



ENVIRONMENTAL STATEMENT: 6.3 APPENDIX 7-10: WINTERING BIRD SURVEY REPORT

DECARBONISATION

Cory Decarbonisation Project

PINS Reference: EN010128

December 2023

Revision A

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EXECUTIVE SUMMARY

WSP UK Ltd has been commissioned by Cory Environmental Holdings Limited (Cory) (hereafter referred to as 'the Applicant') to undertake a wintering bird survey, for the Cory Decarbonisation Project to be located at Norman Road, Belvedere in the London Borough of Bexley (LBB; National Grid Reference/NGR 549572, 180512).

This wintering bird survey was undertaken to ensure sufficient baseline data regarding the wintering bird community was available to inform the design of the Proposed Scheme. The aims of the wintering bird survey were to:

- undertake a desk study reviewing records held by Green Space Information for Greater London (GiGL) and Crossness LNR;
- provide a list of bird species that make up the wintering tidal bird community associated with the Proposed Scheme;
- record any onshore wintering birds of conservation concern; and
- identify all high tide roosts and assess any that are to be impacted by the Proposed Scheme.

The Site does not fall within proximity (15km or less) of any international designated sites of ornithological interest, including Special Protection Areas (SPA) or Ramsar sites. However, two statutory designated sites (both Sites of Special Scientific Interest (SSSI)) that are designated for their overwintering or passage bird interest do occur within 10km or less and one Local Nature Reserve (LNR) does occur within 2km or less. Other statutory designated areas are known to occur within proximity of the Site, but these do not have specifically cited passage or overwintering bird interest.

The survey methodology used was an adapted version of the standard BTO's Wetland Bird Survey (WeBS)¹, incorporating the direct counts methodology². A full count of all wetland birds was made twice per month between November 2022 and March 2023 (i.e. 10 visits in total).

A total of 35 water bird and 27 non-water bird species were recorded within the Survey Area. Of these species, three are listed on Annex 1 of the Birds Directive, three are Species of Principal Importance (SPI) species, 12 are listed on the Red List for Birds of Conservation Concern (BoCC), 22 are listed on the Amber List for BoCC and 13 are listed as London Priority Species (LPS).

The Thames mudflat within the Site as a whole was used regularly by wintering birds for foraging, loafing and roosting. Of note is the sewage outfall area adjacent to Vantage Point (VP) 3 (as presented on **Figure 7-25: Wintering Bird - Survey Area and Survey Transect (Volume 2)**) which is highlighted as an important foraging area for winter bird species. The north bank of the Thames opposite the Site and the Belvedere Power Station Jetty (disused) have been highlighted as high tide roost sites. Birds also occasionally roost on the wooden posts at VP5 and within the reedbed habitat at VP3 and VP4. Norman Road Field (as detailed in **Figure 7-10: Ecological Survey Areas (Volume 2)**) within the Site was also used regularly by wintering

birds with higher concentrations of birds recorded within the section of Crossness LNR adjacent to the Site.

No peak counts recorded during the field survey were higher than the WeBS annual peak count recorded for the River Thames – Barking site. Peak count of Shoveler is greater than the 1% national threshold³. No other peak counts recorded during the field survey are higher than the 1% national threshold³.

1. INTRODUCTION

- 1.1.1. WSP UK Ltd has been commissioned by Cory Environmental Holdings Limited (Cory) (hereafter referred to as 'the Applicant') to undertake a bat activity survey, for the Cory Decarbonisation Project to be located at Norman Road, Belvedere in the London Borough of Bexley (LBB; National Grid Reference/NGR 549572, 180512).
- 1.1.2. The land upon which the Proposed Scheme is to be located is referred to as the 'Site' and the edge of this land referred to as the 'Site Boundary'.

1.2. BRIEF AND OBJECTIVES

- 1.2.1. The Applicant commissioned WSP UK Ltd to complete a wintering bird survey to:
- undertake a desk study reviewing ecological records of wintering birds held by Green Space Information for Greater London (GiGL) and Crossness LNR which is managed by Thames Water;
 - provide a list of bird species that make up the wintering tidal bird community associated with the Proposed Scheme;
 - record any onshore wintering birds of conservation concern; and
 - identify all high tide roosts and assess any that are to be impacted by the Proposed Scheme.

1.3. ECOLOGICAL BACKGROUND

STUDY AREAS

- 1.3.1. Review of desk study information from the Proposed Scheme's Preliminary Ecological Appraisal (PEA) relating to birds was undertaken to provide context for the survey, including biological records and nearby designated sites which support birds and the bird species found there. The following study areas are used:
- Statutory Designated Sites – National Network Sites (SAC/SPA/Ramsar) - Within 15km of the Site Boundary;
 - Statutory Designated Sites – SSSI - Within 10km of the Site Boundary;
 - Statutory Designated Sites – NRR, LNR - Within 2km of the Site Boundary; and
 - Non-statutory Designated Sites - Within 2km of the Site Boundary.

DESIGNATED SITE AND CONSERVATION LISTING SUMMARY

- 1.3.2. The Site does not fall within 15km or less of any international designated sites of ornithological interest, including SPA or Ramsar sites. However, two statutory designated sites (both SSSI that are designated for their overwintering or passage bird interest do occur within 10km or less and one LNR does occur within 2km or less). These are summarised below. Note that other statutory designated areas are known to occur within proximity of the Site, but these do not have specifically cited passage or overwintering bird interest.

- Crossness LNR – a 25.52ha area located within and immediately adjacent to the Site. One of the last remaining areas of grazing marsh in Greater London and the largest reedbed in Bexley. This area contains a network of pools and scrapes known to be used by over 200 different species of bird.
- Inner Thames Marshes SSSI – a 479.3ha area located approximately 1.5km east of the Site. This is an area of wetland and grazing marsh bordering the upper reaches of the Thames Estuary. The SSSI is of note for its diverse ornithological interest including numbers of wintering wildfowl, waders, finches and birds of prey, with wintering teal *Anas crecca* populations reaching levels of international importance.
- West Thurrock Lagoon & Marshes SSSI – a 66.08ha area located approximately 8.2km east of the Site. This site is one of the most important sites for wintering waders and wildfowl.
- Wildfowl on the Inner Thames Estuary. The combination of extensive intertidal mudflats together with a large and secure high tide roost, attracts waders in nationally important numbers, with significant populations of other bird species.

1.3.3. Sites of Importance for Nature Conservation (SINC) also occur within 2km of the Site. Only the SINC with cited value to passage and overwintering birds have been detailed below:

- River Thames and Tidal Tributaries SINC – this is a large (2304.92ha) section of the River Thames partly falling within the Site. It should be noted that the survey area used for the study that is the subject of this report falls entirely within the SINC boundary. This part of the River Thames is cited as being of particular importance for wildfowl and wading birds.
- Erith Marshes SINC – a 88.59ha area of grazing marsh situated within the Site. Part of the SINC contains the Crossness LNR. Dunlin *Calidris alpina*, Pintail *Anas acuta*, Snipe *Gallinago gallinago*, Redshank *Tringa totanus*, Black-tailed Godwit *Limosa limosa* and Green Sandpiper *Tringa ochropus* are all cited as regular winter visitors.
- Crossness Sewage Treatment Works Pond SINC - a 2.74ha angling lake supporting populations of common waterfowl located approximately 1km to the west of the Site.
- Crossways Lake Nature Reserve SINC – a 5.1ha reed-fringed lake valuable for water birds located 1.8km to the west of the Site.

WETLAND BIRD SURVEY DATA

1.3.4. The stretch of the River Thames within the Site is within the “River Thames – Barking sector” survey area covered under the national Wetland Bird Survey (WeBS). River Thames – Barking sector includes the River Thames that stretches from Thamesmead to Lower Belvedere. These WeBS data include Low Tide Counts at least once every seven years.

