Kelme Wind Farm Project, Lithuania

Critical Habitat Assessment

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Kelme Wind Farm Project, Lithuania

Critical Habitat Assessment

0779257

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LIST OF ACRONYMS & ABBREVIATIONS

Name	**Description**
AoO	Area of Occupancy
AoI	Area of Influence
CH	Critical Habitat
CHA	Critical Habitat Assessment
CR	Critical Endangered (species threat status, according to IUCN)
DD	Data Deficient (species threat status, according to IUCN)
E&S	Environmental and Social
EAAA	Ecologically Appropriate Area of Analysis
EBRD	European Bank for Reconstruction and Development
EN	Endangered (species threat status, according to IUCN)
EoO	Extent of Occurrence
ERM	Environmental Resources Management Ltd.
ESIA	Environmental and Social Impact Assessment
ESS	Environmental and Social Standard
EU	European Union
EUNIS	European Nature Information System

Name	Description
GN	Guidance Note
IBA	Important Bird and Biodiversity Area
IBAT	Integrated Biodiversity Assessment Tool
IFC	International Finance Corporation
IFI	International Finance Institution
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
kV	Kilo Volt
LC	Least Concern (species threat status, according to IUCN)
MW	Mega Watt
NG	Net Gain (of biodiversity)
NNL	No Net Loss (of biodiversity)
NT	Near Threatened (species threat status, according to IUCN)
PBF	Priority Biodiversity Feature
PR	Performance Requirement
PS	Performance Standard
VU	Vulnerable (species threat status, according to IUCN)
WDPA	The World Database on Protected Areas
WF	Wind Farm
WT	Wind Turbine
WTG	Wind Turbine Generator

DEFINITIONS OF KEY TERMS

Critical habitat:
Critical habitat is typically defined as the most sensitive biodiversity features and the definitions varies somewhat between different International Financial Institutions (IFIs). Typically, though, this relates to habitat important for supporting globally/regionally threatened species, endemic and/or restricted-range species, migratory and/or congregatory species, threatened or unique ecosystems/habitats and ecological / evolutionary processes.

EBRDs definition of Critical Habitat (which comprises one of the following): *(i) highly threatened or unique ecosystems;*
(ii) habitats of significant importance to endangered or critically endangered species;
(iii) habitats of significant importance to endemic or geographically restricted species;
(iv) habitats supporting globally significant migratory or congregatory species; and/or
(v) areas associated with key evolutionary processes (EBRD, 2019).

Priority biodiversity features:
This concept replaces the previous definition of natural habitat used previously by EBRD and adopts a criterion-based approach already used for definition of critical habitat. Priority in all

EBRD definitions combines consideration of irreplaceability and vulnerability. Priority biodiversity features (PBF) have a high, but not the highest, degree of irreplaceability and/or vulnerability. Although a level below critical habitat in sensitivity, they still require careful consideration during project assessment and impact mitigation (EBRD PR6, 2019).

No Net Loss (of biodiversity):
An approach and goal for a development project, policy, plan or activity in which the impacts on biodiversity it causes are balanced by measures taken to avoid and minimize the impacts, to restore affected areas and finally to offset the residual impacts, so that no loss remains.

No net loss is defined as the point at which project-related biodiversity losses are balanced by gains resulting from measures taken to avoid and minimize these impacts, to undertake on-site restoration and finally to offset significant residual impacts, if any, on an appropriate geographic scale (EBRD, 2019).

Net Gain (of biodiversity):
An approach and goal for a development project, policy, plan or activity in which the impacts on biodiversity it causes are outweighed by measures taken to avoid and minimize the impacts, to restore affected areas and finally to offset the residual impacts, so that natural environment is left in a measurably better state than it was beforehand.

Net gains refer to measurable improvements in the condition or extent of biodiversity values for which Critical Habitat was identified. These gains can be achieved either by implementing a biodiversity offset or, if offsets are not required, through on-the-ground actions that enhance habitats and support the protection and conservation of biodiversity in the same area (EBRD, 2019).

Mitigation hierarchy:
A tool commonly applied in Environmental Impact Assessments (EIAs) which helps to manage biodiversity risk. The hierarchy of controls that begins with avoidance, then considers minimization or reduction of impacts, followed by restoration actions and finally compensation for biodiversity loss (e.g. through offsetting) as a last resort measure only once all other options have been considered/exhausted.

EXECUTIVE SUMMARY

ERM conducted a Critical Habitat Assessment (CHA) for the 300 MW Kelme Wind Farm in Lithuania, developed and implemented by Ignitis Renewables. The Project is seeking finance under international project finance principles and will align with the environmental and social standards of the European Bank for Reconstruction and Development ("EBRD").

The main objective of the CHA was to determine whether any Critical Habitat ("CH") or Priority Biodiversity Features ("PBF") are present within the Project area by applying the criteria and thresholds of EBRD Performance Requirement 6, to understand possible risks/impacts thereon and to identify any resulting management implications for the Project.

The findings of the CHA indicate that CH is identified for the following:

- Several habitat types qualify as CH due to their regional CR/EN threat status and/or listing in Annex I of the EU Habitats Directive as 'priority' habitat types;
- Based on the EBRD PR6 Criterion 2, only one species of Bird, Black Kite (*Milvus migrans)* is considered to qualify as CH due to the species being Endangered nationally and with a very low national population size; and
- All 13 bat species qualify as CH given their listing in Annex IV of the EU Habitats Directive.

PBF was identified as follows:

- The remaining habitats listed in Annex I of the EU Habitats Directive that are NOT 'priority' habitat types or CR/EN types regionally; and
- 69 species of birds (including several species of raptors, storks, cranes, waterfowl, passerines) due to their listing in Annex I of the EU Birds Directive, Annex II of the EU Habitats Directive and/or Resolution 6 of the BERN convention.

ERM conducted a GIS analysis that involved overlaying the Project layout plan onto a map showing the habitats for the study area which qualify as either CH or PBF. Based on this visual analysis it was confirmed that the Project has entirely avoided the habitats that qualify as CH or PBF, and on this basis impacts on CH/PBF physical habitats during the construction phase are unlikely. Also, field surveys to verify residual impacts to habitats in June 2025 confirmed that no habitat types of EU community importance (in terms of listing in Annex I of the EU Habitats Directive) that could qualify as CH/PBF have been impacted by the Project construction.

As an outcome of the conceptualized Project operational risk to birds and bats that qualify as CH/PBF, species that could potentially be impacted by the Project include:

Five species of birds (all qualifying as PBF, except Black Kite which is CH*):

- Black Kite, *Milvus migrans* (CH*)
- European Honey-buzzard, *Pernis apivorus*
- Lesser Spotted Eagle, *Clanga (Aquila) pomarina*
- White Stork, *Ciconia ciconia*
- White-tailed Sea-eagle. *Haliaeetus albicilla*

10 species of bats (all qualify as CH):

- Barbastelle bat, *Barbastella barbastellus*
- Common noctule, *Nyctalus noctula*
- Common Pipistrelle, *Pipistrellus pipistrellus*
- Kuhls Pipistrelle, *Pipistrellus kuhlii*
- Leisler's Bat, *Nyctalus leisleri*
- Nathusius` Pipistrelle, *Pipistrellus nathusii*
- Northern bat, *Eptesicus nilssonii*
- Parti-colored Bat, *Vespertilio murinus*
- Serotine, *Eptesicus serotinus*
- Soprano Pipistrelle, *Pipistrellus pygmaeus*

To align with EBRD PR6, the Project will need to develop a Biodiversity Action Plan (BAP) and/or Biodiversity Management Plan (BMP) that documents the approach and strategy towards achieving positive conservation outcomes (i.e. Net Gain (NG) / Net Positive Impact in terms of biodiversity) for the relevant CH values (Black Kite and several bat species) and at least No Net Loss (NNL) and preferably Net Gain (NG) for PBFs (numerous bird species). ERM is preparing the BAP and BMP for the Project.

It should be noted that there are no CH/PBF liabilities that require specific actions for the Project in terms of residual impacts to physical habitats post-construction. However, measures to avoid impacts on the CH/PBF habitats during operation/maintenance of the WF will still need to be incorporated into the operational BMP and there are several recommendations also made in the 'Residual Habitat Impact Assessment' Report (ERM, 2025) for restoring/compensating for residual impacts to habitats (wetlands in particular 0 but which don't qualify as CH/PBF) that should be implemented for the Project.

1. INTRODUCTION

Environmental Resources Management ("ERM") was appointed by Ignitis Renewables (referred to hereafter as "Ignitis" or "the Client") to provide supplementary information concerning the Kelme I and II Wind Farm in Lithuania, in support of the Project seeking finance from the European Bank for Reconstruction and Development ("EBRD").

The requirement to undertake a Critical Habitat Assessment ("CHA") was identified during the environmental due diligence and gap analysis undertaken by ERM, in order to align with EBRDs performance requirements in this regard. The CHA will serve to validate and interpret existing field data regaridng biodiversity (concerning ecosystems, habitats and species), identify Critical Habitat ("CH") qualifying features and Priority Biodiversity Features ("PBF") in accordance with the approach and crtieria of EBRD's Performance Requirement 6 ("PR6"), consider Project risks to CH and PBF and inform mitigation or management required to ensure alignment with EBRD PR6 reqirements in this regard.

1.1 BACKGROUND TO THE PROJECT

The Kelme Wind Farm Project (referred to hereafter as "the Project") located in Lithuania comprises two sub-projects, Kelme I and Kelme II, with a power generation capacity of 105 MW and 195 MW, respectively. Kelme I includes 16 wind turbines ("WTs"), whilst Kelme II includes 28 WTs. The Project also includes a 28.8 km underground transmission line to enable the connection of both wind farms to the electrical grid. The Project layout is shown on the map in **Error! Reference source not found.**.

Construction commenced in May 2023, with construction having been completed and currently both sub-projects are undergoing test operations. Commercial operations for Kelme I are anticipated to start between Q1 and Q2 of 2025, while Kelme II is expected to begin operations later, between Q3 and Q4 of 2025.

In line with Lithuanian environmental permitting requirements, the Projects underwent environmental assessment procedures between 2019 and 2022. For Kelme I, a screening assessment was conducted and documented by the national consultancy Ekosistema in 2019. For Kelme II, a full Environmental Impact Assessment (EIA) was completed by Ekosistema in 2022.

1.2 PURPOSE OF THE ASSESSMENT AND REPORT

Ignitis is seeking to finance the Project using a Project Finance structure involving EBRD. The Project has been categorized as 'Category A' under the EBRD's 2019 Environmental & Social ("E&S") Policy, signifying its potential for significant environmental and social impacts. Consequently, adherence to the EBRD's 2019 E&S Policy and associated Performance Requirements ("PR") is a critical component of the assessment.

A key element of PR6 is the requirement to identify Critical Habitats and Priority Biodiversity Features (PBFs) and to assess potential impacts on these in order to guide mitigation and management. To inform this assessment, ERM conducted a preliminary desktop screening using the UNEP-WCMC (2023) global dataset on potential Critical Habitat. This high-level review indicates that the Project may intersect with areas of potential CH.

This Critical Habitat Assessment (CHA) report prepared by ERM applies approach and criteria for identifying Critical Habitat as per the EBRD Performance Requirement 6 (PR6): Biodiversity Conservation and Sustainable Management of Living Natural Resources (EBRD, 2019).

The objective of the CHA is to determine whether any Critical Habitat ("CH") or Priority Biodiversity Features ("PBF") are present within the Project area, to understand possible risks/impacts thereon and to identify any resulting management implications for the Project. Specifically, the CHA aims to:

- Assess the potential presence of CH and PBFs based on site-specific biodiversity features, in line with EBRD PR6 and its accompanying Guidance Notes;
- Identify and classify any CH or PBFs applicable to the Project;
- Evaluate the implications of these findings for the Operation of the Project, including any additional mitigation or management measures that may be required; and
- Recommend appropriate next steps to ensure compliance with PR6 and support biodiversity-related decision-making going forward.

1.3 DEFINITIONS OF CRITICAL HABITAT AND PRIORITY BIODIVERSITY FEATURES

EBRD defines Critical Habitat (CH) and Priority Biodiversity Features (PBF) within its Environmental and Social Policy, specifically under Performance Requirement 6 (PR6) on biodiversity conservation and sustainable management of living natural resources.

According to EBRD PR6, paragraph 14, CH is defined as the most sensitive biodiversity features, which include one or more of the following:

(i) *highly threatened or unique ecosystems;*

(ii) *habitats of significant importance to endangered or critically endangered species;*

(iii) *habitats of significant importance to endemic or geographically restricted species;*

(iv) *habitats supporting globally significant migratory or congregatory species;*

(v) *areas associated with key evolutionary processes* (EBRD, 2019).

EBRD criteria for defining CH include reference to EU Habitat/Birds Directives. *CH qualifying criteria are described in detail in Section 2.3.*

EBRD also define PBF (Priority Biodiversity Features) which are a sub-set of biodiversity that is irreplaceable or vulnerable, but at a lower priority level than CH, which include*: (i) threatened habitats; (ii) vulnerable species; (iii) significant biodiversity features identified by a broad set of stakeholders or governments; and (iv) ecological structure and functions needed to maintain the viability* (EBRD, 2019).

PBF qualifying criteria are described in detail in Section 2.3.

1.4 PROJECT DESCRIPTION

1.4.1 LOCATION

The Kelme Wind Farm Project is situated in the Kelmė District Municipality, a predominantly rural area in northwestern Lithuania. This region is characterized by a landscape of expansive

agricultural fields, interspersed with patches of forest and pastureland. The area supports a variety of land uses, including grain cultivation, vegetable farming, and livestock grazing, contributing to its ecological diversity.

1.4.2 PROJECT COMPONENTS

The Project will be developed and implemented in two phases: Kelme I (105 MW) and Kelme II (195 MW). Kelme I includes 16 wind turbines ("WTs"), whilst Kelme II includes 28 WTs. The Project also includes a 28.8 km underground transmission line to enable the connection of both wind farms to the electrical grid. The Project layout is shown on the map in **Error! Reference source not found.**.

The Project is set to comprise of the following infrastructure components:

- The Kelmė Wind Farm will consist of 44 Nordex N163 6.X turbines—16 in Phase I and 28 in Phase II;
- The Project is expected to generate approximately 914.7 GWh annually (P50), with a capacity factor of 34.3% at P50.
- The wind turbine generators (WTGs) will be located at elevations between 134 m and 168 m above sea level, with a minimum distance of 3.1 times the rotor diameter (3.1D) between the turbines;
- The individual WTGs will be connected via a network of underground transmission line cables to a new 110/33 kV substation (also containing the control room for the WF and offices), which will be constructed in the northwestern part of the wind farm site;
- The Project also includes a completed 28.8 km underground transmission line connecting the wind farm to the grid.

The Project infrastructure and location is shown on the map in Figure 1-1.

Note that the underground transmission line for the connection of the WF to the grid was excluded from the survey study area as construction of this component had already been finalised and no operational risks to avian species are expected as the line is buried below ground.

