

Habitats Regulations Assessment: The Arches Neighbourhood Plan

The Arches 'Chatham' Neighbourhood Forum (ACNF)

July 2021

Quality information

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1. Introduction

Scope of project

- 1.1 AECOM was appointed by The Arches 'Chatham' Neighbourhood Forum to undertake a Habitats Regulations Assessment (HRA) for The Arches 'Chatham' Neighbourhood Forum (ACNF). This is to inform the planning group and local council of Medway of the potential effects of the Arches 'Chatham' Neighbourhood Plan (ACNP) development on European Sites and how they are being, or should be, addressed in the draft NP.
- 1.2 The purpose of this report is to produce a clear assessment of the identified sites to advise which ones might be appropriate for allocation in the Plan, in particular whether they comply with National Planning Policy Guidance and the strategic policies of Medway's adopted and emerging Local Plan. This will help ACNF to ensure that the Neighbourhood Planning site selection process is robust and transparent and will meet the Basic Conditions considered by the Independent Examiner, as well as any potential legal challenges by developers and other interested parties.
- 1.3 The objective of this HRA is to identify if any particular site allocation proposed by in the ANCF have the potential to result in Likely Significant Effects (LSEs) and, potentially, cause an adverse effect on the integrity of European designated sites (Special Areas of Conservation, SACs, Special Protection Areas, SPAs, and Ramsar sites designated under the Ramsar convention), either in isolation or in combination with other plans and projects, and to determine whether site-specific or policy mitigation measures are required.

Legislation

- 1.4 The need for HRA is set out within the Conservation of Habitats & Species Regulations 2017 (as amended) and concerns the protection of European sites. European sites can be defined as actual or proposed/candidate Special Areas of Conservation (SAC) or Special Protection Areas (SPA). It is also Government policy for sites designated under the Convention on Wetlands of International Importance (Ramsar sites) to be treated as having equivalent status to European sites.
- 1.5 The HRA process applies the precautionary principle to protected areas. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

Conservation of Habitats and Species Regulations 2017 (as amended)

With specific reference to Neighbourhood Plans, Regulation 106(1) states that:

"A qualifying body which submits a proposal for a neighbourhood development plan must provide such information as the competent authority [the Local Planning Authority] may reasonably require for the purpose of the assessment under regulation 105... [which sets out the formal process for determination of 'likely significant effects' and the appropriate assessment']."

Box 1: The legislative basis for HRA

- 1.6 It is therefore important to note that this report has two purposes:
 - To assist ACNF in preparing their plan by recommending (where necessary) any adjustments required to protect European sites, thus making it more likely their plan will be deemed compliant with the Conservation of Habitats and Species Regulations 2017 (as amended); and
 - On behalf of ACNF, to assist the Local Planning Authority (in this case Medway Council) to discharge their duty under Regulation 105 (in their role as 'plan-making authority' within the meaning of that regulation) and Regulation 106 (in their role as 'competent authority').
- 1.7 As 'competent authority', the legal responsibility for ensuring that a decision of 'likely significant effects' is made, for ensuring an 'appropriate assessment' (where required) is undertaken, and for ensuring Natural England are

consulted, falls on the local planning authority. However, they are entitled to request from the Qualifying Body the necessary information on which to base their judgment and that is a key purpose of this report.

1.8 Over the years, 'Habitats Regulations Assessment' (HRA) has come into wide currency to describe the overall process set out in the Habitats Regulations, from screening through to identification of IROPI. This has arisen in order to distinguish the overall process from the individual stage of "Appropriate Assessment". Throughout this Report the term HRA is used for the overall process and restricts the use of Appropriate Assessment to the specific stage of that name.

2. Methodology

Introduction

2.1 Figure 1 below outlines the stages of HRA according to current Ministry of Housing, Communities and Local Government guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations, and any relevant changes to the Plan until no significant adverse effects remain.

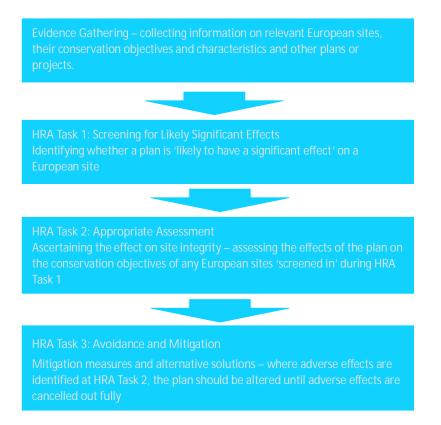


Figure 1: Four Stage Approach to Habitats Regulations Assessment. Source GOV.UK, 2019.

HRA Task 1 – Likely Significant Effects (LSEs)

2.2 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Likely Significant Effect (LSE) test - essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

" Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

2.3 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Chapter 4 of this report.

HRA Task 2 – Appropriate Assessment (AA)

2.4 Where it is determined that a conclusion of 'no likely significant effect' cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'appropriate assessment' is

<u>not</u> a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to appropriate assessment rather than determination of likely significant effects.

- 2.5 During July 2019 the Ministry of Housing, Communities and Local Government published guidance for Appropriate assessment¹. Paragraph: 001 Reference ID: 65-001-20190722m explains: 'Where the potential for likely significant effects cannot be excluded, a competent authority must make an appropriate assessment of the implications of the plan or project for that site, in view of the site's conservation objectives. The competent authority may agree to the plan or project only after having ruled out adverse effects on the integrity of the habitats site. Where an adverse effect on the site's integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured'.
- 2.6 As this analysis follows on from the screening process, there is a clear implication that the analysis will be more detailed than undertaken at the Screening stage and one of the key considerations during appropriate assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the appropriate assessment takes any policies or allocations that could not be dismissed following the high-level screening analysis and analyses the potential for an effect in more detail, with a view to concluding whether there would be an adverse effect on integrity (in other words, disruption of the coherent structure and function of the European site(s)).
- 2.7 A decision by the European Court of Justice² concluded that measures intended to avoid or reduce the harmful effects of a proposed project on a European site may no longer be taken into account by competent authorities at the Likely Significant Effects or 'screening' stage of HRA. The UK is no longer part of the European Union. However, as a precaution, it is assumed for the purposes of this HRA that EU case law regarding Habitat Regulations Assessment will still be considered informative jurisprudence by the UK courts. That ruling has therefore been considered in producing this HRA.
- 2.8 Also, in 2018 the Holohan ruling³ was handed down by the European Court of Justice. Among other provisions paragraph 39 of the ruling states that 'As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, ... typical habitats or species must be included in the appropriate assessment, <u>if they are necessary to the conservation of the habitat types and species listed for the protected area</u>' [emphasis added]. This has been taken into account in the HRA process.

HRA Task 3 – Avoidance and Mitigation

- 2.9 Where necessary, measures are recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. There is considerable precedent concerning the level of detail that a Neighbourhood Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.10 In evaluating significance, AECOM has relied on professional judgement and the LP HRA regarding development impacts on the European sites considered within this assessment.
- 2.11 When discussing 'mitigation' for a Neighbourhood Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the Local Development Plan document is a high-level policy document. A Neighbourhood Plan is a lower level constituent of a Local Plan or Core Strategy.

