

# Rampion 2 Wind Farm Category 6: Environmental Statement

## Volume 4, Appendix 22.15: Biodiversity Net Gain information

**Date: August 2023**  
**Revision A**

Document Reference: 6.4.22.15  
Pursuant to: APFP Regulation 5 (2) (a)  
Ecodoc number: 004866513-01



## Document revisions

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Revision	Date	Status/reason for issue	Author	Checked by	Approved by
A	04/08/2023	Final for DCO Application	WSP	RED	RED

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# 1. Introduction

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## 1.1 Background

- 1.1.1 Rampion Extension Development Limited (RED) has made a commitment for the Rampion 2 Offshore Wind Farm ('Rampion 2' and 'the Proposed Development') to deliver a Biodiversity Net Gain (BNG) of at least 10% for all onshore and intertidal (above the low water mark) habitats subject to permanent or temporary losses as a result of the construction and operation of the Proposed Development. This BNG is measured using Natural England's Biodiversity Metric 4.0 ('the metric') (Natural England and Other Parties, 2023).
- 1.1.2 A commitment to BNG is a positive benefit of the Proposed Development, however it is not a form of mitigation. Mitigation for individual ecological features is described within [Chapter 22: Terrestrial ecology and nature conservation, Volume 2](#) (Document Reference: 6.2.22) of the ES.
- 1.1.3 BNG is calculated based on a realistic worst-case scenario based on [Chapter 4: The Proposed Development, Volume 2](#) (Document Reference: 6.2.4) of the ES and the 'Maximum design scenario' described in [Section 22.7 of Chapter 22: Terrestrial ecology and nature conservation, Volume 2](#) (Document Reference: 6.2.22) of the ES.
- 1.1.4 This Appendix should be read in conjunction with:
- [Chapter 4: The Proposed Development, Volume 2](#) (Document Reference: 6.2.4) of the ES;
  - [Chapter 22: Terrestrial ecology and nature conservation, Volume 2](#) (Document Reference: 6.2.22) of the ES;
  - [Appendix 22.1: Policy and legislation tables, Volume 4](#) (Document Reference: 6.4.22.1) of the ES; and
  - [Appendix 22.3: Extended Phase 1 habitat survey report, Volume 4](#) (Document Reference: 6.4.22.3) of the ES.

## 1.2 Purpose of this Appendix

- 1.2.1 This biodiversity net gain information describes the methods and results of the analysis using the metric, the assumptions used to define a realistic worst-case scenario, the approach to refining BNG calculations at the detailed design stage, approach to delivering newly created and enhanced habitats to meet the target and how these will be secured for a period of at least 30 years.

## Structure of this Appendix

- 1.2.2 The remainder of the Appendix is structured as follows:
- **Section 2: Legislative and policy context;**

- **Section 3: Measuring Biodiversity Net Gain (BNG);**
- **Section 4: Biodiversity metric outputs;**
- **Section 5: Delivering Biodiversity Net Gain;**
- **Section 6: Glossary of terms and abbreviations; and**
- **Section 7: References.**

## 2. Legislative and policy context

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### 2.1 Legislation and national policy

- 2.1.1 The UK Government has repeatedly expressed the need to reverse the current trend in biodiversity loss being suffered across the UK, with a move towards a transitional position of no net loss followed by a realisation of BNG within various strategy documents. The “*Natural Environment White Paper - The natural choice: securing the value of nature*” (2011) and related strategy document “*Biodiversity 2020: A system for England’s wildlife and ecosystems services*” (2011) first described a transition towards BNG (to be achieved by 2020) to be implemented via government policy (for example through describing the concept robustly in the National Planning Policy Framework (Ministry of Housing, Communities and Local Government (MHCLG), 2021)). However, there has been a realisation that the current voluntary and arbitrary system has failed to deliver the aims of the strategy. Therefore, a universal system for delivering BNG in England was described in the Department for Environment, Food and Rural Affairs (Defra)’s “*A Green Future: Our 25-year plan to improve the environment*” (2018). This has culminated in a mandatory system for BNG, being written into legislation in the Environment Act 2021. This system will differ dependent on whether the development in question is covered by the Planning Act 2008 (as amended) or the Town & Country Planning Act 1990 (as amended).
- 2.1.2 Nationally Significant Infrastructure Projects (NSIPs) will need to deliver BNG in line with the relevant National Policy Statement (NPS) (or where a BNG policy is absent a Biodiversity Gain Statement published by the Secretary of State) by November 2025. The current Overarching National Policy Statement for Energy (EN-1) was published in 2011 (Department of Energy and Climate Change (DECC)) and therefore does not include a statement regarding BNG. The replacement for this NPS (‘draft EN-1’), published in March 2023 (Department for Energy Security and Net Zero (DESNZ)) contains a statement encouraging applicants to deliver BNG (see paragraph 4.5.5) measured using the most current version of the Defra and Natural England (2023) biodiversity metric. It also recommends delivery of BNG in a manner that best contributes to the achievement of wider strategic outcomes for biodiversity (as described in a Local Nature Recovery Strategy where available). It is expected that this will be altered to be in line with the Environment Act 2021 post the mandatory requirement coming in to force in 2025. Regardless, it is clear that Rampion 2 is not currently mandated to provide BNG based on a Development Consent Order Application (DCO) in 2023.
- 2.1.3 RED is seeking to deliver a renewable energy project that provides a positive legacy for the environment, both through delivery of low carbon electricity and by mitigating and compensating for the effects associated with construction and operation. As part of this effort, RED is making a commitment, to be secured through a requirement within the DCO, to deliver a BNG for onshore habitats of at least 10% in order to deliver a positive outcome for biodiversity.