1.3.5. The most recent Low Tide Count, for which reports and data are available online, was completed over the 2021/2022 winter³. WeBS survey Low Tide Counts assess the number of all water birds at low tide once per month from November to February and from this the following are calculated:

- peak number of individuals present across the River Thames – Barking sector in any one month;
- an estimate mean number present across the River Thames – Barking sector throughout the winter; and
- the mean density within the River Thames – Barking site (birds per hectare).

THE 1% THRESHOLD

1.3.6. The British Trust for Ornithology (BTO) publish data known as the 1% threshold for bird species³. Criteria for assessing the international importance of wetlands have been agreed under the Ramsar Convention on Wetlands of International Importance. Under criterion 6, a wetland is considered internationally important if it “*regularly holds at least 1% of the population of a waterbird species or subspecies*”. Wetlands in Britain are considered nationally important if they regularly hold 1% or more of the estimated British population. The 1% thresholds for British and international waterbird populations, where known, are published by the BTO. It should be noted that, where 1% of the national population is less than 50 birds, 50 is normally used as a minimum qualifying threshold for the designation of sites of national or international importance.

RIVERSIDE ENERGY PARK – WINTERING BIRD SURVEY (CORY, 2018)

1.3.7. An overwintering bird survey was carried out for the Riverside 2 between October 2017 and March 2018. Comparisons have been made between the results of the 2022/23 wintering bird survey to the 2017/18 overwintering survey results⁴.

2. LEGAL AND PLANNING POLICY CONTEXT

2.1. LEGISLATION

HABITATS DIRECTIVE

- 2.1.1. Article 6 (3) of the European Union Habitats Directive (1992, as amended, ‘the Habitats Directive’) sets out the need for ‘Appropriate Assessment’ of plans or projects which have potential to affect the integrity of a Natura 2000 network (now known as ‘National Site Network’) site (including SPA, SAC and candidate SAC (cSAC) sites such as those in proximity to the Proposed Scheme):
- 2.1.2. *“Any plan or project likely to have a significant effect on a Natura 2000, either individually or in combination with other plans or projects, shall undergo an Appropriate Assessment to determine its implications for the site. The competent authorities can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site concerned.”*
- 2.1.3. As the purpose of the National Site Network is preservation of examples of species and habitats across Europe, rather than preservation of individual sites, Article 6 (4) allows for exceptional circumstances where negative effects may be permitted. This reads:
- 2.1.4. *“In exceptional circumstances, a plan or project may still be allowed to go ahead, in spite of a negative assessment, provided there are no alternative solutions and the plan or project is considered to be of overriding public interest^a. In such cases the Member State must take appropriate compensatory measures to ensure that the overall coherence of the N2000 Network is protected.”*
- 2.1.5. These commitments are brought forward in the UK through the Habitats Regulations discussed below.

THE BIRDS DIRECTIVE

- 2.1.6. A number of bird species recorded within the UK (including those that are resident, overwintering and migratory) are protected under European legislation through the Directive of the Conservation of Wild Birds, which lists 193 species, or subspecies, of birds in Annex 1 of the Birds Directive which are:
- in danger of extinction;
 - are rare, or have restricted local distribution;

^a An exact definition of ‘imperative reasons of overriding public interest’ is not provided, but EC guidance (EC, 2007) states “It is reasonable to consider that the “imperative reasons of overriding public interest, including those of social and economic nature” refer to situations where plans or projects envisaged prove to be indispensable:
 - within the framework of actions or policies aiming to protect fundamental values for the citizens’ life (health, safety, environment);
 - within the framework of fundamental policies for the State and the Society;
 - within the framework of carrying out activities of economic or social nature, fulfilling specific obligations of public service.”

- are vulnerable to specific changes in their habitat; or
- require particular attention for reasons of the specific nature of habitat.

2.1.7. This Directive is reflected in English law by the Conservation of Habitats and Species Regulations 2017 (as amended). Although the UK is no longer a member state of the European Union, the 2019 amendments to the Conservation of Habitats and Species Regulations 2017 make it clear that provisions regarding the protection and designation of SPAs are maintained. Species listed on Annex 1 of the Wild Birds Directive are those for which the UK Government are also required to take special measures, including the designation of land as SPAs, to ensure the survival and reproduction of these species throughout their area of distribution. These sites are then automatically included within the National Site Network, a network of core breeding and resting sites that are protected for rare and threatened species.

CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017 (HABITATS REGULATIONS)

2.1.8. The Habitats Regulations Part 1 Regulation 10 (2) & (3) state that competent local authorities “*must take such steps in the exercise of their functions as they consider appropriate to contribute to...the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the UK including by means of the upkeep, management and creation of such habitat...*” The legislation continues to state that economic and recreation requirements must be taken into consideration in considering which measures are appropriate.

WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

2.1.9. The Wildlife and Countryside Act 1981 (as amended) protects only breeding wild birds and is therefore not mentioned further in this report.

NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006 (NERC)

2.1.10. The NERC Act 2006 reinforces the duty upon all public authorities, including planning authorities, to have regard for the conservation and enhancement of biodiversity when discharging their duties. The Act refines the definition of biodiversity conservation, stating that it includes restoring or enhancing a population or habitat. Section 41 of the NERC Act requires the Secretary of State to list habitats and species of principal importance (HPIs and SPIs) for the conservation of biodiversity in England. The habitats and species listed in accordance with Section 41 largely replicate those listed on the UK Biodiversity Action Plan (BAP) which occur in England (however there are exceptions).

2.2. PLANNING POLICY

2.2.1. All relevant planning policies is detailed within the **Section 7.2 of Chapter 7: Terrestrial Biodiversity (Volume 1)**.

2.3. OTHER CONSIDERATIONS

BIRDS OF CONSERVATION CONCERN (BOCC) RED AND AMBER LISTS

- 2.3.1. The UK's leading bird conservation organisations reviewed the most up to date information on the status of birds in the UK and elsewhere in their range to produce the third review of the status of birds which occur regularly in the UK. This is presented as the Birds of Conservation Concern 5⁵, comprising a Red List of species of high conservation concern, an Amber List of species of moderate conservation concern, with other species that do not qualify under red or Amber List criteria on the green list. To qualify on the Red List species may be listed as globally threatened by International Union for Conservation of Nature (IUCN), have suffered a historical decline without substantial recent recovery, or a decline of more than 50% in breeding or non-breeding populations, or a 50% contraction in breeding range over 25 years (or the longer term). Amber List species can be those listed as Species of European Conservation Concern, those which have suffered a historical decline but shown significant recent recovery, have shown a decline of between 25 and 50% in breeding or non-breeding populations, or a contraction in breeding range of between 25 and 50% over 25 years (or the longer term) or be rare or localised breeders in the UK, or be species for which 20% of the breeding or non-breeding population is found in the UK.
- 2.3.2. Red or amber listing does not confer additional protection under legislation or planning policy, however it provides a basis for informing evaluation of a Site and for targeting conservation effort and is a widely used resource for interpreting bird populations.

BIODIVERSITY ACTION PLAN

- 2.3.3. The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, is a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contains a list of priority habitats and species of conservation concern in the UK, and outlines biodiversity initiatives designed to enhance their conservation status. The priority species generally correlate with those listed in accordance with Section 41 of the NERC Act (with some exceptions).
- 2.3.4. BAP in the UK have no statutory status but provide a framework for implementing conservation requirements. Furthermore, species listed as Priority species in the UK BAP which are also listed as Species of Principal Importance (SPI) are afforded a degree of protection under the NERC Act, which states that local authorities have a duty to conserve biodiversity (see above).

LONDON PRIORITY SPECIES

- 2.3.5. The national BAP is supplemented by local BAP that identify habitats and species of particular value or concern at the local level. The Site is covered by the London

Environment Strategy which describes how the Mayor will work to make sure that London's biodiversity is enhanced and protected, and more Londoners can experience nature. In 2018 the process of updating the London Species of Conservation Concern (LSOCC) list was initiated. From this initial longer list, London's Priority Species (LPS) have been identified.

