



**codling**  
**wind park**



# Natura Impact Statement (NIS) Addendum

## Part 2

---

SAC In-combination  
Assessment



## TABLE OF CONTENTS

<b>1</b>	<b>SUMMARY OF UPDATES TO NIS VOLUME 6 PART 1 .....</b>	<b>8</b>
1.1	Signposting to sections of the NIS that have been updated.....	8
<b>NIS ADDENDUM VOLUME 6 IN-COMBINATION ASSESSMENT – PART 1 ....</b>		<b>15</b>
<b>1</b>	<b>INTRODUCTION .....</b>	<b>15</b>
<b>2</b>	<b>APPROACH TO IN-COMBINATION ASSESSMENT.....</b>	<b>15</b>
2.1	Marine mammals in-combination assessment approach – increased underwater noise.....	16
<b>3</b>	<b>EXAMINATION AND ANALYSIS OF POTENTIAL IMPACTS ON EUROPEAN SITES – CWP PROJECT IN-COMBINATION WITH OTHER PLANS AND PROJECTS .....</b>	<b>18</b>
3.1	South Dublin Bay SAC (IE000210) .....	18
3.2	Rockabill to Dalkey Island SAC (IE003000).....	20
3.3	North Dublin Bay SAC (IE000206).....	31
3.4	Codling Fault Zone SAC (IE003015).....	33
3.5	Lambay Island SAC (IE000204) .....	35
3.6	North Anglesey Marine SAC (UK0030398) .....	42
3.7	Blackwater Bank SAC (IE002953).....	44
3.8	Basket Islands SAC (IE002172) .....	46
3.9	Carnsore Point SAC (IE002269).....	48
3.10	Hook Head SAC (IE000764).....	50
3.11	West Wales Marine SAC (UK0030397) .....	58
3.12	Llŷn Peninsula and the Sarnau SAC (UK0013117) .....	60
3.13	Cardigan Bay / Bae Ceredigion SAC (UK0012712).....	69
3.14	North Channel SAC (UK0030399).....	74
3.15	Bristol Channel Approaches SAC (UK0030396) .....	76
3.16	Roaringwater Bay and Islands SAC (IE000101) .....	78
3.17	Irish West Coast SACs .....	81
3.18	Slaney River Valley SAC (IE0000781) .....	84
3.19	Cardigan Bay / Bae Ceredigion SAC (UK0012712).....	94
3.20	River Barrow and River Nore SAC (IE0002162) .....	98
3.21	Lower River Suir SAC (IE0002137).....	108
3.22	Blackwater River (Cork / Waterford) SAC (IE0002170).....	118
3.23	River Boyne and River Blackwater SAC (IE0002299).....	128

Section 3.24 remains unchanged .....	135
3.25 Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (IE0000365) .....	136
3.26 Killala Bay / Moy Estuary SAC (IE0000458).....	142
3.27 Lough Gill SAC (IE0001976).....	146
3.28 River Moy SAC (IE0002298) .....	153
3.29 Castlemaine Harbour SAC (IE0000343) .....	160
3.30 Lower River Shannon SAC (IE0002165) .....	167
3.31 Lough Corrib SAC (IE0000297).....	174
3.32 Pembrokeshire Marine / Sir Benfro Forol SAC (UK0013116) .....	181
3.33 Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd SAC (UK0020020) .	188
3.34 Afon Tywi / River Tywi SAC (UK0013010) .....	195
3.35 Severn Estuary / Môr Hafren SAC (UK0013030) .....	202
3.36 River Usk / Afon Wysg SAC (UK0013007) .....	209
3.37 River Wye / Afon Gwy SAC (UK0012642) .....	224
3.38 Afon Teifi / River Teifi SAC (UK0012670).....	234
3.39 Dee Estuary / Aber Dyfrdwy SAC (UK0030131) .....	241
3.40 Afonydd Cleddau / Cleddau Rivers SAC (UK0030074) .....	245
3.41 River Dee and Bala Lake / Afon Dyfrdwy a Llŷn Tegid SAC (UK0030252) .....	249
3.42 River Derwent and Bassenthwaite Lake SAC (UK0030032) .....	256
3.43 Solway Firth SAC (UK0013025) .....	263
3.44 River Eden SAC (UK0012643).....	267
3.45 River Axe SAC (UK0030248) .....	274
3.46 River Avon SAC (UK0013016).....	278
3.47 French ZSCs – Migratory Fish.....	285
3.48 French ZSCs – Marine Mammals.....	291
4 NIS (IN-COMBINATION) CONCLUSION .....	295
5 REFERENCES .....	295

## LIST OF TABLES

Table 1: Summary of updates to NIS volume 6 .....	9
Table 2: Tiered structure for other plans and programmes considered (modified from The Planning Inspectorate (PINS) Advice Note 17 (PINS, 2019)) .....	15
Table 3: Other plans and projects considered in the in-combination assessment for piling in 2031 .....	17
Table 4: Offshore survey projects screened into the CEA. Key: Construction, Inactive .....	17
Table 5: Offshore projects with potential to carry out UXO clearance screened into the in-combination assessment. Key: Construction, Operation .....	18
Table 6: Other plans and projects considered in the in-combination assessment .....	18
Table 7: Other plans and projects considered in the in-combination assessment .....	21
Table 8: Number of harbour porpoise disturbed per piling day at OWF projects constructing in 2031. The number of harbour porpoise disturbed per piling day is presented using values from the project specific EIAs (if available), and using an 11 km EDR for mitigated piling and the SCANS IV Block density .....	24
Table 9: Other plans and projects considered in the in-combination assessment .....	31
Table 10: Number of grey seals disturbed per piling day at OWF projects constructing in 2031. The number of grey seals disturbed per piling day is presented using values from the project specific EIAs (if available), and using an 11 km EDR for mitigated piling .....	37
Table 11: Number of bottlenose dolphins disturbed per piling day at OWF projects constructing in 2031. The number of bottlenose dolphins disturbed per piling day is presented using values from the project specific EIAs (if available), and using an 11 km EDR for mitigated piling and the SCANS IV Block density .....	54
Table 12: Other plans and projects considered in the in-combination assessment .....	85
Table 13: Other plans and projects considered in the in-combination assessment .....	95
Table 14: Other plans and projects considered in the in-combination assessment .....	99
Table 15: Other plans and projects considered in the in-combination assessment .....	108
Table 16: Other plans and projects considered in the in-combination assessment .....	118
Table 17: Other plans and projects considered in the in-combination assessment .....	128
Table 18: Other plans and projects considered in the in-combination assessment .....	136
Table 19: Other plans and projects considered in the in-combination assessment .....	143
Table 20: Other plans and projects considered in the in-combination assessment .....	147
Table 21: Other plans and projects considered in the in-combination assessment .....	154
Table 22: Other plans and projects considered in the in-combination assessment .....	161
Table 23: Other plans and projects considered in the in-combination assessment .....	168
Table 24: Other plans and projects considered in the in-combination assessment .....	175
Table 25: Other plans and projects considered in the in-combination assessment .....	182
Table 26: Other plans and projects considered in the in-combination assessment .....	189
Table 27: Other plans and projects considered in the in-combination assessment .....	196

Table 28: Other plans and projects considered in the in-combination assessment ..... 203

Table 29: Other plans and projects considered in the in-combination assessment ..... 210

Table 30: Conservation Objectives, Attributes and Targets for River Usk / Afon Wysg SAC and summary of associated assessment ..... 212

Table 31: Other plans and projects considered in the in-combination assessment ..... 224

Table 32: Other plans and projects considered in the in-combination assessment ..... 235

Table 33: Other plans and projects considered in the in-combination assessment ..... 242

Table 34: Other plans and projects considered in the in-combination assessment ..... 246

Table 35: Other plans and projects considered in the in-combination assessment ..... 250

Table 36: Other plans and projects considered in the in-combination assessment ..... 257

Table 37: Other plans and projects considered in the in-combination assessment ..... 264

Table 38: Other plans and projects considered in the in-combination assessment ..... 268

Table 39: Other plans and projects considered in the in-combination assessment ..... 275

Table 40: Other plans and projects considered in the in-combination assessment ..... 279

Table 41: Other plans and projects considered in the in-combination assessment ..... 286

List of Figures

Figure 1: 11 km EDR for mitigated piling from other OWF projects piling in 2031, in relation to the Irish Sea and eastern Celtic Sea SACs designated for harbour porpoise ..... 25

Figure 2: 3 km EDR for geophysical surveys with respect to Rockabill to Dalkey Island SAC... 27

Figure 3: 5 km EDR for low order UXO clearance with respect to Rockabill to Dalkey Island SAC ..... 29

Figure 4: 11 km EDR for mitigated piling from other OWF projects piling in 2031, in relation to the Irish Sea SACs designated for grey seals, and harbour seals at the Lambay Island SAC ..... 38

Figure 5: 11 km EDR for mitigated piling from other OWF projects in relation to the Irish Sea SACs designated for bottlenose dolphins ..... 55

Figure 6: 11 km EDR for mitigated piling from other OWF projects in relation to the Llŷn Peninsula and the Sarnau SAC designated for bottlenose dolphins ..... 62

Figure 7: 11 km EDR for mitigated piling from other OWF projects in relation to the Cardigan Bay / Bae Ceredigion SAC designated for bottlenose dolphins ..... 71

Figure 8: 11 km EDR for mitigated piling from other OWF projects in relation to the Irish West Coast SACs designated for harbour porpoise ..... 82

Figure 9: 11 km EDR for mitigated piling from other OWF projects in relation to the French ZSCs designated for harbour porpoise ..... 293

## ABBREVIATIONS

Abbreviation	Term in full
AA	Appropriate Assessment
no AESI	Adverse Effect on Site Integrity
CEA	Cumulative Effects Assessment
CWP	Codling Wind Park
DPC	Dublin Port Company
EDR	Effective Deterrent Ranges
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMF	Electromagnetic field
FIR	Further Information Request
MAC	Maritime Area Consent
MU	Management Unit
NIS	Natura Impact Statement
OECC	Offshore export cable corridor
O&M	Operation and maintenance
OSS	Offshore Substation
OWF	Offshore wind farm
PINS	The Planning Inspectorate
PTS	Permanent Threshold Shift
SAC	Special Areas of Conservation
SBL	Short Baseline
SBP	Sub Bottom Profiler
SSC	Suspended sediment concentration
QI	Qualifying interest
UHRS	Ultra-High Resolution Seismic
UK	United Kingdom
UXO	Unexploded ordnance
WTG	Wind Turbine Generator
ZSC	Zones Spéciales de Conservation

## 1 SUMMARY OF UPDATES TO NIS VOLUME 6 PART 1

### 1.1 Signposting to sections of the NIS that have been updated

1. **Table 1** below identifies the sections and volumes of the NIS that have been updated in **NIS Addendum (Part 2)** in response to specific Further Information Request (FIR) items. The updated sections are presented section by section below. The section numbering corresponds with NIS volumes, sub-sections that have not been updated are not included in this document.

Table 1: Summary of updates to NIS volume 6

NIS Volume	Section	Summary of Updates	Cross reference to section of this NIS Addendum document
<b>Part 2 of the NIS Addendum</b>			
6 Part 1	1 INTRODUCTION	This section remains unchanged.	
	2 APPROACH TO IN-COMBINATION ASSESSMENT	Section 2 has been updated in response to FIR Item 5	<b>Section 2</b> Approach to In-Combination Assessment
	3 EXAMINATION AND ANALYSIS OF POTENTIAL IMPACTS ON EUROPEAN SITES – CWP PROJECT IN-COMBINATION WITH OTHER PLANS AND PROJECTS	Section 3.1 has been updated in response to FIR Item 5	<b>Section 3.1</b> South Dublin Bay SAC (IE000210)
		Section 3.2 has been updated in response to FIR Item 5	<b>Section 3.2</b> Rockabill to Dalkey Island SAC (IE003000)
		Section 3.2.1 has been updated in response to FIR Item 5	<b>Section 3.2.1</b> Reefs [1170]
		Section 3.2.2 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.2.2</b> Harbour porpoise
		Section 3.3 has been updated in response to FIR Item 5	<b>Section 3.3</b> North Dublin Bay SAC (IE000206)
		Section 3.4 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.4</b> Codling Fault Zone SAC (IE003015)
Section 3.5.1 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.5</b> Lambay Island SAC (IE000204)		

NIS Volume	Section	Summary of Updates	Cross reference to section of this NIS Addendum document
		Section 3.6 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.6</b> North Anglesey Marine SAC (UK0030398)
		Section 3.7 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.7</b> Blackwater Bank SAC (IE002953)
		Section 3.8 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.8</b> Blasket Islands SAC (IE002172)
		Section 3.9 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.9</b> Carnsore Point SAC (IE002269)
		Section 3.10 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.10</b> Hook Head SAC (IE000764)
		Section 3.11 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.11</b> West Wales Marine SAC (UK0030397)
		Section 3.12 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.12</b> Llŷn Peninsula and the Sarnau SAC (UK0013117)
		Section 3.13 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.13</b> Cardigan Bay / Bae Ceredigion SAC (UK0012712)
		Section 3.14 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.14</b> North Channel SAC (UK0030399)

NIS Volume	Section	Summary of Updates	Cross reference to section of this NIS Addendum document
		Section 3.15 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.15</b> Bristol Channel Approaches SAC (UK0030396)
		Section 3.16 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.16</b> Roaringwater Bay and Islands SAC (IE000101)
		Section 3.17.1 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.17.1</b> Harbour porpoise
		Section 3.18 has been updated in response to FIR Item 5	<b>Section 3.18</b> Slaney River Valley SAC (IE0000781)
		Section 3.19 has been updated in response to FIR Item 5	<b>Section 3.19</b> Cardigan Bay / Bae Ceredigion SAC (UK0012712)
		Section 3.20 has been updated in response to FIR Item 5	<b>Section 3.20</b> River Barrow and River Nore SAC (IE0002162)
		Section 3.21 has been updated in response to FIR Item 5	<b>Section 3.21</b> Lower River Suir SAC (IE0002137)
		Section 3.22 has been updated in response to FIR Item 5	<b>Section 3.22</b> Blackwater River (Cork / Waterford) SAC (IE0002170)
		Section 3.23 has been updated in response to FIR Item 5	<b>Section 3.23</b> River Boyne and River Blackwater SAC (IE0002299)
		Section 3.24 remains unchanged	

NIS Volume	Section	Summary of Updates	Cross reference to section of this NIS Addendum document
		Section 3.25 has been updated in response to FIR Item 5	<b>Section 3.25</b> Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (IE0000365)
		Section 3.26 has been updated in response to FIR Item 5	<b>Section 3.26</b> Killala Bay / Moy Estuary SAC (IE0000458)
		Section 3.27 has been updated in response to FIR Item 5	<b>Section 3.27</b> Lough Gill SAC (IE0001976)
		Section 3.28 has been updated in response to FIR Item 5	<b>Section 3.28</b> River Moy SAC (IE0002298)
		Section 3.29 has been updated in response to FIR Item 5	<b>Section 3.29</b> Castlemaine Harbour SAC (IE0000343)
		Section 3.30 has been updated in response to FIR Item 5	<b>Section 3.30</b> Lower River Shannon SAC (IE0002165)
		Section 3.31 has been updated in response to FIR Item 5	<b>Section 3.31</b> Lough Corrib SAC (IE0000297)
		Section 3.32 has been updated in response to FIR Item 5	<b>Section 3.32</b> Pembrokeshire Marine / Sir Benfro Forol SAC (UK0013116)
		Section 3.33 has been updated in response to FIR Item 5	<b>Section 3.33</b> Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd SAC (UK0020020)
		Section 3.34 has been updated in response to FIR Item 5	<b>Section 3.34</b> Afon Tywi / River Tywi SAC (UK0013010)

NIS Volume	Section	Summary of Updates	Cross reference to section of this NIS Addendum document
		Section 3.35 has been updated in response to FIR Item 5	<b>Section 3.35</b> Severn Estuary / Môr Hafren SAC (UK0013030)
		Section 3.36 has been updated in response to FIR Item 5	<b>Section 3.36</b> River Usk / Afon Wysg SAC (UK0013007)
		Section 3.37 has been updated in response to FIR Item 5	<b>Section 3.37</b> River Wye / Afon Gwy SAC (UK0012642)
		Section 3.38 has been updated in response to FIR Item 5	<b>Section 3.38</b> Afon Teifi / River Teifi SAC (UK0012670)
		Section 3.39 has been updated in response to FIR Item 5	<b>Section 3.39</b> Dee Estuary / Aber Dyfrdwy SAC (UK0030131)
		Section 3.40 has been updated in response to FIR Item 5	<b>Section 3.40</b> Afonydd Cleddau / Cleddau Rivers SAC (UK0030074)
		Section 3.41 has been updated in response to FIR Item 5	<b>Section 3.41</b> River Dee and Bala Lake / Afon Dyfrdwy a Llŷn Tegid SAC (UK0030252)
		Section 3.42 has been updated in response to FIR Item 5	<b>Section 3.42</b> River Derwent and Bassenthwaite Lake SAC (UK0030032)
		Section 3.43 has been updated in response to FIR Item 5	<b>Section 3.43</b> Solway Firth SAC (UK0013025)
		Section 3.44 has been updated in response to FIR Item 5	<b>Section 3.44</b> River Eden SAC (UK0012643)

NIS Volume	Section	Summary of Updates	Cross reference to section of this NIS Addendum document
		Section 3.45 has been updated in response to FIR Item 5	<b>Section 3.45</b> River Axe SAC (UK0030248)
		Section 3.46 has been updated in response to FIR Item 5	<b>Section 3.46</b> River Avon SAC (UK0013016)
		Section 3.47 has been updated in response to FIR Item 5	<b>Section 3.47</b> French ZSCs – Migratory Fish
		Section 3.48 has been updated in response to FIR Items 10aa and 10bb	<b>Section 3.48</b> French ZSCs – Marine Mammals
	4 NIS (IN-COMBINATION) CONCLUSION	This section remains unchanged.	
	5 REFERENCES		<b>Section 5</b> References

## NIS ADDENDUM VOLUME 6 IN-COMBINATION ASSESSMENT – PART 1

### 1 INTRODUCTION

Section 1 remains unchanged

### 2 APPROACH TO IN-COMBINATION ASSESSMENT

Section 2 remains unchanged except for paragraph 5 which is replaced by paragraph 2 below, paragraph 6 and 7 which are replaced by paragraph 3 below and Table 2-1 which is replaced by Table 2 below. These updates have been made in response to Further Information Request (FIR) Item 5 (see **FIR Response Document**).

2. The long list of other plans and programmes (presented in **Appendix 1** of the **Cumulative Effects Assessment (CEA) Report (Part 1)** of the Environmental Impact Assessment Report (EIAR) Addendum) was then subject to additional screening criteria to establish a short list of other development for each European Site. Each plan or project considered alongside the Codling Wind Park (CWP) Project has been assigned to a tier, reflecting their current status in the planning and development process.
3. The proposed tiering structure is presented in **Table 2** and described in more detail in **CEA Report (Part 1)** of the EIAR Addendum. The tiers are listed in descending order of level of detail likely to be available (and, correspondingly, certainty of effects arising).

Table 2: Tiered structure for other plans and programmes considered (modified from The Planning Inspectorate (PINS) Advice Note 17 (PINS, 2019))

Tier	Description
Tier 1	<ul style="list-style-type: none"> <li>• Constructed projects with a continuing effect;</li> <li>• Under construction;</li> <li>• Permitted applications, but not yet implemented;</li> <li>• Offshore applications submitted six months or more in advance of the CWP Project submission of further information, but not yet determined. This includes the other Phase 1 Projects; and</li> <li>• Onshore applications submitted six months or more in advance of the CWP Project submission of further information, but not yet determined. This includes the Dublin Port Company (DPC) 3FM Project.</li> </ul>
Tier 2	<ul style="list-style-type: none"> <li>• Offshore projects in receipt of a Maritime Area Consent (MAC);</li> <li>• Offshore projects in the public domain where an Environmental Impact Assessment (EIA) scoping report has been issued; and</li> <li>• Onshore projects in the public domain where an EIA scoping report has been issued.</li> </ul>
Tier 3	<ul style="list-style-type: none"> <li>• Projects in the public domain where an EIA scoping report has not been issued;</li> <li>• Projects that have been identified in the relevant development plans and programmes, which set the framework for future development consents / approvals, where such development is reasonably likely to come forward.</li> </ul>

Section 2 remains unchanged except the addition of Section 2.1 (paragraphs 4 and 9) below. This update has been made to clarify the approach to the in-combination assessment for marine mammals and avoid duplication across the report and is applicable to the AA for all SACs with Annex II marine mammal qualifying features.

## 2.1 Marine mammals in-combination assessment approach – increased underwater noise

4. For marine mammals, the main potential impacts from the CWP Project in-combination with other plans and projects are associated with underwater noise due to:
  - Pre-construction geophysical surveys;
  - UXO clearance; and
  - Pile driving.
5. The approach to the in-combination assessment for pile driving, geophysical surveys and UXO clearance is described in **Section 2** (Volume 2) of the **NIS Addendum (Part 1)**. In summary, all projects are expected to implement noise abatement technologies to mitigate impacts associated with piling<sup>1</sup> and UXO clearance (DEFRA *et al.*, 2025). As such, for UXO clearance, the in-combination assessment uses an Effective Deterrent Range (EDR) of 5 km for low-order UXO clearance (JNCC, 2025b). For piling, the in-combination assessment is presented using both the EIAR values (where available) and assumed mitigated piling using an 11 km EDR (JNCC, 2025b). For the assessment of in-combination impacts due to geophysical surveys, a 3 km EDR is used (JNCC, 2025b).

### 2.1.1 Project screening

#### Pile driving

6. Only projects which are proposed to be constructing in the same year (2031) as the CWP Project were included in the in-combination assessment (**Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
7. To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.

---

<sup>1</sup> E.g. [A noise limit for offshore wind piling driving: feasibility assessment and pilot programme design](#).

Table 3: Other plans and projects considered in the in-combination assessment for piling in 2031

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Dublin Array	2.8	1.4	1
Mooir Vannin	154.2	156.7	1
North Channel Wind 1	202.1	183.9	3
North Channel Wind 2	177.6	162.7	3

### Geophysical surveys

8. Given the small disturbance ranges expected from geophysical surveys, this assessment considers only survey activities in the Irish Sea that are expected to occur between 2025-2028 when CWP is conducting survey activities. There are 12 other survey projects that are planned to be surveying between 2025-2028 when CWP is expecting to be conducting site investigations (**Table 4**).

Table 4: Offshore survey projects screened into the CEA. Key: **Construction**, **Inactive**.

Survey Project	Tier	2025	2026	2027	2028
Codling Wind Park Ltd. Site Investigations for proposed Offshore Wind Farm, off Counties Wicklow and Dublin	1				
Sure Partners Arklow Bank Wind Park Phase 2 Site Investigations	1				
Environmental survey and ground investigation works in order to inform the design of proposed Point Bridge and Tom Clarke Widening Project.	1				
Site investigation activities to inform the development of the North Irish Sea Array (NISA) offshore windfarm (OWF) and export cable, off the coasts of counties Dublin, Meath and Louth.	1				
MaresConnect Electricity Interconnector Site Investigation	1				
Statkraft North Irish Sea Array (NISA) Site Investigations for Export Cable Route	1				
North Irish Sea Array (NISA) Site Investigations	1				
Braymore Point	1				
Oriel Windfarm Ltd	3				
Geophysical survey and site investigations for a proposed subsea fibre optic cable having a landfall in Dublin Port, County Dublin and to evaluate options for the route traversing Dublin Bay, across the Irish Sea to Anglesey, Wales.	1				
Tuskar Subsea Fibre Optic Cable - Geophysical survey and site investigations	1				
SOBR1 Subsea Fibre Optic Cable - Geophysical survey and site investigations	1				
SOBR2 Subsea Fibre Optic Cable - Geophysical survey and site investigations	1				

### UXO clearance

9. Given the small disturbance ranges expected from low-order UXO clearance, this assessment considers only UXO clearance activities in the Irish Sea that are expected to occur between 2031-2033 when CWP is conducting offshore construction activities. There are seven other offshore developments that are expected to be constructing at the same time as CWP (2031-2033) in the Irish Sea (**Table 5**).

