.6.1.1 in Chapter 22 of the 2024 EIAR.

22.6.1.2 Specific Mitigation and Monitoring Measures

There are no changes required to this section. Refer to Section 22.6.1.2 in Chapter 22 of the 2024 EIAR.

22.6.2 Operational Phase

There are no changes required to this section. Refer to Section 22.6.2 in Chapter 22 of the 2024 EIAR.

22.6.3 Decommissioning

There are no changes required to this section. Refer to Section 22.6.3 in Chapter 22 of the 2024 EIAR.

22.7 Residual Effects

22.7.1 Construction Phase

There are no changes required to this section. Refer to Section 22.7.1. in Chapter 22 of the 2024 EIAR. Therefore, the significance of residual effect remains unchanged across all residual effects previously assessed for the construction phase as described in Section 22.7.1 in Chapter 22 of the 2024 EIAR.

22.7.2 Operational Phase

There are no changes required to this section. Refer to Section 22.7.2 in Chapter 22 of the 2024 EIAR. Therefore, there will be no residual flooding effects during the operation.

22.7.3 Decommissioning

There are no changes required to this section. Refer to Section 22.7.3 in Chapter 22 of the 2024 EIAR. Therefore, there are no likely significant residual effects on water or flooding as a result of the decommissioning phase of the proposed development.

22.8 Transboundary Effects

There are no changes to this section. Refer to Section 22.8 in Chapter 22 of the 2024 EIAR. Therefore, there are no transboundary effects anticipated.

22.9 Cumulative Effects

The Cumulative Effects Assessment (CEA) is presented in Volume 6, Chapter 38: Cumulative and Inter-Related Effects. In response to RFI Section 5, the CEA has been updated to align with the UK Guidance document *Nationally Strategic Infrastructure Projects (NSIP) Advice on Cumulative Effects Assessment*. However, it should be noted that the overall conclusions of the CEA from a water perspective remain unchanged from the 2024 EIAR (as stated below).

Therefore, the entirety of Section 22.9 of Chapter 22 of the 2024 EIAR shall be deleted and replaced with the text herein:

A long list of "other existing and/or approved developments" which were deemed to be potentially relevant for inclusion in the cumulative impact assessment was compiled (refer to Volume 6, Chapter 38: Cumulative and Inter-related Effects (hereafter referred to as 'Chapter 38')). A screening exercise of the "long list" was carried out in order to determine whether each of those "other existing and/or approved developments" has the potential to give rise to likely significant cumulative effects with the proposed development from a water perspective. Many of the "other existing and/or approved developments" were screened out for a number of reasons including their location, scale and nature of the project. Those projects which were "screened in" were carried forward for assessment. The results of the assessment are presented in Section 38.2.3.13 of Chapter 38.

The assessment concluded that no likely significant direct or indirect cumulative effects on water are predicted during the construction, operation or decommissioning phases of the proposed development.

22.10 References

The only change to this section is to include the third cycle River Basin Management Plan. Therefore, the following reference included:

DHLGH (2024). Water Action Plan 2024. A River Basin Management Plan for Ireland, Government of Ireland.

There are no other changes to this section. Refer to Section 22.10 in Chapter 22 of the 2024 EIAR.