

# Appendix B

## HRA Screening





West Sussex County Council

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# LOCAL FLOOD RISK MANAGEMENT STRATEGY

Information to Inform a Habitats Regulations Assessment





West Sussex County Council

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# **LOCAL FLOOD RISK MANAGEMENT STRATEGY**

Information to Inform a Habitats Regulations Assessment

**TYPE OF DOCUMENT PUBLIC**

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West Sussex County Council

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# **LOCAL FLOOD RISK MANAGEMENT STRATEGY**

Information to Inform a Habitats Regulations Assessment

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### **APPENDICES**

APPENDIX A: LFRMS DOCUMENT

# 1 INTRODUCTION

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## 1.1 BACKGROUND

- 1.1.1. West Sussex County Council (WSCC) as the Lead Local Flood Authority (LLFA) has a range of risk management duties to manage local flood risk in the borough in accordance with the Flood and Water Management Act (2010). Local flooding is defined as flooding from surface water, ordinary watercourses and groundwater; the flooding from these sources is typically more localised than flooding from rivers and the sea and management of local flooding in West Sussex can also be influenced by the effectiveness of the sewer network.
- 1.1.2. As LLFA, WSCC must produce a Local Flood Risk Management Strategy (LFRMS) to set out a strategy for managing local flood risk. This must be developed in accordance with the Environment Agency's National Strategy for Flooding and Coastal Erosion Risk Management<sup>1</sup>. It also considers the impact of climate change on flooding in the future and attempts to minimise these risks. The LFRMS (herein referred to as the 'Proposed Strategy') provides an action plan with clear objectives and measures, setting out how local flood risk will be managed by WSCC and other associated authorities, and will replace the existing WSCC LFRMS, which was agreed in 2013<sup>2</sup>.
- 1.1.3. The aims of the Proposed Strategy are:
- To meet the statutory duties of an LLFA under the Flood and Water Management Act;
  - To provide an understanding of local flood risk within West Sussex, using knowledge from all Risk Management Authorities (RMAs);
  - To ensure RMAs have a mechanism to work together effectively to understand and deliver appropriate flood risk management; and,
  - To set objectives, measures and actions to sustainably manage flood risk in West Sussex, addressing other societal or environmental objectives where possible.
- 1.1.4. WSP was commissioned to undertake a Habitats Regulations Assessment (HRA) of the Proposed Strategy to determine whether any of its constituent policies would affect sites designated and protected by the Conservation of Habitats and Species Regulations 2017 (as amended; the 'Habitats Regulations'). This is concurrent with WSCC's responsibilities under the Habitats Regulations. The Proposed Strategy can be found in full in Appendix A.

## 1.2 PURPOSE OF THIS REPORT

- 1.2.1. This report presents information to support a Habitats Regulations Assessment (HRA) screening. It is submitted with the planning application to provide the competent authority with the information it needs to inform an assessment of Likely Significant Effects (LSEs) associated with the Proposed Strategy on Habitats Sites. The competent authority may consent the Proposed Strategy only after having ascertained that it will not lead to LSEs, and that it will not adversely affect the integrity of the Habitats Sites.

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1 Environment Agency (2020) [National Flood and Coastal Erosion Risk Management Strategy](#).

2 West Sussex County Council (2013) [Local Flood Risk Management Strategy](#).

## 2 DESCRIPTION OF THE LOCAL FLOOD RISK MANAGEMENT STRATEGY AND ITS POLICIES

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### 2.1 OVERVIEW

2.1.1. The National Flood and Coastal Erosion Risk Management Strategy for England<sup>3</sup> (hereafter referred to as the 'National Strategy') outlines the strategy for national flood risk management across England. The National Strategy's long-term vision is for: *'a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100'*. To ensure this the National Strategy has three long-term ambitions for the management of flood and coastal erosion risk in England:

- Climate resilient places;
- Today's growth and infrastructure resilient in tomorrow's climate; and
- A nation ready to respond and adapt to flooding and coastal change

2.1.2. The LFRMS must be consistent with the National Strategy which will ensure that the objectives set out within the National Strategy are delivered through the work of all the flood and coastal erosion risk management authorities in England.

### 2.2 LEGISLATIVE REQUIREMENTS

2.2.1. As set out in the Flood and Water Management Act 2010, a LLFA (in this case WSCC) for an area in England must develop, maintain, apply and monitor a strategy for local flood risk management in its area. This includes management of surface runoff; groundwater; and ordinary watercourses (which includes lakes ponds and other bodies of water).

2.2.2. The strategy must specify:

- The risk management authorities in West Sussex;
- The flood and coastal erosion risk management functions that may be exercised by those authorities in relation to West Sussex;
- The objectives for managing local flood risk;
- The measures proposed to achieve those objectives;
- How and when the measures are to be implemented;
- The costs and benefits of those measures, and how they are to be paid for;
- The assessment of local flood risk for the purpose of the strategy;
- How and when the strategy is to be reviewed; and
- How the strategy contributes towards the achievement of wider environmental objectives.

### 2.3 OBJECTIVES AND MEASURES

2.3.1. Following the public engagement survey and stakeholder engagement workshops, objectives, measures and actions were defined for the Proposed Strategy, reflecting the progress made to date and the further action needed to better manage flood risk in West Sussex. Objectives are defined as the overarching vision, aligned with the National Flood and Coastal Erosion Management (FCERM) Strategy produced for England by DEFRA. Measures are the next step to achieving these

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<sup>3</sup> Environment Agency (2022) [National Flood and Coastal Erosion Risk Management Strategy for England](#). (Accessed: 10/06/2024)

objectives, linked to local needs within West Sussex. Finally, the measures are broken down into actions, providing specific (and often time-bound) targets.

- 2.3.2. The objectives are presented below alongside proposed measures to achieve them, and specific actions to be undertaken are presented in Table 2-1 below. WSCC will work towards delivering each of the objectives with key partners over the period covered by the LFRMS.

**Table 2-1 – LFRMS objectives, measures and actions**

| Objective                                                              | Measures                                                                                                                                                                                                                                                                                                   | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Use a catchment-based approach to understand and manage flood risk. | <ul style="list-style-type: none"> <li>■ 1.1 - Establish a clear understanding of flood risk across West Sussex by catchment</li> <li>■ 1.2 - Utilise the best available data to prioritise flood risk management schemes</li> <li>■ 1.3 - Develop collaborative opportunities for sharing data</li> </ul> | <ul style="list-style-type: none"> <li>● 1.1.1 - Refine a process to maintain historic flood risk data register in a mapping platform, looking at all flood sources</li> <li>● 1.1.2 - Develop a set of online educational materials to aid the 'What can I do approach?'</li> <li>● 1.2.1 - Maintain a central point of collaboration between river trusts and partnerships</li> <li>● 1.2.2 - Review and analyse all data received as part of the LFRMS public engagement survey including GIS mapping</li> <li>● 1.2.3 - Use all available data to inform a clear scale of risk assessment to identify higher flood risk locations</li> <li>● 1.2.4 - Subject to funding, undertake local studies and assessments and generate new flood risk data to support strategic decision making.</li> <li>● 1.3.1 - Establish a report my flood system for local communities and partners.</li> <li>● 1.3.2 - Reinstate attendance of stakeholder flood meetings to encourage collaboration across partnerships</li> </ul> |