Table 5: Offshore projects with potential to carry out UXO clearance screened into the in-combination assessment. Key: Construction, Operation

Project	Tier	2031	2032	2033
CWP				
Arklow Bank Wind Park 2	1			
Dublin Array	1			
Isle of Man (Mooir Vannin)	1			
Dublin Port Company MP2 Project	1			
Arklow Bank Wind Park 2 Operations and Maintenance Facility Onshore and Nearshore infrastructure and associated works	1			
Dublin Port Masterplan (3FM Plan)	1			
Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility	1			

### 3 EXAMINATION AND ANALYSIS OF POTENTIAL IMPACTS ON EUROPEAN SITES – CWP PROJECT IN-COMBINATION WITH OTHER PLANS AND PROJECTS

#### 3.1 South Dublin Bay SAC (IE000210)

Section 3.1 remains unchanged except for Table 3-1 which is replaced by Table 6. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-2 (summary of assessment) of the application Natura Impact Statement (NIS) remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 6: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
Dublin Array (OWF_02)	2.8	0.0	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	44.1	1
MP2 Project (CA_16)	25.1	4.2	1
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 Operation and maintenance (O&M) Facility (CA_30)	30.8	33.1	1
3FM Project (CA_33)	31.3	0.6	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	23.2	3.7	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Dumping at Sea arising from capital dredging (DAS_03)	23.2	3.7	1

### 3.1.1 Mudflats and sandflats not covered by seawater at low tide [1140], *Salicornia* and other annuals colonising mud and sand [1310]

#### Direct impacts on habitats

This section remains unchanged except for paragraphs 14 to 15 which are replaced by paragraph 10 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

10. Of the above described plans and projects that may act in-combination, there are none with the potential to have direct impacts on habitats which directly overlap the Special Areas of Conservation (SAC). As such, there can be no in-combination impact.

This section remains unchanged except for paragraphs 16 to 17 which are replaced by paragraph 11 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

11. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on the site integrity of the South Dublin Bay SAC in combination with other plans or projects.

#### Increased SSC and sediment deposition

This section remains unchanged except for paragraph 20 which is replaced by paragraph 12 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

12. Of the relevant projects, the following are considered to have similar scale impacts to the CWP Project as they are similar project types, or include dredge and disposal programmes.
- Arklow Bank Wind Park 2;
  - Dublin Array;
  - North Irish Sea Array;
  - Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project;

- MP2 Project;
- Maintenance dredging River Boyne, Drogheda;
- Development at Howth Fishery Harbour Centre (dredging and reclamation works);
- Maintenance Dredging in Dublin Port; and
- Dumping at Sea arising from capital dredging works under the MP2 Project.

This section remains unchanged except for paragraphs 24 and 25 which are replaced by paragraph 13 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

13. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on the site integrity of the South Dublin Bay SAC in combination with other plans or projects.

#### Remobilisation of contaminated sediments

This section remains unchanged except for paragraphs 31 and 32 which are replaced by paragraph 14 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

14. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on the site integrity of the South Dublin Bay SAC in combination with other plans or projects.

#### Presence of EMF / temperature changes (O&M)

This section remains unchanged except for paragraphs 37 to 38 which are replaced by paragraph 15 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

15. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on the site integrity of the South Dublin Bay SAC in combination with other plans or projects.

#### *Residual effect*

This section remains unchanged except for paragraphs 43 to 44 which are replaced by paragraph 16 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

16. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on the site integrity of the South Dublin Bay SAC in combination with other plans or projects.

## **3.2 Rockabill to Dalkey Island SAC (IE003000)**

Section 3.2 remains unchanged except for Table 3-3 which is replaced by **Table 7**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-4 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 7: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
Dublin Array (OWF_02)	2.8	0.0	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	44.1	1
MP2 Project (CA_16)	25.1	4.2	1
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
3FM Project (CA_33)	31.3	0.6	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	23.2	3.7	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Dumping at Sea arising from capital dredging (DAS_03)	23.2	3.7	1

### 3.2.1 Reefs [1170]

[Direct impacts on habitats, increased SSC and associated deposition, remobilisation of contaminated sediments, and presence of EMF and associated temperature changes](#)

This section remains unchanged except for paragraph 52 which is replaced by paragraph 17 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

- No reef habitat will be directly affected by the CWP Project as it is all situated outside of the Offshore export cable corridor (OECC). The reef habitat within Rockabill to Dalkey Island SAC is located to the north or west of the CWP offshore development area. Based upon the modelling of sediment transport arising from the CWP Project activities, there is negligible potential for increases in Suspended sediment concentration (SSC) to affect the protected habitats within the Rockabill to Dalkey SAC.

Sediment transport is predicted to travel in a north-south / slight east direction with plumes not extending more than 6 km from the OECC. As such, no in combination adverse effects on site integrity will arise on the Rockabill to Dalkey Island SAC, as any sediment arisings resulting from the CWP Project that may reach the reef feature of the SAC being so immaterial that they could not in any way contribute to an in-combination adverse effect and with the CWP project likely to make only a *de minimis* contribution to any in-combination impact on the Reefs Qualifying interest (QI).

This section remains unchanged except for paragraphs 54 to 55 which are replaced by paragraph 18 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

18. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### *Residual effect*

This section remains unchanged except for paragraphs 60 to 61 which are replaced by paragraph 19 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

19. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.2.2 Harbour porpoise**

Section 3.2.2 remains unchanged except for paragraphs 62 through to 67 which are replaced by paragraphs 20 to 40 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Volume 1** of the **NIS Addendum**, **Volume 2 Introduction**, **Section 2**.

#### Increased underwater noise

#### *Piling of WTGs*

20. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea Management Unit (MU) for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs (in addition to CWP) in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise

the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.

21. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at Wind Turbine Generator (WTG) and Offshore Substation (OSS) piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will implement noise reduction measures, as this is now supported by policy positions for Ireland and all United Kingdom (UK) nations that require mitigation, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In situ impacts

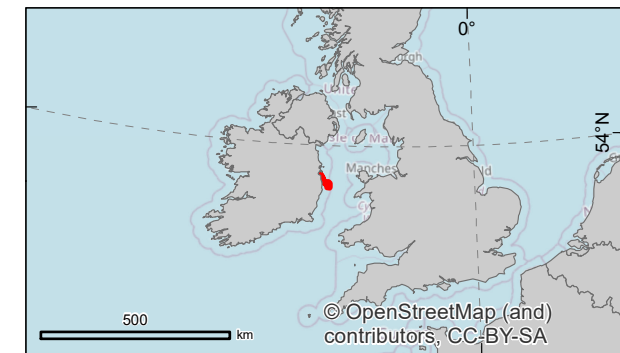
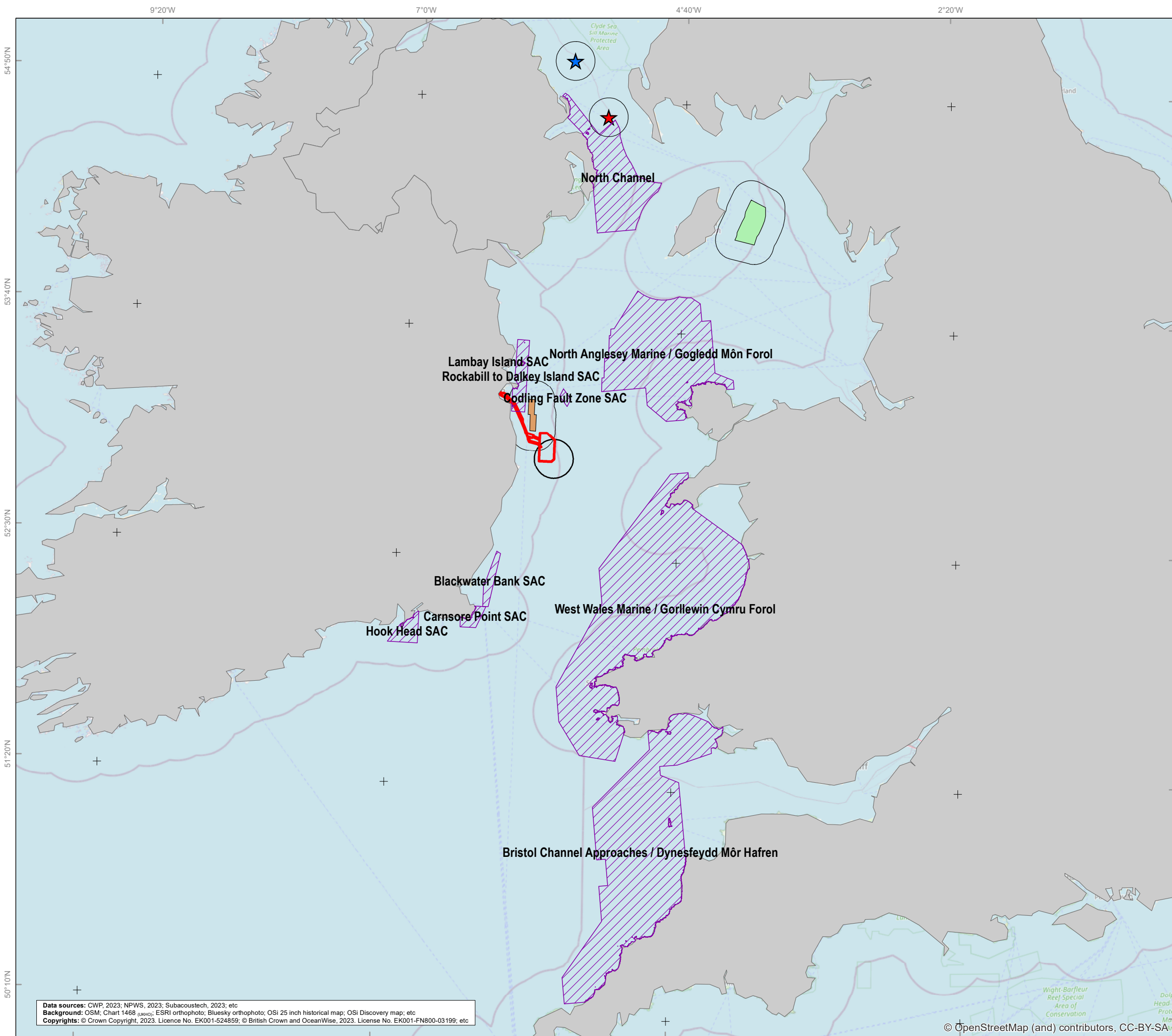
22. In line with the assessment of no adverse effect on site integrity (AESI) for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Rockabill to Dalkey Island SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

23. Using the values from the project specific EIAs (where available), there is expected to be disturbance to 8,781 porpoise per piling day, assuming all five OWF pile on the same day (14.05% of the Celtic and Irish Sea MU, CWP contributes 7.61% of this total) (**Table 8**).
24. Using the 11 km EDR and SCANS IV block density approach, there is expected to be disturbance to 624 porpoise per piling day, assuming all five OWF pile on the same day (1.0% of the Celtic and Irish Sea MU, CWP contributes 17% of this total) (**Table 8**).

Table 8: Number of harbour porpoise disturbed per piling day at OWF projects constructing in 2031. The number of harbour porpoise disturbed per piling day is presented using values from the project specific EIAs (if available), and using an 11 km EDR for mitigated piling and the SCANS IV Block density

Project	Approach	# porpoise disturbed per piling day
<b>Values from the project specific EIAs (if available)</b>		
Codling	EIA: Dose-response, Irish Sea density surface, grid cell specific	668
Dublin Array	EIA: Dose-response, Irish Sea density surface, grid cell specific	995
Moor Vannin	EIA: Dose-response, SCANS IV block CS-E 0.5153 porpoise/km <sup>2</sup>	6,904
North Channel 1	<i>No EIA. Assumed: 11 km EDR, SCANS IV block CS-D 0.2803 porpoise/km<sup>2</sup></i>	107
North Channel 2	<i>No EIA. Assumed: 11 km EDR, SCANS IV block CS-D 0.2803 porpoise/km<sup>2</sup></i>	107
Total disturbed per piling day (assuming projects pile on the same day)		8,781
		% MU 14.05%
<b>Values using an 11 km EDR for mitigated piling and SCANS IV Block density</b>		
Codling	11 km EDR, SCANS IV block CS-D 0.2803 porpoise/km <sup>2</sup>	107
Dublin Array	11 km EDR, SCANS IV block CS-D 0.2803 porpoise/km <sup>2</sup>	107
Moor Vannin	11 km EDR, SCANS IV block CS-E 0.5153 porpoise/km <sup>2</sup>	196
North Channel 1	11 km EDR, SCANS IV block CS-D 0.2803 porpoise/km <sup>2</sup>	107
North Channel 2	11 km EDR, SCANS IV block CS-D 0.2803 porpoise/km <sup>2</sup>	107
Total disturbed per piling day (assuming projects pile on the same day)		624
		% MU 1.0%



### Legend

- Planning application boundary
- North Channel 1
- North Channel 2
- Dublin Array
- Isle of Man
- 11 km EDR
- Harbour Porpoise SAC

	Project: Codling Wind Park													
<p>Figure 1: 11 km EDR for mitigated piling from other OWF projects piling in 2031, in relation to the Irish Sea and eastern Celtic Sea SACs designated for harbour porpoise</p>														
<p>CWP doc. number: CWP-SMR-CON-09-MAP-2119</p>														
<p>Internal descriptive code: IS - PAB.DPMM.CONT.CORNERS.THRESH.SEL. IN-COMB.CONT.WTGs.CORNERS - ROCKABILL.to. DALKEY.ISL.SAC</p>	<p>Size: A3 Scale:</p>	<p>CRS: EPSG 25830</p>												
<table border="1"> <thead> <tr> <th>Rev.</th> <th>Updates</th> <th>Date</th> <th>By</th> <th>Chk'd</th> <th>App'd</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Final version</td> <td>03/04/2026</td> <td>JC</td> <td>RRS/EA</td> <td>EA</td> </tr> </tbody> </table>	Rev.	Updates	Date	By	Chk'd	App'd	A	Final version	03/04/2026	JC	RRS/EA	EA		
Rev.	Updates	Date	By	Chk'd	App'd									
A	Final version	03/04/2026	JC	RRS/EA	EA									

Data sources: CWP, 2023; NPWS, 2023; Subacoustech, 2023; etc  
 Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
 Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

© OpenStreetMap (and) contributors, CC-BY-SA

25. The effect of disturbance from a single piling event is expected to last less than a day, though the disturbance impact across the projects will occur intermittently throughout 2031. This is expected to result in intermittent and temporary behavioural effects in a small proportion of the population. It is therefore possible that piling activities at projects considered may restrict access to habitats in the vicinity of the projects for the duration of piling. Given how spread out the projects are within the Irish Sea, it is expected that harbour porpoises will be able to use other areas not affected by the underwater noise footprint. As such, it is anticipated that the temporary changes in behaviour and/or distribution of individuals are at a scale that is unlikely to result in potential reductions to lifetime reproductive success and survival rates to some individuals.

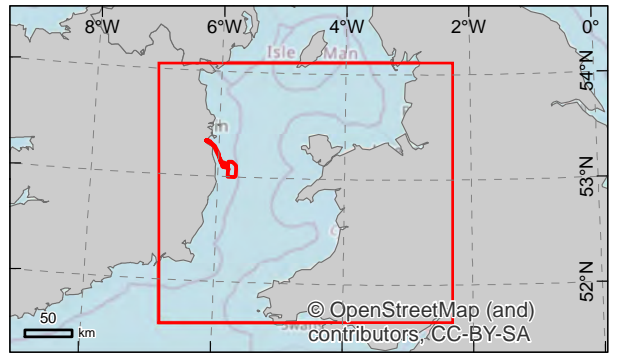
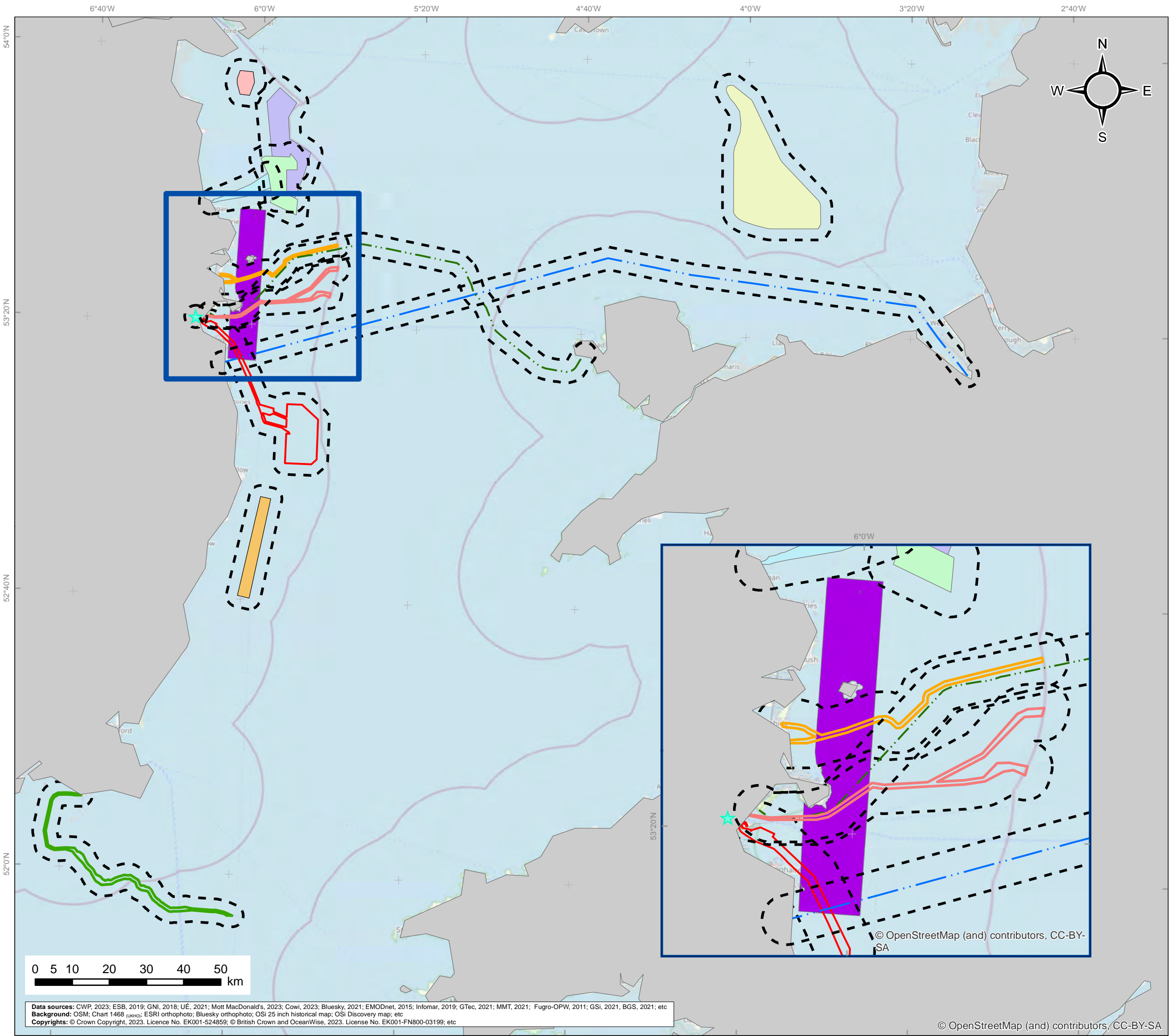
### Summary

26. Considering the above, mitigated piling at WTGs is unlikely to result in a significant negative impact on individuals or the harbour porpoise community within and outside the site. It will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance from piling at WTGs in-combination with other projects will not adversely affect the harbour porpoise community at the site.

### Geophysical surveys

#### In situ impacts

27. For *in situ* disturbance from geophysical surveys, a 3 km EDR centred in the OECC results in up to 26.24 km<sup>2</sup> impacted area within the SAC (9.62% SAC area). For geophysical surveys occurring within the array area, there is no overlap with the SAC.
28. For other projects screened into the in-combination assessment, when considering an EDR measured from the location closest to the SAC, there is an overlap for six projects (NISA OWF array area, SOBR2, SOBR1, Celtix Connect, Mares Connect, CWP OECC, **Figure 2**). If all six projects were to conduct geophysical surveys at the same time, then the overlap would result in up to 121.9 km<sup>2</sup> impacted area within the SAC (44.67% SAC area); however, this is extremely unlikely to occur. The chance of all six projects conducting geophysical surveys at the same time within the SAC is negligible, in particular given current Condition wording on Foreshore Investigation licences and Maritime Usage Licences that requires projects to avoid a temporal overlap when the vessel to vessel distance between survey vessels is 10km or less.



**Legend**

- Planning application boundary
- Rockabill to Dalkey Island SAC
- Arklow Bank Wind Park 2
- Braymore Point
- Mona Array
- NISA Array
- NISA Offshore Export Cable Corridor
- Oriel
- ★ Environmental survey and ground investigation for the proposed Point Bridge and Tom Clarke Widening Project
- Celtix Connect
- Mares Connect
- SOBR1 Subsea Fibre Optic Cable
- SOBR2 Subsea Fibre Optic Cable
- Tuskar Subsea Fibre Optic Cable
- 3km EDR

	Project: Codling Wind Park				
<b>Figure 2: 3 km EDR for geophysical surveys with respect to Rockabill to Dalkey Island SAC</b>					
CWP doc. number: CWP-SMR-CON-09-MAP-2120					
Internal descriptive code: N/A	Size: A3 Scale: 1:1,000,000	CRS: EPSG 25830			
Rev.	Updates	Date	By	Chk'd	App'd
A	First issue	03/04/2026	JC/AS	RRS	

Data sources: CWP, 2023; ESB, 2019; GNI, 2018; UÉ, 2021; Mott MacDonald's, 2023; Cowi, 2023; Bluesky, 2021; EMODnet, 2015; Infomar, 2019; GTec, 2021; MMT, 2021; Fugro-OPW, 2011; GSi, 2021; BGS, 2021; etc  
Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. License No. EK001-FN800-03199; etc

© OpenStreetMap (and) contributors, CC-BY-SA

#### Ex situ impacts

29. For *ex situ* disturbance from geophysical surveys, using the SCANS IV block density, the number of harbour porpoise predicted to be impacted is 8 individuals (0.01% Celtic and Irish Sea MU). Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea.

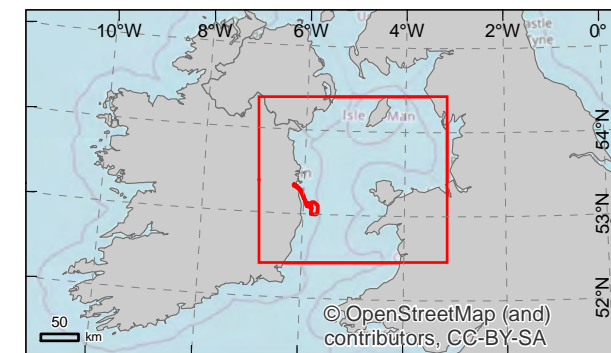
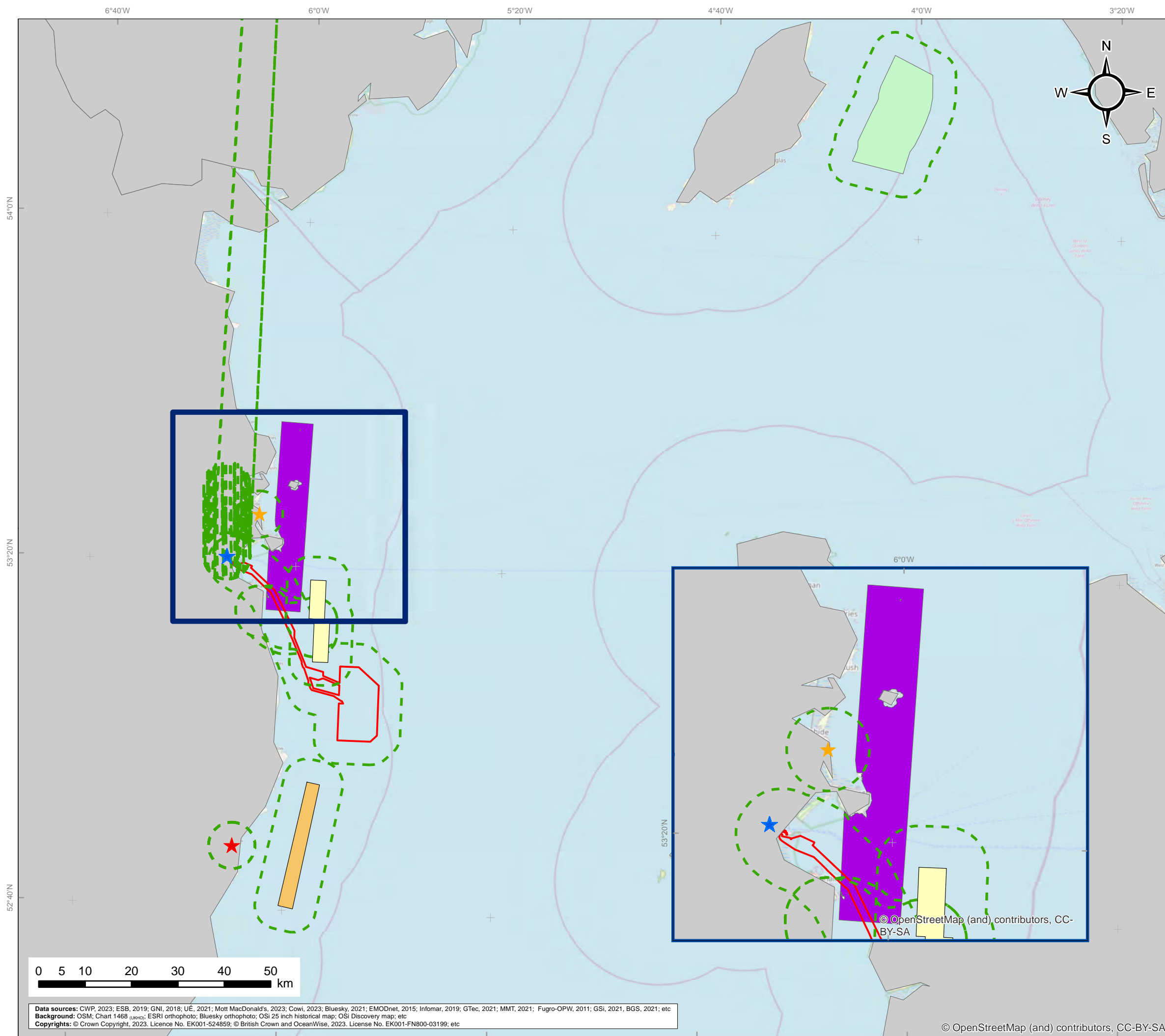
#### Summary

30. It is anticipated that the noise emitted from geophysical survey equipment will be rapidly attenuated with distance from source such that noise levels at which behavioural disturbance would be anticipated to occur will be of small spatial extent. In particular, it is noted that those sources with higher source levels (Sub Bottom Profiler (SBP), Ultra-High Resolution Seismic (UHRSS)), along with the Short Baseline (SBL), are highly directional, with noise levels outside of the main beam considerably lower and therefore with limited horizontal propagation of noise levels. The consequence of the impact is short-term, intermittent over the course of the geophysical survey campaigns, with temporary behavioural effects that are very unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. If multiple projects will plan to conduct geophysical surveys within the SAC at the same time, it is expected that temporal mitigation will be put in place.
31. The proposed geophysical survey activities are therefore unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance from geophysical surveys in-combination with other projects is highly unlikely to adversely affect the harbour porpoise community at the site.

