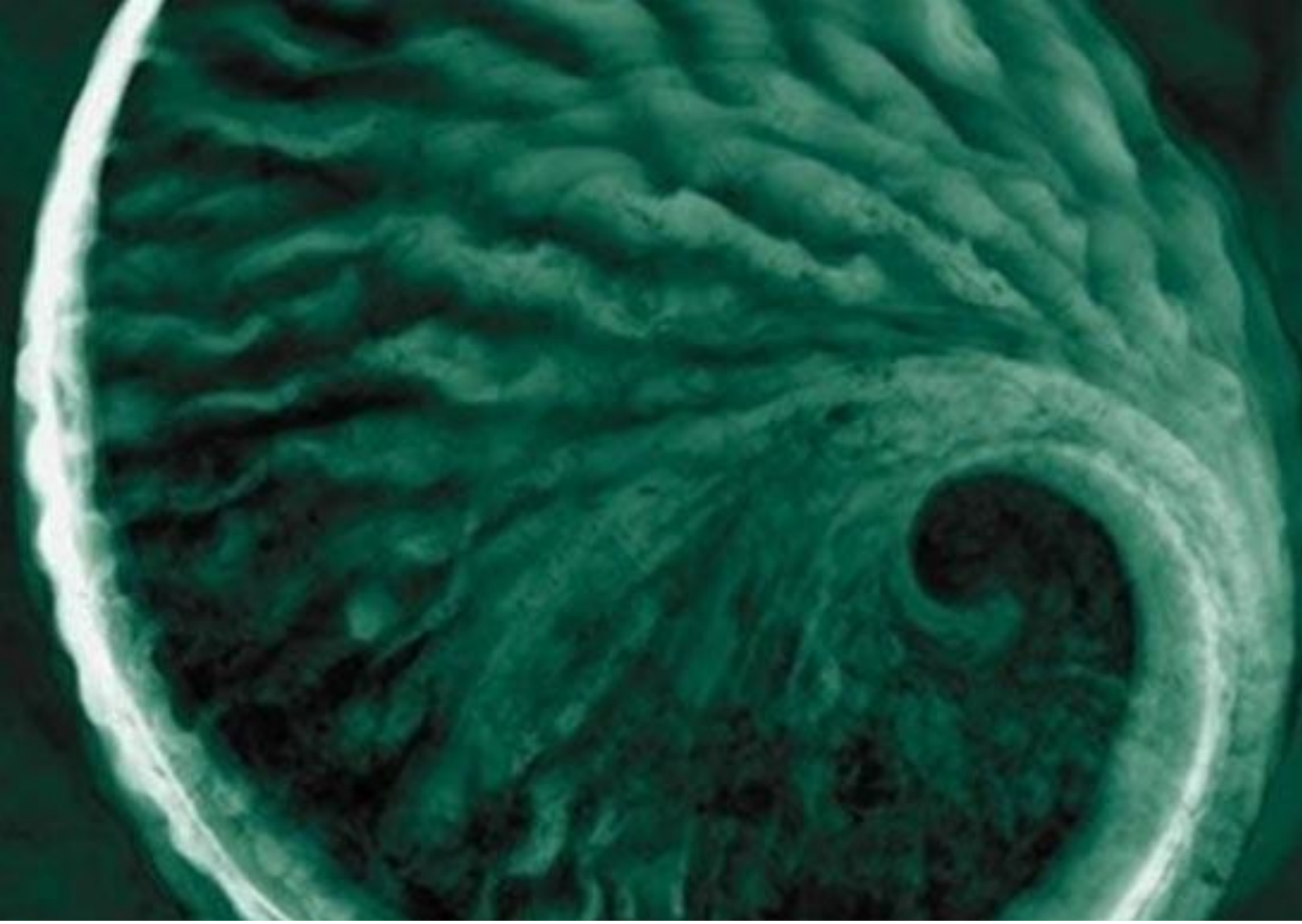


Nakkas Basaksehir Highway, Turkey

Critical Habitat Assessment

16 September 2022

Project No.: 0580559

The business of sustainability

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1. INTRODUCTION

1.1 Background and Purpose

The investment costs of the “Nakkas Basaksehir Motorway Project” (hereinafter “the Project”) will be potentially financed by debt and equity under a Project Finance structure involving numerous international Lenders. Accordingly, the Project seeks to comply with relevant international lender requirements, including those of the European Bank for Reconstruction and Development (EBRD) and its E&S Policy. This extends to include EBRD’s Performance Requirement 6 (PR6) ‘Biodiversity Conservation and Sustainable Management of Living Natural Resources’.

The purpose of this Report is to determine the extent of Critical Habitat and Priority Biodiversity Features that could be affected by the Project. Critical Habitat and Priority Biodiversity Features represent significant areas of importance to high value biodiversity. PR6 requires projects to achieve net gains in the biodiversity values for which Critical Habitat is designated and at least no net loss for those designated Priority Biodiversity Features.

1.2 The Project

The Project is located in Istanbul Province, Turkey and is the last portion (section 8) of the “Northern Marmara Motorway” (NMM). Sections 1-6 are already constructed and operational, while section 7 will complete construction in 2021. The location of the Project (i.e. section 8) is presented in Figure 1 below and comprises the following key components:

- 24,17 km long main road with a 2x4-lane and 2x3 lane connecting roads
- 6,47 km long connection roads; and
- a 1,600 m cable-stayed bridge with 46 m width and tower height of 196 m at the Sazlıdere creek.
- Three batch plants will facilitate the Project’s construction.

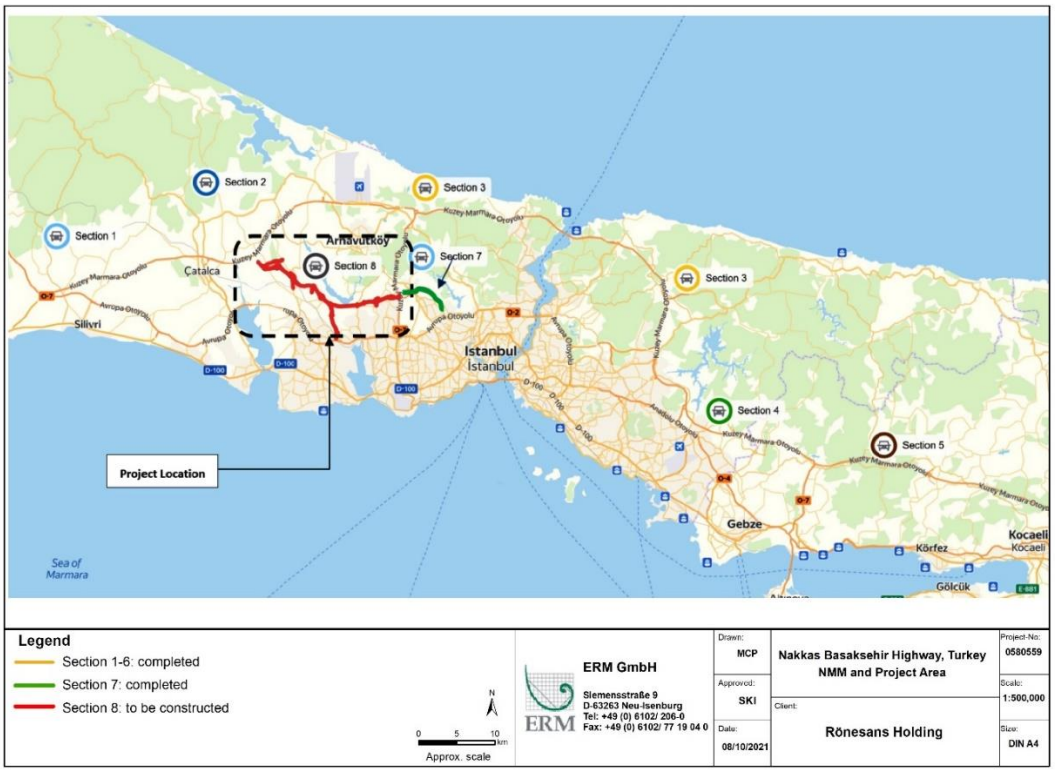


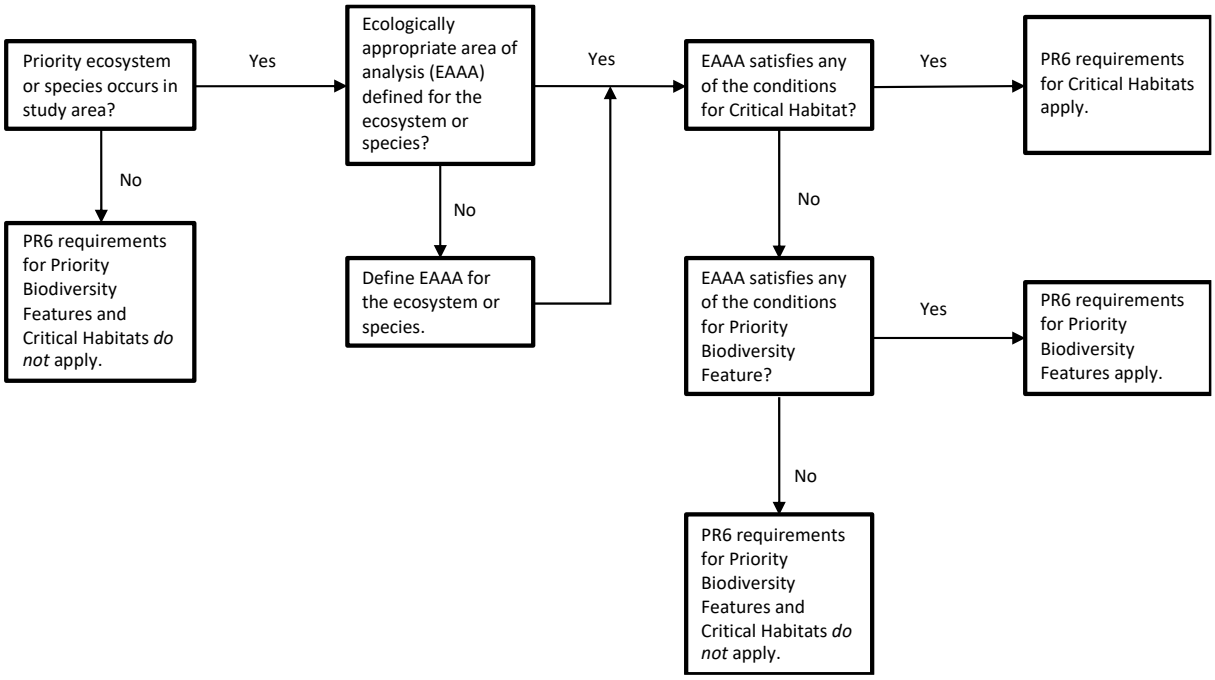
Figure 1 Project Location and Wider NNM (sections 1-5 only shown)

2. METHODOLOGY

The Critical Habitat Assessment methodology followed EBRD Guidance Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources (v. January 1, 2020 – unpublished). The steps of the assessment were:

1. Screening of the ESIA biodiversity baseline data to identify any candidate Critical Habitat or Priority Biodiversity Features regularly occurring in the study area. The study area encompassed the area affected by the Project's direct and indirect impacts i.e. the Area of Influence, and the surrounding landscape.
2. Where candidates were identified, an Ecologically Appropriate Area of Analysis (EAAA) was defined (refer Appendix A for EAAA mapping). The EAAAs were mapped according to EBRD GN6, as supplemented with information from the International Finance Corporation's (IFC) GN6 (i.e. paragraph GN59).
3. The criteria for Critical Habitat and Priority Biodiversity Features (explained fully in section 2.2 below) were applied to the EAAAs to determine whether each candidate qualified as such or not.
4. Where Critical Habitat and Priority Biodiversity Features were confirmed present (or likely present), the implications for the Project under PR6 were then set out. This information was used to inform the Project's impact assessment process.

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



Source: emerging EBRD *'Guidance Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources' Jan 2020 (unpublished).*

Figure 2 Assessment Process Flow Chart

2.1 Criteria for Priority Biodiversity Features and Critical Habitat

Table 1 presents the criteria used to identify Priority Biodiversity Features (PBF) and Critical Habitat (CH). The following additional matters were also applied in accordance with PR6, which are not listed in Table 1, i.e:

- PR6 paragraph 12-iii: significant biodiversity features identified by a broad set of stakeholders or governments (including in this Report legally protected and internationally / nationally recognized areas of high conservation value);
- PR6 paragraph 12-iv: ecological structure and functions needed to maintain the viability of PBFs described in this paragraph; and
- PR6 paragraph 14-v: Areas associated with key evolutionary processes.

Where applicable to the Project, these additional matters were determined as PBFs or CH using professional judgement.

As Turkey is a signatory to the Bern Convention on the 'Conservation of European Wildlife and Natural Habitats', habitats or species listed in the Bern Convention (Resolutions 4[1] and Resolution 6[2], respectively) qualified automatically as PBFs or CH, as appropriate based on the relevant EBRD PR6 qualifying criteria (refer to Table 1).

For remaining Priority Ecosystems and Priority Species, an Ecologically Appropriate Area of Analysis (EAAA) was defined and that EAAA unit evaluated against the conditions for CH (Table 1). The EAAAs were identified according to the EBRD GN6 supplemented with information from the International Finance Corporation's (IFC) Guidance Note 6. The EAAA approach to the analysis was not adopted for features which did not qualify as a PBFs or CH at this step were not taken further in the assessment.

It should be noted that because Turkey is not a member of the European Union, the PR6 criteria in relation to the Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) do not apply to the Project. As such, the PBF and CH criteria in respect of these EU Directives have not been applied to PBF and CH identification for the Project.

Irrespective of any international listing, all species were also considered based on whether they are (Table 2):

- Globally threatened according to IUCN Red List (CR, EN or VU);
- Endemic and range restricted species; and
- Migratory and congregatory species.

2.2 Data Sources

The Project ESIA was used to provide all desktop and field survey data on which this Report is based. Supplementary information on the ecology of certain biodiversity values was sought through various sources and these are referenced in the text where used.

[1] Resolution No. 4 (of 1996) listing endangered natural habitats requiring specific conservation measures.

[2] Resolution No. 6 (of 1998) listing the species requiring specific habitat conservation measures (revised list adopted in 2011).