| Objective                                                                                                                                                                                    | Measures                                                                                                                                                                                                                                                       | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Create a common, informed framework for sustainable development that improves safety and resilience for people, property, infrastructure, and the environment through long-term thinking. | <ul style="list-style-type: none"> <li>2.1 - Promote a consistent approach across local planning authorities</li> <li>2.2 - Align and integrate with Local Nature Recovery strategies and biodiversity projects to maximise delivery of co-benefits</li> </ul> | <ul style="list-style-type: none"> <li>2.1.1 - Review and update standard drainage guidance and advice for developers</li> <li>2.1.2 - Provide annual SuDS and drainage training for Local Planning Officers</li> <li>2.1.3 - Promote the chargeable pre-application service on sustainable drainage and local flood risk management for new development proposals</li> <li>2.1.4 - Produce standard conditions on flooding and drainage to apply across all West Sussex Local Planning Authorities, including consideration of drainage implications within minor development</li> <li>2.2.1 - Engage with WSCC departments and partner organisations to establish synergies and opportunities for nature recovery by collating ongoing projects and strategies.</li> <li>2.2.2 - Promote the wider biodiversity benefits from SuDS and Nature based flood alleviation with updated online resources signposting to best practice and information shares at stakeholder meetings.</li> </ul> |

| Objective                                                                                                                                                 | Measures                                                                                                                                                                       | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Adopt collaborative approaches to understanding and managing flood risk assets and systems, prioritising the implementation of nature-based solutions. | <ul style="list-style-type: none"> <li>3.1 - Develop a greater understanding of existing assets</li> <li>3.2 - Support the implementation of Nature Based Solutions</li> </ul> | <ul style="list-style-type: none"> <li>3.1.1 - Creation of a directory of asset data holders</li> <li>3.1.2 – Consolidate partnership working via a formalised collaboration agreement or MOU.</li> <li>3.1.3 - Develop consistent condition grading system for assets affecting local flood risk (e.g. ditches, culverts and outfalls)</li> <li>3.1.4 - Agree methodology on defining priority assets in terms of impact of failure</li> <li>3.1.5 - Undertake focused studies of high risk assets, once identified</li> <li>3.1.6 - Working with partners, consolidate a spatial mapping application to map flood risk management assets across the county</li> <li>3.1.7 - Utilising shared mapping applications, undertake gap analysis to identify missing or poor quality asset data</li> <li>3.1.8 - Where suitable locations are identified, develop business cases to support funding of scheme</li> <li>3.1.9 - Implement programme of remedial or risk management projects for relevant high-risk assets, where cost-benefit justification exists.</li> <li>3.1.10 - Engage relevant stakeholders in asset management conversations to encourage consistent record keeping via stakeholder flood group meetings.</li> <li>3.1.11 - Explore the feasibility of smart sensor implementation across WSCC highways and FCERM drainage assets, and undertake initial pilot project(s).</li> <li>3.2.1 - Educate communities and stakeholders on the benefits of Nature Based Solutions through online resources and in person meetings</li> <li>3.2.2 - Review and document barriers to implementation of Nature Based Solutions</li> <li>3.2.3 - Signpost and consolidate national and county-scale best practice nature-based solutions projects</li> </ul> |

| Objective                                                                                                          | Measures                                                                                                                                                                                                                      | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. Empower our communities to increase their resilience and ability to adapt to flood risk now, and in the future. | <ul style="list-style-type: none"> <li>■ 4.1 - Create mechanisms for communities to influence flood risk management</li> <li>■ 4.2 - Improve understanding and adoption of flood preparedness at a community scale</li> </ul> | <ul style="list-style-type: none"> <li>● 4.1.1 - Identify the main landowners, community groups, stakeholders by catchment</li> <li>● 4.1.2 - Develop a flooding toolbox regarding guidance and communication material for Parish Councils.</li> <li>● 4.1.3 - Promote and advocate for community flood wardens within at-risk communities, through coordinated engagement activities such as Parish Council Meetings</li> <li>● 4.1.4 - Develop a programme tracker for all ongoing, or planned flood risk management projects, across all RMAs in West Sussex</li> <li>● 4.1.5 - Continued promotion and collaboration of Operation Watershed</li> <li>● 4.2.1 - Signpost guidance for community level preparedness including property level resilience on WSCC website and community hubs in vulnerable areas</li> <li>● 4.2.2 - Attend community events via collaboration with WSCC Engagement and Communities teams</li> <li>● 4.2.3 – Encourage participation in community led flood projects through an active outreach campaign at community engagement events</li> <li>● 4.2.4 - Collaborate with schools to develop a flood risk programme to educate and improve flood risk knowledge in partnership organisations.</li> <li>● 4.2.5 - Collaborate with schools to develop awareness around flood risk through STEM events</li> <li>● 4.2.6 - Implement learning outcomes from the RAPA pilot study for better adaptation planning</li> </ul> |

## 3 HRA PROCESS

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### 3.1 LEGISLATIVE AND PLANNING POLICY CONTEXT

#### Habitats Regulations Assessment

- 3.1.1. The Conservation of Habitats and Species Regulations 2017 (as amended, hereafter referred to as the Habitats Regulations) protects a national network of sites within the UK consisting of Special Areas of Conservation ('SAC'; focussed on intrinsically important habitats and biological populations other than birds) and Special Protection Areas ('SPA'; focussed on protecting important bird populations and the habitats that support them). This National Site Network, termed the Natura 2000 network prior to the UK's departure from the European Union, supports and forms part of a wider network of sites within Europe.
- 3.1.2. As a result of the 2019 Habitats Regulations references to Natura 2000 in the 2017 Regulations, and in guidance, are now taken to refer to the 'National Site Network'.
- 3.1.3. Maintaining a coherent network of protected sites with overarching conservation objectives is still required to:
  - fulfil the commitment made by government to maintain environmental protections; and
  - continue to meet our international legal obligations, such as the Bern Convention, the Oslo and Paris (OSPAR) Conventions, Bonn and Ramsar Conventions.
- 3.1.4. Regulation 63 (1) of the Habitats Regulations states that '*A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—*  
*(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and*  
*(b) is not directly connected with or necessary to the management of that site,*  
*—must make an Appropriate Assessment of the implications for that site in view of that site's conservation objective*".
- 3.1.5. Where effects on a habitats site are likely to be significant, they must be subject to the second stage of the HRA process, Appropriate Assessment. Conservation of Habitats and Species Regulations 2017 (as amended) also make allowance for projects or plans to be completed if they satisfy 'imperative reasons of overriding public interest (IROPI)'<sup>4</sup>. Regulations 64 and 68 cover such situations.
- 3.1.6. Although the UK has now left the European Union, Court of Justice of the European Union (CJEU) decisions issued prior to 1<sup>st</sup> January 2021 remain binding until subsequent UK court decisions overrule them. Further to the case of *Harris v Environment Agency*, it is clear that article 6(2) of the Habitats Directive still continues to take effect.

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<sup>4</sup> '(a) reasons relating to human health, public safety or beneficial consequences of primary importance to the environment; or (b) any other reasons which the competent authority, having due regard to the opinion of the European Commission, consider to be imperative reasons of overriding public interest.'