## 2.2 Local planning policy

2.2.1 **Appendix 22.1: Policy and legislation tables, Volume 4** (Document Reference: 6.4.22.1) of the ES provides local planning policy relevant to the delivery of BNG. This is both by direct references to BNG, or in older documents, references to enhance biodiversity. The relevant policies are listed below:

- Arun District Council (2018), Adopted Arun Local Plan 2011 – 2031 (July 2018) - Policy ENV DM5 Development and biodiversity;
- South Downs National Park Authority (2019), Adopted South Downs Local Plan 2014 – 2033 (July 2019) – Strategic Policy SD9 Biodiversity and geodiversity;
- Horsham District Council (2015), Horsham District Planning Framework (excluding the South Downs National Park) (2015) – Policy 31 Green infrastructure and biodiversity;
- Horsham District Council (2020) Draft Horsham District Local Plan 2019 – 2036 (2018) - Policy 31 Green infrastructure and biodiversity;
- Mid Sussex District Council (2018) Mid-Sussex District Plan 2014 – 2031 (2018) – Policy DP38 Biodiversity.

2.2.2 These policies outline the expectations of local planning authorities that the majority of developments should seek to enhance biodiversity as a matter of course, as opposed to resulting in a net deterioration of the environment.



## 3. Measuring Biodiversity Net Gain

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- 3.1.1 BNG is a concept that in principle is straightforward (i.e. provide more biodiversity than that which is lost to development). However, to deliver a unified mandatory system it has been necessary for Natural England to develop the Biodiversity Metric 4.0 (Natural England and Other Parties, 2023). The metric works by considering:
- extent of habitat (measured in hectares (ha) or kilometres dependent on whether the habitat is linear or area-based);
  - how distinctive the habitat is (its complexity, rarity, diversity etc.);
  - its condition (its structure and management); and
  - its strategic location.
- 3.1.2 These elements are used both to determine the biodiversity value (measured in habitat units, hedgerow units and/or river units) of the losses due to a particular development, but also the gains made from its proposed habitat enhancement and creation measures.
- 3.1.3 The biodiversity value of the gains is refined based on a number of risk multipliers that account for the difficulty of habitat creation (e.g. it is easier to create ‘medium distinctiveness’ habitats such as other neutral grassland, than a ‘very high distinctiveness’ active raised bog), the time it takes for a habitat to reach target condition (e.g. a grassland reaches target condition quicker than a woodland), the location of delivery (i.e. habitat creation local to the biodiversity loss is worth more than habitat creation unrelated to the impact) and the time of delivery (e.g. before, during or after the losses have occurred).
- 3.1.4 The metric is also framed by a set of principles that seek to ensure:
- adherence to the mitigation hierarchy (i.e., avoid, mitigate, compensate, enhance);
  - the exclusion of designated sites and irreplaceable habitats from the main calculations (encouraging their avoidance and ensuring any losses are compensated for on a case-by-case basis);
  - the “like for like or better” replacement of habitats (e.g., removal of valuable woodland, requires replacement of woodland habitat, as opposed to replacement with grassland or other habitats that may provide more biodiversity unit value per hectare of creation). These elements are known as the “trading rules” (see **Table 3-1**);
  - habitats provided to deliver BNG will be managed for a minimum period of 30 years; and
  - losses and deterioration of irreplaceable or very high distinctiveness habitat cannot be accounted for through this metric.

