

### Breeding Raptor Survey

Buzzard were observed on 148 occasions during the breeding raptor surveys (see Appendix 7-4, Figure 7-4-33). Buzzard were recorded at all six survey locations, and on all or most survey dates at each location. Observations were of between one and six birds, with most observations being of birds commuting, hunting, soaring or perched. There were 16 observations relating to breeding behaviour, including displaying, mobbing, provisioning and chicks calling (see Confidential Appendix 7-5, Figure 7-5-5). These observations related to four confirmed breeding territories, three of which were confirmed to have fledged at least one chick. The territories ranging from approximately 600m to 2.3km from the nearest turbine.

### Incidental Observations

Buzzard were observed on 31 occasions as incidental records during waterbird distribution and abundance surveys (see Appendix 7-4, Figure 7-4-34). All observations were of one or two birds commuting, hunting or perched. Observations ranged from approximately 1.3km to 11km from the nearest turbine.

### Breeding Summary

In summary, there were four confirmed breeding territories identified during the survey period ranging from approximately 600m to 2.3km from the nearest turbine. The observations of probable breeding behaviour during surveys are likely associated with these confirmed territories. All breeding territories are presented in Confidential Appendix 7-5, Figure 7-5-6.

## 7.3.8.15 Sparrowhawk

Sparrowhawk were observed in the breeding and winter seasons. Raw survey data and maps are provided in Appendix 7-4.

### Vantage Point Surveys

Sparrowhawk were observed on five occasions during the vantage point surveys (see Appendix 7-4, Figure 7-4-35). Sparrowhawk were observed, on average, once every 29 hours of surveys. All observations were of one or two birds commuting or hunting. There were two observations within 500m of the turbines, this represents 40% of observations during these surveys. There were only two observations during the core breeding season for this species (April to August). There was no evidence of breeding recorded during these surveys.

### Breeding Walkover Surveys

Sparrowhawk were observed on only two occasions during the breeding walkover surveys (see Appendix 7-4, Figure 7-4-36). Sparrowhawk were recorded on 25% of survey dates. Both observations were of individuals commuting and soaring. Both observations were within 500m of the turbines. There was no evidence of breeding recorded during these surveys.

### Breeding Raptor Survey

Sparrowhawk were observed on three occasions during the breeding raptor surveys (see Appendix 7-4, Figure 7-4-37). Sparrowhawk were recorded at two of the six survey locations, and on average on one survey date per location. All observations were of individuals commuting. Observations were between approximately 300m and 2.7km from the nearest turbine. There was no evidence of breeding recorded during these surveys.

### 7.3.8.16 Passerines (Red Listed)

The BoCCI Red listed species grey wagtail, meadow pipit, redwing, stock dove, swift and yellowhammer were recorded during the surveys. Grey wagtail were observed on 18 occasions, with up to two birds being recorded per observation. Meadow pipit were observed on 11 occasions, with up to six birds being recorded. Redwing were observed on seven occasions, with up to 56 birds being recorded. Stock dove were observed on nine occasions, with up to two birds being recorded. Swift were observed on six occasions, with up to two birds being recorded. Yellowhammer were observed on 84 occasions, with up to four birds being recorded.

## 7.4 Receptor Evaluation

### 7.4.1 Determination of Population Importance

A determination of population importance for birds within the likely ZOI is provided below, following criteria described in Section 7.2.6. Estimates of national population sizes were obtained from the most recent species-specific national survey, or national surveys by Burke *et al.* (2018), Lewis *et al.* (2019a), Crowe *et al.* (2014) and Lewis *et al.* (2019b), or Ireland's Article 12 Reporting 2013-2018 (EU, 2022), depending on what literature was available. Estimates for mean county population sizes were obtained from species-specific surveys, a review of I-WeBS sites within Wexford<sup>1</sup>, or derived from national estimates, according to what literature was available.

Following NRA (2009), a population of National Importance is a regularly occurring population that exceeds 1% of the national population. Similarly, a population of County Importance is a regularly occurring population that exceeds 1% of the county population. Locally Important (Higher Value) populations are resident or regularly occurring species of conservation concern of importance at the local level, while Locally Important (Lower Value) populations are resident or regularly occurring species of some local importance.

#### 7.4.1.1 Golden Plover

The national wintering population of golden plover is estimated to be 80,707 birds (Burke *et al.*, 2018) and the county wintering population is estimated to be 17,293 birds<sup>2</sup> (I-WeBS mean count for the period 2016/17 – 2020/21). Therefore, as per NRA (2009), a regularly occurring population of 807 birds is required for classification as National Importance and of 172 birds for classification as County Importance.

This species was infrequently recorded during surveys, with only four observations of up to 150 birds within a 500m radius of turbines. Given how infrequently birds were observed and that there were no observations exceeding the threshold of county importance, there is **no evidence of a regularly occurring population of ecological significance** using the site.

#### 7.4.1.2 Kingfisher

The national breeding population of kingfisher is estimated to be 368–1031 pairs (NPWS Article 12 Reporting). There are no published figures for the County Wexford population of kingfisher. Using the

<sup>1</sup> Please note that these figures are estimates based on the best available information but should be interpreted with a degree of caution.

<sup>2</sup> It is likely that this figure is an underestimate of the county population given that this species will utilise agricultural grasslands and other habitats not typically surveyed during I-WeBS counts.

distribution of kingfisher across Ireland from the breeding bird atlas<sup>3</sup> (2007-2011) the County population of kingfisher is estimated to be 7-21 pairs. Therefore, as per NRA (2009), and taking the conservative minimum value, a regularly occurring breeding population of four pairs is required for classification as National Importance and of one pair for classification as County Importance. There are no estimates available for the national wintering kingfisher population due to survey constraints, although this species is believed to be widely distributed (Cummins *et al.*, 2010b). Similarly, I-WeBS counts are generally too limited to provide an estimate for the county wintering population. Thus, in the absence of national and county population estimate, and following the precautionary principle, regular records of wintering kingfisher are treated as County Importance.