## National Planning Policy Framework 2021 (NPPF)

- 3.1.7. The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development (for the purposes of this assessment the Proposed Scheme is considered to be a development) can be produced. It must be considered in preparing the development plan and is a material consideration in planning decisions.
- 3.1.8. The NPPF (at para 179) states that when considering the conservation and enhancement of the natural environment, with regard to habitats and biodiversity, the Local Planning Authority should:
- "...protect and enhance biodiversity and geodiversity, plans should:*
- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
  - b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity".*
- 3.1.9. Para 181 to 182 of the NPPF states: The following should be given the same protection as habitats sites:
- 181:
- a) "potential Special Protection Areas and possible Special Areas of Conservation;*
  - b) listed or proposed Ramsar sites; and*
  - c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites".*
- 182: *"The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site".*

## 3.2 STAGES OF HABITATS REGULATIONS ASSESSMENT

- 3.2.1. UK Government guidance<sup>5</sup> sets out the process of HRA. Existing guidance on the assessment of effects of plans or projects on Natura 2000 sites (now Habitats Sites in the UK) issued by the European Commission<sup>6</sup> has also been used by this assessment. This document sets out the step-wise approach which should be followed to enable competent authorities to discharge their duties under the Habitats Regulations. The process used is usually summarised in four distinct stages of assessment which are described below and shown in the chart overleaf.

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<sup>5</sup> Defra (2023) [Habitats regulations assessments: protecting a European site](#). Accessed 8 April 2024

<sup>6</sup> European Commission (2018) Managing Natura 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/CEE. Brussels: European Commission.

- **Screening (Stage 1):** the process to identify the likely effects of a plan or project upon the qualifying features and conservation objectives of a Habitats Sites, either alone or in combination with other plans or projects and consider whether there will be an LSE.
- **Appropriate Assessment (Stage 2):** detailed consideration of LSEs and whether they would lead to significant adverse effects on the integrity of the Habitats Sites, either alone or in combination with other plans and projects. Where there are adverse effects, mitigation is considered to offset them. Consent may only be granted at this stage if the Appropriate Assessment can conclude beyond reasonable scientific doubt that the plan or project will not have adverse effects (alone or in-combination with other plans or projects). If the mitigation options cannot avoid adverse effects, then development consent can only be given if Stages 3 and 4 are followed.
- **Assessment of Alternative Solutions (Stage 3):** the process which examines alternative ways of achieving the objectives of the plan or project that avoid or have lesser adverse effects on the integrity of the Habitats Sites.
- **Imperative Reasons of Overriding Public Interest (IROPI) (Stage 4):** the assessment where no alternative solutions exist and where adverse effects remain: an assessment of whether the development is necessary for IROPI and, if so, of the compensatory measures needed to maintain the overall coherence of the site or integrity of the Habitats Sites.

3.2.2. The method for assessing the likely significance of an effect is based on the potential for impacts arising from the Proposed Scheme, both alone and in-combination with other plans and projects, to undermine the Conservation Objectives of relevant Habitats Sites. There is no specific definition of what constitutes a LSE, but case law (CJEU C-127/027) clarified that in the context of an HRA, an LSE is one whose occurrence cannot be excluded based on objective information.

### 3.3 SCREENING (STAGE 1)

3.3.1. An initial broad screening of Habitats Sites to investigate the potential for effects pathways linking them the Proposed Scheme has been undertaken and is referred to as 'screening'. The screening process was wide-ranging and took into consideration the sensitivity and mobility of Habitats Site Qualifying Features, e.g. marine mammal and bat species, as well as the nature of the proposed works and working methods.

3.3.2. Its purpose is to identify the likely impacts upon a Habitats Site of a project or a plan, either alone or in combination with other plans or projects and considers whether these impacts are likely to be significant. It will include:

- determining whether the plan is directly connected with or necessary for the management of applicable sites (SAC, SPA, Ramsar);
- describing the project/plan that may have the potential for significant effects upon applicable sites;
- undertaking an initial scoping for potential direct and indirect impacts upon applicable sites;
- assessing the likely significance of any potential effects identified as resulting from these impacts, both alone and in-combination with other plans and projects; and
- excluding sites where it can be objectively concluded that there will be no significant effects.

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7 CJEU - C-370/12 / Judgment Thomas Pringle v Government of Ireland and Others.

- 3.3.3. Results of the screening assessment are set out in Section 4. It should be noted that due to the early stage of assessment no list of plans or projects that could act in-combination with the Proposed Scheme is available at this time. The assessment in relation to in-combination effects will be undertaken in later versions of this assessment.
- 3.3.4. Following the judgement handed down by the CJEU in Case C-323/178, it is no longer appropriate to consider measures taken specifically to reduce a project's potential impact on European designated sites into account at the screening stage. Accordingly, no reference to mitigation is made, or relied upon, in this screening assessment.

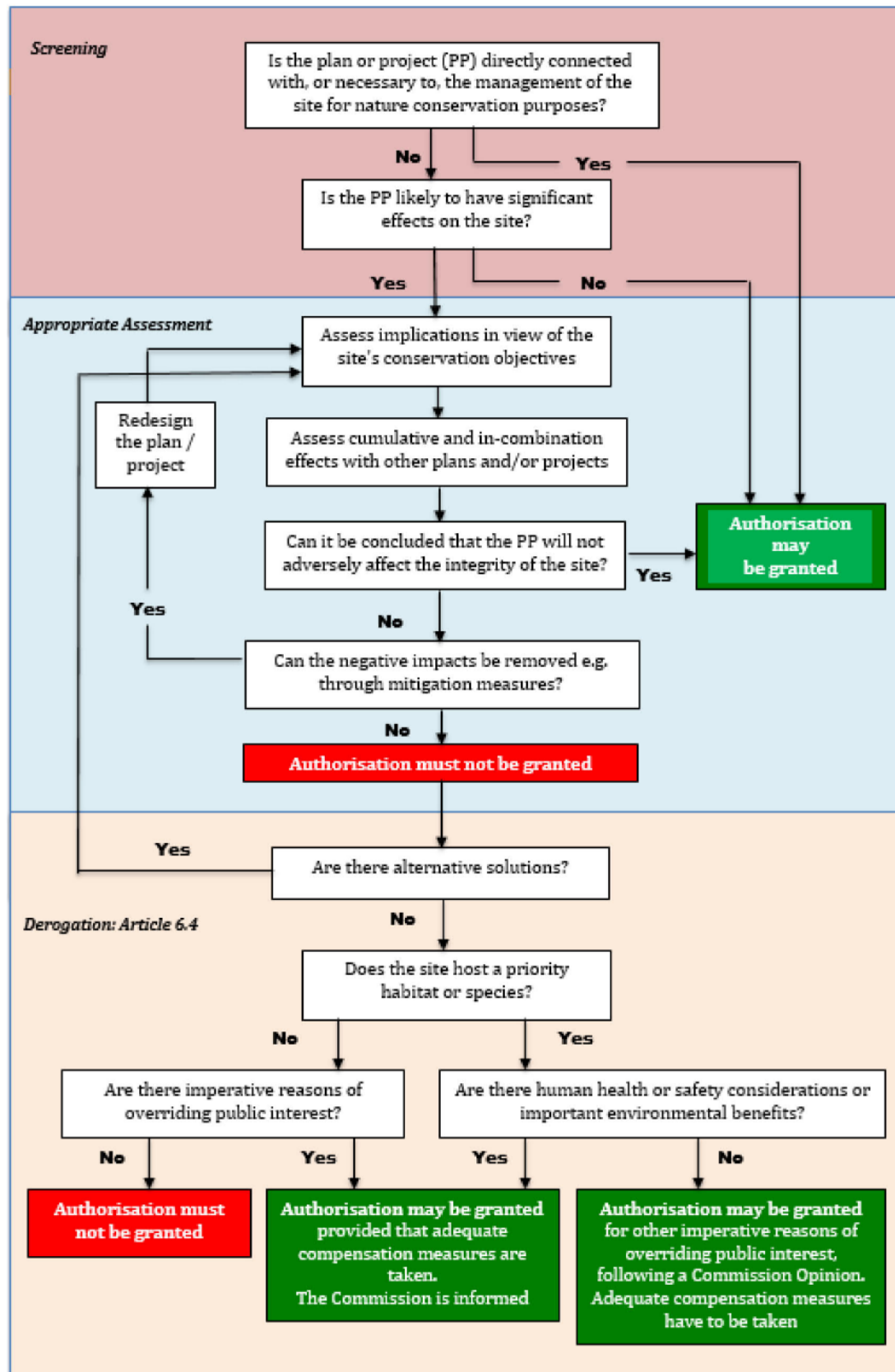
### **3.4 FURTHER HRA STAGES (STAGE 2, 3 AND 4)**