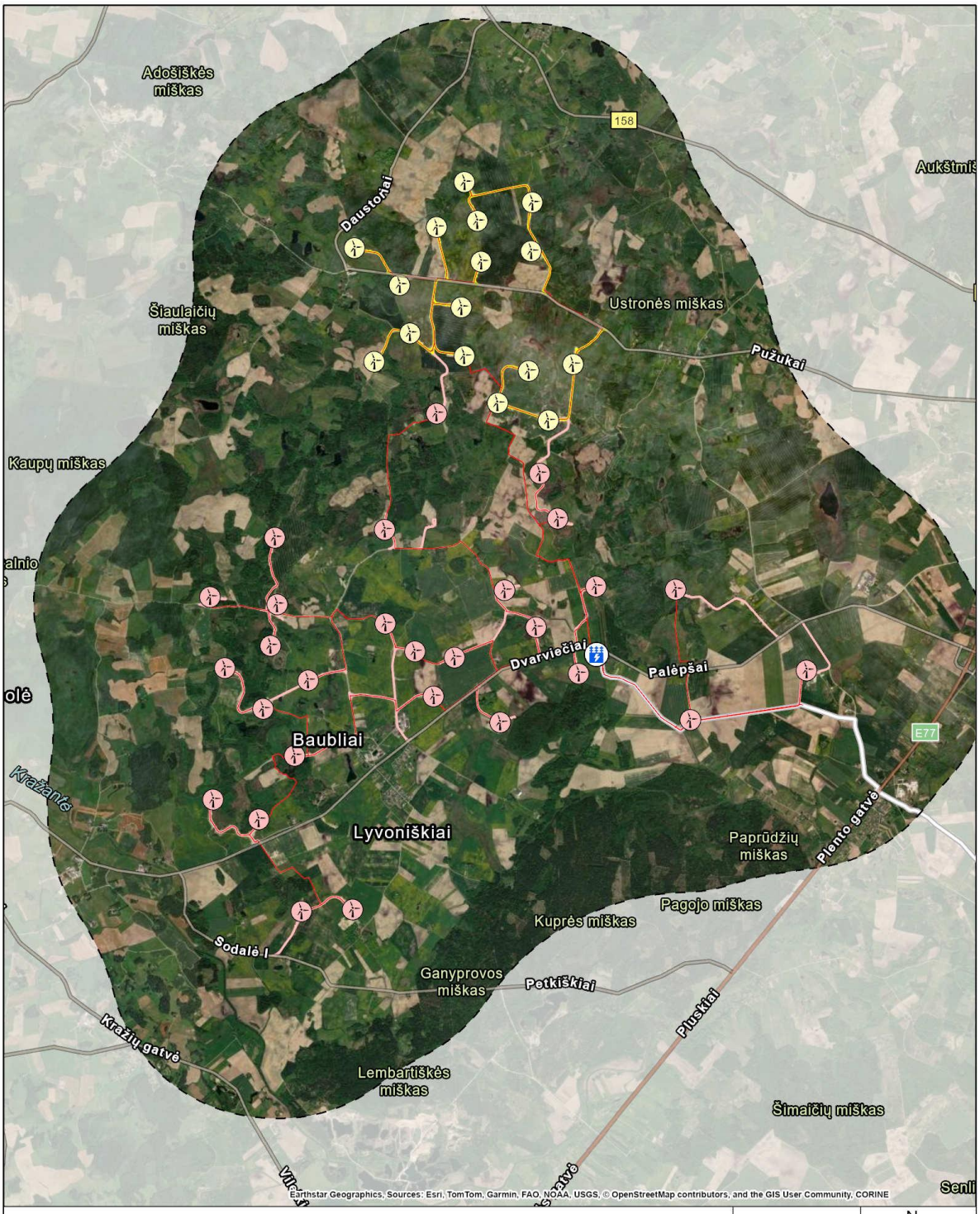

FIGURE 1-1 PROJECT INFRASTRUCTURE AND LOCATION

Source: ERM, based on layout data provided by Ignitis

1.4.3 RELATIONSHIP TO PROTECTED AREAS AND OTHER IMPORTANT AREAS OF BIODIVERSITY VALUE

1.4.3.1 LEGALLY PROTECTED AREAS

The Project infrastructure footprint is not located within any nationally or internationally recognized protected area[1]. According to the Environmental Impact Assessment (EIA) report (Ekosistema, 2019), the closest protected area in terms of the Natura 2000 network of sites is 'Paginskiai Village' (BAST code 1000000000457; EU code LTKEL0023), which lies approximately 2.7 km to the northwest of the Project area.

Two other Natura 2000 sites are also nearby: 'Pakevis Forest' (BAST code 1000000000229; EU code LTKEL0001), about 2.8 km to the north, and 'Pamedziokalnis Forest' (BAST code 1000000000449; EU code LTKEL00248), roughly 5.4 km to the southwest.

The 330 kV underground cable/transmission line (TL) is located in close proximity to the Natura 2000 site 'Dubysos vidurupis ir žemupys', located to the east of the Project area (see map in Figure 1-2). This site is designated under the EU Habitats Directive for the protection of 16 habitat types, including grasslands, wetlands, and forests, as well as 10 species of conservation importance that are mainly aquatic species (including freshwater fish, aquatic invertebrates, and semi-aquatic mammals – otter). Notably, it provides habitat supporting the Eurasian otter (*Lutra lutra*), a species classified as Near Threatened (NT) both globally and in Europe. Although construction of the transmission line in this area has already been completed, ERM has assessed the alignment for CH and PBF and as part of the evaluation of residual impacts post-construction.

1.4.3.2 INTERNATIONALLY RECOGNIZED AREAS OF BIODIVERSITY VALUE

The Project is not located within or near any internationally recognized areas of biodiversity value, in accordance with the EBRD PR6 definition[2] thereof:

- There are no nearby Ramsar sites identified;
- No UNESCO natural world heritage sites are located nearby;
- There are no Alliance for Zero Extinction (AZE) sites in Lithuania;
- Additionally, the Project lies outside any Key Biodiversity Areas (KBAs), with the closest, 'Tyruliai State Nature Reserve' and 'Dubysa River (Lyduvenai settlement & its valley)', located more than 18 km away. Direct impacts of the Project to KBAs will not result, and given the large distance, impacts on qualifying/trigger species (particularly breeding waterbirds and raptors) are highly unlikely; and
- The nearest Important Bird and Biodiversity Area (IBA), which overlaps with the Dubysa River KBA, is also over 18 km from the Project site, making any potential impact from the Project on the IBA conservation values (i.e. relevant breeding birds) highly unlikely due to the significant distance.

[1] EBRD adopts the IUCN definition of a protected areas, which is "*a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values"* (EBRD, 2019).
[2] Other internationally recognized areas are exclusively defined by EBRD as including but not limited to UNESCO Natural World Heritage Sites, UNESCO Man-and-Biosphere Reserves, Key Biodiversity Areas (KBAs), Alliance for Zero Extinction (AZE) sites and wetlands designated under the Ramsar Convention on Wetlands of International Importance (EBRD, 2019).

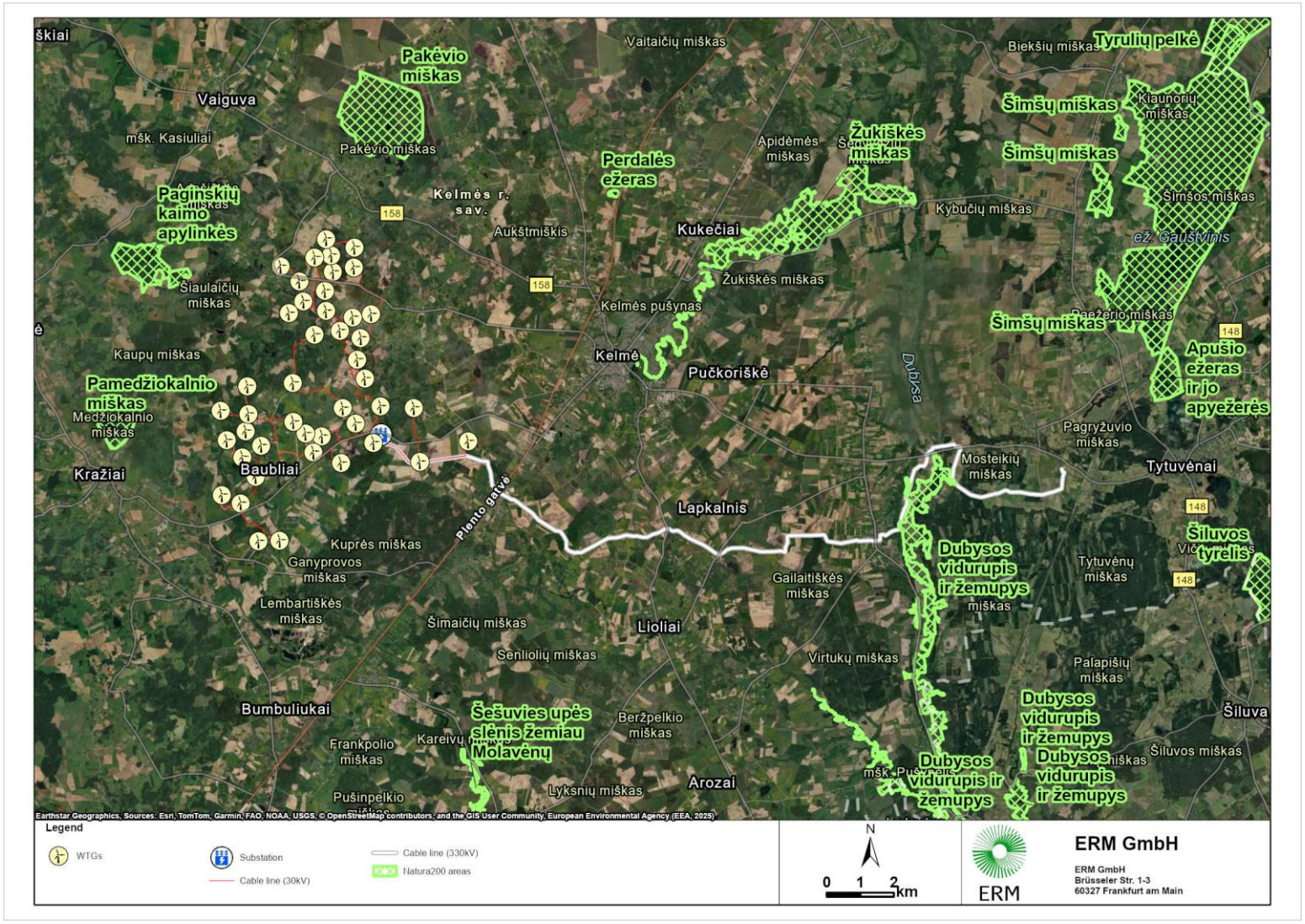

FIGURE 1-2 MAP SHOWING PROTECTED AREAS IN TERMS OF NATURA 2000 IN RELATION TO THE KELME WF PROJECT

Source: ERM, based on data provided by Ignitis, Natura 2000 coverage (European Environment Agency, 2021)

1.4.4 KEY ECOSYSTEMS AND HABITATS

The Project area is characterized by a mosaic of agricultural land, fragmented woodlands, and patches of natural forest, typical of the rural landscape surrounding villages such as Pliuškiai, Bielskiai, and Pupenai in northwestern Lithuania (see land cover types map in Figure 1-3). The landscape predominantly consists of expansive farmlands used for cultivating grains, vegetables, and pasture, interspersed with scattered forest patches and small wetlands, contributing to the region's ecological diversity.

There are several habitat types of EU Community Importance as per their listing in Annex I of the EU Habitats Directive, including aquatic habitats (lakes, ponds, peat wetlands/bogs), various grassland and meadow types and forest/woodland types. These are discussed in detail in Chapter 3.

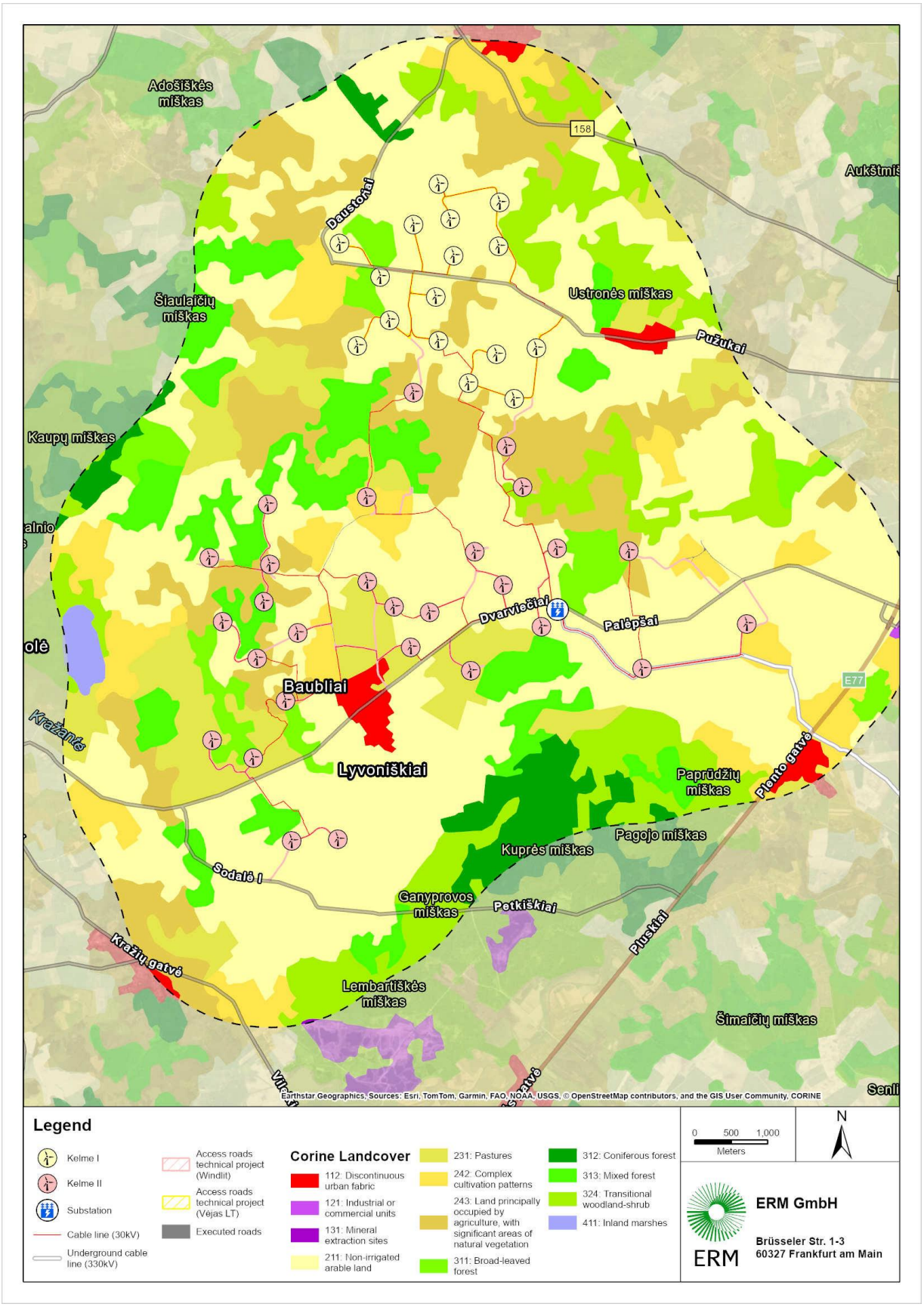

FIGURE 1-3 CORINE LAND COVER TYPES MAPPED FOR THE STUDY AREA

Source: ERM, based on data provided by Ignitis, CORINE land cover dataset (Copernicus, 2018)

2. APPROACH AND METHODS

2.1 DELINEATE THE STUDY AREA AND EAAAS FOR KEY SPECIES

A preliminary review of information on the region's ecology was carried out to define an appropriate overall 'Study Area' for the CHA. Delineating the study area requires consideration of: (i) the likely geographic area or extent of anticipated project activities and impacts; (ii) the full extent of ecosystems that might be affected in any way; and (iii) any additional areas that have a functional role in supporting those ecosystems or their associated biodiversity.

2.1.1 STUDY AREA FOR VOLANT SPECIES

For wind farm developments, identifying the study area for the CHA can be particularly challenging. This is because unlike other developments, the primary impacts arising from mortality or displacement of avian species/volant species (i.e. bats and birds) that interact with the wind farm and collision risk zone created by the rotation of the turbine blades. In such circumstances, one way of understanding and delineating the study area, is to identify the suite of volant (mobile/flying) species likely to interact with the turbines. Importantly, no distinct migratory corridors were recorded in the Project area and the area is not considered a key site for migration or stopover by migrant species based on the results of pre-operational monitoring for birds and bats conducted by CORPI (2025).