This species was recorded on three occasions during the survey period, over 3.7km from the site. Based on this low frequency of occurrence and the separation distance of observations, there is **no evidence of a regularly occurring population of ecological significance** using the site.

### 7.4.1.3 Peregrine Falcon

The national breeding population of peregrine is estimated to be 425 pairs (National Breeding Peregrine Survey 2017). There are no published figures for the County Wexford population of peregrine. Using the distribution of peregrine across Ireland from the breeding bird atlas<sup>4</sup> (2007-2011) the County population of peregrine is estimated to be 12 pairs. Therefore, as per NRA (2009), a regularly occurring breeding population of four pairs is required for classification as National Importance and of one pair for classification as County Importance. There are no estimates available for the national or county wintering population. Thus, in the absence of national and county population estimate, and following the precautionary principle, regular records of wintering peregrine are treated as County Importance.

This species was recorded on four occasions at the site during surveys. Taking a precautionary approach, given the number of observations and the nature of this species, the population recorded at the site could be associated with a population of **County Importance**.

### 7.4.1.4 Black-headed Gull

The national wintering population of black-headed gull is estimated to be 48,821 birds (Lewis *et al.*, 2019a) and the county wintering population is estimated to be 4,306 birds<sup>5</sup> (I-WeBS mean count for the period 2016/17 – 2020/21). Therefore, as per NRA (2009), a regularly occurring population of 488 birds is required for classification as National Importance and of 43 birds for classification as County Importance.

Black-headed gull were regularly recorded at the site during the winter season only, with a peak count of 215 birds being observed. Flocks of county importance (>43 birds) were recorded on two occasions at the site. All observations occurred during the winter season, therefore the site is likely of no ecological significance to this species during the breeding season.

Black-headed gull are an SCI species for Wexford Harbour and Slobs SPA (wintering population only). The foraging distance of black-headed gull is a maximum of 40km (Thaxter *et al.*, 2012), therefore there is potential for the population at the Proposed Development to be associated with this SPA.

<sup>3</sup> Bird Atlas data from the National Biodiversity Data Centre was used to estimate the county population. Presence/absence hectad data was used to estimate the proportion of the national population that occurs in the county. The national population was then multiplied by this percentage to give a county population estimate.

<sup>4</sup> Bird Atlas data from the National Biodiversity Data Centre was used to estimate the county population. Presence/absence hectad data was used to estimate the proportion of the national population that occurs in the county. The national population was then multiplied by this percentage to give a county population estimate.

<sup>5</sup> It is likely that this figure is an underestimate of the county population given that this species will utilise agricultural grasslands and other habitats not typically surveyed during I-WeBS counts.

For the winter season, on a precautionary basis, it is considered that observations were associated with a population of **County Importance**.

#### 7.4.1.5 Brent Goose

The national wintering population of Brent goose is estimated to be 30,295 birds (NPWS Article 12 Reporting) and the county wintering population is estimated to be 3,215 birds (I-WeBS mean count for the period 2016/17 – 2020/21). Therefore, as per NRA (2009), a regularly occurring population of 302 birds is required for classification as National Importance and of 32 birds for classification as County Importance.

Brent geese were only observed on one occasion during surveys, with a flock of seven birds being observed. Furthermore, this observation was approximately 3.8km from the nearest turbine and there were no observations within the site. Therefore, there is **no evidence of a regularly occurring population of ecological significance** using the site.

#### 7.4.1.6 Cormorant

The national wintering population of cormorant is estimated to be 7,967 birds (NPWS Article 12 Reporting) and the county wintering population is estimated to be 316 birds (I-WeBS mean count for the period 2016/17 – 2020/21). Therefore, as per NRA (2009), a regularly occurring population of 79 birds is required for classification as National Importance and of just 3 birds for classification as County Importance.

Cormorants were only observed during waterbird distribution and abundance surveys, with the closest observation being approximately 3.3km from the nearest turbine. Therefore, there is **no evidence of a regularly occurring population of ecological significance** using the site.

#### 7.4.1.7 Grey Heron

The national population of grey heron is estimated to be 1,943 birds in winter and 3,087 pairs during the breeding season (NPWS Article 12 Reporting) and the county wintering population is estimated to be 61 birds (I-WeBS mean count for the period 2016/17 – 2020/21). The majority of observations were in the winter season, therefore, as per NRA (2009), a regularly occurring population of 19 birds is required for classification as National Importance and of just one bird for classification as County Importance during the winter season.

There was only one observation of grey heron at the site (this observation was during the breeding season). The remainder of observations were in the winter season and the closest record was approximately 3.1km from the nearest turbine. Therefore, there is **no evidence of a regularly occurring population of ecological significance** using the site.

#### 7.4.1.8 Lapwing

The national wintering population of lapwing is estimated to be 69,823 birds (Burke *et al.*, 2019) and the county wintering population is estimated to be 10,547 birds (I-WeBS mean count for the period 2015/16 – 2019/20). Therefore, as per NRA (2009), a regularly occurring population of 698 birds is required for classification as National Importance and of 105 birds for classification as County Importance.

Lapwings were regularly recorded in the hinterland of the wind farm during surveys within an 8km radius of the study area during the post-breeding and winter season, including flocks of up to 359 birds (County Importance). However, the closest observation to the site was approximately 5.4km from the nearest turbine, there is **no evidence of a regularly occurring population of ecological significance** using the site.