Table 1 Criteria and conditions for identifying Critical Habitats and Priority Biodiversity Features (Note – references to EU Habitat/Birds Directives not applicable to present CHA – see 'Red' text)

Priority Ecosystem or Priority Species	Priority Biodiversity Feature	Critical Habitat
1. Priority ecosystems		
1i Threatened ecosystems		
(a) Habitats listed in Annex 1 of EU Habitats Directive (**EU members only**) or Resolution 4 of Bern Convention (b) IUCN Red-List EN or CR ecosystems	(c) EAAA is habitat type listed in Annex 1 of EU Habitats Directive **(EU members only)** or Resolution 4 of Bern Convention (d) EAAA < 5% of the global extent of an *ecosystem* type with IUCN status of CR or EN	(e) EAAA is habitat type listed in Annex 1 of EU Habitats Directive marked as "priority habitat type" **(EU members only)** (f) EAAA ≥5% of global extent of an ecosystem type with IUCN status of CR or EN (g) EAAA is ecosystem determined to be of high priority for conservation by national systematic conservation planning
2. Priority Species and their Habitats		
2iThreatened Species		
(a) Species and their habitats listed in EU Habitats Directive and Birds Directive **(EU members only)** or Bern Convention (b) IUCN Red List EN or CR species (c) IUCN Red List VU species (d) Nationally or regionally (e.g., Europe) listed EN or CR species	(e) EAAA for species and their habitats listed in Annex II of Habitats Directive, Annex I of Birds Directive **(EU members only)**, or **Resolution 6 of Bern Convention** (f) EAAA supports < 0.5% of global population OR < 5 reproductive units of a CR or EN species. **(g) EAAA supports VU species** (h) EAAA for regularly occurring nationally or regionally listed EN or CR species	(i) EAAA for species and their habitats listed in Annex IV of the Habitats Directive **(EU members only)** (j) EAAA supports ≥ 0.5% of the global population AND ≥ 5 reproductive units of a CR or EN species (k) 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) (l) EAAA for important concentrations of a nationally or regionally listed EN or CR species
2ii Range-restricted species		
	(a) EAAA for regularly occurring range-restricted species	(b) EAAA regularly holds ≥ 10% of global population AND ≥ 10 reproductive units of the species***
2iii Migratory and congregatory species		
	(a) EAAA identified per Birds Directive (**EU members only**) or recognized national or international process as important for migratory birds (esp. wetlands)	(b) EAAA sustains, on a cyclical or otherwise regular basis, ≥ 1 percent of the global population at any point of the species' lifecycle (c) EAAA predictably supports ≥10 percent of global population during periods of environmental stress

*** The IUCN Key Biodiversity Areas standard cites the following definition for reproductive unit: "the minimum number and combination of mature individuals necessary to trigger a successful reproductive event at a site. Examples of five reproductive units include five pairs, five reproducing females in one harem, and five reproductive individuals of a plant species.

3. RESULTS

Table 2 provides the screening results for PBFs and CH. In summary:

- Overall, there are three CH qualifying biodiversity features identified, which include:
  - one plant (*Cirsium polycephalum,* CR); and
  - two Internationally Recognised Areas [Küçükçekmece Basin Important Bird Area (IBA) & Key Biodiversity Area (KBA), and the West Istanbul Grasslands Important Plant Area (IPA)].
- The Internationally Recognized Areas are heavily degraded and it is probable that they no longer support biodiversity which qualifies as CH or PBFs. The Study Area partly overlaps with the eastern end of the West Istanbul Grasslands IPA. This part of the IPA is already heavily impacted by urban development through buildings and infrastructure (see ESIA, Chapter 6.2.4 and Figure 3). The citation for this IPA notes many species for which it was designated are no longer present in this Internationally Recognized Area. It is therefore not considered to be able to support populations of its characterizing plant species[1] anymore. However, conservatively the IPA is considered to be CH at this time based purely on its designation as such. A similar finding has been determined for the Küçükçekmece Basin IBA/KBA.
- A total of 15 threatened species (CR, EN, VU) were considered in the assessment. Of these, 12 qualify as PBFs (based on threat status and/or listing in terms of the Bern Convention: Resolution 6) and this includes:
  - six bird species;
  - four mammals (including 3 bats);
  - one reptile species;
  - one plant species.
- In addition to the threatened species PBFs, an additional 93 species of fauna have been identified as PBFs in terms of their listing in Resolution 6 of the Bern Convention (bringing the total number PBFs in terms of fauna species identified to 105) and these comprise the following:
  - 79 birds (74 LC species, 5 NT species);
  - 10 mammals (mainly bats and small mammals, five NT species, five of LC);
  - one amphibians of LC;
  - two reptiles (1 LC, 1 NT);
  - one species of fish (LC).
- No migratory or congregatory species are present in numbers which qualify as CH or PBFs. The majority of birds pass through the area only on passage and the EAAA does not sustain a significant population for any species.
- No “Priority Habitat Types” listed in Resolution 4 of the Bern Convention are found. The habitats present are not considered to be in good condition or representative for being designated as Emerald site (which is the purpose of their listing on Resolution 4 of the Bern Convention).
- No areas associated with PR6 paragraph 12-iv: “*Ecological structure and functions needed to maintain the viability of priority biodiversity features*” were identified present, or areas associated with key evolutionary processes were identified present (PR6 paragraph 14-v).

[1] 122turkiyeninonemlibitki_alanlar.pdf (panda.org). Last viewed on 24.06.2022.

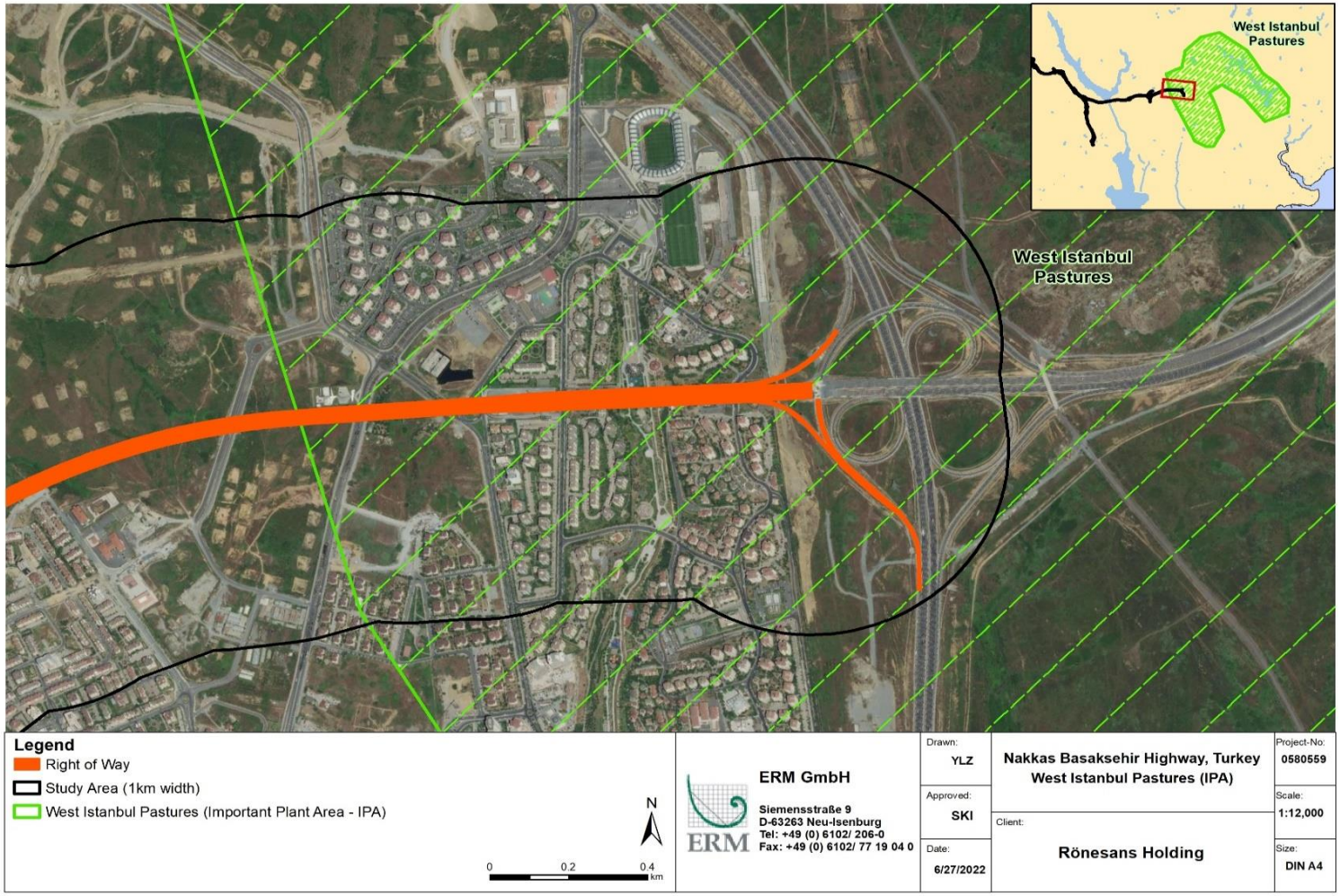


Figure 3 Study Area within West Istanbul Pastures IPA. Note existing development within the IPA. Note extent of existing residential and infrastructure development within this part of the IPA relative to proposed motorway corridor (shown in orange).

Table 2 Assessment of Critical Habitat (CH) and Priority Biodiversity Features (PBFs)

3.1 Threatened Species

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
Birds									
Egyptian Vulture	*Neophron percnopterus*	-	EN	R6	-	X	This species is a passage migrant within the Study Area. It was not recorded during field surveys. The number of individuals migrating through the Bosporus is very limited during spring and autumn, for example only 11 and four birds in total were counted during spring autumn migrations in 2014 respectively[4]. Whilst the Bosporus is recognised as an important migration bottleneck for birds of prey, most Egyptian vultures during the spring migration travel via the Dardanelles at the south-western margin of the Marmara Sea[5] (south of the Bosporus straits and the Study Area). It is likely the same route is followed post-breeding in the autumn.	EAAA: The regional airspace for migrating birds through the Bosporus is considered to be the EAAA for this species. In Europe 3,000-4,700 pairs are estimated breeding. Within the EAAA, as a migratory species, the species requires temporary nocturnal roosts on trees, cliffs or power pylons that offer safety from predators. Migration occurs usually as solitary birds or small groups [5]. The proportion of the population within the EAAA (conservatively 0.4% and intermittently during migration only) is not significant to the conservation of this EN or R6-listed species. The EAAA does not provide an important function in maintaining or supporting the species' population.	This species qualifies as a **Priority Biodiversity Feature** (Criterion 2i.e – species listed in terms of Resolution 6 of Bern Convention)

4 Fülüp *et al.* (2014). Autumn migration of soaring birds at Bosporus: validating a new survey station design. Bird Study. 61:264.269.

5 Panuccio, M.; Mellone, U. and Agostini, N. Migration Strategies of Birds of Prey in the Western Palearctic. 2021.

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
Eurasian Turtle Dove	*Streptopelia turtur*	Y	VU	-	-	X	This globally vulnerable species was recorded present during the ESIA surveys (no abundance data recorded). The Study Area is located within the breeding range of this species. It also migrates through the Study Area but there is no evidence of large-scale passage through the Bosporus[6]. The species uses a variety of woodland types, as well as steppe and semi-desert, frequently relying on agricultural land for feeding. It may also use hedges, borders of forest, groves, spinneys, coppices, young tree plantations, scrubby wasteland, woody marshes, scrub and garigue.	The EAAA for this assessment is the garrigue and woodland habitat. The present Turkish population size and trend is not known but was estimated in 2004 at being 300,000 – 900,000 and decreasing. Kirwan et al 2008[7] describe it as a widespread and common summer visitor. The population or the habitats within the EAAA are not considered to be important to the Turkish or global populations of this VU species.	This species does not qualify as a Priority Biodiversity Feature or Critical Habitat.
Greater Spotted Eagle	*Clanga clanga*	-	VU	-	-	X	This species is a passage migrant in the Study Area. This species was not recorded during the ESIA studies. Although the Bosporus is a key migration route for the species on passage low annual average numbers are recorded during migration I.e. four birds in 2010, six birds in 2008 and 2014[8] respectively	The global population is estimated at 5,000 – 13,200 individuals[9]. The regional airspace for migrating birds through the Bosporus is considered to be the EAAA for this species. The proportion of the population within the EAAA (conservatively = 0.1%) is not significant to the conservation of this species.	This species does not qualify as a Priority Biodiversity Feature or Critical Habitat.

[6] https://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/20181002%20Final_draft_European%20Turtle-Dove.pdf

[7] KIRWAN GM, BOYLA K, CASTELL P, DEMIRCI B, ÖZEN M, WELCH H and MARLOW T (2008) The Birds of Turkey. Christopher Helm, London.

[9] http://datazone.birdlife.org/species/factsheet/greater-spotted-eagle-clanga-clanga/text

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
								The EAAA does not provide an important function in maintaining or supporting the species' population.	
Imperial Eagle	*Aquila heliaca*	-	VU	R6	-	X	This species is a passage migrant in the Study Area. The Study Area is outside its breeding range in Turkey. Very low numbers are recorded during migration through the area (total four birds in 2014)[10].	The regional airspace for migrating birds through the Bosporus is considered to be the EAAA for this species. The global population is estimated to be <4,000 birds. The stronghold of the population is in Russia and Kazakhstan. The proportion of the population within the EAAA (conservatively = 0.1% and intermittently during migration only), is not significant to the conservation of this VU or R6-listed species. The EAAA does not provide an important function in maintaining or supporting the species' population.	This species qualifies as a **Priority Biodiversity Feature** (Criterion 2i.e – Species listed in terms of Resolution 6 of Bern Convention & Criterion 2i.g – EAAA supports VU species**)**
Pochard	*Aythya ferina*	-	VU	-	-	X	This species is a winter visitor which could potentially occur on lakes or waterbodies within the Study Area.	The species has been recorded as a winter visitor on the Küçükçekmece Lake IBA/KBA totalling 7,336 birds. The EAAA for this assessment is taken to be the Küçükçekmece Lake and nearby Büyükçekmece Lake and Terkos Basin (Figure 5). Across the EAAA the total population estimate is 23,599 birds The Global population is estimated to be c.	This species qualifies as a **Priority Biodiversity Feature** (**Criterion 2i.g** – EAAA supports VU species**)**

[10] https://www.researchgate.net/publication/262068319_Autumn_migration_of_soaring_birds_at_Bosporus_Validating_a_new_survey_station_design/link/5512e0e40cf268a4aaeb48e4/download

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
								1,950,000-2,250,000 individuals. The proportion of the population within the EAAA is approximately 1% of the global population of this VU and R6 listed species and considered to be of significance. The EAAA is likely to have some important function in maintaining or supporting the species' population.	
Red-Breasted Goose	*Branta ruficollis*	-	VU	R6	-	X	Red-breasted goose is a winter visitor to Turkey. It has not been recorded during the ESIA field studies or historically at the Küçükçekmece Lake IBA/KBA.	N/A	This species qualifies as a **Priority Biodiversity Feature** (Criterion 2i.e – Species listed in terms of Resolution 6 of Bern Convention)
Steppe Eagle	*Aquila nipalensis*	-	EN	R6	-	X	This species was not recorded during field surveys. Core populations are found in Kazakhstan and Mongolia. Isolated breeding sites in Turkey encompass the Ankara, Konya, and Kayseri triangle which are not near the Study Area. Passage via the Bosporus is considered non-existent. Eagles from Central Turkey migrate via the Levant.	N/A	This species qualifies as a **Priority Biodiversity Feature** (**Criterion 2i.e** – Species listed in terms of Resolution 6 of Bern Convention)
White-headed Duck	*Oxyura leucocephala*	-	EN	R6	-	X	This species was not recorded during ESIA field surveys but considered potentially present on passage and over winter at Küçükçekmece IBA/KBA.	EAAA: Küçükçekmece IBA/KBA Less than three birds (combined) have been recorded at Küçükçekmece IBA/KBA since beginning of MWC records in 1993, which	This species qualifies as a **Priority Biodiversity Feature** (**Criterion 2i.e** – Species listed in terms of

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
								is approximately 0.06% of the global population. The proportion of the population within the EAAA is not significant to the conservation of this species. The EAAA does not provide an important function in maintaining or supporting the species' population.	Resolution 6 of Bern Convention)
Mammals									
European souslisk	*Spermophilus citellus*	-	EN	R6	-	-	This species was not recorded during baseline studies for the present Project but has been directly observed approximately 2 km from the Project area as part of the Hakkali-Ispartakulecerkezkoy Railway ESIA and in similar habitats. This location is at the eastern edge of this species' range in Europe[11]. The habitat preference is short-grass steppe habitat on well drained soils in the Thrace region, the south-eastern extent of its global range.	The EAAA for this assessment extends over unoccupied grasslands and pastures (Figure 7). The global population is unknown, however, considered decreasing[12]. Using information from the Hakkali-Ispartakulecerkezkoy Railway ESIA and CHA the population in the EAAA is considered likely to be up to 250 individuals, representing 0.3% of the global population (upper estimated) within the EAAA. Given that the Study Area is at the edge of this species' range and the EAAA supports <0.5% of the global population, the EAAA is - conservatively - considered to be of significance to the conservation of this EN and R6-listed species.	This species qualifies as a **Priority Biodiversity Feature** (Criterion 2i.e - species listed in terms of Resolution 6 of Bern Convention & Criterion 2i.f – EAAA supports <0.5% of global population of EN species)

[11]The IUCN Red List of Threatened Species (2022): https://www.iucnredlist.org/species/20472/91282380. Downloaded on 08.06.2022.