For volant species (birds and bats), the study area was considered **up to a maximum of 5 km**, informed by the following distances of effects for species based on a review of the literature:

- In terms of displacement effects (change in abundance and behavior) on species including birds, bats, small mammals, according to Tolvanen et al. (2023[3]) the distance of effect on average ranges from 500 m for waterfowl, raptors, passerines and waders; up to 5 km for gallinaceus birds (landfowl) and up to 1 km on average for bats. Distances accounted for both direct (e.g. noise) and indirect (e.g. reduced habitat quality) impacts of wind power development.
- NatureScot (2022[4]) indicates a protection zone buffer distance of 50 m up to 1000 m for breeding birds.
- Migratory birds trigger a requirement to include Key Biodiversity Areas (KBAs) and/or Important Bird Areas (IBAs) that can be separated by large distances often exceeding 10 km from the Project, if there is a likelihood of migratory flows through the Project area and towards or between the KBAs and IBAs. Here the concept of ecological connectivity is important and bearing in mind that migration distances locally may be relatively short, but across regions can be notably larger.
- Importantly, the Project area falls within zones of low to moderate sensitivity regarding bird migration. The pre-operational monitoring report by CORPI (2025), covering surveys of birds and bats from March to December 2024 confirmed that bird and bat migration in the area is limited.

[3] Tolvanen et al. (2023). How far are birds, bats, and terrestrial mammals displaced from onshore wind power development? – A systematic review. Biological Conservation 288 (2023). DOI: 10.1016/j.biocon.2023.110382

[4] NatureScot (2022). Disturbance Distances in selected Scottish Bird Species. Online at: https://www.nature.scot/doc/disturbance-distances-selected-scottish-bird-species-naturescot-guidance

- In terms of bats, activity was found to be moderate, with the peak collision risk identified during the August migration period, though no significant migratory bat corridors were identified.

2.1.2 STUDY AREA FOR NON-VOLANT SPECIES

For non-volant species (e.g. land-based fauna), the study area was considered to **up to a maximum of 700 m**, informed by the following distances of effects for species based on a review of the literature:

- In terms of displacement effects (change in abundance and behavior) on species including small mammals, according to Tolvanen et al. (2023[5]) the distance of effect on average ranges up to 700m for small mammals, accounting for both direct (e.g. noise) and indirect (e.g. reduced habitat quality) impacts of wind power development.
- It is recommended that the AoI also considers the potential for indirect impacts during construction such as visual, noise and vibration disturbance to fauna (wildlife) and in this case the literature reviewed (such as Kwon *et al*., 2018), suggests there is a strong possibility that species could be disturbed by noise up to a radius of approximately 250m from construction sites, and outside of the 250m noise level from construction should have been attenuated to background noise levels.
- Natural England (2018[6]) recommend a distance of 200m to account for air quality impacts around roads. Dust emissions can affect plants and habitats up to 350m from construction, therefore the AoI is extended to 350m for construction.
- The Nature Conservancy (2015[7]) recommend ecological buffer widths to minimize impacts to fish and wildlife habitat, that range from 10m to 150m for most fish, amphibians, reptiles, birds and mammals.
- Macfarlane & Bredin (2017[8]) recommend minimum buffer zones for aquatic habitats (wetlands, rivers) based on sector/activity type. For electricity generation works, a minimum buffer of 20m is recommended, for power/transmission lines a minimum buffer width of 10m is defined and for unpaved roads, a minimum width of 15m is recommended.

The CHA study area for volant species (~**7,377 ha** in extent) and non-volant species (~**1,449 ha** in extent) is presented on the map in **Error! Reference source not found.**, as a **5 km** and **700 m buffer zone**, respectively.

[5] Tolvanen et al. (2023). How far are birds, bats, and terrestrial mammals displaced from onshore wind power development? – A systematic review. Biological Conservation 288 (2023). DOI: 10.1016/j.biocon.2023.110382

[6] Natural England (2018). Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. June 2018. Online at: https://publications.naturalengland.org.uk/publication/4720542048845824

[7] The Nature Conservancy (2015). Reducing Ecological Impacts of Shale Development: Ecological buffers. Online at: https://www.nature.org/media/centralapps/recommended-shale-practices-ecological-buffers.pdf

[8] Macfarlane & Bredin (2017). Buffer Zone Guidelines for Rivers, Wetlands and Estuaries. Part 1: Technical Manual. Online at: https://www.wrc.org.za/wp-content/uploads/mdocs/TT715-1_web.pdf

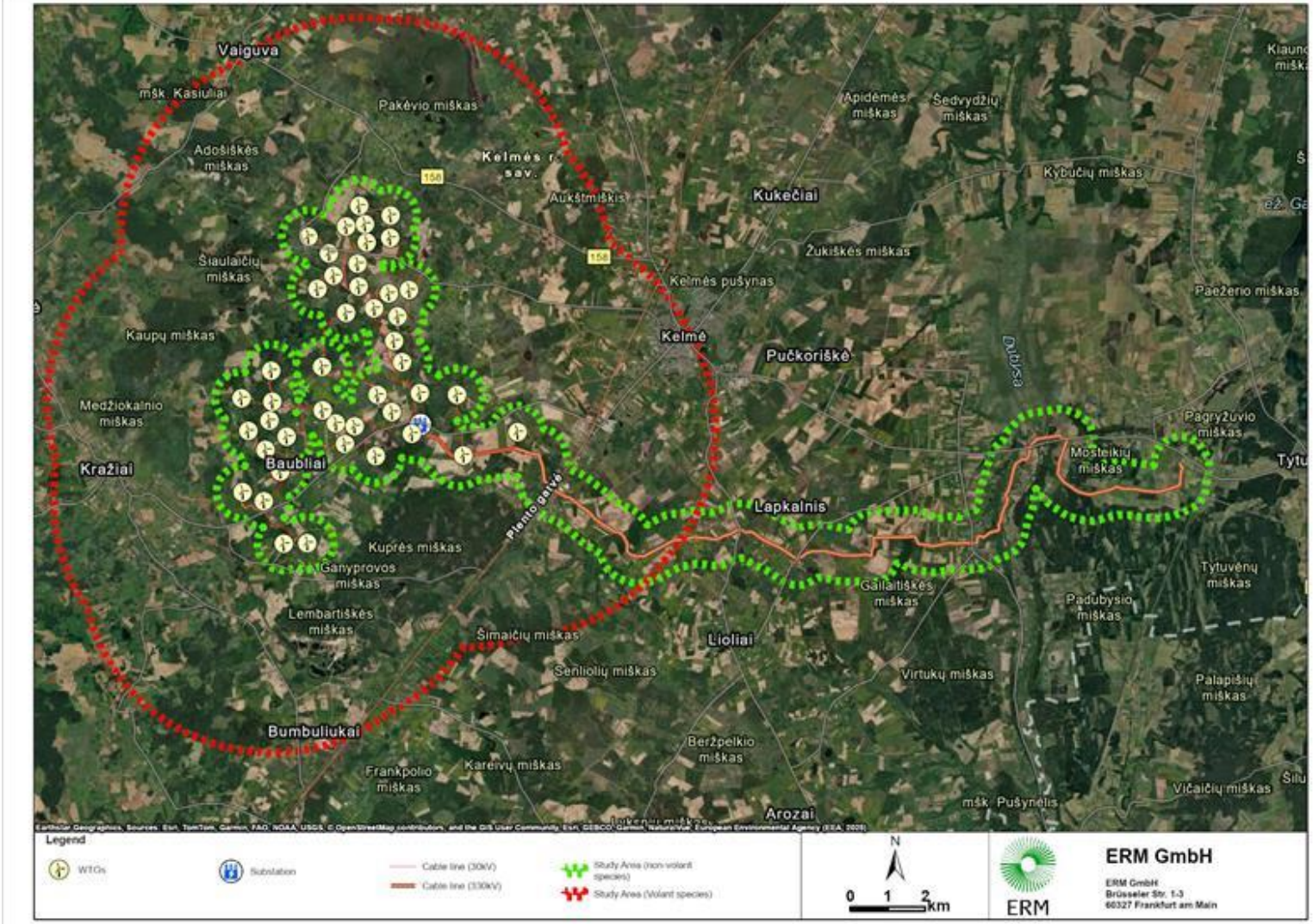

FIGURE 2-1 CHA STUDY AREA FOR VOLANT ('RED' OULINE) AND NON-VOLANT ('GREEN' OUTLINE) SPECIES

Source: ERM, using Client data

2.2 IDENTIFY BIODIVERSITY VALUES/FEATURES FOR THE PROJECT

A desk-based review of available information on the biodiversity values/features within the study area was undertaken to inform the CHA. This included a review of global biodiversity datasets, project-specific biodiversity information, and published and publicly available information (as needed). A list of biodiversity features (i.e. species, KBAs, and PAs), potentially present in the study area was compiled from a spatial analysis of global datasets available through the Integrated Biodiversity Assessment Tool (IBAT). IBAT is a tool that draws from the IUCN (International Union for Conservation of Nature) Red List of Threatened Species, KBAs, and The World Database on Protected Areas (WDPA).

Project biodiversity baseline information was also reviewed to support the identification of biodiversity that may qualify as CH/PBF. This included the following sources of information:

- Reports on Bird and Bat Surveys for the Kelme District Wind Farms: Kelme I and II (Coastal Research and Planning Institute - CORPI, 2025);
- The Bird and Bat Monitoring Summary Report (ERM, 2025);
- Residual Habitat Impact Assessment Report (ERM, 2025);
- Screening Information for Environmental Impact Assessment for Kelme I (UAB Ekosistema, 2019);
- Environmental Impact Assessment for Kelme II (UAB Ekosistema, 2021-2022); and
- Environmental and Social Due Diligence (ESDD) Report (ERM, 2025).

2.3 SCREENING OF BIODIVERSITY VALUES AGAINST CRITICAL HABITAT CRITERIA & THRESHOLDS

2.3.1 APPROACH

The guidance provided in EBRD Guidance Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources (EBRD, March 2023) outlines the detailed steps for screening the Project's biodiversity values against the CH/PBF criteria as follows:

1. Screening of the biodiversity baseline data to identify any candidate Critical Habitat (CH) and/or Priority Biodiversity Features (PBF) regularly occurring in the study area. The study area encompasses the area affected by the Project's direct and indirect impacts i.e. the Area of Influence, and the surrounding landscape.
2. Where candidates are identified, an Ecologically Appropriate Area of Analysis (EAAA) is typically defined. The EAAA mapping is according to EBRD GN6, as supplemented with information from the International Finance Corporation's (IFC) GN6 (i.e. paragraph GN59).
3. The criteria for CH and PBFs are applied to the EAAAs to determine whether each candidate qualified as such or not.
4. Where CH and/or PBFs are confirmed present (or likely present), the implications for the Project under PR6 are then set out. This information is used to inform the Project's impact assessment process.

A summary of the approach is presented in the following sub-sections and shown graphically in Figure 2-2.

The screening process was further informed by additional guidance provided in GN69 to GN97 of the IFC Guidance Note (GN) 6: 'Biodiversity Conservation and Sustainable Management of Living Natural Resources' (2019).

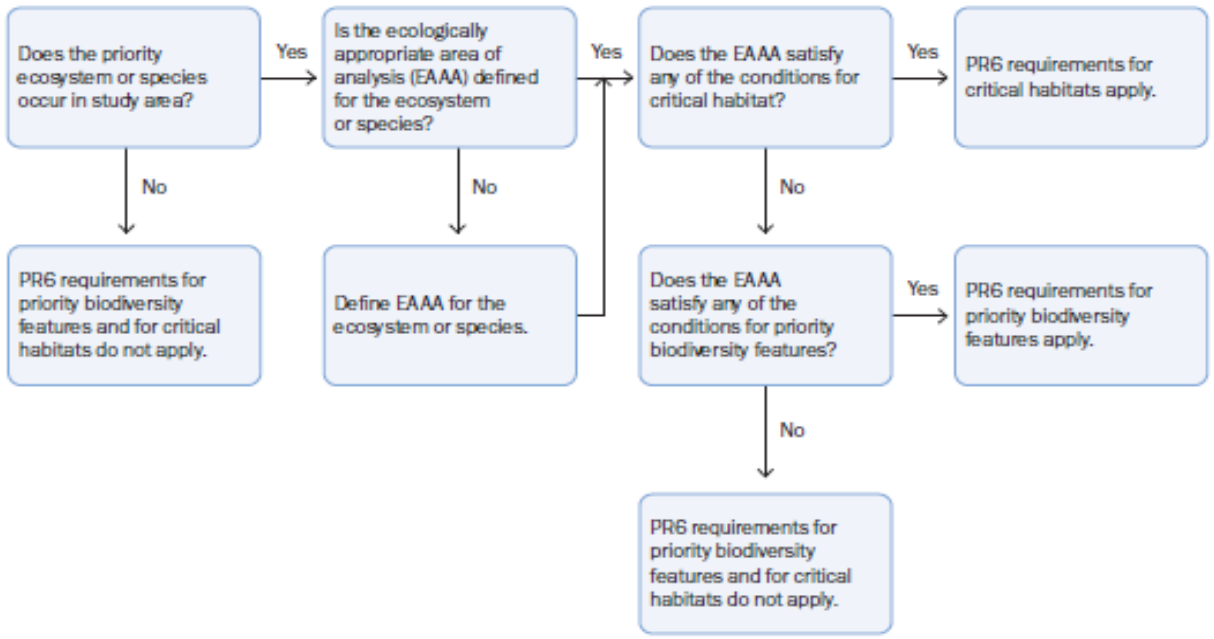

FIGURE 2-2 EBRD CH SCREENING APPROACH

Source: EBRD 'Guidance Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources' (EBRD, March 2023)

NOTE: Use of population surrogates / proxies

Note that in the absence of reliable population data, proxies such as the proportion of a species' distribution in the area, have been used to inform the CH determination for criteria that consider species. Appropriate population surrogates including Extent of Occurrence (EOO), range, or known sites of occurrence (mainly derived from the IUCN Red List data), were used to determine significance with respect to the global population (see IFC, 2019: Guidance Note 77). Where there is uncertainty about the population, range, and distribution of potentially occurring biodiversity features within the study area, a precautionary approach has been applied, and the feature is retained for further assessment.

2.3.2 EBRD CRITERIA & THRESHOLDS

The EBRD criteria for screening CH and PBF are as follows:

Criterion 1. Priority ecosystems

- Threatened ecosystems:

  (a) Habitats listed in Annex 1 of EU Habitats Directive

  (b) IUCN Red List EN or CR ecosystems

Criterion 2. Priority species and their habitats

- Threatened species:
  (a) Species and their habitats listed in Annex I of the EU Birds Directive, Annex II and IV of Annex EU Habitats Directive
  (b) IUCN Red List EN or CR species
  (c) IUCN Red List VU species
  (d) Nationally or regionally (for example, Europe) listed EN or CR species
- Range-restricted species
- Migratory and congregator species

The EBRD thresholds for screening CH include species/habitats listed in terms of the EU Habitats Directive and EU Birds Directive for example, and thresholds also exist for the determination of Priority Biodiversity Features (PBF). These are presented below in Table 2-1.

TABLE 2-1 EBRD CRITERIA AND THRESHOLDS OF CH AND PBF

Criterion	Priority Biodiversity Feature (PBF)	Critical Habitat (CH)
1. Priority ecosystems		
Threatened ecosystems		
(a) Habitats listed in Annex 1 of EU Habitats Directive (EU member states only*) or Resolution 4 of Bern Convention (signatory nations only) (b) IUCN Red-List EN or CR ecosystems	(a) EAAA is a habitat type listed in Annex 1 of EU Habitats Directive (EU member states only*) or Resolution 4 of Bern Convention (b) EAAA < 5% of the global extent of an ecosystem type with IUCN status of CR or EN	(a) EAAA is habitat type listed in Annex 1 of EU Habitats Directive marked as "priority habitat type" (EU member states only*) (b) EAAA ≥ 5% of global extent of an ecosystem type with IUCN status of CR or EN (c) EAAA is an ecosystem determined to be of high priority for conservation by national systematic conservation planning
2. Priority Species and their Habitats		
(i) Threatened Species		
(a) Species and their habitats listed in EU Habitats Directive and Birds Directive (EU members only*) or Bern Convention (signatory nations only) (b) IUCN Red List EN or CR species (c) IUCN Red List VU species	(a) EAAA for species and their habitats listed in Annex II of Habitats Directive (EU member states only*), Annex I of Birds Directive (EU member states only*), or Resolution 6 of Bern Convention (b) EAAA supports < 0.5% of global population OR < 5	(a) EAAA for species and their habitats listed in Annex IV of the Habitats Directive (see EU restrictions) (EU member states only*) (b) EAAA supports ≥ 0.5% of the global population AND ≥ 5 reproductive units of a CR or EN species

Criterion	Priority Biodiversity Feature (PBF)	Critical Habitat (CH)
(d) Nationally or regionally (e.g., Europe) listed EN or CR species	reproductive units of a CR or EN species. (c) EAAA supports VU species (d) EAAA for regularly occurring nationally or regionally listed EN or CR species	(c) EAAA supports globally significant population of VU species necessary to prevent a change of IUCN Red List status to EN or CR, and satisfies threshold (b) (d) EAAA for important concentrations of a nationally or regionally listed EN or CR species
(ii) Range-restricted species		
	(a) EAAA for regularly occurring range-restricted species	(a) EAAA regularly holds ≥ 10% of global population AND ≥ 10 reproductive units of the species***
(iii) Migratory and congregatory species		
	(a) EAAA identified per Birds Directive or recognized national or international process as important for migratory birds (esp. wetlands)	(a) EAAA sustains, on a cyclical or otherwise regular basis, ≥ 1 percent of the global population at any point of the species' lifecycle (b) EAAA predictably supports ≥10 percent of global population during periods of environmental stress

Source: ERM, adapted from EBRD (2023) - Guidance Note 6 regarding PR6

3. FINDINGS OF THE CRITICAL HABITAT ASSESSMENT

The following sections of Chapter 3 provide a comprehensive assessment of CH and PBF for the Project based on the approach and criteria of EBRD PR6.