Confirming Other Plans and Projects That May Act 'In Combination'

2.12 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question. The Medway Local Plan sets out to have a combination of 29,500 new homes within the district by 2035, focusing primarily on regenerating brownfield sites with half the growth aimed to be on urban sites. A rural town and some

¹ <u>https://www.gov.uk/guidance/appropriate-assessment#what-are-the-implications-of-the-people-over-wind-judgment-for-habitats-regulations-assessments</u> [Accessed: 07/01/2020].

² People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

³ Case C-461/17

village expansions on the Hoo Peninsula would provide for the improvements in infrastructure to support a wide mix of development. These areas could meet over a third of the growth needed. About a sixth of development would be spread across sites in suburban areas and smaller villages. Previous stages of consultation on the Medway Local Plan referred to the possible use of land at Lodge Hill for a new settlement on the Hoo Peninsula. This involved development on land designated as Site of Special Scientific Interest (SSSI) for its environmental importance. The proposal related to a planning application, which has now been withdrawn.

- 2.13 In considering the potential for combined regional housing development to impact on European sites the primary consideration is the impact of visitor numbers i.e. recreational pressure and urbanisation.
- 2.14 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plans (which in themselves may have minor impacts) are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in-combination assessment is therefore of greatest relevance when the plan or policy would otherwise be screened out because its individual contribution is inconsequential.

3. Internationally Designated Sites

- 3.1 In the case of the ACNF, it has been determined that the European sites identified in Table 1 require consideration.
- 3.2 The locations of the below European sites in relation to the ACNF boundary and allocated sites are illustrated in Appendix A, Figure 1A.

Table 1. European Sites for Consideration and their Location in Relation to The Arches 'Chatham' Neighbourhood Plan

European site	Location	
Medway Estuary & Marshes SPA Ramsar	Located c.2.7km from ACNF boundary (The Arches 'Chatham') (within Medway District)	
Peters Pit SAC	Located c.5.4km from ACNF boundary (The Arches 'Chatham')	
Queendown Warren SAC Located c.6.2km from ACNF boundary (The Arches 'Ch		
Thames Estuary & Marshes SPA Ramsar	Located c.7.2km from ACNF boundary (The Arches 'Chatham')	
North Downs Woodlands SAC	Located c.8.4km from ACNF boundary (The Arches 'Chatham')	
The Swale SPA/Ramsar	Located c.13km from ACNF boundary (The Arches 'Chatham')	

Source: https://magic.defra.gov.uk/MagicMap.aspx

3.3 The reason for designation, conservation objectives and environmental vulnerabilities of the European sites are detailed below.

Medway Estuary & Marshes SPA, Ramsar

Introduction

- 3.4 The Medway Estuary SPA and Ramsar site is located along the North Kent Coast within the Thames Estuary, approximately 2.6km north east of the Chatham NP boundary.
- 3.5 The Ramsar information Sheet describes the site as a 'complex of rain-fed, brackish, floodplain grazing marsh with ditches, and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. Rare wetland birds breed in important numbers. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.'

SPA Reasons for Designation⁴

- 3.6 The site is designated for the following Criteria:
- 3.7 The Medway Estuary and Marshes qualifies under Article 4.1 of the EC Birds Directive by supporting in summer nationally important breeding populations of avocet (*Recurvirostra avosetta*) (28 pair, 7% British breeding population) and little tern (*Sterna albifrons*) (24 pairs, 1% British breeding population) both Annex 1 species
- 3.8 The site also qualifies under Article 4.1 by regularly supporting a nationally important wintering population of avocet. During the five year period 1986/87 to a990/91, the average peak count was 70 birds, representing 7% of the British population.
- 3.9 The site also qualifies under Article 4.2 as a wetland of international importance by virtue of regularly supporting over 20000 waterfowl with an average peak count of 53900 birds recorded in the five winter period 1986/87 to 1990/91 This total includes internationally or nationally important wintering population of the following migratory waterfowl (figures given are average peak counts for the five winter period 1986/87 to 1990/91): dark-bellied brent geese (*Branta bernicla bernicla*, shelduck (*Tadorna tadorna*), pintail, (*Anas acuta*), ringed plover (*Charadrius hiaticula*), grey plover (*Pluvialis squatarola*), knot (*Calidris canutus*), dunlin (*Calidris alpina*), redshank (*Tringa totanus*), great crested grebe (*Podiceps cristatus*), Wigeon (*Anas Penelope*), teal (*Anas crecca*), shoveler (*Anas*)

⁴untitled (jncc.gov.uk) [accessed 17/06/2021]

clypeata), oystercatcher (*Haematopus ostralegus*), black tailed godwit (*Numenius arquata*), spotted redhank (*Tringa erythropus*), greenshank (*Tringa nebulria*) and turnstone (*Arenaria interpres*).

- 3.10 The Site also qualifies under Article 4.2 by virtue of regularly supporting in summer a diverse assemblage of breeding migratory waterfowl including oystercatcher (*Haematopus ostralegus*), lapwing (*Vanellus vanellus*), ringed plover (*Charadrius hiaticula*), redshank (*Tringa totanus*), shelduck (*Tadorna tadorna*), mallard (*Anas platyrhynchos*), Teal (*Anas Penelope*), shoeveler (*Anas clypeata*), Pochard (*Aythya farina*) and common tern (*Sterna hirundo*).
- 3.11 The site also qualifies under Article 4.2 by virtue of regularly supporting in winter a diverse assemblage of wintering species including red throated diver (*Gavia stellate*), great crested grebe (*Podiceps cristatus*), cormorant (*Phalacrocorax carbo*), shelduck (*Tadorna tadorna*), mallard (*Anas platyrhynchos*), teal (*Anas crecca*), Shoveler (*Anas clypeata*), Pochard (*Aythya farina*), oystercatcher (*Haematopus ostralegus*), ringed plover (*Charadrius hiaticula*), dunlin (*Calidris alpine*) and redshank (*Tinga totanus* and also the following Annex 1 species: Bewick's swan(*Cygnus columbianus bewickil*), hen harrier (*Circs cyaneus*), merlin (*Falco columbarius*) golden plover (*Pluvialis apricaria*), short eared owl (*Asio flammeus*) and kingfisher (*Alcedo atthis*).

Ramsar Reasons for Designation

3.12 The site is designated as a Ramsar site for the same reasons it is designated as an SPA but is also designated as a Ramsar site because it supports a number of species of rare plants and animals. The site holds several nationally scarce plants, including sea barley *Hordeum marinum*, curved hard-grass *Parapholis incurva*, annual beard-grass *Polypogon monspeliensis*, Borrer's saltmarsh-grass *Puccinellia fasciculata*, slender hare's-ear *Bupleurum tenuissimum*, sea clover *Trifolium squamosum*, saltmarsh goose-foot *Chenopodium chenopodioides*, golden samphire *Inula crithmoides*, perennial glasswort *Sarcocornia perennis* and one-flowered glasswort *Salicornia pusilla*. A total of at least twelve British Red Data Book species of wetland invertebrates have been recorded on the site. A significant number of non-wetland British Red Data Book species also occur.

Conservation Objectives⁵

- 3.1 "With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;"
- 3.2 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;
 - The extent and distribution of the habitats of the qualifying features
 - The structure and function of the habitats of the qualifying features
 - The supporting processes on which the habitats of the qualifying features rely
 - The population of each of the qualifying features, and,
 - The distribution of the qualifying features within the site.

