

# Habitat Regulations Assessment of the Portsmouth Local Transport Plan

Portsmouth City Council

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### Quality information

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# **1. Introduction**

# **Background to the project**

- 1.1 AECOM was appointed by Portsmouth City Council (PCC) to undertake a Habitats Regulations Assessment (HRA) of the Draft Local Transport Plan 4 (hereafter referred to as the 'LTP'). The aim of this HRA is to assess whether the implementation of the LTP, assuming all initiatives in that paper are included in the final plan, will result in Likely Significant Effects (LSEs) on European sites that are located within or adjacent to Portsmouth City. LSEs are deemed to be present where the implementation of a package might prevent a European site from reaching its conservation objectives. If LSEs cannot be excluded, the HRA will investigate whether adverse effects on site integrity would occur and, if present, identify any mitigation measures that might be required to protect European sites.
- 1.2 The new draft LTP covers the years between 2021 and 2038 and is intended to play a major role in maintaining and improving the city's transport networks. It represents a targeted effort to reduce the collective dependence on private car use, which has resulted in high levels of carbon emissions, atmospheric pollution, traffic congestion and reduced levels of physical activity. The LTP sets out a clear vision of Portsmouth City by 2038 with four strategic objectives underpinning this change. It is a strategic document that is relatively broad in nature and will be supported by individual schemes taken forward to effect policies.
- 1.3 Due to its strong focus on reducing the reliance on private vehicles and its support for public and active transport modes (e.g. walking and cycling), the LTP will have many beneficial effects. This applies particularly to the impact pathway atmospheric pollution, which could reasonably be expected to experience a reduction in oxides of nitrogen and ammonia emissions from traffic, and thus in nitrogen deposition, in the city and adjacent European sites particularly from the delivery of a Clean Air Zone (which will encourage a shift from older, more polluting, vehicles to newer, less polluting, vehicles) and initiatives to promote electric vehicles which will reduce emissions generally. However, Portsmouth's unique situation as an island city means that it is surrounded by European sites. Most notably, these include the Portsmouth Harbour SPA / Ramsar, the Chichester and Langstone Harbours SPA / Ramsar and the Solent Maritime SAC. these sites are sensitive to various other impact pathways, including recreational pressure, visual and noise disturbance (during and post construction), and changes to water quality via runoff from urban surfaces. All of these impact pathways can be exacerbated by the implementation of transport plans. As such, this HRA assesses all policies in detail, evaluating whether any might result in LSEs (and adverse effects) on European sites.
- 1.4 In many cases the LTP4 does not set out specific details in relation to schemes that are to be delivered. Regarding this, the role of tiering in HRA has been carefully considered. For most if not all such initiatives the inclusion in the LTP4 will be followed by the development of a scheme or project. On these occasions the advice of Advocate-General Kokott<sup>1</sup> is worth considering. She commented that: 'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications or individual schemes] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure'. This is the approach taken in the HRA.
- 1.5 Following the HRA for the LTP4, a more detailed HRA will be undertaken on each scheme and initiative identified in this report as potentially posing an impact pathway to European sites, as it is developed.

# Legislation

1.1 The UK left the EU on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 ("the Withdrawal Act"). This established a transition period, which ended on 31

49http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN

<sup>&</sup>lt;sup>1</sup> Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph

December 2020. The Withdrawal Act retains the body of existing EU-derived law within our domestic law, meaning that the need for HRA continues to apply in the UK.

- 1.2 The need for Appropriate Assessment (Figure 1) is set out within the Conservation of Habitats and Species Regulations 2017 (as amended). The HRA process applies the 'Precautionary Principle'<sup>2</sup> to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the European site(s) in question. Plans and projects with predicted adverse impacts on European sites 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.
- 1.3 In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

### Figure 1: The legislative basis for Appropriate Assessment

### Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

"A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site".

- 1.4 Over time the phrase 'Habitats Regulations Assessment' (HRA) has come into wide currency to describe the overall process set out in the Habitats Directive from screening through to Imperative Reasons of Overriding Public Interest (IROPI). This has arisen in order to distinguish the process from the individual stage described in the law as an 'Appropriate Assessment'.
- 1.5 In spring 2018 the 'Sweetman' European Court of Justice ruling<sup>3</sup> clarified that 'mitigation' (i.e. measures that are specifically introduced to avoid or reduce a harmful effect on a European site that would otherwise arise) should **not** be taken into account when forming a view on likely significant effects. Mitigation should instead only be considered at the Appropriate Assessment stage. This HRA has been cognisant of that ruling.

# This Report

1.6 Chapter 2 of this report explains the methodology through which the HRA has been carried out. Chapter 3 details background on the relevant European sites, including their qualifying features, conservation objectives, and the potential threats and pressures to their site integrity. Chapter 4 provides scientific background on the impact pathways considered relevant to these European sites. Chapter 5 provides the in-combination scope for the HRA, detailing Local Plans, Transport Plans and other schemes that may act in-combination with the LTP. Chapter 6 provides the Likely Significant Effects (LSEs) screening table for the policies included in the LTP. Chapter 7 comprises the Appropriate Assessment of impact pathways for which LSEs could not be excluded. The main conclusions of the HRA are summarised in Chapter 8.

<sup>&</sup>lt;sup>2</sup> The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: *"When human activities may lead to morally unacceptable harm* [to the environment] *that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis".* <sup>3</sup> People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

# 2. Methodology

# Introduction

2.1 Figure 2 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 2: Four Stage Approach to Habitats Regulations Assessment. Source GOV.UK, 2019.

# HRA Task 1 – Likely Significant Effects (LSE)

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 6 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 By virtue of the fact that it follows Screening, 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 would take any policies or allocations that could not be dismissed following the high-level Screening analysis and analyse the potential for an effect in more detail, with a view to concluding whether there would actually be an adverse effect on integrity (in other words, disruption of the coherent structure and function of the European site(s)).
- 2.6 A decision by the European Court of Justice<sup>4</sup> 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. That ruling has been considered in producing this HRA.
- 2.7 Also, in 2018 the Holohan ruling<sup>5</sup> 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

- 2.8 Where necessary, measures are recommended for incorporation into the document in order to avoid or mitigate adverse effects on European sites. There is considerable precedent concerning the level of detail that a proposal 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 planning document, but the Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.9 In evaluating significance, AECOM has relied on professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.

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

- 2.10 It is a requirement of the Regulations that the impacts of any plans, schemes or projects 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.
- 2.11 For example, in the context of a GTP, a reasonable question might be whether the transport plans or Local Plans of other nearby authorities might have an in-combination effect with the GTP being assessed. This synergistic effect may potentially lead to higher recreational pressure in European sites or encouraging higher volumes of private car travel along European sites, potentially leading to an increase in atmospheric pollution.
- 2.12 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 Likely Significant Effect. In practice, in-combination assessment is therefore of greatest relevance when a scheme or project would otherwise be screened out, because its individual contribution is inconsequential.

<sup>&</sup>lt;sup>4</sup> People Over Wind and Sweetman v Coillte Teoranta (C-323/17) <sup>5</sup> Cose C 461/17

<sup>&</sup>lt;sup>5</sup> Case C-461/17

# **Physical Scope of the HRA**

- 2.13 There are no standard criteria for determining the physical scope of an HRA. Rather, the source-pathwayreceptor model should be used to determine whether there is any potential impact pathway connecting development to European sites. In the case of the LTP for Portsmouth City, and based on a 15km zone of search around its boundary, it was determined at an early stage that the following European sites should be investigated:
  - Portsmouth Harbour SPA / Ramsar;
  - Chichester and Langstone Harbours SPA / Ramsar;
  - Solent and Southampton Water SPA / Ramsar;
  - Solent Maritime SAC; and
  - Solent and Isle of Wight Lagoons SAC

# 3. European Sites

- 3.1 The following European sites are situated within 15km of the development area outlined in the Portsmouth Seafront Masterplan:
  - Portsmouth Harbour SPA / Ramsar
  - Chichester and Langstone Harbours SPA / Ramsar
  - Solent and Southampton Water SPA / Ramsar
  - Solent Maritime SAC
  - Solent and Isle of Wight Lagoons SAC
- 3.2 Due to development being within the 15km screening distance, there are potential negative impacts on these sites of conservation interest. They are thus needed to be considered in more detail. The following section provides an introduction, the qualifying features, the conservation objectives and the threats / pressures to each of these European sites.

# **Portsmouth Harbour SPA / Ramsar**

## Introduction

3.3 This European site is an industrialised estuary located centrally on the south coast of England. It comprises one of the four largest expanses of mudflats and tidal creeks in southern England. These mudflats support a diverse assemblage of aquatic plants, including narrow-leaved eelgrass *Zostera angustifolia*, dwarf eelgrass *Zostera noltii* and sea lettuce *Ulva lactuca*. Portsmouth Harbour is connected to the sea via a narrow section of the Solent and only receives small quantities of freshwater (e.g. from the River Wallington), therefore possessing a unique hydrology. The site supports significant numbers of wintering dark-bellied brent geese *Branta b. bernicla*, which are known to feed extensively in surrounding agricultural areas outside the SPA boundary.

# SPA Qualifying Features<sup>6</sup>

3.4 This site qualifies under **Article 4.2** of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

### Over winter:

- Dark-bellied brent goose Branta bernicla bernicla: 2,847 individuals representing at least 0.9% of the wintering Western Siberia / Western Europe population (5 year peak mean 1991/2 – 1995/6)
- Red-breasted merganser Mergus serrator: 87 individuals (non-breeding)
- Dunlin Calidris alpina alpina: 5,123 individuals (non-breeding)
- Black-tailed godwit Limosa limosa islandica: 31 individuals (non-breeding)

## **Ramsar Qualifying Features**<sup>7</sup>

3.5 Portsmouth Harbour qualifies as a Ramsar site under the following criteria:

### Criterion 3

The intertidal mudflat areas possess extensive beds of eelgrass *Zostera angustifolia* and *Zostera noltei* which support the grazing dark-bellied brent geese populations. The mud-snail *Hydrobia ulvae* is found at extremely high densities, which helps to support the wading bird interest of the site. Common cord-grass *Spartina anglica* dominates large areas of the saltmarsh and there are also extensive areas of green algae

<sup>&</sup>lt;sup>6</sup> Available at: <u>http://incc.defra.gov.uk/default.aspx?page=2036</u> [Accessed on the 02/07/2020]

<sup>&</sup>lt;sup>7</sup> Available at: http://jncc.defra.gov.uk/default.aspx?page=2036 [Accessed on the 02/07/2020]

*Enteromorpha* spp. and sea lettuce *Ulva lactuca*. More locally the saltmarsh is dominated by sea purslane *Halimione portulacoides* which gradates to more varied communities at the higher shore levels. The site also includes a number of saline lagoons hosting nationally important species.

#### Criterion 6 Species / populations occurring at levels of international importance

Qualifying species / populations (as identified at designation):

#### Species with peak counts in winter

 Dark-bellied brent goose Branta bernicla bernicla; 2,105 individuals, representing an average of 2.1% of the GB population (5 year peak mean 1998/9 – 2002/3)

### SPA Conservation Objectives<sup>8</sup>

- 3.6 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;
- 3.7 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.

## **Threats / Pressures to Site Integrity**<sup>9</sup>

- 3.8 The following threats and pressures to the integrity of the Portsmouth Harbour SPA have been identified in the Natural England Site Improvement Plan:
  - Public access / disturbance
  - Costal squeeze
  - Fisheries: Commercial marine and estuarine
  - Water pollution
  - Changes in species distribution
  - Climate change
  - Change to site conditions
  - Invasive species
  - Direct land take from development
  - Biological resource use
  - Change in land management
  - Inappropriate pest control
  - Air pollution: Impact of atmospheric nitrogen deposition
  - Hydrological changes

 <sup>&</sup>lt;sup>8</sup> Available at: <u>http://publications.naturalengland.org.uk/publication/4857883850178560</u> [Accessed on the 02/07/2020]
 <sup>9</sup> Available at: <u>http://publications.naturalengland.org.uk/publication/4692013588938752</u> [Accessed on the 02/07/2020]

Extraction: Non-living resources

# **Chichester and Langstone Harbours SPA / Ramsar**

## Introduction

3.9 The Chichester and Langstone Harbours SPA / Ramsar is a complex of large, sheltered estuarine basins comprising sand- and mud-flats that are exposed at low tide. The two harbours are connected via a stretch of water that separates Hayling Island from the mainland. Some tidal channels drain the basin and reach far inland. The mud-flats harbour a rich assemblage of invertebrates and algae, such as *Enteromorpha* spp. and eelgrasses *Zostera* spp. The wide range of habitats present in the Chichester and Langstone Harbours SPA / Ramsar support key animal communities. These include significant numbers of waterbirds during migration and over winter. Furthermore, the site supports important colonies of breeding terns, which are rare in southern England.