[12] The IUCN Red List of Threatened Species (2022): https://www.iucnredlist.org/species/20472/91282380. Downloaded on 08.06.2022.

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
Greater noctule bat	*Nyctalus lasiopterus*	Y	VU	R6	-	-	This species was recorded on two occasions at low activity rates (peak 6 passes). It was recorded along the shores of the dam as well as along the canal south of the project site. The species occupies forest and shrubland, and also wetlands and swampy areas. It roosts in bat boxes, roof spaces and larger caves[13]. Within the study area, it is only known as a migrating species along wetlands.	The EAAA for this assessment stretches along the shore of the Sazlidere lake and along the Sazlidere canal down south. The global population is estimated at 9,999 bats. The proportion of the population within the EAAA is not significant to the conservation of this species. The EAAA does not provide an important function in maintaining or supporting the species' population.	This species qualifies as a **Priority Biodiversity Feature** (Criterion 2i.e – Species listed in terms of Resolution 6 of Bern Convention)
Long-fingered bat	*Myotis capaccinii*	Y	VU	R6	-	-	The presence of this species was not confirmed. A roost has been recorded approximately 10 km west of the Project at Gokceali as part of the Halkali Railway Line ESIA (WSP, 2021). This species is almost exclusively found in cave-rich karst limestone areas with large waterbodies. Other areas are only potentially suitable if cave roosts are available. It rarely roosts outsides caves or mines in bridges, buildings, cellars or buildings[14].	Based on its habitat preferences and regarding the abundance of limestone areas in the study area, all unoccupied shrubland within a radius of 15 km including water bodies is conservatively considered the EAAA (Figure 8). The population within the EAAA is unknown, as is its global population. Conservatively the EAAA is considered significant for this VU and R6-listed species by taking into account its restriction to limestone areas such as those present in the Study Area.	This species qualifies as a **Priority Biodiversity Feature** (Criteria 2ia – EAAA for R6 species and 2i.g – EAAA supports VU species & Criterion 2i.e – Species listed in terms of Resolution 6 of Bern Convention)

[13] Dietz and Kiefer 2014 Bats of Britain and Europe.

[14] Dietz and Kiefer 2014 Bats of Britain and Europe.

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
Marbled polecat	*Vormela peregusna*	Y	VU	R6	-	-	This species was not recorded in the Study Area and there are no historical records. The species occupies shrubland, grassland and rocky areas and could potentially occur within natural habitats in the study area. They nest in hollows of rock crevices, trees or underground.	The EAAA for this assessment is considered to be all non-wooded areas outside of occupied areas within the study area (Figure 9). The Thrace region is considered to be a relative stronghold for this species in Turkey although the national population and global population sizes are unknown[15] . Conservatively the EAAA is considered significant for this VU and R6-listed species.	This species qualifies as a **Priority Biodiversity Feature** (Criteria 2ia – EAAA for R6 species and 2i.g – EAAA supports VU species)
Mehely's Horseshoe Bat	*Rhinolophus mehelyi*	Y	VU	R6	-	-	This is the rarest of the medium-sized horseshoe bat in Turkey. The European population is estimated at c. 50,000 bats. The presence of this species was confirmed during the field survey close to the Sazlidere dam at the camp site. This species roosts exclusively in caves but sometimes mines or cellars[16]. It forages in Mediterranean shrubland and woodland, dry steppes and water bodies[17].	Considering the generalist nature of its habitat, the whole study area, except occupied land, is considered to be the EAAA for this assessment (Figure 10). Conservatively the EAAA is considered significant for this VU and R6-listed species.	This species qualifies as a **Priority Biodiversity Feature** (Criteria 2ia - EAAA for R6 species and 2i.g – EAAA supports VU species & Criterion 2i.e – Species listed in terms of Resolution 6 of Bern Convention)

[15] HALKALI-ISPARTAKULE-CERKEZKOY RAILWAY LINE Critical Habitat Assessment (WSP, 2021)

[16] Dietz and Kiefer 2014 Bats of Britain and Europe.

[17] The IUCN Red List of Threatened Species (2022): https://www.iucnredlist.org/species/19519/21974380#habitat-ecology. Downloaded on 09.06.2022.

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
Herptiles									
Mediterranean Spur-thighed Tortoise	*Testudo graeca*	Y	VU	R6	-	-	The species was recorded in the study area at study point 3 in the south west of the Sazlidere Dam, with plantations bushes and rocky areas.	The EAAA is considered to extend across all non-wooded areas outside of occupied (developed) areas. Arslan et al 2021 [18] assume a population size of 5.7 individuals per ha in the Gediz Delta, Turkey (Aegean) which is comparable to the only other studied population in Muğla, Turkey. It also confers with other population estimates in Donana, Spain, Jebilet, Morroco and elsewhere in southern Mediterranean basin. It is considered unlikely that the population or the habitats within the EAAA are of significant importance to the Turkish or global populations of this VU and R6-listed species.	This species qualifies as a **Priority Biodiversity Feature** (Criterion 2i.e – Species listed in terms of Resolution 6 of Bern Convention)
Fish									
Common carp	*Cyprinus carpio*	Y	VU	-	-	-	This species was recorded just below Sazlidere Dam (station 3) within an area of suitable habitat i.e., warm, deep, slow-flowing and still waters. Native wild populations are listed as globally vulnerable.	Native wild populations are threatened by the regulation of water in particular changes to flooded areas required for spawning, as well as hybridisation with domesticated stocks, which have been introduced within all of its Turkish range. It has not been possible to confirm whether the individual recorded within	This species does not qualify as a Priority Biodiversity Feature or Critical Habitat.

[18] https://www.researchgate.net/publication/351845605_Demography_distribution_and_threat_assessment_of_the_Spur-thighed_Tortoise_Testudo_graeca_in_the_Gediz_Delta_Turkey_Reptilia_Testudines

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
								the Study Area is a native wild specimen or from introduced stock. However, wild stocks are known to occur naturally only in rivers draining to the Black, Caspian and Aral Seas[19]. The Sazlidere drains into the Mediterranean Sea. Therefore, the recorded individuals are considered introduced.	
Flora									
-	*Cirsium polycephalum*	Y	CR	-	X	-	*Cirsium polycephalum* was recorded during field surveys within Black Sea garrigue habitat, *Spartium junceum* fields, Maquis habitat, Pinus plantation forest and Meso and eutrophic mixed deciduous forest.	The species is endemic to the Marmaras region (67,000 km^2 in size). Based on its habitat, the EAAA comprises all garrigue habitat, *Spartium junceum* fields, shrubland/woodland and forest (plantation) withing the Area of Influence (Figure 6). The population of this species within the Study Area was 2,020 individuals recorded across four sampling locations. This population is taken to represent 0.4% - 0.6% the population within the EAAA. The EAAA therefore supports c. 0.5% of the global population and more than 5 reproductive units of this CR species.	The species qualifies as a **Critical Habitat (Criterion 2j –** EAAA supports >0.5% of global population AND >5 reproductive units of a CR species).

[19]The IUCN Red List of Threatened Species (2022): https://www.iucnredlist.org/species/6181/12559362#geographic-range. Downloaded on 27.06.2022.

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
-	*Euphorbia amygdaloides var. robbiae*	X	NT	-	X	-	It was recorded during an additional rapid habitat survey and ground-truthing exercise completed by ERM in May 2022. It was noted as commonly occurring in almost all habitats, particularly the garrigue.	Based on its habitat preferences, all garrigue habitat within the study area is considered the EAAA (Figure 12). It is known to occur throughout the whole Marmara region. Therefore, it is highly unlikely, that the EAAA supports ≥10 % of the global population, thus not qualifying for Critical Habitat. The Marmara region extents over an area of 67,000 km^2, therefore exceeding the EOO threshold of 50,000 km^2 defined by IFC for range restricted species [21]. The population within the EAAA is not considered to be important to the Turkish or global populations of this species.	This species does not qualify as a Priority Biodiversity Feature or Critical Habitat.
Snowdrop	*Galanthus x valentinei*	X	VU	-	X	-	50 individuals were observed of the snowdrop *Galanthus x valentinei.* The species was recorded in Mediterranean riparian woodland.	The species is found only in the Thrace region in Turkey. Its population is estimated to be 25,000 individuals[20]. Based on its habitat preferences, Mediterranean riparian woodland within the Area of Influence is considered the EAAA for this species in this assessment (Figure 11). The total extent of occurrence is less than 20,000 km^2. This is below	This species qualifies as a **Priority Biodiversity Feature (Criterion** 2iia – EAAA for regularly occurring range-restricted species**).**

[20] Based upon: Ekim, T., Koyuncu, M., Vural, M., Duman, H., Aytac, Z. & Adiguzel, N. (2000). Red Data Book of Turkish Plants (Pterdophyta and Spermatophyta). Van : Turkiye Tabiatini Koruma Dernegi

English Name	Scientific Name	Directly Observed	IUCN RL (Global)	Bern Convention	Endemic	Migratory/ Congregatory	Screening Comments	EAAA and Population	CH/PBF
								the 50,000 km2 threshold used to define range restricted species[21]. Conservatively the EAAA is considered to support a regularly occurring range restricted species.	

3.2 Threatened Ecosystems

Name	Priority Habitat	Bern Convention	Description	EAAA	CH / PBF
Habitats listed in Resolution 4 of Bern Convention					
Water-fringing reedbeds and tall helophytes other than canes (Eunis code C3.2)	-	R4	This type of habitat is represented in the project area along the creek at the Sazlıdere Dam exit (see Figure 2). Since the flow is low along the creek, the species diversity of the hydrophilic herbaceous species and overlap are high. The dominant species of this habitat are bulrush (Typha latifolia), common reed (Phragmites australis), gibbous duckweed (Lemna gibba), soft rush (Juncus effuses), common club-rush (Schoenoplectus lacustris), gypsywort (Lycopus europeus), three-lobe beggarticks (Bidens tripartite) and marsh ragwort (Senecio aquaticus).  **P1: Water-fringing reedbeds at Sazlıdere Dam**	The EAAA is the habitat within the AoI.	This habitat qualifies as **Priority Biodiversity Feature** (Criterion 1.i – ecosystems / habitats listed in terms of Resolution 4 of Bern Convention)

[21] International Finance Corporation (IFC) Guidence Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. 2012.

Name	Priority Habitat	Bern Convention	Description	EAAA	CH / PBF
			The presence of this habitat below Sazlidere dam is not typical of the area and is considered to be a modified habitat which has formed artificially as a result of the excavation and straightening/canalization of the section of the previous natural watercourse present before dam construction and operation. Indeed, the extensive reed/bulrush growth observed is considered to be linked to the eutrophic status of the watercourse and elevated nutrient levels, exemplified by the presence of extensive algal blooms within the water column. The habitat is therefore not considered representative of the natural 'Water-fringing reedbeds and tall helophytes' type which would be more commonly associated with natural wetland ecosystems in the region.		
Moeso-Thracian mesophile hay meadows (Eunis code E2.252)	-	R4	Found in a small area along the motorway as well as near the end of the motorway route at a larger size. This habitat type is grazed heavily by cattle with the dominant species of soft rush (*Juncus effusus*), *Ranunculus constantinopoliatanus*, ribwort plantain (*Plantago lanceolate*), hemlock (*Conium maculatum*), blessed thistle (*Silybum marianum*), radish (*Raphanus raphanistrum*), cutleaf teasel (*Dipsacus laciniatus*), alfalfa (*Medicago sativa*), cat grass (*Dactylis glomerata*), and Bermuda grass (*Cynodon dactylon*).  **P2: Moeso-Thracian mesophile hay meadows** This habitat is not considered representative of natural hay meadows or grasslands which would be sustained naturally by several environmental and climatic drivers and is rather considered a secondary grassland type forming as a result of the clearance of Black Sea garrigue or as a result of overgrazing by livestock which has diminished the woody vegetation component and maintained the short herbaceous/grass cover.	The EAAA is the habitat within the AoI.	This habitat qualifies as **Priority Biodiversity Feature** (Criterion 1.i – ecosystems / habitats listed in terms of Resolution 4 of Bern Convention)
Mediterranean Riparian Woodland (Eunis code G1.3)	-	R4	This habitat develops along alluvial valley grounds with high groundwater table level and along streams. This habitat type is represented at study point 5 and 6. The characteristic tree species are field elm (*Ulmus minor*), white willow (*Salix alba*) and narrow-leaved ash (*Fraxinus angustifolia*). While there are bush species holy bramble (*Rubus sanctus*) and blackthorn (*Prunus spinose*) in the underbrush, there are high	The EAAA is the habitat within the AoI.	This habitat qualifies as **Priority Biodiversity Feature** (Criterion

Name	Priority Habitat	Bern Convention	Description	EAAA	CH / PBF
			water-use species such as *Juncus heldreichianus*, bulrush (*Typha latifolia*), lesser water-parsnip (*Berula erecta*), common club-rush (*Schoenoplectus lacustris*), common rush, common reed (*Phragmites australis*), common fleabane (*Pulicaria dysenterica*), ribwort plantain, and cutleaf teasel.  **P3: Mediterranean Riparian Woodland** This habitat is not considered representative of natural riparian woodland given the location of the majority of these watercourses in agricultural areas where a high level of modification that has taken place as a result of historical channel straightening and excavation and the replacement of typical native species by invasive species and weeds typical of cultivation.		1.i – ecosystems / habitats listed in terms of Resolution 4 of Bern Convention)
Internationally Recognized Areas					
West Istanbul Grasslands IPA	-	-	The IPA comprises the remaining fragments of limestone grassland, rock outcrops and dry acid heath grassland, situated on the low hills north-west of Istanbul. The site hosts 19 threatened flora species, seven of which are endemic to the area. The part of the study area that falls into the IPA, however, is already heavily disturbed and transformed by urban development. This part is not considered able to support these species anymore.	EAAA assumed to be the entire IPA (14,900 ha in size) (Figure 4). It is probable that the IPA no longer contains biodiversity at Critical Habitat levels. However, it is conservatively considered to be Critical Habitat at this time until consultation with Plantlife confirms otherwise.	Qualifies as **Critical Habitat** (Criterion 1i g**)**

Name	Priority Habitat	Bern Convention	Description	EAAA	CH / PBF
Küçükçekmece IBA/KBA	-	-	The site comprises natural brackish lagoon which holds significant numbers of wintering waterbirds[22]. The main area of the IBA/KBA expected to be impacted by the Project is the Sazlıdere creek. This area is considered largely to consist of modified habitat (see ESIA, Chapter 6.2.4).	EAAA assumed to be the entire IBA/KBA (11,715 ha in size) (Figure 4). It is known or thought to hold congregations of ≥1% of the global population of one or more species, in this case waterbirds, on a regular or predictable basis. The qualifying features of the IBA are (estimated population in brackets): ■ Pygmy cormorant (126 – 160 individuals) ■ Great cormorant (10,200 individuals) ■ Species group – waterbirds (21,177-21,273 individuals) The IBA/KBA is located in an area subject to intense development pressure. It is unknown if the qualifying features are still present. Conservatively it is assumed to be Critical Habitat.	The IBA qualifies as **Critical Habitat** (Criterion 2iii b)

[22] BirdLife International (2022) Important Bird Areas factsheet: Küçükçekmece Basin. Downloaded from http://www.birdlife.org on 21/06/2022.