### 7.4.1.9 Lesser Black-backed Gull

#### Wintering

The national wintering population of lesser black-backed gull is estimated to be 11,842 birds (Lewis *et al.*, 2019a) and the county wintering population is estimated to be 99 birds<sup>6</sup> (I-WeBS mean count for the period 2016/17 – 2020/21). Therefore, as per NRA (2009), a regularly occurring population of 118 birds is required for classification as National Importance and of just one bird for classification as County Importance.

Lesser black-backed gull are an SCI species for Wexford Harbour and Slobs SPA (wintering population only). The foraging distance of lesser black-backed gull is a maximum of 181km (Thaxter *et al.*, 2012), therefore there is potential for the population at the Proposed Development to be associated with this SPA. Lesser black-backed gull were regularly recorded at the site during the winter season, with a peak count of 73 birds being observed at the site. Flocks of county importance (>1 bird) were recorded regularly at the site. On a precautionary basis, it is considered that observations were associated with a population of **County Importance**.

#### Breeding

The national breeding population of lesser black-backed gull is estimated to be 7,471 pairs (Burnell *et al.*, 2023) and the county population is estimated to be 252 birds<sup>7</sup> (Burnell *et al.*, 2023). Therefore, as per NRA (2009), a regularly occurring population of 74 pairs is required for classification as National Importance and of 2 pairs for classification as County Importance.

Lesser black-backed gull were regularly recorded at the site during the breeding season, with a peak count of nine birds being observed at the site. On a precautionary basis, it is considered that observations were associated with a population of **County Importance**.

### 7.4.1.10 Mallard

The national wintering population of mallard is estimated to be 18,810 birds (Lewis *et al.*, 2019a) and the county wintering population is estimated to be 1,332 birds (I-WeBS mean count for the period 2016/17 – 2020/21). Therefore, as per NRA (2009), a regularly occurring population of 188 birds is required for classification as National Importance and of 13 birds for classification as County Importance.

Mallard were only observed during waterbird distribution and abundance surveys, with the closest observation being approximately 4.3km from the nearest turbine. Therefore, there is **no evidence of a regularly occurring population of ecological significance** using the site.

### 7.4.1.11 Teal

The national wintering population of teal is estimated to be 27,644 birds (NPWS Article 12 Reporting) and the county wintering population is estimated to be 2,817 birds (I-WeBS mean count for the period 2016/17 – 2020/21). Therefore, as per NRA (2009), a regularly occurring population of 276 birds is required for classification as National Importance and of just 28 birds for classification as County Importance.

<sup>6</sup> It is likely that this figure is an underestimate of the county population given that this species will utilise agricultural grasslands and other habitats not typically surveyed during I-WeBS counts.

<sup>7</sup> It is likely that this figure is an underestimate of the county population given that this species will utilise agricultural grasslands and other habitats not typically surveyed during I-WeBS counts.

Teal were only observed during waterbird distribution and abundance surveys, with the closest observation being approximately 7km from the nearest turbine. Therefore, there is **no evidence of a regularly occurring population of ecological significance** using the site.

#### 7.4.1.12 Kestrel

As reported (2008-2012) under Article 12 of the Birds Directive (Directive 2009/147/EC), the national breeding population estimates of kestrel in the Republic of Ireland is 13,500 birds. Therefore, a regularly occurring population of 135 birds is required for classification as National Importance. There are no published figures for the County Wexford population of kestrel. Using the distribution of kestrel across Ireland from the breeding bird atlas<sup>8</sup> (2007-2011) the County population of kestrel is estimated to be 540 birds. Therefore, a regularly occurring population of five birds is required for classification of County Importance.

Kestrel was observed within 500m of the turbines on 29 occasions. The maximum number of birds recorded within the site from the winter seasons surveyed was two birds. There was one probable breeding territory identified adjacent to the site. Given the frequency of observations and the presence of a breeding territory, the population recorded at the site was assigned **Local Importance (Higher value)**.

#### 7.4.1.13 Snipe

As reported (2013-2018) under Article 12 of the Birds Directive (Directive 2009/147/EC), the national breeding population estimates of snipe in the Republic of Ireland is 8,550 no. birds. Therefore, a regularly occurring population of 86 birds is required for classification as National Importance. There are no published figures for the County Wexford population of snipe. Using the distribution of snipe across Ireland from the breeding bird atlas<sup>9</sup> (2007-2011) the County population of snipe is estimated to be 171 birds. Therefore, a regularly occurring population of one bird is required for the classification of County Important.

Snipe was observed within 500m of the turbines on only one occasion, with only one bird being observed. All other observations were between 800m and 7.5km from the nearest turbine. Given the infrequency of observations, and the low numbers observed, there is **no evidence of a regularly occurring population of ecological significance** using the site.

#### 7.4.1.14 Buzzard

The national population of buzzard is estimated to be 1,938 breeding pairs (NPWS Article 12 Reporting). In the absence of more detailed county-level information, the county population is estimated to be 75 breeding pairs, assuming an even spatial distribution across the 26 counties of Ireland. Buzzard is not an SCI of an SPA in Ireland, nor listed on Annex I of the Birds Directive, and is a Green Listed BoCCI species, indicating it is of lower conservation priority.

Buzzard was regularly observed within the site and surrounds during the breeding and winter seasons. Birds were hunting within the site and there were four confirmed breeding territories located between approximately 600m to 2.3km from the nearest turbine. Thus, this species is considered to be a population of **Local Importance (Higher value)** on the basis of a resident/regularly occurring population assessed to be important at the local level.

<sup>8</sup> Bird Atlas data from the National Biodiversity Data Centre was used to estimate the county population. Presence/absence hectad data was used to estimate the proportion of the national population that occurs in the county. The national population was then multiplied by this percentage to give a county population estimate.