# SPA Qualifying Features<sup>10</sup>

3.10 This site qualifies under **Article 4.1** of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

### During the breeding season:

- Little tern *Sterna albifrons*; 100 pairs representing up to 4.2% of the breeding population in Great Britain (5 year mean, 1992 1996)
- Sandwich tern *Sterna sandvicensis*; 158 pairs representing up to 1.1% of the breeding population in Great Britain (1998)
- Common tern Sterna hirundo; 126 pairs (5 year mean, 2011-2015)

### On passage:

• Little egret *Egretta garzetta*; 137 individuals representing up to 17.1% of the population in Great Britain (Count as at 1998)

### Over winter:

- Bar-tailed godwit *Limosa lapponica*; 1,692 individuals representing up to 3.2% of the wintering population in Great Britain (5 year peak mean 1991/2 1995/6)
- Little egret *Egretta garzetta*; 100 individuals representing up to 20% of the wintering population in Great Britain (Count as at 1998)
- 3.11 This site qualifies under **Article 4.2** of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

### On passage:

• Ringed Plover *Charadrius hiaticula*; 2,471 individuals representing up to 4.9% of the Europe/Northern Africa - wintering population (5 year peak mean 1991/2 - 1995/6

### Over winter:

- Dark-bellied brent Goose *Branta bernicla bernicla*; 17,119 individuals representing up to 5.7% of the wintering Western Siberia/Western Europe population (5 year peak mean 1991/2 1995/6)
- Dunlin *Calidris alpina alpina*; 44,294 individuals representing up to 3.2% of the wintering Northern Siberia/Europe/Western Africa population (5 year peak mean 1991/2 1995/6)
- Grey Plover *Pluvialis squatarola*, 3,825 individuals representing up to 2.5% of the wintering Eastern Atlantic wintering population (5 year peak mean 1991/2 1995/6)

<sup>&</sup>lt;sup>10</sup> Available at: <u>http://jncc.defra.gov.uk/default.aspx?page=2034</u> [Accessed on the 02/07/2020]

- Redshank *Tringa totanus*; 1,788 individuals representing up to 1.2% of the wintering Eastern Atlantic wintering population (5 year peak mean 1991/2 1995/6)
- Ringed Plover *Charadrius hiaticula*, 846 individuals representing up to 1.7% of the wintering Europe/Northern Africa wintering population (5 year peak mean 1991/2 1995/6)
- Common shelduck *Tadorna tadorna*; 1,096 individuals wintering population (5 year peak mean 2009/10 2013/14)
- Eurasian wigeon *Anas Penelope*; 3,947 individuals wintering population (5 year peak mean 2009/10 2013/14)
- Eurasian teal Anas crecca; 1,953 individuals wintering population (5 year peak mean 2009/10 2013/14)
- Northern pintail Anas acuta; 338 individuals wintering population (5 year peak mean 2009/10 2013/14)
- Northern shoveler *Anas clypeata*; 106 individuals wintering populations (5 year peak mean 2009/10 2013/14)
- Red-breasted merganser *Mergus serrator*, 366 individuals wintering population (5 year peak mean 2009/10 2013/14)
- Sanderling Calidris alba; 216 individuals wintering population (5 year peak mean 2009/10 2013/14)
- Eurasian curlew *Numenius arquata*; 3,181 individuals wintering population (5 year peak mean 2009/10 2013/14)
- Ruddy turnstone *Arenaria interpres*; 501 individuals wintering population (5 year peak mean 2009/10 2013/14)

### 3.12 Assemblage qualification: A wetland of international importance.

The area 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 93,142 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Wigeon Anas penelope, Bar-tailed Godwit Limosa lapponica, Dark-bellied brent Goose Branta bernicla bernicla, Ringed Plover Charadrius hiaticula, Grey Plover Pluvialis squatarola, Dunlin Calidris alpina alpina, Black-tailed Godwit Limosa limosa islandica, Redshank Tringa totanus, Little Grebe Tachybaptus ruficollis, Little Egret Egretta garzetta, Shelduck Tadorna tadorna, Curlew Numenius arquata, Teal Anas crecca, Pintail Anas acuta, Shoveler Anas clypeata, Red-breasted Merganser Mergus serrator, Oystercatcher Haematopus ostralegus, Lapwing Vanellus vanellus, Knot Calidris canutus, Sanderling Calidris alba, Cormorant Phalacrocorax carbo, Whimbrel Numenius phaeopus.

### Ramsar Qualifying Features<sup>11</sup>

3.13 The Chichester and Langstone Harbours qualify as a Ramsar site under the following criteria:

### **Criterion 1**

Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes.

### Criterion 5

### Assemblages of international importance

Species with peak counts in winter

<sup>&</sup>lt;sup>11</sup> Available at: <u>http://jncc.defra.gov.uk/pdf/RIS/UK11013.pdf</u> [Accessed on the 02/07/2020]

76,480 waterfowl (5 year peak mean 1998/99 - 2002/03)

#### Criterion 6 Species / populations occurring at levels of international importance

#### Qualifying species / populations (as identified at designation):

#### Species with peak counts in spring / autumn

- Ringed plover *Charadrius hiaticula*, Europe / Northwest Africa: 853 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9 2002/3)
- Black-tailed godwit *Limosa limosa islandica*, Iceland / W Europe: 906 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9 2002/3)
- Common redshank *Tringa totanus totanus*: 2,577 individuals, representing an average of 1% of the population (5 year peak mean 1998/9 2002/3)

#### Species with peak counts in winter

- Dark-bellied brent goose *Branta bernicla bernicla*: 12,987 individuals, representing an average of 6% of the population (5 year peak mean 1998/9 2002/3)
- Common shelduck *Tadorna tadorna*, NW Europe: 1,468 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9 – 2002/3)
- Grey plover *Pluvialis squatarola*, E Atlantic / W Africa wintering: 3,043 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9 2002/3)
- Dunlin Calidris alpina alpina, W Siberia / W Europe: 33,436 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9 – 2002/3)

# Species / populations identified subsequent to designation for possible future consideration under criterion 6.

#### Species regularly supported during the breeding season

• Little tern *Sterna albifrons albifrons*, W Europe: 130 apparently occupied nests, representing an average of 1.1% of the breeding population

### **SPA Conservation Objectives**<sup>12</sup>

- 3.14 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;
- 3.15 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.

### **Threats / Pressures to Site Integrity**<sup>13</sup>

3.16 The following threats and pressures to the integrity of the Chichester and Langstone Harbours SPA have been identified in the Natural England Site Improvement Plan:

<sup>&</sup>lt;sup>12</sup> Available at: <u>http://publications.naturalengland.org.uk/publication/5789102905491456</u> [Accessed on the 02/07/2020]

<sup>&</sup>lt;sup>13</sup> Available at: <u>http://publications.naturalengland.org.uk/publication/4692013588938752</u> [Accessed on the 02/07/2020]

- Public access / disturbance
- Costal squeeze
- Fisheries: Commercial marine and estuarine
- Water pollution
- Changes in species distribution
- Climate change
- Change to site conditions
- Invasive species
- Direct land take from development
- Biological resource use
- Change in land management
- Inappropriate pest control
- Air pollution: Impact of atmospheric nitrogen deposition
- Hydrological changes
- Extraction: Non-living resources

# Solent Maritime SAC

### Introduction

- 3.17 The Solent comprises a major estuarine system on the south coast of England with four coastal plain estuaries and four bar-built estuaries. The maritime SAC is the only site that contains a cluster of physiographic sub-types of estuary. Furthermore, in contrast to all other European estuaries, the Solent has a unique hydrographic regime consisting of four tides per day.
- 3.18 The site also harbours a complex array of marine and estuarine habitats. Sediment habitats in the estuarine system include extensive estuarine flats with intertidal areas, supporting eelgrass *Zostera* spp., green algae, sand and shingle spits, and shoreline transitions. Mudflat habitats range from low or variable salinity in the upper reaches of the estuaries to fully marine mudflats in Chichester and Langstone Harbours. Unusual species in these habitats include rare sponges, communities of a polychaete *Sabellaria spinulosa* and smooth cord-grass *Spartina alterniflora*.
- 3.19 Within the Solent Maritime SAC, the second-largest aggregation of Atlantic salt meadows in south / southwest England is located. The saltmarsh is present as a large number of disjointed habitat patches. This ungrazed aquatic plant community is dominated by sea-purslane *Atriplex portulacoides*, common sealavender *Limonium vulgare* and thrift *Armeria maritima*. Overall, the site is less disturbed by man-made structures than other parts of the southern coast.

## **Qualifying Features**<sup>14</sup>

- 3.20 Annex I habitats that are a primary reason for selection of this site:
  - Estuaries
  - Spartina swards (Spartinion maritimae)
  - Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

<sup>&</sup>lt;sup>14</sup> Available at: <u>http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030059</u> [Accessed on the 02/07/2020]

- 3.21 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:
  - Sandbanks which are slightly covered by sea water all the time
  - Mudflats and sandflats not covered by sea water at low tide
  - Coastal lagoons
  - Annual vegetation of drift lines
  - Perennial vegetation of stony banks
  - Salicornia and other annuals colonizing mud and sand
  - Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')
- 3.22 Annex II species present as a qualifying feature, but not a primary reason for site selection
  - Desmoulin's whorl snail Vertigo moulinsiana

### **Conservation Objectives**<sup>15</sup>

- 3.23 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;
- 3.24 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 and habitats of qualifying species
  - The structure and function (including typical species) of qualifying natural habitats
  - The structure and function of the habitats of qualifying species
  - The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
  - The populations of qualifying species, and,
  - The distribution of qualifying species within the site.

## **Threats / Pressures to Site Integrity**<sup>16</sup>

- 3.25 The following threats and pressures to the integrity of the Solent Maritime SAC have been identified in the Natural England Site Improvement Plan:
  - Public access / disturbance
  - Costal squeeze
  - Fisheries: Commercial marine and estuarine
  - Water pollution
  - Changes in species distribution
  - Climate change
  - Change to site conditions
  - Invasive species

<sup>&</sup>lt;sup>15</sup> Available at: <u>http://publications.naturalengland.org.uk/publication/4857883850178560</u> [Accessed on the 02/07/2020]

<sup>&</sup>lt;sup>16</sup> Available at: <u>http://publications.naturalengland.org.uk/publication/4692013588938752 [Accessed on the 02/07/2020]</u>

- Direct land take from development
- Biological resource use
- Change in land management
- Inappropriate pest control
- Air pollution: Impact of atmospheric nitrogen deposition
- Hydrological changes
- Extraction: Non-living resources

# **Solent and Southampton Water SPA / Ramsar**

### Introduction

- 3.26 The Solent and Southampton Water SPA / Ramsar covers an expansive area on the south England coast from Hurst Spit to Hill Head on the coast of Hampshire, and from Yarmouth to Whitecliff Bay along the north coast of the Isle of Wight. It is composed of several estuaries and harbours with mudflats, saltmarshes, saline lagoons, shingle beaches, reedbeds, damp woodland and grazing marsh.
- 3.27 The mudflats support beds of *Enteromorpha* spp. and *Zostera* spp., and harbour a rich assemblage of invertebrates that forms the main food source for estuarine birds. In the breeding season in summer, the site is important for seabirds such as gulls and terns. In winter the SPA holds a significant assemblage of waterfowl, including geese, ducks and waders. The brent goose *Branta bernicla bernicla* is known to feed in areas of surrounding agricultural land.

## SPA Qualifying Features<sup>17</sup>

3.28 This site qualifies under **Article 4.1** of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

### During the breeding season;

- Common tern *Sterna hirundo*, 267 pairs representing at least 2.2% of the breeding population in Great Britain (5 year peak mean, 1993-1997)
- Little tern *Sterna albifrons*, 49 pairs representing at least 2% of the breeding population in Great Britain (5 year peak mean, 1993-1997)
- Mediterranean gull *Larus melanocephalus*, 2 pairs representing at least 20% of the breeding population in Great Britain (5 year peak mean, 1994-1998)
- Roseate tern *Sterna dougallii*, 2 pairs representing at least 3.3% of the breeding population in Great Britain (5 year peak mean, 1993-1997)
- Sandwich tern *Sterna sandvicensis*, 231 pairs representing at least 1.7% of the breeding population in Great Britain (5 year peak mean, 1993-1997)
- 3.29 This site also qualifies under **Article 4.2** of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

### Over winter;

- Black-tailed godwit *Limosa limosa islandica*, 1,125 individuals representing at least 1.6% of the wintering Iceland breeding population (5 year peak mean, 1992/3-1996/7)
- Dark-bellied brent goose *Branta bernicla bernicla*, 7,506 individuals representing at least 2.5% of the wintering Western Siberia/Western Europe population (5 year peak mean, 1992/3-1996/7)

<sup>&</sup>lt;sup>17</sup> Available at: <u>http://jncc.defra.gov.uk/default.aspx?page=2037 [</u>Accessed on the 02/07/2020]

- Ringed plover *Charadrius hiaticula*, 552 individuals representing at least 1.1% of the wintering Europe/Northern Africa wintering population (5 year peak mean, 1992/3-1996/7)
- Teal *Anas crecca*, 4,400 individuals representing at least 1.1% of the wintering Northwestern Europe population (5 year peak mean, 1992/3-1996/7)

#### Assemblage qualification: A wetland of international importance.

3.30 The area 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 53,948 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Gadwall Anas strepera, Teal Anas crecca, Ringed Plover Charadrius hiaticula, Black-tailed Godwit Limosa limosa islandica, Little Grebe Tachybaptus ruficollis, Great Crested Grebe Podiceps cristatus, Cormorant Phalacrocorax carbo, Dark-bellied brent Goose Branta bernicla bernicla, Wigeon Anas penelope, Redshank Tringa totanus, Pintail Anas acuta, Shoveler Anas clypeata, Red-breasted Merganser Mergus serrator, Grey Plover Pluvialis squatarola, Lapwing Vanellus vanellus, Dunlin Calidris alpina alpina, Curlew Numenius arquata, Shelduck Tadorna tadorna.