Current Pressures and Threats⁶

- 3.3 The Site Improvement Plan identifies the following pressures and threats to the SPA and Ramsar:
 - Environmental Pressures
 - Coastal Squeeze
 - Public access/disturbance
 - Invasive species
 - Changes in species distribution
 - Fisheries: Commercial marine and estuarine
 - Vehicles: illicit

⁵ <u>untitled (jncc.gov.uk)</u> [accessed 17/06/2021]

⁶ publications.naturalengland.org.uk/file/5760073666134016 [accessed 13/07/2021]

Peters Pit SAC

Introduction

3.4 Peter's Pit is an old chalk quarry with adjoining soil-stripped fields on the North Downs, with scattered ponds situated amongst grassland, scrub and woodland. The ponds have widely fluctuating water levels and support large breeding populations of great crested newt *Triturus cristatus*.

Reason for Designation⁷

- 3.5 The site is designated the following Criteria:
- 3.6 The site has an undulating terrain in which many rain fed ponds, of various sizes, have developed. Those which dry up early in the season are of less interest, but five ponds are sufficiently large to support very substantial populations of amphibians, particularly the great crested newt. The value of the site for newts is enhanced by the presence, around the edges and between the ponds, of areas of scrub with loose rock which serve as day and winter refuges. Aquatic vegetation provides shelter in the pond environment.
- 3.7 Qualifying species: The site is designated under article 4 of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:
 - Great crested newt Triturus cristatus

Conservation Objectives[®]

- 3.8 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;
 - The extent and distribution of the habitats of the qualifying features
 - The structure and function of the habitats of the qualifying features
 - The supporting processes on which the habitats of the qualifying features rely
 - The population of each of the qualifying features, and,
 - The distribution of the qualifying features within the site

Environmental Pressures⁸

3.9 None identified in the Site Improvement Plan.

Queendown Warren SAC

Introduction

3.10 Queendown Warren is a nature reserve made up primarily of dry grassland steppes and broad-leaved deciduous woodland with small amounts of heath, scrub, maquis and garrigue. The site habitats allow for populations of various orchids.

⁷ Peter's Pit - Special Areas of Conservation (jncc.gov.uk) [assessed 17/06/2021]

⁸ publications.naturalengland.org.uk/file/4886180921344000 [assessed 13/07/2021]

Reason for Designation•

- 3.11 The site is designated the following Criteria:
 - This site hosts the priority habitat type "orchid rich sites". Queendown Warren consists of CG3 *Bromus erectus* grassland. It contains an important assemblage of rare and scarce species, including early spider-orchid *Ophrys sphegodes*, burnt orchid *Orchis ustulata* and man orchid *Aceras anthropophorum*.

Conservation Objectives¹⁰

- 3.12 "With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 3.13 Ensure that the integrity of the site is maintained or restored as appropriate, and *ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*
 - The extent and distribution of qualifying natural habitats
 - The structure and function (including typical species) of qualifying natural habitats, and the supporting processes on which qualifying natural habitats rely"

Current Pressures, Threats and Historic Trends¹⁰

- Species decline
- Habitat fragmentation
- Air quality: risk of atmospheric nitrogen deposition

Thames Estuary & Marshes SPA, Ramsar

Introduction

3.14 Thames Estuary & Marshes SPA, Ramsar lies along the east coast of England in the southern North Sea and extends northward from the Thames Estuary to the sea area off Great Yarmouth on the East Norfolk Coast. The foraging areas protected for little tern and common tern, enhance the protection afforded to their feeding and nesting areas in the adjacent coastal SPAs (Foulness SPA, Breydon Water SPA and Minsmere to Walberswick SPA). The Outer Thames Estuary SPA overlaps with a Special Area of Conservation that has been identified for the protection of Harbour porpoise – the Southern North Sea SAC. Thames Estuary SPA is classified for the protection of the largest aggregation of wintering red-throated diver (*Gavia stellata*) in the UK, an estimated population of 6,466 individuals, which is 38% of the wintering population of Great Britain.

Reason for Designation

- 3.15 Qualifying features for designation are:
 - Circus cyaneus; Hen harrier (Non-breeding)
 - Recurvirostra avosetta; Pied avocet (Non-breeding)
 - Charadrius hiaticula; Ringed plover (Non-breeding)
 - *Pluvialis squatarola*; Grey plover (Non-breeding)
 - Calidris canutus; Red knot (Non-breeding)
 - Calidris alpina alpina; Dunlin (Non-breeding)
 - Limosa limosa islandica; Black-tailed godwit (Non-breeding)

⁹ <u>Oueendown Warren - Special Areas of Conservation (jncc.gov.uk)</u> [accessed 17/06/2021]

¹⁰ <u>http://publications.naturalengland.org.uk/file/5485982457528320</u> [accessed 13/07/2021]

¹¹ Outer Thames Estuary SPA | JNCC - Adviser to Government on Nature Conservation [accessed 21/06/2021]

- Tringa totanus; Common redshank (Non-breeding)
- Waterbird assemblage

Ramsar Reasons for Designation

3.16 The site is designated as a Ramsar site for the same reasons it is designated as an SPA but is also designated as a Ramsar site because it supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates

Conservation Objectives¹²

- 3.17 "The site's conservation objectives apply to the site and the individual species and/or assemblage of species for which the site has been classified (the "Qualifying features" listed above).
- 3.18 The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:
 - The extent and distribution of the habitats of the qualifying features
 - the structure and function of the habitats of the qualifying features
 - the supporting processes on which the habitats of the qualifying features rely
 - the populations of each of the qualifying features
 - the distribution of qualifying features within the site"

Current Pressures and Threats13

- Low levels of winter disturbance (from both noise and visual presence);
- Low risk of direct bird strike from wind turbines;
- Good water quality
- Limited dredging
- Coastal Squeeze; and
- Public access/disturbance.

North Downs Woodlands SAC

Introduction

North Downs Woodlands SAC is an area made up primarily of broad-leaved deciduous woodland, with included coniferous woodland and dry grassland steppes.

Reason for Designation¹⁴

- 3.19 Qualifying features for designation include:
 - *Taxus baccata* woods of the British Isles. (Yew-dominated woodland)
 - Asperulo-Fagetum beech forests. (Beech forests on neutral to rich soils)
 - Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*). (Dry grasslands and scrublands on chalk or limestone

13 http://publications.naturalengland.org.uk/file/5485982457528320 [accessed 13/07/2021]

¹²https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9020309&S%20iteName=outer%20thames&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&%20NumMarineSeasonality=3&SiteNameDisplay=Outer%20Thames%20Estuary%20SPA#hlco [accessed 21/06/2021]

¹⁴https://sac.jncc.gov.uk/site/UK0030225 [accessed 21/06/2021]

Conservation Objectives¹⁵

- 3.20 "With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 3.21 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
 - The extent and distribution of the habitats of the qualifying features
 - the structure and function of the habitats of the qualifying features, and
 - the supporting processes on which the habitats of the qualifying features rely"

Current Pressures and Threats¹⁶

- Public access/ disturbance
- Forestry and woodland management
- Invasive species
- Air pollution: impact of atmospheric nitrogen deposition

The Swale SPA/Ramsar

Introduction

3.22 The Swale SPA/Ramsar is an extensive complex of mudflats, saltmarsh and freshwater grazing marsh, an estuarine channel, and areas of shingle, shell and sand beaches and mussel beds. The saltmarshes and mudflats support a high species diversity of plants and invertebrates, including several nationally rare species. The area is of national importance for various breeding, passage and wintering ducks and waders, and regularly supports internationally important numbers of numerous species of wintering water birds.