<sup>9</sup> Bird Atlas data from the National Biodiversity Data Centre was used to estimate the county population. Presence/absence hectad data was used to estimate the proportion of the national population that occurs in the county. The national population was then multiplied by this percentage to give a county population estimate.

#### 7.4.1.15 Sparrowhawk

The national population of sparrowhawk is estimated to be 11,859 birds (Lewis *et al.*, 2019b). In the absence of more detailed county-level information, the county population is estimated to be 456 birds, assuming an even spatial distribution across the 26 counties of Ireland. Sparrowhawk is not an SCI of any Irish SPA, nor listed on Annex I of the Birds Directive, and is a Green Listed BoCCI species, indicating it is of lower conservation priority.

Sparrowhawk was regularly observed within the Site and its surroundings during the breeding and winter seasons. Birds were hunting within the site and while no breeding territories were identified, it is assumed that this species is resident in the area. Thus, this species is considered to be a population of **Local Importance (Higher value)** on the basis of a resident/regularly occurring population assessed to be important at the local level.

#### 7.4.1.16 Passerine (Red Listed)

Grey wagtail, meadow pipit, redwing, stock dove, swift and yellowhammer are Red listed in Ireland. As per SNH guidance, it is considered that passerine species are not significantly impacted by wind farms. Therefore, populations recorded were deemed to be of no greater than **Local Importance (Lower Value)**.

## 7.4.2 Identification of Key Ornithological Receptors

Table 7-11 outlines the rationale for including or excluding each target species recorded during field surveys as a KOR. The conservation status, population importance evaluation following NRA (2009) and a detailed explanation for inclusion/exclusion as a KOR is provided. The sensitivity of species included as KORs are then evaluated in the following section.

Table 7-11 Receptor evaluation and selection criteria rationale

Species	Conservation Status	NRA Evaluation	Rationale for inclusion/exclusion as KOR	KOR
Golden Plover	Annex I Birds Directive & SCI of Wexford Harbor and Slobs SPA	<u>Winter</u> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Kingfisher	Annex I Birds Directive	<u>Winter</u> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Peregrine Falcon	Annex I Birds Directive	<u>All Seasons</u> County Importance	During the breeding and winter season, peregrine were observed within the site, and the individuals recorded are considered to be associated with a population of County Importance. The potential for displacement and collision risk cannot be excluded. As such, an assessment for displacement and collision risk is required for peregrine.	Yes
Black-headed Gull	SCI of Wexford Harbor and Slobs SPA (Winter Season)	<u>Winter</u> County Importance	During the winter season, black-headed gull were observed within the site, and the flocks recorded are considered to be associated with a population of County Importance. The potential for displacement and collision risk cannot	Yes



Species	Conservation Status	NRA Evaluation	Rationale for inclusion/exclusion as KOR	KOR
			be excluded. As such, an assessment for displacement and collision risk is required for black-headed gull.	
Brent Goose	SCI of Wexford Harbor and Slob SPA	<u>Winter</u> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Cormorant	SCI of Wexford Harbor and Slob SPA	<u>Winter</u> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Grey Heron	SCI of Wexford Harbor and Slob SPA	<u>Winter</u> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Lapwing	SCI of Wexford Harbor and Slob SPA & BoCCI Red List	<u>Winter</u> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Lesser Black-backed Gull	SCI of Wexford Harbor and Slob SPA (Winter Season)	<u>Winter</u> County Importance	During the breeding and winter season, lesser black-backed gull were observed within the site, and the flocks recorded are considered to be associated with a population of County Importance. The potential for	Yes

Species	Conservation Status	NRA Evaluation	Rationale for inclusion/exclusion as KOR	KOR
		<b><u>Breeding</u></b> County Importance	displacement and collision risk cannot be excluded. As such, an assessment for displacement and collision risk is required for lesser black-backed gull.	
Mallard	SCI of Wexford Harbor and Slob's SPA	<b><u>Winter</u></b> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Teal	SCI of Wexford Harbor and Slob's SPA	<b><u>Winter</u></b> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No
Kestrel	BoCCI Red List	<b><u>All Seasons</u></b> Local Importance (Higher Value)	During the breeding and winter season, kestrel were observed within the site and are resident in the area, with a probable breeding territory being identified. The individuals recorded are considered to be associated with a population of Local Importance. The potential for displacement and collision risk cannot be excluded. As such, an assessment for displacement and collision risk is required for kestrel.	Yes
Snipe	BoCCI Red List	<b><u>All Seasons</u></b> No populations of ecological importance recorded	No population of ecological significance was recorded utilising the site during the extensive suite of surveys conducted. As such, the potential disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will have a significant effect on this species.	No

Species	Conservation Status	NRA Evaluation	Rationale for inclusion/exclusion as KOR	KOR
Buzzard	BoCCI Green List; a species sensitive to Wind Farm Developments	<u>All Seasons</u> Local Importance (Higher Value)	During the breeding and winter season, buzzard were observed within the site and are resident in the area, with four confirmed breeding territories being identified. The individuals recorded are considered to be associated with a population of Local Importance. The potential for displacement and collision risk cannot be excluded. As such, an assessment for displacement and collision risk is required for buzzard.	Yes
Sparrowhawk	BoCCI Green List; a species sensitive to Wind Farm Developments	<u>All Seasons</u> Local Importance (Higher Value)	During the breeding and winter season, sparrowhawk were observed within the site and are resident in the area. The individuals recorded are considered to be associated with a population of Local Importance. The potential for displacement and collision risk cannot be excluded. As such, an assessment for displacement and collision risk is required for sparrowhawk.	Yes
Passerine (Red Listed)	BoCCI Red List	<u>All Seasons</u> Local Importance (Lower Value)	As per NatureScot guidance, it is generally considered that passerine bird species are not significantly impacted by wind farms due to their life history. As such, the potential for disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Development will significantly impact this species.	No

### 7.4.3 Key Ornithological Receptor Sensitivity Determination

Criteria developed by Percival (2003) for assessing bird sensitivity within the Site is presented in Table 7-3 (Section 7.2.6). The sensitivity of the KORs, as per Percival (2003), are listed below, including the rationale for their respective sensitivity classification.