### **Ramsar Qualifying Features**<sup>18</sup>

3.31 The Solent and Southampton Water qualify as a Ramsar site under the following criteria:

### **Criterion 1**

The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.

#### **Criterion 2**

The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.

#### **Criterion 5**

#### Assemblages of international importance

Species with peak counts in winter

51,343 waterfowl (5 year peak mean 1998/99 - 2002/03)

### Criterion 6 Species / populations occurring at levels of international importance

#### Qualifying species / populations (as identified at designation):

#### Species with peak counts in spring / autumn

• Ringed plover *Charadrius hiaticula*, Europe / Northwest Africa: 853 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9 – 2002/3)

#### Species with peak counts in winter

- Dark-bellied brent goose Branta bernicla bernicla: 12,987 individuals, representing an average of 6% of the population (5 year peak mean 1998/9 – 2002/3)
- Eurasian teal *Anas crecca*, NW Europe: 5,514 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/9 2002/3)
- Black-tailed godwit *Limosa limosa islandica*, Iceland / W Europe: 1,240 individuals, representing an average of 3.5% of the population (5 year peak mean 1998/9 2002/3)

<sup>&</sup>lt;sup>18</sup> Available at: <u>http://jncc.defra.gov.uk/pdf/RIS/UK11063.pdf</u> [Accessed on the 02/07/2020]

## **Conservation Objectives**<sup>19</sup>

- 3.32 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;
- 3.33 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.

## **Threats / Pressure to Site Integrity**<sup>20</sup>

- 3.34 The following threats and pressures to the integrity of the Solent and Southampton Water SPA have been identified in the Natural England Site Improvement Plan:
  - Public access / disturbance
  - Costal squeeze
  - Fisheries: Commercial marine and estuarine
  - Water pollution
  - Changes in species distribution
  - Climate change
  - Change to site conditions
  - Invasive species
  - Direct land take from development
  - Biological resource use
  - Change in land management
  - Inappropriate pest control
  - Air pollution: Impact of atmospheric nitrogen deposition
  - Hydrological changes
  - Extraction: Non-living resources

# Solent and Isle of Wight Lagoons SAC

### Introduction

3.35 The Solent encompasses a series of coastal lagoons, including percolation, isolated and sluiced lagoons. This site includes several lagoons in the marshes near Keyhaven – Pennington, at Farlington Marshes in Chichester Harbour, at Bembridge Harbour and at Gilkicker near Gosport. These lagoons have a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle. Farlington Marshes is an isolated lagoon in marsh pasture, which is separated from the sea by a sea wall. It receives

<sup>&</sup>lt;sup>19</sup> Available at: http://publications.naturalengland.org.uk/publication/6567218288525312 [Accessed on the 02/07/2020]

sea water only during spring tides. Its fauna is dominated by low-medium salinity insects. The lagoons at Bembridge Harbour lie in a depression behind the sea wall and sea water enters through percolation. Species diversity here is very high, including high densities of *N. vectensis*.

3.36 The habitats present in the Solent and Isle of Wight Lagoons SAC support high diversity faunal communities, including the rare foxtail stonewort *Lamprothamnium papulosum*, the scarce lagoon sand shrimp *Gammarus insensibilis* and the scarce starlet sea anemone *Nematostella vectensis*.

## **Qualifying Features**<sup>21</sup>

- 3.37 Annex I habitats that are a primary reason for selection of this site:
  - Coastal lagoons

### **Conservation Objectives**<sup>22</sup>

- 3.38 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;
- 3.39 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

### **Threats / Pressures to Site Integrity**<sup>23</sup>

- 3.40 The following threats and pressures to the integrity of the Solent and Isle of Wight Lagoons SAC have been identified in the Natural England Site Improvement Plan:
  - Hydrological changes
  - Inappropriate weed control
  - Coastal squeeze
  - Invasive species
  - Air pollution: Risk of atmospheric nitrogen deposition

<sup>&</sup>lt;sup>21</sup> Available at: <u>http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0017073</u> [Accessed on the 02/07/2020]

<sup>&</sup>lt;sup>22</sup> Available at: http://publications.naturalengland.org.uk/publication/5646122018144256 [Accessed on the 02/07/2020]

# 4. Impact pathways

- 4.1 All European Sites described in Chapter 3 lie relatively close to Portsmouth City, the area covered by the LTP. However, three of the sites directly border Portsmouth and are therefore most likely to be affected by impact pathways relating to the plan: The Portsmouth Harbour SPA / Ramsar, the Chichester and Langstone Harbours SPA / Ramsar and the Solent Maritime SAC. Please see Figure 3 for the location of the European sites in relation to Portsmouth City.
- 4.2 Based on Natural England's Site Improvement Plans and a general assessment of the sites' ecological features, the following potential impact pathways have been identified in relation to the LTP (see Table 1):
  - Water quality (surface water runoff),
  - Habitat fragmentation,
  - Loss of functionally linked habitat,
  - Atmospheric pollution,
  - Recreational pressure, and
  - Visual and noise disturbance during and post construction (e.g. traffic noise, lighting)
- 4.3 The policies are assessed for Likely Significant Effects (LSEs) on European sites in Table 2.

#### Table 1. Potential impact pathways linked to the LTP.

Impact pathway Discussion

Water quality (surface increased development stipulated in the LTP could lead to the loss of existing greenfield land or intensify impermeable surfaces in brownfield sites. In turn this may lead to increased surface water runoff volumes and / or velocities, resulting in altered hydrological and water quality regimes in nearby European Sites. For example, the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbour SPA / Ramsar lie directly adjacent to Portsmouth City and are sensitive to changes in water quality. Furthermore, inappropriate drainage design may lead to increased surface water runoff during and post construction.

Atmospheric pollution An improvement in transportation infrastructure could increase the number of vehicles using the roads. Overall, this could lead to increased atmospheric pollution levels compared to a no-development scenario. Similarly, the introduction of a Clean Air Zone could reduce the number of vehicles or alter the emissions profile from older, more polluting, vehicles to newer, less polluting vehicles. Vehicle pollutants (e.g. NOx, ammonia) may be deposited on European sites through wind currents or in soluble form in precipitation. The sensitivity of a designated site depends on its gualifying features. According to APIS, the Portsmouth Harbour SPA, the Solent & Isle of Wight Lagoons SAC and the Solent Maritime SAC generally have relatively low sensitivity to atmospheric nitrogen deposition; most of their designated habitats - or in the case of the SPA the habitats that support the birds - either have no nitrogen critical load, or have a relatively high minimum critical load of 20 kgN/ha/yr. The exceptions are the localised areas of 'perennial vegetation of stony banks' and 'shifting dunes along the shoreline with Ammophila arenaria', for which Solent Maritime SAC is partly designated; these are both relatively nutrient impoverished habitats. During surveys undertaken for the Havant Local Plan air quality assessment in 2018 four small areas of perennial vegetation of stony banks were identified at the western shore of Langstone Harbour, within the Portsmouth boundary<sup>24</sup>, one of which is adjacent to the A2030 south of Great Salterns Quay on Portsea Island; no sand dunes were identified. Some of the gualifying waterbird species of Chichester & Langstone Harbours SPA / Ramsar, notably the nesting terns, are also potentially sensitive to nitrogen deposition. Nesting terns require stony/sandy substrate in which to nest and increased nitrogen deposition can result in vegetation growth that may make the nesting locations less suitable. Guidance from the Institute of Air Quality Management and Highways England both set a potential maximum impact zone of 200m<sup>25 26</sup> from the roadside for significant air guality effects to European sites from road traffic, although the influence of roads on pollutant concentrations reduces steeply across that zone such that the greatest effect is generally within a few tens of metres of the roadside. In addition, the Department for Transport reported in the National Travel Survey (2018) that the average trip undertaken by car is 10.6km<sup>27</sup>. The European sites included in this HRA all lie within 10km of the LTP boundary.

Habitat fragmentation Simply described, habitat fragmentation is the division of an expanse of habitat into smaller, individual patches that are isolated from each other by the removal of the original habitat<sup>28</sup>. The European sites surrounding the Portsmouth City peninsula are located in a highly urbanised setting. The main in which LTPs may result in increased habitat fragmentation would be by decreasing the connectivity of European sites, such as by developing new major roads or impacting flightlines of SPA / Ramsar birds. Such activities may result in habitat fragmentation and ultimately the way in which qualifying species use European sites.

https://www.havant.gov.uk/sites/default/files/documents/Air%20Quality%20Habitat%20Regulations%20Assessment.pdf

<sup>25</sup> GOV.UK (2019). Transport analysis guidance. Transport analysis guidance (TAG) provides information on the role of transport modelling and appraisal. Available at: <u>https://www.gov.uk/guidance/transport-analysis-guidance-webtag#013</u> [Accessed on the 08/07/2020]

<sup>26</sup> GOV.UK (2016). Standards for Highways online resources. Information on the design, construction and maintenance of highways for construction professionals. Available at: <a href="https://www.gov.uk/guidance/standards-for-highways-online-resources">https://www.gov.uk/guidance/standards-for-highways-online-resources</a> [Accessed on the 08/07/2020]

<sup>&</sup>lt;sup>24</sup> See the maps on page 94 of the Air Quality Habitats Regulations Assessment for Havant Borough Local Plan 2036 (2019) available at:

<sup>&</sup>lt;sup>27</sup> GOV.UK (2019). Average number of trips made and distance travelled. Available at: <u>https://www.gov.uk/government/statistical-data-sets/nts01-average-number-of-trips-made-and-distance-travelled</u> [Accessed on the 08/07/2020]

<sup>&</sup>lt;sup>28</sup> Wilcove, D.S., McLellan, C.H. and Dobson, A.P., 1986. Habitat fragmentation in the temperate zone. **Conservation Biology 6**: 237-256.

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Recreational pressure Increased / improved transportation links detailed in Local Transport Plans may lead to increased visitor numbers to European Sites as access, walking and cycling, public transport and traffic are improved. The recreational pressure impacts on each European Site vary. Most sites relevant to the Portsmouth LTP (including the Portsmouth Harbour SPA / Ramsar, the Chichester and Langstone Harbours SPA / Ramsar, and the Solent and Southampton Water SPA / Ramsar) are most affected by visual and noise disturbance from recreational activities (especially dog walking) – this is due to their sensitive qualifying bird species. In contrast, the Solent Maritime SAC is more likely to be affected by specific activities such as boating, due to abrasive and mechanical damage of anchoring. European sites that are sensitive to recreational pressure are likely to be negatively impacted by increased visitation rates if there are no appropriate management mechanisms in place to protect their qualifying features.

Visual. noise Development schemes can result in disturbance of qualifying SPA / Ramsar, such as birds, through several mechanisms. Noise disturbance arising from construction activities and may result in behavioural changes (e.g. fleeing from the nest, cessation of foraging) in birds. The three most important factors are species sensitivity, proximity of disturbance lighting disturbance (during and post source and timing / duration of the disturbance. The noisiest construction activity (impact piling at approx. 110 dB(A) at 1m from source) requires a distance of 100m to reduce construction) to 70dB(A), a level that research in the Humber Estuary suggests will not be disturbing to waterfowl and waders<sup>29</sup>. Disturbance can also result post-construction although substantial changes in traffic flow are generally needed for significant noise disturbance to arise from roads. For example, a 25% increase in road traffic (e.g. through a road scheme) will result in only a 1dB(A) increase at the roadside, with a 100% increase needed to result in a 3dB(A) increase<sup>30</sup> – the lowest increase in noise that is thought to be even perceivable by humans and birds. In contrast, the introduction of operational lighting of schemes into areas that are not currently lit can result in disturbance of animal species within European sites or those that rely on functionally linked habitats. At the same time, it must be noted that the Portsmouth area is already generally a brightly lit urban frontage.