3.1 PRIORITY / THREATENED ECOSYSTEMS

Criteria:

Criterion 1 considers the presence of 'priority ecosystems' (i.e. threatened ecosystems) and this includes ecosystems that are listed as CR (Critically Endangered) or EN (Endangered) as per the IUCN threatened ecosystems listing, as well as habitats listed in Annex 1 of the EU Habitat directive.

CH would be triggered for any of the following:	PBF would be triggered for the following:
• 'Priority' habitats listed in Annex I of the EU Habitats Directive. • Globally threatened (CR/EN) ecosystems (in terms of the IUCN) that represent ≥ 5 % of the global extent. • Other areas that are of high priority for conservation in terms of regional/national conservation planning.	• Habitats types listed in Annex I of the EU Habitats Directive (automatically qualify) • Habitats listed in Resolution 4 of the Bern Convention (automatically qualify). • Globally CR/EN ecosystems that are <5% of the known global extent.

Candidate ecosystems/habitats:

Available spatial information from the Lithuanian Geoportal.lt database (online at: https://www.geoportal.lt/map/) was sourced and inputted into GIS, showing natural habitats of European Community Importance (i.e. Annex I Habitats of the EU Habitats Directive) mapped for the country and managed by the Ministry of Environment of the Republic of Lithuania.

These are shown indicated on the maps in Figure 3-2 and Figure 3-2 in relation to the Project layout and summarised in Table 3-1. *Note that the habitat codes indicated on the maps (Figure 3-2 and Figure 3-2) relate to those indicated in Table 3-1.*

Several are 'priority' habitats listed in Annex I of the EU Habitats Directive and several are also threatened types (Endangered, EN) regionally according to the EU Red List of Threatened Ecosystems (Janssen *et al.*, 2016[9]), and these were considered in terms of CH or PBF qualification, as summarized in Table 3-1.

[9] Janssen *et al.* (2016). European Red List of Habitats: Part 2. Terrestrial and freshwater habitats. European Union (2016).

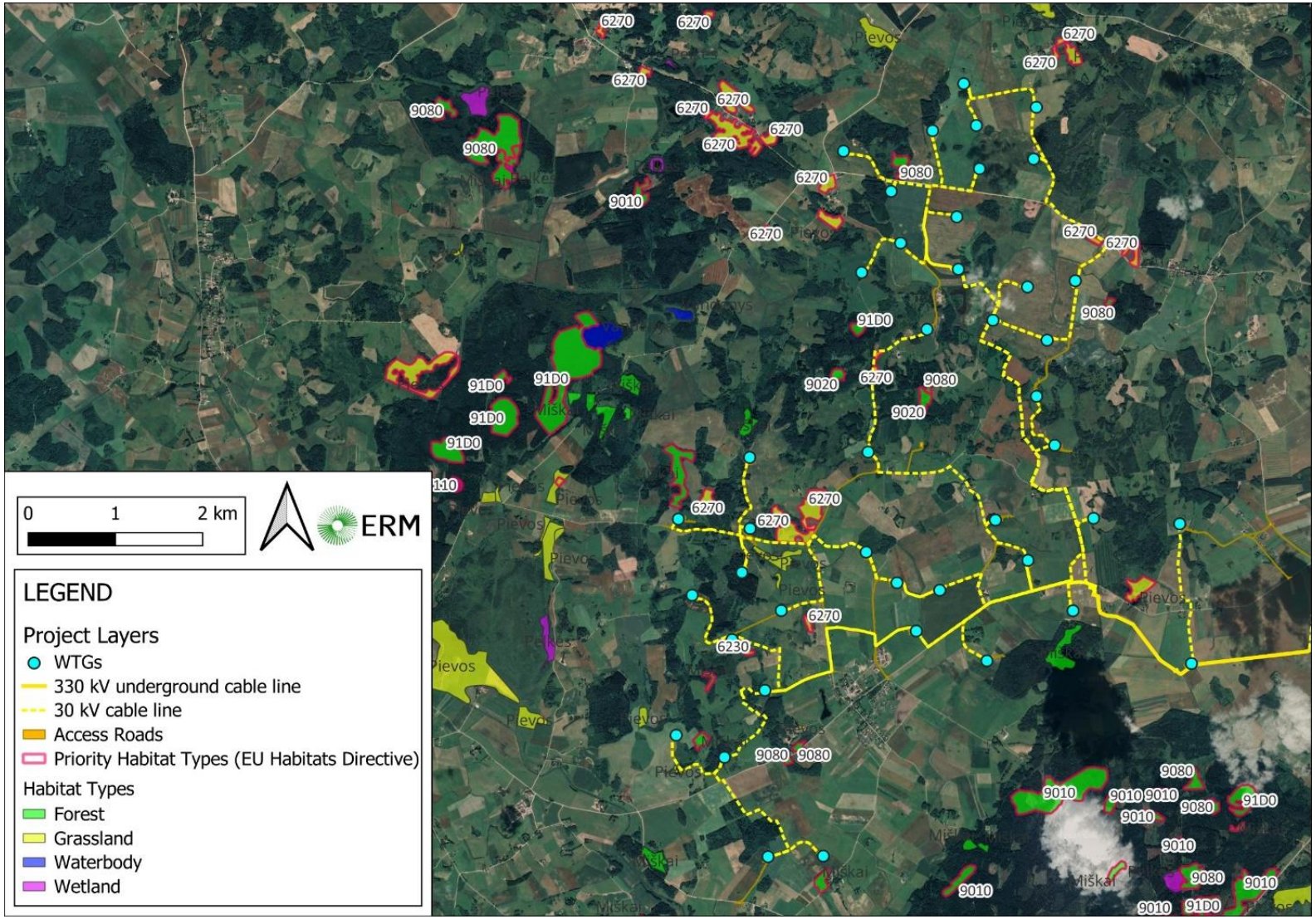

FIGURE 3-1 ANNEX I HABITAT TYPES IN RELATION TO THE WIND FARM LAYOUT

Source: ERM, Lithuanian Geoportal.lt database online at: https://www.geoportal.lt/map/

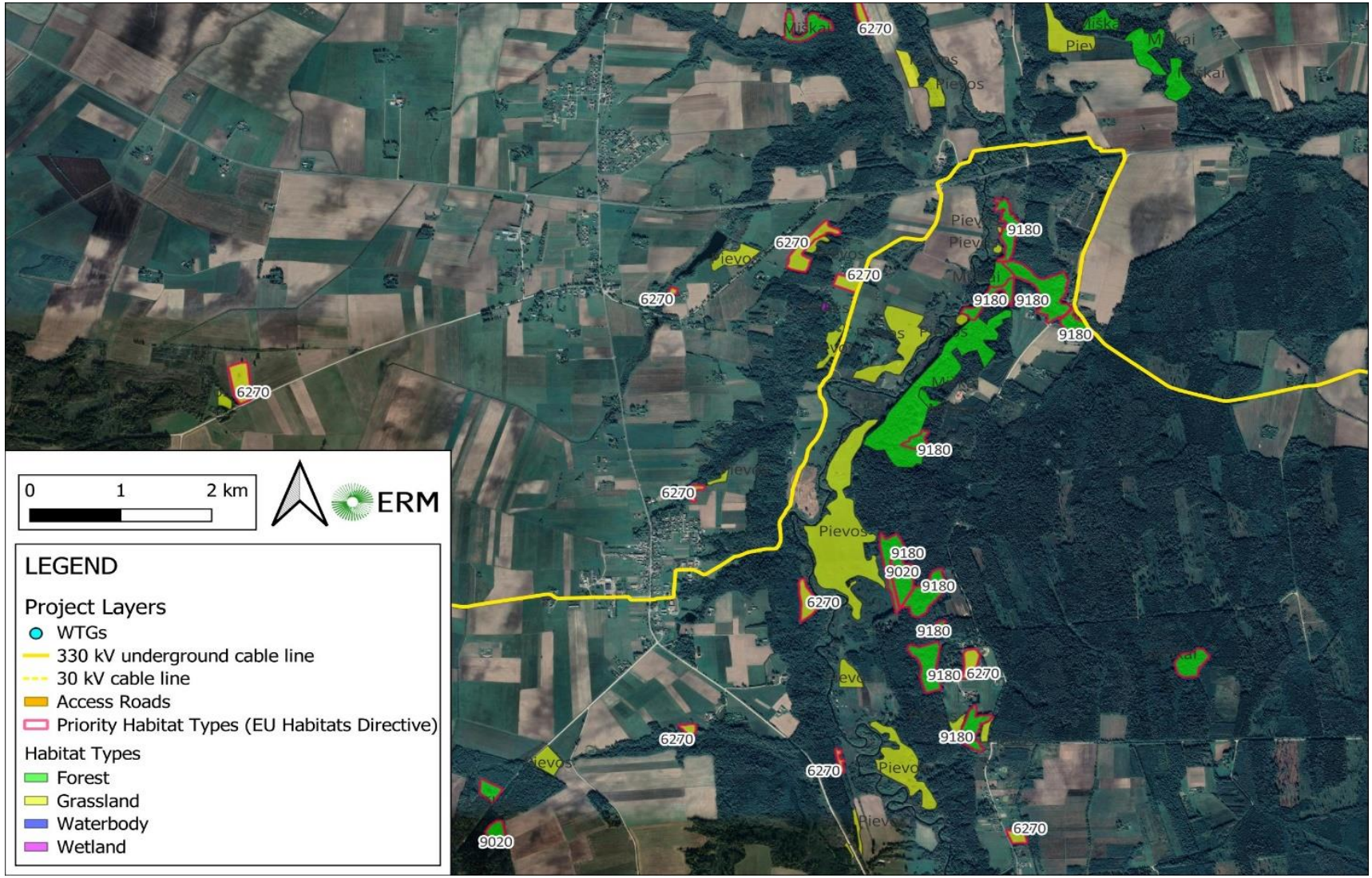

FIGURE 3-2 ANNEX I HABITAT TYPES IN RELATION TO THE 330 KV TRANSMISSION LINE

Source: ERM, Lithuanian Geoportal.lt database online at: https://www.geoportal.lt/map/

TABLE 3-1 ANNEX I HABITAT TYPES

Habitat Classification: Annex I of the EU Habitats Directive	Annex I Priority Habitat Type?	EUNIS Habitat Type and Code (2012)	Revised EUNIS Habitat Type and Code (2021)	EU Terrestrial Habitat Red List: Code and Name	EU Red List Status (2016)	CH or PBF?
3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	No	C1.2 Permanent mesotrophic lakes, ponds and pools	-	C1.2a Permanent oligotrophic to mesotrophic waterbody with Characeae	VU	PBF
3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition — type vegetation	No	C1.3 Permanent eutrophic lakes, ponds and pools	-	C1.2b Mesotrophic to eutrophic waterbody with vascular plants	NT	PBF
3160: Natural dystrophic lakes and ponds	No	C1.4 Permanent dystrophic lakes, ponds and pools	-	C1.4 Permanent dystrophic waterbody	NT	PBF
***6120 Xeric sand calcareous grasslands**	**Yes**	E1.9 Open non-Mediterranean dry acid and neutral grassland, including inland dune grassland	R1P Oceanic to subcontinental inland sand grassland on dry acid and neutral soils	E1.9a Oceanic to subcontinental inland sand grassland on dry acid and neutral soils	**EN**	**CH**
6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (important orchid sites)	No	E1.2 Perennial calcareous grassland and basic steppes	R1A Semi-dry perennial calcareous grassland (meadow steppe)	E1.2a Semi-dry perennial calcareous grassland	VU	PBF
***6230 Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)**	**Yes**	E1.7 Closed non-Mediterranean dry acid and neutral grassland	R1M Lowland to montane, dry to mesic grassland usually dominated by Nardus stricta	E1.7 Lowland to submontane, dry to mesic Nardus grassland	**VU**	**CH**
***6270 Fennoscandian lowland species-rich dry to mesic grasslands**	**Yes**	E2.2 Low and medium altitude hay meadow	R22 Low and medium altitude hay meadow	E2.2 Low and medium altitude hay meadow	**VU**	**CH**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	No	E3.5 Moist or wet oligotrophic grassland	R37 Temperate and boreal moist or wet oligotrophic grassland	E3.5 Temperate and boreal moist or wet oligotrophic grassland	EN	PBF
6450: Northern boreal alluvial meadows	No	E3.4 Moist or wet eutrophic and mesotrophic grassland	R35 Moist or wet mesotrophic to eutrophic hay meadow	E3.4a Moist or wet mesotrophic to eutrophic hay meadow	LC	PBF
6510: Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	**Yes**	E2.2 Low and medium altitude hay meadows	R22 Low and medium altitude hay meadow	E2.2 Low and medium altitude hay meadow	**EN**	**CH**
***7110 Active raised bogs**	**Yes**	D1.1 Raised bogs	**-**	D1.1 Raised bog	**EN**	**CH**
7140 Transition mires and quaking bogs	No	D2.2 Poor fens and soft-water spring mires	-	D2.2a Poor fen	VU	PBF

Habitat Classification: Annex I of the EU Habitats Directive	Annex I Priority Habitat Type?	EUNIS Habitat Type and Code (2012)	Revised EUNIS Habitat Type and Code (2021)	EU Terrestrial Habitat Red List: Code and Name	EU Red List Status (2016)	CH or PBF?
7160 Fennoscandian mineral-rich springs and springfens	No	D2.2 Poor fens and soft-water spring mires	-	D2.2c Intermediate fen and soft-water spring mire	VU	PBF
***9010 Western Taïga**	**Yes**	G1.9 Non-riverine woodland with birch, aspen or rowan	T1C Temperate and boreal mountain Betula and Populus tremula forest on mineral soils	G1.9a Temperate and boreal mountain Betula and Populus tremula forest on mineral soils	**LC**	**CH**
***9020 Fennoscandian hemiboreal natural old broad-leaved deciduous forests (Quercus, Tilia, Acer, Fraxinus or Ulmus) rich in epiphytes**	**Yes**	G1. A Meso- and eutrophic oak, hornbean, ash, sycamore, lime, elm and related woodland	T1E Carpinus and Quercus mesic deciduous forest	G1. Aa Carpinus and Quercus mesic deciduous woodland	**NT**	**CH**
9050 Fennoscandian herb-rich forests with Picea abies	No	G3.A Spruce taiga woodland	T3F Dark taiga	G3.A Picea taiga woodland	NT	PBF
***9080 Fennoscandian deciduous swamp woods**	**Yes**	G1.4 Broadleaved swamp woodland not on acid peat	T15 Broadleaved swamp forest on non-acid peat	G1.4 Broadleaved swamp woodland on non-acid peat	**VU**	**CH**
9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	No	G1. A Meso- and eutrophic oak, hornbean, ash, sycamore, lime, elm and related woodland	T1E Carpinus and Quercus mesic deciduous forest	G1. Aa Carpinus and Quercus mesic deciduous woodland	NT	PBF
***9180 Tilio-Acerion forests of slopes, screes and ravines**	**Yes**	G1.A Meso- and eutrophic oak, hornbean, ash, sycamore, lime, elm and related woodland	T1F Ravine Forest	G1. Ab Ravine woodland	**NT**	**CH**
***91D0 Bog woodland**	**Yes**	G3.D Boreal bog conifer woodland	T3J Pinus and Larix mire forest	G3. Da Pinus mire woodland	**VU**	**CH**
***91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)**	**Yes**	G1.1 Riparian and gallery woodland, with dominant alder, birch, poplar or willow	T11 Temperate Salix and Populus riparian forest	G1.1 Temperate and boreal softwood riparian woodland	**NT**	**CH**

Table key:

EU Red List threat status: EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern

CH = Critical Habitat

*asterix indicates priority habitats in terms of Annex I of the EU Habitats Directive

Source: ERM, Geoportal for Lithuania (https://www.geoportal.lt) EUNIS classification, EU Habitats Directive, European Red List of Habitats for terrestrial and freshwater ecosystems (Janssen et al., 2016)

Additionally, ERM together with local consultants and botanists from CORPI, undertook a field survey in June 2025 to assess natural habitats potentially impacted by the construction phase

(installation of underground transmission line, construction of access roads, upgrading of existing access roads and construction of turbine pads). Focal areas where residual post-construction impacts may have resulted from the construction of WF infrastructure across natural habitats were identified by overlaying the layout plant for the WF onto satellite imagery in GIS (Geographic Information Systems) and manually identifying potential natural habitats that may have been impacted. 29 focal areas were identified by ERMs biodiversity expert using GIS and surveyed in the field by CORPI.