Reason for Designation¹⁷

3.23 Qualifying features for designation include:

During the breeding season:

- Avocet Recurvirostra avosetta
- Marsh Harrier Circus aeruginosus
- Mediterranean Gull Larus melanocephalus

Over winter:

- Avocet Recurvirostra avosetta
- Bar-tailed Godwit *Limosa lapponica*
- Golden Plover Pluvialis apricaria
- Hen Harrier Circus *cyaneus*
- Black-tailed Godwit Limosa limosa islandica
- Grey Plover Pluvialis squatarola
- Knot Calidris canutus
- Pintail Anas acuta
- Redshank Tringa totanus

¹⁵<u>http://publications.naturalengland.org.uk/file/5579173532008448</u> [accessed 21/06/2021]

¹⁶ http://publications.naturalengland.org.uk/publication/6363401429188608 [accessed 13/07/2021]

¹⁷ http://publications.naturalengland.org.uk/file/4517156041523200 [accessed 21/06/2021]

- Shoveler Anas clypeata
- Dark-bellied Brent goose Branta bernicla bernicla
- Dunlin Calidris alpina alpina

On passage:

- Ringed Plover *Charadrius hiaticula*
- 3.24 The SPA also qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl (Over winter, the area regularly supports 65,390 individual waterfowl (5 year peak mean 1991/2 1995/6))
- 3.25 The Ramsar information sheet states that The Swale comprises, "A complex of brackish and freshwater, floodplain grazing marsh with ditches, and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. Rare wetland birds breed in important numbers. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates"¹⁸.
 - Ramsar criterion 2: The site supports nationally scarce plants and at least seven British Red data book invertebrates.
 - Ramsar criterion 5: Assemblages of international importance: Species with peak counts in winter: 77501 waterfowl (5 year peak mean 1998/99-2002/2003).
 - Ramsar criterion 6: Species/populations occurring at levels of international importance.

Species with peak counts in spring/autumn:

• Common redshank *Tringa totanus tetanus*

Species with peak counts in winter:

- Dark-bellied brent goose Branta bernicla bernicla
- Grey plover *Pluvialis squatarola* -wintering

Conservation Objectives¹⁹

- 3.26 "With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;
- 3.27 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;
 - The extent and distribution of the habitats of the qualifying features
 - the structure and function of the habitats of the qualifying features,
 - the supporting processes on which the habitats of the qualifying features rely
 - the population of each of the qualifying features, and,
 - the distribution of the qualifying features within the site."

Current Pressures and Threats²⁰

- Coastal squeeze
- Public access/ disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine

¹⁸ <u>https://jncc.gov.uk/jncc-assets/RIS/UK11071.pdf</u> [accessed 21/06/2021]

¹⁹ <u>http://publications.naturalengland.org.uk/file/4666133965963264</u> [accessed 21/06/2021]

²⁰ http://publications.naturalengland.org.uk/file/5485982457528320 [accessed 13/07/2021]

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- Vehicles: illicit
- Air pollution: risk of atmospheric nitrogen deposition

4. Test of Likely Significant Effects

Background to The Arches 'Chatham' Area

- 4.1 The Arches is The Arches Local area, which stretches across two local wards within the town of Chatham; it is an area which does not form a natural neighbourhood or community and could be described as a corridor shape. The "Arches" form part of both the Big Local and Neighbourhood Plan area name it was chosen by a range of local residents as the area roughly in the centre of the geographical map of both is the Luton Arches Railway Arches.
- 4.2 The town of Chatham is located within the Medway unitary authority, in North Kent, in South East England. Its population was 76,792 at the 2011 Census. Chatham is situated where the lower part of the dip slope of the North Downs meets the River Medway which at this point is flowing in a south–north direction.

Physical scope of the HRA

- 4.3 There are no standard criteria for determining the ultimate physical scope of an HRA. Rather, the source-pathwayreceptor model should be used to determine whether there is any potential pathway connecting development to any European sites.
- 4.4 The European sites that are described Section 3 are located within a 10km radius of the ACNF area: Medway Estuary & Marshes SPA Ramsar (2.7km north from ACNF boundary within the Medway Parish boundary), Peters Pit SAC (5.4km south east from ACNF boundary), Queendown Warren SAC (6.2km east from ACNF boundary), Thames Estuary & Marshes SPA Ramsar (7.2km north from ACNF boundary), North Downs Woodlands SAC (8.4km west from the ACNF boundary), The Swale SPA/Ramsar (13km north east from ACNF boundary).
- 4.5 Based upon Natural England Site Improvement Plans and ecological knowledge of the designated sites, there are several impact pathways that require consideration regarding increased development within the ACNF area and said European sites. These are:
 - Recreational pressure;
 - Air quality and atmospheric pollution;
 - Loss of functionally linked habitat;
 - Water quality (surface water runoff and discharge of treated sewage effluent).
- 4.6 Table 2 describes these environmental impact pathways. The consideration of Neighbourhood Plan policies (the Test of Likely Significant Effects) is then documented in Table 3.

Table 2. Description of potential impact pathways from increased development to European Sites.