Loss of functionally While most European sites have been geographically defined to encompass the key features that are necessary for coherence of their structure and function, and the support of their qualifying features, this is not always the case. A diverse array of qualifying species including birds, bats and amphibians are not confined to the boundary of designated sites. For example, the highly mobile nature of waders and waterfowl indicates that areas of habitat of crucial importance to the maintenance of their populations are likely to lie outside the physical limits of European sites. There is now an abundance of authoritative examples of HRA cases on plans affecting bird populations, where the potential importance of functionally linked habitat is recognised31. The Portsmouth Harbour SPA / Ramsar, the Chichester and Langstone Harbours SPA / Ramsar, and the Solent and Southampton Water SPA / Ramsar are all designated for bird species that rely on functionally linked habitat. An important component of the evidence base for functionally linked habitat in the Solent is provided in the Solent Waders and Brent Goose Strategy (SWBGS)<sup>32</sup>, which has mapped areas of importance for Solent's SPA / Ramsar birds.

<sup>&</sup>lt;sup>29</sup> Cutts, N., Phelps, A. and Burdon, D. (2009) Construction and waterfowl: Defining Sensitivity, Response, Impacts and Guidance. Report to Humber INCA, Institute of Estuarine and Coastal Studies, University of Hull

<sup>&</sup>lt;sup>30</sup> Design Manual for Roads and Bridges. November 2011. Volume 11 (Environmental assessment), Section 3 (Environmental Assessment Techniques), Part 7 (Noise and Vibration), Page A1/3

<sup>&</sup>lt;sup>31</sup> Chapman C & Tyldesley D. 2016. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – A review of

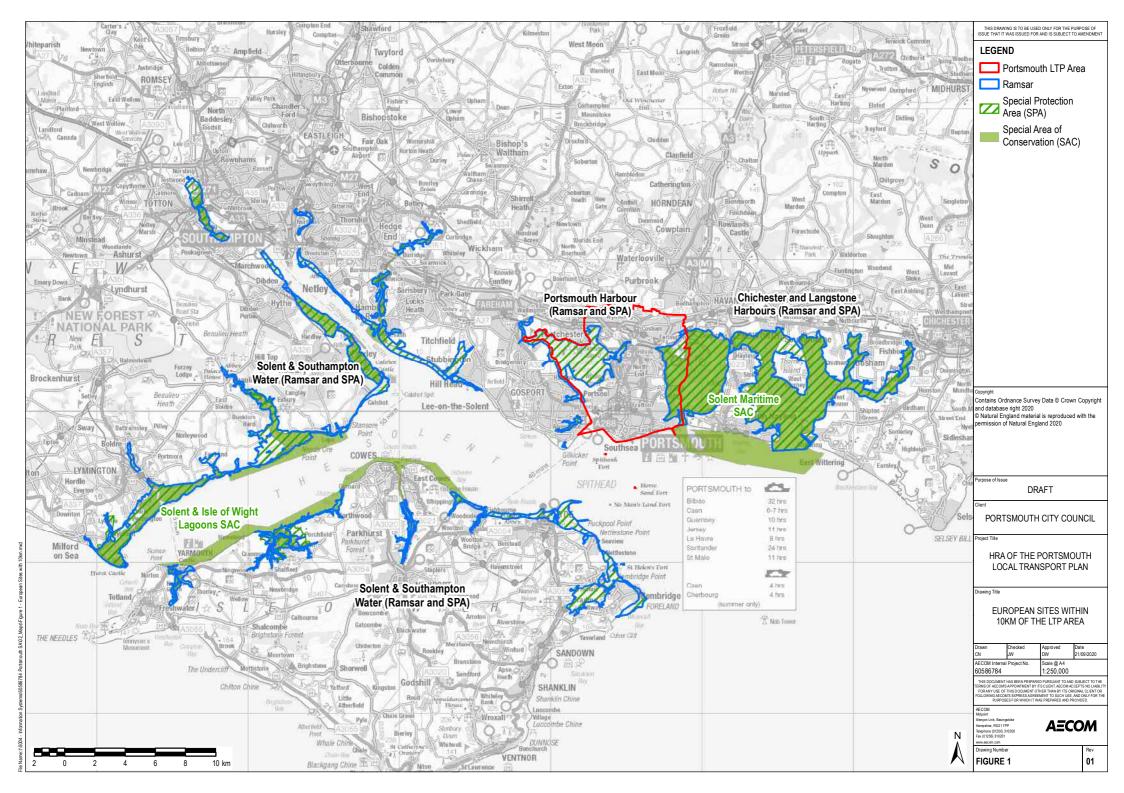
authoritative decisions. Natural England Commissioned Reports 207: 73pp.

<sup>&</sup>lt;sup>32</sup> Available at: <u>https://solentwbgs.wordpress.com/page-2/</u> [Accessed on the 08/07/2020]

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Figure 3: Map of the European sites in relation to the LTP area of Portsmouth City.



# 5. In-Combination Scope

- 5.1 The LTP will occur alongside the following other strategic planning documents, including other transport plans and Local Plans:
  - Portsmouth new Local Plan (in progress)
  - Gosport Local Plan 2011-2029 (Gosport Borough Council)
  - Fareham Draft Local Plan 2036 (Fareham Borough Council)
  - Winchester Local Plan part 2 Development Management and Site Allocations (Winchester City Council)
  - Havant Borough Local Plan (Havant Borough Council)
  - Solent's Transport Delivery Plan
  - Hampshire Local Transport Plan 2011-2031, including Transport Statements of Districts and Boroughs
- 5.2 While the focus of transport plans is primarily to promote sustainable modes of transport, they also include improvements to the road network that might increase the use of private vehicles. Furthermore, there is the potential that such plans may increase recreational pressure and / or affect water quality (via surface runoff), particularly in combination with other plans and projects. Therefore, the strategic planning documents of adjacent authorities also require consideration in this HRA.

# 6. Likely Significant Effects (LSEs) Test

6.1 The Likely Significant Effects (LSEs) screening assessment is presented in table format below (Table 2). Green shading in the 'Screening decision' column indicates that a package (and its schemes or projects) have been determined not to lead to LSEs on European sites due to an absence of a linking impact pathway. Orange shading indicates that an impact pathway exists, and LSEs cannot be excluded, meaning that the proposal is screened in for an in-depth Appropriate Assessment.

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### Table 2. Screening assessment (Likely Significant Effects) of the LTP for Portsmouth City.

Policy	European Sites in relation to screened in proposals	Summary of Policy	Screening decision
Deliver Cleaner A	Air		
Policy A – Implement a government- directed city centre Clean Air Zone in 2021		Portsmouth has suffered from poor air quality for many years, For example, national standards for air quality are currently exceeded in five Air Quality Management Areas (AQMAs), clustered around road links into the city and in the city centre. Air Quality Management Areas are declared when there is an exceedance or likely exceedance of the National Air Quality Objectives. Authorities are obliged to prepare an Air Quality Action Plan setting out how they will resolve these exceedances. Separate to this, following a ministerial direction imposed in 2018, Portsmouth was obliged to produce a Local Air Quality Plan which set out the measures necessary to bring down NO <sub>2</sub> emissions to within the legal limit of 40 µg/m <sup>3</sup> in the shortest possible time. PCC were issued with this direction as a result of DEFRA's Pollution Climate Model forecasting, which showed continued future exceedances of NO <sub>2</sub> concentrations in the city.	2021. This will involve charging the most polluting vehicles that enter the city centre. While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not involve negative impact pathways relating to these European sites. Instead, delineating a CAZ is likely to reduce traffic inflow into Portsmouth City and could improve the local air quality by causing a shift from older more polluting vehicles to newer less polluting vehicles and/or by reducing the number of vehicles on roads within 200m of European sites that approach the city centre. If the CAZ also encouraged a greater uptake of electric vehicles or other Ultra Low Emission Vehicles this would not only reduce NOx emissions but also ammonia emissions from petrol engines. This could therefore be positive for the SAC, SPAs and Ramsars. The infrastructure associated with a CAZ usually involves signage and automated number plate recognition cameras. As such, this policy will also not result in an increase in urban surfacing, recreational levels or construction processes and therefore the impact pathways water quality, recreational pressure and disturbance (during and post construction) are all screened out from Appropriate Assessment.
		The CAZ is potentially to be adapted as a low carbon zone in the future, with the aim to contribute to Portsmouth City's goal of becoming carbon neutral by 2030.	
Policy B – Support infrastructure for alternative fuelled vehicles	NA	This policy intends to enhance the infrastructure for alternatively fuelled cars, including fleet vehicles, taxis, private cars, e-scooters and electric bikes. This is to support the government's anticipated ban on the sale of diesel and petrol cars by 2035 (possibly 2032). This includes the provision of electric charging infrastructure and alternative fuels, such as hydrogen. The bus fleet is being retrofitted with cleaner technology to reduce pollution along the main bus lanes. Charging points will continue to be delivered as part of the On-street Residential Chargepoint Scheme. The charging point are integrated into the lamp posts, which is	Policy B provides support for infrastructure of alternative fuelled vehicles in anticipation of the government's ban on the sale of diesel and petrol cars by 2035 at the latest. Electric vehicle charging points will be provided and taxis / private hire cars converted to zero emission vehicles. While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not

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	be provided in Council car parks and car parking associated with new residential development.	with zero emissions of NOx or ammonia, both of which contribute to nitrogen and acid deposition.
	Taxis and private hire vehicles will be converted into zero emission vehicles with a network of rapid charging hubs at key locations (e.g. at strategic corridors and ferry ports). Portsmouth City Council will work with partners across the Solent to trial alternative fuels (e.g. hydrogen) and to deliver the infrastructure that is required to deliver this policy.	construction processes and therefore the impact pathways water quality, recreational pressure and disturbance (during and post construction) are all screened out from
Policy C – Make NA parking easier through encouraging fewer	A high percentage of households in Portsmouth own one or more cars, restricting the available parking space in residential areas. Residents' Parking Zones (RPZ) have been introduced to make parking fairer. Overall, reduced parking capacity is to promote fewer vehicles and encourage use of shared transport modes.	Policy C implements Residents' Parking Zones (RPZ) to make parking fairer and to encourage
vehicles and supporting shared transport modes	In RPZs the price for parking permits increases with the number of cars per household. The first vehicle permit is charged according to emissions. Electric vehicles are free and vehicles with emissions below 100g/km are charged at 50%. This should encourage residents to switch to greener cars. Furthermore, a Car Club scheme within the city will be introduced to enable access to a car for residents that do not own their own. Furthermore, other shared transport modes (e.g. e-bike, bike share and rental e-scooters will be introduce to provide viable transport choices in place of privates alongside the public transport offer.	number of parking permits per household, may well cap the total number of vehicles in the city. Furthermore, free permits for electric vehicles encourage a switch from polluting to green modes of transport. Both would improve the local air quality, with positive effects on the SAC, SPAs / Ramsars.
Policy D – Expand Portsmouth Harbour SPA / the Portsmouth Ramsar Park and Ride to create a transport hub to reduce pollution and congestion in the city and increase transport choices	traffic entering the city passes along the P&R and therefore increases its capacity (in combination with reducing parking spaces in the centre) will shift more people towards using the P&R. This is a key part of reducing pollution and congestion and delivering cleaner air. Council-owned parking sites in the city centre can be released for regeneration purposes. The proposal for expansion includes multi-decked parking with a capacity of 2,650 cars and a Transport Hub (cycle parking, taxi rank, bicycle rental, e-scooter hire). Importantly, the new P&R facility is intended to link up with the new cycle network (see Policy 7). More detail will be provided in the Portsmouth Parking Supplementary Planning Document.	<ul> <li>Policy D provides for an expansion of the Park and Ride (P&amp;R) system at Junction 1 adjacent to the M275. This is projected to increase to a capacity of 2,650 parking spaces using a multistorey design approach.</li> <li>At its closest point, the P&amp;R lies only approx. 100m from the Portsmouth Harbour SPA / Ramsar. This is within the distance for which disturbance from construction is likely to be relevant, although probably only if particularly noisy activities such as piling would be required. While construction of the expanded P&amp;R could have Likely Significant Effects (without mitigation) depending on when and how it was accomplished, the operational period is unlikely to present a disturbance problem as the area is already experiencing high traffic volume along the M275.</li> </ul>
	The enhanced P&R services are to facilitate access to the city centre as well as other attractions within the city, including the seafront, Queen Alexandra Hospital and Fratton Park. Furthermore, restrictions on access to the city centre by general traffic will be implemented.	Regarding atmospheric pollution, the initiative would need to be modelled when proposals