The results of these additional surveys indicate that whilst several wetlands, forest and woodland patches, shrubland and riverine habitats have been identified in proximity to wind farm infrastructure that has been constructed (i.e. access roads, underground transmission line installation, turbine pads), no habitat types of EU community importance (in terms of listing in Annex I of the EU Habitats Directive) have been impacted by the Project construction.

As such, no additional habitats apart from those indicated in Figure 3-2 and Figure 3-2 in relation to the Project layout and summarised in Table 3-1 are relevant to the Project and no additional candidate habitats are relevant to the CHA.

The reader is referred to the 'Residual Habitat Impact Assessment Report' (ERM, 2025) for further information on the approach, methods and results of the assessment.

Results:

Several of the physical habitats in the Project area qualify as CH (see maps in Figure 3-3 and Figure 3-4), as follows:

- There are four habitat types listed in terms of the IUCN that are regionally threatened (Endangered, EN threat) in terms of the European Red List of Habitats for terrestrial and freshwater ecosystems (Janssen *et al.*, 2016) and which would be considered as qualifying as CH.
- 10 Annex I habitat types in Table 3-1 are listed as 'priority' habitat types in terms of the EU Habitats Directive and qualify as CH, including:
  - *6120 Xeric sand calcareous grasslands
  - *6230 Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe).
  - *6270 Fennoscandian lowland species-rich dry to mesic grasslands
  - 6510: Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)
  - *7110 Active raised bogs
  - *9010 Western Taïga
  - *9020 Fennoscandian hemiboreal natural old broad-leaved deciduous forests (Quercus, Tilia, Acer, Fraxinus or Ulmus) rich in epiphytes
  - *9080 Fennoscandian deciduous swamp woods
  - *9180 Tilio-Acerion forests of slopes, screes and ravines
  - *91D0 Bog woodland
  - *91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

The remaining habitats in Table 3-1, that are not priority types or regionally EN types, qualify as PBF given their listing in Annex I of the EU Habitats Directive and/or listing in Revised Annex I to Resolution 4 of the Bern Convention.

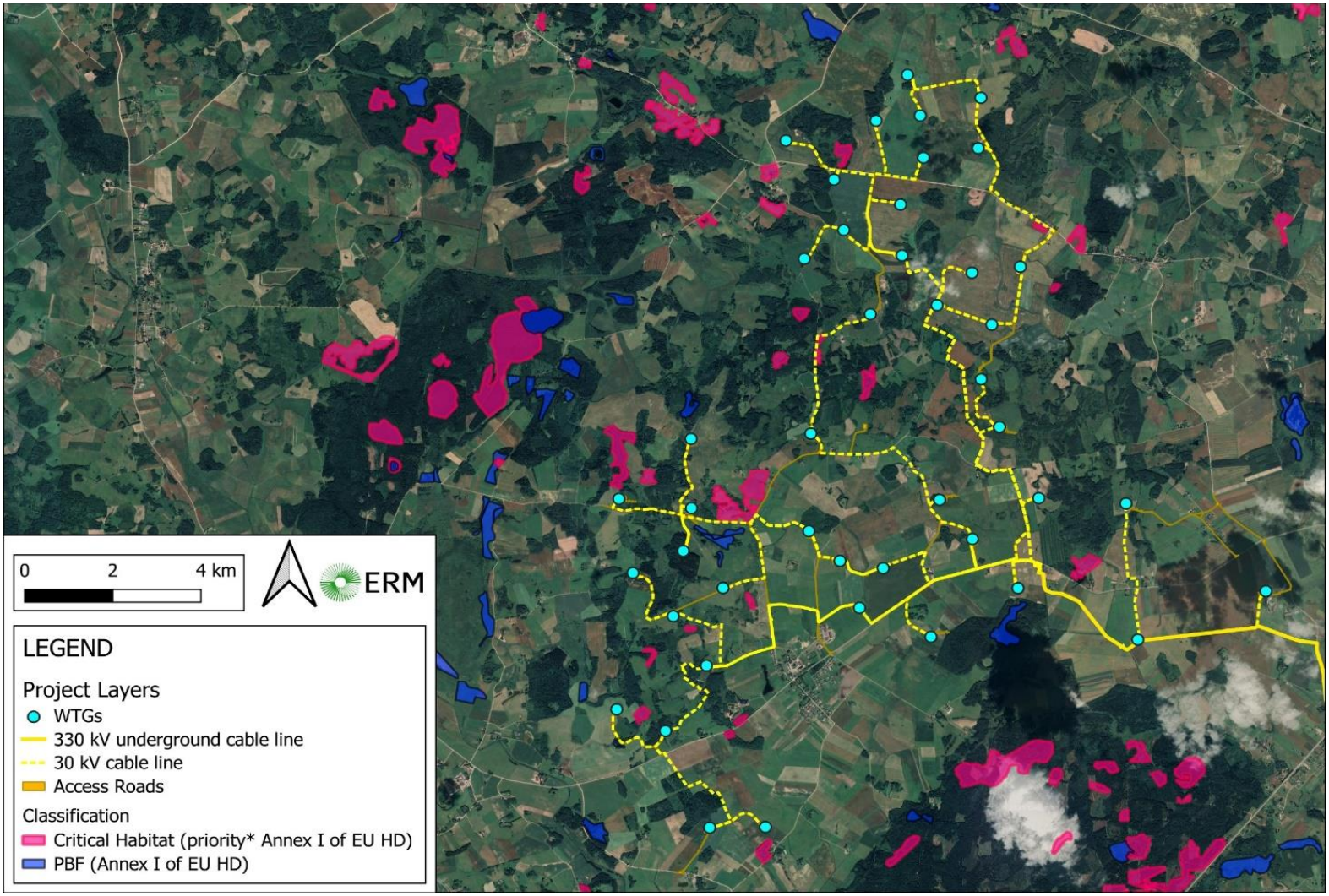

FIGURE 3-3 MAP SHOWING CH AND PBF CLASSIFICATION FOR ANNEX I HABITATS IN RELATION TO THE WIND FARM INFRASTRUCTURE LAYOUT

Source: ERM, Lithuanian Geoportal.lt database online at: https://www.geoportal.lt/map/

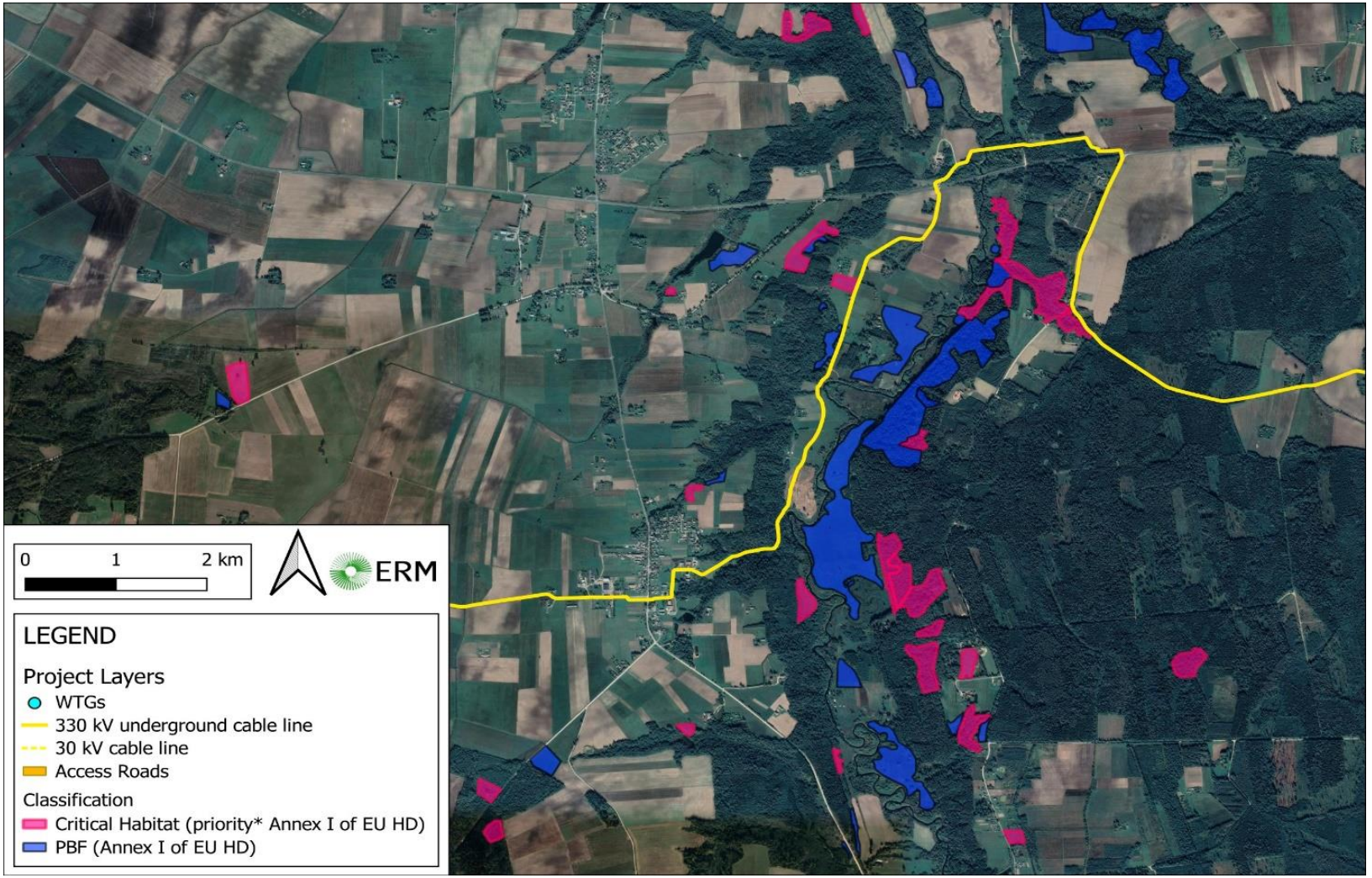

FIGURE 3-4 MAP SHOWING CH AND PBF CLASSIFICATION FOR ANNEX I HABITAT TYPES IN RELATION TO THE 330 KV TRANSMISSION LINE

Source: ERM, Lithuanian Geoportal.lt database online at: https://www.geoportal.lt/map/

3.2 PRIORITY SPECIES AND THEIR HABITATS

Criterion 2 deals with priority species (threatened, restricted-range, migratory & congregatory) and their respective habitats.

3.2.1 THREATENED SPECIES

Criteria:

Criterion 2 (i) deals primarily with species that are of conservation importance or concern (i.e. threatened species with CR/EN/VU threat status, and species included in specific annexes of the EU Habitats/Birds Directives), the presence of which may qualify habitats as 'critical habitat', depending on whether these automatically qualify by presence alone or of certain thresholds are met as relevant to the individual criteria.

CH would be triggered for any of the following:	PBF would be triggered for the following:
• Species and their habitats listed in Annex IV of the EU Habitats Directive. • Areas that support globally important concentrations of an IUCN CR or EN species (≥ 0.5 % of the global population) AND ≥ 5 reproductive units. • Areas that support globally important concentrations of an IUCN globally VU species, the loss of which would result in the upgrading to EN or CR status. • Areas containing important concentrations of a nationally/regionally listed CR/EN species.	• Species listed in Annex I of EU Birds Directive (automatically qualify). • Species listed in Annex II of EU Habitats Directive (automatically qualify). • Areas that support <0.5% of the global population OR <5 reproductive units of an IUCN CR or EN species. • Globally VU species (automatically qualify). • Regularly occurring CR/EN species as per regional (EU) or national listing.

Species that are endemic to Lithuania or restricted-range are considered under Criterion 2 (ii) and migratory/congregatory under Criterion 2 (iii) in subsections 3.2.2 and 3.2.3 that follow.

Candidate species:

Table 3-2 provides a summary of the candidate fauna and flora species that potentially qualify as CH or PBF based on information from the EIA report and pre-operational bird/bat monitoring studies (CORPI, 2025):

- Of a total of 134 species of birds recorded during pre-operational surveys in 2024 (CORPI, 2025), a refined list of 70 species were selected as candidate species for further analysis as part of the CHA (based on species threat status and listing in the EU Bird/Habitats Directives). This included several species of passerines, waterfowl, waders and raptors.
- All 12 species of bats were considered as candidate species.
- One land mammal and semi-aquatic species, the Eurasian Otter (*Lutra lutra*) was considered based on potential evidence of its occurrence as highlighted in the EIA report for Kelme II.

The EIA report for Kelme II mentions that no other threatened species of land animals are likely to occur or be affected by the Project, and therefore the focus has been on documenting and describing impacts to avian species (birds, bats).

ERM did however conduct a rapid screening of the Project area using the IUCN online database of threatened species (https://www.iucn.org), considering threatened species (CR, EN, VU) globally and in Europe that could potentially occur in the broader area of the Project based on their known or modelled geographical/distributional ranges. The findings indicate the following:

- The majority of threatened species globally and for Europe include various species of birds (namely raptors, waterbird and several passerines) as well as several species of bats. These are well covered in terms of the pre-operational bird and bat monitoring completed in 2024 (CORPI. 2025).
- In terms of land mammals, only the European Mink (*Mustela lutreola*) (CR globally and in EU) is considered however this species is known to be regionally extinct.
- Several threatened (EN, VU) terrestrial and aquatic invertebrate species potentially occur, and most are likely to be associated with forest habitats that have been largely avoided during construction. Surveys of this faunal group would probably not be of much added value given the status of the Project now (entering operation), where impacts to this group are unlikely to be of much significance.
- Two threatened fish species, Atlantic Sturgeon (*Acipenser oxyrinchus*) (CR in EU, VU globally) and European Eel (*Anguilla anguilla*) (CR globally and in EU), with the former likely to be extinct regionally and European Eel could potentially occur in streams/rivers associated with the Project. However, the Project is unlikely to have an effect on aquatic biodiversity (ongoing impacts are unlikely as construction of road/powerline infrastructure across watercourses has now been completed and a method of burial below the watercourses was implemented so as to avoid impacts on aquatic habitat and associated fauna).
- In terms of flora, the large majority of globally EN/VU species are fungi and species of moss that typically require older growth/mature forest habitats. At the regional level for Europe, there are several VU aquatic plant species and mosses that are known from forests, deciduous woodlands and wetlands (peat bogs).

Results:

Critical habitat species

There are no globally CR or EN species recorded that would qualify the area as CH.

In terms of birds, only Black Kite (nationally EN species) is considered a CH qualifying feature for the Project area, given its nationally threatened status and very small breeding population in Lithuania.

All 13 bat species qualify automatically as CH due to their listing under Annex IV of the EU Habitats Directive.