- 3.4.1. Stages 2, 3 and 4 are outside of the purpose of this report, which covers only Stage 1 (screening). The findings of this report will define the scope of the assessment of LSEs through an Appropriate Assessment (Stage 2) if they are identified. The Appropriate Assessment would, where necessary, identify alternative solutions to the Proposed Scheme (Stage 3), and also inform any IROPI arguments at Stage 4 that may be required. If options identified at Stage 2 cannot avoid or mitigate adverse effects, then development consent can only be given if Stages 3 and 4 are followed and passed.

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8 Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta ('People over Wind').

Chart illustrating the HRA process



## 4 IDENTIFICATION OF HABITATS SITES

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### 4.1 STUDY AREA AND SITES IDENTIFIED

- 4.1.1. This defines the geographic limits from the Proposed Strategy used to identify National Network sites to be considered within the HRA process and be screened for LSEs. The Study Area reflects the high sensitivity of qualifying features of National Network sites and the fact they often support species that are mobile and wide ranging, such as birds.
- 4.1.2. The principal criterion defining the Study Area is the boundary of the county of West Sussex, as the Proposed Strategy will cover the whole county (shown in Figure 1). The Study Area is appropriate to encompass possible effect pathways from the Proposed Strategy to National Network sites. All National Network sites within this zone have been included into the screening stage of the HRA process to identify potential LSEs.

### 4.2 SITES IDENTIFIED

- 4.2.1. In total, 13 National Network sites (comprising 9 SACs and 4 SPAs) and 3 Ramsar sites were identified within the Study Area. They are listed below, with details of their Qualifying Features provided in Table 4-1, and Table 4-3 for SACs, SPAs and Ramsar sites respectively. All sites are shown in Figure 1.

#### **SAC**

- Arun Valley SAC;
- Ashdown Forest SAC;
- Duncton to Bignor Escarpment SAC;
- Ebernoe Common SAC;
- Kingley Vale SAC;
- Rook Clift SAC;
- Singleton and Cocking Tunnels SAC;
- Solent Maritime SAC; and
- The Mens SAC.

#### **SPA**

- Arun Valley SPA;
- Ashdown Forest SPA;
- Chichester and Langstone Harbours SPA; and
- Pagham Harbour SPA.

#### **Ramsar**

- Arun Valley Ramsar;
- Chichester and Langstone Harbours Ramsar; and
- Pagham Harbour Ramsar.

**Table 4-1 – SACs within the Study Area and their qualifying features**

| SAC                | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Description <sup>9</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Arun Valley SAC    | <p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>4056</b> Ramshorn snail <i>Anisus vorticulus</i></li> </ul>                                                                                                                                                                                                                                                                               | Arun Valley SAC contains species which are rare or threatened within a European context. <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. The Arun valley is one of the three main population centres for this species in the UK.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Ashdown Forest SAC | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>4010</b> Northern Atlantic wet heaths with <i>Erica tetralix</i></li> <li>■ <b>4030</b> European dry heaths</li> </ul> <p>Annex II species present as a qualifying feature, but not a primary reason for site selection:</p> <ul style="list-style-type: none"> <li>■ <b>1166</b> Great crested newt <i>Triturus cristatus</i></li> </ul> | Ashdown Forest contains one of the largest single continuous blocks of lowland heath in south-east England, with both dry heaths and, in a larger proportion, wet heath. The wet heath element provides suitable conditions for several species of bog-mosses <i>Sphagnum spp.</i> , bog asphodel <i>Narthecium ossifragum</i> , deergrass <i>Trichophorum cespitosum</i> , common cotton-grass <i>Eriophorum angustifolium</i> , marsh gentian <i>Gentiana pneumonanthe</i> and marsh clubmoss <i>Lycopodiella inundata</i> . The site supports important assemblages of beetles, dragonflies, damselflies and butterflies, including the nationally rare silver-studded blue <i>Plebejus argus</i> . |

<sup>9</sup> Joint Nature Conservation Committee: [Habitats List](#).

| SAC                              | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Description <sup>9</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Duncton to Bignor Escarpment SAC | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>9130</b> Asperulo-Fagetum beech forests</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   | <p>The Duncton to Bignor Escarpment is an example of mature beech <i>Fagus sylvatica</i> woodland located on the steep scarp face of the South Downs. The site has developed over chalk which is overlain in places by a clay-with-flints capping. The resulting soil conditions have produced many local variations in the composition of the woodland. Beech dominates in a mosaic with ash <i>Fraxinus excelsior</i> woodland, scrub and grassland. Much of the beech woodland is high forest but with some old pollards. Rare plants present include white helleborine <i>Cephalanthera damasonium</i>, yellow bird's nest <i>Monotropa hypopitys</i>, green hellebore <i>Helleborus viridis</i> and limestone fern <i>Gymnocarpium robertium</i>. The woods also have a rich mollusc fauna.</p>                                                                                                       |
| Ebernoe Common SAC               | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>9120</b> Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion roburi-petraeae or Ilici-Fagenion)</li> </ul> <p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>1308</b> Barbastelle <i>Barbastella barbastellus</i></li> <li>■ <b>1323</b> Bechstein's bat <i>Myotis bechsteinii</i></li> </ul> | <p>Ebernoe Common has an extensive block of beech <i>Fagus sylvatica</i> high forest and former wood-pasture over dense holly <i>Ilex aquifolium</i> with a very rich epiphytic lichen flora, including <i>Agonimia octospora</i> and <i>Catillaria atropurpurea</i>. The beech woodland is associated with other woodland types, open glades and pools, which contribute to a high overall diversity. A maternity colony of Barbastelle bats <i>Barbastella barbastellus</i> utilises a range of tree roosts in the site, usually in dead tree stumps, but the species appears to be present throughout the year, with individuals utilising a range of roost sites in tree holes and under bark. The site also holds a maternity colony of Bechstein's bats <i>Myotis bechsteinii</i>, mainly roosting in old woodpecker holes in the stems of live mature sessile oak <i>Quercus petraea</i> trees.</p> |