**Very High Sensitivity** KORs are:

- > Black-headed Gull (winter season; SCI of the Wexford Harbour and Sloba SPA)
- > Lesser black-backed Gull (winter season; SCI of the Wexford Harbour and Sloba SPA)

**Medium Sensitivity** KORs are:

- > Peregrine Falcon (all seasons; Annex I)
- > Kestrel (all seasons; Red List)
- > Lesser black-backed Gull (breeding season; County important population)

**Low Sensitivity** KORs are:

- > Buzzard (all seasons; lower conservation concern)
- > Sparrowhawk (all seasons; lower conservation concern)

## 7.5 Potential Impacts

All elements of the Proposed Development have been considered in assessing impacts on KORs. This section is structured as follows:

- > Assessment of 'Do-Nothing' Scenario
- > Assessment of impacts in relation to KORs during the extended operation period and decommissioning
- > Assessment of impacts on designated areas

### 7.5.1 'Do-Nothing' Scenario

If the Proposed Development were not to proceed, the existing Castledockrell Wind Farm turbines will be decommissioned in August 2025, as per the existing permission. Upon decommissioning of the existing Castledockrell Wind Farm, the 11 no. turbines would be removed from site. It is considered the more environmentally prudent approach to leave all roads and hardstands in situ. Many of the existing site roads are utilised by local landowners for agricultural access, so these will remain in place. Any hardstands or access roads that are not being used for agricultural access will be left to regenerate and revegetate naturally. If the Proposed Development were not to proceed, the opportunity to generate renewable energy and electrical supply to the national grid would be lost, as would the opportunity to further contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions. It is assumed that the character of the bird community, including the KORs identified, will remain much as it is described in the baseline ornithological conditions.

## 7.5.2 Collision Risk Assessment

Collision-related mortality at the wind farm was estimated using the GenEst software package (version 1.4.9; Dalthorp et al., 2023). The results of carcasses found during collision monitoring surveys were input into a model, along with information on the existing wind farm and survey effort, such as the 1) number of turbines, 2) the area surveyed and the 3) survey effort. This generated an estimate of mortality at the existing wind farm, which was then corrected for 4) searcher efficiency, 5) scavenger removal and 6) detection probability, based on the results of the trials.

The model estimates with 90% confidence that between 3 and 21 bird fatalities occurred over the study period at the existing wind farm (estimated mortality = 9.34 birds [confidence intervals 3.00-20.74]). This scales to 1.73 [confidence intervals 0.07-1.73] birds per turbine per year or 0.34 [confidence intervals 0.11-0.76] birds per megawatt hour.

### 7.5.3 Effects on Key Ornithological Receptors during Operation and Decommission

The tables in the following sections describe potential effects on KORs that may occur during the operation and decommission of the wind farm. The magnitude and significance of these effects are then defined according to Percival (2003) and EPA (2022) criteria.

#### 7.5.3.1 Peregrine Falcon

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Operational Phase</b>			
<b>Direct Habitat Loss</b>	Direct habitat loss effects are not anticipated as there is no new infrastructure proposed.	<b>No Effect</b>	<b>No Effect</b>
<b>Displacement and Barrier Effect</b>	Peregrine falcon was recorded on four occasions at the site during surveys. The majority of the habitat within the site is agricultural grassland, which has some ecological value for hunting birds. The availability of large areas of similar alternative suitable habitat (i.e. improved grassland) in the surroundings, limits the potential for significant displacement effects. Of the two observations during vantage point surveys, one was within 50m of the turbines, the second was 50-500m from turbines. This is potential evidence of habituation to the presence of the existing turbines. As documented by Ruddock <i>et al.</i> (2007) peregrine can become accustomed to various sources of human disturbance. Given that the site is infrequently visited by this species, and that when recorded peregrine have been recorded flying close to the wind farm, no significant effect of displacement or barrier effect are anticipated at the county, national or international level.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Low</i> impact corresponds to a <i>Very Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Collision Risk</b>	Peregrine falcon was recorded on only four occasions at the site during surveys. Furthermore, the habitats of the Site are unlikely to attract this species with any regularity. Given this absence from the Site collision-related mortality is not likely to significantly impact this species and the predicted collision risk	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Low</i>	<b>Likely long-term constant slight negative effect</b>

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
	is negligible. In addition, it is noted that the collision monitoring surveys provide a representative sample of bird fatalities and no peregrine falcon fatalities were recorded. No significant effects are anticipated at the county, national or international level.	impact corresponds to a <b>Very Low</b> effect significance.	
Decommissioning Phase			
<b>Direct Habitat Loss</b>	Once the current planning permission expires (2025) the footprint of the development will revert to its original use as agricultural rough pasture and crops. This will provide a slight increase in the availability of pasture and crop habitat locally. However, this will only result in a negligible increase in available habitat relative to its abundance in the wider surroundings. Furthermore, these habitats are not unique to the Site or rare locally. Alternatively, if the operational life is extended (i.e. by c.20 years), a less invasive decommissioning approach is proposed as part of this application (refer to Appendix 4.4) which would include removing infrastructure (e.g. turbines etc.) but leaving the narrow corridor of the onsite roads in situ. No significant effects are anticipated in either scenario.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Negligible</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely long-term constant non-significant positive effect</b>
<b>Disturbance</b>	Peregrine falcon was occasionally recorded at the site. On a precautionary basis, it is assumed that some temporary displacement may occur during decommissioning works. However, given the low frequency of occurrence and the extent of suitable hunting habitat in the surrounding area, no significant displacement is anticipated at the county, national or international level.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Negligible</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely short-term frequent non-significant negative effect</b>