PBF species

Regularly occurring CR/EN species (as per regional/national listing) do not occur based on the baseline data reviewed.

However, all the bird species listed in Table 3-2 qualify as PBF as they meet the criteria outlined in EBRD PR6 for PBF qualification, specifically:

- Species listed in Revised Annex I EU Birds Directive;
- Species listed in Annex II of the EU Habitats Directive;
- Species listed in revised Resolution 6 of the Bern Convention; and
- Species that are globally VU.

Note that since all bat species qualify as CH, the higher status applies (critical habitat) and no PBF species are identified.

TABLE 3-2 CH AND PBF SCREENING FOR THEATENED SPECIES

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
Birds									
Bean Goose	*Anser fabalis*	LC	LC		392		Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive.	PBF
Black Kite	*Milvus migrans*	LC	LC	EN D1	29	Yes	Annex II	A total of 29 counts were recorded during baseline surveys for this nationally EN species. Given the species' rarity in the country and its restricted distribution, the observed number may be considered a nationally important concentration (the estimated national breeding population is 40–70 pairs in Lithuania - Rašomavičius, 2021). **Conservaively, the species is considered as qualifying as CH** despite the lack of evidence of breeding at the site, based purely on the number of counts recorded and the very small national population estimate.	**CH**
Black Stork	*Ciconia nigra*	LC	LC	EN C1	2			The national population estimate from the RDL for Lithuania (Rašomavičius, 2021) is 480 – 720 pairs. The RDL also indicates that Black Stork is widespread in Lithuania however with low breeding densities. This translates to a minimum population estimate of 960 individuals. Based on the pre-operational survey results, 2 individuals were recorded during surveys in 2024 by CORPI and only one nest was identified in the surrounding areas outside of the Project area), representing an estimated 0.2% of the minimum population size. This would not be considered to be an important concentration of this species at the national level such that the species is **not** considered to qualify as CH. Qualifies as PBF – listing in Annex II of EU Habitats Directive.	PBF
Black Tern	*Chlidonias niger*	LC	LC		83			Qualifies as PBF – listing in Annex I of EU Birds Directive.	

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
Black Woodpecker	*Dryocopus martius*	LC	LC		37			Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Black Headed-Gull	*Larus ridibundus*	LC	LC		315	-	Annex II	Qualify as PBF – listing in Annex II of EU Habitats Directive.	
Canada Goose	*Branta canadensis*	LC	LC		4				
Caspian Gull	*Larus cachinnans*	LC	LC		2				
Common Blackbird	*Turdus merula*	LC	LC		92				
Common Crane	*Grus grus*	LC	LC		9,490	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Common Goldeneye	*Bucephala clangula*	LC	LC		1	-	Annex II	Qualify as PBF – listing in Annex II of EU Habitats Directive.	
Common Greenshank	*Tringa nebularia*	LC	LC		7				
Common Kingfisher	*Alcedo atthis*	LC	LC	DD	3	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Common Snipe	*Gallinago gallinago*	LC	VU		52	-	Annex II	Qualify as PBF – listing in Annex II of EU Habitats Directive.	
Common Starling	*Sturnus vulgaris*	LC	NT		20,640	Yes			
Common Moorhen	*Gallinula chloropus*	LC	LC		5		-		
Common Tern	*Sterna hirundo*	LC	LC		25			Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Common Wood Pigeon	*Columba palumbus*	LC	LC		2,560	-	Annex II	Qualifies as PBF – listing in Annex I and II of EU Habitats Directive.	
Eurasian Bullfinch	*Pyrrhula pyrrhula*	LC	LC		6	Yes		Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Eurasian Chaffinch	*Fringilla coelebs*	LC	LC		3,353				
Eurasian Collared Dove	*Streptopelia decaocto*	LC	LC		1	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive.	
Eurasian Coot	*Fulica atra*	LC	NT		1			Qualifies as PBF – listing in Annex II of EU Habitats Directive.	

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
Eurasian Curlew	*Numenius arquata*	NT	NT	CR A2ac ; C2a(i)	119	-		119 counts of this nationally CR species were recorded during field surveys, the Project area could in theory support over 50% of the estimated national population of Eurasian Curlew, which has declined by 60–80% since 2001 and is currently estimated at only 50–100 pairs in Lithuania. However, in terms of breeding activity, no nests or signs of breeding for this species was recorded during surveys. Despite the potentially high concentration of birds, the lack of breeding evidence suggests that the Prpject area and habitats should not qualify as CH for this species. Qualifies as PBF – listing in Annex II of EU Habitats Directive.	PBF
Eurasian Golden Plover	*Pluvialis apricaria*	LC	LC	EN D1	1,410	Yes	-	With 1,410 counts of this nationally EN species recorded during field surveys, the Project site could support a significant proportion of the national population of Eurasian Golden Plover. When one considers the number of breeding pairs which is estimated at only 35–45 breeding pairs across 12 raised bogs in Lithuania, this observed counts exceeds the national population minimum estimate of roughly 70 individuals, the Project area may be considered an important concentration nationally for this species. However, in terms of breeding activity, no nests or signs of breeding for this species was recorded during surveys. Despite the potentially high concentration of birds, the lack of breedign evidence suggests that the Prpject area and habitats should not qualify as CH for this species. Qualifies as PBF – listing in Annex I of EU Birds Directive.	PBF

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
Eurasian Jay	*Garrulus glandarius*	LC	LC		295	-	Annex II	Qualify as PBF – listing in Annex II of EU Habitats Directive	PBF
Eurasian Magpie	*Pica pica*	LC	LC		412				
Eurasian Skylark	*Alauda arvensis*	LC	LC		733				
Eurasian Sparrowhawk	*Accipiter nisus*	LC	LC		204	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Eurasian Woodcock	*Scolopax rusticola*	LC	LC		10	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive.	
Eurasian Wren	*Troglodytes troglodytes*	LC	LC		11	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
European Herring Gull	*Larus argentatus*	LC	LC		24	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive	
European Honey-buzzard	*Pernis apivorus*	LC	LC		68	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Fieldfare	*Turdus pilaris*	LC	LC		1,285	-	Annex II	Yes, Annex II of EU Habitats Directive	
Great Spotted Woodpecker	*Dendrocopos major*	LC	LC		41	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Great White Egret	*Ardea alba*	LC	LC		112				
Greater White-fronted Goose	*Anser albifrons*	LC	LC		10,762		Annex I & II	Qualifies as PBF – listing in Annex I and II of EU Habitats Directive.	
Grey Partridge	*Perdix perdix*	LC	LC	VU C1	28		-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Grey-headed Woodpecker	*Dendropicos spodocephalus*	LC	LC	NT	4			Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Greylag Goose	*Anser anser*	LC	LC		1,868	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive	
Hen Harrier	*Circus cyaneus*	LC	LC		20	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Jackdaw	*Corvus monedula*	LC	LC		567	-	Annex II	Qualify as PBF – listing in Annex II of EU Habitats Directive.	
Lesser Black-backed Gull	*Larus fuscus*	LC	LC		10	-			

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
Lesser Spotted Eagle	*Clanga (Aquila) pomarina*	LC	LC	VU C1	1,444	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Mallard	*Anas platyrhynchos*	LC	LC		676	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive	
Merlin	*Falco columbarius*	LC	VU	EN° D	1	Yes	-	Although one individual was recorded during baseline surveys, the species is a very rare breeder in Lithuania, with an estimated national population of fewer than 10 pairs. This observation represents roughly 5% of the national population; however, due to the lack of evidence of regular or breeding presence, the species does **not** qualify as Critical Habitat. Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Mew (Common) Gull	*Larus canus*	LC	LC		35	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive	
Middle Spotted Woodpecker	*Leiopicus medius*	LC	LC		4	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Mistle Thrush	*Turdus viscivorus*	LC	LC		51	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive	
Montagu's Harrier	*Circus pygargus*	LC	LC	VU D1	23	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Mute Swan	*Cygnus olor*	LC	LC		29	-	Annex II	Qualifies as PBF – listing in Annex II of EU Habitats Directive	
Northern Goshawk	*Accipiter gentilis*	LC	LC	NT	6	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Osprey	*Pandion haliaetus*	LC	LC	EN D1	1			Osprey (*Pandion haliaetus*) breeds in the eastern and southern parts of Lithuania with an estimated national population of 30–50 breeding pairs, only one individual was recorded during surveys at the site. This represents less than 2% of the national population and provides no indication of regular or significant use of the area. Therefore, the site is not considered to support a nationally important concentration	

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
								of the species and does **not** qualify as Critical Habitat under EBRD PR6. Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Pallid Harrier	*Circus macrourus*	LC	LC		1			Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Red Kite	*Milvus milvus*	LC	LC	VU° D	7			Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Red-backed Shrike	*Lanius collurio*	LC	LC		53			Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Red-footed Falcon	*Falco vespertinus*	VU	VU		4	Yes		Although the Red-footed Falcon is listed as globally Vulnerable, only four individuals were recorded during baseline surveys, with no evidence of breeding, roosting, or repeated use of the site. The lower limit of the global population is estimated at approximately 287,500 individuals, meaning a Critical Habitat threshold of 0.5% would equate to around 1,500 individuals. As such, the project area supports only a negligible portion of the global population and does **not** qualify as Critical Habitat. Qualifies as PBF – globally VU species and listing in Annex I of EU Birds Directive.	PBF
Redwing	*Turdus iliacus*	LC	LC		24	-	Annex II	Qualify as PBF – listing in Annex II of EU Habitats Directive.	PBF
Rock Dove (Domestic Pigeon)	*Columba livia*	LC	LC		650				
Rook	*Corvus frugilegus*	LC	VU		962				
Ruff	*Calidris pugnax*	LC	NT	DD	1	Yes	-	Qualifies as PBF – listing in Annex I of EU Birds Directive.	
Song Thrush	*Turdus philomelos*	LC	LC		26	-	Annex II	Qualify as PBF – listing in Annex II of EU Habitats Directive.	
Stock Dove	*Columba oenas*	LC	LC	NT D1	27				

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
Tufted Duck	*Aythya fuligula*	LC	NT		2				
Tundra Swan	*Cygnus columbianus*	LC	VU		23				
Western Marsh-harrier	*Circus aeruginosus*	LC	LC		949				
White Stork	*Ciconia ciconia*	LC	LC		1955				
White-tailed Sea-eagle	*Haliaeetus albicilla*	LC	LC	NT° D	150	Yes	-	Qualify as PBF – listing in Annex I of EU Birds Directive.	
Whooper Swan	*Cygnus cygnus*	LC	LC		1145				
Wood Sandpiper	*Tringa glareola*	LC	LC	VU D1	3				
Woodlark	*Lullula arborea*	LC	LC		5				
Bats									
Barbastelle bat	*Barbastella barbastellus*	NT	VU	VU	180	-	Annex II & IV	All bat species qualify automatically as CH given their listing in Annex IV of the EU Habitats Directive and observed regular presence during surveys suggesting they are feeding, resting and/or migratory through the study area.	**CH**
Brown Long-eared Bat	*Plecotus auritus*	LC	LC		331		Annex IV		
Common noctule	*Nyctalus noctula*	LC	LC		1,144				
Common Pipistrelle	*Pipistrellus pipistrellus*	LC	LC		18				
Daubenton's bat	*Myotis daubentonii*	LC	LC		321				
Kuhls Pipistrelle	*Pipistrellus kuhlii*	LC	LC		1,765				
Leisler's Bat	*Nyctalus leisleri*	LC	LC		2,833				
Nathusius` Pipistrelle	*Pipistrellus nathusii*	LC	LC		1,765				
Natterer's bat	*Myotis nattereri*	LC	LC		40				
Northern bat	*Eptesicus nilssonii*	LC	LC		3,920				

Common Name	Species Name	Global Threat Status (IUCN)	Regional Threat Status (Europe)	National Threat Status in Lithuania	Number of counts recorded on site	Annex I of EU Birds Directive	Listing in EU Habitats Directive (HD)	Justification	CH or PBF?
Parti-colored Bat	*Vespertilio murinus*	LC	LC	DD	204				
Pond bat	*Myotis dasycneme*	NT	VU	NT	30		Annex II & IV		
Serotine	*Eptesicus serotinus*	LC	LC		851		Annex IV		
Soprano Pipistrelle	*Pipistrellus pygmaeus*	LC	LC		192				
Land Mammals									
Eurasian Otter	*Lutra lutra*	NT	NT		No observations, but potentially suitable riverine habitat	-	Annex II & IV	The species was last recorded in the area in 1996 and has not been observed during recent surveys, despite suitable habitat still being present. No population data specific to Lithuania or the site are available, and the IUCN assessment indicates an Extensive Extent of Occurrence (EOO) of 150,000–300,000 km² in Europe, with no evidence of extreme fluctuations or range decline. Given the species' wide distribution across Europe, Asia, and Africa, and the lack of confirmed recent presence, the Project area is not considered as being globally important for supporting a significant, regularly occurring or geographically restricted population of this species that could qualify the species as CH or PBF.	-

Table key:

Threat status: EN = Endangered, VU = Vulnerable, NT = Near Threatened, DD = Data Deficient, na = not assessed

EU = Europe, HD = Habitats Directive, AOO = Area of Occupancy, EOO = Extent of Occurrence

Source: ERM, based on baseline information from pre-operational bird and bat surveys (CORPI, 2025), IUCN online database/Red List, EU Habitats Directive

3.3 RESTRICTED-RANGE SPECIES

Criteria:

Species that are defined as being restricted-range are considered under Criterion 2 (ii). *EBRD PR6 Guidance Note 6 (EBRD, 2023) defines 'restricted-range' species for terrestrial vertebrates and plants as being "species that have an extent of occurrence (EoO) of less than 50,000 km^2".*

CH would be triggered for any of the following:	PBF would be triggered for the following:
• Areas that regularly hold ≥ 10 % of the global population AND ≥ 10 reproductive units of a restricted-range species.	• Regularly occurring restricted-range species.

Candidate species:

None of the species identified for the Project qualify as restricted-range species in terms of the EBRD PR6 definition (above), with no national endemics recorded.

Results:

CH and PBF is not triggered in terms of Criterion 2 (ii) from the perspective of restricted-range species as there are no species that qualify as such for the Project.

3.4 MIGRATORY & CONGREGATORY SPECIES

Criteria:

Migratory and congregatory species are typically limited to faunal species that are highly mobile and mainly birds, bats and larger land mammals that migrate over large distances and those that tend to congregate in large groups. These are considered under Criterion 2 (iii)

As part of the Critical Habitat screening under EBRD PR6, migratory bird species observed during baseline surveys were assessed against global population thresholds.

CH would be triggered for any of the following:	PBF would be triggered for the following:
• Areas that regularly sustain ≥ 1 % of the global population of a migratory or congregatory species. • Areas supporting ≥ 10 % of the global population of a migratory/congregatory species during periods of environmental stress.	• Recognized area important for migratory birds as per EU Birds Directive or other national/international process.

Candidate species:

Several migratory bird species have been identified based on the pre-operational bird monitoring undertaken by CORPI (2025). These are listed below, indicating that the number of individuals observed at the Project site represents a negligible fraction of the estimated global population (well below the 1% threshold to qualify as CH):

- Barn Swallow (*Hirundo rustica*): With a global population estimated at ~290–487 million individuals, the 2,398 individuals observed during surveys represent less than 0.001% of the global population.