3.3 Priority Species, Habitats and Ecosystems in terms of the Bern Convention (Resolution 4 & 6)

Feature
Priority Ecosystems
■ Three habitats listed in Resolution 4 of the Bern Convention that qualify habitat as PBFs (none of which are “priority habitats”). ■ Two internationally recognized areas important for migratory species.
Priority Species and their Habitats
■ Five IUCN CR / EN species (one plant, three birds, one mammal). ■ Ten IUCN VU species (nine fauna, one flora species). ■ 12 threatened species qualify habitat as PBFs (11 fauna, one species of flora) ■ 93 additional fauna species (PBFs) that are not threatened (i.e. NT, LC) but listed in Resolution 6 of the Bern Convention (see full list of species in **Appendix B**) ■ Four range-restricted species

3.4 Summary

CH and PBFs have been determined as occurring within the Study Area. The Project is therefore located in Critical Habitat and an area supporting Priority Biodiversity Features. Table 3 below summaries these elements.

Table 3 Results of PBF/CH Assessment Process

Feature
Critical Habitat (CH)
Flora habitat: ■ *Cirsium polycephalum* (CR) Internationally Recognised Areas: ■ Küçükçekmece Basin IBA and KBA ■ West Istanbul Grasslands IPA
Priority Biodiversity Features (PBFs)
Habitats: ■ Water-fringing reedbeds and tall helophytes other than canes (Eunis code C3.2) ■ Moeso-Thracian mesophile hay meadows (Eunis code E2.252) ■ Mediterranean Riparian Woodland (Eunis code G1.3) Threatened fauna (11): ■ Egyptian Vulture (EN) ■ Steppe Eagle (EN) ■ White-headed Duck (EN) ■ European Souslik (EN) ■ Pochard (VU) ■ Imperial Eagle (VU) ■ Red--Breasted Goose (VU) ■ Long-fingered bat (VU) ■ Marbled polecat (VU) ■ Mehely's horseshoe bat (VU) ■ Mediterranean Spur-thighed Tortoise (VU) Threatened flora: ■ Snowdrop *Galanthus x valentinei* (VU) Additional: ■ An additional 93 fauna species (NT, LC, DD) qualify as PBFs based on their listing in terms of Resolution 6 of the Bern Convention: - 79 birds (74 LC species, 5 NT species); - 10 mammals (5 of LC, 5 NT, including bats and small mammals); - one amphibian (LC); - two reptiles (one of LC, one NT); - one species of fish (LC)

4. CONCLUSIONS AND IMPLICATIONS FOR THE PROJECT

Having identified the qualifying biodiversity values that meet the criteria for PBFs and CH, the following sections detail the requirements of PR6. Compliance against these requirements will be covered by the CESMP and BAP as appropriate. In summary, no net loss and no residual impact will be achieved by the mitigation hierarchy, including on-site restoration for the CH identified feature, *Cirsium polycephalum*.

4.1 Critical Habitat

Paragraph 16 of PR6 states that: "*Critical habitat must 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:*

- *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*
- *the project is designed to deliver net gains (through a biodiversity offset to enhance habitat and protect and conserve biodiversity) 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*
- *a robust and appropriately designed, long-term biodiversity monitoring and evaluation programme aimed at assessing the status of critical habitat is integrated into the client's adaptive management programme."*

To achieve a Net Gain (NG) in terms of CH, which in this instance is linked to the rare and endangered plant species, *Cirsium polycephalum,* Küçükçekmece Basin IBA and KBA and the West Istanbul Grasslands IPA, the following is recommended:

- The ESIA describes measures to avoid and minimize impacts on CH. These measures will be documented within the BAP and ESMP / CESMP and include embedded mitigation and measures to be implemented as part of construction and operational activities. It will also include measures to restore and recreate habitats used by CH features temporarily disturbed within the construction footprint but outside the final operating area, where appropriate. Further involvement from local specialists to design and implement these measures and during construction works.
- Avoidance and mitigation measures for impacts on *Cirsium polycephalum* will require areas of land to be identified and agreed with relevant land holders as being able to receive translocated or propagated specimens from areas to be disturbed by construction works. These areas should be of similar habitat type or better and not proposed for future development in the long term.
- A review of the key threats affecting the species for which Critical Habitat has been identified.
- Habitat management enhancements or creation to achieve net gains at the scale of the EAAA.
- Monitoring and management based on pre-established targets and goals using quantified data. Reviews at appropriate intervals to determine the success of the measures and the need to design and implement adaptive management measures.

4.2 Internationally Recognised Areas

In relation to internationally recognised areas paragraph 22 states: if the assessment identifies that the project has the potential to adversely impact the conservation objectives and integrity of the site,

priority biodiversity features and/or critical habitat within the internationally recognised areas the client will seek to avoid such impacts. In addition, the client will:

- demonstrate that the development is legally permitted, which may have entailed that a specific assessment of the project related impacts on the protected area has been carried out as required under national law;
- act in a manner consistent with any government recognised management plans for such areas;
- consult protected areas managements, relevant authorities, local communities and other stakeholders on the proposed project in accordance with PR10; and
- implement additional programmes as appropriate to promote and enhance conservation objectives of area.

For Küçükçekmece Basin IBA and KBA and the West Istanbul Grasslands IPA, the following is recommended:

- Consultation with Birdlife International and Plantlife International (and any other relevant NGOs or conservation groups) to be undertaken to discuss potential project impacts on the KBAs and IPA and mitigation strategy.
- NG measures to be investigated further should include:

  - Preparation or updating of site management plans and conservation objectives to effectively manage the sites;
  - Identification of key threats (expected to be regional and local development pressures) and designing and implementing measures to reduce those threats e.g. formal protection for the sites under national and regional planning laws and policies;
  - Restoration of degraded areas within the site lost to agricultural development or other development / activities;
  - Supporting management of the sites through the provision of resources and capacity building, based on a Needs and Capacity Assessment; and
  - The approach should be documented within the Project BAP.

4.3 Priority Biodiversity Features

Paragraph 13 of PR6 states that: "*Where the assessment has identified that the project could have significant, adverse and irreversible impacts to priority biodiversity features, the client should not implement any project-related activities unless:*

- *there are no technically and economically feasible alternatives;*
- *the overall benefits outweigh the project impacts on biodiversity;*
- *stakeholders are consulted in accordance with PR 10;*
- *the project is permitted under applicable environmental laws, recognising the priority biodiversity features;*
- *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 over the long term, to achieve measurable conservation outcomes*."

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

NNL would typically need to be applied to the following habitats identified (listed in Resolution 4 of Bern Convention):

- Water-fringing reedbeds and tall helophytes other than canes (Eunis code C3.2)
- Moeso-Thracian mesophile hay meadows (Eunis code E2.252)
- Mediterranean Riparian Woodland (Eunis code G1.3)

It must be noted however that habitats are not "Priority Habitat Types" listed in Resolution 4 of the Bern Convention - the habitats present are considered to be largely secondary, are not in good condition or representative for being designated as Emerald site (which is the purpose of their listing on Resolution 4 of the Bern Convention).

In terms of species, NNL will be required for PBFs identified, including the habitat supporting the list of EN and VU fauna (mainly birds, bats, one reptile) and the plant species, Snowdrop *Galanthus x valentinei* (VU). An additional 93 species (mainly birds and mammals) also qualify habitat as PBFs and NNL will need to be considered for these PBFs as well (see full list in **Appendix B**).

To achieve a NNL objective for PBFs, the following is recommended for inclusion in the Biodiversity Action Plan (BAP) for the Project and ESMMP / CESMP as relevant:

- The ESIA describes measures to avoid and minimise impacts on Priority Biodiversity Features. These measures will be documented within the BAP and ESMMP/CESMP and include embedded mitigation included as part of the Project design and additional measures to be implemented as part of construction and operational activities. It will also include measures to restore and recreate habitats temporarily disturbed within the construction footprint but outside the final operating area.
- Areas of land suitable to receive translocated flora and fauna from areas to be disturbed by construction works, should be identified and agreed with relevant land holders before any construction clearing works commence. These areas should be of similar habitat type or better and not proposed for future development in the long term.
- The process for calculating and delivering any necessary offsets to achieve NNL will be set out in the BAP.
- NNL interventions will be planned and specific to PBF habitats and species, and include the following as possible measures:

  - Habitat restoration and recreation to compensate for the losses of key habitats, including but not necessarily restricted to the identified PBF habitats associated with 'Water-fringing reedbeds and tall helophytes other than canes', 'Moeso-Thracian mesophile hay meadows' and 'Mediterranean Riparian Woodland';
  - Cable-stayed suspension bridge design and mitigation to be commensurate with risk of bird collisions with the structure under certain circumstances;
  - Identify where possible key local wildlife corridors suitable for potential terrestrial species movement between habitats that may be obstructed or severed by the road development;
  - Design and implemented appropriate wildlife crossings as part of the road design, in order to maintain connectivity between habitats and key local corridors for terrestrial fauna (focus will be on accommodating threatened species and PBFs, including small mammals, reptiles and amphibians in particular);
  - Inclusion of micro-habitat enhancements that benefit affected species e.g. bat boxes (of various designs to benefit a large number of species);
  - Enhancement to reptile and amphibian habitats to benefit all stages of their life cycles (through habitat creation, corridor enhancement, rehabilitation of disturbed aquatic and semi-aquatic habitats for example);
  - Surveys and population counts for European Souslik and Marbled polecat to take place and where identified, enhancements to the existing habitats to be planned and implemented;
  - Look into options for the reduction in surrounding agricultural run-off into Sazlıdere Dam where possible or other habitat enhancement to support amphibians/fish; and
  - Translocation and/or replacement of Snowdrop (*Galanthus x valentinei*) where potentially disturbed at wooded riparian crossings.

Note that while mitigation to reduce bridge collision impact risk and habitat recreation and enhancement will generally support a NNL objective for the various PBFs related to bird species, the focus of NNL mitigation recommendations here has been on supporting terrestrial species which are

likely to be most affected potentially due to the nature of the project. The CHA has not considered the individual requirements of the full list of PBFs given the large number of faunal species, but has focused rather on threatened species where project design and mitigation can factor in species-specific requirements.