#### UXO clearance

#### In situ impacts

32. For a 5 km EDR for low-order UXO clearance occurring within the OECC, this results in an overlap with up to 52.32 km<sup>2</sup> of the SAC area (19.2%). For UXO clearance occurring within the array area, there is no overlap of the 5 km EDR with the SAC. For other projects screened into the in-combination assessment, when considering an EDR measured from the location closest to the SAC, there is an overlap for two projects (Dublin OWF array area and OECC and Codling OWF OECC (**Figure 3**)).
33. If both projects were to clear a UXO at the same time, the overlap would result in up to 71.11 km<sup>2</sup> impacted area within the SAC (25.97% SAC area); however, this is extremely unlikely to occur.



**Legend**

- Planning application boundary
- Rockabill to Dalkey Island SAC
- Arklow Bank 2
- Dublin Array
- Moir Vannin
- ★ Arklow Bank O&M Facility
- ★ Dublin Port Projects (MP2 & 3FM)
- ★ Greater\_Dublin\_Drainage\_Project\_
- 5km EDR

	Project: Codling Wind Park	
--	-------------------------------	--

**Figure 3: 5 km EDR for low order UXO clearance with respect to Rockabill to Dalkey Island SAC**

CWP doc. number: CWP-SMR-CON-09-MAP-2121

Internal descriptive code: N/A	Size: A3 Scale: 1:800,000	CRS: EPSG 25830
-----------------------------------	------------------------------	--------------------

Rev.	Updates	Date	By	Chk'd	App'd
A	First issue	2021/09/08	SP	DM/EA	CC
B	Second revision	2021/09/09	LH	PC/EA	CC
C	Third revision	2021/09/22	LH	PC/EA	CC
D	Final version	2021/09/30	SP	PC/EA	CC

Data sources: CWP, 2023; ESB, 2019; GNI, 2018; UÉ, 2021; Mott MacDonald's, 2023; Cowi, 2023; Bluesky, 2021; EMODnet, 2015; In/omar, 2019; GTec, 2021; MMT, 2021; Fugro-OPW, 2011; GSi, 2021, BGS, 2021; etc  
Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

### Ex situ impacts

34. When considering *ex situ* impacts of disturbance from low-order UXO clearance, a maximum of 22 harbour porpoise individuals are at risk of being disturbed (0.03% of the Celtic and Irish Sea MU). Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea. It is expected that the detonation of a UXO would elicit a startle response and potentially very short duration behavioural responses and would therefore not be expected to cause widespread and prolonged displacement (JNCC, 2020). Given the very small percentage of the MUs predicted to be impacted per UXO clearance event, and the fact the consequence of the impact is likely to be short-term, intermittent during the UXO clearance campaigns, and with temporary behavioural effects that are very unlikely to affect the survival and reproductive rates to the extent that the population trajectory would be altered.

### Summary

35. It is extremely unlikely that multiple projects will conduct UXO clearance within the SAC at the same time. If this were to occur, it is expected that temporal mitigation will be put in place to prevent multiple clearances in the SAC at any one time.
36. The disturbance associated with UXO clearance will not result in the permanent exclusion of harbour porpoise from part of its range within the site and beyond. Additionally, such short-term disturbance is unlikely to be sufficient to result in any changes to the vital rates of individuals and therefore will not result in a significant negative impact on individuals or the harbour porpoise community within the site. Subsequently, behavioural disturbance from UXO clearance in-combination with other projects is highly unlikely to adversely affect the harbour porpoise community at the site.

### *Disturbance from other construction activities and vessels*

37. There is expected to be non-piling construction activity associated with the construction of other offshore developments including dredging, trenching, cable laying, rock placement and drilling. Additionally, there will be disturbance from construction vessels at all OWF screened into the cumulative assessment (**Table 3, Table 4, Table 5**).
38. It is extremely difficult to reliably quantify the level of increased disturbance to marine mammals resulting from increased vessel activity on a cumulative basis, given the large degree of temporal and spatial variation in vessel movements between projects and regions. Although some OWF vessels (such as crew transport and supply vessels) may transit the wind farm at higher speeds, they often travel in repeated / predictable routes within the site. Many other vessels (e.g., jack-up vessels and pilot or attending vessels) travel more slowly within the wind farm site or spend long periods of time jacked-up, at anchor (minimising movement and acoustic signature from engines) or using dynamic positioning systems (minimising movement, although still generating noise). Geophysical surveys do not use existing vessel routes, so may risk adding vessel presence to novel areas; however, these are slow-moving and operate their own mitigation measures to protect marine mammals (while mitigating for Permanent Threshold Shift (PTS) the mitigation measures will also reduce disturbance impacts). Therefore, increases in disturbance from vessels from offshore projects are likely to be small in relation to current and ongoing levels of shipping. All projects are expected to adopt Vessel Management Plans (VMPs or comply with exiting Marine Wildlife Watching Codes) to minimise any potential effects on marine mammals, as this is considered standard mitigation across the offshore wind industry and complies directly with the relevant Irish guidance for managing vessel interactions with marine mammals.

## Summary

39. The disturbance associated with other construction activities and vessels will not result in the permanent exclusion of harbour porpoise from part of its range within the site and beyond. The effect of disturbance from other construction activities and vessels will occur intermittently, resulting in short-term and temporary behavioural effects. It is expected that the temporary changes in behaviour and/or distribution of individuals are at a scale that would result in potential reductions to lifetime reproductive success and survival rates to some individuals, but not enough to affect the population trajectory over the long term.

## Conclusion

40. Considering the impact pathways described above, disturbance effects from increased underwater noise are anticipated to be below levels that may adversely affect the harbour porpoise individuals and community at the site and will not lead to permanent exclusion of harbour porpoise from a part of its range. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Rockabill to Dalkey Island SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 3.3 North Dublin Bay SAC (IE000206)

Section 3.3 remains unchanged except for Table 3-8 which is replaced by **Table 9**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-9 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 9: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
Dublin Array (OWF_02)	2.8	0.0	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	44.1	1
MP2 Project (CA_16)	25.1	4.2	1
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
3FM Project (CA_33)	31.3	0.6	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	23.2	3.7	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Dumping at Sea arising from capital dredging (DAS_03)	23.2	3.7	1

**3.3.1 Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) [1330], Mediterranean salt meadows (*Juncetalia maritimi*) [1410]**

Increased SSC and associated deposition and remobilisation of contaminated sediments

This section remains unchanged except for paragraph 88 which is replaced by paragraph 41 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

41. The marine QIs of North Dublin Bay SAC are habitats that have formed within this area of net accretion and are thus tolerant of variation in and deposition of suspended sediments. Furthermore, based upon the modelling of sediment transport arising from the CWP Project activities, there is negligible potential for increases in SSC to affect the protected habitats within this SAC. Sediment transport is predicted to travel in a north-south / slight east direction with plumes not extending more than 6 km from the OECC. Cumulative sediment deposition thickness in the immediate vicinity of the disposal site or trenching location is expected to range from 1-4 cm, reflecting the portion of material that settles almost instantaneously. These sediments are anticipated to be rapidly reworked by the prevailing hydrodynamic regime and integrated into the existing seabed sediment system. As such, any sediment arisings resulting from the CWP Project that may reach the SAC will be so immaterial that they could not in any way contribute to an in-combination adverse effect and with the CWP project likely to make only a *de minimis* contribution to any in-combination impact on the QIs

This section remains unchanged except for paragraphs 90 to 91 which are replaced by paragraph 42 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

42. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

*Residual effect*

This section remains unchanged except for paragraphs 95 to 96 which are replaced by paragraph 43 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

43. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects

### 3.4 Codling Fault Zone SAC (IE003015)

#### 3.4.1 Harbour porpoise

Section 3.4.1 remains unchanged except for paragraphs 97 through to 106 which are replaced by paragraphs 44 to 53 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

Increased underwater noise

*Piling of WTGs*

44. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
45. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement

noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In-situ impacts

46. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Codling Fault Zone SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

47. The *ex situ* disturbance due to piling, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the Codling Fault SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Geophysical surveys

##### In situ impacts

48. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Codling Fault Zone SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### Ex situ impacts

49. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Codling Fault SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### UXO clearance

##### In situ impacts

50. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Codling Fault Zone SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### Ex situ impacts

51. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the

Codling Fault SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Disturbance from other construction activities and vessels*

52. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Codling Fault SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Conclusion*

53. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap between the CWP project and Codling Fault SAC. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Codling Fault SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## **3.5 Lambay Island SAC (IE000204)**

### **3.5.1 Grey and harbour seals**

Section 3.5.1 remains unchanged except for paragraphs 117 through to 123 which are replaced by paragraphs 56 to 73 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

### Increased underwater noise

#### *Piling of WTGs*

54. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the East Regions of the Republic of Ireland and Northern Ireland MU for grey and harbour seals in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the East Regions of the Republic of Ireland and Northern Ireland MU that will be constructing in 2031 (see **Table 3**).
55. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In-situ impacts

56. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Lambay Island SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

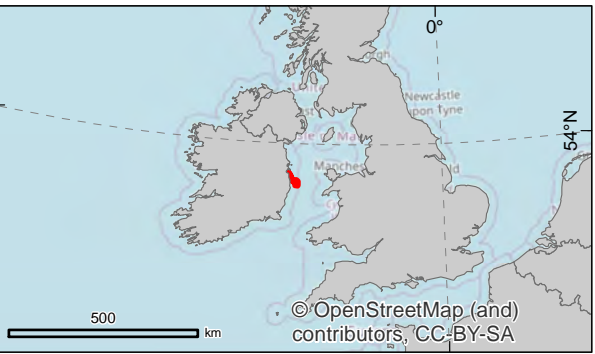
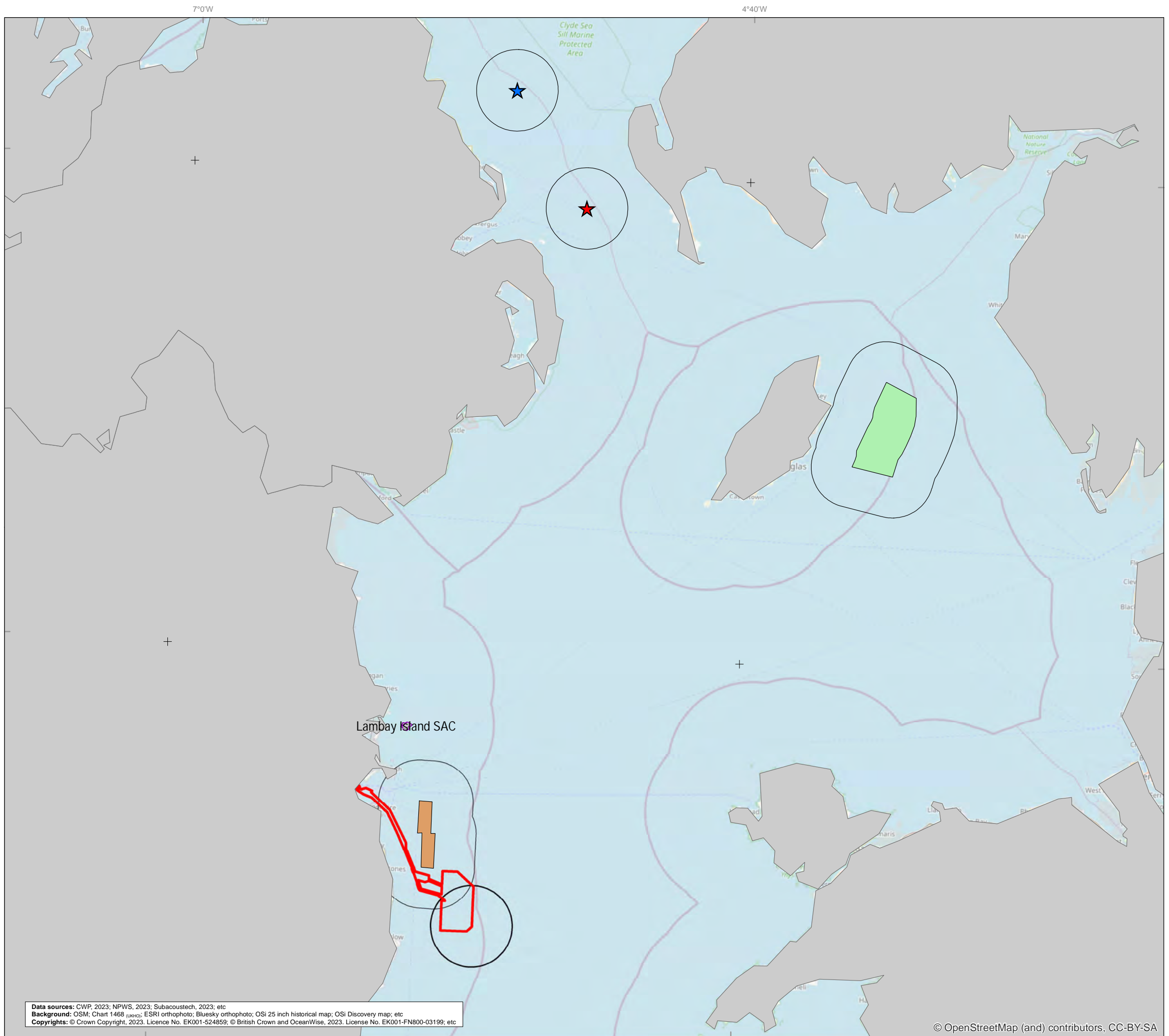
#### Ex situ impacts

##### *Grey seals*

57. Using the values from the project specific EIAs (if available), there is expected to be disturbance to 1,175 grey seals per piling day, assuming all five OWF pile on the same day (19.40% of the East Regions of the Republic of Ireland and Northern Ireland MU, CWP contributes 2.21% of this total) (**Table 10**).
58. Using the 11 km EDR and SCANS IV block density approach, there is expected to be disturbance to 45 grey seals per piling day, assuming all five OWF pile on the same day (0.7% of the East Regions of the Republic of Ireland and Northern Ireland MU, CWP contributes 6.7% of this total) (**Table 10**).

Table 10: Number of grey seals disturbed per piling day at OWF projects constructing in 2031. The number of grey seals disturbed per piling day is presented using values from the project specific EIAs (if available), and using an 11 km EDR for mitigated piling

Project	Approach	# grey seals disturbed per piling day
<b>Values from the project specific EIAs (if available)</b>		
Codling	EIA: Dose-response, Seal habitat preference map – grid cell specific	26
Dublin Array	EIA: Dose-response, Seal habitat preference map – grid cell specific	177
Moor Vannin	EIA: Dose-response, Seal habitat preference map (0.07 seals/km <sup>2</sup> )	938
North Channel 1	<i>No EIA: 11 km EDR, Seal habitat preference map (0.0594 seals/km<sup>2</sup>)</i>	23
North Channel 2	<i>No EIA: 11 km EDR, Seal habitat preference map (0.0300 seals/km<sup>2</sup>)</i>	11
Total disturbed per piling day (assuming projects pile on the same day)		1,175
		% MU 19.40%
<b>Values using an 11 km EDR for mitigated piling and seal habitat preference map density</b>		
Codling	11 km EDR, Seal habitat preference map (0.0083 seals/km <sup>2</sup> )	3
Dublin Array	11 km EDR, Seal habitat preference map (0.0127 seals/km <sup>2</sup> )	5
Moor Vannin	11 km EDR, Seal habitat preference map (0.0073 seals/km <sup>2</sup> )	3
North Channel 1	11 km EDR, Seal habitat preference map (0.0594 seals/km <sup>2</sup> )	23
North Channel 2	11 km EDR, Seal habitat preference map (0.0300 seals/km <sup>2</sup> )	11
Total disturbed per piling day (assuming projects pile on the same day)		45
		% MU 0.7%



**Legend**

- Planning application boundary
- ★ North Channel 1
- ★ North Channel 2
- Dublin Array
- Moir Vannin
- 11 km EDR
- Grey seal SAC

**Data sources:** CWP, 2023; NPWS, 2023; Subacoustech, 2023; etc  
**Background:** OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
**Copyrights:** © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

© OpenStreetMap (and) contributors, CC-BY-SA

	Project: Codling Wind Park	
--	-------------------------------	--

**Figure 4: 11 km EDR for mitigated piling from other OWF projects piling in 2031, in relation to the Irish Sea SACs designated for grey seals, and harbour seals at the Lambay Island SAC**

CWP doc. number: CWP-SMR-ENG-08-01-MAP-1598

Internal descriptive code: N/A	Size: A3 Scale:	CRS: EPSG 25830
-----------------------------------	--------------------	--------------------

Rev.	Updates	Date	By	Chk'd	App'd
A	Final version	06/04/2026	JC	RRS/EA	EA

59. The effect of disturbance from a single piling event is expected to last less than a day, though the disturbance impact across the projects will occur intermittently throughout 2031. This is expected to result in intermittent and temporary behavioural effects in a small proportion of the population. It is therefore possible that piling activities at projects considered may restrict access to habitats in the vicinity of the projects for the duration of piling. Given how spread out the projects are within the Irish Sea, it is expected that grey seals will be able to use other areas not affected by the underwater noise footprint. As such, it is anticipated that the temporary changes in behaviour and/or distribution of individuals are at a scale that is unlikely to result in potential reductions to lifetime reproductive success and survival rates to some individuals.
60. Considering the above, mitigated piling at WTGs is unlikely to result in a significant negative impact on individuals or the grey seal community within and outside the site. It will also not lead to the permanent exclusion of grey seal from any part of its range within the site. Subsequently, behavioural disturbance from piling at WTGs will not adversely affect the grey seals community at the site.

#### Harbour seals

61. Harbour seals were screened out of the in-combination assessment for disturbance from pile driving construction activities since <1 harbour seal was predicted to be disturbed per piling day at CWP alone. Therefore, there is no potential for CWP to contribute to an in-combination effect.

#### Summary

62. Considering the above, the piling at CWP in-combination with other plans and projects activities will not result in interference or disturbance of a breeding, moulting or resting behaviour of grey and harbour seals at the site. It will also not lead to the permanent exclusion of seals from any part of its range within the site.

#### Geophysical surveys

#### In situ impacts

63. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Lambay Island SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

64. For *ex situ* disturbance from geophysical surveys within the Irish Sea MU, using SCANS IV block density and 3 km EDR, the numbers of individuals predicted to be impacted are 4 grey seals (0.07% East regions of RoI and Northern Ireland MU) and <1 harbour seal (<0.07% East regions of RoI and Northern Ireland MU). Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea.

### Summary

65. It is anticipated that the noise emitted from geophysical survey equipment will be rapidly attenuated with distance from source such that noise levels at which behavioural disturbance would be anticipated to occur will be of small spatial extent. In particular, it is noted that those sources with higher source levels (SBP, UHRS), along with the SBL, are highly directional, with noise levels outside of the main beam considerably lower and therefore with limited horizontal propagation of noise levels. The consequence of the impact is short-term, intermittent over the course of the geophysical survey campaigns, with temporary behavioural effects that are very unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered.
66. Considering the above, the geophysical surveys at CWP in-combination with other plans and projects activities will not result in interference or disturbance of a breeding, moulting or resting behaviour of grey and harbour seals at the site. It will also not lead to the permanent exclusion of seals from any part of its range within the site.

### UXO clearance

#### In situ impacts

67. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Lambay Island SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

68. When considering *ex situ* impacts of disturbance from low-order UXO clearance, a maximum of 12 grey seals (0.20% East regions of RoI and Northern Ireland MU) and 1 harbour seals (<0.07% East regions of RoI and Northern Ireland MU) are predicted to be disturbed. Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea. It is expected that the detonation of a UXO would elicit a startle response and potentially very short duration behavioural responses and would therefore not be expected to cause widespread and prolonged displacement (JNCC, 2020). Given the very small percentage of the MUs predicted to be impacted per UXO clearance event, and the fact the consequence of the impact is likely to be short-term, intermittent during the UXO clearance campaigns, and with temporary behavioural effects that are very unlikely to affect the survival and reproductive rates to the extent that the population trajectory would be altered.

### Summary

69. Considering the above, the UXO clearance at CWP in-combination with other plans and projects activities will not result in interference or disturbance of a breeding, moulting or resting behaviour of grey and harbour seals at the site. It will also not lead to the permanent exclusion of seals from any part of its range within the site.

### Disturbance from other construction activities and vessels

70. There is expected to be non-piling construction activity associated with the construction of other offshore developments including dredging, trenching, cable laying, rock placement and drilling.

Additionally, there will be disturbance from construction vessels at all OWF screened into the cumulative assessment (**Table 3, Table 4, Table 5**).

71. It is extremely difficult to reliably quantify the level of increased disturbance to marine mammals resulting from increased vessel activity on a cumulative basis, given the large degree of temporal and spatial variation in vessel movements between projects and regions. Although some OWF vessels (such as crew transport and supply vessels) may transit the wind farm at higher speeds, they often travel in repeated / predictable routes within the site. Many other vessels (e.g., jack-up vessels and pilot or attending vessels) travel more slowly within the wind farm site or spend long periods of time jacked-up, at anchor (minimising movement and acoustic signature from engines) or using dynamic positioning systems (minimising movement, although still generating noise). Geophysical surveys do not use existing vessel routes, so may risk adding vessel presence to novel areas; however, these are slow-moving and operate their own mitigation measures to protect marine mammals (while mitigating for PTS the mitigation measures will also reduce disturbance impacts). Therefore, increases in disturbance from vessels from offshore projects are likely to be small in relation to current and ongoing levels of shipping. All projects are expected to adopt Vessel Management Plans (VMPs or comply with exiting Marine Wildlife Watching Codes) to minimise any potential effects on marine mammals, as this is considered standard mitigation across the offshore wind industry and complies directly with the relevant Irish guidance for managing vessel interactions with marine mammals.

#### Summary

72. Considering the above, other construction activities and vessel movements associated with the CWP in-combination with other plans and projects activities will not result in interference or disturbance of a breeding, moulting or resting behaviour of grey and harbour seals at the site. These activities will also not lead to the permanent exclusion of seals from any part of its range within the site.

#### Conclusion

73. Considering the impact pathways described above, disturbance effects from increased underwater noise at CWP in-combination with other projects are anticipated to be below levels that may adversely affect the grey and harbour seal individuals and community within and outside the site and will not lead to permanent exclusion of seals from a part of its range. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, grey and harbour seals, which undermine the COs of the Lambay Island SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

### 3.5.2 Harbour porpoise

Section 3.5.2 remains unchanged. This is because the Lambay Island SAC is primarily on land. It is also located within the Rockabill to Dalkey Island SAC and have the same conservation objectives as this site, for which a full assessment has been provided) in section 3.2.2. Thus, the potential for no AESI is not assessed separately here for harbour porpoise qualifying Annex II marine mammal species.