- Greater White-fronted Goose (*Anser albifrons*) and Tundra Swan (*Cygnus columbianus*): Despite several thousand geese being observed during surveys, these are widespread Palearctic migrants with global populations in the millions. For example, *Anser albifrons* has a global population >5 million; the observed numbers still fall short of the 1% global threshold.
- Common Crane (*Grus grus*), Whooper Swan (*Cygnus cygnus*), Northern Lapwing (*Vanellus vanellus*), and Eurasian Golden Plover (*Pluvialis apricaria*) also have globally large populations, typically ranging from hundreds of thousands to several million individuals. Observations during surveys at the Project area (e.g., 9,490 Common Cranes; 4,636 Lapwings; 1,410 Golden Plovers) still represent well below 1% of the global populations of these species.
- Rarer migrants such as Ruff (*Calidris pugnax*), Wood Sandpiper (*Tringa glareola*), Black Tern (*Chlidonias niger*), Common Tern (*Sterna hirundo*), and Common Snipe (*Gallinago gallinago*) were recorded in very low numbers (typically between 1–3 individuals), making their contribution to global populations negligible and also well below 1% of the global populations of these species.
- Raptors including Red-footed Falcon (*Falco vespertinus*), Osprey (*Pandion haliaetus*), Black Kite (*Milvus migrans*), and Merlin (*Falco columbarius*) were also observed in very low numbers (1–4 individuals typically). Their global populations are estimated in the tens to hundreds of thousands, and therefore the Project site does not support regionally or globally important concentrations and the 1% threshold is not exceeded.
- Bean Goose (*Anser fabalis*): A total of 392 individuals were observed during the surveys. While this is a notable number, the global population of the Bean Goose is estimated at over 1 million individuals. Therefore, the observed number represents less than 0.04% of the global population, well below the 1% threshold for Critical Habitat under PR6 for migratory or congregatory species.
- White Stork (*Ciconia ciconia*): A total of 1,955 individuals were observed during baseline surveys. The global population of this species is estimated at 700,000–704,000 individuals (Wetlands International, 2015; IUCN Red List). This means that the observed number represents approximately 0.28% of the global population, which is below the 1% threshold. Therefore, the presence of White Stork at the project site does not qualify as a globally significant concentration and does not trigger Critical Habitat under EBRD PR6 Criterion 2.
- Black Stork (*Ciconia nigra*): Only 2 individuals were recorded during the surveys. The global population is estimated to be between 24,000 and 44,000 individuals. The number observed at the site is therefore negligible in relation to the global population (approximately 0.005–0.008%) and does not represent a globally significant concentration.
- Finally, Western Marsh-harrier (*Circus aeruginosus*) and Eurasian Curlew (*Numenius arquata*) were observed in moderate numbers. However, only the Eurasian Curlew was identified as qualifying as Critical Habitat under PR6, not due to migratory significance, but due to national conservation status and population context (CR in Lithuania, with >50% of the national population recorded).

Bat monitoring during spring and autumn migration periods (July–October 2024) using static detectors recorded 13 bat species. The following bat species recorded are considered migratory in Europe according to EUROBATS and literature (e.g., Rodrigues et al., 2015):

- Common Noctule *(Nyctalus noctula)*
- Leisler's Bat *(Nyctalus leisleri)*
- Parti-coloured Bat *(Vespertilio murinus)*
- Serotine Bat *(Eptesicus serotinus)*
- Northern Bat *(Eptesicus nilssonii)*
- Pond Ba*t (Myotis dasycneme)*
- Soprano Pipistrelle *(Pipistrellus pygmaeus)*
- Common Pipistrelle *(Pipistrellus pipistrellus)*

Migration activity peaked in August, with the Northern Bat (*Eptesicus nilssonii*), Lesser Noctule, and Nathusius' Pipistrelle being most frequently recorded. The project area was used unevenly by bats, indicating specific flyways or foraging routes may be present.

Results:

The Project area falls within zones of low to moderate sensitivity regarding bird migration. The pre-operational monitoring report by CORPI (2025), covering surveys of birds and bats from March to December 2024 confirmed that bird and bat migration in the area is limited. CORPI observed mainly local and regional movements, with no evidence of the site acting as a key stopover or wintering area for birds. The autumn migration season showed the highest overall bird activity, particularly among waterfowl and passerines; however, these did not form large congregations or meet thresholds that could qualify numbers as globally significant.

The Project area is not known to support migratory or congregatory species of birds, bats and other large land mammals that could be considered globally significant, and CH or PBF is not triggered in this regard for the following reasons:

- Birds: A total of 21 migratory bird species were recorded during site observations. While several of these species are long-distance migrants, including the Barn Swallow (*Hirundo rustica*), Western Marsh-harrier (*Circus aeruginosus*), and Eurasian Golden Plover (*Pluvialis apricaria*)—the survey results do not indicate regular or significant concentrations that would meet the threshold of ≥1% of the global population.
- Bats: Migratory surveys identified 13 bat species, with low activity levels for species of conservation concern such as the Barbastelle (*Barbastella barbastellus*) and Pond Bat (*Myotis dasycneme*), both regionally Vulnerable and globally Near Threatened. However, no bat species or counts approached levels that would indicate the site supports significant migratory bat pathways or aggregations.
- Congregatory Species: No permanent aggregation sites or important stopover habitats were observed during surveys. Observations of flocking birds, including cranes and storks, were sporadic and limited to small groups in wetlands and fields. These do not suggest the presence of globally important congregatory behavior or regular use of the site

- In terms of PBF, the area is not recognized as an internationally or nationally important area of migratory birds, and this was confirmed by the pre-operational field surveys for birds undertaken by CORPI (2025). The Project is not located within a known migratory corridor and is also not poisoned within or near any IBA (Important Bird and Biodiversity Area) as per the BirdLife database.

4. SUMMARY

4.1 CRITICAL HABITAT IDENTIFIED

The criteria presented in Table 4-1 below provides a summary of the outcomes of the CHA.

TABLE 4-1 CHA SUMMARY

#	Criteria grouping	CH Criteria of EBRD
1	**Threatened / Unique Ecosystems**	**CH triggered**
2	**Threatened Species**	**CH triggered**
3	Restricted-range species	CH not triggered
4	Migratory and/or congregatory species	CH not triggered

Source: ERM

In terms of CH, the following qualify:

- Several habitat types qualify as CH due to their regional CR/EN threat status and/or listing in Annex I of the EU Habitats Directive as 'priority' habitat types;
- Based on the EBRD PR6 Criterion 2, only one species of Bird, Black Kite (*Milvus migrans)* which is nationally EN is considered to qualify as CH due to its rareity and small national population size estimates; and
- All 13 bat species qualify as CH automatically given their listing in Annex IV of the EU Habitats Directive.

4.2 PRIORITY BIODIVERSITY FEATURES IDENTIFIED

EBRD define Priority Biodiversity Features (PBF) which are a sub-set of biodiversity that is irreplaceable or vulnerable, but at a lower priority level than CH.

The following PBF were identified:

- The remaining habitats listed in Annex I of the EU Habitats Directive that are NOT 'priority' habitat types or CR/EN types regionally; and
- 69 species of birds (including several species of raptors, storks, cranes, waterfowl, passerines) due to their listing in Annex I of the EU Birds Directive, Annex II of the EU Habitats Directive and/or Resolution 6 of the BERN convention.

5. IMPLICATIONS FOR THE PROJECT

5.1 ANTICIPATED RISKS TO CH AND PBF

The Biodiversity Action Plan (BAP) and Biodiversity Management Plan (BMP) being prepared for the Project will need to consider the potential impacts of the Project on the identified Critical Habitat (CH) and Priority Biodiversity Features (PBF).

These plans will explore viable options for avoidance and minimization of impacts in line with the mitigation hierarchy, prior to considering restoration or compensation measures such as biodiversity offsets for example.

5.1.1 RISK OF IMPACT TO PHYSICAL HABITATS

ERM conducted a GIS analysis that involved overlaying the Project layout plan onto the map showing the habitats for the study area identified as being listed in Annex I of the EU Habitats Directive and which qualify as either CH or PBF. The outputs are shown on the maps in Figure 3-3 and Figure 3-4 (*see Chapter 3, section 3.1*).

Based on this visual analysis it was confirmed that the Project has entirely avoided the Annex I habitats that qualify as CH (priority types) and PBF, and on this basis residual impacts on CH/PBF physical habitats from the construction phase are highly unlikely. Additionally, based on the field surveys for the 'Residual Habitat Impact Assessment Report' (ERM, 2025) completed for the Project, it was concluded that no habitat types of EU community importance (in terms of listing in Annex I of the EU Habitats Directive) that may qualify as CH/PBF have been impacted by the Project construction.

There are therefore no CH/PBF liabilities that require specific actions for the Project in terms of residual impacts to physical habitats post-construction. However, measures to avoid impacts on the CH/PBF habitats during operation/maintenance of the WF will still need to be incorporated into the operational BMP and there are several recommendations also made in the 'Residual Habitat Impact Assessment' Report (ERM, 2025) for restoring/compensating for residual impacts to habitats (wetlands in particular 0 but which don't qualify as CH/PBF) that should be implemented for the Project.

5.1.2 RISK OF IMPACT TO SPECIES

Potential risks to species considered birds and bats that qualify as CH/PBF and were conceptualized in terms of the following:

- An understanding of known risks/threats to species (based on the IUCN database);
- Comparing known risks/threats to the Project-related risks (namely around turbine collision risk for birds/bats and visual/noise/light disturbance);
- Consideration of collision risk based on field surveys and the recorded flights at collision risk height for target birds (raptors, cranes and storks) (see CORPI, 2025) (see also the 'Bird and Bats Monitoring Summar Report by ERM, 2025);

- In the context of Potential Biological Removal (PBR[10]) calculated for target bird species (see the 'Bird and Bats Monitoring Summar Report by ERM, 2025); and
- Based on generic bat collision risk per genus / species as documented in the EUROBATS guidelines (Rodrigues et al., 2015) (see also the 'Bird and Bats Monitoring Summar Report by ERM, 2025).

Project operational risk to birds and bats that qualify as CH/PBF has been considered in Table 5-1, which suggests that species that could be impacted by the Project operations include the following:

5 species of birds (qualify as PBF, except Black Kite which is CH*):

- Black Kite, *Milvus migrans* (CH*)
- European Honey-buzzard, *Pernis apivorus*
- Lesser Spotted Eagle, *Clanga (Aquila) pomarina*
- White Stork, *Ciconia ciconia*
- White-tailed Sea-eagle. *Haliaeetus albicilla*

10 species of bats (all qualify as CH):

- Barbastelle bat, *Barbastella barbastellus*
- Common noctule, *Nyctalus noctula*
- Common Pipistrelle, *Pipistrellus pipistrellus*
- Kuhls Pipistrelle, *Pipistrellus kuhlii*
- Leisler's Bat, *Nyctalus leisleri*
- Nathusius` Pipistrelle, *Pipistrellus nathusii*
- Northern bat, *Eptesicus nilssonii*
- Parti-colored Bat, *Vespertilio murinus*
- Serotine, *Eptesicus serotinus*
- Soprano Pipistrelle, *Pipistrellus pygmaeus*

Species that were found to occur rarely at the site and those that are not considered to be at risk of collision/displacement were EXCLUDED from further assessment.

[10] Potential biological removal (PBR) refers to the maximum human-induced mortality that can be sustained each year by a wildlife population (bird species in this case) while allowing it to reach or maintain its optimum sustainable level (Dillingham and Fletcher, 2008).

TABLE 5-1 SUMMARY OF POTENTIAL PROJECT RISK TO AVIAN SPECIES THAT QUALIFY AS CH OR PBF

Common Name	Species Name	Number of counts recorded on site	Type	Risks / Threats (IUCN)	Project Operational Risk
BIRDS					
Bean Goose	*Anser fabalis*	392	PBF	Habitat degradation, hunting, poisoning by pesticides used on agricultural land	NO: Not at risk of collision based on high avoidance rates and observed behavior (migratory overflights).
Black Kite	*Milvus migrans*	29	CH	Habitat loss, renewable energy, hunting/trapping, pollution	YES: Potentially impacted due to potential collision risk (72% of flight time at collision risk height) and given very low PBR (2 birds/annum).
Black Stork	*Ciconia nigra*	2	PBF	Habitat degradation, powerlines (collisions), water pollution	NO: Unlikely to be impacted based on very low numbers recorded during field surveys and low collision risk (0% of flight time at collision risk height).
Black Tern	*Chlidonias niger*	83	PBF	Reduction of water level due to droughts and water abstraction for domestic and agricultural use;	NO: Not at risk of collision based on avoidance rates and observed behavior (migratory overflights).
Black Woodpecker	*Dryocopus martius*	37	PBF	No threats listed for this species	NO: Not at risk of collision.
Black Headed-Gull	*Larus ridibundus*	315	PBF	Contamination with chemical pollutants; coastal oil spills	NO: Not at risk of collision.
Canada Goose	*Branta canadensis*	4	PBF	No threats listed for this species	NO: Not at risk of collision based on very low numbers recorded and high avoidance rates and observed behavior (migratory overflights).
Caspian Gull	*Larus cachinnans*	2	PBF	Habitat disturbance, pollution, including plastic ingestion and toxins, competition and hybridization with other gull species	NO: Unlikely to be impacted based on very low numbers recorded during field surveys and not vulnerable to collisions.
Common Blackbird	*Turdus merula*	92	PBF	Habitat loss in urban areas and intensive agriculture	NO: Not at risk of collision.
Common Crane	*Grus grus*	9,490	PBF	Habitat loss and degradation through dam construction, urbanization and agricultural expansion, Collision with power lines during migration	NO: Low collision risk (20% of flight time at collision risk height).
Common Goldeneye	*Bucephala clangula*	1	PBF	Wetland degradation and loss, especially in breeding areas; Pollution from pesticides and industrial runoff	NO: Unlikely to be impacted based on very low numbers recorded during field surveys.
Common Greenshank	*Tringa nebularia*	7	PBF	Habitat loss and degradation, disturbance in breeding and foraging	NO: Unlikely to be impacted based on low numbers recorded during field surveys.

Common Name	Species Name	Number of counts recorded on site	Type	Risks / Threats (IUCN)	Project Operational Risk
				habitats, Invasive species and potential diseases	
Common Kingfisher	*Alcedo atthis*	3	PBF	Pollution of rivers and lakes (e.g. pesticides, heavy metals) Loss of natural nesting sites due to riverbank development Disturbance from recreational activities near waterways	NO: Not at risk of collision and very low numbers recorded.
Common Snipe	*Gallinago gallinago*	52	PBF	Habitat loss, particularly wetlands and rice fields Hunting and persecution in some regions Agricultural practices, such as early rice harvesting, which can destroy nests	NO: Not at risk of collision.
Common Starling	*Sturnus vulgaris*	20,640	PBF	Drainage of wetlands leading to habitat loss, Intensive agriculture reducing suitable breeding areas Disturbance during breeding season	NO: Not at risk of collision.
Common Moorhen	*Gallinula chloropus*	5	PBF	Agricultural pest status leading to control measures Declines in northern and western Europe due to reduced availability of invertebrate prey in intensively managed grasslands	NO: Unlikely to be impacted based on low numbers recorded during field surveys.
Common Tern	*Sterna hirundo*	25	PBF	Disturbance at breeding colonies Predation by introduced mammals Loss of nesting habitats due to coastal development	NO: Not at risk of collision.
Common Wood Pigeon	*Columba palumbus*	2,560	PBF	Hunting pressure in some regions Habitat changes due to agricultural practices	NO: Not at risk of collision.
Eurasian Bullfinch	*Pyrrhula pyrrhula*	6	PBF	Habitat loss due to changes in woodland management Declines in certain regions	NO: Not at risk of collision and very low numbers recorded.
Eurasian Chaffinch	*Fringilla coelebs*	3,353	PBF	Generally stable; no major threats identified	NO: Not at risk of collision.
Eurasian Collared Dove	*Streptopelia decaocto*	1	PBF	Competition with native dove species Potential to spread diseases such as West Nile virus	NO: Not at risk of collision and very low numbers recorded.
Eurasian Coot	*Fulica atra*	1	PBF	Wetland degradation and pollution Disturbance from recreational activities	NO: Not at risk of collision and very low numbers recorded.