APPENDIX A EAAA FIGURES

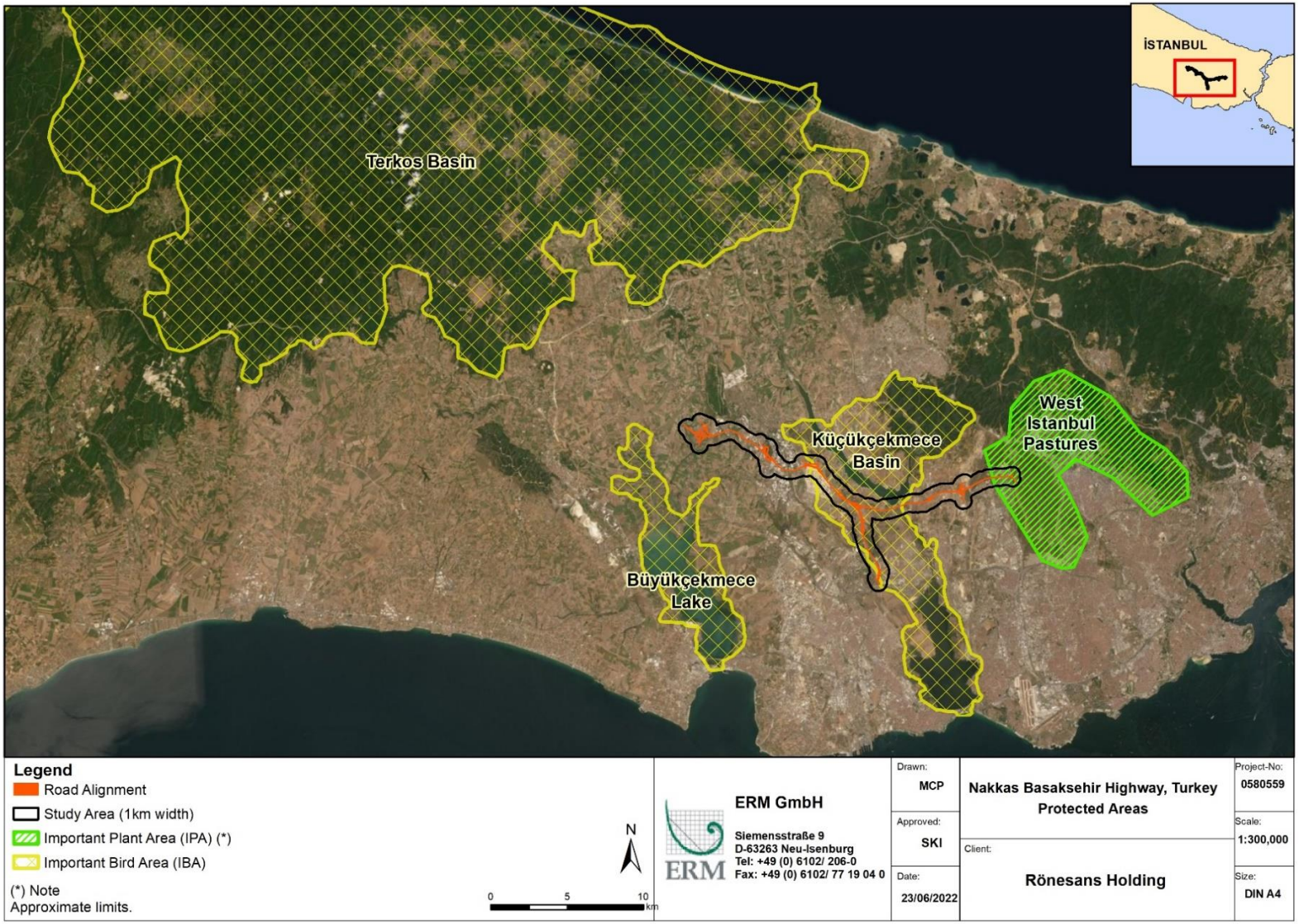


Figure 4 Important Areas

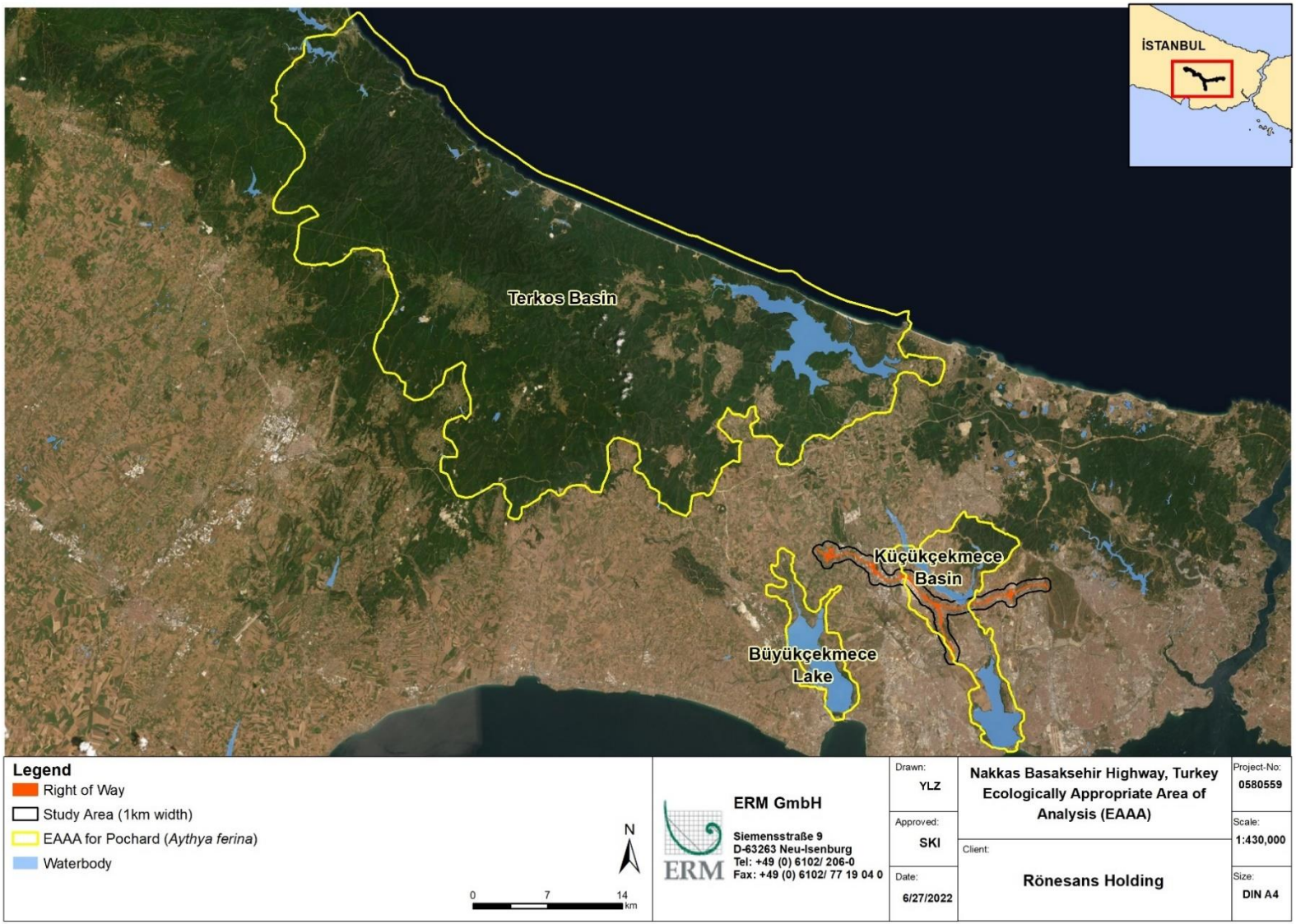


Figure 5 EAAA Pochard

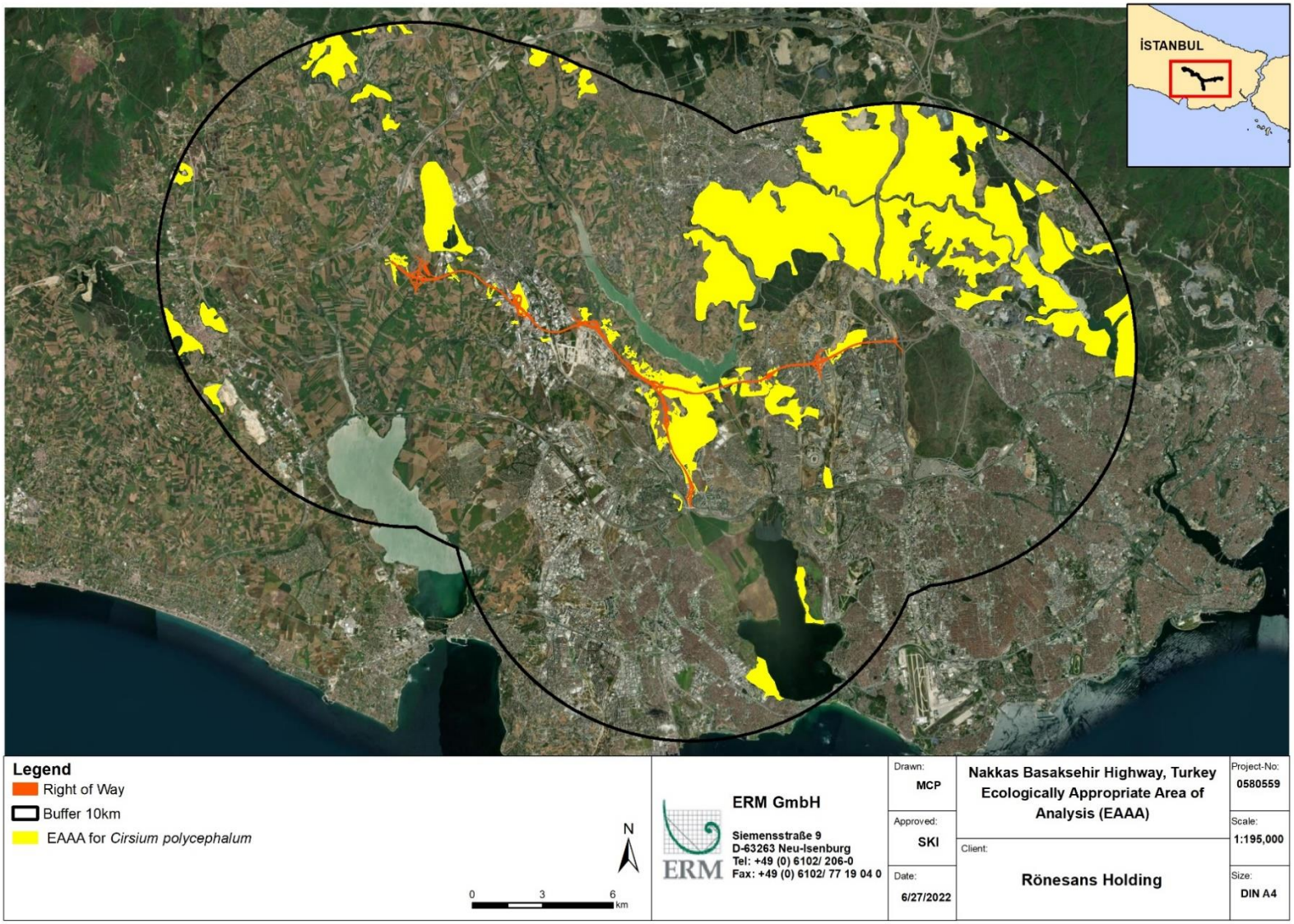


Figure 6 EAAA *Cirsium polycephalum*

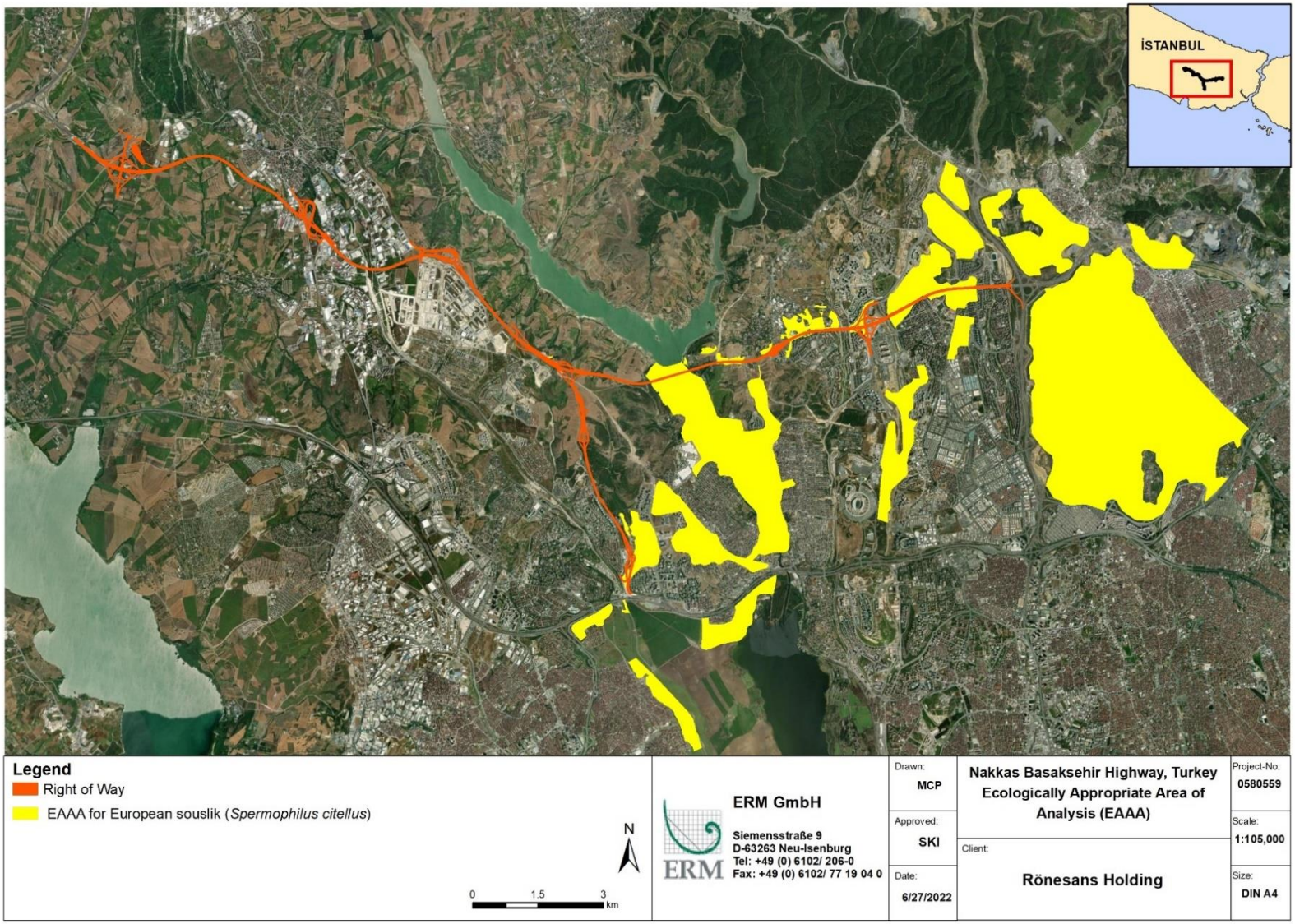


Figure 7 EAAA European souslik

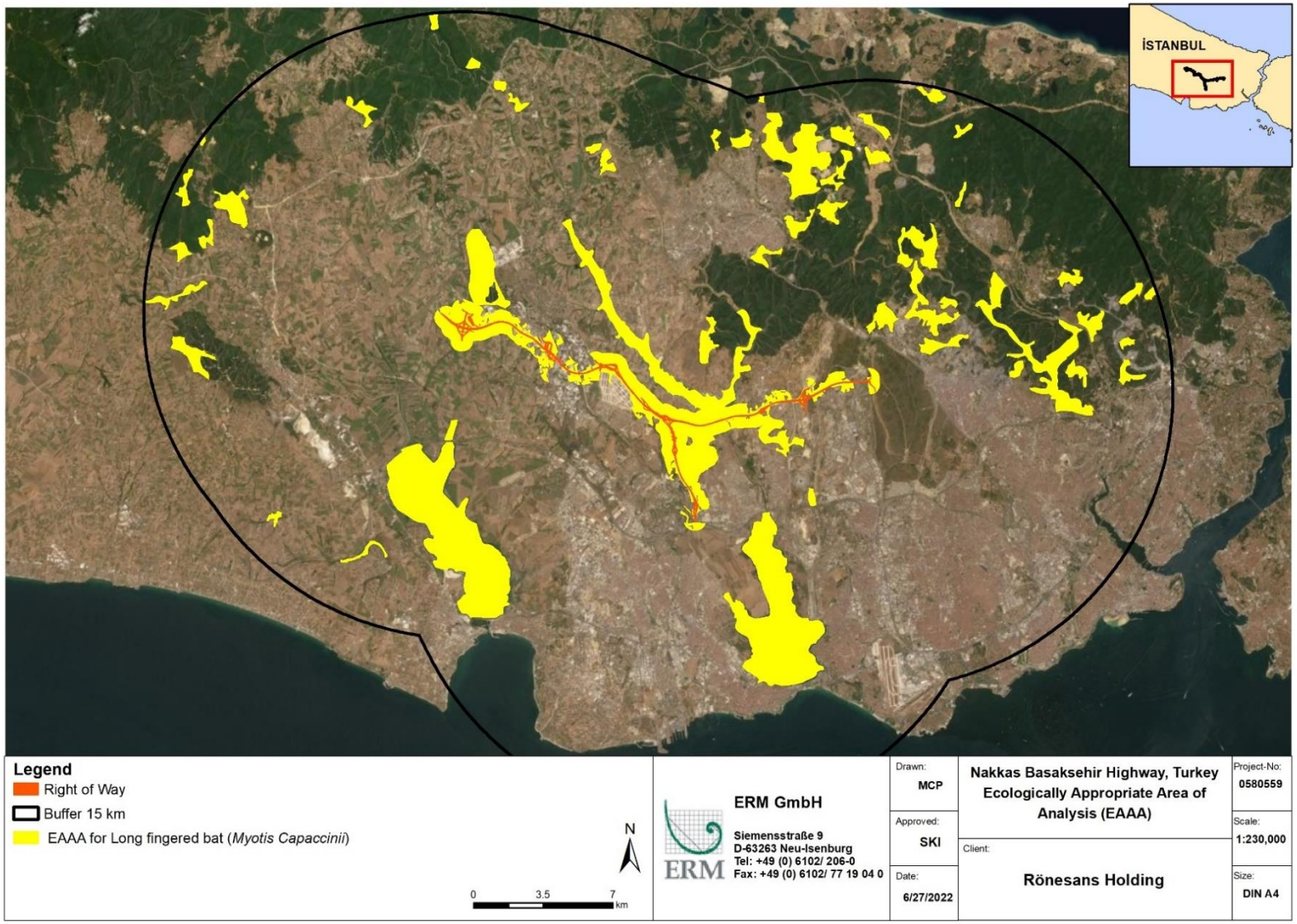


Figure 8 EAAA Long fingered bat

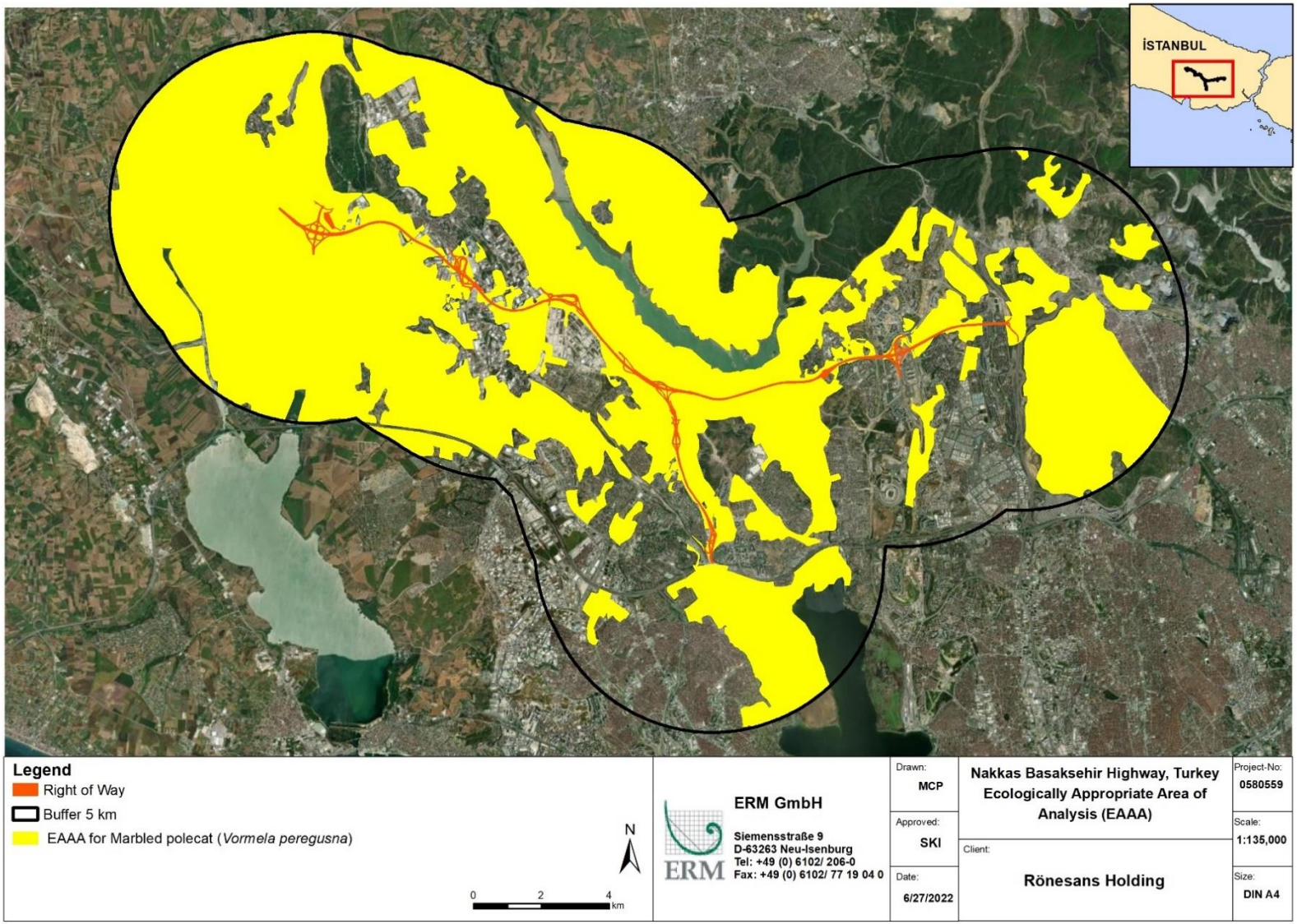


Figure 9 EAAA Marbled polecat

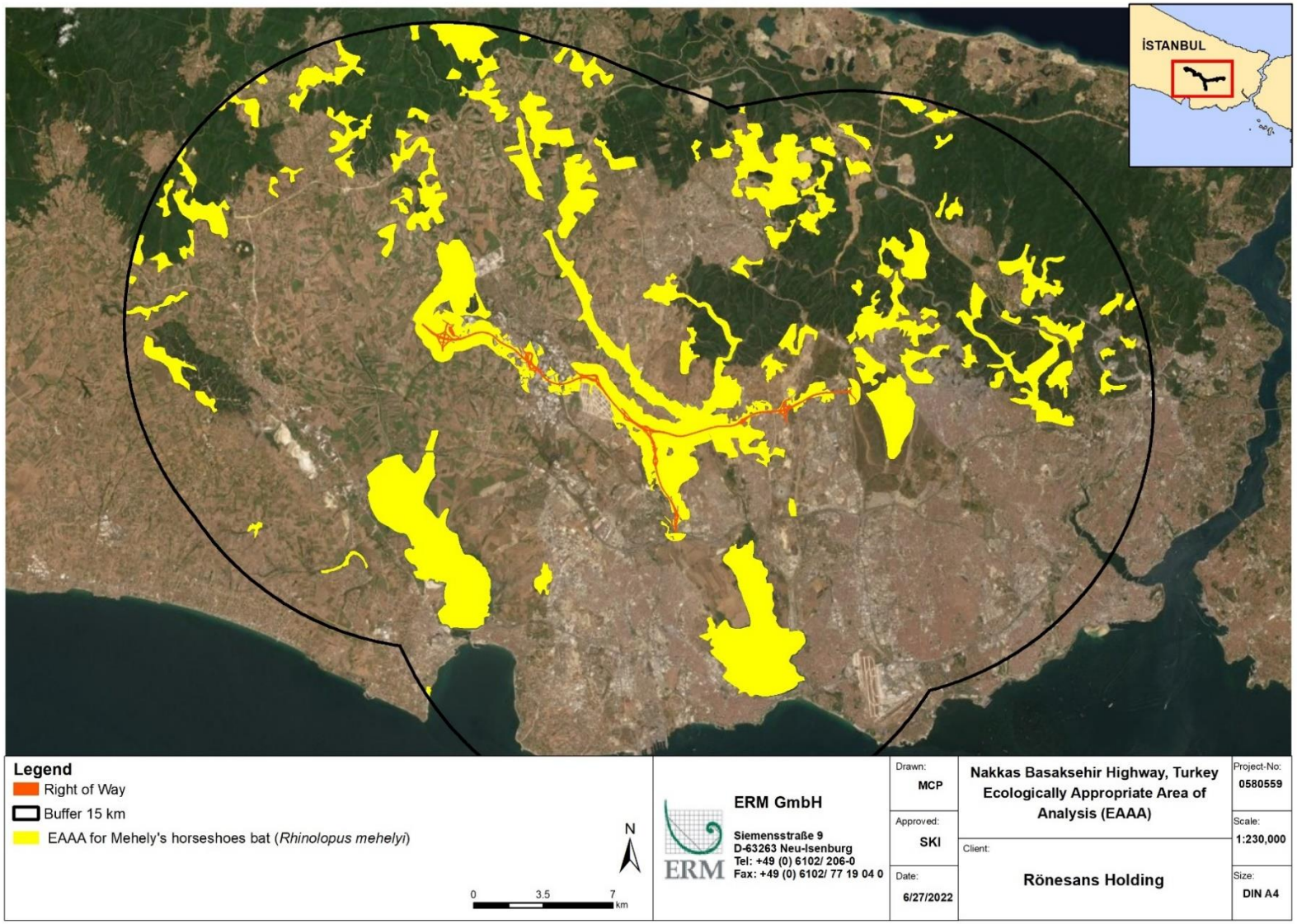


Figure 10 EAAA Mehely's horseshoe bat

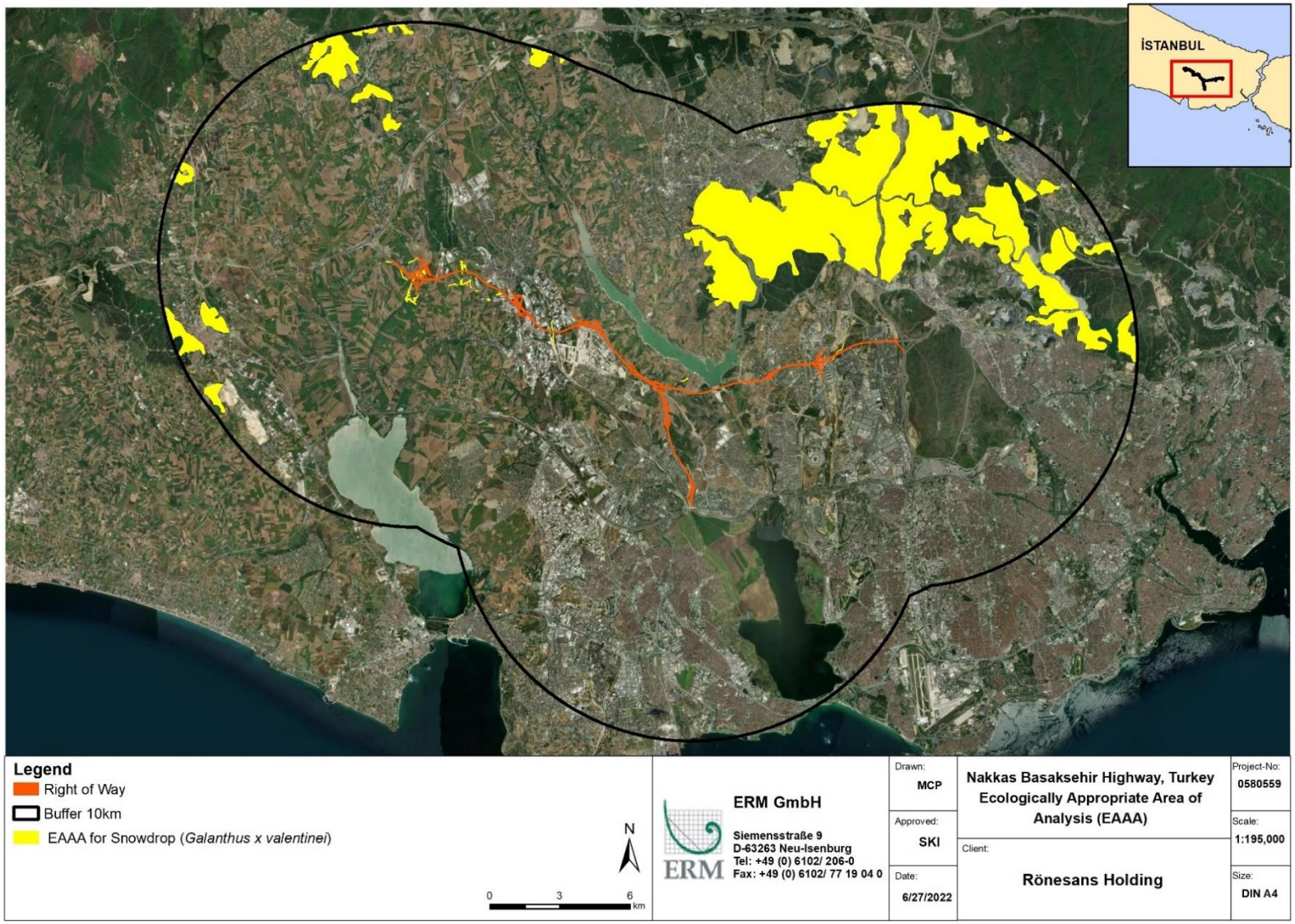


Figure 11 EAAA Snowdrop

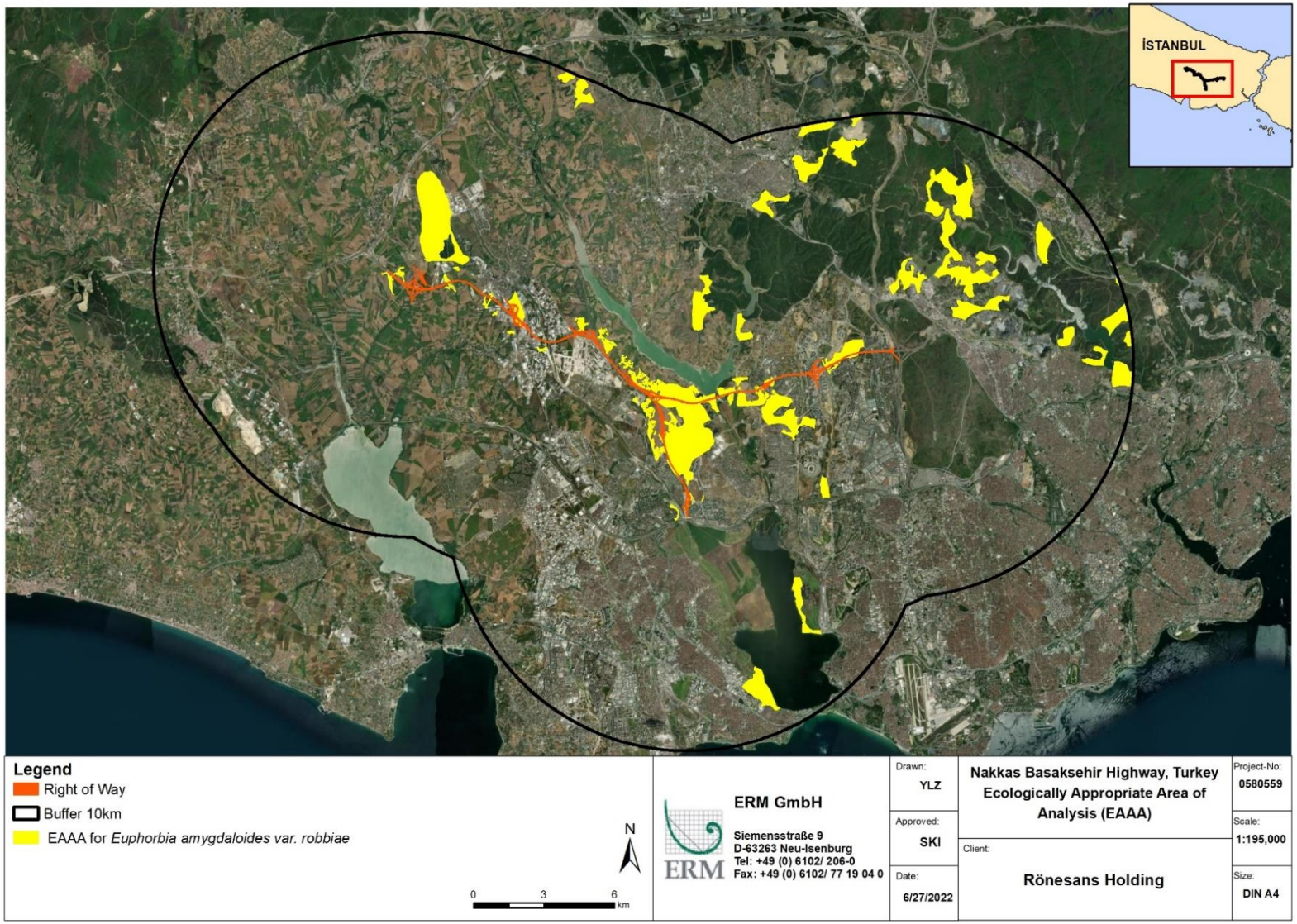


Figure 12 EAAA *Euphorbia amygdaloides var. robbiae*

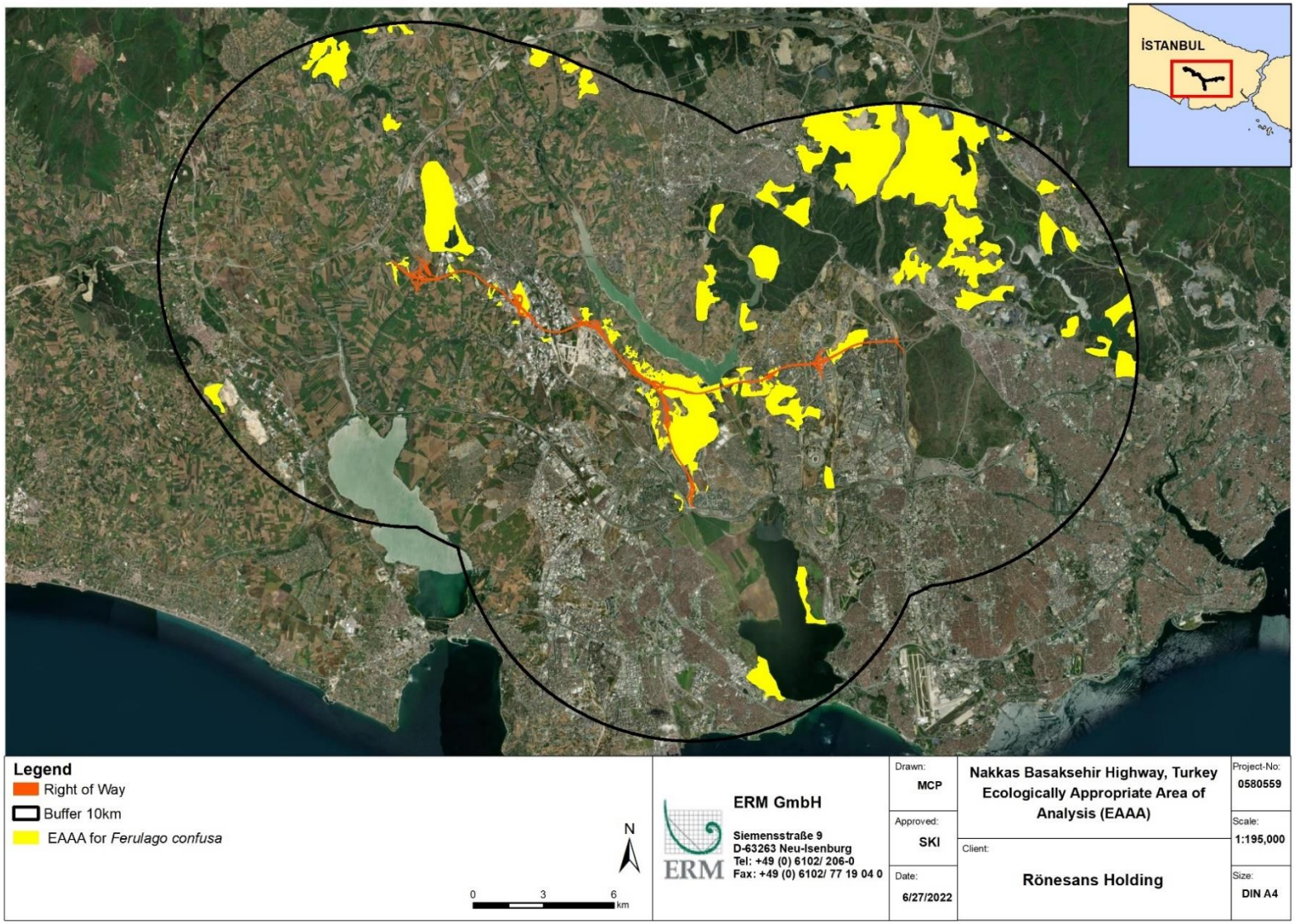


Figure 13 EAAA *Ferulago confusa*

APPENDIX B LIST OF QUALIFING PBF FAUNA SPECIES IN TERMS OF RESOLUTION 6 OF THE BERN CONVENTION

Table 4 List of faunal species qualifying as PBFs in terms of the Bern Convention (Res 6)

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
1	Amphibians	Desktop: potential presence only	Agile Frog	*Rana dalmatina*	LC	Annex II Bern Convention			
2		Desktop: potential presence only	Balkan-Anatolian Crested Newt	*Triturus ivanbureschi*	LC	Annex II Bern Convention			
3		Desktop: potential presence only	Common toad	*Bufo bufo*	LC				
4		Desktop: potential presence only	European fire-bellied toad	*Bombina bombina*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
5		Desktop: potential presence only	Green Frog	*Hyla orientalis*	LC	Annex II Bern Convention			
6		Desktop: potential presence only	Green Toad	*Bufotes viridis*	LC				
7		Yes	Marsh frog	*Pelophylax ridibundus*	LC				
8		Desktop: potential presence only	Smoot Newt	*Lissotriton schmidtleri*	LC				
9		Desktop: potential presence only	Syrian spadefoot	*Pelobates syriacus*	LC	Annex II Bern Convention			
10	Birds	Yes	Levant sparrowhawk	*Accipiter brevipes*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
11		Desktop: potential presence only	Goshawk	*Accipiter gentilis*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
12		Yes	Sparrowhawk	*Accipiter nisus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
13		Desktop: potential presence only	Black Vulture	*Aegypius monachus*	NT	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
14		Yes	Kingfisher	*Alcedo atthis*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
15		Yes	Purple Heron	*Andrea purpurea*	LC	Annex II Bern Convention			
16		Yes	Tawny Pipit	*Anthus campestris*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
17		Desktop: potential presence only	Red-Thorated Pipit	*Anthus cervinus*	LC				

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
18		Yes	Meadow Pipit	*Anthus pratensis*	LC	Annex II Bern Convention			
19		Yes	Tree Pipit	*Anthus trivialis*	LC	Annex II Bern Convention			
20		Yes	Alpine Swift	*Apus melba*	LC	Annex II Bern Convention			
21		Yes	Pallid Swift	*Apus pallidus*	LC	Annex II Bern Convention			
22		Desktop: potential presence only	Imperial Eagle	*Aquila heliaca*	VU	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention & Criterion 2i.g: EAAA supports VU species*
23		Desktop: potential presence only	Steppe Eagle	*Aquila nipalensis*	EN	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
24		Yes	Great Egret	*Ardea alba*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
25		Desktop: potential presence only	Purple Heron	*Ardea purpurea*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
26		Desktop: potential presence only	Squacco Heron	*Ardeola ralloides*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
27		Desktop: potential presence only	Short-Eared Owl	*Asio flammeus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
28		Desktop: potential presence only	Long-Eared Owl	*Asio otus*	LC				
29		Yes	Little Owl	*Athene noctua*	LC	Annex II Bern Convention			
30		Desktop: potential presence only	Pochard	*Aythya ferina*	VU		Y		*Qualifies as PBF under Criterion 2i.g: EAAA supports VU species*
31		Desktop: potential presence only	Ferruginous Duck	*Aythya nyroca*	NT	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
32		Desktop: potential presence only	Eurasian Bittern	*Botaurus stellaris*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
33		Desktop: potential presence only	Red-Breasted Goose	*Branta ruficollis*	VU	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
34		Desktop: potential presence only	Cattle Egret	*Bubulcus ibis*	LC				

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
35		Desktop: potential presence only	Stone Curlew	*Burhinus oedicnemus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