Impact pathway	Discussion
Water quality (surface water runoff)	Increased residential development within The Arches could theoretically lead to increased surface water runoff to nearby European Sites. Medway Estuary & Marshes SPA/Ramsar, Thames Estuary & Marshes SPA/Ramsar and The Swale SPA/Ramsar are located north east of the ACHF boundary. However, Medway Estuary & Marshes SPA/Ramsar, Thames Estuary & Marshes SPA/Ramsar and The Swale SPA/Ramsar are all over 50km ² so surface area runoff will likely have little effect. Changes in water quality due to surface water runoff has therefore been screened out.21 Furthermore, the closest European site (the Medway Estuary & Marshes SPA/Ramsar) lies approx. 2.7km from the NP area. Surface water run-off is unlikely to significantly impact water quality beyond 1km distance, due to the biological attenuation and dilution processes involved. Moreover, it is illegal to pollute watercourses irrespective of designation, under the Environmental Damage (Prevention and Remediation) (England) Regulations 2015 and the Environmental Permitting (England and Wales) Regulations 2016. This impact pathway can therefore be screened out.
Water quality (discharge of	Increased housing development within the ACNF area could lead to increased sewage production. Therefore, it is necessary to consider any risk that increased sewage could degrade the water quality (i.e. through increased phosphorus discharge) of European Sites, in the absence of environmental mitigation and adequate wastewater treatment works. Currently, treated sewage effluent is discharged into the Mersey Estuary and additional development could increase this net discharge.
treated sewage effluent)	Wastewater treatment within the District is currently handled by Chatham-Kent Public Utilities Commission. There are future plans to invest in wastewater treatment and sustainability and have the capacity to accommodate the additional allocated sites and housing numbers proposed within the ACNF. Moreover, the European site is too far from Dartford for there to be a realistic surface water pathway connection. Moreover, the estuaries of the Greater Thames have a high sediment load, low water temperatures and high wave action. As such, smothering macroalgal growth, which has caused issues for European sites on the south coast, is not considered a threat to achievement of conservation objectives for these European sites. The lower water temperatures and high sediment load restrict algal growth rates such that large algal mats tend not to develop, while the high wave action breaks up those mats that do accrete. Changes in water quality as a result of the discharge of sewage effluent has therefore been screened out.
Air quality	Increased residential development would likely lead to a greater number of vehicles within the ACNF area. As such, increased air pollution could arise relative to a situation of no growth. Pollutants released from vehicles may be carried directly by wind currents and deposited to the Medway Estuary & Marshes SPA/Ramsar, Thames Estuary & Marshes SPA/Ramsar and The Swale SPA/Ramsar or pollutants may become soluble and taken up during evaporation and deposited to said sites during precipitation. New developments would primarily increase traffic on local residential streets and commuting routes such as the A2. Guidance from the Institute of Air Quality Management and Highways England both set an impact zone of 200m from the roadside for potential significant air quality effects to vegetation from main road traffic ²² . As such, traffic-related air quality is only an issue where significant roads pass within 200m of a site. Queendown Warren SAC lies over 200m from any roads likely to be significant journey to work routes for residents of Chatham.
	The nearest point at which a significant road (the A229) lies within 200m of North Downs Woodlands SAC is 6km from Chatham, and the road lies 160m from the SAC at its closest and is separated from it by the Channel Tunnel Rail Link. As such, only 600m ² of the North Downs Woodlands SAC (0.02% of the total area) lies within 200m of the A229 and it is sufficiently far from the SAC that the influence of the road on air quality will have reduced with distance from the road to a minimal level. Moreover, paragraph 48 of Advocate-General Sharpston's Opinion in European Court of Justice Case C-258/11 states that [emphasis added]: <i>'the requirement for an effect to be 'significant' exists in order to lay down a de minimis threshold. Plans and projects</i>

 ²¹ Water Resources Management Plan (unitedutilities.com) [accessed 20/04/2021]
 ²² <u>air-quality-impacts-on-nature-sites-2020.pdf (iaqm.co.uk)</u> [accessed 20/04/2021]

Impact pathway	Discussion
	that have no appreciable effect on the site can therefore be excluded. If all plans and projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill'. Given the distance of the Neighbourhood Plan area from the SAC, the small amount of growth provided in the plan, and the distance of the SAC from the A229, it is considered that the Neighbourhood Plan will not have an appreciable effect on the SAC. Therefore, likely significant effects can be ruled out for this European Site as a result of air quality.
	The Medway Estuary & Marshes SPA / Ramsar lies within approx. 50m of the A289 and includes an area of saltmarsh habitat approx. 170m of that same road. There is also an area of saltmarsh habitat approx. 50m from the A228 to the west if the Isle of Grain. Both these roads are within Medway District and lie adjacent to significant employment opportunities. According to the Site Relevant Critical Load tool on APIS, six interest features of Medway Estuary & Marshes SPA/Ramsar site that roost in saltmarsh have some limited sensitivity to nitrogen deposition (great crested grebe, wigeon, curlew, brent goose, black-tailed godwit and pied avocet). However, their principal habitat is naturally relatively nitrogen rich and has a high critical load of 20-30 kgN/ha/yr. According to the UK Air Pollution Information System (www.apis.ac.uk) the maximum background deposition at the SPA/Ramsar site is 11.3 kgN/ha/yr which is significant effect is likely to occur and has therefore been screened out.
Recreational pressure	Increased development within the ACNF area could lead to higher numbers of visitors to European Sites, particularly those within relatively easy recreational access. For example, the nature, scale, timing and duration of some human activities can result in the disturbance of birds at a level that may substantially affect their behaviour, and consequently affect the long-term viability of the population. It is long standing knowledge that the European Sites located in Kent and the south-east are attractive to visitors on a county, national and in some cases international level. Increased visitors can have direct and indirect impacts for a European Site that could prevent said site achieving its conservation objectives. The relevant European Sites impacted by recreational pressure are the Medway Estuary & Marshes SPA/Ramsar, Thames Estuary & Marshes SPA/Ramsar and The Swale SPA/Ramsar. These sites are therefore screened in for the impact pathway of recreational pressure.
	Furthermore, an increase in the local population may also lead to higher visitor numbers in European sites designated for sensitive habitats and plant species. For example, recreational trampling can lead to soil compaction around and damage to tree roots. Off-track recreation can directly damage orchids, particularly at key times of seed germination, reducing overall plant cover. As such, both the Queendown Warren SAC and the North Downs Woodland SAC require consideration. The Site Improvement Plan for North Downs Woodlands SAC specifies the nature of recreational pressure at this SAC refers to off-road vehicles and all-terrain bikes, not footfall, and steps are already being taken to secure site access points to curb this issue. The Site Improvement Plan for Queendown Warren SAC does not indicate recreational pressure is a concern for the SAC and the site is not easy to access from Chatham, being accessible only from minor roads and with a small car park that will inherently limit the number of people who visit the site at a time. Therefore, it is considered that no likely significant effects will arise on either SAC from new housing in Chatham.
Loss of Functionally Linked Habitats (FLH)	While most internationally designated sites have been geographically defined in order to encompass the key features that are necessary for coherence of their structure and function, this is not the case for all such sites. Due to the highly mobile nature of waterfowl, overwintering birds, breeding SPA and Ramsar birds in locations such as the North Kent Estuaries, it is inevitable that areas of habitat of crucial importance to the maintenance of their populations are outside the physical limits of the European site for which they are an interest feature. All allocated sites within the ACNF for development are on urban brownfield sites that are unsuitable as supporting habitat for the sensitive bird species within designated sites. The proposed development sites also lie outside of the suggested 500m range of great crested newts within Peters Pit SAC to be functionally linked. As such, no likely significant effect is likely to occur and has therefore been screened out.

Table 3. Screening assessment (likely significant effect) of the ACNP.

Policy	European Sites and Proximity to Policy Area	Brief summary	Screening outcome
PolicyE1: Encouraging new business	N/A	Policy describes proposals that provide new spaces or the right conditions for business to flourish will be supported.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Rather it sets out that development that meets certain criteria will be supported. Therefore, no impact pathways exist to European Sites.
PolicyE2: Mixed use development	N/A	Policy describes how new development in the neighbourhood centre should incorporate a mix of uses where possible, to ensure that all residents are within a 15-minute walk of their daily needs.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Rather it sets out that development that meets certain criteria will be supported. Therefore, no impact pathways exist to European Sites.
PolicyE3: Retail frontages	N/A	Policy describes how shop owners who want to improve the street in front of their shops -in order to create a pleasant space for customers and residents to spend time and improve the walkability on the street will be supported.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyE4: Healthy businesses	N/A	Policy describes that businesses that contribute to the health of the neighbourhood will be strongly supported. Unhealthy food takeaways must not be located within 400m of schools in the neighbourhood.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyHO1: Affordable housing	N/A	Policy describes that new developments must provide high quality, genuinely affordable housing which takes into consideration the local needs for tenure and size, and should incorporate them within the development boundary.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyHO2: Beautiful design	N/A	Policy states that new residential developments must be designed in line with the standards set out in the Design Code.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyHO3: Family housing	N/A	Policy states developments that remove family homes from the market will not be supported.	No likely Significant Effect. Screened out.