Common Name	Species Name	Number of counts recorded on site	Type	Risks / Threats (IUCN)	Project Operational Risk
Eurasian Curlew	*Numenius arquata*	119	PBF	Habitat loss and fragmentation, renewable energy, hunting/trapping, water pollution	NO: Not at risk of collision.
Eurasian Golden Plover	*Pluvialis apricaria*	1,410	PBF	Habitat alteration, hunting	NO: Not at risk of collision.
Eurasian Jay	*Garrulus glandarius*	295	PBF	Currently, no significant threats identified.	NO: Not at risk of collision.
Eurasian Magpie	*Pica pica*	412	PBF	Currently, no significant threats identified.	NO: Not at risk of collision.
Eurasian Skylark	*Alauda arvensis*	733	PBF	Intensive agriculture leading to habitat loss. Use of pesticides reducing insect prey availability.	NO: Not at risk of collision.
Eurasian Sparrowhawk	*Accipiter nisus*	204	PBF	No significant threats; populations are stable.	NO: Low collision risk (26% of flight time at collision risk height).
Eurasian Woodcock	*Scolopax rusticola*	10	PBF	Habitat loss due to deforestation and drainage of wetlands. Hunting pressure in some regions.	NO: Not at risk of collision.
Eurasian Wren	*Troglodytes troglodytes*	11	PBF	No major threats; species is widespread and abundant.	NO: Not at risk of collision.
European Herring Gull	*Larus argentatus*	24	PBF	Changes in fishery practices affecting food availability. Pollution and human disturbance in breeding areas.	NO: Not at risk of collision.
European Honey-buzzard	*Pernis apivorus*	68	PBF	Habitat loss, renewable energy, hunting/trapping, pollution	YES: Potentially impacted due to potential collision risk (56% of flight time at collision risk height) and given low PBR (298 birds/annum).
Fieldfare	*Turdus pilaris*	1,285	PBF	Habitat loss due to changes in land use. Climate change affecting food availability.	NO: Not at risk of collision.
Great Spotted Woodpecker	*Dendrocopos major*	41	PBF	Habitat fragmentation and loss of mature trees.	NO: Not at risk of collision.
Great White Egret	*Ardea alba*	112	PBF	Habitat loss/degradation	NO: Low collision risk (5% of flight time at collision risk height).
Greater White-fronted Goose	*Anser albifrons*	10,762	PBF	Hunting pressure; poisoning by pesticides used on agricultural land; human disturbance	NO: Not at risk of collision based on high avoidance rates and observed behavior (migratory overflights).
Grey Partridge	*Perdix perdix*	28	PBF	Loss of nesting cover, predation, herbicides	NO: Not at risk of collision.

Common Name	Species Name	Number of counts recorded on site	Type	Risks / Threats (IUCN)	Project Operational Risk
Grey-headed Woodpecker	*Dendropicos spodocephalus*	4	PBF	Decline in tree cover within its range, leading to habitat loss.	NO: Not at risk of collision.
Greylag Goose	*Anser anser*	1,868	PBF	Considerable hunting pressures across much of its range.	NO: Not at risk of collision based on high avoidance rates and observed behavior (migratory overflights).
Hen Harrier	*Circus cyaneus*	20	PBF	Habitat transformation due to intensified agriculture, disappearance of marshes, and reforestation. Burning of vegetation in breeding areas.	NO: Low collision risk (15% of flight time at collision risk height).
Jackdaw	*Corvus monedula*	567	PBF	Currently not threatened, but monitoring is recommended to prevent local extinctions.	NO: Not at risk of collision.
Lesser Black-backed Gull	*Larus fuscus*	10	PBF	Declines in prey fish species. Competition and predation at breeding sites. Contamination by pollutants such as PCBs and DDT.	NO: Not at risk of collision.
Lesser Spotted Eagle	*Clanga (Aquila) pomarina*	1,444	PBF	Renewable energy, powerlines (collisions), habitat loss, pollution, hunting/trapping	YES: Potentially impacted due to potential collision risk (59% of flight time at collision risk height) and given low PBR (29 birds/annum).
Mallard	*Anas platyrhynchos*	676	PBF	Habitat loss due to agricultural expansion and wetland drainage. Hybridization with domestic ducks.	NO: Not at risk of collision based on observed behavior and low numbers recorded during field surveys.
Merlin	*Falco columbarius*	1	PBF	Exposure to environmental contaminants like organochlorines and mercury.	NO: Very low numbers recorded and very ow collision risk (0% of flight time at collision risk height).
Mew (Common) Gull	*Larus canus*	35	PBF	Habitat loss and disturbance from human activities, including tourism and fishing.	NO: Not at risk of collision.
Middle Spotted Woodpecker	*Leiopicus medius*	4	PBF	Habitat loss and fragmentation due to deforestation.	NO: Not at risk of collision, very low numbers recorded.
Mistle Thrush	*Turdus viscivorus*	51	PBF	Currently, no major threats identified within its European range.	NO: Not at risk of collision.
Montagu's Harrier	*Circus pygargus*	23	PBF	Habitat loss, renewable energy, fire, hunting/trapping	NO: Low collision risk (4% of flight time at collision risk height).
Mute Swan	*Cygnus olor*	29	PBF	Lead poisoning; Habitat degradation; Human-wildlife conflict	NO: Not at risk of collision based on high avoidance rates and observed behavior (migratory overflights).
Northern Goshawk	*Accipiter gentilis*	6	PBF	Chemical contaminants, Human disturbance, Fishing practices	NO: Very low numbers recorded.

Common Name	Species Name	Number of counts recorded on site	Type	Risks / Threats (IUCN)	Project Operational Risk
Osprey	*Pandion haliaetus*	1	PBF	Habitat loss, Persecution, Chemical exposure	NO: Very low numbers recorded.
Pallid Harrier	*Circus macrourus*	1	PBF	Habitat loss, fires, overgrazing of grassland	NO: Very low numbers recorded and very ow collision risk (0% of flight time at collision risk height).
Red Kite	*Milvus milvus*	7	PBF	Illegal Poisoning; Habitat Loss and Degradation through agricultural intensification and changes in land use; Collisions with power lines and wind turbines; Persecution.	NO: Very low numbers recorded and low collision risk (29% of flight time at collision risk height).
Red-backed Shrike	*Lanius collurio*	53	PBF	Habitat loss and fragmentation	NO: Not at risk of collision.
Red-footed Falcon	*Falco vespertinus*	4	PBF	Loss and degradation of foraging habitats. Loss of nest sites due to agricultural intensification. Illegal logging and direct killing.	NO: Very low numbers recorded and very low collision risk (0% of flight time at collision risk height).
Redwing	*Turdus iliacus*	24	PBF	Hunting during migration and in wintering areas.	NO: Not at risk of collision.
Rock Dove (Domestic Pigeon)	*Columba livia*	650	PBF	Hybridization with feral domestic pigeons leading to genetic dilution.	NO: Not at risk of collision.
Rook	*Corvus frugilegus*	962	PBF	Persecution due to perceived crop damage.	NO: Not at risk of collision based on observed behavior
Ruff	*Calidris pugnax*	1	PBF	Habitat loss due to wetland drainage and agricultural intensification. Hunting during migration.	NO: Not at risk of collision and very low numbers recorded.
Song Thrush	*Turdus philomelos*	26	PBF	Habitat degradation and fragmentation. Use of pesticides reducing food availability.	NO: Not at risk of collision.
Stock Dove	*Columba oenas*	27	PBF	Loss of nesting sites due to removal of old trees.	NO: Not at risk of collision.
Tufted Duck	*Aythya fuligula*	2	PBF	Habitat loss through wetland drainage and pollution.	NO: Not at risk of collision and very low numbers recorded.
Tundra Swan	*Cygnus columbianus*	23	PBF	Threatened by the degradation and loss of wetland habitats due to drainage, petroleum pollution, peat extraction, changing wetland management practices; suffers from poaching in north-west Europe and is hunted considerably for subsistence throughout its range	NO: Not at risk of collision based on high avoidance rates and observed behavior (migratory overflights).

Common Name	Species Name	Number of counts recorded on site	Type	Risks / Threats (IUCN)	Project Operational Risk
Western Marsh-harrier	*Circus aeruginosus*	949	PBF	Renewable energy, powerlines, habitat loss, pollution, hunting/trapping	NO: Low collision risk (11% of flight time at collision risk height).
White Stork	*Ciconia ciconia*	1,955	PBF	Habitat change, collisions with power lines	YES: Potentially impacted due to potential collision risk (42 % of flight time at collision risk height) and with a moderate number of birds recorded during field surveys (PBR: 2,472 birds/annum).
White-tailed Sea-eagle	*Haliaeetus albicilla*	150	PBF	Habitat loss/degradation, renewable energy, hunting/trapping	YES: Potentially impacted due to potential collision risk (53% of flight time at collision risk height) and given low PBR (4 birds/annum).
Whooper Swan	*Cygnus cygnus*	1,145	PBF	Habitat loss/degradation, water pollution, collisions with powerlines and wind turbines, hunting	NO: Not at risk of collision based on high avoidance rates and observed behavior (migratory overflights).
Wood Sandpiper	*Tringa glareola*	3	PBF	Oil pollution in moulting and staging areas. Collisions with power lines.	NO: Not at risk of collision and very low numbers recorded.
Woodlark	*Lullula arborea*	5	PBF	Drainage of peatlands for forestry and agriculture.	NO: Not at risk of collision and very low numbers recorded.
BATS					
Barbastelle bat	*Barbastella barbastellus*	180	CH	Loss of old mature woodland, habitat loss/disturbance, fragmentation of habitat.	YES: Relatively low occurrence / abundance based on field survey data. May be impacted during operation due to Medium collision risk (EUROBATS: Rodrigues at el., 2015).
Brown Long-eared Bat	*Plecotus auritus*	331	CH	Habitat loss, predation, light pollution, pesticides.	NO: Relatively low occurrence / abundance based on field survey data. Low collision risk (EUROBATS). Unlikely to be significantly affected by operation.
Common noctule	*Nyctalus noctula*	1,144	CH	No major threats known apart from loss of old trees with holes for roosting.	YES: Relatively abundant based on field survey data. May be impacted during operation due to High collision risk (EUROBATS).
Common Pipistrelle	*Pipistrellus pipistrellus*	18	CH	Habitat loss, renewable energy (collision risk), light pollution, vehicle collisions.	YES: Low occurrence / abundance based on field survey data. May be impacted during operation due to High collision risk (EUROBATS).
Daubenton's bat	*Myotis daubentonii*	321	CH	No major threats known, some intolerance to changes in water quality and loss of roost sites.	No: Relatively low occurrence / abundance based on field survey data. Low collision risk (EUROBATS). Unlikely to be significantly affected by operation.
Kuhls Pipistrelle	*Pipistrellus kuhlii*	1,765	CH	No major threats known. Use of pesticides in some places may be a risk.	YES: Relatively frequent occurrence / moderate abundance based on field survey data. May be

Common Name	Species Name	Number of counts recorded on site	Type	Risks / Threats (IUCN)	Project Operational Risk
					impacted during operation due to High collision risk (EUROBATS).
Leisler's Bat	*Nyctalus leisleri*	2,833	CH	No major threats, some risk posed by habitat loss and disturbance of roosts and foraging habitat.	YES: Relatively frequent occurrence / high abundance based on field survey data. May be impacted during operation due to High collision risk (EUROBATS).
Nathusius`Pipistrelle	*Pipistrellus nathusii*	1,765	CH	No major threats, some risk posed by habitat fragmentation on migration routes, loss/disturbance of roosts and water quality changes.	YES: Relatively frequent occurrence / moderate abundance based on field survey data. May be impacted during operation due to High collision risk (EUROBATS).
Natterer's bat	*Myotis nattereri*	40	CH	Roost loss, artificial light, road casualties, agricultural effluent.	NO: Low occurrence / abundance based on field survey data. Low collision risk (EUROBATS). Unlikely to be significantly affected by operation.
Northern bat	*Eptesicus nilssonii*	3,920	CH	No major threats known, some localized threats in range.	YES: Relatively frequent occurrence / high abundance based on field survey data. May be impacted during operation due to High collision risk (EUROBATS).
Parti-colored Bat	*Vespertilio murinus*	204	CH	No major threats known, affected by loss/disturbance of roosts in buildings in Europe.	YES: Relatively low occurrence / abundance based on field survey data. May be impacted during operation due to High collision risk (EUROBATS).
Pond bat	*Myotis dasycneme*	30	CH	Habitat change, water pollution.	NO: Low occurrence / abundance based on field survey data. Low collision risk (EUROBATS). Unlikely to be significantly affected by operation.
Serotine	*Eptesicus serotinus*	851	CH	Habitat loss, fragmentation and disturbance, renewable energy, collision from vehicles, light pollution.	YES: Relatively low occurrence / abundance based on field survey data. May be impacted during operation due to High collision risk (EUROBATS).
Soprano Pipistrelle	*Pipistrellus pygmaeus*	192	CH	No major threats, potentially vulnerable to disturbance of maternal colonies.	YES: Relatively low occurrence / abundance based on field survey data. Unlikely to be significantly affected by operation.

5.2 REQUIREMENTS FOR CH

Critical habitat (CH) is triggered for several species of fauna (one bird, 13 species of bats). For these CH qualifying values, the Project will need to align with the EBRD requirements pertaining to the management and mitigation of impacts on CH, as outlined in Performance Requirement 6 (PR6). These include the following key obligations:

- Viable alternatives (in terms of location or design) must first be considered to avoid impacts on Critical Habitat;
- The Project must demonstrate that it does not lead to measurable adverse impacts on the ecological integrity of Critical Habitat values;
- The Project must not result in a net reduction in the global, regional, or national populations of any Critically Endangered (CR) or Endangered (EN) species;
- The Project must adhere to the mitigation hierarchy, prioritizing avoidance and minimization of impacts before considering restoration and biodiversity offsets;
- A mitigation strategy must be outlined in the Biodiversity Action Plan (BAP) or Biodiversity Management Plan (BMP), as applicable;
- The Project should aim to achieve positive conservation outcomes for relevant Critical Habitat features;
- A long-term monitoring and evaluation program focused on Critical Habitat must be part of the Project's adaptive management approach;
- Relevant stakeholders, including biodiversity experts and local communities, must be engaged as part of impact management planning; and
- The Project must comply with applicable environmental legislation.

Further detail on these requirements is provided in Annexure 7.1 of this CHA report.

5.3 REQUIREMENTS FOR PBF

For PBF, EBRD PR6 also provides relevant management requirements that include:

- Demonstrating that no viable alternatives exist to avoid impacts on PBFs;
- The Project must implement the mitigation hierarchy to ensure at least No Net Loss (NNL) and preferably Net Gain (NG) of PBFs;
- Relevant stakeholders are to be consulted; and
- The Project is permitted under applicable environmental laws.

Further detail on these requirements is provided in Annexure 7.1 of this CHA report.

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7. ANNEXURES

7.1 EBRD REQUIREMENTS FOR CRITICAL HABITAT (CH) AND PRIORITY BIODIVERSITY VALUES (PBF)

7.1.1 EBRD REQUIREMENTS FOR CH

Paragraphs 15 and 16 of EBRD PR6 provides the requirements for the management of critical habitat, as follows:

15. Critical habitat shall not be further fragmented, converted or degraded to the extent that its ecological integrity or biodiversity importance is compromised. Consequently, in areas of critical habitat, the client will not implement any project activities unless the following conditions are met:

- *no other viable alternatives within the region exist for development of the project in habitats of lesser biodiversity value;*
- *stakeholders are consulted in accordance with PR 10;*
- *the project is permitted under applicable environmental laws, recognising the priority biodiversity features;*
- *the project does not lead to measurable adverse impacts on those biodiversity features for which the critical habitat was designated as outlined in paragraph 14;*
- *the project is designed to deliver net gains80 for critical habitat impacted by the project;*
- *the project is not anticipated to lead to a net reduction in the population of any endangered or critically endangered species, over a reasonable time period; and*
- *a robust and appropriately designed, long-term biodiversity monitoring and evaluation program aimed at assessing the status of critical habitat is integrated into the client's adaptive management program.*

16. In such cases where a client is able to meet these requirements, the project's mitigation strategy will be described in a biodiversity management plan or biodiversity action plan, wherever appropriate.

Source: EBRD PR6 (2019).

7.1.2 EBRD REQUIREMENTS FOR PBF

Paragraph 13 of EBRD PR6 provides the requirements for the management of PBF, as follows:

13. Where the assessment has identified that the project could have significant, adverse and irreversible impacts to priority biodiversity features, the client shall not implement any project related activities unless:

- *the client can demonstrate that there are no technically and economically feasible alternatives;*
- *stakeholders are consulted in accordance with PR 10;*

- *the project is permitted under applicable environmental laws, recognising the priority biodiversity features; and*
- *appropriate mitigation measures are put in place, in accordance with the mitigation hierarchy, to ensure no net loss and preferably a net gain of priority biodiversity features and the habitats and ecological functions that support them over the long term to achieve measurable conservation outcomes.*

Source: EBRD PR6 (2019)

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