36		Yes	Common Buzzard	*Buteo buteo*	LC	Annex II Bern Convention			
37		Desktop: potential presence only	Rough-Legged Buzzard	*Buteo lagopus*	LC				
38		Yes	Long-legged Buzzard	*Buteo rufinus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
39		Yes	Greater Short-toed Lark	*Calandrella brachydactyla*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
40		Desktop: potential presence only	Dunlin	*Calidris alpina*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
41		Desktop: potential presence only	Broad-Billed Sandpiper	*Calidris falcinellus*	LC				
42		Desktop: potential presence only	Curlew Sandpiper	*Calidris ferruginea*	NT				
43		Desktop: potential presence only	Little Stint	*Calidris minuta*	LC				
44		Desktop: potential presence only	Nightjar	*Caprimulgus europaeus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
45		Desktop: potential presence only	Linnet	*Carduelis cannabina*	LC				
46		Yes	Goldfinch	*Carduelis carduelis*	LC	Annex II Bern Convention			
47		Yes	Greenfinch	*Carduelis chloris*	LC	Annex II Bern Convention			
48		Desktop: potential presence only	Siskin	*Carduelis spinus*	LC				
49		Yes	Red-rumped Swallow	*Cecropis daurica*	LC	Annex II Bern Convention			
50		Desktop: potential presence only	Short-Toed Tree Creeper	*Certhia brachydactyla*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
51		Desktop: potential presence only	Tree Creeper	*Certhia familiaris*	LC				
52		Desktop: potential presence only	Kentish Plover	*Charadrius alexandrinus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
53		Desktop: potential presence only	Little Ringed Plover	*Charadrius dubius*	LC				
54		Desktop: potential presence only	Ringed Plover	*Charadrius hiaticula*	LC				
55		Desktop: potential presence only	Dotterel	*Charadrius morinellus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
56		Desktop: potential presence only	Whiskered Tern	*Chlidonias hybridus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
57		Yes	White-winged Tern	*Chlidonias leucopterus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
58		Desktop: potential presence only	Black Tern	*Chlidonias niger*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
59		Yes	White Stork	*Ciconia ciconia*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
60		Yes	Black Stork	*Ciconia nigra*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
61		Yes	Short-toed Snake Eagle	*Circaetus gallicus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
62		Yes	Eurasian Marsh-Harrier	*Circus aeruginosus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
63		Yes	Hen Harrier	*Circus cyaneus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
64		Desktop: potential presence only	Pallid Harrier	*Circus macrourus*	NT	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
65		Desktop: potential presence only	Montagu's Harrier	*Circus pygargus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
66		Desktop: potential presence only	Great Spotted Cuckoo	*Clamator glandarius*	LC				
67		Desktop: potential presence only	Greater Spotted Eagle	*Clanga clanga*	VU				*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
68		Yes	Lesser Spotted Eagle	*Clanga pomarina*	LC	Annex II Bern Convention			

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69		Desktop: potential presence only	Hawfinch	*Coccothraustes coccothraustes*	LC				
70		Yes	European Roller	*Coracias garrulous*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
71		Desktop: potential presence only	Roller	*Coracias garrulus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
72		Desktop: potential presence only	Corncrake	*Crex crex*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
73		Yes	Sardinian Warbler	*Curruca melanocephala*	LC	Annex II Bern Convention			
74		Yes	Barred Warbler	*Curruca nisoria*	LC	Annex II Bern Convention			
75		Desktop: potential presence only	Bewick's Swan	*Cygnus columbianus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
76		Desktop: potential presence only	Whooper Swan	*Cygnus cygnus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
77		Yes	House Martin	*Delichon urbicum*	LC	Annex II Bern Convention			
78		Desktop: potential presence only	Great-Spotted Woodpecker	*Dendrocopos major*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
79		Desktop: potential presence only	Middle Spotted Woodpecker	*Dendrocopos medius*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
80		Desktop: potential presence only	Lesser Spotted Woodpecker	*Dendrocopos minor*	LC				
81		Yes	Syrian Woodpecker	*Dendrocopos syriacus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