Policy	European Sites and Proximity to Policy Area	Brief summary	Screening outcome
			This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyHO4: Site allocation	e Medway Estuary & Marshes SPA/Ramsar (2.7km), Thames Estuary & Marshes SPA/Ramsar (7.2km) and The Swale SPA/Ramsar (13km)		Likely Significant Effect. Screened in regarding the impact pathways of recreational pressure on the North Kent estuaries European sites. Increased development within the ACNF area could lead to higher numbers of visitors to European Sites, particularly those within relatively easy recreational access. This would put increased pressure on the disturbance of birds at a level that may substantially affect their behaviour, and consequently affect the long-term viability of the populations. This policy allocates approx. 244 new homes over 12 potential sites.
PolicyHO5: HMO's	N/A	Policy describes the need for Homes of Multiple Occupancy (HMOs) to provide minimum space standards as set out in the Medway Housing Standards.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyHO6: Outdoor space	r N/A	Policy describes the requirement for all new developments to provide high quality outdoor space for use of occupants.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyBNE1: Public realm enhancement	N/A	Policy states that all new developments and street works should contribute to improving the public realm of the neighbourhood area.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyBNE2: Local green spaces	I N/A	Policy designates the following as Local Green Spaces: Luton Millennium Green. Town Hall Gardens. Luton Primary School Playing Fields & Forest area. Proposals that negatively affect these spaces will not be permitted.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.

Policy	European Sites and Proximity to Policy Area	Brief summary	Screening outcome
PolicyBNE3 Open spaces	N/A	Policy states that developments which provide new open spaces or enhance existing open spaces will be strongly supported. Developments which remove open or green spaces must replace elsewhere within the neighbourhood area.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyBNE4: Street trees	N/A	Policy states that existing trees in the neighbourhood area must be protected and maintained. Any tree that is removed must be replaced elsewhere.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyST1: Air quality	N/A	Policy states the developments and street improvements must show how they will contribute to the improvement of air quality in the area through zero emission energy, encouraging walking and the reduction of car dependency.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyST2: Safe routes for pedestrians	N/A	Policy states that historically, Chatham contains a network of alleyways that pedestrians would use to navigate the town. Proposals which revive these alleyways and which create new ones will be strongly encouraged.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyST3: Humanising Luton Road	N/A	Policy states that traffic management measures along Luton Road that minimise the impact of traffic – such as noise and air pollution – and improve safety, particularly for the most vulnerable road users, will be strongly encouraged.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyST4: Parking	N/A	Policy states that new developments should aim to be car- lite in form and function and should utilise opportunity parking and on-street parking where possible.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyST5: Active transport	N/A	Policy states that Proposals which enable active transport opportunities will be strongly supported, including those that provide improvements to walking and cycling infrastructure.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyCS1: Assets to community value	N/A	Policy states that the neighbourhood forum has identified several sites and buildings which should be protected for community use.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.

Policy	European Sites and Proximity to Policy Area	Brief summary	Screening outcome
PolicyCS2: Provision of sports facilities and play spaces		Policy states that proposals for the development of sports facilities and outdoor play spaces will be strongly supported.	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.
PolicyCS3: Luton Road shoppers car park, Go Outdoors and Bingo hall		significantly improve the provision of community spaces	No likely Significant Effect. Screened out. This is a development management policy and does not specifically allocate sites for development. Therefore, no impact pathways exist to European Sites.

5. Effects 'in Combination'

- 5.1 It is a requirement of the Conservation of Habitats and Species Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the internationally designated site(s) in question.
- 5.2 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plans which in themselves have minor impacts are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. The overall approach is to exclude the risk of there being unassessed likely significant effects in accordance with the precautionary principle. This was first established in the seminal Waddenzee²³ case.
- 5.3 For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects with potential for in combination likely significant effects are those schemes that have the following impact pathways: recreational pressure. The following plans have been assessed for their in-combination impact to interact with The Arches 'Chatham' Neighbourhood Plan:
 - Thames Water Resource Management Plan 2020 2100. Final adopted April 2020
 - Southern Water Water Resources Management Plan 2020 2070. Final adopted: December 2019
 - Thurrock Borough Council Core Strategy Local Plan 2011-2026. Final adopted 21 December 2011
 - Bexley Borough Council Core Strategy. Final adopted: 22 February 2012
 - Bromley Local Plan: Adopted January 2019
 - Sevenoaks District Council Core Strategy. Final adopted February 2011
 - Dartford Local Plan. Regulation 19 Local Plan being prepared for consultation
 - Medway Local Plan, currently being prepared
 - Swale Local Plan, Regulation 19 Local Plan consultation recently ended
 - Thanet Local Plan, adopted 2020
 - Gravesham Local Plan Core Strategy, September 2014
 - Kent Minerals and Waste Local Plan 2013 2030, adopted July 2019
 - Kent Local Transport Plan (LTP4): Delivering Growth without Gridlock 2016-2031. Final adopted August 2017
 - Environment Agency and Defra River Basin Management Plan Thames River Basin District, December 2015
- 5.4 It should be noted that, while the broad potential impacts of these other projects and plans will be considered, we do not propose carrying out full HRA on each of these plans we will however draw upon existing HRA that have been carried out for surrounding regions and plans.
- 5.5 With a view to screening likely significant effects, all impact pathways from The Arches 'Chatham' alone (other than recreational) were screened out due to a lack of either European site vulnerability, or a lack of a connection to growth in Medway borough. Therefore, the existence of other plans and projects promoting growth in other areas will not alter that assessment.

²³ Waddenzee case (Case C-127/02, [2004] ECR-I 7405)

- 6. With a view to screening likely significant effects, the impact pathway screened in was recreational pressure on designated sites, specifically recreational pressure in the North Kent Estuaries. This was primarily due to suggested development locations being around 2.7km from the closest access to the North Kent Estuary system, resulting in an increase in recreational pressure from the increased housing within the ACNF. This is all with addition to other housing developments planned in Dartford, Medway, Swale, Thanet and Gravesham Local Plans within 6km of the North Kent **Estuaries**. Appropriate Assessment
- 6.1 The law does not prescribe how an appropriate assessment should be undertaken or presented but the appropriate assessment must consider all impact pathways that have been screened in, whether they are due to policies alone or to impact pathways that arise in combination with other projects and plans. That analysis is the purpose of this section. The law does not require the 'alone' and 'in combination' effects to be examined separately provided all effects are discussed. The main impact pathways of concern to this HRA (recreational pressure, air quality and atmospheric pollution and water quality (surface water runoff and discharge of treated sewage effluent)) are inherently 'in combination' with neighbouring plans and projects. However, for completeness, potential impacts of the potential 244 net residential dwellings allocated within The Arches 'Chatham' Neighbourhood Plan area in isolation are also assessed. Water quality and air quality were screened out at the Screening stage due to a lack of linking impact pathways. Recreational pressure could not be screened out at the Screening stage and is therefore further discussed within the Appropriate Assessment.
- 6.2 The HRA screening exercise undertaken in Table 3 indicates one potential HO4 policy (Site allocation) that will encompass the 12 potential site allocations. These may have likely significant effects on the North Kent Estuaries European Sites due to recreational pressure. At the screening stage, the following potential housing allocations were screened in and require further assessment:
 - Former Go Outdoors.
 - 97-99 The Brook.
 - Arches View.
 - Bright Road.