7.5.3.2 **Black-headed Gull**

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Operational Phase</b>			
<b>Direct Habitat Loss</b>	Direct habitat loss effects are not anticipated as there is no new infrastructure proposed.	<b>No Effect</b>	<b>No Effect</b>
<b>Displacement and Barrier Effect</b>	<p>Black-headed gull were regularly recorded at the Site during the winter season only. The majority of the habitat within the site is agricultural grassland, which is of some ecological value to foraging black-headed gull. In addition, significant avoidance of the existing turbines was not evident within the study area, as much of the observed black-headed gull activity during vantage point surveys was close to the turbines: 18% were 100-200m from turbines and 35% were 200-500m from turbines (the remaining 47% were 500m+ from turbines). Therefore, it is likely that black-headed gull will continue to utilise the area within 500m of the turbines, in the way they currently are, and significant impacts of displacement and barrier effects are not anticipated.</p> <p>Furthermore, significant areas of suitable foraging habitat for the species occur in the wider landscape and will be retained. The onsite improved grassland is not a rare habitat type or unique to the Site. In the event of displacement, there are extensive areas of similar habitat in the wider area. This would likely render such an effect inconsequential. No significant effect of displacement or barrier effect are anticipated.</p>	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Collision Risk</b>	This species was recorded flying within the Site, including three observations at PCH. However, collision-related mortality incidents for this species were not detected during 12 months of dog-led searches at all turbine bases. Based on available data, collision-related mortality is not likely to significantly impact this species and the predicted collision risk is low. No significant effects are anticipated.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Decommissioning Phase</b>			

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Direct Habitat Loss</b>	Once the current planning permission expires (2025) the footprint of the existing Castledockrell Wind Farm will be left to naturally regenerate and revegetate. This will provide a slight increase in the availability natural habitat locally. However, this will only result in a negligible increase in available habitat relative to its abundance in the wider surroundings. Furthermore, these habitats are not unique to the Site or rare locally. Alternatively, if the operational life is extended (i.e. by c.20 years), a less invasive decommissioning approach is proposed which would include removing infrastructure (e.g. turbines etc.) but leaving the narrow corridor of the onsite roads in situ, as is set out in Appendix 4-4. No significant effects are anticipated in either scenario.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant non-significant positive effect</b>
<b>Disturbance</b>	There is potential for displacement of wintering black-headed gull within the Site during decommissioning works. However, given the abundance of similar suitable habitat in the surrounding area and that this is a widespread species that forages in an abundant habitat in Ireland (e.g. improved grassland), no significant displacement is anticipated.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely short-term frequent slight negative effect</b>

### 7.5.3.3 Lesser Black-backed Gull (Wintering)

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Operational Phase</b>			
<b>Direct Habitat Loss</b>	Direct habitat loss effects are not anticipated as there is no new infrastructure proposed.	<b>No Effect</b>	<b>No Effect</b>
<b>Displacement and Barrier Effect</b>	<p>Lesser black-backed gull were regularly recorded at the Site during the winter season. The majority of the habitat within the site is agricultural grassland, which is of some ecological value for foraging lesser black-backed gull. In addition, significant avoidance of the existing turbines was not evident within the study area, as much of the observed lesser black-backed gull activity during vantage point surveys was close to the turbines: 4% were up to 50m from turbines, 19% were 50-200m from turbines and 41% were 200-500m from turbines (the remaining 36% were 500m+ from turbines). Therefore, it is likely that lesser black-backed gull will continue to utilise the area within 500m of the turbines and significant impacts of displacement and barrier effects are not anticipated.</p> <p>Furthermore, significant areas of suitable foraging habitat for the species occur in the wider landscape and will be retained. In the event of displacement, there are extensive areas of similar habitat in the wider area e.g. improved grassland. This would likely render such an effect inconsequential. No significant effect of displacement or barrier effect are anticipated.</p>	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Collision Risk</b>	This species was recorded flying within the Site, including 11 observations at PCH. However, collision-related mortality incidents for this species were not detected during 12 months of dog-led searches at all turbine bases. Based on available data, collision-related mortality is not likely to significantly impact this species and the predicted collision risk is low. No significant effects are anticipated.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Decommissioning Phase</b>			

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Direct Habitat Loss</b>	Once the current planning permission expires (2025) the footprint of the development will be left to naturally regenerate and revegetate. This will provide a slight increase in the availability natural habitat locally. However, this will only result in a negligible increase in available habitat relative to its abundance in the wider surroundings. Furthermore, these habitats are not unique to the Site or rare locally. Alternatively, if the operational life is extended (i.e. by c.20 years), a new less invasive decommissioning approach is proposed which would include removing infrastructure (e.g. turbines etc.) but leaving the narrow corridor of the onsite roads in situ, as detailed in Appendix 4-4. No significant effects are anticipated in either scenario	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant non-significant positive effect</b>
<b>Disturbance</b>	There is potential for displacement of wintering lesser black-backed gull within the study area during decommissioning works. However, given the abundance of similar suitable habitat in the surrounding area and that this is a widespread species and not a habitat specialist, no significant displacement is anticipated.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Very High</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely short-term frequent slight negative effect</b>