82		Yes	Little Egret	*Egretta garzetta*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
83		Desktop: potential presence only	Rock Bunting	*Emberiza cia*	LC				

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
84		Yes	Cirl Bunting	*Emberiza cirlus*	LC	Annex II Bern Convention			
85		Desktop: potential presence only	Yellowhammer	*Emberiza citrinella*	LC				
86		Yes	Black-headed Bunting	*Emberiza melanocephala*	LC	Annex II Bern Convention			
87		Desktop: potential presence only	Reed Bunting	*Emberiza schoeniclus*	LC				
88		Desktop: potential presence only	Robin	*Erithacus rubecula*	LC				
89		Desktop: potential presence only	Merlin	*Falco columbarius*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
90		Yes	Lesser Kestrel	*Falco naumanni*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
91		Yes	Peregrine Falcon	*Falco peregrinus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
92		Yes	Hobby	*Falco subbuteo*	LC	Annex II Bern Convention			
93		Yes	Eurasian Kestrel	*Falco tinnunculus*	LC	Annex II Bern Convention			
94		Desktop: potential presence only	Red-Footed Falcon	*Falco vespertinus*	NT	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
95		Yes	Collared Flycatcher	*Ficedula albicollis*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
96		Desktop: potential presence only	Pied flycatcher	*Ficedula hypoleuca*	LC				
97		Desktop: potential presence only	Red-breasted flycatcher	*Ficedula parva**	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
98		Desktop: potential presence only	Semi-collared flycatcher	*Ficedula semitorquata*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*

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99		Yes	Eurasian Jay	*Garrulus glandarius*	LC	Annex II Bern Convention			
100		Desktop: potential presence only	Gull-Billed Tern	*Gelochelidon nilotica*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
101		Desktop: potential presence only	Collared Pranticole	*Glareola pratincola*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
102		Desktop: potential presence only	Crane	*Grus grus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
103		Desktop: potential presence only	Griffon Vulture	*Gyps fulvus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
104		Desktop: potential presence only	Eurisan Oystercatcher	*Haematopus ostralegus*	NT				
105		Yes	Booted Eagle	*Hieraaetus pennatus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
106		Yes	Black-winged Stilt	*Himantopus himantopus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
107		Desktop: potential presence only	Red-Rumped Swallow	*Hirundo daurica*	LC				
108		Yes	Barn Swallow	*Hirundo rustica*	LC	Annex II Bern Convention			
109		Desktop: potential presence only	Little Gull	*Hydrocoloeus minutus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
110		Desktop: potential presence only	Caspian Tern	*Hydroprogne caspia*	LC				
111		Yes	Mediterranean Gull	*Ichthyaetus melanocephalus*	LC	Annex II Bern Convention			
112		Yes	Eastern Olivaceous Warbler	*Iduna pallida*	LC	Annex II Bern Convention			
113		Desktop: potential presence only	Little Bittern	*Ixobrychus minutus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*

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114		Yes	Wryneck	*Jynx torquilla*	LC	Annex II Bern Convention			
115		Yes	Red-backed Shrike	*Lanius collurio*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
116		Desktop: potential presence only	Great Grey Shrike	*Lanius excubitor*	LC				
117		Yes	Lesser Grey Shrike	*Lanius minor*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
118		Yes	Masked shrike	*Lanius nubicus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
119		Yes	Woodchat Shrike	*Lanius senator*	LC	Annex II Bern Convention			
120		Desktop: potential presence only	Armenian Gull	*Larus armenicus*	NT				
121		Desktop: potential presence only	Slender-Billed Gull	*Larus genei*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
122		Desktop: potential presence only	Mediterranean Gull	*Larus melanocephalus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
123		Desktop: potential presence only	Black-Tailed Godwit	*Limosa limosa*	NT				
124		Yes	Thrush Nightingale	*Luscinia luscinia*	LC	Annex II Bern Convention			
125		Yes	Common Nightingale	*Luscinia megarhynchos*	LC	Annex II Bern Convention			
126		Desktop: potential presence only	Bluethroat	*Luscinia svecica*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
127		Yes	Calandra lark	*Melanocorypha calandra*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
128		Desktop: potential presence only	Smew	*Mergus albellus*	LC				