**Table 3-1 Trading rules within the Biodiversity Metric 4.0 (Natural England and Other Parties, 2023)**

Habitat distinctiveness (baseline)	Distinctiveness of replacement habitat required
<b>Very high</b>	<i>“Losses are not permitted within this metric AND bespoke assessment and compensation are required.”</i>
<b>High</b>	<i>“Losses must be replaced with area units of the same habitat type.”</i>
<b>Medium</b>	<p><i>“Losses must be replaced by area units of either:</i></p> <p><i>Medium distinctiveness habitats within the same broad habitat type</i></p> <p><i>OR</i></p> <p><i>Any habitat from a higher distinctiveness band (from any broad habitat type)”</i></p>
<b>Low</b>	<i>“Losses must be replaced with area units of the same or higher distinctiveness band”</i>
<b>Very low</b>	<i>“Not applicable” (i.e., replacement not required)</i>

- 3.1.5 It is also notable that this system does not remove the legal obligations with regard to protected or notable species, or statutorily designated sites. These are considered where necessary and detailed within **Chapter 22: Terrestrial ecology and nature conservation, Volume 2** (Document Reference: 6.2.22) of the ES.
- 3.1.6 The adoption of the metric for Rampion 2 results in the provision of a calculation of biodiversity losses due to permanent infrastructure and temporary construction works (based on a realistic worst-case scenario), and gains associated with reinstatement of habitats subject to temporary works and the creation of new habitat at the onshore substation site. Also calculated is the estimated size of the deficit (measured in habitat, hedgerow and river units – referred to collectively as biodiversity units in this Appendix) that will need to be met through the purchase of biodiversity units from third party providers.
- 3.1.7 The following assumptions form the basis for the realistic worst-case scenario used as the basis for calculations:
- the proposed DCO Order Limits do not represent temporary habitat loss as they are drawn to enable micro-siting, the maximum design scenario (e.g., up to four cables), provide limits of deviation and different approaches to construction;
  - the onshore cable corridor, trenchless crossing compounds, temporary construction compounds, temporary construction accesses and onshore substation footprint represent temporary and permanent habitat loss

(operational access points are excluded as light access once or twice per year with a van or 4x4 required only, using existing tracks or driving along field edges as per current practice by land managers). Therefore, the habitats that make up these areas represent the baseline;

- within specified areas of loss, the **Vegetation Retention Plan** within **Appendix B** of the **Outline Code of Construction Practice (CoCP)** (Document Reference: 7.2) specifies those habitats that are to be retained;
- all habitat within trenchless crossing areas will be retained (other than in a small number of occurrences where a haul road is still required);
- habitats temporarily affected by construction will be reinstated within two years of loss other than in specific locations such as the onshore substation (see embedded environmental measure C-103);
- reinstated habitats (other than woodland) will be replaced with the same habitat type and at the same habitat condition as in the baseline (i.e. there is no enhancement proposed<sup>1</sup>);
- woodland (all types) lost temporarily will be replaced with scrub (due to need to protect transmission cables from root damage caused by large trees);
- areas listed on the Priority Habitat Inventory as floodplain and coastal grazing marsh that support grassland (as opposed to where arable conversion has taken place) are specified as this habitat type (i.e., not as the improved pasture shown on Phase 1 habitat maps – see **Appendix 22.3: Extended Phase 1 habitat survey report, Volume 4** (Document Reference: 6.4.22.3) of the ES;
- management of hedgerows, scrub and trees along existing tracks and highways (as per typical management to reduce overhang), or the reduction in height of hedgerows and scrub (to 0.9m) for visibility splays at access/egress points from the highway is assumed to be retained habitat (see **Outline Code of Construction Practice**) (Document Reference: 7.2);
- strategic significance has been applied to each habitat as described in **Table 4-1; Table 4-2** and **Table 4-3**. However, this has been completed without any Local Nature Recovery Strategy (LNRS) being published. Should an LNRS be published post DCO award this will be further considered during the detailed design phase (see **Section 5**); and
- habitats that can be temporarily lost and reinstated to baseline condition within 2 years of loss are entered into the metric and shown as retained. For Rampion 2, this status has not been attributed to any habitats as the commitment to reinstate has been stated as 2 years (see **Chapter 22: Terrestrial ecology and nature conservation, Volume 2** (Document Reference: 6.2.22) of the ES)

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<sup>1</sup> No enhancement is specified as ensuring specified enhancements of biodiversity are achieved in a narrow corridor across multiple landowners is unrealistic, especially as the transmission assets will need to be sold to an Offshore Transmission Operator once completed (as per Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2009).

at this juncture as a detailed schedule will not be available until the detailed design phase.