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			<ul> <li>be needed for any application as it could result in a localised increase in atmospheric nitrogen deposition the nearest part of the SPA. That said, it has been noted already that the SPA has a relatively high critical load and a distance of 100m may be sufficient for the worst-case increase in deposition to fall outside the SPA/Ramsar boundary.</li> <li>This policy will also not result in an increase in urban surfacing and recreational levels and therefore the impact pathways water quality and recreational pressure are screened out from Appropriate Assessment.</li> <li>Overall, the following impact pathway requires further consideration in an AA: <ul> <li>Visual and noise disturbance (during construction)</li> </ul> </li> </ul>
Policy E – Explore private non- residential parking restrictions to encourage mode shift and help pay for improved walking, cycling and public transport infrastructure	NA	Around 60% of people working in Portsmouth commute by car, undertaking trips of less than 10km. One of the reasons behind this is the availability of free / cheap parking near their workplace. Attractive alternative transport modes to the car are needed and increasing the cost / reducing the availability of parking in the city centre. A Workplace Parking Levy (WPL) is a potential delivery mechanism for this policy, as has been trialled successfully in Nottingham ( $CO_2$ levels have decreased drastically). The potential for a WPL in Portsmouth will be investigated in consultation with businesses. The revenue from the WPL could be invested into providing more efficient transport networks and enhancing walking / cycling routes.	Air quality (localised) No Likely Significant Effects (LSEs) present. This policy is screened out. Policy E explores private non-residential parking restrictions through a Workplace Parking Levy (WPL), the revenue of which could be invested in promoting active transport modes. While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not involve negative impact pathways relating to these European sites. Instead, limiting the
Policy F – Deliver and support residential and business behaviour change initiatives to encourage people to walk, cycle and use public transport and to travel more safely	NA	Travel behaviour change programmes can have a significant impact on the people's travel patterns (decreases of 50% in private car usage and similar increases for alternative transport modes). Infrastructure investment combined with such behaviour change programmes is most effective. The Council will continue to develop the My Journey programme, which provides residents with travel information, incentives and help to travel more sustainably. The infrastructure investment will complement the behaviour change programme. School travel planning will continue to be provided to educate children and their parents. Portsmouth City Council will continue to promote sustainable commuting patterns. Up to 2019/20, 1,700 Bikeability places were provided in the City pre-pandemic and numbers are expected to return to this level as the effects of the pandemic ease.	No Likely Significant Effects (LSEs) present. This policy is screened out. Policy F delivers behaviour change programmes for residents and businesses through the My Journey programme and educational activities in schools. While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not involve negative impact pathways relating to these European sites. Instead, promoting sustainable and active transport modes (e.g. walking, cycling, public transport) is likely to reduce private car usage, thereby reducing atmospheric pollution in the city (and adjacent European sites) and improving the quality of life. This policy will also not result in an increase in urban surfacing, recreational levels or construction processes and therefore the impact pathways water quality, recreational pressure and disturbance (during and post construction) are all screened out from Appropriate Assessment.

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### Prioritise walking and cycling

Policy G –Establish a cohesive and continuous network of attractive, inclusive, safe and accessible walking and cycling routes accompanied by cycle parking facilities	Portsmouth Harbour SPA / Ramsar and Chichester & Langstone Harbours SPA / Ramsar	<ul> <li>emissions and use of street space. The aim is to achieve active travel of up to 40% (as in Oxford and Cambridge). The low prevalence of active travel modes is partly due to the poor public realm, crossings, footways and a lack of safe cycle routes. Making streets safer and more attractive is a key part of delivering this policy.</li> <li>A draft Local Cycling and Walking Infrastructure Plan (LCWIP) has identified a network of cycling routes that connect residential areas with the city centre. To support this network, protected continuous cycleways, widened and higher quality footpaths and</li> </ul>	Policy G establishes a cohesive network of walking and cycling routes, including cycle parking
			In some instances (for example where a new walking or cycling path facilitates access to a SPA / Ramsar that is sensitive to recreational disturbance) the LCWIP may lead to negative effects on qualifying waterfowl / waders. A high-level assessment of the path network identified in the LCWIP was therefore undertaken. All walking routes are relatively distant from the Portsmouth Harbour SPA / Ramsar (over 500m) and the Solent and Dorset Coast pSPA / pRamsar (over 323m). The walking routes lie beyond the distance at which visual disturbance is likely to arise (200-300m). The walking routes proposed in the LCWIP are concluded not to have any HRA implications.
			Instead, some of the cycling routes run within close distance to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar. Moreover, cycle routes 108, 205 and 301 traverse the Chichester and Langstone Harbours SPA / Ramsar on a bridge of the A2030 (Eastern Road). Similarly, cycling routes 405 and 503 run directly adjacent to the Portsmouth Harbour SPA / Ramsar. While the cycling routes generally run alongside existing main roads and do not develop access to previously undisturbed sections of European sites, due to their proximity to some European sites, it is recommended that this policy is screened in as a precautionary measure.
			This policy will not result in an increase in urban surfacing or construction processes and therefore the impact pathways water quality and visual and noise disturbance (during and post construction) are all screened out from Appropriate Assessment. Any construction involved is likely to be very small-scale (e.g. installing cycle parking) and within the existing urban fabric.
			Overall, the following impact pathway requires further consideration in an AA: <ul> <li>Recreational disturbance</li> </ul>

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Policy H – NA Introduce a network of low traffic neighbourhoods and School Streets that reduce through traffic in residential streets	With the increase in car ownership, a portion of residential streets has been given over to parked cars and passing traffic. The Council will introduce Low Traffic Neighbourhoods in residential areas to limit through traffic. This will be achieved by placing planters or bollards in the carriageway. Evidence from Waltham Forest shows that this significantly decreases overall traffic volume and increases walking / cycling levels. This would lead to general traffic calming and healthier streets.	
Policy I – Improve NA the city centre, local and district centres by reducing or removing general traffic, with access focused on walking, cycling and public transport	City centres must be attractive places in order to be successful, which means less moving traffic and fewer parked cars. Evidence from across the UK suggests that a better public realm and traffic management results in higher usage of active transport modes, higher levels of footfall and reduced vacancy rates. Priority will be given to walking, cycling and public transport modes. This approach will use similar existing approaches in Palmerston Road and Commercial Road as examples. Some parking spaces will be converted into community spaces (e.g. parklets). Notwithstanding this, the policy recognises that as an island city, a certain amount of traffic is necessary and will continue to be present.	Policy I reshapes the city centre by reducing the overall amount of traffic and prioritising walking, cycling and public transport access. While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the

Transform Public Transport

Policy J – Prioritise	NA		No Likely Significant Effects (LSEs) present. This policy is screened out.
local bus services			
over general			reliable. This will be achieved through a reallocation of road space and giving dynamic priority
traffic to make		bus service reduces social deprivation by approx. 4%.	to buses at junctions.
journeys by public			
transport quicker		The Council will seek to improve local bus services, particularly focussing on east-west	While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the
and more reliable		connections. This will involve bus priority infrastructure and dynamic priority at	Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not
and support			involve negative impact pathways relating to these European sites. Instead, supporting bus
demand			services will likely reduce overall private car usage, thereby reducing atmospheric pollution
responsive		trialled to facilitate commuter journeys where bus services are not available (e.g. micro-	in the city (and adjacent European sites) and improving the overall guality of life.
transport services		mobility modes that connect to the rapid transit system). The enhanced bus services will	
· · · · · · · · · · · · · · · · · · ·			This policy will also not result in an increase in urban surfacing, recreational levels or
		from developer contributions.	construction processes and therefore the impact pathways water quality, recreational
			pressure and disturbance (during and post construction) are all screened out from
			Appropriate Assessment. Any construction (e.g. improvements at bus interchanges) is likely
			to be very small-scale and restricted to the existing urban fabric.

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Policy K – Develop a rapid transit network that connects key locations in the city with South East Hampshire, and facilitates future growth	Developing a new rapid transit network (new vehicles, improved stops, easy ticketing, real-time service information) will connect the city with over 40% of the new home and 70% of the new jobs anticipated over the plan period. Where rapid transit schemes have been developed in the UK, they have resulted in high public transport usage and decreased traffic volumes (e.g. Eclipse Bus Rapid Transit between Gosport and Fareham). The City Council will deliver the first stages of the South East Hampshire Rapid Transit network that will connect the mainland with the city centre through Transforming Cities Fund Tranche 2. The city's main growth locations including growth at Tipner and Horsea Island, which would be linked by a new bridge. Bus priority measures will be reassessed to accommodate rapid transit systems and to result in 20% quicker journey times.	<ul> <li>Likely Significant Effects (LSEs) of this policy cannot be excluded. This policy is screened in for Appropriate Assessment.</li> <li>Policy K provides for a new rapid transit network that connects the city centre with southeast Hampshire and facilitates future growth. In general, this will be positive but the policy specifically provides for a new bridge between Tipner and Horsea Island, to accommodate the part of the transit system serving these growth areas.</li> <li>The plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar. While the delivery of a rapid transit system is considered positive regarding atmospheric pollution (it will reduce private car usage and reduce air pollution levels), the new bridge between Tipner and Horsea would cut through the Portsmouth Harbour SPA / Ramsar. This would present a disturbance issue for SPA / Ramsar birds during construction (both visual and noise disturbance). The bridge would also increase the amount of urban surfacing with the potential for water runoff into the SPA / Ramsar. It is considered that the policy would not increase the level of recreational pressure in the relevant SPAs / Ramsars.</li> <li>Overall, the following impact pathway requires further consideration in an AA: <ul> <li>Visual and noise disturbance (during construction)</li> <li>Water quality (via surface runoff)</li> <li>Habitat fragmentation</li> </ul> </li> </ul>
Policy L – Deliver NA high quality transport interchanges, stations and stops	Seamless journeys across different transport modes are key to encouraging car- independent citizens. The ease of interchange and environmental quality at stops is the key driver of this. The interchanges should also be accessible to people with low mobility and offer a safe feel. First or last mile journeys need to be supported. Stops and interchanges along the rapid transit will be upgraded to include real-time information, enhanced lighting, places to sit, cycle parking, cycle hire docks and other first / last mile transport modes. Key transport interchanges (e.g. train stations) will be improved by providing convenient / direct crossings, safety and clear wayfinding. As part of the Future Transport Zones project, Mobility Hubs will be installed at key locations, including car clubs, cycle hire, taxi ranks, etc.	<ul> <li>Habitat fragmentation</li> <li>Air quality</li> <li>No Likely Significant Effects (LSEs) present. This policy is screened out.</li> <li>Policy L delivers high-quality transport interchanges, stations and stops by providing real- time information, enhanced lighting, eating opportunities, cycle parking and micro-mobility transport modes.</li> <li>While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not involve negative impact pathways relating to these European sites. Instead, enhancing public transport interchanges and facilitating sustainable travel will likely reduce overall private car usage, thereby reducing atmospheric pollution in the city (and adjacent European sites) and improving the overall quality of life.</li> <li>This policy will also not result in an increase in urban surfacing, recreational levels or construction processes and therefore the impact pathways water quality, recreational pressure and disturbance (during and post construction) are all screened out from Appropriate Assessment. Any construction (e.g. enhancements at bus interchanges) are likely to be very small-scale and restricted to the existing urban fabric. Similarly, enhanced lighting at public transport interchanges is unlikely to materially increase lighting disturbance in the SPAs / Ramsar; light disturbance from other sources (e.g. ports and shipping) are considered</li> </ul>

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Policy M – NA Continue to work with public transport operators to deliver integrated, efficient, affordable, attractive services promoting local and regional connectivity	A consistent feature of cities with high levels of public transport usage is an integrated ticketing system, which makes travelling less confusing and cheaper. The Solent Go platform (a collaboration between bus operators and Solent Transport) has improved accessibility across the Solent region. However, in Portsmouth City many short trips are still made by car. The City Vision for Portsmouth Conference showed that residents demand greater integration of transport and cheaper fares. Portsmouth City Council will work with operators to expand the Solent Go platform into the Portsmouth City, making it easier to use different modes of transport including rail. A Mobility as a Service (MaaS) platform will deliver daily and / or weekly caps on fares (as in London).	Policy M delivers integrated and affordable public transport services locally and regionally in collaboration with public transport operators. For example, this is to include the Solent Go platform that intends to integrate public transport journeys into Portsmouth City.
Support business and protect our assets		
Policy N – Protect Portsmouth Harbour SPA / the main road Ramsar network and maintain access to the ports and HM Naval Base, Portsmouth and other key industry, business and retail sites.	<ul> <li>Portsmouth has been shaped by its Ports and the Naval Base. The Portsmouth International Port makes the city a gateway to the world with 1 million tonnes of goods and many ferry passengers entering / leaving the city every year. This sustains the livelihoods of many Portsmouth residents. Furthermore, Portsmouth is one of the three vehicle ferry routes to the Isle of Wight.</li> <li>To ensure the success of the Ports and the Naval Base the key connections from the mainland through the city (especially the M275) must operate efficiently. Commuting trips to the Ports should be achieved by public transport modes (delivered through earlier policies). Local trips should avoid the M275 wherever possible, introducing intelligent Transport Systems better managing demand and reducing access to the M275. Targeted capacity improvements will be considered where they do not create</li> </ul>	for Appropriate Assessment. Policy N protects the key connection routes from the mainland to the Ports and the Naval Base. This includes maintaining an efficient operation of the M275 and the use of Intelligent Transport Systems. Limiting the use of the M275 for essential traffic and encouraging commuting trips to be undertaken by public transport may contribute to decreased private car usage, thereby reducing atmospheric pollution in the city (and adjacent European sites) and improving the overall quality of life.