- Dagmar Road.
- Garages off Lawn Close.
- Garages off Shipwrights Avenue. Union Place.
- The Brook and King Street land. 393 High Street.
- Pembroke Court car park.
- Luton Invicta Club Car Park.

Recreational pressure

- 6.3 There is growing concern over the cumulative impacts of recreation on key nature conservation sites in the UK, as most sites must fulfil conservation objectives while also providing recreational opportunity. Various research reports have provided compelling links between changes in housing and access levels and impacts on European protected sites^{24 25}. This applies to any habitat, but the additional recreational pressure from housing growth on destinations with water features is likely to be especially strong and some of the qualifying waterfowl are known to be sensitive to disturbance. Different European sites are subject to different types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects from recreation can be complex. HRAs of Plans tend to focus on recreational sources of disturbance as a result of new residents²⁶.
- 6.4 Human activity can affect organisms directly (e.g. loss of habitat or by causing species to flee) and indirectly (e.g. by damaging their habitat or reducing their fitness in less obvious ways e.g. stress). The most obvious direct effect is the loss of habitat as a result of increased visitors to a site (i.e. trampling). But human activity can also lead to much subtler behavioural (e.g. alterations in feeding behaviour, avoidance of certain areas and use of sub optimal areas etc.) and physiological changes to species (e.g. an increase in heart rate). While these are less noticeable, they might result in major population-level changes by altering the balance between immigration/birth and emigration/death²⁷.
- 6.5 At the screening stage (Table 2) three European Sites were identified that could be impacted by recreational pressure. These were the North Kent estuaries; Medway Estuary & Marshes SPA/Ramsar, Thames Estuary & Marshes SPA/Ramsar and The Swale SPA/Ramsar.
- 6.6 Impacts of recreational pressure for the North Kent estuaries would likely be through more indirect means such as disturbance of species. For example, the impact of bird disturbance has been particularly well studied. Much research concern stems from the fact that birds expend energy unnecessarily when disturbed and the time they spend responding to humans is time that is not spent feeding²⁸. Disturbance therefore risks increasing energy expenditure of birds while reducing their energy intake, which can adversely affect their 'condition' and ultimately their survival. Additionally, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they then must sustain a greater number of birds²⁹. Moreover, the more time a breeding bird spends disturbed from its nest, the more its eggs are likely to cool and the more vulnerable they, or any nestlings, are to predators. Recreational effects on ground-nesting birds are particularly severe, with many studies concluding that urban sites support lower densities of key species, such as nightjar³⁰ ³¹.
- 6.7 Evidence in the literature suggests that the magnitude of disturbance clearly differs between different types of recreational activities. For example, dog walking leads to a significantly higher reduction in bird diversity and abundance than hiking³². Scientific evidence also suggests that key disturbance parameters, such as areas of influence

²⁴ Liley D, Clarke R.T., Mallord J.W., Bullock J.M. 2006a. The effect of urban development and human disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths. Natural England / Footprint Ecology.

²⁵ Liley D., Clarke R.T., Underhill-Day J., Tyldesley D.T. 2006b. Evidence to support the appropriate Assessment of development plans and projects in south-east Dorset. Footprint Ecology / Dorset County Council.

²⁶ The RTPI report 'Planning for an Ageing Population' (2004) which states that 'From being a marginalised group in society, the elderly are now a force to be reckoned with and increasingly seen as a market to be wooed by the leisure and tourist industries. There are more of them and generally they have more time and more money.' It also states that 'Participation in most physical activities shows a significant decline after the age of 50. The exceptions to this are walking, golf, bowls and sailing, where participation rates hold up well into the 70s'.
²⁷ Riley, J. 2003. Review of Recreational Disturbance Research on Selected Wildlife in Scotland. Scottish Natural Heritage.

 ²⁸ Riddington, R. *et al.* 1996. The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* 43:269-279

 ²⁹ Gill, J.A., Sutherland, W.J. & Norris, K. 1998. The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* 12: 67-72

³⁰ Clarke R.T., Liley D., Sharp J.M., Green R.E. 2013. Building development and roads: Implications for the distribution of stone curlews across the Brecks. PLOS ONE. doi:10.1371/journal.pone.0072984.

³¹ Liley D., Clarke R.T. 2003. The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England. Biological Conservation 114: 219-230.

³² Banks P.B., Bryant J.Y. 2007. Four-legged friend or foe? Dog walking displaces native birds from natural areas. Biology Letters 3: 14pp.

and flush distance, are significantly greater for dog walkers than hikers³³. Previous visitor surveys suggest that important spatial (e.g. the area of a site potentially influenced) and temporal (e.g. how often or long an activity is carried out) parameters differ considerably between recreational activities, suggesting that activity type is a factor that should be taken into account in HRAs.

- 6.8 A study was undertaken in 2010/2011 by Footprint Ecology³⁴, who looked at bird disturbance in North Kent. The study focused on recreational disturbance to wintering waterfowl on intertidal habitats and focused on part of the North Kent shoreline, stretching between Gravesend and Whitstable; encompassing three SPAs: the Thames Estuary and Marshes SPA, the Medway Estuary and Marshes SPA and the Swale SPA. The key findings of the study are as follows:
 - From 1,400 events (records of visitors in the bird survey areas) occurring within 200m of the birds, 3,248 species specific observations were noted of which:
 - 74% resulted in no response.
 - 13% resulted in a major flight.
 - 5% resulted in a short flight.
 - 5% resulted in a short walk.
 - 3% resulted in an alert.
 - Dog walking accounted for 55% of all major flight observations with a further 15% attributed to walkers without dogs. After controlling for distance, major flights were more likely to occur when activities took place on the intertidal zone (compared to events on the water or events on the shore), when dogs were present, and the probability of major flight increased with the number of dogs present within a group.
 - There were significant differences between species with curlew *Numenius arquata* the species with the highest probability of major flight and teal and black-tailed godwit *Limosa limosa* the lowest.
 - Tide state was also significant with major flights more likely at high tide, after controlling for distance. There was also a significant interaction between distance and tide, indicating that the way in which birds responded varied according to tide.
- 6.9 All of the proposed housing sites allocated by the ACNF are within 4.5km of the Medway Estuary SPA/Ramsar. The closest site to the SPA boundary is FRO/0039, which is 2.3km away. Therefore, it is likely that residential development within the ACNF area will lead to increased visitors to the Mersey Estuary SPA/Ramsar, both alone and especially when considered in-combination with growth across Medway District and surrounding districts.
- 6.10 A visitor survey was undertaken at the same time as the aforementioned bird survey by Footprint Ecology.³⁵ The key findings of the survey are as follows:
 - 542 groups of visitors were interviewed representing information from 930 people with 502 dogs.
 - 65% (345) interviewed groups were accompanied by at least one dog.
 - 96% (521) interviewed groups were local residents who made their visit from home.
 - 70% of visitors who arrive by foot made their visits either daily or most days (in comparison to 31% who arrive by car).
 - 63% of visitors travelled to their visit location by car or van, 34% of visitors arrived by foot, 3% arrived by bicycle and 2% by public transport.
 - 50% of visitors who arrived by car lived within 4.2km of their visit location.
 - 23% of visitors stated they walked off the paths and onto the mudflats or the open beach. Of the 23% of visitors whose routes took them onto the mudflats 65% were accompanied by at least one dog.