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129		Yes	European Bee-eater	*Merops apiaster*	LC	Annex II Bern Convention			
130		Yes	Pygmy Cormorant	*Microcarbo pygmaeus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
131		Yes	Black Kite	*Milvus migrans*	LC	Annex II Bern Convention			
132		Yes	Pied wagtail	*Motacilla alba*	LC	Annex II Bern Convention			
133		Yes	White Wagtail	*Motacilla alba*	LC	Annex II Bern Convention			
134		Desktop: potential presence only	Grey Wagtail	*Motacilla cinerea*	LC				
135		Desktop: potential presence only	Citrine Wagtail	*Motacilla citreola*	LC				
136		Yes	Western Yellow Wagtail	*Motacilla flava*	LC	Annex II Bern Convention			
137		Yes	Spotted Flycatcher	*Muscicapa striata*	LC	Annex II Bern Convention			
138		Desktop: potential presence only	Egyptian Vulture	*Neophron percnopterus*	EN	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
139		Desktop: potential presence only	Curlew	*Numenius arquata*	NT				
140		Desktop: potential presence only	Black-crowned Night Heron	*Nycticorax nycticorax*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
141		Desktop: potential presence only	Isabellina Wheatear	*Oenanthe isabellina*	LC				
142		Yes	Northern Wheatear	*Oenanthe oenanthe*	LC	Annex II Bern Convention			
143		Yes	Eurasian Golden Oriole	*Oriolus oriolus*	LC	Annex II Bern Convention			
144		Yes	Eurasian Scops-Owl	*Otus scops*	LC	Annex II Bern Convention			
145		Desktop: potential presence only	White-Headed Duck	*Oxyura leucocephala*	EN	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
146		Desktop: potential presence only	Osprey	*Pandion haliaetus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
147		Yes	Blue tit	*Parus caeruleus*	LC	Annex II Bern Convention			
148		Yes	Great Tit	*Parus major*	LC	Annex II Bern Convention			
149		Desktop: potential presence only	Marsh Tit	*Parus palustris*	LC				
150		Desktop: potential presence only	Dalmatian Pelican	*Pelecanus crispus*	NT	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
151		Desktop: potential presence only	White Pelican	*Pelecanus onocrotalus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
152		Yes	Eurasian Honey-Buzzard	*Pernis apivorus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
153		Desktop: potential presence only	Rock Sparrow	*Petronia petronia*	LC				
154		Yes	Greater Flamingo	*Phoenicopterus roseus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
155		Desktop: potential presence only	Black Redstart	*Phoenicurus ochruros**	LC				
156		Desktop: potential presence only	Redstart	*Phoenicurus phoenicurus*	LC				
157		Yes	Common Chiffchaff	*Phylloscopus collybita*	LC	Annex II Bern Convention			
158		Desktop: potential presence only	Wood Warbler	*Phylloscopus sibilatrix*	LC				
159		Yes	Willow Warbler	*Phylloscopus trochilus*	LC	Annex II Bern Convention			
160		Desktop: potential presence only	Grey-Headed Woodpecker	*Picus canus*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
161		Desktop: potential presence only	Green Woodpecker	*Picus viridis*	LC				

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
162		Desktop: potential presence only	Eurasian Spoonbill	*Platalea leucorodia*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
163		Yes	Glossy ibis	*Plegadis falcinellus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
164		Desktop: potential presence only	Black-Necked Grebe	*Podiceps nigricollis*	LC				
165		Desktop: potential presence only	Spotted Crake	*Porzana porzana*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
166		Desktop: potential presence only	Dunnock	*Prunella modularis*	LC				
167		Desktop: potential presence only	Avocet	*Recurvirostra avosetta*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
168		Desktop: potential presence only	Firecrest	*Regulus ignicapillus*	LC				
169		Desktop: potential presence only	Goldcrest	*Regulus regulus*	LC				
170		Yes	Sand martin	*Riparia riparia*	LC	Annex II Bern Convention			
171		Yes	Whinchat	*Saxicola rubetra*	LC	Annex II Bern Convention			
172		Yes	European Stonechat	*Saxicola rubicola*	LC	Annex II Bern Convention			
173		Desktop: potential presence only	Stonechat	*Saxicola torquata*	LC				
174		Desktop: potential presence only	Serin	*Serinus serinus*	LC				
175		Desktop: potential presence only	Nuthatch	*Sitta europaea*	LC				
176		Desktop: potential presence only	Little Tern	*Sterna albifrons*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
177		Yes	Common Tern	*Sterna hirundo*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
178		Yes	Eurasian Turtle Dove	*Streptopelia turtur*	LC				
179		Desktop: potential presence only	Tawny Owl	*Strix aluco*	LC				
180		Yes	Blackcap	*Sylvia atricapilla*	LC	Annex II Bern Convention			
181		Desktop: potential presence only	Garden Warbler	*Sylvia borin*	LC				
182		Yes	Greater Whitethroat	*Sylvia communis*	LC	Annex II Bern Convention			
183		Yes	Lesser Whitethroat	*Sylvia curruca*	LC	Annex II Bern Convention			
184		Desktop: potential presence only	Orphean Warbler	*Sylvia hortensis*	LC				
185		Desktop: potential presence only	Sardinian Warbler	*Sylvia melanocephala*	LC				
186		Desktop: potential presence only	Barred Warbler	*Sylvia nisoria*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
187		Yes	Little grebe	*Tachybaptus ruficollis*	LC	Annex II Bern Convention			
188		Desktop: potential presence only	Alpine Swift	*Tachymarptis melba**	LC				
189		Desktop: potential presence only	Ruddy Shelduck	*Tadorna ferruginea*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
190		Desktop: potential presence only	Shelduck	*Tadorna tadorna*	LC				
191		Desktop: potential presence only	Sandwich Tern	*Thalasseus sandvicensis*	LC				
192		Yes	Wood Sandpiper	*Tringa glareola*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
193		Yes	Green Sandpiper	*Tringa ochropus*	LC	Annex II Bern Convention			
194		Desktop: potential presence only	Marsh Sandpiper	*Tringa stagnatilis*	LC				

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
195		Desktop: potential presence only	Wren, Winter Wren	*Troglodytes troglodytes*	LC	Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
196		Desktop: potential presence only	Redwing	*Turdus iliacus*	NT				
197		Desktop: potential presence only	Ring Ouzel	*Turdus torquatus*	LC				
198		Desktop: potential presence only	Barn Owl	*Tyto alba*	LC				
199		Yes	Eurasian Hoopoe	*Upupa epops*	LC	Annex II Bern Convention			
200		Yes	Lapwing	*Vanellus vanellus*	NT				
201		Desktop: potential presence only	Little Crake	*Zapornia parva*	LC				
202	Fish	Yes	Chub	*Squailus cephalus*	LC				
203		Yes	Common carp	*Cyprinus carpio*	LC				
204		Yes	Dnieper Chub	*Petroleuciscus borysthenicus*	LC				
205		Yes	European bitterling	*Rhodeus amarus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
206		Yes	Freshwater bream	*Abramis brama*	LC				
207		Yes	Monkey goby	*Neogobius fluviatilis*	LC				
208		Yes	Pike-perch	*Sander lucioperca*	LC				
209		Yes	Prussian carp	*Carassius gibeli*	NE				
210		Yes	Round goby	*Neogobius melanostomus*	LC				
211	Mammals	Desktop: potential presence only	Alcathoe bat	*Myotis alcathoe*	DD	Annex II Bern Convention			

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
212		Desktop: potential presence only	Bechstein's bat	*Myotis bechsteinii*	NT	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
213		Desktop: potential presence only	Beech marten	*Martes foina*	LC				
214		Desktop: potential presence only	Bicolored shrew	*Crocidura leucodon*	LC				
215		Desktop: potential presence only	Black rat	*Rattus rattus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
216		Desktop: potential presence only	Blasius's horseshoe bat	*Rhinolophus blasii*	LC	Annex II Bern Convention			
217		Desktop: potential presence only	Brandt's bat	*Myotis brandtii*	LC	Annex II Bern Convention			
218		Desktop: potential presence only	Brown Long-eared Bat	*Plecotus auritus*	LC	Annex II Bern Convention			
219		Yes	Brown rat	*Rattus norvegicus*	LC				
220		Desktop: potential presence only	Caucasian squirrel	*Sciurus anomalus*	LC	Annex II Bern Convention			
221		Desktop: potential presence only	Common bent-wing bat	*Miniopterus schreibersii*	NT	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
222		Yes	Common noctule	*Nyctalus noctula*	LC	Annex II Bern Convention			
223		Yes	Common pipistrelle	*Pipistrellus pipistrellus*	LC				
224		Desktop: potential presence only	Daubenton's bat	*Myotis daubentonii*	LC	Annex II Bern Convention			
225		Desktop: potential presence only	Eurasian otter	*Lutra lutra*	NT	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
226		Desktop: potential presence only	European badger	*Meles meles*	LC				

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
227		Desktop: potential presence only	European hare	*Lepus europaeus*	LC				
228		Indirect: signs of presence	European mole	*Talpa europaea*	LC				
229		Desktop: potential presence only	European souslisk	*Spermophilus citellus*	EN	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e - species listed in terms of Resolution 6 of Bern Convention & Criterion 2i.f – EAAA supports <0.5% of global population of EN species*
230		Desktop: potential presence only	Forest Dormouse	*Dryomys nitedula*	LC				
231		Desktop: potential presence only	Geoffroy's bat	*Myotis emarginatus*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
232		Desktop: potential presence only	Golden jackal	*Canis aureus*	LC				
233		Desktop: potential presence only	Greater horseshoe bat	*Rhinolophus ferrumequinum*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
234		Desktop: potential presence only	Greater mouse-eared bat	*Myotis myotis*	LC	Annex II Bern Convention			
235		Yes	Greater noctule bat	*Nyctalus lasiopterus*	VU	Annex II Bern Convention			
236		Desktop: potential presence only	Grey dwarf hamster	*Cricetulus migratorius*	LC				
237		Desktop: potential presence only	Grey Long-eared Bat	*Plecotus austriacus*	NT	Annex II Bern Convention			
238		Indirect: signs of presence	Harting’s vole	*Microtus hartingi*	LC				
239		Desktop: potential presence only	House Mouse	*Mus domesticus*	LC				
240		Indirect: signs of presence	Kuhl's pipistrelle	*Pipistrellus kuhlii*	LC	Annex II Bern Convention			
241		Desktop: potential presence only	Least weasel	*Mustela nivalis*	LC				

No.	Faunal Group	Direct Observation	Species: Common Name	Species: Latin Name	IUCN (Global) RDLThreat Status	Bern Convention	Qualifying as PBF Habitat	Qualifying as CH	Comments
242		Desktop: potential presence only	Lesser horseshoe bat	*Rhinolophus hipposideros*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
243		Indirect: signs of presence	Lesser mole rat	*Nannospalax leucodon*	DD				
244		Desktop: potential presence only	Lesser mouse-eared bat	*Myotis blythii*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
245		Yes	Lesser noctule	*Nyctalus leisleri*	LC	Annex II Bern Convention			
246		Desktop: potential presence only	lesser white-toothed shrew	*Crocidura suaveolens*	LC				
247		Desktop: potential presence only	Long-fingered bat	*Myotis capaccinii*	VU	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention & Criterion 2i.g: EAAA supports VU species*
248		Desktop: potential presence only	Macedonian mouse	*Mus macedonicus*	LC				
249		Desktop: potential presence only	Marbled polecat	*Vormela peregusna*	VU	Annex II Bern Convention	Y		*Qualifies as PBF under Criteria 2i.a: EAAA for R6 species & 2i.g: EAAA supports VU species*
250		Desktop: potential presence only	Mediterranean horseshoe bat	*Rhinolophus Euryale*	NT	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
251		Desktop: potential presence only	Mehely's Horseshoe Bat	*Rhinolophus mehelyi*	VU	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criteria 2i.a: EAAA for R6 species, Criterion 2i.g: EAAA supports VU species & Criterion 2i.g: EAAA supports VU species*
252		Desktop: potential presence only	Nathusius's pipistrelle	*Pipistrellus nathusii*	LC	Annex II Bern Convention			
253		Desktop: potential presence only	Natterer's bat	*Myotis nattereri*	LC	Annex II Bern Convention			
254		Desktop: potential presence only	Northern white-breasted hedgehog	*Erinaceus roumanicus*	LC				
255		Yes	Parti-coloured bat	*Vespertilio murinus*	LC	Annex II Bern Convention			
256		Desktop: potential presence only	Red wolf	*Vulpes vulpes*	LC				

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257		Yes	Savi's pipistrelle	*Hypsugo savii*	LC	Annex II Bern Convention			
258		Desktop: potential presence only	Serotine bat	*Eptesicus serotinus*	LC	Annex II Bern Convention			
259		Yes	Soprano pipistrelle	*Pipistrellus pygmaeus*	LC				
260		Desktop: potential presence only	Southern vole	*Microtus mystacinus*	LC				
261		Desktop: potential presence only	Southern water shrew	*Neomys anomalus*	LC				
262		Desktop: potential presence only	Steppe Whiskered Bat	*Myotis aurascens*	LC	Annex II Bern Convention			
263		Desktop: potential presence only	Western Barbastelle	*Barbastella barbastellus*	NT	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
264		Desktop: potential presence only	Whiskered bat	*Myotis mystacinus*	LC	Annex II Bern Convention			
265		Desktop: potential presence only	Wild boar	*Sus scrofa*	LC				
266		Desktop: potential presence only	Wildcat	*Felis silvestris*	LC	Annex II Bern Convention			
267		Desktop: potential presence only	Wood mouse	*Apodemus sylvaticus*	LC				
268		Desktop: potential presence only	Yellow-necked Mouse	*Apodemus flavicollis*	LC				
269	Amphibians	Desktop: potential presence only	Aesculapian snake	*Zamenis longissimus*	LC	Annex II Bern Convention			
270		Yes	Balkan green lizard	*Lacerta trilineata*	LC	Annex II Bern Convention			
271		Yes	Balkan wall lizard	*Podarcis taurica*	LC	Annex II Bern Convention			
272		Desktop: potential presence only	Blotched snake	*Elaphe sauromates*	LC				
273		Yes	Caspian whip snake	*Dolichophis caspius*	LC				

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274		Desktop: potential presence only	Common wall lizard	*Podarcis muralis*	LC	Annex II Bern Convention			
275		Desktop: potential presence only	Dahl's whip snake	*Platyceps najadum*	LC	Annex II Bern Convention			
276		Desktop: potential presence only	Dice snake	*Natrix tessellate*	LC	Annex II Bern Convention			
277		Desktop: potential presence only	Eastern montpellier snake	*Malpolon insignitus*	LC				
278		Desktop: potential presence only	European glass lizard	*Pseudopus apodus*	LC	Annex II Bern Convention			
279		Yes	European green lizard	*Lacerta viridis*	LC	Annex II Bern Convention			
280		Yes	European pond turtle	*Emys orbicularis*	NT	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
281		Desktop: potential presence only	European ratsnake	*Zamenis situla*	LC	Annex II Bern Convention			
282		Yes	Grass snake	*Natrix natrix*	LC	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
283		Yes	Italian wall lizard	*Podarcis sicula*	LC	Annex II Bern Convention			
284		Desktop: potential presence only	Kotschy's gecko	*Mediodactylus kotschyi*	LC	Annex II Bern Convention			
285		Yes	Mediterranean Spur-thighed Tortoise	*Testudo graeca*	VU	Annex II Bern Convention Revised Annex I of Resolution 6	Y		*Qualifies as PBF under Criterion 2i.e: Species listed in terms of Resolution 6 of Bern Convention*
286		Desktop: potential presence only	Nose-horned viper	*Vipera ammodytes*	LC	Annex II Bern Convention			
287		Desktop: potential presence only	Red whip snake	*Platyceps collaris*	LC				
288		Desktop: potential presence only	Ring-headed dwarf snake	*Eirenis modestus*	LC				
289		Desktop: potential presence only	Sand Boa	*Eryx jaculus*	LC				
290		Desktop: potential presence only	Slow worm	*Anguis fragilis*	LC				
291		Desktop: potential presence only	Smooth snake	*Coronella austriaca*	LC	Annex II Bern Convention			

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292		Yes	Snake-eyed lizard	*Ophisops elegans*	LC	Annex II Bern Convention			
293		Yes	Snake-eyed skink	*Ablepharus kitaibelii*	LC	Annex II Bern Convention			
294		Desktop: potential presence only	Soosan snake	*Telescopus fallax*	LC	Annex II Bern Convention			
295		Yes	Western caspian turtle	*Muaremys rivulata*	NE				
296		Desktop: potential presence only	Worm snake	*Typhlops vermicularis*	LC				

Key:
Threat Status: CR = Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, DD = Data Deficient, LC = Least Concern
Shaded rows indicate PBF threatened species (CR, EN, VU threat status)

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