## 4. Biodiversity Metric Outputs

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### 4.1 Baseline conditions

- 4.1.1 A classification of the habitats on-site and their condition was undertaken between April 2020 and March 2023 (see [Appendix 22.3: Extended Phase 1 habitat survey report, Volume 4](#) (Document Reference: 6.2.22) of the ES). The approach taken to gather the ecological baseline for the sites accords with that outlined in the Chartered Institute of Ecology and Environmental Management's (CIEEM) 'Good Practice Guidelines for Habitats and Species' (2021) and generally following the condition assessment criteria as outlined in the Biodiversity Metric 4.0 Technical Annex 2 – Technical Information (Natural England and Other Parties, 2023). As the guidelines for habitat condition have evolved over the course of the data collection period, professional judgement has been used to determine a final condition status, using survey notes against the latest published criteria. This has also been necessary for areas where habitats were recorded from Public Rights of Way (PRoW) due to land access restrictions, where habitat type could be established however details underpinning habitat condition criteria could not.
- 4.1.2 The baseline conditions across the onshore cable route are expected to remain relatively static between the submission of the DCO Application and the commencement of construction works. However, some changes may occur such as changes in locations of agri-environment prescriptions, the planting of new hedgerows and changes associated with highway works or local planning applications coming forward. Given the scale of the Proposed Development and the uncertainty in what will or will not be present by the expected construction commencement in 2025 all calculations have been undertaken based on existing survey information.
- 4.1.3 The construction schedule (see [Chapter 4: The Proposed Development, Volume 2](#) (Document Reference: 6.2.4) outlines the construction phase as a duration of five years. However, due to the nature of the Proposed Development, the majority of habitat loss and reinstatement is delivered on a rolling programme and therefore, no delay associated with reinstatement has been allowed for. At the onshore substation site, reinstatement of temporarily lost habitats will be undertaken over a longer period, however there will also be habitat creation taking place prior to losses occurring (including the securing of off-site biodiversity units – see [Section 5](#)). Due to the uncertainty that will be resolved in the detailed design stage, no advance or delay has been assumed in the metric. This approach has also been applied to the securing of BNG prior to construction commencing (i.e., no advance has been accounted for). It should be noted that final calculations based on the detailed design will underpin the final delivery of the BNG commitment (see [Section 5](#)).
- 4.1.4 **Table 4-1** to **Table 4-3** show a summary of the data input to the BNG metric to form the baseline with each habitat type and its size noted, the unit value of each

habitat type and information on the extent of habitat retained<sup>2</sup>, reinstated or permanently lost.

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<sup>2</sup> Within the metric areas referred to in this Appendix to be 'reinstated' are entered as 'Site Habitat Creation'.

**Table 4-1 Baseline input of area-based habitat units and habitat status following temporary and permanent habitat loss**

Habitat type	Habitat condition	Extent (ha)	Habitat units	Areas retained (ha)	Areas to be reinstated (ha)	Areas permanently lost (ha)	Strategic significance
<b>Coastal and floodplain grazing marsh (CFGM)<sup>3</sup></b>	Moderate	2.5	34.50	0.00	2.50	0.00	Formally identified in local strategy. CFGM in the Arun and Adur Valleys. Areas lie within Biodiversity Opportunity Areas (BOA) (namely Climping to Houghton and Woodmill Stream to Adur).
<b>Other neutral grassland</b>	Moderate	0.96	8.45	0.00	0.96	0.00	Location ecologically desirable but not in local strategy. Occurs in several small patches both within and outside BOAs and the South Downs National Park (SDNP).
<b>Modified grassland</b>	Poor	72.73	145.46	0.00	69.98	2.75	Area / compensation not in local strategy / no local strategy. Habitat is widespread and common and not the target of any BOA (although areas do overlap).
<b>Modified grassland</b>	Moderate	18.18	72.72	0.00	17.92	0.26	Area / compensation not in local strategy / no local strategy. Habitat is widespread and common and not the

<sup>3</sup> Habitat type in the Biodiversity Metric 4.0 is “Floodplain wetland mosaic and CFGM”

Habitat type	Habitat condition	Extent (ha)	Habitat units	Areas retained (ha)	Areas to be reinstated (ha)	Areas permanently lost (ha)	Strategic significance
							target of any BOA (although areas do overlap).
<b>Cereal crops</b>	Condition assessment N/A	77.48	154.96	0.00	69.11	8.37	Area / compensation not in local strategy / no local strategy. Habitat is widespread and common and not the target of any BOA (although areas do overlap).
<b>Arable field margins tussocky<sup>4</sup></b>	Condition assessment N/A	2.00	8.00	0.00	2.00	0.00	Area / compensation not in local strategy / no local strategy. Habitat is widespread and common and not the target of any BOA (although areas do overlap).
<b>Ruderal / Ephemeral</b>	Poor	0.03	0.06	0.00	0.03	0.00	Area / compensation not in local strategy / no local strategy. Habitat is widespread and common and not the target of any BOA (although areas do overlap).
<b>Bare ground</b>	Poor	1.17	2.34	0.00	1.17	0.00	Area / compensation not in local strategy / no local strategy. Habitat is widespread and common and not the

<sup>4</sup> A proxy for habitat strips along arable field edges (a habitat that changes frequently due to typical farm management)