## 3.6 North Anglesey Marine SAC (UK0030398)

### 3.6.1 Harbour porpoise

Section 3.6.1 remains unchanged except for paragraphs 141 through to 147 which are replaced by paragraphs 74 to 83 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Impact 1: Increased underwater noise

##### *Piling of WTGs*

74. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
75. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

##### *In situ impacts*

76. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the North Anglesey Marine SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

77. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* North Anglesey Marine SAC are the same

as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Geophysical surveys*

##### *In situ impacts*

78. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the North Anglesey Marine SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

79. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the North Anglesey Marine SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *UXO clearance*

##### *In situ impacts*

80. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the North Anglesey Marine SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

81. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the North Anglesey Marine SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Disturbance from other construction activities and vessels*

82. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the North Anglesey Marine SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Conclusion*

83. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. Given that there is no spatial overlap between the CWP and North Anglesey Marine SAC, the harbour porpoise potential usage of the site will be maintained and there is

no risk of significant disturbance of the species from the CWP in-combination with other plans and projects. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the West Wales Marine SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 3.7 Blackwater Bank SAC (IE002953)

### 3.7.1 Harbour porpoise

Section 3.7.1 remains unchanged except for paragraphs 160 through to 165 which are replaced by paragraphs 84 to 93 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Increased underwater noise

##### *Piling of WTGs*

84. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**).
85. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In situ impacts

86. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the

Blackwater Bank SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

87. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* Blackwater Bank SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Geophysical surveys

##### In situ impacts

88. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Blackwater Bank SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### Ex situ impacts

89. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Blackwater Bank SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### UXO clearance

##### In situ impacts

90. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Blackwater Bank SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### Ex situ impacts

91. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Blackwater Bank SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Disturbance from other construction activities and vessels

92. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with

geophysical surveys for the Blackwater Bank SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Conclusion*

93. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap between the CWP and Blackwater Bank SAC. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Blackwater Bank SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## **3.8 Basket Islands SAC (IE002172)**

### **3.8.1 Harbour porpoise**

Section 3.7.1 remains unchanged except for paragraphs 180 through to 185 which are replaced by paragraphs 94 to 103 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

### Increased underwater noise

#### *Piling of WTGs*

94. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.

95. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In situ impacts

96. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Blasket Islands SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

97. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* Blasket Islands SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Geophysical surveys

#### In situ impacts

98. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Blasket Islands SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

99. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Blasket Islands SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### UXO clearance

#### In situ impacts

100. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the

Blasket Islands SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

101. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Blasket Islands SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Disturbance from other construction activities and vessels

102. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Blasket Islands SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Conclusion

103. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap between the CWP and Blasket Islands SAC. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Blasket Islands SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 3.9 Carnsore Point SAC (IE002269)

### 3.9.1 Harbour porpoise

Section 3.9.1 remains unchanged except for paragraphs 200 through to 205 which are replaced by paragraphs 104 to 113 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Increased underwater noise

##### *Piling of WTGs*

104. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
105. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

##### *In situ impacts*

106. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Carnsore Point SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

107. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* Carnsore Point SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Geophysical surveys*

##### *In situ impacts*

108. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Carnsore Point SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

109. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Carnsore Point SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *UXO clearance*

#### *In situ impacts*

110. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Carnsore Point SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

111. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Carnsore Point SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Disturbance from other construction activities and vessels*

112. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Carnsore Point SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Conclusion*

113. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap of the CWP and the Carnsore Point SAC. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Carnsore Point SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## **3.10 Hook Head SAC (IE000764)**

### **3.10.1 Harbour porpoise**

Section 3.10.1 remains unchanged except for paragraphs 220 through to 225 which are replaced by paragraphs 114 to 141 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;

2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

### Increased underwater noise

#### *Piling of WTGs*

114. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**).
115. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### *In situ impacts*

116. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Hook Head SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

117. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* Hook Head SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Geophysical surveys*

#### *In situ impacts*

118. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the

Hook Head SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

119. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Hook Head SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### UXO clearance

#### In situ impacts

120. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Hook Head SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

121. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Hook Head SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Disturbance from other construction activities and vessels

122. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Hook Head SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Conclusion

123. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap between the CWP and Hook Head SAC. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the Project, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Hook Head SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

### 3.10.2 Bottlenose dolphin

Section 3.10.2 remains unchanged except for paragraphs 240 through to 245 which are replaced by paragraphs 124 to 141 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Increased underwater noise

##### *Piling of WTGs*

124. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Irish Sea MU for bottlenose dolphins in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Irish Sea MU that will be constructing in 2031 (see **Table 3**).
125. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

##### *In situ impacts*

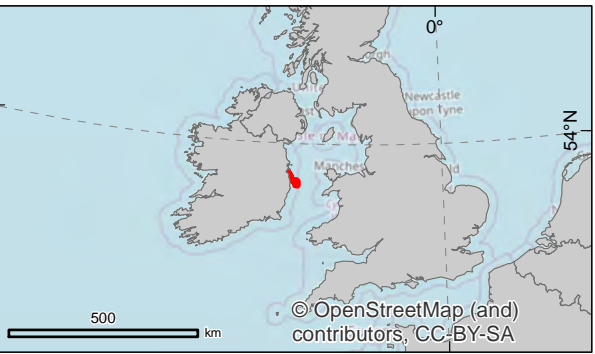
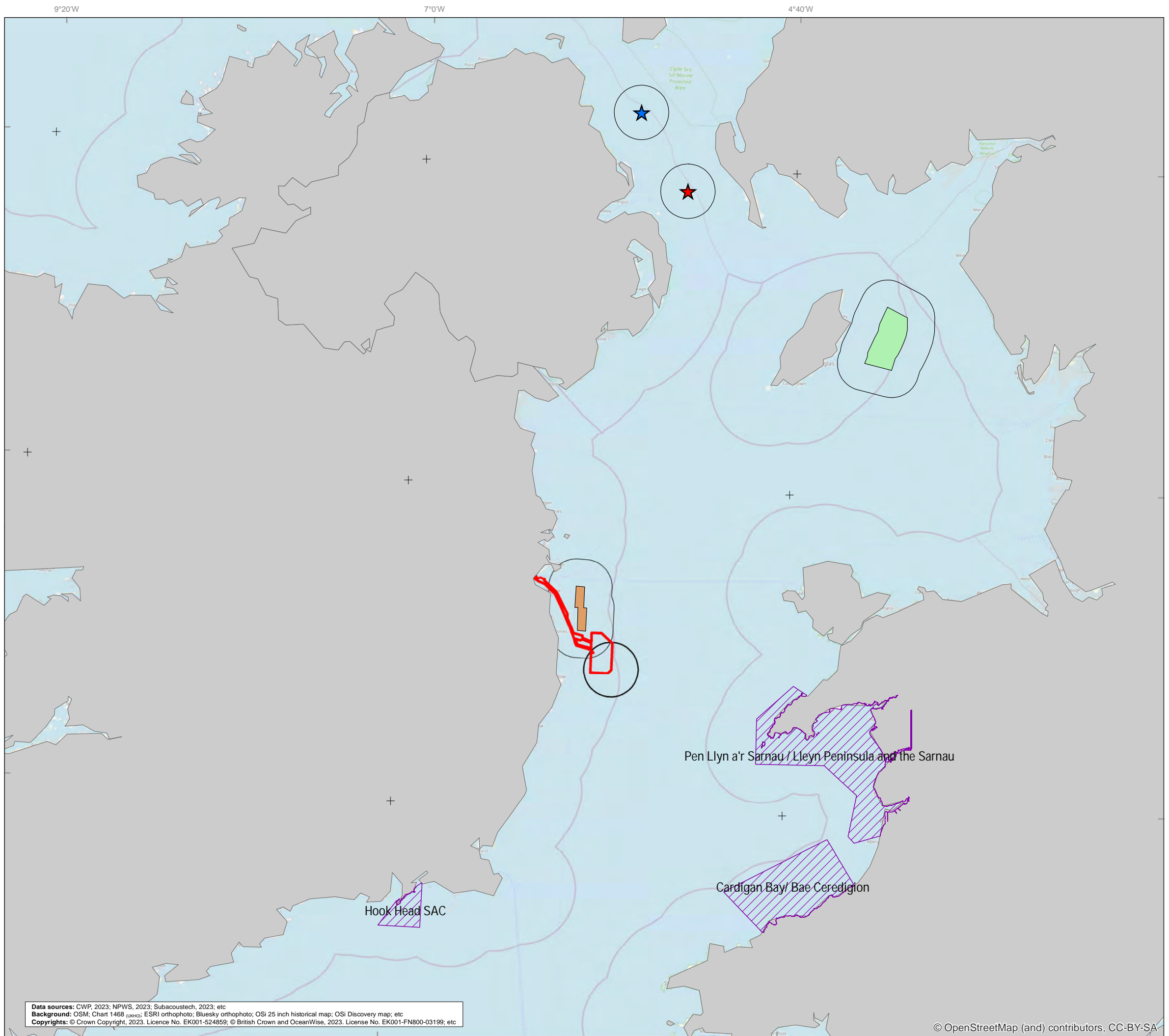
126. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Hook Head SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

127. Using the values from the project specific EIAs (if available), there is expected to be disturbance to 1,425 dolphins per piling day, assuming all five OWF pile on the same day (17.33% of the Irish Sea MU, CWP contributes 31.44% of this total) (**Table 11**).
128. Using the 11 km EDR and SCANS IV block density approach, there is expected to be disturbance to 360 dolphins per piling day, assuming all five OWF pile on the same day (4.4% of the Irish Sea MU, CWP contributes 24.7% of this total) (**Table 11**).

Table 11: Number of bottlenose dolphins disturbed per piling day at OWF projects constructing in 2031. The number of bottlenose dolphins disturbed per piling day is presented using values from the project specific EIAs (if available), and using an 11 km EDR for mitigated piling and the SCANS IV Block density

Project	Approach	# dolphins disturbed per piling day
<b>Values from the project specific EIAs (if available)</b>		
Codling	EIA: Dose-response, SCANS IV block CS-D 0.2352 dolphins/km <sup>2</sup>	448
Dublin Array	EIA: Dose-response, SCANS IV block CS-D 0.2352 dolphins/km <sup>2</sup>	699
Moor Vannin	EIA: Level B, SCANS IV block CS-D 0.2352 dolphins/km <sup>2</sup>	100
North Channel 1	<i>No EIA. Assumed: 11 km EDR, SCANS IV block CS-D 0.2352 dolphins/km<sup>2</sup></i>	89
North Channel 2	<i>No EIA. Assumed: 11 km EDR, SCANS IV block CS-D 0.2352 dolphins/km<sup>2</sup></i>	89
Total disturbed per piling day (assuming projects pile on the same day)		1,425
		% MU 17.33%
<b>Values using an 11 km EDR for mitigated piling and SCANS IV Block density</b>		
Codling	11 km EDR, SCANS IV block CS-D 0.2352 dolphins/km <sup>2</sup>	89
Dublin Array	11 km EDR, SCANS IV block CS-D 0.2352 dolphins/km <sup>2</sup>	89
Moor Vannin	11 km EDR, SCANS IV block CS-E 0.0104 dolphins /km <sup>2</sup>	4
North Channel 1	11 km EDR, SCANS IV block CS-D 0.2352 dolphins/km <sup>2</sup>	89
North Channel 2	11 km EDR, SCANS IV block CS-D 0.2352 dolphins/km <sup>2</sup>	89
Total disturbed per piling day (assuming projects pile on the same day)		360
		% MU 4.4%



**Legend**

- Planning application boundary
- ★ North Channel 1
- ★ North Channel 2
- Dublin Array
- Moir Vannin
- 11 km EDR
- Bottlenose dolphin SAC

	Project: Codling Wind Park				
<b>Figure 5: 11 km EDR for mitigated piling from other OWF projects in relation to the Irish Sea SACs designated for bottlenose dolphins</b>					
CWP doc. number: CWP-SMR-CON-09-MAP-2123					
Internal descriptive code: N/A	Size: A3 Scale:	CRS: EPSG 25830			
Rev.	Updates	Date	By	Chk'd	App'd
A	Final version	06/04/2026	JC	RRS/EA	EA

Data sources: CWP, 2023; NPWS, 2023; Subacoustech, 2023; etc  
Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

129. The effect of disturbance from a single piling event is expected to last less than a day, though the disturbance impact across the projects will occur intermittently throughout 2031. This is expected to result in intermittent and temporary behavioural effects in a small proportion of the population. It is therefore possible that piling activities at projects considered may restrict access to habitats in the vicinity of the projects for the duration of piling. Given how spread out the projects are within the Irish Sea, it is expected that bottlenose dolphins will be able to use other areas not affected by the underwater noise footprint. As such, it is anticipated that the temporary changes in behaviour and/or distribution of individuals are at a scale that is unlikely to result in potential reductions to lifetime reproductive success and survival rates to some individuals.
130. Considering the above, mitigated piling at WTGs is unlikely to result in a significant negative impact on individuals or the bottlenose dolphin community within and outside the site. It will also not lead to the permanent exclusion of bottlenose dolphins from any part of its range within the site. Subsequently, behavioural disturbance from piling at WTGs will not adversely affect the bottlenose dolphin community at the site.

### Geophysical surveys

#### In situ impacts

131. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Hook Head SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

132. For *ex situ* disturbance from geophysical surveys, using the SCANS IV block density, the number of bottlenose dolphins predicted to be impacted is 7 individuals (0.08% Irish Sea MU). Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea.

#### Summary

133. It is anticipated that the noise emitted from geophysical survey equipment will be rapidly attenuated with distance from source such that noise levels at which behavioural disturbance would be anticipated to occur will be of small spatial extent. In particular, it is noted that those sources with higher source levels (SBP, UHRS), along with the SBL, are highly directional, with noise levels outside of the main beam considerably lower and therefore with limited horizontal propagation of noise levels. The consequence of the impact is short-term, intermittent over the course of the geophysical survey campaigns, with temporary behavioural effects that are very unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered.
134. The proposed geophysical survey activities are unlikely to result in a significant negative impact on individuals or the bottlenose dolphin community within the site. They will also not lead to the permanent exclusion of bottlenose dolphin from any part of its range within the site. Subsequently, behavioural disturbance from geophysical surveys will not adversely affect the bottlenose dolphin community at the site.

### UXO clearance

#### In situ impacts

135. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Hook Head SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

136. When considering *ex situ* impacts of disturbance from low-order UXO clearance, a maximum of 18 bottlenose dolphin individuals (0.22% of the Irish Sea MU) are predicted to be disturbed. Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea. It is expected that the detonation of a UXO would elicit a startle response and potentially very short duration behavioural responses and would therefore not be expected to cause widespread and prolonged displacement (JNCC, 2020). Given the very small percentage of the MUs predicted to be impacted per UXO clearance event, and the fact the consequence of the impact is likely to be short-term, intermittent during the UXO clearance campaigns, and with temporary behavioural effects that are very unlikely to affect the survival and reproductive rates to the extent that the population trajectory would be altered.

#### Summary

137. The disturbance associated with UXO clearance will not result in the permanent exclusion of bottlenose dolphin from part of its range within the site and beyond. Additionally, such short-term disturbance is unlikely to be sufficient to result in any changes to the vital rates of individuals and therefore will not result in a significant negative impact on individuals or the bottlenose dolphin community within the site. Subsequently, behavioural disturbance from UXO clearance in-combination with other plans and projects will not adversely affect the bottlenose dolphin community at the site.

### Disturbance from other construction activities and vessels

138. There is expected to be non-piling construction activity associated with the construction of other offshore developments including dredging, trenching, cable laying, rock placement and drilling. Additionally, there will be disturbance from construction vessels at all OWF screened into the cumulative assessment (**Table 3, Table 4, Table 5**).
139. It is extremely difficult to reliably quantify the level of increased disturbance to marine mammals resulting from increased vessel activity on a cumulative basis, given the large degree of temporal and spatial variation in vessel movements between projects and regions. Although some OWF vessels (such as crew transport and supply vessels) may transit the wind farm at higher speeds, they often travel in repeated / predictable routes within the site. Many other vessels (e.g., jack-up vessels and pilot or attending vessels) travel more slowly within the wind farm site or spend long periods of time jacked-up, at anchor (minimising movement and acoustic signature from engines) or using dynamic positioning systems (minimising movement, although still generating noise). Geophysical surveys do not use existing vessel routes, so may risk adding vessel presence to novel areas; however, these are slow-moving and operate their own mitigation measures to protect marine mammals (while mitigating for PTS the mitigation measures will also reduce disturbance impacts). Therefore, increases in disturbance from vessels from offshore projects are likely to be small in relation to current and ongoing levels of shipping. All projects are expected to adopt VMPs (VMPs or comply with exiting Marine

Wildlife Watching Codes) to minimise any potential effects on marine mammals, as this is considered standard mitigation across the offshore wind industry and complies directly with the relevant Irish guidance for managing vessel interactions with marine mammals.

### Summary

140. The disturbance associated with other construction activities and vessels will not result in the permanent exclusion of bottlenose dolphin from part of its range within the site and beyond. The effect of disturbance from other construction activities and vessels will occur intermittently, resulting in short-term and temporary behavioural effects. It is expected that the temporary changes in behaviour and/or distribution of individuals are at a scale that would result in potential reductions to lifetime reproductive success and survival rates to some individuals, but not enough to affect the population trajectory over the long term.

### Conclusion

141. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap between the CWP and the Hook Head SAC. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the bottlenose dolphin community within the site. They will also not lead to the permanent exclusion of bottlenose dolphin from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the bottlenose dolphin community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, bottlenose dolphin, which undermine the COs of the Hook Head SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 3.11 West Wales Marine SAC (UK0030397)

### 3.11.1 Harbour porpoise

Section 3.11.1 remains unchanged except for paragraphs 260 through to 266 which are replaced by paragraphs 142 to 151 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

### Impact 1: Increased underwater noise

#### *Piling of WTGs*

142. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**).
143. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,0.5}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In situ impacts

144. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the West Wales Marine SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

145. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* West Wales Marine SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Geophysical surveys*

#### In situ impacts

146. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the West Wales Marine SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

147. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the West Wales Marine SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *UXO clearance*

#### *In situ impacts*

148. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the West Wales Marine SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

149. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the West Wales Marine SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Disturbance from other construction activities and vessels*

150. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the West Wales Marine SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Conclusion*

151. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. Given that there is no spatial overlap between the CWP and West Wales Marine SAC, the harbour porpoise potential usage of the site will be maintained and there is no risk of significant disturbance of the species from the CWP in-combination with other plans and projects. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the West Wales Marine SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## **3.12 Llŷn Peninsula and the Sarnau SAC (UK0013117)**

### **3.12.1 Bottlenose dolphin**

Section 3.12.1 remains unchanged except for paragraphs 279 through to 289 (which are replaced by paragraphs 152 to 169 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);

3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Impact 1: Increased underwater noise

##### *Piling of WTGs*

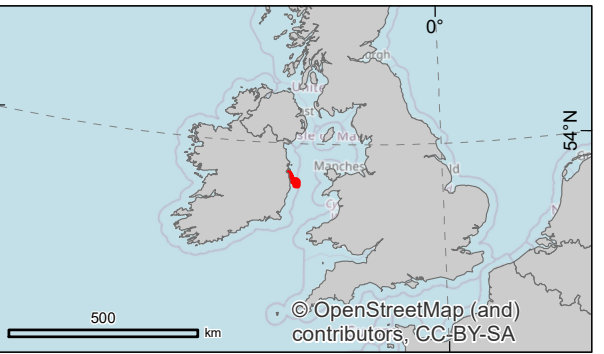
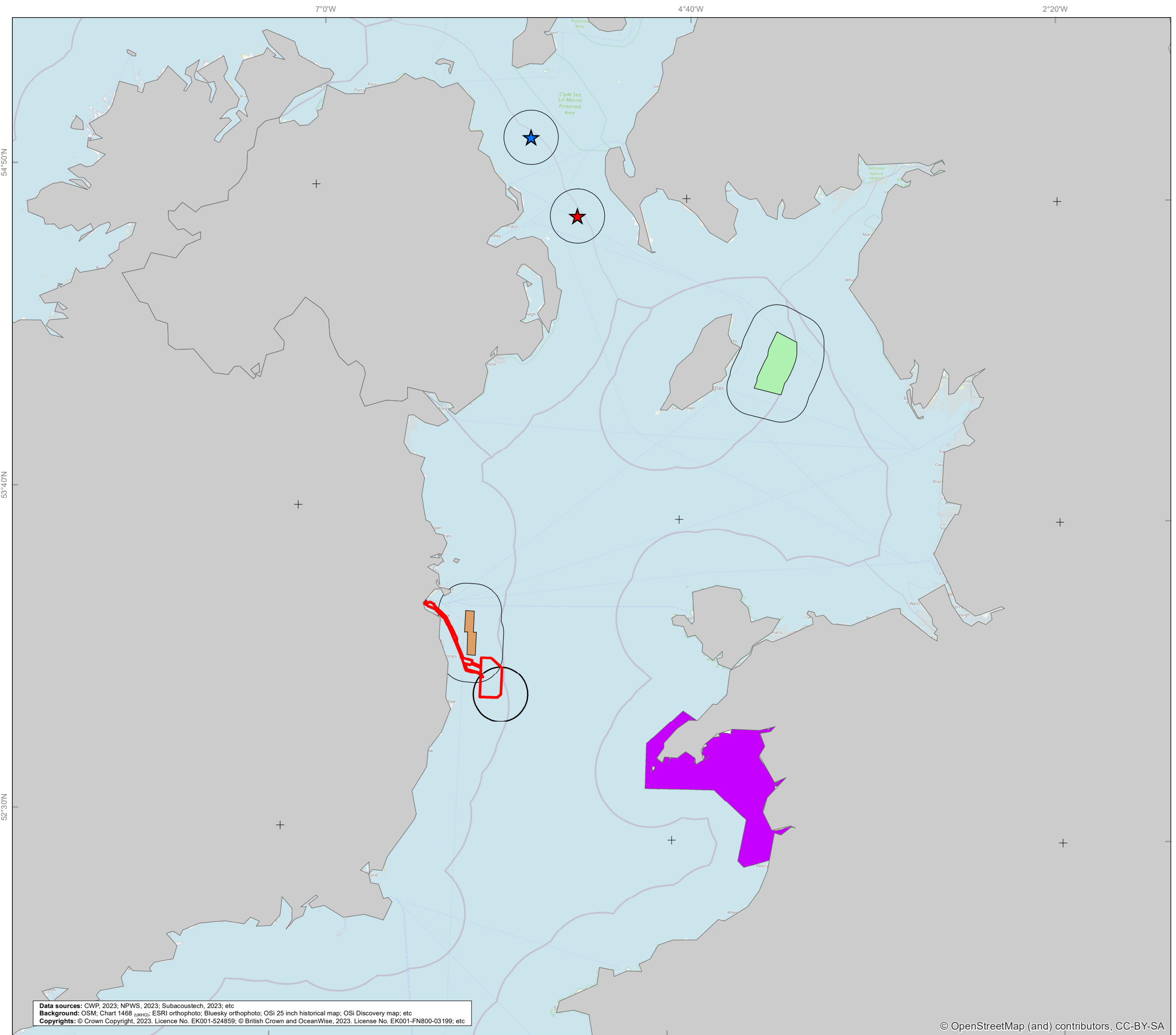
152. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Irish Sea MU for bottlenose dolphins in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
153. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

##### *In situ impacts*

154. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Llŷn Peninsula and the Sarnau SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

155. Using the values from the project specific EIAs (if available), there is expected to be disturbance to 1,425 dolphins per piling day, assuming all five OWF pile on the same day (17.33% of the Irish Sea MU, CWP contributes 31.44% of this total) (**Table 11**).
156. Using the 11 km EDR and SCANS IV block density approach, there is expected to be disturbance to 360 dolphins per piling day, assuming all five OWF pile on the same day (4.4% of the Irish Sea MU, CWP contributes 24.7% of this total) (**Table 11**).



**Legend**

- Planning application boundary
- ★ North Channel 1
- ★ North Channel 2
- Dublin Array
- Moir Vannin
- 11 km EDR
- Llyn Peninsula and the Sarnau SAC

	Project: Codling Wind Park				
<b>Figure 6: 11 km EDR for mitigated piling from other OWF projects in relation to the Llyn Peninsula and the Sarnau SAC designated for bottlenose dolphins</b>					
CWP doc. number: CWP-SMR-CON-09-MAP-2124					
Internal descriptive code: N/A	Size: A3 Scale:	CRS: EPSG 25830			
Rev.	Updates	Date	By	Chk'd	App'd
A	Final version	06/04/2026	JC	RRS/EA	EA

Data sources: CWP, 2023; NPWS, 2023; Subacoustech, 2023; etc  
 Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
 Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

157. The effect of disturbance from a single piling event is expected to last less than a day, though the disturbance impact across the projects will occur intermittently throughout 2031. This is expected to result in intermittent and temporary behavioural effects in a small proportion of the population. It is therefore possible that piling activities at projects considered may restrict access to habitats in the vicinity of the projects for the duration of piling. Given how spread out the projects are within the Irish Sea, it is expected that bottlenose dolphins will be able to use other areas not affected by the underwater noise footprint. As such, it is anticipated that the temporary changes in behaviour and/or distribution of individuals are at a scale that is unlikely to result in potential reductions to lifetime reproductive success and survival rates to some individuals.

#### Summary

158. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of piling at CWP in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

#### Geophysical surveys

##### In situ impacts

159. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Llŷn Peninsula and the Sarnau SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### Ex situ impacts

160. For *ex situ* disturbance from geophysical surveys, using the SCANS IV block density, the number of bottlenose dolphins predicted to impacted is 7 individuals (0.08% Irish Sea MU). Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea.