7.5.3.4 Lesser Black-backed Gull (Breeding)

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Operational Phase</b>			
<b>Direct Habitat Loss</b>	Direct habitat loss effects are not anticipated as there is no new infrastructure proposed.	<b>No Effect</b>	<b>No Effect</b>
<b>Displacement and Barrier Effect</b>	<p>Lesser black-backed gull were regularly recorded at the site during the breeding season. The majority of the habitat within the Site is agricultural grassland, which is of some ecological value to this species. In addition, significant avoidance of the existing turbines was not evident within a 500m radius of the turbines, as much of the observed lesser black-backed gull activity during vantage point surveys was close to the turbines: 15% were up to 50m from turbines, 31% were 50-100m from turbines and 46% were 200-500m from turbines (the remaining 8% were 500m+ from turbines). Therefore, it is likely that lesser black-backed gull will continue to utilise the study area and significant impacts of displacement and barrier effects are not anticipated.</p> <p>Furthermore, significant areas of suitable foraging habitat for the species occur in the wider landscape and will be retained. In the event of displacement, there are extensive areas of similar habitat in the wider area. This would likely render such an effect inconsequential. No significant effect of displacement or barrier effect are anticipated.</p>	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Very Low</i> effect significance.	<b>Likely long-term constant non-significant negative effect</b>
<b>Collision Risk</b>	This species was recorded flying within the Site, including six observations at PCH. However, collision-related mortality incidents for this species were not detected during 12 months of dog-led searches at all turbine bases. Based on available data, collision-related mortality is not likely to significantly impact this species and the predicted collision risk is low. No significant effects are anticipated.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Very Low</i> effect significance.	<b>Likely long-term constant non-significant negative effect</b>
<b>Decommissioning Phase</b>			

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Direct Habitat Loss</b>	Once the current planning permission expires (2025) the footprint of the development will be left to naturally regenerate and revegetate. This will provide a slight increase in the availability of natural habitat locally. However, this will only result in a negligible increase in available habitat relative to its abundance in the wider surroundings. Furthermore, these habitats are not unique to the Site or rare locally. Alternatively, if the operational life is extended (i.e. by c.20 years), a new less invasive decommissioning approach is proposed which would include removing infrastructure (e.g. turbines etc.) but leaving the narrow corridor of the onsite roads in situ. No significant effects are anticipated in either scenario.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Very Low</i> effect significance.	<b>Likely long-term constant non-significant positive effect</b>
<b>Disturbance</b>	There is potential for displacement of breeding lesser black-backed gull within the study area during decommissioning works. However, given the abundance of similar suitable habitat in the surrounding area and that this is a widespread species and not a habitat specialist, no significant displacement are anticipated.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Negligible</i> impact corresponds to a <i>Very Low</i> effect significance.	<b>Likely short-term frequent non-significant negative effect</b>



7.5.3.5 Kestrel

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Operational Phase</b>			
<b>Direct Habitat Loss</b>	Direct habitat loss effects are not anticipated as there is no new infrastructure proposed.	<b>No Effect</b>	<b>No Effect</b>
<b>Displacement and Barrier Effect</b>	<p>The majority of the habitat within the Site is agricultural grasslands. These habitats are used by kestrel for foraging.</p> <p>Kestrel was observed within 500m of the turbines on 29 occasions. The maximum number of birds recorded within the Site from the winter seasons surveyed was two birds. There was one breeding territory identified adjacent to the Site. This indicates that this species is resident locally. In addition, significant avoidance of the existing turbines was not evident within the study area, as much of the observed kestrel activity during vantage point surveys was close to the turbines: 13% were within 50m of the turbines, 33% were 50-100m from turbines, 17% were 100-200m from turbines and 21% were 200-500m from turbines (the remaining 16% were 500m+ from turbines). This observation is further corroborated in the literature: kestrels have been found to only show low levels of turbine avoidance and are known to continue foraging activity close to turbines (Pearce-Higgins <i>et al.</i>, 2009). Therefore, it is likely that kestrel will continue to utilise the Site and significant impacts of displacement and barrier effects are not anticipated at the county, national or international level.</p>	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Low</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Collision Risk</b>	This species was recorded flying within the Site, including observations at PCH and within 50m of turbines. However, collision-related mortality incidents for this species were not detected during 12 months of dog-led searches at all turbine bases. Furthermore, although likely breeding locally, no nests were identified within the Site. This limits the potential for significant collision risk, as the flight activity is typically concentrated around the nest. Based on available data, collision-related mortality is not likely to significantly impact this	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Low</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>



Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
	species and the predicted collision risk is low. No significant effects are anticipated at the county, national or international level.		
<b>Decommissioning Phase</b>			
<b>Direct Habitat Loss</b>	Once the current planning permission expires (2025) the footprint of the development will be left to naturally regenerate and revegetate. This will provide a slight increase in the availability of natural habitat locally. However, this will only result in a negligible increase in available habitat relative to its abundance in the wider surroundings. Furthermore, these habitats are not unique to the Site or rare locally. Alternatively, if the operational life is extended (i.e. by c.20 years), a new less invasive decommissioning approach is proposed which would include removing infrastructure (e.g. turbines etc.) but leaving the narrow corridor of the onsite roads in situ. No significant effects are anticipated in either scenario.	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Low</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely long-term constant non-significant positive effect</b>
<b>Disturbance</b>	Kestrel were regularly recorded within the study area and surrounds throughout the breeding and winter season. Birds were hunting in the Site, but no breeding behaviour was observed within the wind farm. There is potential for displacement of hunting kestrel within the Site during decommissioning works. However, given the abundance of similar suitable hunting habitat in the surrounding area and that this is a widespread species and not a habitat specialist, no significant displacement are anticipated at the county, national or international level.	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Medium</i> sensitivity species and <i>Low</i> impact corresponds to a <i>Low</i> effect significance.	<b>Likely short-term frequent slight negative effect</b>