2.3.6. Species on the London Priority Species List (LPSL) meet one or more criteria to indicate their conservation status as a species which require conservation action:

- species with native or long term naturalized populations in London that are listed on S41 of the NERC act;
- species that are on the UK Red List or are UK scarce; and
- species that are not recognized as of conservation concern nationally but are characteristic of London and under threat locally, e.g. black poplar.

3. METHODS

3.1. TIDAL SURVEY AREA

3.1.1. The area covered by the tidal bird survey (the ‘Survey Area’) comprised the stretch of the River Thames within the preliminary version of the Red Line Boundary (RLB) (as published in November 2022). In January 2023 the RLB was amended to exclude a large section of intertidal mudflat, however the survey area remained the same to allow for a more effective assessment of the wintering tidal bird community. Observations from outside the survey area were taken at the discretion of the ornithologist to allow consideration for temporary or permanent impacts outside the footprint of the Proposed Scheme. The Survey Area is presented on **Figure 7-25: Wintering Bird - Survey Area and Survey Transect (Volume 2)**.

3.2. DESK STUDY

3.2.1. A data search was obtained from Greenspace Information for Greater London (GiGL) in January 2023, which detailed records of protected and/or notable bird species within a 2km radius of the Proposed Scheme and from within the last ten years of the request date.

3.2.2. Records of bird sightings noted by Thames Water at the Crossness LNR over the period of 2015 – 2023 were also obtained and are presented in **Annex B**.

3.3. WINTERING BIRD SURVEY

3.3.1. The survey methodology used was an adapted version of the BTO’s WeBS, incorporating the direct counts methodology².

3.3.2. The wintering bird survey involved two surveyors walking and stopping at a total of seven Vantage Points (VP) along the England Coast Path (FP3/NCN1). A full count of all wetland birds was made twice per month between November 2022 and March 2023 (i.e. 10 visits in total), using binoculars and a field scope to identify bird species present within the Survey Area. Each visit was completed in daylight hours and the start point and direction of the route walked were varied on each survey visit to minimise bias, as birds may be active at different times of day in different areas.

3.3.3. Locations, numbers and behaviour (foraging, loafing, roosting, etc) of bird species were marked on a map of the survey area. Only birds actively using the survey area were counted, i.e. birds flying over were not included unless they were known to or likely to have originated within the Survey Area, or if they were engaged in behaviour clearly associated with the Survey Area (e.g. foraging). Registrations of birds were recorded using standard BTO two letter species codes. **Figure 7-25: Wintering Bird - Survey Area and Survey Transect (Volume 2)** shows the route and VP of the intertidal transect.

3.3.4. Survey visits were approximately 2-3 hours in duration and were carried out within 2 hours of low tide and 2 hours of high tide each month. This was to find out how

different species use the area at different times of the day and depending on the tide cycle (for instance, foraging areas during low tide, roosts during high tide).

High Tide Roost Survey

3.3.5. On high tide visits, the land within Crossness LNR and within West Paddock, East Paddock, Stable Paddock, Borax North, Borax South, Riverside 1, Riverside 2 and Norman Road Field (all inland from the river) was also surveyed to identify any high tide roosts present within the Site. During each high tide survey visit the transect route (as detailed in **Figure 7-25: Wintering Bird – Survey Area and Survey Transect (Volume 2)**) was walked slowly, scanning, and listening for birds, in accordance with good practice guidance². Any non-waterbird birds of conservation concern (see **Section 5**) were also recorded. Registrations of birds were again recorded using standard BTO two letter species codes.

3.4. DATES OF SURVEY AND PERSONNEL

3.4.1. The wintering bird survey visits were completed by ornithologists with at least five years' experience of wintering bird surveys. Lead surveyors were either Full or Associate members of Chartered Institute of Ecology and Environmental Management (CIEEM). Dates of survey and weather conditions are detailed in **Table 3-1** below.

Table 3-1: Dates of Survey and Weather Conditions

Survey Visit	Date	Tidal Cycle	Tide Height (m)	Tide Time	Weather conditions
1	22 nd November 2022	High	6.77	11:48am	6C, cloud 2/8, wind F2, Dry
	30 th November 2022	Low	0.96	12:01pm	9C, cloud 7/8, wind F2, Dry
2	15 th December 2022	Low	1.19	11:17am	-2C, cloud 1/8, wind F2, Dry
	19 th December 2022	High	5.97	9:06am	13C, cloud 8/8, wind F3-4, Drizzle
3	19 th January 2023	High	6.41	10:41am	2C, cloud 3/8, wind F2, Dry
	24 th January 2023	Low	0.11	09:50am	5C, cloud 8/8, wind F2, Dry

Survey Visit	Date	Tidal Cycle	Tide Height (m)	Tide Time	Weather conditions
4	2 nd February 2023	High	6.06	11:04am	10C, cloud 6/8, wind F2-3, Dry
	22 nd February 2023	Low	-0.1	9.36am	11C, cloud 8/8, wind F3, Rain
5	2 nd March 2023	High	5.58	9:09am	6C, cloud 7/8, wind F2, Dry
	14 th March 2023	Low	0.98	11:08am	5C, cloud 5/8, wind F2, Dry

3.5. NOTES AND LIMITATIONS

- 3.5.1. The aim of a desk study is to provide valuable background information that would not be captured by surveying alone. Information obtained from the desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular species does not necessarily mean that the species does not occur in the study area. Likewise, the presence of records for particular species does not automatically mean that these still occur within the study area.
- 3.5.2. Given the size of the Survey Area and due to daylight hours, some sections in November and December 2022 were completed at mid tide. This is not considered to be a significant limitation as the Survey Area was split between two surveyors for the remainder of the surveys and the survey data collected is sufficient to provide an effective assessment of the wintering bird population at low or high tide.
- 3.5.3. Surveyors had to keep to Public Rights of Way (ProW) for the grass fields in the Norman Road Field section of the Site (as detailed in **Figure 7-10: Ecological Survey Areas (Volume 2)**), due to access not being granted at the time of the wintering tidal bird surveys. This is not considered to be a significant limitation as an effective assessment could be made from the PRow using binoculars and listening for bird calls.
- 3.5.4. The Order Limits were amended to include a larger section of Crossness LNR after the winter bird surveys were completed, therefore not all of the Crossness LNR section has been surveyed for wintering birds. This is not considered to be a significant limitation as an effective assessment of the wintering bird population could be made from the extensive records of bird sightings at Crossness LNR from 2015-2023 provided by Thames Water (as detailed in **Section 3.2.2** of this appendix).

4. RESULTS

4.1. DESK STUDY

- 4.1.1. The GiGL returned records of 54 protected and/or notable bird species within 2km of the Proposed Scheme and within the last ten years. This list of protected and/or notable bird species includes wader and waterfowl species. Additionally, 27 non-water protected or notable bird species were also returned. A full list of wintering protected, or notable bird species returned by the data search is included in **Annex A**.
- 4.1.2. Thames Water returned records of 212 different bird species from Crossness LNR between 2015 and 2023, 125 of which are protected and/or notable bird species. The full list of protected and/or notable bird species can be found in **Annex B**.

4.2. FIELD SURVEY

- 4.2.1. A total of 35 waterbird species were recorded within the Survey Area. The total and peak counts of all waterbird species recorded is detailed in **Table 4-1** below.