| SAC              | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Description <sup>9</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kingley Vale SAC | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>91J0</b> <i>Taxus baccata</i> woods of the British Isles*</li> </ul> <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>6210</b> Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)</li> </ul> | <p>The Kingley Vale SAC lies on three geological formations: the Upper Chalk of the steep escarpment, the clay-with-flints capping of the plateau above the escarpment, and the valley gravel and coombe deposits of the valley floor. This geological variation is reflected in the various habitat types, including the largest area of yew <i>Taxus baccata</i> woodlands in Britain, chalk grassland, chalk heath, juniper scrub and yew scrub. An important feature of the site is the presence of all stages in the development of the chalk flora from grassland via scrub to mature yew woodland.</p>                                                                                                                                                                                                                                                                                                                      |
| Rook Clift SAC   | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>9180</b> Tilio-Acerion forests of slopes, screes and ravines*</li> </ul>                                                                                                                                                                                                                                                                                                     | <p>The Rook Clift SAC is an ancient woodland which remains in a semi-natural condition. Large-leaved lime <i>Tilia platyphyllos</i> dominates the canopy, together with some ash <i>Fraxinus excelsior</i> and beech <i>Fagus sylvatica</i>. It lies on the deeper soils towards the base of the slope and valley bottom of the small wooded combe, which gives the site its humid microclimate. The soils are rather deeper and there is less exposed rock at this site because the chalk is more readily weathered than the limestones on which many of the other sites lie. Despite this, the vegetation is otherwise typical of the habitat type, with an abundance of ferns such as hart's-tongue <i>Phyllitis scolopendrium</i> and shield-fern <i>Polystichum spp.</i> In addition to species more common in the west of Britain, continental species such as Italian lords-and-ladies <i>Arum italicum</i> also occur.</p> |

| SAC                               | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Description <sup>9</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Singleton and Cocking Tunnels SAC | <p>Annex II species present as a qualifying feature, but not a primary reason for site selection:</p> <ul style="list-style-type: none"> <li>■ <b>1308</b> Barbastelle <i>Barbastella barbastellus</i></li> <li>■ <b>1323</b> Bechstein's bat <i>Myotis bechsteinii</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>The Singleton and Cocking Tunnels are two disused brick built railway tunnels in West Sussex running between Midhurst and Chichester. The tunnels provide ideal microclimates and protection for hibernating bats. The site is one of the best hibernacula in the UK and features hundreds of bats and a diversity of species including Bechstein's and Barbastelles. Horseshoe bats, and the last resident Greater mouse-eared bat in the UK are also present.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Solent Maritime SAC               | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>1130</b> Estuaries</li> <li>■ <b>1320</b> Spartina swards (<i>Spartinion maritimae</i>)</li> <li>■ <b>1330</b> Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</li> </ul> <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>■ <b>1110</b> Sandbanks which are slightly covered by sea water all the time</li> <li>■ <b>1140</b> Mudflats and sandflats not covered by seawater at low tide</li> <li>■ <b>1150</b> Coastal lagoons*</li> <li>■ <b>1210</b> Annual vegetation of drift lines</li> <li>■ <b>1220</b> Perennial vegetation of stony banks</li> <li>■ <b>1310</b> Salicornia and other annuals colonizing mud and sand</li> <li>■ <b>2120</b> "Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")"</li> </ul> <p>Annex II species present as a qualifying feature, but not a primary reason for site selection:</p> <ul style="list-style-type: none"> <li>■ <b>1016</b> Desmoulin's whorl snail <i>Vertigo moulinsiana</i></li> </ul> | <p>The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass <i>Zostera spp.</i> and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation. All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass <i>Spartina maritima</i>. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.</p> |

| SAC          | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Description <sup>9</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The Mens SAC | <p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li>9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>).</li> </ul> <p>Annex II species present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> <li><b>1308</b> Barbastelle.</li> </ul> | <p>The Mens is an extensive and structurally diverse woodland site. Like Ebernoe Common, the woodland site adjacent to it, it is ancient woodland, having been under continuous woodland cover for the last 500 years. Its diversity supports a range of species including lichen, fungi and invertebrates. Barbastelle bats <i>Barbastella barbastellus</i> - who favour ancient woodland - breed in the site because it provides the nesting and feeding habitats they require. Barbastelles commute into the surrounding countryside using the woodland corridors which branch out from the site.</p> |

**Table 4-2 – SPAs within the Study Area and their qualifying features**

| SPA                | Qualifying Features                                                                                                                                                                                                               | Description <sup>10</sup>                                                                                                                                                                                                                   |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Arun Valley SPA    | <p>The qualifying features of the Site are:</p> <ul style="list-style-type: none"> <li>A037 Bewick's Swan <i>Cygnus columbianus bewkii</i> (Non-breeding)</li> <li>Waterbird assemblage</li> </ul>                                | <p>The Arun Valley SPA is internationally important because of the site's European ornithological importance. The site encompasses a series of wet meadows, alluvial grazing marsh and former raised peat bog.</p>                          |
| Ashdown Forest SPA | <p>The qualifying features of the Site are:</p> <ul style="list-style-type: none"> <li>A224 <i>Caprimulgus europaeus</i>; European nightjar (Breeding)</li> <li>A302 <i>Sylvia undata</i>; Dartford warbler (Breeding)</li> </ul> | <p>The Ashdown Forest SPA comprises a mosaic of wet and dry heath, valley bog and woodland, and supports several uncommon plants, a rich invertebrate fauna and nationally important numbers of breeding nightjar and Dartford warbler.</p> |

<sup>10</sup> Joint Nature Conservation Committee: [Special Protection Areas](#).

| SPA                                   | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Description <sup>10</sup>                                                                                                                                                                                          |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chichester and Langstone Harbours SPA | <p>The qualifying features of the Site are:</p> <ul style="list-style-type: none"> <li>■ A046a <i>Branta bernicla bernicla</i>; Dark-bellied brent goose (Non-breeding)</li> <li>■ A048 <i>Tadorna tadorna</i>; Common shelduck (Non-breeding)</li> <li>■ A050 <i>Anas penelope</i>; Eurasian wigeon (Non-breeding)</li> <li>■ A052 <i>Anas crecca</i>; Eurasian teal (Non-breeding)</li> <li>■ A054 <i>Anas acuta</i>; Northern pintail (Non-breeding)</li> <li>■ A056 <i>Anas clypeata</i>; Northern shoveler (Non-breeding)</li> <li>■ A069 <i>Mergus serrator</i>; Red-breasted merganser (Non-breeding)</li> <li>■ A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding)</li> <li>■ A141 <i>Pluvialis squatarola</i>; Grey plover (Non-breeding)</li> <li>■ A144 <i>Calidris alba</i>; Sanderling (Non-breeding)</li> <li>■ A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding)</li> <li>■ A157 <i>Limosa lapponica</i>; Bar-tailed godwit (Non-breeding)</li> <li>■ A160 <i>Numenius arquata</i>; Eurasian curlew (Non-breeding)</li> <li>■ A162 <i>Tringa totanus</i>; Common redshank (Non-breeding)</li> <li>■ A169 <i>Arenaria interpres</i>; Ruddy turnstone (Non-breeding)</li> <li>■ A191 <i>Sterna sandvicensis</i>; Sandwich tern (Breeding)</li> <li>■ A193 <i>Sterna hirundo</i>; Common tern (Breeding)</li> <li>■ A195 <i>Sterna albifrons</i>; Little tern (Breeding)</li> <li>■ Waterbird assemblage</li> </ul> | <p>The Chichester and Langstone Harbours SPA is internationally important because it regularly supports more than 10000 wintering wildfowl, and also by regularly supporting more than 20000 wintering waders.</p> |