A new traffic link to Junction 1 of the M275 could be explored to facilitate easier access to the strategic road network, reduce pressure at the Rudmore Roundabout and support delivery of strategic development sites at Tipner.

additional demand or add to congestion of the surrounding road network.

This policy will not result in an increase in recreational levels therefore the impact pathway recreational pressure is screened out from Appropriate Assessment.

on not creating additional demand (thereby avoiding by definition an increase in atmospheric

Overall, the following impact pathway requires further consideration in an AA:

- Visual and noise disturbance (during construction)
- Water quality (via surface runoff)

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Policy O – Deliver micro and macro freight consolidation measures, supporting businesses and other organisations to consolidate their operational journeys, including the use of zero emission vehicles for last mile delivery	Portsmouth Harbour SPA / Ramsar and Chichester & Langstone Harbours SPA / Ramsar	This policy is based on the fact that one fully loaded HGV unloaded onto e-cargo bikes for last mile deliveries can replace multiple lightly loaded light vans in sensitive areas. Consolidation capacity in strategic locations across the city is required to achieve this. The Council will trial consolidation facilities at a range of scales to aid in reducing congestion and pollution. This could also help businesses by reducing costs of inefficient	The plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar. Depending on whether the micro and macro consolidation centres would have to be constructed, and where they are located, this
Policy P – Explore a lane rental scheme to maximise co- ordination of street works and roadworks, in order to minimise impacts on traffic sensitive routes during peak periods	NA	Road works have a significant impact on the functionality of the road network across the UK, causing congestion. Lane rental schemes (requiring a permit to be issued prior to commencing works) have been found to be effective in other areas of the UK. The Council will explore a lane rental scheme that will be applied to traffic sensitive routes during peak periods to reduce congestion and improve journey time reliability. This will improve planning of street works by utility companies. It is expected this will incentivise more efficient working practices.	<ul> <li>Overall, the following impact pathway requires further consideration in an AA:</li> <li>Loss of functionally linked habitat</li> <li>Visual and noise disturbance (during and post construction)</li> <li>Water quality (via surface runoff)</li> <li>No Likely Significant Effects (LSEs) present. This policy is screened out.</li> <li>Policy P provides for a Lane Rental scheme to maximise coordination of roadworks, with the intention to reduce congestion and improve journey times.</li> <li>While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not involve negative impact pathways relating to these European sites. The Lane Rental scheme will not materially affect the number of journeys undertaken and will thus not have any impact on air quality.</li> <li>This policy will also not result in an increase in urban surfacing, recreational levels or construction processes and therefore the impact pathways water quality, recreational pressure and disturbance (during and post construction) are all screened out from Appropriate Assessment.</li> </ul>
Policy Q – Maintain our highway infrastructure	NA	In the last decade highway maintenance budgets have been under pressure as the grant available from the government has reduced. Notwithstanding this, the highway infrastructure needs to be well maintained to be most efficient. The Council will continue to work collaboratively with their highway maintenance partners in setting out robust maintenance regimes, inspection and testing procedures and an accredited Asset Management Strategy. A better maintained highway network is crucial to promoting active transport modes, such as walking and cycling.	No Likely Significant Effects (LSEs) present. This policy is screened out. Policy Q details a robust maintenance scheme for the highway infrastructure, including roads, cycling routes and pavements. While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not involve negative impact pathways relating to these European sites.

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			Simply maintaining the highway infrastructure in good condition will ensure a continued use by motorists, cyclists and walkers. It will not materially increase the number of vehicle journeys undertaken and therefore have no atmospheric pollution effects.
			This policy will also not result in an increase in urban surfacing, recreational levels or construction processes and therefore the impact pathways water quality, recreational pressure and disturbance (during and post construction) are all screened out from Appropriate Assessment.
Policy R – Proactively manage kerbside space to enable	NA	making it easier to walk, cycle and use public transport. This will increase the pressure on the remaining kerb side space, with businesses needing to operate efficiently and those in need for parking still being able to do so. Kerbside management will become	No Likely Significant Effects (LSEs) present. This policy is screened out. Policy R sets out a proactive management of kerbside space, including a smart and flexible demand-based system of loading bays and parking spaces.
flexible use for essential access		monitor the real-time demand for parking and loading bays via smartphones.	While the plan area lies directly adjacent to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, it is concluded that the policy does not involve negative impact pathways relating to these European sites. Managing kerbside
			spaces dynamically will allow motorists to identify free parking locations more quickly and reduce the amount of time spent circling in search for parking. This would effectively reduce emissions by cutting excess journey time and may help reduce atmospheric pollution in the city (and adjacent European sites).
		loading bays, parking spaces, special events or emergencies.	This policy will also not result in an increase in urban surfacing, recreational levels or construction processes and therefore the impact pathways water quality, recreational pressure and disturbance (during and post construction) are all screened out from Appropriate Assessment.

# 7. Appropriate Assessment

- 7.1 The following policies were screened in for Appropriate Assessment in the previous chapter:
  - Policy D Expand the Portsmouth Park and Ride to create a transport hub to reduce pollution and congestion in the city and increase transport choices – regarding visual and noise disturbance during construction and atmospheric pollution in the operational period on the Portsmouth Harbour SPA / Ramsar
  - Policy G Establish a cohesive and continuous network of attractive, inclusive, safe and accessible walking and cycling routes accompanied by cycle parking facilities – regarding recreational pressure in the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar
  - Policy K Develop a rapid transit network that connects key locations in the city with South East Hampshire, and facilitates future growth regarding visual and noise disturbance during construction, water quality (via surface runoff), habitat fragmentation and atmospheric pollution in the operational period on the Portsmouth Harbour SPA / Ramsar
  - Policy N Protect the main road network and maintain access to the ports and HM Naval Base, Portsmouth and other key industry, business and retail sites – regarding visual and noise disturbance during construction and water quality (via surface runoff)
  - Policy O Deliver micro and macro freight consolidation measures, supporting businesses and other organisations to consolidate their operational journeys, including the use of zero emission vehicles for last mile delivery – regarding the loss of functionally linked habitat, visual and noise disturbance during and post-construction; and water quality (via surface runoff)
- 7.2 It is to be noted that the policies of the LTP set out little specific detail, which will be required to enable a full Appropriate Assessment. As such, most conclusions are deferred to the Implementation Plan, which will seek to implement the LTP's policies by providing deliverable schemes / projects. The AA of this HRA uses best available evidence to identify which policies may result in adverse effects on the integrity of European sites, and which thus will require further assessment at the next tier of development framework.

# Visual and noise disturbance

## **Portsmouth Harbour SPA / Ramsar**

- 7.3 Several policies in the LTP might result in visual and noise disturbance of the Portsmouth Harbour SPA / Ramsar during and post construction. Detail on the policies is provide in the following:
  - Policy D proposes the conversion of the Portsmouth Park and Ride (P&R) along the M275 into a
    multi-storey P&R, tripling its capacity. It also considers the creation of a transport hub to provide
    access to multi-modal transport options and associated services, delivery collection points, freight
    consolidation facilities and a bus depot. At its closest point, the P&R boundary lies approx. 100m
    from the Portsmouth Harbour SPA / Ramsar. This lies well within the precautionary screening
    distance for visual and noise disturbance of the SPA's / Ramsar's most sensitive bird species (Brent
    goose, black-tailed godwit). As such it is possible that the works may particularly affect the birds
    during roosting and loafing, which requires further assessment.
  - Policy K develops a rapid transit network connecting key places in Portsmouth City with South East Hampshire. This is likely to reduce private car usage and is likely to reduce atmospheric pollution in the area. However, the policy also proposes a new bridge between Tipner and Horsea Island. This bridge would cut through the SPA / Ramsar and might pose a significant disturbance issue for overwintering birds during construction.
  - Policy N provides for potential capacity improvements on the M275 (without creating additional demand or adding to congestion) and a water taxi between Tipner and the port.

- Policy O delivers micro and macro freight-consolidation measures to serve Portsmouth, with the macro-scale consolidation centres likely to lie just outside of Portsmouth
- 7.4 None of the policies go into detail about where the infrastructure may be created (except for the expansion of the P&R and the transport hub) and none can therefore be assessed in detail at the plan level.
- 7.5 The Portsmouth Harbour SPA / Ramsar is designated for various waterfowl species, including dark-bellied Brent goose. All waterbird species are sensitive to disturbance stimuli to a certain extent, but some species are significantly more sensitive than other. For example, the Brent goose is classified as highly sensitive to both visual and noise stimuli. For example, while feeding Brent goose show a first reaction at a distance of approx. 100m to the stimulus. The disturbance distance doubles to approx. 200m when the birds are loafing or roosting. It is generally thought that if geese are within 400m of proposed works, mitigation measures should be considered to avoid altering their natural behaviour.
- 7.6 Very little information on visual and noise disturbance of black-tailed godwit is available to date. Given this, it is recommended to use a standard approach for protecting this species (i.e. considering it as moderately sensitive). Generally, it is considered that if birds are closer than 250m to proposed works, then they should be taken into account in the mitigation of construction works, especially if any aspect of the works is carried out on mudflat and / or fronting of the intertidal zone.
- 7.7 It is to be noted that the P&R is situated in an already built-up area, directly adjacent to the M275, the busy motorway connecting the mainland with the City of Portsmouth. Therefore, it is expected that SPA / Ramsar birds in this part of the Portsmouth Harbour SPA / Ramsar are already experiencing a high level of disturbance and are likely to show a high degree of habituation.
- 7.8 Notwithstanding this, any potential disturbance issue in relation to the SPA / Ramsar needs to be formally assessed. Regarding visual disturbance, the Street View available for the P&R indicates that there currently are protective screens preventing a direct sightline from the nearest section of the SPA / Ramsar into the P&R. It appears that this is a temporary screen due to an ongoing building project next to the P&R. AECOM advises that a protective screen should be used to shield the northern side of the P&R from the Portsmouth Harbour SPA / Ramsar during construction.
- 7.9 Depending on the construction methods and machinery used to deliver this policy, the closest section of the SPA / Ramsar would be at the likely risk of noise disturbance, particularly from impact piling the noisiest construction method that might be used. If the schemes / projects developed to support Policy D in the LTP, require the use of particularly noisy equipment, it is advised that the construction activities are restricted to between April to September, the spring and summer months during which the qualifying species are not present on site. If construction works were to be carried out between April and September, there would be no potential for visual and noise disturbance of qualifying SPA / Ramsar bird species.
- 7.10 In contrast to the P&R (which lies some distance from the closest section of the SPA / Ramsar), the planned bridge between Tipner and Horsea (included in Policy K) would be located within the SPA / Ramsar. This makes it likely that the associated construction works will inevitably be undertaken within the screening distance for visual and noise disturbance for SPA / Ramsar birds. It is concluded that any construction works for the bridge should be undertaken outside the overwintering season for birds (October March). If this isn't possible then it will need to be demonstrated as part of the planning application that significant disturbance of wintering waterfowl and waders can be avoided.
- 7.11 It is noted that ecology survey data are currently being collected to inform the Environmental Impact Assessment (EIA) of Tipner West, including the proposed Tipner bridge, within the Transport and Works Act Order (TWAO). However, these data are not yet complete. A detailed assessment of the potential impacts of the bridge proposal will therefore be undertaken at the project-level HRA of this scheme (see policy recommendation below).
- 7.12 Finally, the potential for visual and noise disturbance is also present for Policy O, which provides for microand macro-scale consolidation centres. At this point it is unclear whether the consolidation centres would be housed in existing infrastructure or whether these will be constructed. If any consolidation centres are to be constructed within 200m from the Portsmouth Harbour SPA / Ramsar, it is likely that mitigation measures would be required to avoid adverse effects on the site. However, this policy will have to be reassessed in the context of the applications for these centres, which will provide more detail on how this policy will be implemented.

- 7.13 Overall, at the LTP level, no detail on the timing and nature of the construction programme is available. Therefore, an Appropriate Assessment regarding visual and noise disturbance of these policies will be required at the planning application stage for individual schemes, which will set out detail regarding delivery timetables, construction programme and specific scheme parameters. The purpose of the HRA at this plan level is to ensure that a sufficient policy framework exists to require that further project-level assessment and to confirm that relevant projects will not be consented until such an assessment is complete.
- 7.14 It is noted that Portsmouth's LTP4 currently does not contain a policy that ensures the protection of European sites regarding the impact pathways identified in this HRA. <u>Therefore, it is recommended that</u> the following supporting text is inserted into the LTP4 regarding environmental and ecological protection: 'Habitats Regulations Assessments (HRAs), including Appropriate Assessment (AA), and Environmental Impact Assessment (EIA) where necessary, will be undertaken on schemes as required. The HRA and Strategic Environmental Assessment (SEA) published alongside the LTP4 highlight the mitigation measures that could be taken forward to ensure no adverse effects on the integrity of relevant European sites, and reduce the environmental impact of LTP4.' Regarding visual and noise disturbance in the Portsmouth Harbour SPA / Ramsar, inclusion of this wording would allow for a conclusion of no adverse effects on site integrity at the plan level. Effective mitigation measures that could be taken forward to providing visual screens.