Table 4-1: Total and Peak Counts of all Waterbird Species in 2022 - 2023

Species		Total Count										Peak Count (Month)
		November		December		January		February		March		
Common Name	Latin Name	LT	HT	LT	HT	LT	HT	LT	HT	LT	HT	
Common sandpiper	<i>Actitis hypoleucos</i>	0	0	0	0	0	0	1	0	0	1	1 (February and March)
Egyptian goose	<i>Alopochen aegyptiaca</i>	2	0	0	0	0	2	0	0	0	2	2 (November, January and March)
Teal	<i>Anas crecca</i>	497	213	327	341	365	386	198	287	80	378	497 (November)
Mallard	<i>Anas platyrhynchos</i>	6	21	14	6	16	12	34	11	24	12	34 (February)
Greylag goose	<i>Anser anser</i>	0	0	0	76	8	0	35	4	4	0	76 (December)
Grey heron	<i>Ardea cinerea</i>	0	3	2	4	5	4	0	5	1	0	5 (January)
Tufted duck	<i>Aythya fuligula</i>	0	0	0	0	0	0	0	0	2	0	2 (March)
Canada goose	<i>Branta canadensis</i>	0	1	0	38	0	6	1	2	14	14	38 (December)
Sanderling	<i>Calidris alba</i>	0	0	1	0	0	0	0	0	0	0	1 (December)
Dunlin	<i>Calidris alpina</i>	0	0	201	310	0	250	355	2	5	702	702 (March)
Black headed gull	<i>Chroicocephalus ridibundus</i>	770	471	466	433	177	234	118	368	440	166	471 (November)
Mute swan	<i>Cygnus olor</i>	0	0	0	0	0	2	0	0	0	0	2 (January)

Species		Total Count										Peak Count (Month)
		November		December		January		February		March		
Common Name	Latin Name	LT	HT	LT	HT	LT	HT	LT	HT	LT	HT	
Little egret	<i>Egretta garzetta</i>	0	0	0	0	0	0	0	1	0	1	1 (February and March)
Coot	<i>Fulica atra</i>	1	3	0	2	3	12	1	8	15	5	15 (March)
Snipe	<i>Gallinago gallinago</i>	0	0	8	1	1	0	0	0	0	0	8 (December)
Moorhen	<i>Gallinula chloropus</i>	2	11	3	4	0	16	0	7	5	7	16 (January)
Oystercatcher	<i>Haematopus ostralagus</i>	0	0	0	0	0	0	1	0	2	7	7 (March)
Herring gull	<i>Larus argentatus</i>	0	4	0	0	0	1	4	1	1	8	8 (March)
Common gull	<i>Larus canus</i>	0	0	0	0	0	0	3	0	0	0	3 (February)
Lesser-black backed gull	<i>Larus fuscus</i>	0	1	1	0	0	2	5	0	1	1	5 (February)
Great black backed gull	<i>Larus marinus</i>	4	2	1	2	2	4	0	1	0	0	4 (January)
Black-tailed godwit	<i>Limosa limosa</i>	0	0	9	81	6	43	3	43	1	4	81 (December)
Jack snipe	<i>Lymnocyptes minimus</i>	0	0	1	0	0	0	0	0	0	0	1 (December)
Wigeon	<i>Mareca penelope</i>	0	6	0	0	22	30	140	18	4	15	140 (February)

Species		Total Count										Peak Count (Month)
		November		December		January		February		March		
Common Name	Latin Name	LT	HT	LT	HT	LT	HT	LT	HT	LT	HT	
Gadwall	<i>Mareca strepera</i>	40	22	33	37	53	16	27	55	99	71	99 (March)
Curlew	<i>Numenius arquata</i>	0	0	0	1	2	0	1	4	0	2	4 (February)
Cormorant	<i>Phalacrocorax carbo</i>	2	18	14	5	4	26	1	24	22	13	26 (January)
Great crested grebe	<i>Podiceps cristatus</i>	0	1	1	1	0	0	0	0	0	1	1 November, December and March)
Water rail	<i>Rallus aquaticus</i>	0	1	0	0	0	0	0	0	0	0	1 (November)
Avocet	<i>Recurvirostra avosetta</i>	0	6	1	13	0	2	0	0	2	0	13 (December)
Shoveler	<i>Spatula clypeata</i>	47	47	173	360	218	88	4	0	2	0	360 (December)
Little grebe	<i>Tachybaptus ruficollis</i>	0	0	0	0	0	1	0	1	1	1	1 (January, February and March)
Shelduck	<i>Tadorna tadorna</i>	51	0	25	77	65	64	38	37	67	44	77 (December)
Common Redshank	<i>Tringa totanus</i>	82	4	60	45	23	40	19	35	15	15	82 (November)
Lapwing	<i>Vanellus vanellus</i>	28	1	16	46	26	43	69	72	0	2	72 (February)

4.2.2. **Plate 4-1** below details the total number of waterbirds recorded across the Survey Area during each survey visit and by tide cycle. In general, numbers for low tide gradually decreased from a peak of 1532 birds recorded in November to 808 birds recorded in March. The number of birds recorded at high tide varied with a slight increase from November to March. However, as detailed in **Section 3.5** of this report, some sections of the Survey Area were completed at mid tide during November and December which may account for the high numbers recorded in December. Furthermore, at high tide some water birds will be on the waterbodies of Crossness LNR, which may explain why higher numbers of birds were recorded at high tide compared to low tide during December, January and March.

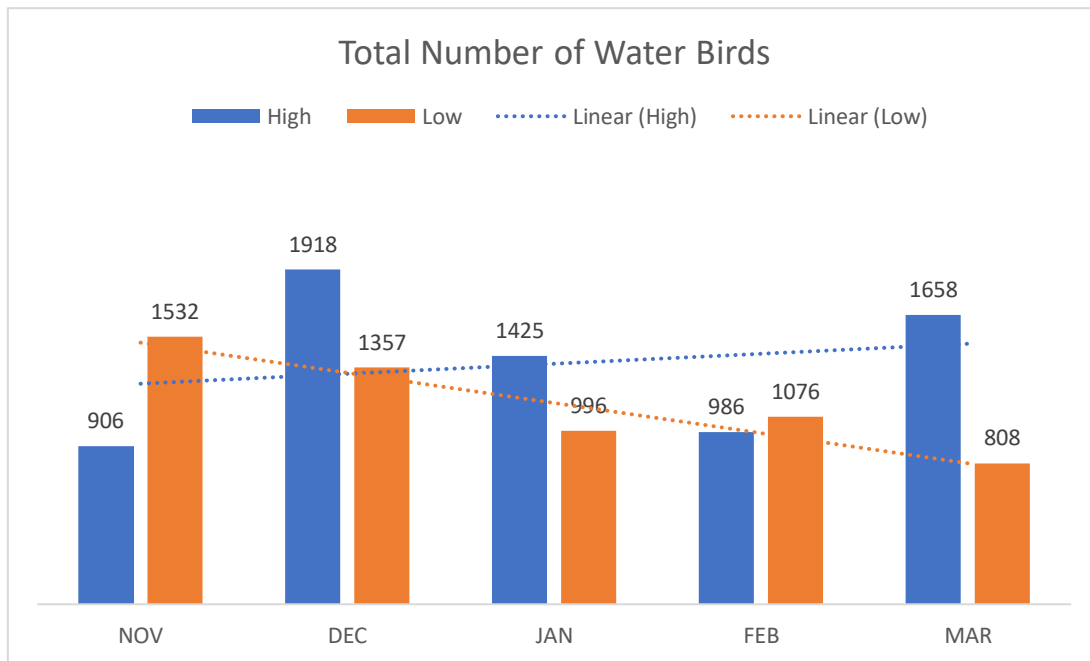


Plate 4-1: Total Number of Waterbirds Recorded Across the Survey Area during Each Survey Visit and by Tide Cycle

4.2.3. The distribution of all water bird species recorded within the Survey Area are presented on **Figure 7-27: Overall Distribution of Waterbirds (Volume 2)**.