| SPA                | Qualifying Features                                                                                                                                                                                                                                                                                                                                                            | Description <sup>10</sup>                                                                                                                                                                                                                                                                                                                       |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pagham Harbour SPA | <p>The qualifying features of the Site are:</p> <ul style="list-style-type: none"> <li>■ A046a <i>Branta bernicla bernicla</i>; Dark-bellied brent goose (Non-breeding)</li> <li>■ A151 <i>Philomachus punax</i>; Ruff (Non-breeding)</li> <li>■ A193 <i>Sterna hirunda</i>; Common tern (Breeding)</li> <li>■ A195 <i>Sterna albifrons</i>; Little tern (Breeding)</li> </ul> | <p>Pagham Harbour SPA qualifies as an internationally important wetland supporting in winter an average of 3045 dark-bellied brent geese. The site also supports nationally important wintering populations: 270 pintail <i>Anas acuta</i>, 781 grey plovers <i>Pluvialis squatarola</i> and 340 black-tailed godwits <i>Limosa limosa</i>.</p> |

**Table 4-3 – Ramsar sites within the Study Area and their qualifying features**

| Ramsar site        | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Description <sup>11</sup>                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Arun Valley Ramsar | <p><b>Ramsar criterion 2</b></p> <p>The site holds seven wetland invertebrate species listed in the British Red Book as threatened. One of these, <i>Psuedamnicola confuse</i>, is considered to be endangered. The site also supports four nationally rare and four nationally scarce plant species.</p> <p><b>Ramsar criterion 3</b></p> <p>In addition to the Red Data Book invertebrate and plant species, the ditches intersecting the site have a particularly diverse and rich flora. All five British <i>Lemna</i> species, all five <i>Rorippa</i> species, and all three British water milfoils (<i>Myriophyllum</i> species), all but one of the seven British water dropworts (<i>Oenanthe</i> species), and two-thirds of the British pondweeds (<i>Potamogeton</i> species) can be found on site.</p> <p><b>Ramsar criterion 5</b></p> <p>Internationally important waterfowl assemblage (greater than 20,000 birds)</p> | <p>The Arun Valley Ramsar comprise an area of wet meadows on the floodplain on the floodplain of the River Arun. The neutral wet grassland, which is subject to winter and occasional summer flooding, is dissected by a network of ditches, several of which support rich aquatic flora and invertebrate fauna. The area is of outstanding ornithological importance notable for wintering wildfowl and breeding waders.</p> |

<sup>11</sup> Convention on Wetlands Secretariat. Available at: [Ramsar: The Convention on Wetlands](#).

| Ramsar site                              | Qualifying Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Description <sup>11</sup>                                                                                                                                                                                                                                                                                                        |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chichester and Langstone Harbours Ramsar | <p><b>Ramsar criterion 1</b></p> <p>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</p> <p><b>Ramsar Criterion 5</b></p> <p>Assemblages of international importance:</p> <p>Species with peak counts in winter: 76480 waterfowl</p> <p><b>Ramsar Criterion 6</b></p> <p>Species/populations offering at levels of international importance.</p> <p>Qualifying species with peak counts in spring/autumn:</p> <p>Ringed plover <i>Charadrius hiaticula</i>, black-tailed godwit , <i>Limosa limosa islandica</i> and bar-tailed godwit , <i>Limosa lapponica</i>.</p> <p>Qualifying species with peak counts in winter:</p> <p>Dark-bellied brent goose <i>Branta bernicla bernicla</i>, Common shelduck <i>Tadorna tadorna</i>, Grey plover <i>Pluvialis squatarola</i> and Grey plover <i>Pluvialis squatarola</i>.</p> | Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site is of particular significance for over-wintering wildfowl and waders and also a wide range of coastal and transitional habitats supporting important plant and animal communities. |

| Ramsar site           | Qualifying Features | Description <sup>11</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pagham Harbour Ramsar |                     | <p>Pagham Harbour Ramsar is a natural estuarine harbour, once drained for agriculture but re-flooded at the beginning of the twentieth century. The central part of the basin is dominated by intertidal mudflats and saltmarsh which gives way to brackish marsh (with beds of <i>Phragmites australis</i>) and damp pasture. The harbour has a single, narrow opening to the sea and is flanked by shingle beaches which have, in places, developed a nationally important vegetation community. There is a brackish lagoon behind the beach ridge and the site also includes small amounts of ancient woodland. The harbour supports internationally important numbers of water birds, including wintering <i>Branta bernicla bernicla</i>, and nationally important numbers of other Anatidae and waders. Breeding birds include <i>Sterna albifrons</i>.</p> |

## 4.3 CONSERVATION OBJECTIVES

4.3.1. Conservation objectives for SACs comprise the following:

- Maintain or restore the extent and distribution of qualifying habitats and habitats of qualifying species.
- Maintain or restore the structure and function (including typical species) of qualifying natural habitats.
- Maintain or restore the structure and function of the habitats of qualifying species.
- Maintain or restore the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely.
- Maintain or restore the populations of qualifying species.
- Maintain or restore the distribution of qualifying species within the site.

4.3.2. Conservation objectives for SPAs comprise the following:

- 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.

## 5 SCREENING ASSESSMENT

### 5.1 HABITATS SITE MANAGEMENT STATEMENT

- 5.1.1. The Proposed Strategy is not directly connected with, or necessary for, the management of any National Network site identified in Section 4 as within the HRA Study Area. The Proposed Strategy has not been conceived solely to further the conservation of these sites and nor is it essential to the management of this site.

### 5.2 IDENTIFICATION OF IMPACTS AND LIKELY EFFECTS

- 5.2.1. Where actions prescribed under the LFRMS could lead to physical changes to the environment through their implementation by WSCC, other public bodies or private developers, they could generate impacts that would lead to effects on National Network sites and Ramsar sites. Works that would be undertaken to implement LFRMS actions are not specifically defined, but may constitute impacts with potential effects on National Network site Qualifying Features, such as those involving creation of SuDS features or installation of flood alleviation features in elements of the public realm. This may be through works undertaken via permitted development rights or via planning consents issued by WSCC; the LFRMS does not include designs or timescales for physical works itself, and these would occur as a result of implementation of the actions within West Sussex.
- 5.2.2. Table 5-1 below identifies potential effects on National Network sites that could result from implementation of the LFRMS, through impacts of its actions. Potential effects of impacts could occur during the construction or operation of physical features resulting from implementation of LFRMS.