³³ Miller S.G., Knight R.L., Miller C.K. 2001. Wildlife responses to pedestrians and dogs. 29: 124-132.

³⁴ D. Liley & H. Fearnley (2011). Bird Disturbance Study North Kent. Footprint Ecology

³⁵Fearnley, H. & Liley, D. (2011). North Kent Visitor Survey Results. Footprint Ecology.

- 6.11 The closest described points to the ACNF boundary are points 10 (Motney Hill turning), 11 (Riverside Country Park) and 12 (The Strand, Gillingham). Point 11, Riverside country park was the site with the largest number of people entering the site at 446 (over four times the next largest, point 10 with 110 people). The core recreational catchment is typically defined as by the 75th percentile of visitors. Sites 10, 11 and 12 have a core catchment for car-based visitors of 7.7km, 4.6km and 3.1km respectively, this would include the potential new developments within the ACNF and increase the already higher percentile of recreational visitors at these points.
- 6.12 The Medway District Local Plan States "Strategic Access Management and Mitigation Medway Council Interim Policy Statement"³⁶. This requires developments of 1 or more dwellings within 6km of the SPA's and Ramsar site zones to be screened for potential impacts on the SPAs and Ramsar sites and, if necessary, subject to full appropriate assessment. It sets out the following potential ways in which impacts could be mitigated:
 - The strategic package of mitigation and management measures was costed, and from this a tariff was calculated. It was recommended that the tariff should be applied to new development within 6km of the SPAs and Ramsar sites, addressing the impact from projected increases in the population of north Kent. This was established at £223.58 per new dwelling within the 6km buffer, based on an assumed increase of 35,000 dwellings in the area. The tariff will be used to fund complementary measures capable of addressing a 15% increase in visitor numbers. These include wardening, development of a code of conduct, targeted activities with dog owners, management of access and site works, and ongoing monitoring.
 - Provision of alternative greenspace/ bluespace within or close to the proposed development which provides a demonstrably suitable alternative to visiting the SPAs Ramsar sites
 - Availability of suitable alternative greenspace/ bluespace which may divert potential residents from visiting the SPAs/ Ramsar sites which could reduce or negate the need for tariff contributions.
- 6.13 "It is expected that development will avoid any adverse impacts on existing biodiversity features, including designated sites, priority habitats and species, and waterbodies. If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused ."
- 6.14 Neighbourhood planning must follow the policy framework set in overarching planning documents, such as Local Plans. It follows that the ACNP must be guided by policies set out in the adopted Medway Local Plan (MLP)³⁷. Policy BNE35 (International and National Nature Conservation Sites) stipulates that 'International and National Nature Conservation Sites) stipulates that 'International and National Nature Conservation Sites) stipulates that 'International and National Nature Conservation Sites, as defined on the proposals map, will be given long term protection: (i) classified and potential Special Protection Areas (SPAs); (ii) listed and proposed Ramsar sites...' The policy goes on to clarify that 'Development that would materially harm, directly or indirectly, the scientific or wildlife interest of these sites will not be permitted unless the development is connected with, or necessary to, the management of the site's wildlife interest.' By definition, this policy would ensure any residential development coming forward under the ACNP must not result in adverse recreational pressure effects on the North Kent SPAs Ramsars.
- 6.15 Policy BNE2 (Local green spaces) stipulates that "This plan designates the following as Local Green Spaces: Luton Millennium Green, Town Hall Gardens, Luton Primary School Playing Fields & Forest area. Proposals that negatively affect these spaces will not be permitted." This policy would ensure that current local green spaces are not degraded and so could act as suitable pressure relief for the North Kent Estuaries SPAs Ramsar's. This is further aided by Policy BNE3 (Open spaces) which stipulates that "Developments which provide new open spaces or enhance existing open spaces will be strongly supported." This policy the goes on to reference mitigation with "Developments which remove open or green spaces must replace them (including the function of the green space) elsewhere within the neighbourhood area." It is to be noted that the Medway Local Plan is currently being updated and it is likely that the policy framework addressing disturbance impacts on breeding / overwintering birds will be significantly strengthened in light of the updated evidence base (see recent Footprint Ecology work).
- 6.16 Several residential sites allocated in Policy HO4 fall within the 6km and wider 6-10km core recreational catchment zones of the North Kent SPAs Ramsars and will be subject to the identified mitigation requirements. To ensure compliance with Habitats and Species Regulations 2017 (as amended) and that Conservation Objectives will be met, AECOM recommends that additional protective policy is inserted to the next iteration of the NP. For example, a new policy could be added to the chapter 'Built and Natural Environment': *Policy BNE5 (Protection of Internationally Designated Sites) To ensure that recreational pressure effects on sites designated for overwintering and breeding birds are appropriately mitigated, residential development in the 6km and 6-10km core recreational catchment zones*

³⁶<u>https://www.medway.gov.uk/download/downloads/id/1852/strategic_access_management_and_mitigation.pdf</u> [Assessed 14/07/2021] ³⁷ Medway Local Plan. (Adopted May 2003). Available at: <u>https://www.medway.gov.uk/downloads/file/2400/medway_local_plan_2003</u> [Accessed on the 07/07/2021]

will need to contribute to the recreation mitigation strategy emerging for the North Kent SPAs Ramsars. All residential developments within 6km and larger developments (comprising 100+ dwellings) within 6-10km will need to contribute an agreed per-dwelling tariff towards Strategic Access Management and Monitoring in the European sites. Furthermore, larger developments are required to demonstrate the availability of or provide for alternative greenspace / bluespace to help absorb recreation pressure locally.'

6.17 If these additional policy wordings are included in the ACNP and considering the policies set out in the emerging Medway Local Plan, adverse impacts of the NP on the integrity of North Kent SPAs Ramsars regarding recreational pressure can be excluded.

7. Conclusions

- 7.1 This assessment undertook both Screening and Appropriate Assessment of the policies and the proposed allocations resulting from the Parish's Call for Sites.
- 7.2 The international designated sites considered within the Appropriate Assessment for impact pathways that could not be screened out at the screening stage were:

The North Kent estuaries;

- Medway Estuary & Marshes SPA/Ramsar,
- Thames Estuary & Marshes SPA/Ramsar and;
- The Swale SPA/Ramsar.
- 7.3 Impact pathways considered during the screening were: recreational pressure, loss of functionally linked habitat, air quality and water quality. Water quality, air quality and functionally linked habitat were screened out at the Screening stage due to a lack of linking impact pathways. Recreational pressure could not be screened out at the Screening stage and was therefore further discussed within the Appropriate Assessment.
- 7.4 Twelve potential Site Allocations to provide net new residential development were subject to Appropriate Assessment as they were located within the accepted zones of influence of the aforementioned international sites and could result in adverse effects on the integrity of an international site in combination with other projects and plans.
- 7.5 Following Appropriate Assessment, it is concluded that The Arches 'Chatham' Neighbourhood Plan will contain sufficient policy framework to ensure no adverse effects on the integrity of international designated sites will occur in isolation or in combination with other projects and plans.

Appendix A Figure 1A – European Sites