NON-WATER BIRD SPECIES

4.2.4. In total 27 non-water bird species (defined as passerines, near passerines and raptors) were also recorded during the surveys. Of which, 13 are protected/notable:

- Cetti's Warbler *Cettia cetti*;
- Dunnock *Prunella modularis*;
- Greenfinch *Chloris chloris*;
- Kestrel *Falco tinnunculus*;
- Linnet *Linaria cannabina*;
- Marsh Harrier *Circus aeruginosus*;
- Meadow Pipit *Anthus pratensis*;

- Mistle Thrush *Turdus viscivorus*;
- Peregrine *Falco peregrinus*;
- Redwing *Turdus iliacus*;
- Reed Bunting *Emberiza schoeniclus*;
- Song Thrush *Turdus philomelos*; and
- Starling *Sturnus vulgaris*.

4.2.5. Further details of the legislation for protected species and those listed on conservation concern or county lists are provided below in **Section 3** of this appendix.

4.2.6. Additionally, Dartford warbler *Sylvia undata*, Bearded Tit *Panurus biarmicus* and Fieldfare *Turdus pilaris* were recorded within the survey period (between November 2022 and March 2023) by the Crossness LNR members who regularly survey and record bird species found within the Crossness LNR and the wider area. Dartford warbler was found in West Paddock, Bearded Tit was found in the reeds adjacent to England Coast Path (FP3/NCN1) and Fieldfare was recorded close to the Crossness LNR members area hide. These locations are detailed on **Figure 7-26: Wintering Bird – Feature Locations (Volume 2)**.

4.3. OVERALL DISTRIBUTION OF WATER BIRD SPECIES

4.3.1. **Figure 7-26: Wintering Bird – Feature Locations (Volume 2)** details where the Middleton Jetty (central), Belvedere Power Station Jetty (disused) (eastern), Thames Water Jetty (western) and wooden posts are located, which are used to explain the distribution of water birds.

4.3.2. **Figure 7-27: Overall Distribution of Waterbirds (Volume 2)** presents the distribution of all bird species. Water birds were found to be concentrated around VP3, where the Thames Water sewage outlet is located. Wastewater discharges from outfalls can provide considerable supplies of food for bird species⁶ which would explain the concentration of birds at VP3.

IMPORTANT BIRD SPECIES

4.3.3. To provide a concise analysis of the data the following sections only refer to protected or notable bird species, hereafter referred to as ‘important bird species.’ The important bird species recorded during the survey are those included within the following:

- The Birds Directive – Annex 1:
 - Avocet, Black-tailed Godwit and Little Egret.
- Schedule 1 of the Wildlife and Countryside Act (WCA)1981 (as amended):
 - Avocet and Black-tailed Godwit.
- Natural Environment and Rural Communities Act (2006) – Priority Species:
 - Black-tailed Godwit, Curlew, Lapwing and Herring Gull.
- Birds of Conservation Concern (BoCC) – Red List Species:
 - Black-tailed Godwit, Curlew, Dunlin, Lapwing and Herring Gull.

- BoCC – Amber List Species:
 - Avocet, Common Sandpiper, Oystercatcher, Redshank, Sanderling, Common Snipe, Gadwall, Greylag Goose, Mallard, Shelduck, Teal, Shoveler, Wigeon, Black-headed Gull, Common Gull, Great Black-backed Gull, Lesser Black-backed Gull and Moorhen.
- London Priority Species (LPS) (Greater London Authority 2019):
 - Black-tailed Godwit, Common Sandpiper, Lapwing, Gadwall and Shelduck.

4.3.4. Further details of the legislation for protected species and those listed on conservation concern or county lists are provided below in **Section 3** of this appendix.

4.4. DISTRIBUTION OF IMPORTANT BIRD SPECIES – WADERS

4.4.1. The distribution of each wader recorded within the Survey Area is presented on **Figure 7-28: Wintering Bird Results – AV, BW + CS (Volume 2); Figure 7-29: Wintering Bird Results – CU, DN + JS (Volume 2); Figure 7-30: Wintering Bird Results – L. + OC (Volume 2); and Figure 7-31: Wintering Bird Results – RK, SS + SN (Volume 2);** –. Location of jetties and other features are presented on **Figure 7-26: Wintering Bird – Feature Locations (Volume 2)**.

Avocet (AV)

4.4.2. Avocet was recorded throughout the River Thames mudflat. A peak count of 13 birds were recorded in December, with a group of eight birds recorded close to the Thames Water Jetty at VP1.

Black-tailed Godwit (BW)

4.4.3. The majority of Black-tailed Godwit were recorded on the mudflats close to VP3 and 5. A peak count of 81 birds were recorded in December, with a group of 62 birds recorded foraging close to the wooden posts, south of the Middleton Jetty at VP5.

Common Sandpiper (CS)

4.4.4. An individual was recorded on two occasions on the edge of the reedbed habitat close to VP4.

Curlew (CU)

4.4.5. Individual birds were recorded throughout the Thames mudflats, excluding VP6 and VP7. A group of four birds (peak count) were recorded at the Thames Water Sewage outlet at VP3.

Dunlin (DN)

4.4.6. The majority of Dunlin were recorded at VP1 – 5. A peak count of 702 birds were recorded in March, with a group of 700 birds recorded at the Thames Water Sewage outlet at VP3.

Lapwing (L.)

- 4.4.7. Lapwing were recorded throughout the Thames mudflat and on the grass fields within Crossness LNR. A peak count of 72 birds were recorded in February, with a group of 64 birds recorded close to the Thames Water Jetty at VP1.

Oystercatcher (OC)

- 4.4.8. The majority of Oystercatcher were recorded in March on the wooden posts at VP5 and on the Belvedere Power Station Jetty (disused) at VP6.

Redshank (RK)

- 4.4.9. Redshank were recorded throughout the Thames mudflat. A peak count of 82 birds were recorded in November, with groups of 40 birds and 28 birds recorded close to the Thames Water Jetty at VP1.

Sanderling (SS)

- 4.4.10. An individual Sanderling was recorded once in December foraging at VP7.

Common Snipe (SN)

- 4.4.11. Common Snipe were recorded on the Thames mudflat, the Crossness LNR members area and within the Norman Field Road (as detailed in **Figure 7-10: Ecological Survey Areas (Volume 2)** section of the Site. A peak count of eight birds were recorded in December, with a group of five birds recorded at the Thames Water Sewage outlet at VP3.

DISTRIBUTION OF IMPORTANT BIRD SPECIES – WATERFOWL

- 4.4.12. The distribution of each waterfowl recorded within the Survey Area is presented on **Figure 7-32: Wintering Bird Results – GA + GJ (Volume 2); Figure 7-33: Wintering Bird Results - MA + SU (Volume 2); Figure 7-34: Wintering Bird Results – T. (Volume 2); and Figure 7-35: Wintering Bird Results – SV + WN (Volume 2)**. Location of jetties and other features are presented on **Figure 7-26: Wintering Bird - Feature Locations (Volume 2)**.

Gadwall (GA)

- 4.4.13. Gadwall were recorded on the grass fields of the Site and on the Thames mudflat. A peak count of 99 birds were recorded in March, with groups of 66, 11 and ten gadwall recorded at the Thames Water Sewage outlet at VP3.

Greylag Goose (GJ)

- 4.4.14. Greylag Geese were recorded on the grass fields of the Site and on the Thames mudflat. A peak count of 76 birds were recorded in December, with groups of 53 birds and 22 birds recorded on the grass fields within the Crossness LNR section of the Site.

Mallard (MA)

- 4.4.15. Mallard were recorded throughout the Survey Area, on the grass fields of the Site and on the Thames mudflat. A peak count of 34 birds were recorded in February, with a group of 14 Mallard recorded adjacent to the Thames Water Jetty at VP2. Mallard were also recorded within the Crossness LNR section of the Site.