# **Disturbance of Functionally Linked Habitat**

- 7.15 Visual and noise disturbance may not only affect qualifying species in the designated site boundary, but also in habitat parcels that are functionally linked to the Portsmouth Harbour SPA / Ramsar, the Chichester and Langstone Harbours SPA / Ramsar, and the Solent and Southampton Water SPA / Ramsar. All bird species are highly mobile and may spend a significant portion of time roosting and / or feeding on land outside European sites (also see earlier section on the impact pathway 'loss of functionally linked habitat'). Since these off-site parcels are extended the same level of protection as the designated sites, visual and noise disturbance also needs to be considered in relation to these sites.
- 7.16 Policy D proposes the expansion of the existing P&R to a multi-storey car park and the creation of a transport hub. The P&R lies very close to several land parcels that are identified as functionally linked habitat in the SWBGS, including P136 (a field that is classified as an area of Low Use), P139 (a section of grassland bordering mudflats and the intertidal zone, classified as an area of Secondary Use) and P60 (Tipner Range, which constitutes a Primary Support Area). These functionally linked habitat parcels lie at distances of approx. 35m, 105m and 133m from the boundary of the P&R. Considering the established flight distances (particularly of the Brent goose which may take flight in response to visual disturbance stimuli as far as 200m away), all these fragments of supporting habitat lie within the potential disturbance distance for construction works. It is considered that disturbance is least likely for P60 because this is separated from the P&R by the M275, which is likely to currently expose Tipner Range to high noise levels. Any noise disturbance arising from construction works in the P&R, are likely to be insignificant in relation to the existing soundscape.
- 7.17 The bridge proposed in Policy K would connect Tipner to Horsea and it is unclear where exactly it will be located. As for the P&R, there are potential concerns over visual and noise disturbance arising from bridge construction works on habitat parcels functionally linked to European sites in the Solent. In addition to the functionally linked land parcels in Tipner, Horsea itself comprises several land parcels that are routinely used by SPA / Ramsar birds, including P76 (Secondary Use), P75 (Primary Support Area) and P48C (Secondary Use). Depending on where the bridge is constructed, mitigation measures for visual and noise stimuli may become necessary. However, it is not possible to assess this impact pathway fully until a construction programme for the bridge becomes available.
- 7.18 It is noted that Portsmouth's LTP4 currently does not contain a policy that ensures the protection of European sites regarding the impact pathways identified in this HRA. <u>Therefore, it is recommended that</u> the following supporting text is inserted into the LTP4 regarding environmental and ecological protection: 'Habitats Regulations Assessments (HRAs), including Appropriate Assessment (AA), and Environmental Impact Assessment (EIA) where necessary, will be undertaken on schemes as required. The HRA and Strategic Environmental Assessment (SEA) published alongside the LTP4 highlight the mitigation measures that could be taken forward to ensure no adverse effects on the integrity of relevant European sites, and reduce the environmental impact of LTP4.' Regarding visual and noise disturbance in habitat that is functionally linked to the Portsmouth Harbour SPA / Ramsar or the Chichester and Langstone Harbours SPA / Ramsar, inclusion of this wording would allow for

<u>a conclusion of no adverse effects on site integrity at the plan level.</u> As with noise and visual disturbance within the European sites themselves, widely used effective mitigation measures that could be employed include the seasonal timing of works and/or providing visual screens.

# Water quality (through surface runoff)

### **Portsmouth Harbour SPA / Ramsar**

- 7.19 Likely Significant Effects of several policies in the LTP on the water quality of European sites via surface runoff could not be excluded. Due to the relatively localised nature of the policies, it is considered that they will only affect the water quality of adjacent European sites, even in-combination with other plans and projects. Because the focal area of most policies lies in the western part of Portsmouth City (e.g. the bridge between Tipner and Horsea, the P&R and the M275 capacity improvements), it is considered that the Portsmouth Harbour SPA / Ramsar is likely to be the European site most at risk. However, any construction works within a few hundred metres of the Chichester and Langstone Harbours SPA / Ramsar or the Solent Maritime SAC, could have negative water quality impacts in these European sites. The following policies are deemed to have potential water quality impacts:
  - Policy D proposes the conversion of the Portsmouth Park & Ride (P&R) along the M275 into a
    multi-storey P&R, tripling its capacity, and the creation of a transport hub. At its closest point, the
    P&R boundary lies approx. 100m from the Portsmouth Harbour SPA / Ramsar. This lies within the
    distance at which synthetic or non-synthetic pollutants from spills and leakages might reach the
    SPA / Ramsar. Increase surface runoff may also be present post-construction as a result of an
    increase in impermeable urban surfaces.
  - Policy K develops a rapid transit network connecting key places in Portsmouth City with South East Hampshire. Building of a new bridge between Tipner and Horsea Island may result in the release of aquatic pollutants during and post construction. Any such pollutants would directly wash into the SPA / Ramsar because the bridge would traverse this European site.
  - Policy N provides for potential capacity improvements on the M275 (without creating additional demand or adding to congestion). Any works on the M275, including the provision of additional lanes, changes to roundabout configurations (e.g. the new link at Junction 1 to Rudmore Roundabout) and road resurfacing works have the potential to result in pollutant deposition into the Portsmouth Harbour SPA / Ramsar especially where the motorway runs directly adjacent to the European site.
  - Policy O delivers micro and macro freight-consolidation measures to serve Portsmouth, with the macro-scale consolidation centres likely to lie just outside of Portsmouth. Depending on the potential location of the consolidation centres (if any are to be constructed), there is a potential for adverse effects on the Portsmouth Harbour SPA / Ramsar.

# Chichester and Langstone Harbours SPA / Ramsar & Solent Maritime SAC

- 7.20 In contrast to the Portsmouth Harbour SPA / Ramsar, these two European sites lie further away from the areas covered by the LTP's policies. Likely Significant Effects could not be excluded for the following policy:
  - Policy O delivers micro and macro freight-consolidation measures to serve Portsmouth, with the
    macro-scale consolidation centres likely to lie just outside of Portsmouth. It is not yet known how
    and where this policy will be delivered, including where (if any) consolidation centres are to be
    built. If such centres were built in close proximity, there would be potential negative impacts on the
    water quality of the Chichester and Langstone Harbours SPA / Ramsar, and the Solent Maritime
    SAC.

### **Mitigation**

7.21 A detailed assessment of potential negative water quality impacts will only be possible at the successive planning stages, such as individual outline planning applications (which will provide a detailed programme of the construction works). However, a range of effective measures exist for ensuring that proposals do no

lead to adverse effects on the integrity of European sites and it is likely that the mitigation measures will include some or all of the following:

- Production of a Construction Environment Management Plan (CEMP)
- Installation of Sustainable Drainage Systems (this will not be possible on the bridge between Tipner and Horsea, but could be an option for the P&R)
- Ensuring that any new workplaces resulting from the policies are connected to the public sewerage system and that there is sufficient headroom at the relevant Wastewater Treatment Works (WwTWs) to accommodate the development
- Secure storage of materials that represent a risk of pollution further than 10m away from any water body and making sure that any refuelling / liquid storage areas have sufficient capacity and are bunded
- Provision of spill kits for the event of an emergency
- 7.22 It is also to be noted that is an offence for construction activities and site operators to release pollutants into watercourses according to the Environmental Damage (Prevention and Remediation) (England) Regulations 2015 and the Environmental Permitting (England and Wales) Regulations 2016. Therefore, at least some of the above mitigation measures will need to be adopted in order to secure a permit. In the HRA of the Implementation Plan, such measures could be taken into account at the LSEs stage because they are not explicitly adopted to protect European sites (but rather all water bodies).
- 7.23 It is noted that Portsmouth's LTP4 currently does not contain a policy that ensures the protection of European sites regarding the impact pathways identified in this HRA. Therefore, it is recommended that the following supporting text is inserted into the LTP4 regarding environmental and ecological protection: 'Habitats Regulations Assessments (HRAs), including Appropriate Assessment (AA), and Environmental Impact Assessment (EIA) where necessary, will be undertaken on schemes as required. The HRA and Strategic Environmental Assessment (SEA) published alongside the LTP4 highlight the mitigation measures that could be taken forward to ensure no adverse effects on the integrity of relevant European sites, and reduce the environmental impact of LTP4.' Regarding negative impacts on the water quality of the Portsmouth Harbour SPA / Ramsar, the Chichester and Langstone Harbours SPA / Ramsar, and the Solent Maritime SAC, inclusion of this wording would allow for a conclusion of no adverse effects on site integrity at the plan level. Widely used and effective mitigation measures that could be deployed at the scheme level to prevent negative changes in water quality include an adequate CEMP, use of SuDS where possible, storing construction materials appropriately and providing spill kits.

# Loss of Functionally Linked Habitat

### Portsmouth Harbour SPA / Ramsar, Chichester and Langstone Harbours SPA / Ramsar & Solent and Southampton Water SPA / Ramsar

7.24 The Solent Waders and Brent Goose Strategy (SWBGS)<sup>33</sup>, a conservation partnership project focusing particularly on brent goose and wading bird species in the Solent, has undertaken surveys over three winters between 2016 and 2019. The strategy is an attempt to identify the sites these birds rely on in the Solent, outside of the boundaries of the formal designations. This network of functionally linked feeding and roosting sites has been mapped<sup>34</sup>, identifying Core Areas, Primary Support Areas, Secondary Support Areas, Low Use areas and Candidate areas. For example, one of the key parcels of functionally linked habitat within the northern part of Portsmouth City lies at Tipner Range, P60 a primary feeding area for Brent goose. Various other land parcels within or adjacent to Portsmouth's urban fabric are also key support areas for SPA / Ramsar birds. It is important to note that the loss of functionally linked habitat does not solely include the direct loss of land to development.

<sup>&</sup>lt;sup>33</sup> Available at <u>https://solentwbgs.wordpress.com/ [Accessed on the 08/07/2020]</u>

<sup>&</sup>lt;sup>34</sup> Freely available to view online at: <u>https://solentwbgs.wordpress.com/page-2/[</u>Accessed on the 08/07/2020]

- 7.25 The only policy for which Likely Significant Effects on European sites designated for mobile waterbirds could not be excluded was the following:
  - Policy O delivers micro and macro freight-consolidation measures (including centres) to serve Portsmouth, with the macro-scale centres likely to be located on the outskirts of the City while micro-scale centres are more likely to be located in the City near the freight destinations. Depending on the potential location of the consolidation centres (if any are to be constructed), there is a potential for adverse effects on the Portsmouth Harbour SPA / Ramsar, Chichester and Langstone Harbours SPA / Ramsar, and the Southampton Water SPA / Ramsar.
- 7.26 The loss of functionally linked habitat for Solent's Brent goose and waders would be of concern only if greenfield sites were to be developed under Policy O, which geese or waders might use for foraging or roosting. Consolidation centres to be delivered on brownfield sites would not be relevant to this impact pathway, as developed sites have no functional value for the SPA / Ramsar birds. It is to be noted that even very small parcels of greenfield land amidst housing or industrial infrastructure require assessment. For example, Baffins Pond (site P129) lies in the heart of Portsmouth City and is only 1.35ha in size, but is nonetheless an area of Low Use for SPA / Ramsar birds.
- 7.27 The LTP does not specify the nature or location of the consolidation centres, on which more detail will be contained in the Implementation Plan. As such, a complete Appropriate Assessment of this impact pathway is deferred to an HRA of a lower planning tier. Notwithstanding this, any projects or schemes coming forward to deliver the LTP will have to be assessed in context of the data from the Solent Waders and Brent Goose Strategy. This will help determine whether the land included in a proposal is likely to be functionally linked to European sites and to identify the next steps required to obtain planning permission.
- 7.28 For example, any greenfield site that has the potential to constitute functionally linked habitat would have to be surveyed in autumn, winter and spring over two consecutive years to evaluate its habitat type and establish whether the land parcel supports a significant<sup>35</sup> population of SPA / Ramsar birds. This requirement would also extend to neighbouring greenfield sites, in which the development site may cause disturbance (ultimately leading to the loss of function of that parcel). If the habitat within the proposed development site or adjacent land are identified to represent functionally linked habitat, mitigation or avoidance measures will be required to gain planning permission. Mitigation and avoidance measures may comprise the use of site Masterplans to identify bird habitat for retention or the provision and / or enhancement of new / existing habitat for the SPA / Ramsar birds. Furthermore, a project-level HRA would become necessary to ensure that the proposal would not result in adverse effects on the integrity of any European sites.
- 7.29 Overall, the impact pathway loss of functionally linked habitat presents an issue for any greenfield development coming forward under Portsmouth's LTP. It is noted that Portsmouth's LTP4 currently does not contain a policy that ensures the protection of European sites regarding the impact pathways identified in this HRA. Therefore, it is recommended that the following supporting text is inserted into the LTP4 regarding environmental and ecological protection: 'Habitats Regulations Assessments (HRAs), including Appropriate Assessment (AA), and Environmental Impact Assessment (EIA) where necessary, will be undertaken on schemes as required. The HRA and Strategic Environmental Assessment (SEA) published alongside the LTP4 highlight the mitigation measures that could be taken forward to ensure no adverse effects on the integrity of relevant European sites, and reduce the environmental impact of LTP4.' Regarding the loss of habitat that is functionally linked to the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar, inclusion of this wording would allow for a conclusion of no adverse effects on site integrity at the plan level. An Appropriate Assessment at the planning application stage would place schemes in the context of the SWBGS data and require overwintering bird surveys for any parcels that are identified as potentially functionally linked.