#### Summary

161. It is anticipated that the noise emitted from geophysical survey equipment will be rapidly attenuated with distance from source such that noise levels at which behavioural disturbance would be anticipated to occur will be of small spatial extent. In particular, it is noted that those sources with higher source levels (SBP, UHRS), along with the SBL, are highly directional, with noise levels outside of the main beam considerably lower and therefore with limited horizontal propagation of noise levels. The consequence of the impact is short-term, intermittent over the course of the geophysical survey campaigns, with temporary behavioural effects that are very unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered.
162. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of geophysical surveys at CWP

in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

#### *UXO clearance*

#### *In situ impacts*

163. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Llŷn Peninsula and the Sarnau SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

164. When considering *ex situ* impacts of disturbance from low-order UXO clearance, a maximum of 18 bottlenose dolphin individuals (0.22% of the Irish Sea MU) are predicted to be disturbed. Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea. It is expected that the detonation of a UXO would elicit a startle response and potentially very short duration behavioural responses and would therefore not be expected to cause widespread and prolonged displacement (JNCC, 2020). Given the very small percentage of the MUs predicted to be impacted per UXO clearance event, and the fact the consequence of the impact is likely to be short-term, intermittent during the UXO clearance campaigns, and with temporary behavioural effects that are very unlikely to affect the survival and reproductive rates to the extent that the population trajectory would be altered.

#### *Summary*

165. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of UXO clearance at CWP in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

#### *Disturbance from other construction activities and vessels*

166. There is expected to be non-piling construction activity associated with the construction of other offshore developments including dredging, trenching, cable laying, rock placement and drilling. Additionally, there will be disturbance from construction vessels at all OWF screened into the cumulative assessment (**Table 3, Table 4, Table 5**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
167. It is extremely difficult to reliably quantify the level of increased disturbance to marine mammals resulting from increased vessel activity on a cumulative basis, given the large degree of temporal and spatial variation in vessel movements between projects and regions. Although some OWF vessels (such as crew transport and supply vessels) may transit the wind farm at higher speeds, they often travel in repeated / predictable routes within the site. Many other vessels (e.g., jack-up vessels and pilot or attending vessels) travel more slowly within the wind farm site or spend long periods of time jacked-up, at anchor (minimising movement and acoustic signature from engines) or using dynamic positioning systems (minimising movement, although still generating noise). Geophysical surveys do not use existing vessel routes, so may risk adding vessel presence to novel areas; however, these are slow-moving and operate their own mitigation measures to protect marine mammals (while mitigating for PTS the mitigation measures will also reduce disturbance impacts). Therefore, increases in

disturbance from vessels from offshore projects are likely to be small in relation to current and ongoing levels of shipping. All projects are expected to adopt VMPs (VMPs or comply with exiting Marine Wildlife Watching Codes) to minimise any potential effects on marine mammals, as this is considered standard mitigation across the offshore wind industry and complies directly with the relevant Irish guidance for managing vessel interactions with marine mammals.

### Summary

168. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of other construction activities and vessel movements associated with CWP in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

### Conclusion

169. Considering the impact pathways described above, disturbance effects from increased underwater noise will not affect the ability of the bottlenose dolphin population to have access to, and be able to utilise habitats necessary to maintain the population in favourable condition. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, bottlenose dolphin, which undermine the COs of the Llŷn Peninsula and the Sarnau SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

### 3.12.2 Grey seals

Section 3.12.2 remains unchanged except for paragraphs 303 to 309 which are replaced by paragraphs 170 to 186 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Impact 1: Increased underwater noise

#### *Piling of WTGs*

170. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the East Regions of the Republic of Ireland and Northern Ireland MU for grey seals in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the East Regions of the Republic of Ireland and Northern Ireland MU that will be

constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.

171. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In-situ impacts

172. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Llŷn Peninsula and the Sarnau SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

173. Using the values from the project specific EIAs (if available), there is expected to be disturbance to 1,175 grey seals per piling day, assuming all five OWF pile on the same day (19.40% of the East Regions of the Republic of Ireland and Northern Ireland MU, CWP contributes 2.21% of this total (**Table 10**)). Using the 11 km EDR and SCANS IV block density approach, there is expected to be disturbance to 45 grey seals per piling day, assuming all five OWF pile on the same day (0.7% of the East Regions of the Republic of Ireland and Northern Ireland MU, CWP contributes 6.7% of this total) (**Table 10**).
174. The effect of disturbance from a single piling event is expected to last less than a day, though the disturbance impact across the projects will occur intermittently throughout 2031. This is expected to result in intermittent and temporary behavioural effects in a small proportion of the population. It is therefore possible that piling activities at projects considered may restrict access to habitats in the vicinity of the projects for the duration of piling. Given how spread out the projects are within the Irish Sea, it is expected that grey seals will be able to use other areas not affected by the underwater noise footprint. As such, it is anticipated that the temporary changes in behaviour and/or distribution of individuals are at a scale that is unlikely to result in potential reductions to lifetime reproductive success and survival rates to some individuals.

#### Summary

175. Considering the above, mitigated piling at WTGs is unlikely to result in a significant negative impact on individuals or the grey seal community within and outside the site. It will also not lead to the permanent exclusion of grey seal from any part of its range within the site. Subsequently, behavioural disturbance from piling at WTGs will not adversely affect the grey seals community at the site.

#### Geophysical surveys

#### In situ impacts

176. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the

Llŷn Peninsula and the Sarnau SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

177. For *ex situ* disturbance from geophysical surveys within the Irish Sea MU, using SCANS IV block density and 3 km EDR, the numbers of individuals predicted to be impacted are 4 grey seals (0.07% East regions of RoI and Northern Ireland MU) and <1 harbour seal (<0.07% East regions of RoI and Northern Ireland MU). Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea.

#### Summary

178. It is anticipated that the noise emitted from geophysical survey equipment will be rapidly attenuated with distance from source such that noise levels at which behavioural disturbance would be anticipated to occur will be of small spatial extent. In particular, it is noted that those sources with higher source levels (SBP, UHRS), along with the SBL, are highly directional, with noise levels outside of the main beam considerably lower and therefore with limited horizontal propagation of noise levels. The consequence of the impact is short-term, intermittent over the course of the geophysical survey campaigns, with temporary behavioural effects that are very unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered.
179. Considering the above, the geophysical surveys at CWP in-combination with other plans and projects are unlikely to result in significant disturbance and significant negative effects on the accessibility to habitats used by seals within and outside of the SAC.

#### UXO clearance

#### In situ impacts

180. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Llŷn Peninsula and the Sarnau SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

181. When considering *ex situ* impacts of disturbance from low-order UXO clearance, a maximum of 12 grey seals (0.20% East regions of RoI and Northern Ireland MU) and 1 harbour seals (<0.07% East regions of RoI and Northern Ireland MU) are predicted to be disturbed. Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea. It is expected that the detonation of a UXO would elicit a startle response and potentially very short duration behavioural responses and would therefore not be expected to cause widespread and prolonged displacement (JNCC, 2020). Given the very small percentage of the MUs predicted to be impacted per UXO clearance event, and the fact the consequence of the impact is likely to be short-term, intermittent during the UXO clearance

campaigns, and with temporary behavioural effects that are very unlikely to affect the survival and reproductive rates to the extent that the population trajectory would be altered.

#### Summary

182. Considering the above, the UXO clearance at CWP in-combination with other plans and projects are unlikely to result in significant disturbance and significant negative effects on the accessibility to habitats used by seals within and outside of the SAC.

#### *Disturbance from other construction activities and vessels*

183. There is expected to be non-piling construction activity associated with the construction of other offshore developments including dredging, trenching, cable laying, rock placement and drilling. Additionally, there will be disturbance from construction vessels at all OWF screened into the cumulative assessment (**Table 3, Table 4, Table 5**).

184. It is extremely difficult to reliably quantify the level of increased disturbance to marine mammals resulting from increased vessel activity on a cumulative basis, given the large degree of temporal and spatial variation in vessel movements between projects and regions. Although some OWF vessels (such as crew transport and supply vessels) may transit the wind farm at higher speeds, they often travel in repeated / predictable routes within the site. Many other vessels (e.g., jack-up vessels and pilot or attending vessels) travel more slowly within the wind farm site or spend long periods of time jacked-up, at anchor (minimising movement and acoustic signature from engines) or using dynamic positioning systems (minimising movement, although still generating noise). Geophysical surveys do not use existing vessel routes, so may risk adding vessel presence to novel areas; however, these are slow-moving and operate their own mitigation measures to protect marine mammals (while mitigating for PTS the mitigation measures will also reduce disturbance impacts). Therefore, increases in disturbance from vessels from offshore projects are likely to be small in relation to current and ongoing levels of shipping. All projects are expected to adopt VMPs (VMPs or comply with exiting Marine Wildlife Watching Codes) to minimise any potential effects on marine mammals, as this is considered standard mitigation across the offshore wind industry and complies directly with the relevant Irish guidance for managing vessel interactions with marine mammals.

#### Summary

185. Considering the above, the other construction activities and vessels associated with the CWP in-combination with other plans and projects are unlikely to result in significant disturbance and significant negative effects on the accessibility to habitats used by seals within and outside of the SAC.

#### *Conclusion*

186. Considering the impact pathways described above, disturbance effects from increased underwater noise at CWP in-combination with other projects will not affect the ability of the grey seal population to have access to and be able to utilise habitats necessary to maintain the population in favourable condition. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, grey and harbour seals, which undermine the COs of the Llŷn Peninsula and the Sarnau SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

### 3.13 Cardigan Bay / Bae Ceredigion SAC (UK0012712)

It is acknowledged that the heading for Cardigan Bay / Bae Ceredigion SAC (UK0012712) was replicated in error in the NIS against Heading 3.19. In order to maintain transferability of this NIS addendum and comparison with the NIS, the replicated heading 3.19 is maintained in the NIS Addendum. Section 3.13 therefore relates to the in-combination effects on bottlenose dolphin only. Please refer to Section 3.19 for the in-combination effects on sea lamprey and river lamprey.

#### 3.13.1 Bottlenose dolphin

Section 3.13.1 remains unchanged except for paragraphs 323 through to 331 which are replaced by paragraphs 187 to 204 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Impact 1: Increased underwater noise

##### *Piling of WTGs*

187. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Irish Sea MU for bottlenose dolphins in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
188. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

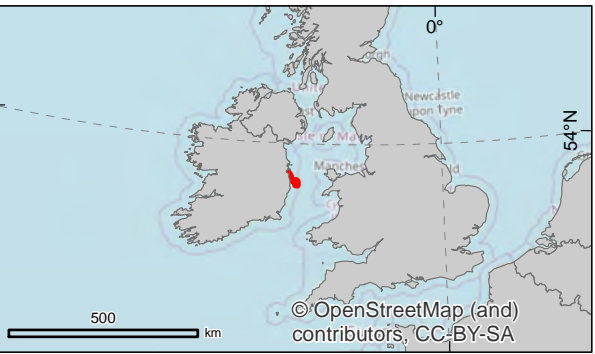
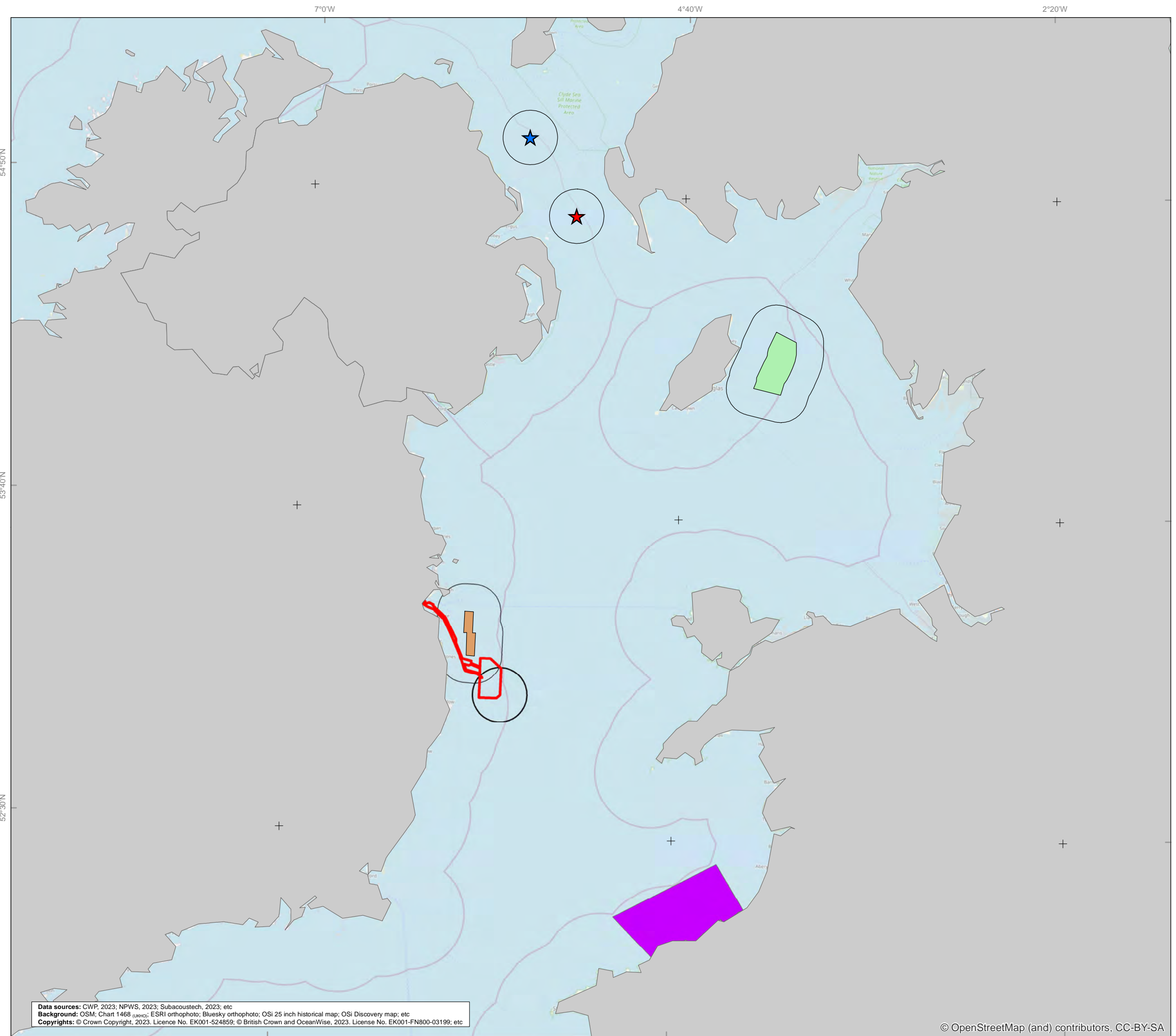
##### *In situ impacts*

189. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the

Cardigan Bay / Bae Ceredigion SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

190. Using the values from the project specific EIAs (if available), there is expected to be disturbance to 1,425 dolphins per piling day, assuming all five OWF pile on the same day (17.33% of the Irish Sea MU, CWP contributes 31.44% of this total) (**Table 11**).
191. Using the 11 km EDR and SCANS IV block density approach, there is expected to be disturbance to 360 dolphins per piling day, assuming all five OWF pile on the same day (4.4% of the Irish Sea MU, CWP contributes 24.7% of this total) (**Table 11**).



**Legend**

- Planning application boundary
- ★ North Channel 1
- ★ North Channel 2
- Dublin Array
- Moir Vannin
- 11 km EDR
- Cardigan Bay SAC

	Project: Codling Wind Park				
<b>Figure 7: 11 km EDR for mitigated piling from other OWF projects in relation to the Cardigan Bay / Bae Ceredigion SAC designated for bottlenose dolphins</b>					
CWP doc. number: CWP-SMR-CON-09-MAP-2125					
Internal descriptive code: N/A	Size: A3 Scale:	CRS: EPSG 25830			
Rev.	Updates	Date	By	Chk'd	App'd
A	Final version	06/04/2026	JC	RRS/EA	EA

Data sources: CWP, 2023; NPWS, 2023; Subacoustech, 2023; etc  
Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

192. The effect of disturbance from a single piling event is expected to last less than a day, though the disturbance impact across the projects will occur intermittently throughout 2031. This is expected to result in intermittent and temporary behavioural effects in a small proportion of the population. It is therefore possible that piling activities at projects considered may restrict access to habitats in the vicinity of the projects for the duration of piling. Given how spread out the projects are within the Irish Sea, it is expected that bottlenose dolphins will be able to use other areas not affected by the underwater noise footprint. As such, it is anticipated that the temporary changes in behaviour and/or distribution of individuals are at a scale that is unlikely to result in potential reductions to lifetime reproductive success and survival rates to some individuals.

#### Summary

193. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of piling at CWP in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

#### Geophysical surveys

##### In situ impacts

194. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Cardigan Bay SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### Ex situ impacts

195. For *ex situ* disturbance from geophysical surveys, using the SCANS IV block density, the number of bottlenose dolphins predicted to impacted is 7 individuals (0.08% Irish Sea MU). Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea.

#### Summary

196. It is anticipated that the noise emitted from geophysical survey equipment will be rapidly attenuated with distance from source such that noise levels at which behavioural disturbance would be anticipated to occur will be of small spatial extent. In particular, it is noted that those sources with higher source levels (SBP, UHRS), along with the SBL, are highly directional, with noise levels outside of the main beam considerably lower and therefore with limited horizontal propagation of noise levels. The consequence of the impact is short-term, intermittent over the course of the geophysical survey campaigns, with temporary behavioural effects that are very unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered.
197. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of geophysical surveys at CWP

in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

#### *UXO clearance*

#### *In situ impacts*

198. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Cardigan Bay SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

199. When considering *ex situ* impacts of disturbance from low-order UXO clearance, a maximum of 18 bottlenose dolphin individuals (0.22% of the Irish Sea MU) are predicted to be disturbed. Similar numbers are expected to be impacted at other geophysical surveys in the Irish Sea. It is expected that the detonation of a UXO would elicit a startle response and potentially very short duration behavioural responses and would therefore not be expected to cause widespread and prolonged displacement (JNCC, 2020). Given the very small percentage of the MUs predicted to be impacted per UXO clearance event, and the fact the consequence of the impact is likely to be short-term, intermittent during the UXO clearance campaigns, and with temporary behavioural effects that are very unlikely to affect the survival and reproductive rates to the extent that the population trajectory would be altered.

#### *Summary*

200. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of UXO clearance at CWP in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

#### *Disturbance from other construction activities and vessels*

201. There is expected to be non-piling construction activity associated with the construction of other offshore developments including dredging, trenching, cable laying, rock placement and drilling. Additionally, there will be disturbance from construction vessels at all OWF screened into the cumulative assessment (**Table 3, Table 4, Table 5**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
202. It is extremely difficult to reliably quantify the level of increased disturbance to marine mammals resulting from increased vessel activity on a cumulative basis, given the large degree of temporal and spatial variation in vessel movements between projects and regions. Although some OWF vessels (such as crew transport and supply vessels) may transit the wind farm at higher speeds, they often travel in repeated / predictable routes within the site. Many other vessels (e.g., jack-up vessels and pilot or attending vessels) travel more slowly within the wind farm site or spend long periods of time jacked-up, at anchor (minimising movement and acoustic signature from engines) or using dynamic positioning systems (minimising movement, although still generating noise). Geophysical surveys do not use existing vessel routes, so may risk adding vessel presence to novel areas; however, these are slow-moving and operate their own mitigation measures to protect marine mammals (while mitigating for PTS the mitigation measures will also reduce disturbance impacts). Therefore, increases in

disturbance from vessels from offshore projects are likely to be small in relation to current and ongoing levels of shipping. All projects are expected to adopt VMPs (VMPs or comply with exiting Marine Wildlife Watching Codes) to minimise any potential effects on marine mammals, as this is considered standard mitigation across the offshore wind industry and complies directly with the relevant Irish guidance for managing vessel interactions with marine mammals.

### Summary

203. Considering the above, bottlenose dolphin that use the SAC will not be significantly constrained from accessing necessary habitats within or outside of the site as a result of other construction activities and vessel movements associated with CWP in-combination with other plans and projects and are highly unlikely to be disturbed in a way that the population is adversely affected.

### Conclusion

204. Considering the impact pathways described above, disturbance effects from increased underwater noise will not affect the ability of the bottlenose dolphin population to have access to, and be able to utilise habitats necessary to maintain the population in favourable condition. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, bottlenose dolphin, which undermine the COs of the Cardigan Bay SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 3.14 North Channel SAC (UK0030399)

### 3.14.1 Harbour porpoise

Section 3.14.1 remains unchanged except for paragraphs 345 through to 351 which are replaced by paragraphs 205 to 214 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Impact 1: Increased underwater noise

##### *Piling of WTGs*

205. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As

outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**).

206. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### In situ impacts

207. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the North Channel SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

208. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* North Channel SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### Geophysical surveys

##### In situ impacts

209. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the North Channel SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### Ex situ impacts

210. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the North Channel SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### UXO clearance

##### In situ impacts

211. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the North

Channel SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### Ex situ impacts

212. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the North Channel SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Disturbance from other construction activities and vessels*

213. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the North Channel SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Conclusion*

214. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. Given that there is no spatial overlap between the CWP and North Channel SAC, the harbour porpoise potential usage of the site will be maintained and there is no risk of significant disturbance of the species from the CWP in-combination with other plans and projects. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the North Channel SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 3.15 Bristol Channel Approaches SAC (UK0030396)

### 3.15.1 Harbour porpoise

Section 3.15.1 remains unchanged except for paragraphs 364 through to 370 which are replaced by paragraphs 215 to 224 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

### Impact 1: Increased underwater noise

#### *Piling of WTGs*

215. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**). To standardise the density estimates used, all cetacean species assessments used the relevant species-specific SCANS IV block density estimate.
216. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

#### *In situ impacts*

217. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Bristol Channel Approaches SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

218. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* Bristol Channel Approaches SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Geophysical surveys*

#### *In situ impacts*

219. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Bristol Channel Approaches SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

220. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Bristol Channel Approaches SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *UXO clearance*

#### *In situ impacts*

221. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Bristol Channel Approaches SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

222. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Bristol Channel Approaches SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Disturbance from other construction activities and vessels*

223. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Bristol Channel Approaches SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Conclusion*

224. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. Given that there is no spatial overlap between the CWP and Bristol Channel Approaches SAC, the harbour porpoise potential usage of the site will be maintained and there is no risk of significant disturbance of the species from the CWP in-combination with other plans and projects. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Bristol Channel Approaches SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## **3.16 Roaringwater Bay and Islands SAC (IE000101)**

### **3.16.1 Harbour porpoise**

Section 3.16.1 remains unchanged except for paragraphs 383 through to 388 which are replaced by paragraphs 225 to 234 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);

3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Increased underwater noise

##### *Piling of WTGs*

225. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**).
226. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

##### *In situ impacts*

227. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Roaringwater Bay and Islands SAC. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

228. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* Roaringwater Bay and Islands SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Geophysical surveys*

##### *In situ impacts*

229. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Roaringwater Bay and Islands SAC. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

230. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical

surveys for the Roaringwater Bay and Islands SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *UXO clearance*

#### *In situ impacts*

231. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Roaringwater Bay and Islands SAC. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

#### *Ex situ impacts*

232. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Roaringwater Bay and Islands SAC are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Disturbance from other construction activities and vessels*

233. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Roaringwater Bay and Islands SAC are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Conclusion*

234. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap of the CWP and the Roaringwater Bay and Islands SAC. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the Roaringwater Bay and Islands SAC will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 3.17 Irish West Coast SACs

### 3.17.1 Harbour porpoise

Section 3.17.1 remains unchanged except for paragraphs 403 through to 408 which are replaced by paragraphs 235 to 246 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Section 2** (Volume 2) of **NIS Addendum (Part 1)**.