Shelduck (SU)

- 4.4.16. Shelduck were only recorded on the Thames mudflat and were recorded at all VP locations. A peak count of 77 birds were recorded in December with a group of 30 Shelduck recorded at the Thames Water Sewage outlet at VP3. Shelduck were also recorded roosting and loafing on the Belvedere Power Station Jetty (disused) at VP6.

Teal (T.)

- 4.4.17. Teal were recorded on the grass fields of the Site and on the Thames mudflat. A peak count of 497 birds were recorded in November with groups of 320 and 124 Teal recorded at the Thames Water Sewage outlet at VP3. A group of 190 Teal was also recorded at VP4.

Shoveler (SV)

- 4.4.18. Shoveler were only recorded on the Thames mudflat and were predominantly found at the Thames Water Sewage outlet at VP3. A peak count of 360 birds were recorded in December with a group of 320 Shoveler recorded loafing in between VP3 and VP4.

Wigeon (WN)

- 4.4.19. Wigeon were recorded on the grass fields of the Site and on the Thames mudflat. A peak count of 140 birds were recorded in February, west of the western jetty at VP1. Groups of up to 18 birds were also recorded at the Thames Water Sewage outlet at VP3.

DISTRIBUTION OF IMPORTANT BIRD SPECIES – OTHER WATER BIRDS

- 4.4.20. The distribution of other water birds recorded within the Survey Area is presented on **Figure 7-36: Wintering Bird Results – BH (Volume 2); Figure 7-37: Wintering Bird Results – CM, GB, HG + LB (Volume 2); and Figure 7-38: Wintering Bird Results – ET, MH + WA (Volume 2)**. Location of jetties and other features are presented on **Figure 7-26: Wintering Bird – Feature Locations (Volume 2)**.

Black-headed Gull (BH)

- 4.4.21. Black-headed Gull were recorded on the grass fields of the Site and on the Thames mudflat. A peak count of 471 birds were recorded in November, with large groups of birds (between 200 – 320 birds) recorded at the Thames Water Sewage outlet at VP3.

Common Gull (CM)

- 4.4.22. Common Gull were recorded individually on three separate occasions close to VP3, 4 and 7.

Great Black-backed Gull (GB)

- 4.4.23. Great Black-backed Gull were only found on the Thames mudflat, with the majority found on the Thames Water Jetty and Belvedere Power Station (disused) Jetty and on the wooden posts at VP5.

Herring Gull (HG)

- 4.4.24. Herring Gull were predominantly found on the Thames mudflat. A peak count of eight birds were recorded in March, with a group of five birds recorded at VP7.

Lesser-black Backed Gull (LB)

- 4.4.25. Lesser-black Backed Gull were predominantly recorded as individuals throughout the Thames mudflat, with a pair recorded at VP7 on one occasion.

Little Egret (ET)

- 4.4.26. Individual Little Egret was recorded on two occasions, once within the reedbed habitat opposite the bird hide (see **Figure 7-26: Wintering Bird – Feature Locations (Volume 2)** for location of bird hide) and once on Norman Road Field section of the Site.

Moorhen (MH)

- 4.4.27. Moorhen were predominantly found within the ditches within the Site, however groups of up to three birds were also found at the Thames Water Sewage outlet at VP3. A peak count of 16 birds were recorded in January, with a group of 10 birds recorded in the Crossness LNR section of the Site.

4.5. HIGH TIDE ROOST SITES

- 4.5.1. A high tide roost site was identified on the wooden jetty and mudflat bank located on the opposite bank of the Thames, north of the Site. A peak of approximately 80 Black-headed Gulls, 50 Shelduck, 50 Lapwing, 40 Black-tailed Godwit and 30 Redshank were recorded at this roost. The Belvedere Power Station Jetty (disused) within the Site was also used as a high tide roost by a peak of approximately 11 Shelduck, 2 Greylag Goose, 1 Lesser Black-backed Gull and 2 Oystercatcher. Birds also used the wooden posts at VP5 and the reedbed habitat at VP3 and VP4, however birds were only recorded to roost here occasionally and so the wooden posts and reedbed habitat is not classified as a high tide roost site. High tide roost sites are highlighted on **Figure 7-39: Wintering Bird - High Tide Roost Sites (Volume 2)**.

4.6. COMPARISON TO WEBS DATA AND DESK STUDY

- 4.6.1. The WeBS Low Tide Count report for the 2021-22 surveys⁴, confirm 85 wetland bird species were recorded in the River Thames - Barking site. However, it is important to note that this includes a much larger area than the stretch of the River Thames within the Site and therefore a reduced species count is expected for the Site.
- 4.6.2. **Table 4-2** below shows the comparison of the peak count for each 'important bird species' recorded during the field survey with the WeBS annual Peak Count for River Thames – Barking site and current 1% threshold values published by the BTO.

Table 4-2: Comparison of Peak Counts with WeBS River Thames – Barking Site Annual Peak Counts and 1% National Threshold Values

Species		Peak Count	WeBS Annual Peak Count (2021/22)	1% National Threshold (Frost et al. 2019)
Common Name	Latin Name			
Common Sandpiper	<i>Actitis hypoleucos</i>	1	12+	1
Teal	<i>Anas crecca</i>	497	3 791+	4 300
Mallard	<i>Anas platyrhynchos</i>	34	1 370+	6 700
Greylag Goose	<i>Anser anser</i>	76	910	1400
Sanderling	<i>Calidris alba</i>	1	2 533	200
Dunlin	<i>Calidris alpina</i>	702	23 893	3 400
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	471	12 728+	22 000
Little Egret	<i>Egretta garzetta</i>	1	299+	110
Snipe	<i>Gallinago gallinago</i>	8	157	10 000
Moorhen	<i>Gallinula chloropus</i>	16	210+	3 000
Oystercatcher	<i>Haematopus ostragalus</i>	7	16 632	2 900
Herring Gull	<i>Larus argentatus</i>	8	2 748	7 300
Common Gull	<i>Larus canus</i>	3	1 970	7 000
Lesser Black-backed Gull	<i>Larus fuscus</i>	5	205+	1 200
Great black-backed Gull	<i>Larus marinus</i>	4	223+	760
Black-tailed Godwit	<i>Limosa limosa</i>	81	4 438	390
Wigeon	<i>Mareca penelope</i>	140	5 970	4 500
Gadwall	<i>Mareca strepera</i>	99	595	310

Species		Peak Count	WeBS Annual Peak Count (2021/22)	1% National Threshold (Frost et al. 2019)
Common Name	Latin Name			
Curlew	<i>Numenius arquata</i>	4	2 929	1 200
Avocet	<i>Recurvirostra avosetta</i>	13	3 343	87
Shoveler	<i>Spatula clypeata</i>	360	585	190
Shelduck	<i>Tadorna tadorna</i>	77	1 703+	470
Common Redshank	<i>Tringa totanus</i>	82	2,614	940
Lapwing	<i>Vanellus vanellus</i>	72	5 688	6 200

4.6.3. No peak counts recorded during the field survey are higher than the WeBS annual peak count recorded for the River Thames – Barking site. Peak count of Shoveler is greater than the 1% national threshold³. No other peak counts recorded during the field survey are higher than the 1% national threshold³.

COMPARISONS TO THE CORY REP 2017/18 WINTER BIRD SURVEY

4.6.4. 34 water bird species were recorded during the Riverside 2 2017/18 overwintering bird survey⁵. This survey recorded Ringed Plover which was not recorded during the 2022/2023 wintering bird survey. Conversely, however Jack Snipe was only recorded during the 2022/23 survey and not the 2017/18 overwintering bird survey.