**Table 5-1 – Potential effects of LFRMS impacts**

| Phase        | Potential Effect                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction | Fragmentation of supporting habitats | Implementation of the LFRMS through the planning system and public works undertaken by WSCC (e.g. creation of new SuDS features or alterations to drainage infrastructure) could lead to works that require removal of habitat within greenspaces and along water courses in West Sussex. Although this would be remote from National Network sites, it may lie on routes used by mobile species associated with such sites (birds, bats etc) to disperse, commute, feed or otherwise navigate the wider landscape. |
| Construction | Dust and particulate emissions       | Implementation of the LFRMS could lead to works that, during construction, release dust and particulate emissions whose deposition may negatively affect the condition of habitats (such as through smothering of plants or changing soil chemistry) and the species that rely on them.                                                                                                                                                                                                                             |
| Construction | Air quality changes from emissions   | Implementation of the LFRMS could lead to works that, during construction, could result in emissions from construction vehicles and equipment. These changes in air quality could lead to deposition of pollutants, including nitrogen, changing the soil chemistry and composition of plant communities, and consequently the species that rely on them.                                                                                                                                                           |

| Phase        | Potential Effect                   | Description                                                                                                                                                                                                                               |
|--------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction | Sediment and chemical run-off      | Implementation of the LFRMS could lead to works that, during construction, result in sediments and pollutants entering water course. This could affect habitats and species within these water courses and in downstream areas adversely. |
| Operation    | Changes in hydrological conditions | Implementation of the LFRMS could lead to works that, during operation, change the supply of water to downstream habitats and consequently the communities of plants and animals they support.                                            |

## 5.3 CONSIDERATION OF IMPACTS, LIKELY EFFECTS AND THEIR SIGNIFICANCE

- 5.3.1. Relevant threats and pressures identified for National Network sites in their supporting documentation have been considered against Objectives, measures and actions prescribed by the Proposed Strategy to screen for LSEs. This has, in the first instance, involved identification of those Actions from the Proposed Strategy that could lead to the impacts identified in Table 5-1; this process is shown in Table 5-2. Impacts identified are then screened against sites and their qualifying features in Table 5-3 to determine those that would be subject to LSEs.

**Table 5-2 – Likely impacts of LFRMS Objectives, Measures and Actions**

| Action                                                                                                                     | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 1.1.1 - Refine a process to maintain historic flood risk data register in a mapping platform, looking at all flood sources | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Data-based action which will not result in projects with direct or indirect impacts on the environment.          |
| 1.1.2 - Develop a set of online educational materials to aid the 'What can I do approach?'                                 | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Desk-based action resulting in educational material development only; no direct/in-direct environmental impacts. |
| 1.2.1 - Maintain a central point of collaboration between river trusts and partnerships                                    | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Desk-based action to promote collaboration between stakeholders; no direct/in-direct environmental impacts.      |

| Action                                                                                                                                     | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.2.2 - Review and analyse all data received as part of the LFRMS public engagement survey including GIS mapping                           | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Data-based action to analyse survey and GIS data which will not result in projects with direct or indirect impacts on the environment.                                                                            |
| 1.2.3 - Use all available data to inform a clear scale of risk assessment to identify higher flood risk locations                          | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Data-based action to identify higher flood risk locations and will not result in projects with direct or indirect impacts on the environment.                                                                     |
| 1.2.4 - Subject to funding, undertake local studies and assessments and generate new flood risk data to support strategic decision making. | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action proposes to undertake a study only and does not propose any interventions with direct or indirect impacts on the environment.                                                                              |
| 1.3.1 - Establish a report by flood system for local communities and partners.                                                             | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | No potential impacts as action involves creation of a reporting system to pass information to communities and partners and does not propose any interventions with direct or indirect impacts on the environment. |

| Action                                                                                                                                       | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.3.2 - Reinstate attendance of stakeholder flood meetings to encourage collaboration across partnerships                                    | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | No potential impacts as action involves enacting meetings with stakeholders and does not propose any interventions with direct or indirect impacts on the environment.         |
| 2.1.1 - Review and update standard drainage guidance and advice for developers                                                               | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Desk-based action providing new guidance and advice and will not result in projects with direct or indirect impacts on the environment.                                        |
| 2.1.2 - Provide annual SuDS and drainage training for Local Planning Officers                                                                | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Provision of training only that will not result in projects with direct or indirect impacts on the environment.                                                                |
| 2.1.3 - Promote the chargeable pre-application service on sustainable drainage and local flood risk management for new development proposals | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes a change in planning policy through addition of a pre-application services and will not result in projects with direct or indirect impacts on the environment. |

| Action                                                                                                                                                                                                  | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 2.1.4 - Produce standard conditions on flooding and drainage to apply across all West Sussex Local Planning Authorities, including consideration of drainage implications within minor development      | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes a change in planning policy and will not result in projects with direct or indirect impacts on the environment. |
| 2.2.1 - Engage with WSCC departments and partner organisations to establish synergies and opportunities for nature recovery by collating ongoing projects and strategies.                               | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes consultation only and will not result in projects with direct or indirect impacts on the environment.           |
| 2.2.2 - Promote the wider biodiversity benefits from SuDS and Nature based flood alleviation with updated online resources signposting to best practice and information shares at stakeholder meetings. | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes consultation only and will not result in projects with direct or indirect impacts on the environment.           |

| Action                                                                                                                          | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 3.1.1 - Creation of a directory of asset data holders                                                                           | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Refers to the creation of an information resource and will not result in projects with direct or indirect impacts on the environment. |
| 3.1.2 – Consolidate partnership working via a formalised collaboration agreement or MOU.                                        | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes consultation only and will not result in projects with direct or indirect impacts on the environment.                 |
| 3.1.3 - Develop consistent condition grading system for assets affecting local flood risk (e.g. ditches, culverts and outfalls) | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Refers to promotion of an assessment system for flood risk assets with direct or indirect impacts on the environment.                 |
| 3.1.4 - Agree methodology on defining priority assets in terms of impact of failure                                             | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action attempts to agree a methodology of impact assessment with no direct or indirect impacts on the environment.                    |
| 3.1.5 - Undertake focused studies of high risk assets, once identified                                                          | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Undertaking desk-based studies would not lead to direct or indirect impacts on the environment.                                       |

| Action                                                                                                                                      | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 3.1.6 - Working with partners, consolidate a spatial mapping application to map flood risk management assets across the county              | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Refers to the creation of an information resource and will not result in projects with direct or indirect impacts on the environment. |
| 3.1.7 - Utilising shared mapping applications, undertake gap analysis to identify missing or poor quality asset data                        | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Refers to the usage of an information resource and will not result in projects with direct or indirect impacts on the environment.    |
| 3.1.8 - Where suitable locations are identified, develop business cases to support funding of scheme                                        | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Creation of business cases will not, on its own, lead to direct or indirect impacts on the environment.                               |
| 3.1.9 - Implement programme of remedial or risk management projects for relevant high-risk assets, where cost-benefit justification exists. | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Risk assessment is desk based and will not lead to direct or indirect impacts on the environment.                                     |