# **Atmospheric Pollution**

## Portsmouth Harbour SPA / Ramsar

7.30 The Air Pollution Information System (APIS) identified that the Portsmouth Harbour SPA is potentially sensitive to atmospheric nitrogen deposition, the most likely issue associated with the expansion of the P&R system. For example, dark-bellied brent geese feed on various eelgrass species (including *Zostera* 

<sup>&</sup>lt;sup>35</sup> A significant population is classified as a site that regularly used by 1% or more of the population of qualifying bird species

angustifolia and Zostera noltei) in the intertidal mudflats of the SPA / Ramsar. APIS provides a critical nitrogen load of 20-30 kg N/ha/yr for the geese (the critical load for saltmarsh). The Ramsar is also designated for other important biota that support qualifying waders, including the mud-snail *Hydrobia ulvae*, common cord-grass *Spartina anglica* and sea lettuce *Ulva lactuca*. The increased deposition of nitrogen may result in the dominance of more competitive plant species in the saltmarsh, reducing the foraging ability of the geese.

- 7.31 Policy D (the proposed expansion of the P&R and creation of a transport hub) and Policy K (the bridge proposed between Tipner and Horsea Island) both involve schemes that lie within 200m of the Portsmouth Harbour SPA / Ramsar; indeed, the bridge would traverse this European site. Furthermore, both policies are likely to result in increased traffic volume locally with the potential to increase nitrogen deposition to the foraging grounds of the SPA's / Ramsar's brent geese. The P&R expansion might have a positive overall effect on air quality (because fewer people drive into Portsmouth City Centre),but could locally (i.e. adjacent to the P&R in Tipner) increase pollutant deposition. As indicated in the section on visual and noise disturbance, survey data to inform the EIA of the bridge proposal is currently being collected. This data will inform the project-level HRA that will need to be undertaken for this scheme as part of the TWAO (also see policy recommendation below).
- 7.32 Natural England (NE) undertakes a periodic condition assessment of all Marine Protected Areas (MPAs) that provides robust data on the condition of marine sites. However, these data are only available for SAC habitats. Further data on MAGIC was appraised to evaluate the condition that the Portsmouth Harbour SPA / Ramsar is currently in. Tipner Lake (part of the Portsmouth Harbour SSSI) is classified as unfavourable (no change). The main reason for this assessment is diffuse water pollution across the entire Tipner Lake, leading to a cover with dense macroalgal mats (83% cover). Schemes associated with an increase in vehicles (even locally) have the potential to add further nitrogen to the existing high load in this part of the SPA / Ramsar.
- 7.33 Given the high-level nature of the LTP4, no detail on these proposals is currently available. As for the other impact pathways, these schemes will have to be re-assessed at the planning application stage. It is noted that Portsmouth's LTP4 currently does not contain a policy that ensures the adequate protection of European sites regarding the impact pathways identified in this HRA. Therefore, it is recommended that the following supporting text is inserted into the LTP4 regarding environmental and ecological protection: 'Habitats Regulations Assessments (HRAs), including Appropriate Assessment (AA), and Environmental Impact Assessment (EIA) where necessary, will be undertaken on schemes as required. The HRA and Strategic Environmental Assessment (SEA) published alongside the LTP4 highlight the mitigation measures that could be taken forward to ensure no adverse effects on the integrity of relevant European sites, and reduce the environmental impact of LTP4.' Regarding atmospheric pollution in the Portsmouth Harbour SPA / Ramsar, inclusion of this wording would allow for a conclusion of 'no adverse effects' on site integrity at the plan level. It is advised that schemes coming forward under the LTP4 will have to demonstrate that they do not cause a significant increase in traffic volume and pollutant deposition within 200m of the Tipner Lake part of the Portsmouth Harbour SPA / Ramsar. It is recommended that the identified development schemes (i.e. the P&R and Tipner - Horsea Island bridge) are supported by traffic modelling and an Air Quality Impact Assessment (AQIA) where relevant.

# **Recreational Pressure**

# Portsmouth Harbour SPA / Ramsar and Chichester and Langstone Harbours SPA / Ramsar

7.34 The previous chapter identified that LSEs of Policy G<sup>36</sup> on the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar could not be excluded. The principal aim of this policy is to reduce private car usage and promote active travel modes (walking and cycling) by reallocating road space to walking and cycling routes, which will be set out in the Council's draft Local Cycling and Walking Infrastructure Plan (LCWIP). An initial assessment of the proposed routes highlighted that the walking routes all lie beyond 300m from sensitive European sites, the threshold distance at which visual disturbance

<sup>&</sup>lt;sup>36</sup> Policy G: Establish a cohesive and continuous network of attractive, inclusive, safe, and accessible walking and cycling routes accompanied by cycle parking facilities.

impacts on SPA / Ramsar wildfowl and waders are likely to arise. Therefore, only the cycling routes are included in this Appropriate Assessment.

- 7.35 A GIS assessment indicated that many of the proposed cycling routes lie within close proximity of European sites. For example, routes 405 and 503 run directly parallel to the Portsmouth Harbour SPA / Ramsar. Moreover, routes 108, 205 and 301 traverse the Chichester and Langstone Harbours SPA / Ramsar on a bridge of the A2030 (Eastern Road). Therefore, the LCWIP could reasonably be expected to lead to increased activity levels within a distance that may disturb sensitive SPA / Ramsar birds.
- 7.36 Several factors in relation to the cycling routes require consideration. Because these routes are tailored for cyclists, it is considered that most users will not actually assess the European sites themselves and it is unlikely that the creation of cycling routes will add significantly to their recreational load. Notwithstanding this, the passing of cyclists within visual disturbance distances could still have an impact on the birds. However, it is noted that the cycling routes closest to the European sites are situated alongside major roads, which will already experience high levels of busyness. This particularly applies to cycle routes 503 (passing along the A27 on the northern edge of the Portsmouth Harbour SPA / Ramsar), 108, 205 and 301 (the latter all passing along the A2030 and / or A27 to the north-western edge of the Chichester and Langstone Harbours SPA / Ramsar). AECOM considers that more disturbing elements (e.g. a high traffic volume) are already present in these parts of Portsmouth City, and that the addition of cycling routes will not materially add to the level of visual and noise disturbance in these parts of the European sites. Most importantly, none of the routes provide access to parts of European sites that were previously undisturbed or inaccessible. Both the Portsmouth SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar are already highly popular destinations for recreational activities, and the creation of cycling routes will not significantly add to this pressure.
- While a significant increase in recreational pressure due to Policy G in the LTP is unlikely, it cannot be 7.37 entirely dismissed that some cyclists will access SPAs / Ramsars and increase the disturbance potential for qualifying birds. However, a strategic mitigation strategy for recreational pressure in the wider Solent area is already in place. In recognition of the impacts of recreation on birds across the Solent, a research project (the Solent Disturbance and Mitigation Project) was undertaken to establish a key evidence base of recreational pressure for its European sites (it also identified the core catchment zone for all sites). This project culminated in the Solent Recreation Mitigation Strategy (SRMS)<sup>37</sup>, which stipulates that financial contributions of housing developments within 5.6km of all European sites in the Solent are to be collected to fund on-site Strategic Access Management and Monitoring (SAMM) measures. Given that all new housing within 5.6km, including the residents that will most likely use new local cycling routes, will financially contribute to the SRMS, it is concluded that any small net increase in recreational pressure due to the LCWIP will be adequately mitigated by the strategy. Moreover, any specific proposal for new cycling routes can be investigated at the project level to ensure that design minimises the risk of users venturing into the European sites. Therefore, it is concluded that the LTP4 will not result in adverse effects on the integrity of the Portsmouth Harbour SPA / Ramsar and the Chichester and Langstone Harbours SPA / Ramsar regarding recreational pressure.

# **In-Combination Assessment**

- 7.38 The in-combination assessment of LTPs is important where individual policies might have a small individual effect on a European site but could act 'in-combination' with other plans / projects / schemes coming forward in Portsmouth City or surrounding authorities. The screening table in Chapter 6 has documented that for some policies LSEs on European sites cannot be excluded, especially in-combination with other plans and projects.
- 7.39 The schemes outlined in the LTP4 will occur coincidentally with an increase in housing and employment developments within Portsmouth City and adjacent authorities, including Gosport, Fareham, Winchester and Havant. The increase in housing and employment sites in these areas is likely to result in an increase in traffic on the road network. The consideration of traffic-related air quality implications across the road network associated with housing and employment growth should be considered within each relevant district's Local Plan.

<sup>&</sup>lt;sup>37</sup> The Solent Recreation Mitigation Strategy is available at: <u>https://solent.birdaware.org/media/29372/Bird-Aware-Solent-</u> <u>Strategy/pdf/Solent\_Recreation\_Mitigation\_Strategy.pdf</u> [Accessed on the 14/01/2021]

- 7.40 The LTP aims to reduce private car usage, congestion and queueing on the M275 and to increase the efficiency of commercial journeys in Portsmouth City. Reducing the number of vehicle journeys, is likely to have a positive air quality effect and means that it is unlikely that there would be an in-combination atmospheric pollution effect. Notwithstanding this, Policies D and K have been screened in for Appropriate Assessment regarding atmospheric pollution. However, HRAs of the development plans of surrounding authorities will have been undertaken prior to the adoption of the Local Plans, ensuring that there will be no in-combination atmospheric pollution effects.
- 7.41 In the HRA it was identified that some of the LTP's policies may lead to visual and noise disturbance in European sites and the loss of functionally linked habitat, particularly 'in-combination' with other plans and projects, unless mitigation measures will be adopted. However, for those projects / plans a similar analysis of any such 'in-combination' proposals will have recommended mitigation interventions to avoid adverse effects on site integrity, both alone and 'in-combination'. As such, cumulative adverse effects with Portsmouth's LTP can be excluded, provided that the recommended policy regarding the protection of European sites is included in the next iteration of the LTP.
- 7.42 Given the low resolution of the LTP (i.e. many of the projects are not yet developed), it is required that the 'in-combination' scope is reassessed in the HRAs of the individual schemes that come forward under the LTP.

# 8. Conclusion

- 8.1 The LTP is a high-level strategic transport planning document for the City of Portsmouth with a very strong focus on sustainable transport modes, including walking, cycling and public transport (e.g. a rapid transit system), reducing unnecessary vehicle journeys and eliciting public behaviour change. Many policies contained in the LTP are aimed at improving the quality and connectivity of sustainable transport modes within Portsmouth. These measures have the potential to decrease private car usage, thereby potentially contributing to an improvement in air quality. Sustainable policies are not generally considered to have impact pathways linking to European sites.
- 8.2 However, LTP policies need not necessarily be positive for European sites. Two ways in which LTP policies might be associated with LSEs on European sites is where they are proposing development on greenfield sites or where they are situated directly adjacent to protected waterbodies. For example, new tarmacked bus or walking / cycling lanes adjacent to a water body might lead to changes in water quality via surface water runoff.
- 8.3 This HRA assessed whether the LTP may result in LSEs on European sites, including the Portsmouth Harbour SPA / Ramsar, the Chichester and Langstone Harbours SPA / Ramsar, the Solent and Southampton Water SPA / Ramsar, and the Solent Maritime SAC. It was concluded that LSEs could not be excluded for Policies D, G, K, N and O. This is because these policies have the potential to result in effects on water quality (via surface runoff), visual and noise disturbance (primarily during construction), the loss of functionally linked habitat and recreational pressure. The Appropriate Assessment undertaken also indicated that depending on how the policies are delivered (i.e. the nature and location of specific schemes / projects), mitigation measures might be required to avoid adverse effects on the integrity of European sites. No adverse effects regarding recreational pressure were identified for any of the LTP's policies.
- 8.4 However, it is was also concluded that the LTP provides insufficient detail to enable definitive conclusions and recommendations regarding the above impact pathways (e.g. in relation to the Tipner Horsea bridge), in-combination with other plans and projects. The delivery of the policies will be set out at the project-level and the above identified policies will require a more detailed Appropriate Assessment at the planning application stage. It is recommended that the LTP include wording that ensures that the necessary assessments are undertaken (and any required mitigation measures implemented). Detailed recommendations on wording can be found in the main body of text above.