#### Increased underwater noise

##### *Piling of WTGs*

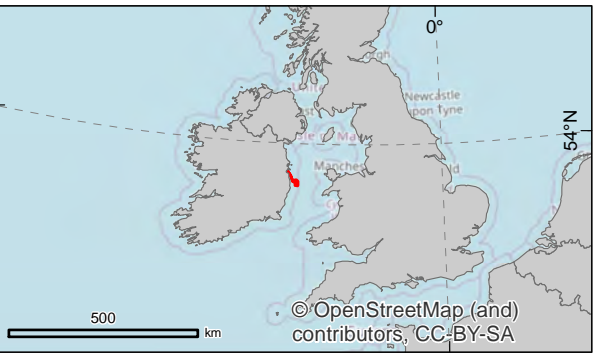
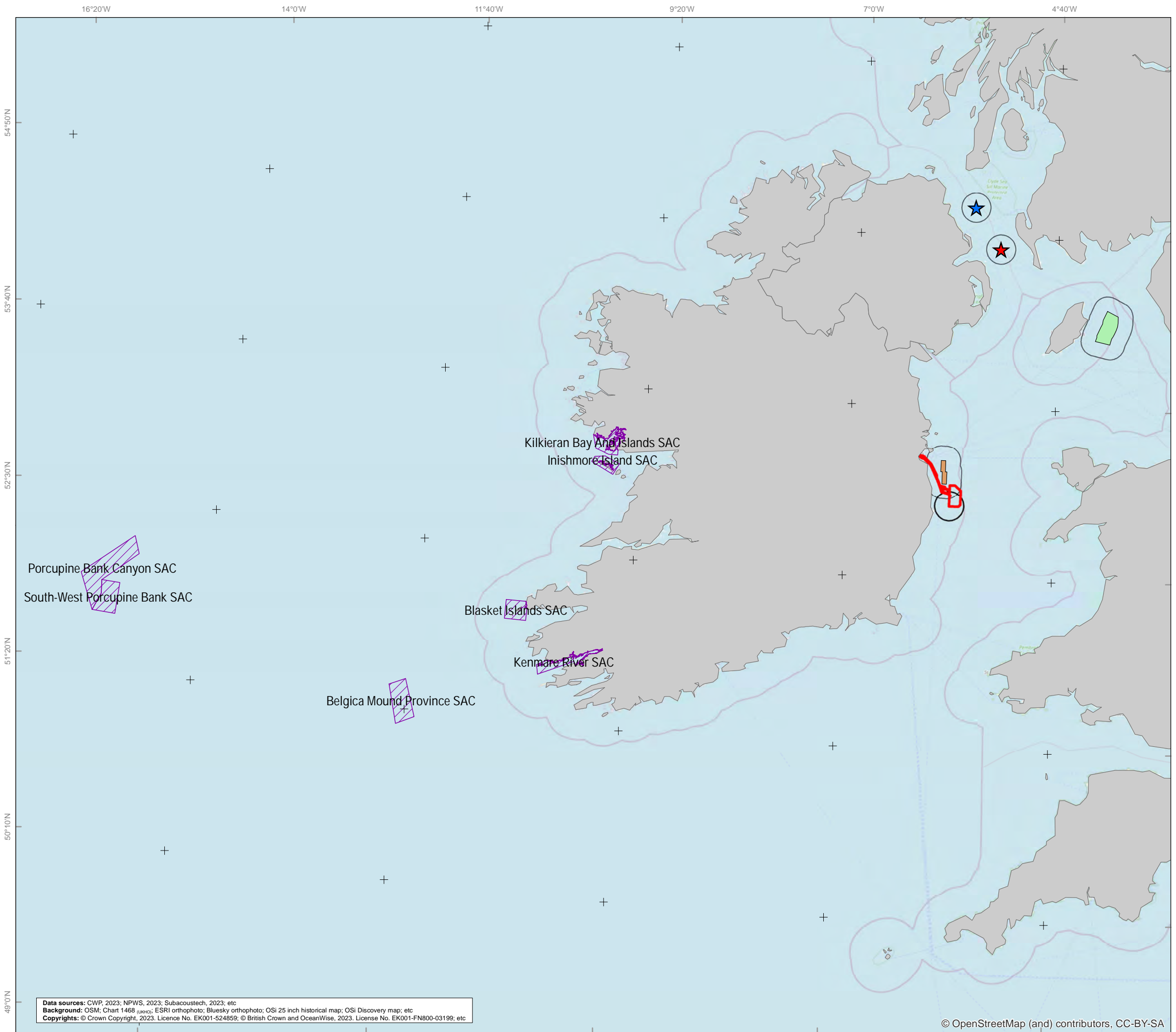
235. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**).
236. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,05}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

##### *In situ impacts*

237. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the Irish West Coast SACs. Therefore, when using the 11 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SAC *in situ*.

##### *Ex situ impacts*

238. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, *ex situ* impacts associated with piling for the Irish West coast SACs are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.



**Legend**

- Planning application boundary
- ★ North Channel 1
- ★ North Channel 2
- Dublin Array
- Moir Vannin
- 11 km EDR
- Harbour porpoise SAC

	Project: Codling Wind Park				
<b>Figure 8: 11 km EDR for mitigated piling from other OWF projects in relation to the Irish West Coast SACs designated for harbour porpoise</b>					
CWP doc. number: CWP-SMR-CON-09-MAP-2126					
Internal descriptive code: N/A	Size: A3 Scale:	CRS: EPSG 25830			
Rev.	Updates	Date	By	Chk'd	App'd
A	Final version	06/04/2026	JC	RRS/EA	EA

Data sources: CWP, 2023; NPWS, 2023; Subacoustech, 2023; etc  
Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

© OpenStreetMap (and) contributors, CC-BY-SA

239. The effect of disturbance from a single piling event is expected to last less than a day, though the disturbance impact across the projects will occur intermittently throughout 2031. This is expected to result in intermittent and temporary behavioural effects in a small proportion of the population. It is therefore possible that piling activities at projects considered may restrict access to habitats in the vicinity of the projects for the duration of piling. Given how spread out the projects are within the Irish Sea, it is expected that harbour porpoises will be able to use other areas not affected by the underwater noise footprint. As such, it is anticipated that the temporary changes in behaviour and/or distribution of individuals are at a scale that is unlikely to result in potential reductions to lifetime reproductive success and survival rates to some individuals.
240. Considering the above, mitigated piling at WTGs is unlikely to result in a significant negative impact on individuals or the harbour porpoise community within and outside the site. It will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance from piling at WTGs will not adversely affect the harbour porpoise community at the site.

### *Geophysical surveys*

#### *In situ impacts*

241. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the Irish West Coast SACs. Therefore, when using the 3 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SACs *in situ*.

#### *Ex situ impacts*

242. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Irish West Coast SACs are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *UXO clearance*

#### *In situ impacts*

243. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the Irish West Coast SACs. Therefore, when using the 5 km EDR, it is unlikely that CWP will contribute significantly to the in-combination impacts to the SACs *in situ*.

#### *Ex situ impacts*

244. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Irish

West Coast SACs are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Disturbance from other construction activities and vessels*

245. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the Irish West Coast SACs are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

#### *Conclusion*

246. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap of the CWP and the West Irish SACs. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the West Irish SACs will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

### **3.17.2 Bottlenose dolphins**

An assessment for bottlenose dolphin was included within the NIS. However, this assessment has been excluded from the current NIS Addendum in-combination assessment. This revision has been made as all SACs for bottlenose dolphins which are designated along the West Coast of Ireland lie outside the Irish Sea MU as defined by the Inter-Agency Marine Mammal Working Group (IAMMWG). The projects considered within this in-combination assessment are located within the Irish Sea MU only; therefore, there is no spatial overlap between the relevant SACs and the MU applicable to the projects, there is no meaningful interaction between the management unit populations, and as such an in-combination assessment for bottlenose dolphin is not required in this addendum.

### **3.18 Slaney River Valley SAC (IE0000781)**

Section 3.18 remains unchanged except for Table 3-49 which is replaced by **Table 12**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-50 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 12: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.18.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 452 which is replaced by paragraph 247 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

247. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from Unexploded ordnance (UXO) clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 456 to 457 which are replaced by paragraph 248 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

248. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 460 which is replaced by paragraph 249 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

249. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination Electromagnetic Field (EMF) as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2;
  - Dublin Array;
  - North Irish Sea Array;
  - Oriel;
  - Mona;
  - Morgan;
  - Awel-y-Mor;
  - SOBR1 subsea fibre optic cable;
  - SOBR2 subsea fibre optic cable;
  - MaresConnect Interconnector;
  - Isle of Man (Mooir Vannin);
  - Morecambe;
  - Celtic Seas Round 5 PDA1 (Gwynt Glas);
  - North Channel Wind 2; and
  - North Channel Wind 1.

This section remains unchanged except for paragraphs 464 to 465 which are replaced by paragraph 250 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

250. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 468 to 469 which are replaced by paragraphs 251 to 252 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

251. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
252. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 472 to 473 which are replaced by paragraph 253 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

253. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 476 which is replaced by paragraph 254 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

254. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array Offshore wind farm (OWF);
  - Arklow Bank Wind Park 2;
  - Dublin Array;
  - North Irish Sea Array;
  - Oriel;
  - Mona;
  - Morgan;
  - Awel-y-Mor;
  - SOBR1 subsea fibre optic cable;
  - SOBR2 subsea fibre optic cable;

- MaresConnect Interconnector;
- Isle of Man (Mooir Vannin);
- Morecambe;
- Celtic Seas Round 5 PDA1 (Gwynt Glas);
- North Channel Wind 2; and
- North Channel Wind 1.

This section remains unchanged except for paragraphs 479 to 480 which are replaced by paragraph 255 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

255. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 483 which is replaced by paragraph 256 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

256. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2;
- Dublin Array;
- North Irish Sea Array;
- Oriel;
- Mona;
- Morgan;
- Awel-y-Mor;
- Isle of Man (Mooir Vannin);
- Morecambe;
- Celtic Seas Round 5 PDA1 (Gwynt Glas);
- North Channel Wind 2; and
- North Channel Wind 1.

This section remains unchanged except for paragraphs 486 to 487 which are replaced by paragraph 257 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

257. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.18.2 Twaite shad [1103]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 492 which is replaced by paragraph 258 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

258. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 496 to 497 which are replaced by paragraph 259 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

259. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 500 which is replaced by paragraph 260 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

260. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2;
  - Dublin Array;
  - North Irish Sea Array;
  - Oriel;
  - Mona;
  - Morgan;
  - Awel-y-Mor;
  - SOBR1 subsea fibre optic cable;
  - SOBR2 subsea fibre optic cable;
  - MaresConnect Interconnector;
  - Isle of Man (Mooir Vannin);
  - Morecambe;
  - Celtic Seas Round 5 PDA1 (Gwynt Glas);
  - North Channel Wind 2; and
  - North Channel Wind 1.

This section remains unchanged except for paragraphs 504 to 505 which are replaced by paragraph 261 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

261. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 508 to 509 which are replaced by paragraphs 262 to 263 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

262. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
263. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 512 to 513 which are replaced by paragraph 264 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

264. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 516 which is replaced by paragraph 265 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

265. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF;
  - Arklow Bank Wind Park 2;
  - Dublin Array;
  - North Irish Sea Array;
  - Oriel;
  - Mona;
  - Morgan;
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable;
  - SOBR2 subsea fibre optic cable;
  - MaresConnect Interconnector;
  - Isle of Man (Mooir Vannin);
  - Morecambe;
  - Celtic Seas Round 5 PDA1 (Gwynt Glas);

- North Channel Wind 2; and
- North Channel Wind 1.

This section remains unchanged except for paragraphs 519 to 520 which are replaced by paragraph 266 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

266. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 523 which is replaced by paragraph 267 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

267. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2;
- Dublin Array;
- North Irish Sea Array;
- Oriel;
- Mona;
- Morgan;
- Awel-y-Mor;
- Isle of Man (Mooir Vannin);
- Morecambe;
- Celtic Seas Round 5 PDA1 (Gwynt Glas);
- North Channel Wind 2; and
- North Channel Wind 1.

This section remains unchanged except for paragraphs 526 to 527 which are replaced by paragraph 268 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

268. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.18.3 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 532 which is replaced by paragraph 269 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

269. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-

330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 536 to 537 which are replaced by paragraph 270 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

270. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 540 which is replaced by paragraph 271 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

271. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2;
- Dublin Array;
- North Irish Sea Array;
- Oriel;
- Mona;
- Morgan;
- Awel-y-Mor;
- SOBR1 subsea fibre optic cable;
- SOBR2 subsea fibre optic cable;
- MaresConnect Interconnector;
- Isle of Man (Mooir Vannin);
- Morecambe;
- Celtic Seas Round 5 PDA1 (Gwynt Glas);
- North Channel Wind 2; and
- North Channel Wind 1.

This section remains unchanged except for paragraphs 544 to 545 which are replaced by paragraph 272 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

272. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 548 to 549 which are replaced by paragraphs 273 to 274 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

273. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
274. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 552 to 553 which are replaced by paragraph 275 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

275. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 556 which is replaced by paragraph 276 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

276. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF;
  - Arklow Bank Wind Park 2;
  - Dublin Array;
  - North Irish Sea Array;
  - Oriel;
  - Mona;
  - Morgan;
  - Awel-y-Mor;
  - SOBR1 subsea fibre optic cable;
  - SOBR2 subsea fibre optic cable;
  - MaresConnect Interconnector;
  - Isle of Man (Mooir Vannin);
  - Morecambe;
  - Celtic Seas Round 5 PDA1 (Gwynt Glas);
  - North Channel Wind 2; and
  - North Channel Wind 1.

This section remains unchanged except for paragraphs 559 to 560 which are replaced by paragraph 277 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

277. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 563 which is replaced by paragraph 278 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

278. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2;
- Dublin Array;
- North Irish Sea Array;
- Oriel;
- Mona;
- Morgan;
- Awel-y-Mor;
- Isle of Man (Moor Vannin);
- Morecambe;
- Celtic Seas Round 5 PDA1 (Gwynt Glas);
- North Channel Wind 2; and
- North Channel Wind 1.

This section remains unchanged except for paragraphs 566 to 567 which are replaced by paragraph 279 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

279. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.19 Cardigan Bay / Bae Ceredigion SAC (UK0012712)**

It is acknowledged that the heading for Cardigan Bay / Bae Ceredigion SAC (UK0012712) was replicated in error in the NIS against Heading 3.13. In order to maintain transferability of this NIS addendum and comparison with the NIS, the replicated heading 3.13 is maintained in the NIS Addendum. Section 3.19 therefore relates to the in-combination effects on sea lamprey and river lamprey only. Please refer to Section 3.13 for the in-combination effects on bottlenose dolphin.

Section 3.19 remains unchanged except for Table 3-51 which is replaced by **Table 13**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-52 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 13: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.19.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 577 which is replaced by paragraph 280 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

280. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 581 to 582 which are replaced by paragraph 281 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

281. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 585 which is replaced by paragraph 282 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

282. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 589 to 590 which are replaced by paragraph 283 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

283. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 593 to 594 which are replaced by paragraphs 284 to 285 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

284. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
285. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 597 to 598 which are replaced by paragraph 286 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

286. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 601 which is replaced by paragraph 287 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

287. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 604 to 605 which are replaced by paragraph 288 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

288. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 608 which is replaced by paragraph 289 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

289. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 611 to 612 which are replaced by paragraph 290 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

290. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.20 River Barrow and River Nore SAC (IE0002162)**

Section 3.20 remains unchanged except for Table 3-53 which is replaced by **Table 14**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-54 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 14: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.20.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 622 which is replaced by paragraph 291 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

291. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 626 to 627 which are replaced by paragraph 292 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

292. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 630 which is replaced by paragraph 293 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

293. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 634 to 635 which are replaced by paragraph 294 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

294. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 638 to 639 which are replaced by paragraphs 295 to 296 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

295. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
296. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 642 to 643 which are replaced by paragraph 297 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

297. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 646 which is replaced by paragraph 298 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

298. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 649 to 650 which are replaced by paragraph 299 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

299. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 653 which is replaced by paragraph 300 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

300. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 656 to 657 which are replaced by paragraph 301 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

301. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.20.2 Twaite shad [1103]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 662 which is replaced by paragraph 302 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

302. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 666 to 667 which are replaced by paragraph 303 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

303. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 670 which is replaced by paragraph 304 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

304. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 674 to 675 which are replaced by paragraph 305 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

305. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 678 to 679 which are replaced by paragraphs 306 to 307 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

306. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
307. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 682 to 683 which are replaced by paragraph 308 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

308. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 686 which is replaced by paragraph 309 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

309. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 689 to 690 which are replaced by paragraph 310 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

310. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 693 which is replaced by paragraph 311 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

311. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 696 to 697 which are replaced by paragraph 312 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

312. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.20.3 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 702 which is replaced by paragraph 313 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

313. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-

330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 706 to 707 which are replaced by paragraph 314 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

314. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 710 which is replaced by paragraph 315 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

315. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 714 to 715 which are replaced by paragraph 316 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

316. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 718 to 719 which are replaced by paragraphs 317 to 318 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

317. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
318. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 722 to 723 which are replaced by paragraph 319 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

319. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 726 which is replaced by paragraph 320 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

320. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 729 to 730 which are replaced by paragraph 321 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

321. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

Presence of structures and predator aggregation

This section remains unchanged except for paragraph 733 which is replaced by paragraph 322 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

322. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 736 to 737 which are replaced by paragraph 323 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

323. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### 3.21 Lower River Suir SAC (IE0002137)

Section 3.21 remains unchanged except for Table 3-55 which is replaced by **Table 15**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-56 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 15: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Mooir Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.21.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 747 which is replaced by paragraph 324 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

324. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 751 to 752 which are replaced by paragraph 325 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

325. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 755 which is replaced by paragraph 326 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

326. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 759 to 760 which are replaced by paragraph 327 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

327. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 763 to 764 which are replaced by paragraphs 328 to 329 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

328. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
329. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 767 to 768 which are replaced by paragraph 330 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

330. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 771 which is replaced by paragraph 331 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

331. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 774 to 775 which are replaced by paragraph 332 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

332. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 778 which is replaced by paragraph 333 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

333. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 781 to 782 which are replaced by paragraph 334 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

334. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.21.2 Twaite shad [1103]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 787 which is replaced by paragraph 335 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

335. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 791 to 792 which are replaced by paragraph 336 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

336. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 795 which is replaced by paragraph 337 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

337. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 799 to 800 which are replaced by paragraph 338 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

338. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 803 to 804 which are replaced by paragraphs 339 to 340 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

339. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
340. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 807 to 808 which are replaced by paragraph 341 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

341. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 811 which is replaced by paragraph 342 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

342. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 814 to 814 which are replaced by paragraph 343 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

343. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 818 which is replaced by paragraph 344 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

344. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 821 to 822 which are replaced by paragraph 345 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

345. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.21.3 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 827 which is replaced by paragraph 346 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

346. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-

330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 831 to 832 which are replaced by paragraph 347 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

347. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 835 which is replaced by paragraph 348 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

348. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 839 to 840 which are replaced by paragraph 349 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

349. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 843 to 844 which are replaced by paragraphs 350 to 351 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

350. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
351. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 847 to 848 which are replaced by paragraph 352 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

352. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 851 which is replaced by paragraph 353 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

353. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 854 to 855 which are replaced by paragraph 354 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

354. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

Presence of structures and predator aggregation

This section remains unchanged except for paragraph 858 which is replaced by paragraph 355 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

355. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 861 to 862 which are replaced by paragraph 356 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

356. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### 3.22 Blackwater River (Cork / Waterford) SAC (IE0002170)

Section 3.22 remains unchanged except for Table 3-57 which is replaced by **Table 16**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-58 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 16: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Mooir Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.22.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 872 which is replaced by paragraph 357 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

357. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 876 to 877 which are replaced by paragraph 358 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

358. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 880 which is replaced by paragraph 359 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

359. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 884 to 885 which are replaced by paragraph 360 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

360. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 888 to 889 which are replaced by paragraphs 361 to 362 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

361. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
362. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 892 to 893 which are replaced by paragraph 363 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

363. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 896 which is replaced by paragraph 364 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

364. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 899 to 900 which are replaced by paragraph 365 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

365. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 903 which is replaced by paragraph 366 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

366. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 906 to 907 which are replaced by paragraph 367 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

367. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.22.2 Twaite shad [1103]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 912 which is replaced by paragraph 368 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

368. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 916 to 917 which are replaced by paragraph 369 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

369. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 920 which is replaced by paragraph 370 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

370. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 924 to 925 which are replaced by paragraph 371 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

371. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 928 to 929 which are replaced by paragraphs 372 to 373 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

372. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
373. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 932 to 933 which are replaced by paragraph 374 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

374. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 936 which is replaced by paragraph 375 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

375. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 939 to 940 which are replaced by paragraph 376 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

376. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 943 which is replaced by paragraph 377 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

377. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 946 to 947 which are replaced by paragraph 378 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

378. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.22.3 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 952 which is replaced by paragraph 379 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

379. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-

330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 956 to 957 which are replaced by paragraph 380 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

380. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 960 which is replaced by paragraph 381 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

381. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 964 to 965 which are replaced by paragraph 382 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

382. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 968 to 969 which are replaced by paragraphs 383 to 384 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

383. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
384. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 972 to 973 which are replaced by paragraph 385 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

385. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 976 which is replaced by paragraph 386 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

386. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 979 to 980 which are replaced by paragraph 387 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

387. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

Presence of structures and predator aggregation

This section remains unchanged except for paragraph 983 which is replaced by paragraph 388 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

388. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 986 to 987 which are replaced by paragraph 389 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

389. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### 3.23 River Boyne and River Blackwater SAC (IE0002299)

Section 3.23 remains unchanged except for Table 3-57 which is replaced by **Table 17**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-60 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 17: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.23.1 River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 995 which is replaced by paragraph 390 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

390. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 999 to 1000 which are replaced by paragraph 391 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

391. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1003 which is replaced by paragraph 392 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

392. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1007 to 1007 which are replaced by paragraph 393 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

393. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1011 to 1012 which are replaced by paragraphs 394 to 395 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

394. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
395. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1015 to 1016 which are replaced by paragraph 396 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

396. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1019 which is replaced by paragraph 397 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

397. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1022 to 1023 which are replaced by paragraph 398 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

398. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1026 which is replaced by paragraph 399 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

399. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1029 to 1030 which are replaced by paragraph 400 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

400. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.23.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1035 which is replaced by paragraph 401 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

401. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1039 to 1040 which are replaced by paragraph 402 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

402. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1043 which is replaced by paragraph 403 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

403. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1047 to 1048 which are replaced by paragraph 404 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

404. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1051 to 1052 which are replaced by paragraphs 405 to 406 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

405. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
406. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1055 to 1056 which are replaced by paragraph 407 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

407. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1059 which is replaced by paragraph 408 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

408. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1062 to 1063 which are replaced by paragraph 409 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

409. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1066 which is replaced by paragraph 410 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

410. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1069 to 1070 which are replaced by paragraph 411 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

411. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **Section 3.24 remains unchanged**

### 3.25 Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (IE0000365)

Section 3.25 remains unchanged except for Table 3-62 which is replaced by **Table 18**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-63 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 18: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Mooir Vannin) (OWF_18)	154.2	156.7	1

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.25.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1081 which is replaced by paragraph 412 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

412. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1085 to 1086 which are replaced by paragraph 413 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

413. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1089 which is replaced by paragraph 414 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

414. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan

- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1093 to 1094 which are replaced by paragraph 415 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

415. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1097 to 1098 which are replaced by paragraphs 416 to 417 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

416. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
417. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1101 to 1102 which are replaced by paragraph 418 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

418. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1105 which is replaced by paragraph 419 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

419. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1108 to 1109 which are replaced by paragraph 420 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

420. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1112 which is replaced by paragraph 421 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

421. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1115 to 1116 which are replaced by paragraph 422 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

422. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or

projects.