Habitat type	Habitat condition	Extent (ha)	Habitat units	Areas retained (ha)	Areas to be reinstated (ha)	Areas permanently lost (ha)	Strategic significance
							target of any BOA (although areas do overlap).
<b>Developed land sealed surface</b>	N/A – Other	0.36	0.00	0.00	0.36	0.00	Area / compensation not in local strategy / no local strategy. overlap)
<b>Lowland mixed deciduous woodland</b>	Moderate	0.06	0.83	0.00	0.06 <sup>5</sup>	0.00	Formally identified in local strategy. Woodland within Clapham to Burpham Down BOA.
<b>Other woodland; broadleaved</b>	Moderate	0.46	4.05	0.12	0.34 <sup>5</sup>	0.00	Location ecologically desirable but not in local strategy. Several woodland blocks within or close to various BOAs and / or the SDNP.
<b>Mixed scrub</b>	Moderate	1.00	8.80	0.00	1.00	0.00	Location ecologically desirable but not in local strategy. Scrub within or close to various BOAs and / or the SDNP.
<b>Rural tree</b>	Good	0.23	3.04	0.00	0.00	0.23	Location ecologically desirable but not in local strategy. Three individual oak trees not related to hedgerows, woodland etc.
<b>TOTAL</b>	-	<b>177.16</b>	<b>443.20</b>	<b>0.12</b>	<b>165.43</b>	<b>11.61</b>	

<sup>5</sup> Reinstated as mixed scrub

**Table 4-2 Baseline input of hedgerow units and hedgerow status following temporary and permanent habitat loss**

Habitat type	Hedgerow condition	Length (km)	Hedgerow units	Length retained (km)	Length reinstated (km)	Length permanently lost (km)	Strategic significance
Species-rich native hedgerow	Good	0.22	2.90	0.17	0.05	0.00	All hedgerows / tree lines have been assumed to be 'Location ecologically desirable but not in local strategy' to represent their importance as habitats in their own right and for connectivity.
Species-rich native hedgerow	Moderate	0.44	3.87	0.34	0.10	0.00	
Species-rich native hedgerow	Poor	0.22	0.97	0.17	0.05	0.00	
Native hedgerow	Moderate	0.98	4.31	0.64	0.26	0.08	
Native hedgerow (intact native hedgerow)	Poor	0.98	2.16	0.64	0.34	0.00	
Native hedgerow (defunct native hedgerow)	Poor	0.39	0.86	0.28	0.11	0.00	
Species-rich native	Good	0.05	0.99	0.04	0.01	0.00	

Habitat type	Hedgerow condition	Length (km)	Hedgerow units	Length retained (km)	Length reinstated (km)	Length permanently lost (km)	Strategic significance
<b>hedgerow with trees</b>							
<b>Species-rich native hedgerow with trees</b>	Moderate	0.10	1.32	0.06	0.04	0.00	
<b>Species-rich native hedgerow with trees</b>	Poor	0.05	0.33	0.04	0.01	0.00	
<b>Native hedgerow with trees</b>	Moderate	0.54	4.75	0.22	0.05	0.27	
<b>Native hedgerow with trees</b>	Poor	0.54	2.38	0.22	0.05	0.27	
<b>Line of trees (broadleaved)</b>	Moderate	2.45	10.78	2.11	0.34	0.00	
<b>Line of trees (mixed)</b>	Moderate	0.18	0.79	0.15	0.03	0.00	
<b>TOTAL</b>		<b>7.14</b>	<b>36.41</b>	<b>5.08</b>	<b>1.44</b>	<b>0.62</b>	

**Table 4-3 Baseline input of river units and habitat status following temporary habitat loss**

Habitat type	River condition	Length (km)	River units	Length retained (km)	Length reinstated (km)	Length permanently lost (km)	Notes
<b>Other rivers and streams</b>	Moderate	0.15	1.50	0.00	0.15	0.00	All streams and ditches have been assumed to be 'Location ecologically desirable but not in local strategy' to represent their importance as habitats in their own right and for connectivity.
<b>Other rivers and streams</b>	Poor	0.15	0.75	0.00	0.15	0.00	
<b>Ditches</b>	Poor	0.36	1.20	0.00	0.36	0.00	
<b>TOTAL</b>		<b>0.66</b>	<b>3.45</b>	<b>0.00</b>	<b>0.66</b>	<b>0.00</b>	

4.1.5 The total number of baseline units calculated for the worst-case realistic scenario are:

- Habitat units: 443.20;
- Hedgerow units: 36.41; and
- River units: 3.46.

4.1.6 The total number of units lost to the Proposed Development are:

- Habitat units: 76.14;
- Hedgerow units: 5.75; and
- River units: 1.07.

4.1.7 The losses in **paragraph 4.1.6** account for temporary and permanent loss of habitat but include the reinstatement of habitats following construction. They do not include the addition of 'new' habitat creation at the onshore substation site at Oakendene, or within the extension of the existing National Grid Bolney substation.

## 4.2 Habitat creation measures at onshore substation at Oakendene and existing National Grid Bolney substation

4.2.1 Habitat creation at the onshore substation site at Oakendene includes elements that will be delivered prior to construction commencing, those that will follow completion of the compound fencing and sustainable drainage infrastructure and finally habitats established following completion of construction.