| Action                                                                                                                                                  | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 3.1.10 - Engage relevant stakeholders in asset management conversations to encourage consistent record keeping via stakeholder flood group meetings.    | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes consultation only and will not result in projects with direct or indirect impacts on the environment. |
| 3.1.11 - Explore the feasibility of smart sensor implementation across WSCC highways and FCERM drainage assets, and undertake initial pilot project(s). | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Undertaking desk-based studies would not lead to direct or indirect impacts on the environment.                       |
| 3.2.1 - Educate communities and stakeholders on the benefits of Nature Based Solutions through online resources and in person meetings                  | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes consultation only and will not result in projects with direct or indirect impacts on the environment. |

| Action                                                                                                   | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                              |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 3.2.2 - Review and document barriers to implementation of Nature Based Solutions                         | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to desk based actions only with direct or indirect impacts on the environment.                      |
| 3.2.3 - Signpost and consolidate national and county-scale best practice nature-based solutions projects | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to desk based actions only with direct or indirect impacts on the environment.                      |
| 4.1.1 - Identify the main landowners, community groups, stakeholders by catchment                        | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes consultation only and will not result in projects with direct or indirect impacts on the environment.  |
| 4.1.2 - Develop a flooding toolbox regarding guidance and communication material for Parish Councils.    | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Refers to the creation of guidance and will not result in projects with direct or indirect impacts on the environment. |

| Action                                                                                                                                                         | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.1.3 - Promote and advocate for community flood wardens within at-risk communities, through coordinated engagement activities such as Parish Council Meetings | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to a promotional exercise which is information-based, and would not result in direct or indirect impacts on the environment. |
| 4.1.4 - Develop a programme tracker for all ongoing, or planned flood risk management projects, across all RMAs in West Sussex                                 | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Refers to the usage of an information resource and will not result in projects with direct or indirect impacts on the environment.              |
| 4.1.5 - Continued promotion and collaboration of Operation Watershed                                                                                           | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to a promotional exercise which is information-based, and would not result in direct or indirect impacts on the environment. |

| Action                                                                                                                                                | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.2.1 - Signpost guidance for community level preparedness including property level resilience on WSCC website and community hubs in vulnerable areas | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to a promotional exercise which is information-based, and would not result in direct or indirect impacts on the environment. |
| 4.2.2 - Attend community events via collaboration with WSCC Engagement and Communities teams                                                          | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | Action promotes consultation only and will not result in projects with direct or indirect impacts on the environment.                           |
| 4.2.3 – Encourage participation in community led flood projects through an active outreach campaign at community engagement events                    | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to a promotional exercise which is information-based, and would not result in direct or indirect impacts on the environment. |
| 4.2.4 - Collaborate with schools to develop a flood risk programme to educate and improve flood risk knowledge in partnership organisations.          | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to a promotional exercise which is information-based, and would not result in direct or indirect impacts on the environment. |

| Action                                                                                      | Potential for fragmentation of supporting habitats (Construction) | Potential for dust and particulate emissions (construction) | Potential for air quality changes from emissions (construction) | Potential for sediment and chemical run-off (construction) | Potential for changes in hydrological conditions (operation) | Reasoning                                                                                                                                       |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.2.5 - Collaborate with schools to develop awareness around flood risk through STEM events | No                                                                | No                                                          | No                                                              | No                                                         | No                                                           | This action refers to a promotional exercise which is information-based, and would not result in direct or indirect impacts on the environment. |

**Table 5-3 – Potential effects of LFRMS impacts**

| Site                                     | LSEs | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Arun Valley SAC                          | No   | Objectives, measures and actions prescribed by the Proposed Strategy involve a wide variety of desk- and community-based actions, but do not in themselves constitute policies that would directly lead to any of the impacts identified in Table 5-1. The Proposed Strategy constitutes development of software (e.g. databases, GIS tools) to provide insight from data, commissioning of studies to obtain information for decision making, community engagement activities and educational outreach regarding flood risk. None of these activities can be directly traceable to impacts that could affect National Network sites and Ramsar sites. |
| Ashdown Forest SAC                       | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Duncton to Bignor Escarpment SAC         | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Ebernoe Common SAC                       | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Kingley Vale SAC                         | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Rook Clift SAC                           | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Singleton and Cocking Tunnels SAC        | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Solent Maritime SAC                      | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| The Mens SAC                             | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Arun Valley SPA                          | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Ashdown Forest SPA                       | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Chichester and Langstone Harbours SPA    | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Pagham Harbour SPA.                      | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Arun Valley Ramsar;                      | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Chichester and Langstone Harbours Ramsar | No   | As Above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Site                   | LSEs | Details   |
|------------------------|------|-----------|
| Pagham Harbour Ramsar. | No   | As Above. |

## 5.4 IN-COMBINATION EFFECTS

- 5.4.1. When determining the potential implications of a plan or project in light of the conservation objectives for a National Network site (i.e. assessing the potential for LSE and ascertaining the potential for effect on site integrity), it is necessary to consider the potential for in-combination effects with other plans and projects on the designated interest features/conservation on the site. This should include:
- Approved but as yet uncompleted plans or projects;
  - Permitted on-going activities such as discharge consents of abstraction licences; and
  - Plans and projects for which an application has been made and which are currently under consideration but not yet approved by competent authorities.
- 5.4.2. An in-combination assessment considers the potential for each plan or project to influence the site. In order for an in-combination effect to arise, the nature of two effects does not necessarily have to be the same. The in-combination assessment, therefore, focuses on the overall implications for site conservation objectives regardless of the type of effect.
- 5.4.3. A search of the West Sussex Planning Portal revealed a wide variety of developments within the local area, but all are relatively small scale and will not interact with the Proposed Strategy to cause in-combination effects on National Network sites that would lead to LSEs. No infrastructure projects, such as Nationally Significant Infrastructure Projects, were identified that could lead to in-combination effects.
- 5.4.4. No in-combination effects are therefore anticipated for the Proposed Strategy.

## 6 RESULTS OF SCREENING AND CONCLUSIONS

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- 6.1.1. Screening of the Proposed Strategy has been undertaken for 13 National Network sites and three Ramsar wetland sites
- 6.1.2. The screening process was undertaken in the absence of mitigation. A ruling by the Court of Justice of the European Union (CJEU)<sup>12</sup> requires that mitigation measures should only be considered at Stage 2 Appropriate Assessment and not at screening stage or as an embedded element of a project. However, suitable measures to avoid and mitigate LSEs can be applied at Stage 2 Appropriate Assessment stage and LSEs that have been identified could be managed through the application of good working practices that would mitigate for potential adverse effects during the operation stage.
- 6.1.3. However, screening of the Proposed Strategy did not identify any LSEs (alone or in-combination with other plans or projects) that could result in adverse effects on integrity for any of the National Network sites or Ramsar sites. It can be concluded that the implementation of the Proposed Strategy will not lead to adverse effects on the integrity of National Network sites. Therefore, no further stages of HRA are required for the competent authority to make an informed decision on the Proposed Strategy.

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<sup>12</sup> Case C-258/11, Sweetman v. An Bord Pleanála, CJEU judgment 11 April 2013

# Appendix A

## LFRMS DOCUMENT

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See separate document.





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