5. CONCLUSIONS

- 5.1.1. A total of 35 water bird and 27 non-water bird species were recorded within the Survey Area. Of these species, three are Annex 1 species, three are SPI species, 12 are listed on the Red List for BoCC, 22 are listed on the Amber List for BoCC and 13 are listed as LPS.
- 5.1.2. The Thames mudflat within the Site as a whole was used regularly by wintering birds for foraging, loafing and roosting. Of note is the sewage outfall area adjacent to VP3 which is highlighted as an important foraging area for winter bird species. The bank opposite the Site and the Belvedere Power Station Jetty (disused) have been highlighted as high tide roost sites. Birds also occasionally roosted on the wooden posts at VP5 and within the reedbed habitat at VP3 and VP4. Norman Field Road (as detailed in **Figure 7-10: Ecological Survey Areas (Volume 2)**) was also used regularly by wintering birds with higher concentrations of birds recorded within the Crossness LNR grass fields.
- 5.1.3. No peak counts recorded during the field survey are higher than the WeBS annual peak count recorded for the River Thames – Barking site. However, the peak count of Shoveler is greater than the 1% national threshold³.

Annex A

GIGL DATA SEARCH

Table 0-1: List of bird species (present during winter) returned within the last 10 years by the GiGL Data Search

Common Name (<i>Latin Name</i>)	Designation	Returned within 100m of the Site (Yes or No)
Arctic Skua (<i>Stercorarius parasiticus</i>)	BRed	No
Avocet (<i>Recurvirostra avosetta</i>)	BD1	Yes
Barnacle Goose (<i>Branta leucopsis</i>)	BD1	Yes
Bar-tailed Godwit (<i>Limosa lapponica</i>)	BD1 BAmb	Yes
Bittern (<i>Botaurus stellaris</i>)	BD1, UK Priority LPS Local priority sp.	No
Black Redstart (<i>Phoenicurus ochruros</i>)	LPS Local priority sp.	Yes
Black-tailed Godwit (<i>Limosa limosa</i>)	LPS Local priority sp.	Yes
Cirl Bunting (<i>Emberiza cirlus</i>)	BRed	No
Common Sandpiper (<i>Actitis hypoleucos</i>)	LPS	Yes
Common Scoter (<i>Melanitta nigra</i>)	UK Priority Bred	No
Curlew (<i>Numenius arquata</i>)	UK Priority BRed Local priority sp.	Yes
Dark-bellied Brent Goose (<i>Branta bernicla bernicla</i>)	UK Priority	No
Dunlin (<i>Calidris alpina</i>)	BRed	Yes
Dunnock (<i>Prunella modularis</i>)	LPS	Yes
Fieldfare (<i>Turdus pilaris</i>)	BRed	Yes
Firecrest (<i>Regulus ignicapilla</i>)	BRed	No
Gadwall (<i>Mareca strepera</i>)	LPS	Yes
Garganey (<i>Spatula querquedula</i>)	BAmb	Yes
Golden Plover (<i>Pluvialis apricaria</i>)	UK Priority	No
Green Sandpiper (<i>Tringa ochropus</i>)	BAmb	Yes

Common Name (<i>Latin Name</i>)	Designation	Returned within 100m of the Site (Yes or No)
Greenfinch (<i>Chloris chloris</i>)	BRed	Yes
Greenshank (<i>Tringa nebularia</i>)	BAmb	Yes
Grey Wagtail (<i>Motacilla cinerea</i>)	Local priority sp.	Yes
Hen Harrier (<i>Circus cyaneus</i>)	BD1 UK Priority BRed Local priority sp.	Yes
Herring Gull (<i>Larus argentatus</i>)	BRed	Yes
House Sparrow (<i>Passer domesticus</i>)	UK Priority BRed	Yes
Kingfisher (<i>Alcedo atthis</i>)	BD1, LPS	Yes
Kittiwake (<i>Rissa tridactyla</i>)	BRed	No
Lapwing (<i>Vanellus vanellus</i>)	UK Priority BRed LPS Local priority sp.	Yes
Lesser Black-backed Gull (<i>Larus fuscus</i>)	LPS	Yes
Lesser Redpoll (<i>Acanthis cabaret</i>)	UK Priority LPS Local priority sp.	Yes
Linnet (<i>Linaria cannabina</i>)	LPS Local priority sp.	Yes
Little Egret (<i>Egretta garzetta</i>)	BD1	Yes
Little Gull (<i>Hydrocoloeus minutus</i>)	BD1	No
Marsh Harrier (<i>Circus aeruginosus</i>)	BD1	Yes
Mediterranean Gull (<i>Ichthyaetus melanocephalus</i>)	BD1	Yes
Mistle Thrush (<i>Turdus viscivorus</i>)	LPS Local priority sp.	Yes
Pochard (<i>Aythya ferina</i>)	BRed LPS Local priority sp.	Yes
Red Kite (<i>Milvus milvus</i>)	UK Priority	Yes
Redwing (<i>Turdus iliacus</i>)		Yes
Reed Bunting (<i>Emberiza schoeniclus</i>)	UK Priority Local priority sp.	Yes
Ringed Plover (<i>Charadrius hiaticula</i>)	BRed LPS	Yes

Common Name (<i>Latin Name</i>)	Designation	Returned within 100m of the Site (Yes or No)
Ruff (<i>Calidris pugnax</i>)	BD1 BRed	Yes
Serin (<i>Serinus serinus</i>)		No
Shelduck (<i>Tadorna tadorna</i>)	LPS	Yes
Skylark (<i>Alauda arvensis</i>)	UK Priority BRed LPS	Yes
Song Thrush (<i>Turdus philomelos</i>)	LPS Local priority sp.	Yes
Spoonbill (<i>Platalea leucorodia</i>)	BD1	No
Starling (<i>Sturnus vulgaris</i>)	BRed LPS	Yes
Tawny Owl (<i>Strix aluco</i>)	LPS	No
Whimbrel (<i>Numenius phaeopus</i>)	BRed	Yes
Whinchat (<i>Saxicola rubetra</i>)	BRed Local priority sp.	Yes
Woodcock (<i>Scolopax rusticola</i>)		No
Yellow Wagtail (<i>Motacilla flava</i>)	BRed Local priority sp.	Yes
Yellowhammer (<i>Emberiza citrinella</i>)	UK Priority BRed LPS	No

Note:

- BD1 – listed on the Birds Directive Annex 1
- LPS – London Priority Species
- BRed – Red List of Birds of Conservation Concern
- BAmb – Amber List of Birds of Conservation Concern

Annex B

THAMES WATER CROSSNESS LNR DATA

Table 0-1: Thames Water Incidental Protected/Notable Bird Species Records from Crossness LNR between 2015 - 2023

Common Species	Latin Name	Designation
Lesser redpoll	<i>Acanthis cabaret</i>	SPI, LPS
Redpoll	<i>Acanthis flammea</i>	BRed
Sparrowhawk	<i>Accipiter nisus</i>	BAmb
Marsh warbler	<i>Acrocephalus palustris</i>	Sch1, BRed
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	BAmb
Skylark	<i>Alauda arvensis</i>	BRed, SPI, LPS
Kingfisher	<i>Alcedo atthis</i>	Sch1, LPS
Pintail	<i>Anas acuta</i>	BAmb
Shoveler	<i>Anas clypeata</i>	BAmb
Teal	<i>Anas crecca</i>	BAmb
Wigeon	<i>Anas penelope</i>	BAmb
Mallard	<i>Anas platyrhynchos</i>	BAmb
Garganey	<i>Anas querquedula</i>	BAmb
Gadwall	<i>Anas strepera</i>	BAmb, LPS
Greylag goose	<i>Anser anser</i>	BAmb
Bean Goose	<i>Anser fabalis</i>	BAmb
Meadow pipit	<i>Anthus pratensis</i>	BAmb
Water pipit	<i>Anthus spinoletta</i>	BAmb
Tree pipit	<i>Anthus trivialis</i>	BRed, SPI
Swift	<i>Apus apus</i>	BRed, LPS
Great white egret	<i>Ardea alba</i>	BAmb
Purple heron	<i>Ardea purpurea</i>	Sch1, BD1
Turnstone	<i>Arenaria interpres</i>	BAmb
Short-eared owl	<i>Asio flammeus</i>	BAmb, BD1
Pochard	<i>Aythya ferina</i>	BRed, LPS
Scaup	<i>Aythya marila</i>	Sch1, BRed
Bittern	<i>Botaurus stellaris</i>	BAmb, SPI, LPS, BD1
Cattle Egret	<i>Bubulcus ibis</i>	BAmb
Goldeneye	<i>Bucephala clangula</i>	BRed
Lapland Bunting	<i>Calcarius lapponicus</i>	BAmb