4.2.2 The habitats to be created at the onshore substation site at Oakendene include:

- Other woodland; broadleaved – 0.8ha;
- Wet woodland – 1.9ha;
- Mixed scrub 0.9ha; and
- Individual trees – 9 standards to be planted.

4.2.3 The habitats to be created at the existing National Grid Bolney substation extension include:

- Individual trees – 31 standards to be planted.

4.2.4 The habitats to be created at the onshore substation site are assumed to be elements of BNG that will be secured in the long term and therefore included in these outline calculations (see **Annex A**). However, this would need to be agreed with the landowner during future land rights negotiations. Any changes to the position described will be reflected in the calculations following detailed design.

4.2.5 The habitats to be created are outlined in **Table 4-4**. **Table 4-5** provides an overview of the losses and gains for the Proposed Development within the proposed DCO Order Limits.

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**Table 4-4 Proposed area-based habitat creation and calculated units delivered at the onshore substation at Oakendene and existing National Grid Bolney substation extension**

Habitat type	Extent (ha)	Target condition	Time to target condition	Units delivered	Strategic significance
<b>Other woodland; broadleaved</b>	0.8	Moderate	15	4.13	Location ecologically desirable but not in local strategy.
<b>Wet woodland</b>	1.9	Moderate	15	9.85	Location ecologically desirable but not in local strategy.
<b>Mixed scrub</b>	0.9	Moderate	5	6.63	Location ecologically desirable but not in local strategy.
<b>Individual trees</b>	1.5	Moderate	27	5.04	Location ecologically desirable but not in local strategy.
<b>TOTAL</b>	<b>5.1</b>	<b>-</b>	<b>-</b>	<b>25.65</b>	

**Table 4-5 Baseline input and calculated losses and gains of biodiversity units for the Proposed Development**

<b>Unit type</b>	<b>Baseline units</b>	<b>Post-construction units</b>	<b>Net unit change</b>	<b>Percentage change (%)</b>	<b>Unit shortfall inc. 10% BNG</b>
<b>Habitat</b>	443.20	392.71	-50.49	-11.39	94.81
<b>Hedgerow</b>	36.41	30.66	-5.75	-15.79	9.39
<b>River</b>	3.46	2.39	-1.07	-30.93	1.42



- 4.2.6 **Table 4-5** shows that there will be a net loss to biodiversity as a result of the Proposed Development without the delivery of additional off-site biodiversity units. This loss is driven by permanent habitat loss (at the onshore substation site and the connection at the existing National Grid Bolney substation) and the reduction in biodiversity caused by the risk multipliers assigned to the reinstatement works that are aiming to deliver (for the vast majority of situations) the same habitat type at the same condition as in the current baseline.
- 4.2.7 In order to satisfy trading rules<sup>6</sup>, particular habitat units will be required to meet the BNG commitment. These are:
- Coastal and floodplain grazing marsh;
  - Lowland mixed deciduous woodland;
  - Other woodland; broadleaved;
  - Species-rich native hedgerow with trees; and
  - Other rivers and streams.
- 4.2.8 Given the nature of some of the habitats (CFGM, lowland mixed deciduous woodland and other rivers and streams), it is likely that a large number of the units required to satisfy the trading rules will be delivered through enhancement of current habitats. This is because creation of these habitats is challenging as it is reliant on physical elements including topography (e.g., within a flood zone).
- 4.2.9 Habitat creation to deliver other types of woodland, grassland and scrub are likely to be created, leading to an overall increase in the extent of habitats that are managed for biodiversity.

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<sup>6</sup> Including additional rules around replacement of woodland of medium distinctiveness with woodland only as per Natural England and Other Parties, 2023 (User Guide - paragraph 6.8).



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## 5. Delivering Biodiversity Net Gain

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### 5.1 Accounting for detailed design of the Proposed Development

- 5.1.1 The design of the onshore elements of the Proposed Development is described within [Chapter 4: The Proposed Development, Volume 2](#) (Document Reference: 6.2.4) of the ES. The onshore elements of the Proposed Development include the flexibility, within specified limits, to design the Proposed Development to correspond with the rapidly evolving nature of the renewables industry. This flexibility has implications for the extent of habitat loss, for example should the maximum number of circuits (four cables) not be required then the size of the construction working area would be reduced, as would also be apparent if the number of temporary construction compounds were reduced. Therefore, a realistic worst-case scenario has been developed to both inform the assessment within [Chapter 22: Terrestrial ecology and nature conservation, Volume 2](#) (Document Reference: 6.2.22) of the ES and the BNG calculations described within this biodiversity gain information.
- 5.1.2 However, this is likely to be an over-estimation of the losses that are likely to occur. Detailed design is likely to see the maximum design scenario reduced as efficiencies in delivery cost, schedule and electrical transmission are accounted for in detail.
- 5.1.3 The detailed design scenario will therefore be used to determine a more accurate estimation of the number of off-site units that will need to be delivered to ensure the commitment of delivering at least 10% BNG is met.
- 5.1.4 It is noted that the detailed design may be delivered in phases (e.g., detailed design of the onshore substation may precede that of the transmission cable). Therefore, the calculation of biodiversity losses and gains may also be delivered on a phase-by-phase basis.