7.5.3.6 Buzzard

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Operational Phase</b>			
<b>Direct Habitat Loss</b>	Direct habitat loss effects are not anticipated as there is no new infrastructure proposed.	<b>No Effect</b>	<b>No Effect</b>
<b>Displacement and Barrier Effect</b>	<p>The majority of the habitat within the 500m radius of turbines is agricultural grasslands. These habitats are used by buzzard for foraging.</p> <p>Buzzard was regularly observed within the site and surrounds during the breeding and winter seasons. Birds were hunting within the site and there were four confirmed breeding territories located between approximately 800m and 2.3km from the nearest turbine.</p> <p>Buzzard were regularly recorded within the 500m radius of turbines and surrounds throughout the breeding and winter season and are resident, with breeding confirmed offsite in the locality. Significant avoidance of the existing turbines was not evident within the study area. Much of the observed buzzard activity was close to the turbines: during vantage point surveys 16% were 0-50m from turbines, 44% were 50-200m from turbines and 28% were 200-500m from turbines (the remaining 12% were 500m+ from turbines). Therefore, it is likely that buzzard will continue to utilise the study area and significant impacts of displacement and barrier effects are not anticipated at the county, national or international level.</p>	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Low</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Collision Risk</b>	This species was recorded flying within the wind farm, including 50 observations at PCH and within 50m of turbines. However, collision-related mortality incidents for this species were not detected during 12 months of dog-led searches at all turbine bases. Based on available data, collision-related mortality is not likely to significantly impact this species and the predicted collision risk is low. No significant effects are anticipated at the county, national or international level.	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Low</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely long-term constant slight negative effect</b>

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Decommissioning Phase</b>			
<b>Direct Habitat Loss</b>	Once the current planning permission expires (2025) the footprint of the development will revert to its original use as agricultural rough pasture, crops and commercial forestry. This will provide a slight increase in the availability of pasture and crop habitat locally. However, this will only result in a negligible increase in available habitat relative to its abundance in the wider surroundings. Furthermore, these habitats are not unique to the Site or rare locally. Alternatively, if the operational life is extended (i.e. by c.20 years), a new less invasive decommissioning approach is proposed which would include removing infrastructure (e.g. turbines etc.) but leaving the narrow corridor of the onsite roads in situ. No significant effects are anticipated in either scenario.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Negligible</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely long-term constant non-significant positive effect</b>
<b>Disturbance</b>	Buzzard were regularly recorded within the study area throughout the breeding and winter season and birds were observed hunting in the Site. Thus, there is potential for displacement of buzzard within the Site during decommissioning works. However, given that there is similar habitat used by buzzard in the surrounding area and that this is an abundant widespread species and not a habitat specialist, no significant displacement are anticipated at the county, national or international level.	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Low</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely short-term frequent slight negative effect</b>



### 7.5.3.7 Sparrowhawk

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Operational Phase</b>			
<b>Direct Habitat Loss</b>	Direct habitat loss effects are not anticipated as there is no new infrastructure proposed.	<b>No Effect</b>	<b>No Effect</b>
<b>Displacement and Barrier Effect</b>	<p>The majority of the habitat within the study area is agricultural grasslands. These habitats are used by sparrowhawk for foraging.</p> <p>Sparrowhawk was regularly observed within the Site and its surrounds during the breeding and winter seasons. Birds were hunting within the Site and while no breeding territories were identified, it is assumed that this species is resident in the area.</p> <p>Sparrowhawk were regularly recorded within the study area and surrounds throughout the breeding and winter seasons and are resident. Significant avoidance of the existing turbines was not evident within the Site. There were several observations of sparrowhawk flying close to turbines. Therefore, it is likely that sparrowhawk will continue to utilise the Site and significant impacts of displacement and barrier effects are not anticipated at the county, national or international level.</p>	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Low</i> impact corresponds to a <i>Very Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Collision Risk</b>	This species was recorded flying within the wind farm, including 50 observations at PCH and within 50m of turbines. However, collision-related mortality incidents for this species were not detected during 12 months of dog-led searches at all turbine bases. Based on available data, collision-related mortality is not likely to significantly impact this species and the predicted collision risk is low. No significant effects are anticipated at the county, national or international level.	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Low</i> impact corresponds to a <i>Very Low</i> effect significance.	<b>Likely long-term constant slight negative effect</b>
<b>Decommissioning Phase</b>			

Potential effects during the operational and decommissioning phases of the Proposed Development		Significance (Percival, 2003)	Significance (EPA, 2022)
<b>Direct Habitat Loss</b>	Once the current planning permission expires (2025) the footprint of the development will revert to its original use as agricultural rough pasture, crops and commercial forestry. This will provide a slight increase in the availability of pasture and crop habitat locally. However, this will only result in a negligible increase in available habitat relative to its abundance in the wider surroundings. Furthermore, these habitats are not unique to the Site or rare locally. Alternatively, if the operational life is extended (i.e. by c.20 years), a new less invasive decommissioning approach is proposed which would include removing infrastructure (e.g. turbines etc.) but leaving the narrow corridor of the onsite roads in situ. No significant effects are anticipated in either scenario.	The magnitude of the effect is assessed as <i>Negligible</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Negligible</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely long-term constant non-significant positive effect</b>
<b>Disturbance</b>	Sparrowhawk were regularly recorded within the study area throughout the breeding and winter season. Thus, there is potential for displacement of sparrowhawk within the Site during decommissioning works. However, given that there is similar habitat used by sparrowhawk in the surrounding area and that this is an abundant widespread species and not a habitat specialist, no significant displacement are anticipated at the county, national or international level.	The magnitude of the effect is assessed as <i>Low</i> . The cross tabulation of a <i>Low</i> sensitivity species and <i>Low</i> impact corresponds to a <b>Very Low</b> effect significance.	<b>Likely short-term frequent slight negative effect</b>