Common Species	Latin Name	Designation
Sanderling	<i>Calidris alba</i>	BAmb
Dunlin	<i>Calidris alpina</i>	BRed
Knot	<i>Calidris canutus</i>	BAmb
Curlew sandpiper	<i>Calidris ferruginea</i>	BAmb
Ruff	<i>Calidris pugnax</i>	Sch1, BD1
Cetti's warbler	<i>Cettia cetti</i>	Sch1,
Little ringed plover	<i>Charadrius dubius</i>	Sch1
Ringed plover	<i>Charadrius hiaticula</i>	BRed, LPS
Black tern	<i>Chlidonias niger</i>	Sch1
Greenfinch	<i>Chloris chloris</i>	BRed
Marsh harrier	<i>Circus aeruginosus</i>	Sch1, BAmb, BD1
Hawfinch	<i>Coccothraustes coccothraustes</i>	BRed, SPI
Stock dove	<i>Columba oenas</i>	BAmb
Wood pigeon	<i>Columba palumbus</i>	BAmb
Rook	<i>Corvus frugilegus</i>	BAmb
Cuckoo	<i>Cuculus canorus</i>	BRed, SPI, LPS
House martin	<i>Delichon urbica</i>	BRed, LPS
Girl bunting	<i>Emberiza cirlus</i>	BRed, SPI
Yellowhammer	<i>Emberiza citrinella</i>	BRed, SPI, LPS
Reed bunting	<i>Emberiza schoeniclus</i>	BAmb
Merlin	<i>Falco columbarius</i>	Sch1, BRed, BD1
Peregrine falcon	<i>Falco peregrinus</i>	Sch1, LPS, BD1
Hobby	<i>Falco subbuteo</i>	Sch1
Kestrel	<i>Falco tinnunculus</i>	BAmb
Pied flycatcher	<i>Ficedula hypoleuca</i>	BAmb
Brambling	<i>Fringilla montfringilla</i>	Sch1
Moorhen	<i>Gallinula chloropus</i>	BAmb
Oystercatcher	<i>Haematopus ostralegus</i>	BAmb
Mediterranean gull	<i>Ichthyaeetus melanocephalus</i>	Sch1, BAmb, BD1
Red-backed shrike	<i>Lanius collurio</i>	BRed, BD1
Herring gull	<i>Larus argentatus</i>	BRed, SPI
Caspian gull	<i>Larus cachinnans</i>	BAmb

Common Species	Latin Name	Designation
Common gull	<i>Larus canus</i>	BAmb
Lesser black-backed gull	<i>Larus fuscus</i>	BAmb
Iceland gull	<i>Larus glaucoides</i>	BAmb
Glaucous gull	<i>Larus hyperboreus</i>	BAmb
Great black-backed gull	<i>Larus marinus</i>	BAmb
Yellow-legged gull	<i>Larus michahellis</i>	BAmb
Little gull	<i>Larus minutus</i>	Sch1, SPI, LPS, BD1
Black tailed godwit	<i>Limosa limosa</i>	Sch1, BRed, SPI, LPS
Linnet	<i>Linaria cannabina</i>	BRed, SPI, LPS
Woodlark	<i>Lullula arborea</i>	Sch1, SPI, BD1
Common Scoter	<i>Melanitta nigra</i>	Sch1, BRed, SPI
Red-breasted merganser	<i>Mergus serrator</i>	BAmb
Red Kite	<i>Milvus milvus</i>	Sch1
Gannet	<i>Morus bassanus</i>	BAmb
Grey wagtail	<i>Motacilla cinerea</i>	BAmb
Yellow wagtail	<i>Motacilla flava</i>	BRed, SPI
Spotted flycatcher	<i>Muscicapa striata</i>	BRed, SPI, LPS
Curlew	<i>Numenius arquata</i>	BRed, SPI
Whimbrel	<i>Numenius phaeopus</i>	Sch1, BRed
Wheatear	<i>Oenanthe oenanthe</i>	BAmb
Osprey	<i>Pandion haliaetus</i>	Sch1, BAmb, BD1
Bearded tit	<i>Panurus biarmicus</i>	Sch1, LPS
House sparrow	<i>Passer domesticus</i>	BRed, SPI, LPS
Honey buzzard	<i>Pernis apivorus</i>	Sch1, BAmb, BD1
Black redstart	<i>Phoenicurus ochruros</i>	Sch1, BAmb, LPS
Common redstart	<i>Phoenicurus phoenicurus</i>	BAmb
Willow warbler	<i>Phylloscopus trochilus</i>	BAmb
Spoonbill	<i>Platalea leucorodia</i>	Sch1, BAmb, BD1
Snow bunting	<i>Plectrophenax nivalis</i>	BAmb
Grey Plover	<i>Pluvialis squatarola</i>	BAmb
Dunnock	<i>Prunella modularis</i>	BAmb, LPS
Manx shearwater	<i>Puffinus puffinus</i>	BAmb

Common Species	Latin Name	Designation
Bullfinch	<i>Pyrrhula pyrrhula</i>	BAmb, SPI
Avocet	<i>Recurvirostra avosetta</i>	Sch1, BAmb, BD1
Firecrest	<i>Regulus ignicapillus</i>	Sch1
Sand martin	<i>Riparia riparia</i>	LPS
Kittiwake	<i>Rissa tridactyla</i>	BRed
Whinchat	<i>Saxicola rubetra</i>	BRed
Woodcock	<i>Scolopax rusticola</i>	BRed
Arctic skua	<i>Stercorarius parasiticus</i>	BRed
Great skua	<i>Stercorarius skua</i>	BAmb
Little tern	<i>Sterna albifrons</i>	Sch1, BAmb, BD1
Common Tern	<i>Sterna hirundo</i>	BAmb, BD1
Arctic tern	<i>Sterna paradisaea</i>	BAmb, BD1
Sandwich tern	<i>Sterna sandvicensis</i>	BAmb, BD1
Turtle dove	<i>Streptopelia turtur</i>	Bred, SPI
Starling	<i>Sturnus vulgaris</i>	BRed, SPI, LPS
Dartford Warbler	<i>Sylvia undata</i>	Sch1, BAmb, BD1
Shelduck	<i>Tadorna tadorna</i>	BAmb, LPS
Spotted redshank	<i>Tringa erythropus</i>	BAmb
Wood sandpiper	<i>Tringa glareola</i>	Sch1, BAmb, BD1
Common sandpiper	<i>Tringa hypoleucos</i>	BAmb, LPS
Greenshank	<i>Tringa nebularia</i>	Sch1, BAmb
Green sandpiper	<i>Tringa ochropus</i>	Sch1, BAmb
Wren	<i>Troglodytes troglodytes</i>	BAmb
Redwing	<i>Turdus iliacus</i>	Sch1, BAmb
Song thrush	<i>Turdus philomelos</i>	BAmb, SPI, LPS
Fieldfare	<i>Turdus pilaris</i>	Sch1, BRed
Ring ouzel	<i>Turdus torquatus</i>	BRed, SPI
Mistle thrush	<i>Turdus viscivorus</i>	BRed, LPS
Barn owl	<i>Tyto alba</i>	Sch1
Guillemot	<i>Uria aalge</i>	BAmb
Lapwing	<i>Vanellus vanellus</i>	BRed, SPI, LPS

6. REFERENCES

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