### 5.2 Timing of delivery

- 5.2.1 To avoid a deficit in biodiversity growing as the construction programme progresses, the Proposed Development will follow two courses of action. The first is to enable a progressive reinstatement of habitats, whilst the second is to secure 70%<sup>7</sup> of the deficit (as calculated in [Table 4-5](#) – i.e., as a realistic worst-case scenario) prior to commencement of construction. Any remaining shortfall identified following detailed design will be secured prior to construction works being completed.

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<sup>7</sup> It is expected that 70% of the deficit as calculated at [Table 4-5](#), will likely be equivalent to that which will be necessary to provide to secure the commitment once detailed design has been completed.

5.2.2 Prior to commencement of construction, the Proposed Development will secure:

- 67 habitat units;
- 7 hedgerow units; and
- 1 river unit.

5.2.3 When delivering these units ahead of the commencement of construction, RED will focus on obtaining units derived from the following habitats: coastal and floodplain grazing marsh, lowland mixed deciduous woodland, species rich native hedgerow with trees and other rivers and streams,

## 5.3 Sourcing Biodiversity Units

5.3.1 RED will not seek to secure and manage land for the purposes of BNG directly. This is because the onshore transmission assets, as required by law, will need to be passed to an Offshore Transmission Owner (OFTO) once energised, who may not have the capability for ongoing management. Therefore, biodiversity units would be sourced from landowners whose land is within the Proposed DCO Order Limits via a third party (such as strategic BNG scheme or via a habitat bank) and / or habitat banks that are being set up to service the mandatory BNG market that is created through the Environment Act 2021.

5.3.2 RED has not secured any off-site units currently. This is because the commencement of construction is not scheduled until 2026, and the detailed design phase is scheduled to take place post-DCO award. However, discussions have been held with affected landowners and a number of stakeholders.

5.3.3 Three landowners with interest over large land holdings (including in Biodiversity Opportunity Areas identified by the Local Nature Partnership) have expressed interest to RED for the delivery of biodiversity units in support of meeting the BNG commitment.

5.3.4 In addition to the landowners, the following organisations have been contacted:

- The Weald to Waves Project (part of the Sussex Regeneration Collective) which is coordinating landowners and identifying opportunities for biodiversity enhancement and associated funding streams across an area that overlaps with the proposed DCO Order Limits. This project is in the early stage of development and therefore, marketable biodiversity units should be available at the necessary juncture to enable the Proposed Development; and
- Commercial entities involved in habitat banking who have confirmed that they are in the process of developing relationships with various landowners and projects (such as the Weald to Waves Project) to bring biodiversity units to the developing market.

5.3.5 South Downs National Park Authority and Wessex County Council have also identified that the Sussex Nature Partnership (in collaboration with the Environment Agency) is currently in the process of identifying strategic areas for the delivery of BNG.

5.3.6 The location of the biodiversity units will be important, both to minimise risk multipliers applying in the metric, but also to ensure that the positive legacy is local

to the affected area. The location of the biodiversity units will be focused on areas inside or within close proximity to the proposed DCO Order Limits wherever possible<sup>8</sup>. However, dependent on availability of biodiversity units this area could be extended across West Sussex. However, a strict prioritisation exercise will take place with units being favoured (subject to reasonable cost consideration and type of unit needed to satisfy metric trading rules) in the following order:

- within the proposed DCO Order Limits or within 2km of them on land owned / managed by affected parties (this would attract a spatial risk of ‘compensation inside LPA or NCA or deemed to be sufficiently local to site of biodiversity loss’). Priority within this category would be given to any areas of land available for habitat enhancement / creation within a future Local Nature Recovery Strategy (or if not available within existing Biodiversity Opportunity Areas);
- within 2km of the proposed DCO Order Limits on land owned / managed by those not directly affected by permanent or temporary land take due to the Proposed Development (this would attract a spatial risk of ‘compensation inside LPA or NCA or deemed to be sufficiently local to site of biodiversity loss’). Priority within this category would be given to any areas of land available for habitat enhancement / creation within a future Local Nature Recovery Strategy (or if not available within existing Biodiversity Opportunity Areas);
- within the River Arun Lower or Adur Upper Operational Catchments (this would attract a spatial risk of ‘compensation inside LPA or NCA or deemed to be sufficiently local to site of biodiversity loss’). Priority within this category would be given to any areas of land available for habitat enhancement / creation within a future Local Nature Recovery Strategy (or if not available within existing Biodiversity Opportunity Areas);
- within the National Character Areas (NCAs) of South Coast Plain, South Downs or Low Weald when in West Sussex (this would attract a spatial risk of ‘compensation inside LPA or NCA or deemed to be sufficiently local to site of biodiversity loss’). Priority within this category would be given to any areas of land available for habitat enhancement / creation within a future Local Nature Recovery Strategy (or if not available within existing Biodiversity Opportunity Areas); and
- within other NCAs in West Sussex (this would attract a spatial risk of ‘compensation outside LPA or NCA but in neighbouring LPA or NCA’).