### 3.25.2 Atlantic salmon [1106]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1121 which is replaced by paragraph 423 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

423. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1125 to 1126 which are replaced by paragraph 424 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

424. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1129 which is replaced by paragraph 425 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

425. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1133 to 1134 which are replaced by paragraph 426 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

426. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1137 to 1138 which are replaced by paragraphs 427 to 428 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

427. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
428. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1141 to 1142 which are replaced by paragraph 429 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

429. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1145 which is replaced by paragraph 430 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

430. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1148 to 1149 which are replaced by paragraph 431 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

431. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1152 which is replaced by paragraph 432 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

432. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - Isle of Man (Moor Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1155 to 1156 which are replaced by paragraph 433 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

433. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.26 Killala Bay / Moy Estuary SAC (IE0000458)**

Section 3.26 remains unchanged except for Table 3-64 which is replaced by **Table 19**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-65 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 19: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.20.1 Sea lamprey [1095]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1164 which is replaced by paragraph 434 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

434. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1168 to 1169 which are replaced by paragraph 435 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

435. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1172 which is replaced by paragraph 436 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

436. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1176 to 1177 which are replaced by paragraph 437 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

437. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1180 to 1181 which are replaced by paragraphs 438 to 439 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

438. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
439. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1184 to 1185 which are replaced by paragraph 440 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

440. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1188 which is replaced by paragraph 441 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

441. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1191 to 1192 which are replaced by paragraph 442 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

442. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1195 which is replaced by paragraph 443 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

443. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1198 to 1199 which are replaced by paragraph 444 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

444. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.27 Lough Gill SAC (IE0001976)**

Section 3.27 remains unchanged except for Table 3-66 which is replaced by **Table 20**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-67 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 20: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.27.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1209 which is replaced by paragraph 445 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

445. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1213 to 1214 which are replaced by paragraph 446 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

446. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1217 which is replaced by paragraph 447 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

447. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1221 to 1222 which are replaced by paragraph 448 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

448. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1225 to 1226 which are replaced by paragraphs 449 to 450 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

449. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
450. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1229 to 1230 which are replaced by paragraph 451 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

451. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1233 which is replaced by paragraph 452 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

452. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1236 to 1237 which are replaced by paragraph 453 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

453. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1240 which is replaced by paragraph 454 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

454. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1243 to 1244 which are replaced by paragraph 455 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

455. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.27.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1249 which is replaced by paragraph 456 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

456. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1253 to 1254 which are replaced by paragraph 457 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

457. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1257 which is replaced by paragraph 458 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

458. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1261 to 1262 which are replaced by paragraph 459 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

459. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1265 to 1266 which are replaced by paragraphs 460 to 461 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

460. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
461. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1269 to 1270 which are replaced by paragraph 462 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

462. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1273 which is replaced by paragraph 463 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

463. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1276 to 1277 which are replaced by paragraph 464 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

464. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1280 which is replaced by paragraph 465 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

465. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1283 to 1284 which are replaced by paragraph 466 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

466. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.28 River Moy SAC (IE0002298)**

Section 3.28 remains unchanged except for Table 3-68 which is replaced by **Table 21**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-69 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 21: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.28.1 Sea lamprey [1095]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1292 which is replaced by paragraph 467 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

467. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1296 to 1297 which are replaced by paragraph 468 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

468. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1300 which is replaced by paragraph 469 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

469. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1304 to 1305 which are replaced by paragraph 470 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

470. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1308 to 1309 which are replaced by paragraphs 471 to 472 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

471. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
472. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1312 to 1313 which are replaced by paragraph 473 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

473. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1316 which is replaced by paragraph 474 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

474. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1319 to 1320 which are replaced by paragraph 475 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

475. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1323 which is replaced by paragraph 476 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

476. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1326 to 1327 which are replaced by paragraph 477 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

477. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.28.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1332 which is replaced by paragraph 478 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

478. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1336 to 1337 which are replaced by paragraph 479 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

479. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1340 which is replaced by paragraph 480 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

480. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1344 to 1345 which are replaced by paragraph 481 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

481. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1348 to 1349 which are replaced by paragraphs 482 to 483 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

482. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
483. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1352 to 1353 which are replaced by paragraph 484 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

484. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1356 which is replaced by paragraph 485 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

485. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1359 to 1360 which are replaced by paragraph 486 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

486. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1363 which is replaced by paragraph 487 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

487. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1366 to 1367 which are replaced by paragraph 488 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

488. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.29 Castlemaine Harbour SAC (IE0000343)**

Section 3.29 remains unchanged except for Table 3-70 which is replaced by **Table 22**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-71 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 22: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.29.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1377 which is replaced by paragraph 489 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

489. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1381 to 1382 which are replaced by paragraph 490 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

490. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1385 which is replaced by paragraph 491 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

491. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1389 to 1390 which are replaced by paragraph 492 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

492. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1393 to 1395 which are replaced by paragraphs 493 to 494 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

493. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
494. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1397 to 1398 which are replaced by paragraph 495 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

495. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1401 which is replaced by paragraph 496 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

496. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1404 to 1405 which are replaced by paragraph 497 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

497. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1408 which is replaced by paragraph 498 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

498. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1411 to 1412 which are replaced by paragraph 499 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

499. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.29.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1417 which is replaced by paragraph 500 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

500. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1421 to 1422 which are replaced by paragraph 501 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

501. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1425 which is replaced by paragraph 502 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

502. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1429 to 1430 which are replaced by paragraph 503 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

503. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1433 to 1434 which are replaced by paragraphs 504 to 505 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

504. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

505. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1437 to 1438 which are replaced by paragraph 506 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

506. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1441 which is replaced by paragraph 507 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

507. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1444 to 1445 which are replaced by paragraph 508 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

508. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1448 which is replaced by paragraph 509 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

509. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1451 to 1452 which are replaced by paragraph 510 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

510. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.30 Lower River Shannon SAC (IE0002165)**

Section 3.30 remains unchanged except for Table 3-72 which is replaced by **Table 23**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-73 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 23: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.30.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1462 which is replaced by paragraph 511 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

511. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1466 to 1467 which are replaced by paragraph 512 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

512. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1470 which is replaced by paragraph 513 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

513. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1474 to 1475 which are replaced by paragraph 514 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

514. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1478 to 1479 which are replaced by paragraphs 515 to 516 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

515. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
516. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1482 to 1483 which are replaced by paragraph 517 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

517. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1486 which is replaced by paragraph 518 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

518. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1489 to 1490 which are replaced by paragraph 519 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

519. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1493 which is replaced by paragraph 520 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

520. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1497 to 1497 which are replaced by paragraph 521 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

521. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.30.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1502 which is replaced by paragraph 522 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

522. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1506 to 1507 which are replaced by paragraph 523 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

523. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1510 which is replaced by paragraph 524 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

524. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1514 to 1515 which are replaced by paragraph 525 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

525. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1518 to 1519 which are replaced by paragraphs 526 to 527 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

526. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
527. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1522 to 1523 which are replaced by paragraph 528 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

528. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1526 which is replaced by paragraph 529 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

529. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1529 to 1530 which are replaced by paragraph 530 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

530. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1533 which is replaced by paragraph 531 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

531. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1536 to 1537 which are replaced by paragraph 532 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

532. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.31 Lough Corrib SAC (IE0000297)**

Section 3.31 remains unchanged except for Table 3-74 which is replaced by **Table 24**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-75 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 24: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.31.1 Sea lamprey [1095]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1545 which is replaced by paragraph 533 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

533. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1549 to 1550 which are replaced by paragraph 534 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

534. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1553 which is replaced by paragraph 535 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

535. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1557 to 1558 which are replaced by paragraph 536 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

536. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1561 to 1652 which are replaced by paragraphs 537 to 538 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

537. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
538. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1565 to 1566 which are replaced by paragraph 539 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

539. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1569 which is replaced by paragraph 540 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

540. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1572 to 1573 which are replaced by paragraph 541 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

541. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1576 which is replaced by paragraph 542 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

542. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1579 to 1580 which are replaced by paragraph 543 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

543. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.31.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1585 which is replaced by paragraph 544 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

544. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1589 to 1590 which are replaced by paragraph 545 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

545. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1593 which is replaced by paragraph 546 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

546. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1597 to 1598 which are replaced by paragraph 547 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

547. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1601 to 1602 which are replaced by paragraphs 548 to 549 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

548. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
549. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1605 to 1606 which are replaced by paragraph 550 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

550. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1609 which is replaced by paragraph 551 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

551. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1612 to 1613 which are replaced by paragraph 552 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

552. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1616 which is replaced by paragraph 553 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

553. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1619 to 1620 which are replaced by paragraph 554 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

554. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.32 Pembrokeshire Marine / Sir Benfro Forol SAC (UK0013116)**

Section 3.32 remains unchanged except for Table 3-76 which is replaced by **Table 25**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-77 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 25: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.32.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1630 which is replaced by paragraph 555 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

555. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1634 to 1635 which are replaced by paragraph 556 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

556. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1638 which is replaced by paragraph 557 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

557. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1642 to 1643 which are replaced by paragraph 558 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

558. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1646 to 1647 which are replaced by paragraphs 559 to 560 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

559. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
560. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1650 to 1651 which are replaced by paragraph 561 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

561. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1654 which is replaced by paragraph 562 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

562. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1657 to 1658 which are replaced by paragraph 563 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

563. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1661 which is replaced by paragraph 564 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

564. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1664 to 1665 which are replaced by paragraph 565 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

565. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.32.2 Twaite shad [1103] and Allis shad [1102]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1672 which is replaced by paragraph 566 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

566. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1676 to 1677 which are replaced by paragraph 567 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

567. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1680 which is replaced by paragraph 568 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

568. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1684 to 1685 which are replaced by paragraph 569 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

569. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1688 to 1689 which are replaced by paragraphs 570 to 571 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

570. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

571. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1693 to 1693 which are replaced by paragraph 572 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

572. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1696 which is replaced by paragraph 573 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

573. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1699 to 1700 which are replaced by paragraph 574 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

574. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1703 which is replaced by paragraph 575 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

575. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1706 to 1707 which are replaced by paragraph 576 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

576. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.33 Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd SAC (UK0020020)**

Section 3.33 remains unchanged except for Table 3-78 which is replaced by **Table 26**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-79 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 26: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.33.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1717 which is replaced by paragraph 577 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

577. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1721 to 1722 which are replaced by paragraph 578 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

578. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1725 which is replaced by paragraph 579 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

579. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1729 to 1730 which are replaced by paragraph 580 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

580. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1733 to 1734 which are replaced by paragraphs 581 to 582 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

581. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
582. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1737 to 1738 which are replaced by paragraph 583 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

583. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1741 which is replaced by paragraph 584 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

584. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1744 to 1745 which are replaced by paragraph 585 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

585. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1748 which is replaced by paragraph 586 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

586. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1751 to 1752 which are replaced by paragraph 587 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

587. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.33.2 Twaite shad [1103] and Allis shad [1102]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1759 which is replaced by paragraph 588 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

588. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1763 to 1764 which are replaced by paragraph 589 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

589. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1767 which is replaced by paragraph 590 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

590. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1771 to 1772 which are replaced by paragraph 591 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

591. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1775 to 1776 which are replaced by paragraphs 592 to 593 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

592. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

593. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1779 to 1780 which are replaced by paragraph 594 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

594. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1783 which is replaced by paragraph 595 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

595. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1786 to 1787 which are replaced by paragraph 596 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

596. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1790 which is replaced by paragraph 597 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

597. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1793 to 1794 which are replaced by paragraph 598 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

598. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.34 Afon Tywi / River Tywi SAC (UK0013010)**

Section 3.34 remains unchanged except for Table 3-80 which is replaced by **Table 27**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-81 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 27: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.34.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1804 which is replaced by paragraph 599 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

599. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1808 to 1809 which are replaced by paragraph 600 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

600. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1812 which is replaced by paragraph 601 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

601. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1816 to 1817 which are replaced by paragraph 602 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

602. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1820 to 1821 which are replaced by paragraphs 603 to 604 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

603. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
604. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1824 to 1825 which are replaced by paragraph 605 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

605. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1828 which is replaced by paragraph 606 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

606. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1831 to 1832 which are replaced by paragraph 607 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

607. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1835 which is replaced by paragraph 608 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

608. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1837 to 1838 which are replaced by paragraphs 609 to 610 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

609. Accordingly, effects arising from the negligible contribution of the CWP Project to any in-combination impact will act over such a negligible proportion of the overall habitat available to these QIs, and with no potential to act as a barrier to migration, that there can be no adverse effect on any Conservation Objective of the SAC arising from impacts either from the CWP Project alone, or in combination with other plans and projects. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

610. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or

projects.

### 3.34.2 Twaite shad [1103] and Allis shad [1102]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1845 which is replaced by paragraph 611 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

611. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1849 to 1850 which are replaced by paragraph 612 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

612. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1853 which is replaced by paragraph 613 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

613. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1857 to 1858 which are replaced by paragraph 614 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

614. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1861 to 1862 which are replaced by paragraphs 615 to 616 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

615. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
616. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1865 to 1866 which are replaced by paragraph 617 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

617. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1869 which is replaced by paragraph 618 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

618. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1872 to 1873 which are replaced by paragraph 619 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

619. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1876 which is replaced by paragraph 620 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

620. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1879 to 1880 which are replaced by paragraph 621 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

621. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.35 Severn Estuary / Môr Hafren SAC (UK0013030)**

Section 3.35 remains unchanged except for Table 3-82 which is replaced by **Table 28**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-83 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 28: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.35.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1890 which is replaced by paragraph 622 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

622. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1894 to 1895 which are replaced by paragraph 623 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

623. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1989 which is replaced by paragraph 624 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

624. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1902 to 1903 which are replaced by paragraph 625 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

625. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1906 to 1907 which are replaced by paragraphs 626 to 627 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

626. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
627. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1910 to 1911 which are replaced by paragraph 628 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

628. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1914 which is replaced by paragraph 629 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

629. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1917 to 1918 which are replaced by paragraph 630 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

630. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1921 which is replaced by paragraph 631 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

631. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1924 to 1925 which are replaced by paragraph 632 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

632. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.35.2 Twaite shad [1103]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1930 which is replaced by paragraph 633 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

633. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1934 to 1935 which are replaced by paragraph 634 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

634. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1938 which is replaced by paragraph 635 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

635. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 1942 to 1943 which are replaced by paragraph 636 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

636. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1946 to 1947 which are replaced by paragraphs 637 to 638 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

637. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
638. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1950 to 1951 which are replaced by paragraph 639 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

639. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1954 which is replaced by paragraph 640 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

640. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1957 to 1958 which are replaced by paragraph 641 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

641. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 1961 which is replaced by paragraph 642 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

642. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1964 to 1965 which are replaced by paragraph 643 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

643. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.36 River Usk / Afon Wysg SAC (UK0013007)**

Section 3.36 remains unchanged except for paragraph 1966 which is replaced by paragraph 644 below, and Table 3-85 which is replaced by **Table 30**; these updates have been made to include the addition of sea lamprey and twaite shad as qualifying features (these species were not included in the NIS and have been added here for completeness). The conclusions of the assessment remain valid for all qualifying features of the SAC. Also, Table 3-84 is replaced by **Table 29**; this update has been made in response to FIR Item 5 (see **FIR Response Document**).

644. This SAC is 327 km from the offshore development area and is screened in for Sea lamprey, River lamprey, Twaite shad and Allis shad.

Table 29: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas)	175.3	181.1	3

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
(OWF_27)			
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

Table 30: Conservation Objectives, Attributes and Targets for River Usk / Afon Wysg SAC and summary of associated assessment

Attributes and targets	Predicted effect	Mitigation	Residual effect	Conclusion
<p>[1095] Sea lamprey (<i>Petromyzon marinus</i>)</p> <p><i>Conservation Objective: To restore the favourable conservation condition of the Qualifying Feature in the SAC, which is defined by the following list of attributes and targets:</i></p>				
<p>The population of the feature in the SAC is stable or increasing over the long term</p>	<p>Increase in underwater noise and vibration</p> <p>Presence of EMF</p> <p>Temporary increase in SSC and contaminated sediments</p> <p>Direct impacts on habitats</p> <p>Presence of structures and predator aggregation.</p> <p>See <b>Section 3.36.1</b> of this document</p>	<p>None required</p>	<p>N / A</p>	<p>No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects</p>
<p>The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future</p>	<p>Increase in underwater noise and vibration</p> <p>Presence of EMF</p> <p>Temporary increase in SSC</p>	<p>None required</p>	<p>N / A</p>	<p>No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects</p>

Attributes and targets	Predicted effect	Mitigation	Residual effect	Conclusion
	and contaminated sediments  Direct impacts on habitats  Presence of structures and predator aggregation.  See <b>Section 3.36.1</b> of this document			
Maintain a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis	No direct or indirect impact on SAC habitats and thus no impact on this attribute and target	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects

[1099] River lamprey (*Lampetra fluviatilis*)

*Conservation Objective: To restore the favourable conservation condition of the Qualifying Feature in the SAC, which is defined by the following list of attributes and targets:*

The population of the feature in the SAC is stable or increasing over the long term	Increase in underwater noise and vibration  Presence of EMF  Temporary increase in SSC and contaminated sediments  Direct impacts on habitats	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects
---	---	---------------	-------	--

Attributes and targets	Predicted effect	Mitigation	Residual effect	Conclusion
	Presence of structures and predator aggregation.  See <b>Section 3.36.1</b> of this document			
The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future	Increase in underwater noise and vibration  Presence of EMF  Temporary increase in SSC and contaminated sediments  Direct impacts on habitats  Presence of structures and predator aggregation.  See <b>Section 3.36.1</b> of this document	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects
Maintain a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis	No direct or indirect impact on SAC habitats and thus no impact on this attribute and target	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects

[1103] Twaite shad (*Alosa fallax*)

*Conservation Objective: To restore the favourable conservation condition of the Qualifying Feature in the SAC, which is defined by the following list*

Attributes and targets	Predicted effect	Mitigation	Residual effect	Conclusion
<i>of attributes and targets:</i>				
<p>The population of the feature in the SAC is stable or increasing over the long term</p>	<p>Increase in underwater noise and vibration</p> <p>Presence of EMF</p> <p>Temporary increase in SSC and contaminated sediments</p> <p>Direct impacts on habitats</p> <p>Presence of structures and predator aggregation.</p> <p>See <b>Section 3.36.2</b> of this document</p>	<p>None required</p>	<p>N / A</p>	<p>No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects</p>
<p>The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future</p>	<p>Increase in underwater noise and vibration</p> <p>Presence of EMF</p> <p>Temporary increase in SSC and contaminated sediments</p> <p>Direct impacts on habitats</p>	<p>None required</p>	<p>N / A</p>	<p>No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects</p>

Attributes and targets	Predicted effect	Mitigation	Residual effect	Conclusion
	Presence of structures and predator aggregation.  See <b>Section 3.36.2</b> of this document			
Maintain a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis	No direct or indirect impact on SAC habitat, and therefore no impact on this attribute and target	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects

1102] Allis shad (*Alosa alosa*)

*Conservation Objective: To restore the favourable conservation condition of the Qualifying Feature in the SAC, which is defined by the following list of attributes and targets:*

The population of the feature in the SAC is stable or increasing over the long term	Increase in underwater noise and vibration  Presence of EMF  Temporary increase in SSC and contaminated sediments  Direct impacts on habitats  Presence of structures and predator aggregation.	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects
---	---	---------------	-------	--

Attributes and targets	Predicted effect	Mitigation	Residual effect	Conclusion
	See <b>Section 3.36.2</b> of this document			
The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future	Increase in underwater noise and vibration  Presence of EMF  Temporary increase in SSC and contaminated sediments  Direct impacts on habitats  Presence of structures and predator aggregation.  See <b>Section 3.36.2</b> of this document	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects
Maintain a sufficiently large habitat to maintain the feature’s population in the SAC on a long-term basis	No direct or indirect impact on SAC habitat, and therefore no impact on this attribute and target	None required	N / A	No impediment to the Conservation Objective being met, and no adverse effect on site integrity predicted from the project in-combination with other plans and projects

### 3.36.1 Sea lamprey [1095] and River lamprey [1099]

Section 3.36.1 remains unchanged except for the addition of paragraph 645 and 646 and for paragraph 1969 which is replaced by paragraph 647. Also note, the section is now titled Sea lamprey [1095] and River lamprey [1099]. The conclusions of the NIS remain true for all designated features of this SAC.

645. Due to similarities in morphology and sensitivity to the relevant impacts, Sea lamprey and River lamprey are considered here together. Conclusions drawn are considered relevant to each individual QI's attributes and targets within this SAC.
646. The following Conservation Objective attributes and targets are considered to have impact pathways arising from the CWP Project in relation to Sea lamprey.
- The population of the feature in the SAC is stable or increasing over the long term; and
  - The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.
647. The following Conservation Objective attributes and targets are considered to have impact pathways arising from the CWP Project in relation to River lamprey.
- The population of the feature in the SAC is stable or increasing over the long term; and
  - The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 1973 which is replaced by paragraph 648 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

648. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 1977 to 1978 which are replaced by paragraph 649 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

649. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 1981 which is replaced by paragraph 650 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

650. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 1985 to 1986 which are replaced by paragraph 651 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

651. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 1989 to 1990 which are replaced by paragraphs 652 to 653 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

652. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

653. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 1993 to 1994 which are replaced by paragraph 654 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

654. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or

projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 1997 which is replaced by paragraph 655 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

655. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2000 to 2001 which are replaced by paragraph 656 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

656. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2004 which is replaced by paragraph 657 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

657. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan

- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2007 to 2008 which are replaced by paragraph 658 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

658. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### 3.36.2 Twaite shad [1103] and Allis shad [1102]

Section 3.36.2 remains unchanged except the addition of paragraph 659 and 660 and for paragraph 2009 which is replaced by paragraph 661. Also note, the section is now titled Twaite shad [1103] and Allis shad [1102]. The conclusions of the NIS remain true for all designated features of this SAC.

659. Due to similarities in morphology and sensitivity to the relevant impacts, Twaite shad and Allis shad are considered here together. Conclusions drawn are considered relevant to each individual QI's attributes and targets within this SAC.
660. The following Conservation Objective attributes and targets are considered to have impact pathways arising from the CWP Project in relation to Twaite shad.
- The population of the feature in the SAC is stable or increasing over the long term; and
  - The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.
661. The following Conservation Objective attributes and targets are considered to have impact pathways arising from the CWP Project in relation to Allis shad.
- The population of the feature in the SAC is stable or increasing over the long term; and
  - The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.

### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2013 which is replaced by paragraph 662 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

662. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and

the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2017 to 2018 which are replaced by paragraph 663 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

663. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2021 which is replaced by paragraph 664 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

664. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2025 to 2026 which are replaced by paragraph 665 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

665. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2029 to 2030 which are replaced by paragraphs 666 to 667 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

666. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted

for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

667. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2033 to 2034 which are replaced by paragraph 668 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

668. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2037 which is replaced by paragraph 669 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

669. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2040 to 2041 which are replaced by paragraph 670 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

670. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2044 which is replaced by paragraph 671 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

671. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2047 to 2048 which are replaced by paragraph 672 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

672. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### 3.37 River Wye / Afon Gwy SAC (UK0012642)

Section 3.37 remains unchanged except for Table 3-86 which is replaced by **Table 31**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-87 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 31: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Mooir Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.37.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2058 which is replaced by paragraph 673 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

673. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2062 to 2063 which are replaced by paragraph 674 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

674. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2066 which is replaced by paragraph 675 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

675. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2070 to 2071 which are replaced by paragraph 676 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

676. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2074 to 2075 which are replaced by paragraphs 677 to 678 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

677. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
678. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2078 to 2079 which are replaced by paragraph 679 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

679. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2082 which is replaced by paragraph 680 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

680. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2085 to 2086 which are replaced by paragraph 681 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

681. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2089 which is replaced by paragraph 682 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

682. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2092 to 2093 which are replaced by paragraph 683 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

683. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.37.2 Twaite shad [1103] and Allis shad [1102]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2100 which is replaced by paragraph 684 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

684. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2104 to 2105 which are replaced by paragraph 685 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

685. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2108 which is replaced by paragraph 686 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

686. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2111 to 2112 which are replaced by paragraphs 687 to 688 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

687. Accordingly, effects arising from the negligible contribution of the CWP Project to any in-combination impact will act over such a negligible proportion of the overall habitat available to these QIs, and with no potential to act as a barrier to migration, that there can be no adverse effect on any Conservation Objective of the SAC arising from impacts either from the CWP Project alone, or in combination with other plans and projects. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in

combination with other plans or projects.

688. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2115 to 2116 which are replaced by paragraphs 689 to 690 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

689. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
690. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2119 to 2120 which are replaced by paragraph 691 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

691. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2123 which is replaced by paragraph 692 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

692. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe

- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2126 to 2127 which are replaced by paragraph 693 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

693. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2130 which is replaced by paragraph 694 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

694. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2133 to 2134 which are replaced by paragraph 695 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

695. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.37.3 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2139 which is replaced by paragraph 696 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

696. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are

considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2143 to 2144 which are replaced by paragraph 697 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

697. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2147 which is replaced by paragraph 698 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

698. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2151 to 2152 which are replaced by paragraph 699 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

699. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2155 to 2156 which are replaced by paragraphs 700 to 701 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

700. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
701. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2159 to 2160 which are replaced by paragraph 702 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

702. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2163 which is replaced by paragraph 703 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

703. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2166 to 2167 which are replaced by paragraph 704 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

704. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2170 which is replaced by paragraph 705 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

705. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2173 to 2174 which are replaced by paragraph 706 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

706. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.38 Afon Teifi / River Teifi SAC (UK0012670)**

Section 3.38 remains unchanged except for Table 3-88 which is replaced by **Table 32**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-89 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 32: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.38.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2184 which is replaced by paragraph 707 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

707. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2188 to 2189 which are replaced by paragraph 708 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

708. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2192 which is replaced by paragraph 709 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

709. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2196 to 2197 which are replaced by paragraph 710 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

710. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2200 to 2201 which are replaced by paragraphs 711 to 712 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

711. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
712. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2204 to 2205 which are replaced by paragraph 713 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

713. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2208 which is replaced by paragraph 714 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

714. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2211 to 2212 which are replaced by paragraph 715 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

715. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2215 which is replaced by paragraph 716 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

716. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2218 to 2219 which are replaced by paragraph 717 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

717. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.38.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2224 which is replaced by paragraph 718 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

718. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2228 to 2229 which are replaced by paragraph 719 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

719. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2232 which is replaced by paragraph 720 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

720. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2236 to 2237 which are replaced by paragraph 721 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

721. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2240 to 2241 which are replaced by paragraphs 722 to 723 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

722. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

723. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2244 to 2245 which are replaced by paragraph 724 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

724. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2248 which is replaced by paragraph 725 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

725. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2251 to 2252 which are replaced by paragraph 726 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

726. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2255 which is replaced by paragraph 727 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

727. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2258 to 2259 which are replaced by paragraph 728 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

728. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.39 Dee Estuary / Aber Dyfrdwy SAC (UK0030131)**

Section 3.39 remains unchanged except for Table 3-90 which is replaced by **Table 33**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-91 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 33: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.39.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2269 which is replaced by paragraph 729 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

729. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2273 to 2274 which are replaced by paragraph 730 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

730. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2277 which is replaced by paragraph 731 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

731. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2281 to 2282 which are replaced by paragraph 732 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

732. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2285 to 2286 which are replaced by paragraphs 733 to 734 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

733. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
734. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2289 to 2290 which are replaced by paragraph 735 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

735. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2293 which is replaced by paragraph 736 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

736. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2296 to 2297 which are replaced by paragraph 737 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

737. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2300 which is replaced by paragraph 738 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

738. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2303 to 2304 which are replaced by paragraph 739 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

739. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.40 Afonydd Cleddau / Cleddau Rivers SAC (UK0030074)**

Section 3.40 remains unchanged except for Table 3-92 which is replaced by **Table 34**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-93 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 34: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.40.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2314 which is replaced by paragraph 740 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

740. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2318 to 2319 which are replaced by paragraph 741 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

741. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2322 which is replaced by paragraph 742 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

742. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2326 to 2327 which are replaced by paragraph 743 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

743. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2330 to 2331 which are replaced by paragraphs 744 to 745 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

744. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
745. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2334 to 2335 which are replaced by paragraph 746 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

746. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2338 which is replaced by paragraph 747 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

747. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2341 to 2342 which are replaced by paragraph 748 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

748. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2345 which is replaced by paragraph 749 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

749. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2348 to 2349 which are replaced by paragraph 750 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

750. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.41 River Dee and Bala Lake / Afon Dyfrdwy a Llŷn Tegid SAC (UK0030252)**

Section 3.41 remains unchanged except for Table 3-94 which is replaced by **Table 35**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-95 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 35: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.41.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2359 which is replaced by paragraph 751 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

751. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2363 to 2364 which are replaced by paragraph 752 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

752. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2367 which is replaced by paragraph 753 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

753. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2371 to 2372 which are replaced by paragraph 754 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

754. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2375 to 2376 which are replaced by paragraphs 755 to 756 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

755. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
756. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2379 to 2380 which are replaced by paragraph 757 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

757. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2383 which is replaced by paragraph 758 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

758. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2386 to 2387 which are replaced by paragraph 759 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

759. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2390 which is replaced by paragraph 760 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

760. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2393 to 2394 which are replaced by paragraph 761 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

761. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.41.3 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2399 which is replaced by paragraph 762 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

762. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2403 to 2404 which are replaced by paragraph 763 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

763. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2407 which is replaced by paragraph 764 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

764. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2411 to 2412 which are replaced by paragraph 765 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

765. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2415 to 2416 which are replaced by paragraphs 766 to 767 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

766. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

767. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2419 to 2420 which are replaced by paragraph 768 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

768. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2423 which is replaced by paragraph 769 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

769. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2426 to 2427 which are replaced by paragraph 770 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

770. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2430 which is replaced by paragraph 771 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

771. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2433 to 2434 which are replaced by paragraph 772 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

772. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.42 River Derwent and Bassenthwaite Lake SAC (UK0030032)**

Section 3.42 remains unchanged except for Table 3-96 which is replaced by **Table 36**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-97 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 36: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.42.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2444 which is replaced by paragraph 773 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

773. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2448 to 2449 which are replaced by paragraph 774 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

774. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2452 which is replaced by paragraph 775 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

775. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2456 to 2457 which are replaced by paragraph 776 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

776. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2460 to 2461 which are replaced by paragraphs 777 to 778 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

777. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
778. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2464 to 2465 which are replaced by paragraph 779 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

779. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2468 which is replaced by paragraph 780 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

780. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2471 to 2472 which are replaced by paragraph 781 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

781. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2475 which is replaced by paragraph 782 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

782. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2478 to 2479 which are replaced by paragraph 783 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

783. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.42.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2484 which is replaced by paragraph 784 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

784. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2488 to 2489 which are replaced by paragraph 785 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

785. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2492 which is replaced by paragraph 786 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

786. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2496 to 2497 which are replaced by paragraph 787 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

787. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2500 to 2501 which are replaced by paragraphs 788 to 789 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

788. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

789. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2504 to 2505 which are replaced by paragraph 790 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

790. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2508 which is replaced by paragraph 791 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

791. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2511 to 2512 which are replaced by paragraph 792 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

792. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2515 which is replaced by paragraph 793 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

793. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2518 to 2519 which are replaced by paragraph 794 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

794. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.43 Solway Firth SAC (UK0013025)**

Section 3.43 remains unchanged except for Table 3-98 which is replaced by **Table 37**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-99 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 37: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.43.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2529 which is replaced by paragraph 795 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

795. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2533 to 2534 which are replaced by paragraph 796 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

796. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2537 which is replaced by paragraph 797 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

797. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2541 to 2542 which are replaced by paragraph 798 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

798. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2545 to 2546 which are replaced by paragraphs 799 to 800 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

799. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
800. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2549 to 2550 which are replaced by paragraph 801 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

801. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2553 which is replaced by paragraph 802 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

802. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2556 to 2557 which are replaced by paragraph 803 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

803. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2560 which is replaced by paragraph 804 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

804. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2563 to 2564 which are replaced by paragraph 805 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

805. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.44 River Eden SAC (UK0012643)**

Section 3.44 remains unchanged except for Table 3-100 which is replaced by **Table 38**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-101 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 38: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.44.1 Sea lamprey [1095] and River lamprey [1099]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2574 which is replaced by paragraph 806 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

806. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2578 to 2579 which are replaced by paragraph 807 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

807. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2582 which is replaced by paragraph 808 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

808. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2586 to 2587 which are replaced by paragraph 809 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

809. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2590 to 2591 which are replaced by paragraphs 810 to 811 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

810. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
811. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2594 to 2595 which are replaced by paragraph 812 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

812. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2598 which is replaced by paragraph 813 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

813. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2601 to 2602 which are replaced by paragraph 814 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

814. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2605 which is replaced by paragraph 815 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

815. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2608 to 2609 which are replaced by paragraph 816 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

816. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.44.2 Atlantic salmon [1106]**

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2614 which is replaced by paragraph 817 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

817. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2618 to 2619 which are replaced by paragraph 818 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

818. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2622 which is replaced by paragraph 819 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

819. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2626 to 2627 which are replaced by paragraph 820 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

820. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2360 to 2361 which are replaced by paragraphs 821 to 822 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

821. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
822. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2364 to 2365 which are replaced by paragraph 823 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

823. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2368 which is replaced by paragraph 824 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

824. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2641 to 2642 which are replaced by paragraph 825 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

825. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2645 which is replaced by paragraph 826 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

826. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2648 to 2649 which are replaced by paragraph 827 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

827. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.45 River Axe SAC (UK0030248)**

Section 3.45 remains unchanged except for Table 3-102 which is replaced by **Table 39**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-103 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 39: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.45.1 Sea lamprey [1095]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2657 which is replaced by paragraph 828 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

828. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2661 to 2662 which are replaced by paragraph 829 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

829. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2665 which is replaced by paragraph 830 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

830. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2669 to 2670 which are replaced by paragraph 831 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

831. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2673 to 2674 which are replaced by paragraphs 832 to 833 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

832. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
833. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2677 to 2678 which are replaced by paragraph 834 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

834. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2681 which is replaced by paragraph 835 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

835. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2684 to 2685 which are replaced by paragraph 836 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

836. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2688 which is replaced by paragraph 837 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

837. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2691 to 2692 which are replaced by paragraph 838 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

838. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.46 River Avon SAC (UK0013016)**

Section 3.46 remains unchanged except for Table 3-104 which is replaced by **Table 40**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-105 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 40: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.46.1 Sea lamprey [1095]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2700 which is replaced by paragraph 839 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

839. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2703 to 2704 which are replaced by paragraphs 840 to 841 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

840. Accordingly, effects arising from the negligible contribution of the CWP Project to any in-combination impact will act over such a negligible proportion of the overall habitat available to these QIs, with effects constrained to minor behavioural responses which are immediately recoverable, and with no potential to act as a barrier to migration, that there can be no adverse effect on any Conservation Objective of the SAC arising from impacts either from the CWP Project alone, or in combination with other plans and projects. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.
841. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2707 which is replaced by paragraph 842 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

842. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2711 to 2712 which are replaced by paragraph 843 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

843. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2715 to 2716 which are replaced by paragraphs 844 to 845 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

844. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
845. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2719 to 2720 which are replaced by paragraph 846 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

846. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2723 which is replaced by paragraph 847 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

847. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel

- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2726 to 2727 which are replaced by paragraph 848 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

848. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2730 which is replaced by paragraph 849 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

849. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

This section remains unchanged except for paragraphs 2733 to 2734 which are replaced by paragraph 850 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

850. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or

projects.

### 3.46.2 Atlantic salmon [1106]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2739 which is replaced by paragraph 851 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

851. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

This section remains unchanged except for paragraphs 2743 to 2744 which are replaced by paragraph 852 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

852. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2747 which is replaced by paragraph 853 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

853. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2751 to 2752 which are replaced by paragraph 854 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

854. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2755 to 2756 which are replaced by paragraphs 855 to 856 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

855. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
856. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

This section remains unchanged except for paragraphs 2759 to 2760 which are replaced by paragraph 857 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

857. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2763 which is replaced by paragraph 858 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

858. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector

- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2766 to 2767 which are replaced by paragraph 859 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

859. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2770 which is replaced by paragraph 860 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

860. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

This section remains unchanged except for paragraphs 2773 to 2774 which are replaced by paragraph 861 below. This is a minor update to reflect the revised in-combination tier definitions (i.e. Tier 1, 2 and 3) described in Section 2 of this document.

861. For the CWP project in-combination with all other projects, it can be concluded beyond reasonable scientific doubt that there will be no adverse effects on site integrity in combination with other plans or projects.

### **3.47 French ZSCs – Migratory Fish**

Section 3.47 remains unchanged except for Table 3-106 which is replaced by **Table 41**. This update has been made in response to FIR Item 5 (see **FIR Response Document**). Table 3-107 (summary of assessment) of the NIS remains unchanged, with a conclusion of no impediment to the Conservation Objectives being met.

Table 41: Other plans and projects considered in the in-combination assessment

Development	Distance from the array site (km)	Distance from the export cable corridor (km)	Tier
Site investigation activities to inform the development of the North Irish Sea Array OWF (SUR_24)	62.0	41.7	1
North Irish Sea Array (OWF_04)	51.0	35.7	1
MP2 Project (CA_16)	25.1	4.2	1
Maintenance dredging River Boyne, Drogheda (CA_68 / DAS_06)	69.1	42.7	1
Maintenance Dredging in Dublin Port (CA_40 / DAS_04)	32.2	0.8	1
Dumping at Sea arising from capital dredging works under the MP2 Project (DAS_03)	23.2	3.7	1
Dredging and Dumping at Sea arising from the Dublin Harbour Capital Dredging Project (DAS_19)	23.2	3.7	1
Dublin Array (OWF_02)	2.8	0.0	1
Arklow Bank Wind Park 2 (OWF_01)	9.3	17.6	1
3FM Project (CA_33)	31.3	0.6	1
Oriel (OWF_06)	83.9	61.6	1
Mona (OWF_08)	125.1	128.7	1
Morgan (OWF_15)	141.2	143.9	1
Awel-y-Mor (OWF_09)	129.4	133.3	1
SOBR1 subsea fibre optic cable (SC_03)	27.0	1.1	3
SOBR2 subsea fibre optic cable (SC_06)	35.0	10.9	3
MaresConnect Interconnector (SC_11)	43.2	19.6	3
Development at Howth Fishery Harbour Centre (dredging and reclamation works) (CA_11)	22.4	0.0	1
Arklow Bank Wind Park 2 O&M Facility (CA_30)	30.8	33.1	1
Greater Dublin Drainage Project (CA_45)	33.1	9.9	1
Isle of Man (Moor Vannin) (OWF_18)	154.2	156.7	1
Morecambe (OWF_19)	154.4	157.9	1
Celtic Seas Round 5 PDA1 (Gwynt Glas) (OWF_27)	175.3	181.1	3
North Channel Wind 2 (OWF_29)	177.6	162.7	3
North Channel Wind 1 (OWF_35)	202.1	183.9	3

### 3.47.1 Sea lamprey [1095]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2783 which is replaced by paragraph 862 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

862. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 50 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2789 which is replaced by paragraph 863 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

863. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2795 to 2796 which are replaced by paragraphs 864 to 865 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

864. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or

completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.

865. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2801 which is replaced by paragraph 866 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

866. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Site investigation activities to inform the development of the North Irish Sea Array OWF
- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- SOBR1 subsea fibre optic cable
- SOBR2 subsea fibre optic cable
- MaresConnect Interconnector
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2806 which is replaced by paragraph 867 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

867. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):

- Arklow Bank Wind Park 2
- Dublin Array
- North Irish Sea Array
- Oriel
- Mona
- Morgan
- Awel-y-Mor
- Isle of Man (Mooir Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)

- North Channel Wind 2
- North Channel Wind 1

### 3.47.2 Twaite shad [1103] and Allis shad [1102]

#### Increase in underwater noise and vibration

This section remains unchanged except for paragraph 2815 which is replaced by paragraph 868 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

868. Based upon project alone assessments, the most likely effects to arise from offshore activities are short-term behavioural responses to stimuli. Injurious effects, e.g. from underwater noise, are considered to only act within 70 m from (mitigated) piling activities, and within 60 m (low order) to 100-330 m (mitigated high order) from UXO clearance work. It is considered that these distances are representative of other equivalent activities occurring at other projects. These areas of impact are considered to be negligible in the context of the wider availability of habitat for the QIs, and considering the low number of expected UXO clearance events, the small predicted areas for piling impacts, and the very limited likelihood of QI individuals being present in the affected areas, the potential for injurious effects is considered highly limited across all plans or projects.

#### Presence of EMF

This section remains unchanged except for paragraph 2822 which is replaced by paragraph 869 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

869. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination EMF as these are the only projects that include energy generation or transmission:
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

#### Temporary increase in SSC and contaminated sediments

This section remains unchanged except for paragraph 2828 to 2829 which are replaced by paragraphs 870 to 871 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

870. All of the identified projects listed above for this site are considered to have the potential to result in increases in SSC. Of these projects, 12 are offshore wind farm developments, and five are dredging programmes. The impacts for these developments are likely to be relatively similar to those predicted for the CWP Project, because the projects are either of a similar scale, in comparable areas or completing the same activities. While the rest (coastal developments and various surveys) have the potential to produce SSC, they will be on a significantly smaller scales when compared to the windfarm / dredging activities.
871. For CWP, it was concluded that natural dispersal and sediment movement would ensure the plume returned to background levels within 11 days.

#### Direct impacts on habitats

This section remains unchanged except for paragraph 2834 which is replaced by paragraph 872 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

872. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Site investigation activities to inform the development of the North Irish Sea Array OWF
  - Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan
  - Awel-y-Mor
  - SOBR1 subsea fibre optic cable
  - SOBR2 subsea fibre optic cable
  - MaresConnect Interconnector
  - Isle of Man (Mooir Vannin)
  - Morecambe
  - Celtic Seas Round 5 PDA1 (Gwynt Glas)
  - North Channel Wind 2
  - North Channel Wind 1

#### Presence of structures and predator aggregation

This section remains unchanged except for paragraph 2839 which is replaced by paragraph 873 below. This update has been made in response to FIR Item 5 (see **FIR Response Document**).

873. Of the projects listed above, only the following are predicted to have the potential to contribute to in-combination impacts, as these are the only projects which may impact marine habitats utilised by this species (i.e. are not located within estuarine or riverine environments):
- Arklow Bank Wind Park 2
  - Dublin Array
  - North Irish Sea Array
  - Oriel
  - Mona
  - Morgan

- Awel-y-Mor
- Isle of Man (Moor Vannin)
- Morecambe
- Celtic Seas Round 5 PDA1 (Gwynt Glas)
- North Channel Wind 2
- North Channel Wind 1

## 3.48 French ZSCs – Marine Mammals

### 3.48.1 Harbour porpoise

Section 3.47.1 remains unchanged except for paragraphs 2842 through to 2847 which are replaced by paragraphs 874 to 883 below. These updates have been made in consideration with:

1. The commitment to mitigated pile driving and UXO clearance;
2. Updated guidance on the use of EDRs for piling, UXO clearance and geophysical surveys (JNCC, 2025b);
3. Updates to the CEA within the EIAR Addendum, and
4. In response to FIR Items 10aa and 10bb (see **FIR Response Document**).

The methodology for the assessment is provided in **Volume 1** of the **NIS Addendum**, **Volume 2 Introduction**, **Section 2**.

#### Increased underwater noise

##### *Piling of WTGs*

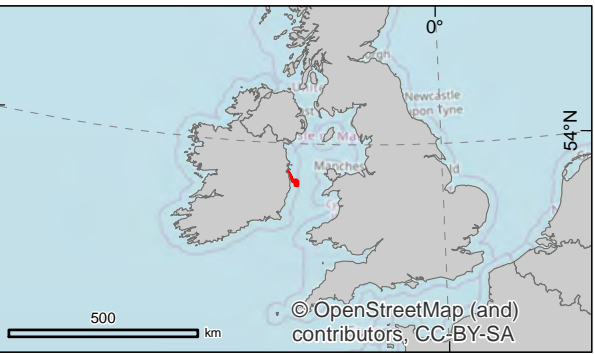
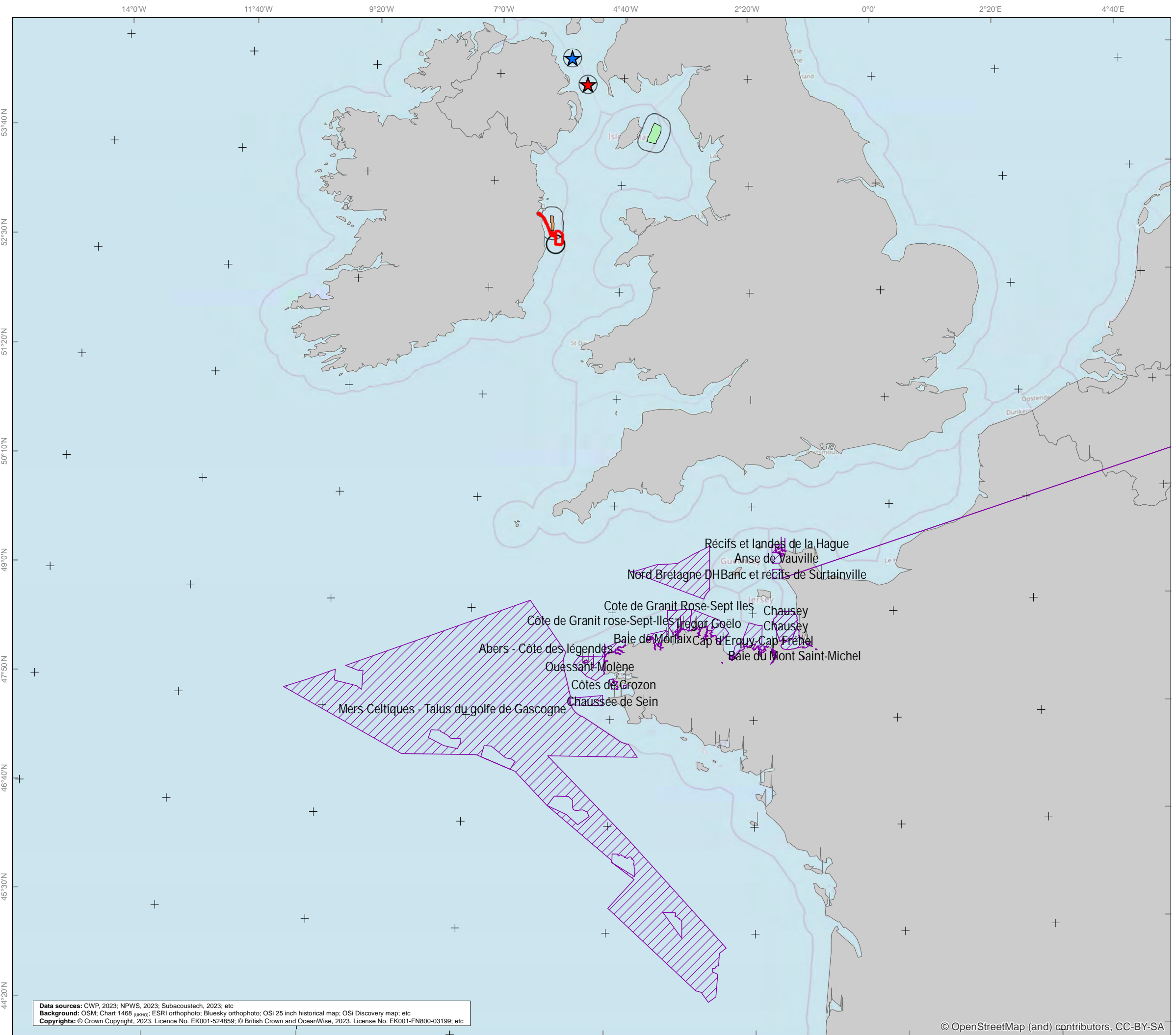
874. This assessment focuses on the potential in-combination impact of construction activities at other OWF in the Celtic and Irish Sea MU for porpoise in 2031 (the same year as piling at the CWP project). As outlined in paragraph 6, there are expected to be four other OWFs in the Celtic and Irish Sea MU that will be constructing in 2031 (see **Table 3**).
875. To mitigate potential impacts from underwater noise during the construction of the project, CWP commits to the limit on underwater noise of 169 dB  $L_{E,p,ss,0.5}$  at 750m at WTG and OSS piling events. It is expected that future OWFs constructing in English, Welsh and Irish waters will likely implement noise reduction measures, therefore the assessment presented here assumes mitigated piling at all OWFs.

##### *In situ impacts*

876. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 11 km EDR from mitigated piling at CWP with the French ZSCs (**Figure 9**). Therefore, CWP will not contribute to any in-combination impacts to the ZSC *in situ*.

#### Ex situ impacts

877. The *ex situ* impact pathway, taking into account receptor population consideration and contextual descriptions, impacts associated with piling for the *ex situ* French ZSCs are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.



**Legend**

- Planning application boundary
- ★ North Channel 1
- ★ North Channel 2
- Dublin Array
- Moir Vannin
- 11 km EDR
- Harbour porpoise ZSCs

	Project: Codling Wind Park				
<b>Figure 9: 11 km EDR for mitigated piling from other OWF projects in relation to the French ZSCs designated for harbour porpoise</b>					
CWP doc. number: CWP-SMR-CON-09-MAP-2127					
Internal descriptive code: N/A	Size: A3 Scale:	CRS: EPSG 25830			
Rev.	Updates	Date	By	Chk'd	App'd
A	Final version	06/04/2026	JC	RRS/EA	EA

Data sources: CWP, 2023; NPWS, 2023; Subacoustech, 2023; etc  
Background: OSM; Chart 1468 (UKHO); ESRI orthophoto; Bluesky orthophoto; OSI 25 inch historical map; OSI Discovery map; etc  
Copyrights: © Crown Copyright, 2023. Licence No. EK001-524859; © British Crown and OceanWise, 2023. Licence No. EK001-FN800-03199; etc

© OpenStreetMap (and) contributors, CC-BY-SA

### *Geophysical surveys*

#### *In situ impacts*

878. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 3 km EDR from geophysical surveys at CWP with the French ZSCs. Therefore, CWP will not contribute to any in-combination impacts to the ZSCs *in situ*.

#### *Ex situ impacts*

879. For *ex situ* disturbance due to geophysical surveys, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the French ZSCs are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *UXO clearance*

#### *In situ impacts*

880. In line with the assessment of no AESI for CWP Alone (see **Section 2** (Volume 4) of the **NIS Addendum (Part 1)**), there is no overlap of the 5 km EDR from UXO clearance at CWP with the French ZSCs. Therefore, CWP will not contribute to any in-combination impacts to the ZSCs *in situ*.

#### *Ex situ impacts*

881. For *ex situ* disturbance due to UXO clearance, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the French ZSCs are the same as the *ex situ* impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Disturbance from other construction activities and vessels*

882. For disturbance due to other construction activities and vessels, taking into account receptor population consideration and contextual descriptions, in-combination impacts associated with geophysical surveys for the French ZSCs are the same as the impacts for the Rockall to Dalkey Island SAC. Please refer to section **3.2.2 Harbour porpoise**.

### *Conclusion*

883. The consequence of the increased underwater noise is a short-term behavioural disturbance, taking place intermittently over the course of the construction of the CWP and other projects. The temporary behavioural effects are unlikely to alter survival and reproductive rates to the extent that the population trajectory would be altered. There is no spatial overlap of the CWP and the French ZSCs. Therefore piling, geophysical surveys, UXO clearance, other activities as well as vessel movements associated with the CWP, in combination with other plans and projects, are unlikely to result in a significant negative impact on individuals or the harbour porpoise community within the site. They will also not lead to the permanent exclusion of harbour porpoise from any part of its range within the site. Subsequently, behavioural disturbance as a result of increased underwater noise will not adversely

affect the harbour porpoise community at the site. As such, it can be concluded beyond reasonable scientific doubt, that adverse effects on the qualifying Annex II marine mammal species, harbour porpoise, which undermine the COs of the French ZSCs will not occur as a result of behavioural disturbance from increased underwater noise generated in-combination other plans and projects.

## 4 NIS (IN-COMBINATION) CONCLUSION

Section 4 remains unchanged.

## 5 REFERENCES

References remains unchanged