5.3.7 Based on current understanding, it is likely that all required biodiversity units could be delivered within the first two bullet points in **paragraph 5.3.6**.

## 5.4 Securing Biodiversity Net Gain

5.4.1 Biodiversity gain information based on the detailed design would be drafted for discussion and agreement with West Sussex County Council and South Downs National Park Authority (SDNPA).

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<sup>8</sup> Proximity is based on Local Planning Authority (LPA) areas and National Character Areas (NCA) within Biodiversity Metric 4.0.

- 5.4.2 In parallel to the calculations of the need for off-site biodiversity units at the detailed design stage, options for delivering BNG will be determined. A short-list of options<sup>9</sup> would be compiled that would ensure that trading rules could be satisfied, that were most local to the losses or connected to strategic projects key to the Local Nature Recovery Network. This would be informed by discussions with biodiversity unit providers (to identify availability) and West Sussex County Council and SDNPA (to understand local priorities).
- 5.4.3 Prior to securing the necessary units to meet the commitment, the short-list would be discussed with West Sussex County Council and SDNPA to agree the biodiversity units to be provided pre-commencement of construction. This discussion would enable the biodiversity gain information to be finalised for sign off with West Sussex County Council and SDNPA.
- 5.4.4 Once the biodiversity gain information has been formally agreed, the biodiversity units would then be purchased and proof of transaction provided to West Sussex County Council and SDNPA. These biodiversity units would also be entered on to Natural England's register of land for off-site biodiversity gain<sup>10</sup>.
- 5.4.5 The commitment to Biodiversity Net Gain is secured through a requirement.

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<sup>9</sup> Potentially secured through options agreements (dependent on how the market develops in the intervening period).

<sup>10</sup> This register is expected to be in general usage by the end of 2023.

## 6. Glossary of terms and abbreviations

**Table 6-1 Glossary of terms and abbreviations**

<b>Term (acronym)</b>	<b>Definition</b>
<b>Baseline Conditions</b>	The environment as it appears (or would appear) immediately prior to the implementation of the Proposed Development together with any known or foreseeable future changes that will take place before completion of the Proposed Development.
<b>BNG</b>	Biodiversity Net Gain
<b>Code of Construction Practice (CoCP)</b>	The code sets out the standards and procedures to which developers and contractors must adhere to when undertaking construction of major projects. This will assist with managing the environmental impacts and will identify the main responsibilities and requirements of developers and contractors in constructing their projects.
<b>Development Consent Order (DCO) Application</b>	An application for consent under the Planning Act 2008 to undertake a Nationally Significant Infrastructure Project made to the Planning Inspectorate who will consider the application and make a recommendation to the Secretary of State, who will decide on whether development consent should be granted for the Proposed Development.
<b>Environmental Impact Assessment (EIA)</b>	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing circumstances (or 'baseline').
<b>Environmental Statement (ES)</b>	The written output presenting the full findings of the Environmental Impact Assessment.
<b>LPA</b>	Local Planning Authority
<b>National Policy Statements (NPS)</b>	<p>Part 2 of the Planning Act 2008 sets out the national policy against which NSIP applications are assessed. NPSs set out guidance to inform the decision-making process for NSIPs. NPSs relevant to energy generation include:</p> <p>Overarching National Policy Statement for Energy (EN-1) (DECC, 2011a);            National Policy Statement for Renewable Energy (EN-3) (DECC, 2011b); and            National Policy Statement for Electricity Networks (EN-5) (DECC, 2011c).</p>

<b>Term (acronym)</b>	<b>Definition</b>
<b>NCA</b>	National Character Area
<b>NCA</b>	National Character Area
<b>NPPF</b>	National Planning Policy Framework
<b>OFTO</b>	Offshore Transmission Owner
<b>Proposed DCO Order Limits</b>	The proposed DCO Order Limits combines the search areas for the offshore and onshore infrastructure associated with the Proposed Development. It is defined as the area within which the Proposed Development and associated infrastructure will be located, including the temporary and permanent construction and operational work areas.
<b>Proposed Development</b>	The development that is subject to the application for development consent, as described in <a href="#">Chapter 4: The Proposed Development, Volume 2</a> of the ES (Document Reference: 6.2.4).
<b>SAC</b>	Special Area of Conservation
<b>SDNPA</b>	South Downs National Park Authority



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