BP5: Habitats Regulations Assessment (HRA).

Replacement Local Development Plan 2018-2033

January 2026

CONWY

Mae’r ddogfen hon ar gael yn Gymraeg hefyd.

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Introduction

Stantec has been commissioned by Conwy County Borough Council (CCBC) to undertake a Habitats Regulations Assessment (HRA) in the form of a combined screening and Appropriate Assessment (AA) of the emerging Replacement Local Development Plan (RLDP) in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended). This report constitutes the HRA of the RLDP. This will be used to inform the Deposit Plan stage of the RLDP.

The purpose of the HRA is to identify whether policies or proposals within the RLDP may give rise to Likely Significant Effects (LSEs) on European Sites, either alone, or in combination with other plans and projects, and, where relevant, to determine whether the RLDP would result in adverse effects on site integrity (AESI).

The assessment considers:

- Potential impact pathways arising from the RLDP;
- Sensitivities and Conservation Objectives of European Sites;
- In-combination effects with other plans and projects; and
- Whether mitigation is required at the Deposit Plan stage.

Given the strategic nature of the RLDP and the current level of certainty regarding future allocations, conclusions for some pathways will need to be revisited at the Deposit Plan stage.

Legislative context

Under the Conservation of Habitats and Species Regulations 2017, any plan or project that is not directly connected with or necessary to the management of a European Site must be assessed for its potential to result in AESI. A competent authority may only approve a plan after ensuring, beyond reasonable scientific doubt, that no AESI of a European Site will occur.

This HRA has been undertaken in accordance with:

- Welsh Government guidance (TAN 5; DPM, 2020);
- Case law including Waddenzee, People Over Wind, and Dilly Lane;
- Natura 2000 Standard Data Forms and Conservation Objectives; and
- Best practice HRA methodology.

HRA process

A search radius of 15 km from the RLDP boundary was used to identify European Sites that may be affected by the Plan, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), proposed SAC, (pSAC), potential SPA (pSPA), and Ramsar sites. Potential impact pathways were then analysed to determine whether LSE could be excluded.

Following detailed screening, the RLDP was found to require Appropriate Assessment only in relation to the ten spatially defined allocations (under nine strategic policies PL17-PL25), which may interact

with up to eleven European Sites through one or more impact pathways. The following European Sites were therefore brought forward to AA:

- Migneint-Arenig-Dduallt SAC
- Migneint-Arenig-Dduallt SPA
- Lavan Sands SPA
- Liverpool Bay SPA
- Creuddyn Peninsula Woods SAC
- Coedydd Aber SAC
- Eryri SAC
- Great Orme's Head SAC
- Gwydyr Forest Mines SAC
- Menai Strait and Conwy Bay SAC
- Elwy Valley Woods SAC (air-quality pathway only)

Each European Site was examined against relevant impact pathways, including:

- Atmospheric pollution
- Recreational disturbance
- Water quality
- Water quantity / hydrological change
- Disturbance to birds / loss of functionally linked land

Findings

CCBC provided Strategic Policies (PL/1-PL/25) to be assessed under the HRA. These Strategic Policies were assessed alone, in combination with each other (the RLDP as a whole), and in combination with other plans and projects. Many policies were screened out considering they are protective, procedural, or have no mechanism leading to environmental impact.

The following strategic policies and allocated sites required further assessment within AA due to mechanisms for effect that could not be excluded:

- PL17 – Site 157 Llanfairfechan (Llanfairfechan) (Mixed-Use Housing & Education);
- PL18 – Site 91 Llanrhos (Llanrhos) (Housing);
- PL19 – Site 68 Peulwys Farm, Old Colwyn (Old Colwyn) (Housing);
- PL20 – Site 56, Land to the East of the A470, Llanrwst & Site 56, Land to the East of the A470, Llanrwst (Housing)
- PL21 – Site 203 Queen's Road, Llandudno (Llandudno) (Housing);

- PL22 – Sites 115 & 204, Llanddulas Quarry (Employment & Solar);
- PL23 – Site 103, Bryniau, Llandudno (Employment);
- PL24 – Site 206, Nant y Coed, Llandudno Junction (Affordable Housing); and
- PL25 – Site 132, Dinerth Road, Rhos on Sea (Affordable Housing).

Screening identified the following impact pathways as relevant:

- **Atmospheric Pollution:** Potential air-quality effects from increased traffic or construction emissions.
- **Recreational Pressure:** Increased visitor use of coastal, upland, woodland and dune systems; dog-walking; trampling; disturbance to overwintering and breeding birds.
- **Water Quality:** Potential increases in nutrient loading, sedimentation, runoff or wastewater inputs.
- **Water Quantity / Hydrology:** Changes in flow, drainage or water resource abstraction associated with development.
- **Disturbance / loss of habitat:** Noise or light disturbance to species and temporary or permanent loss of suitable habitat.

Based on available information, the following impact pathways were screened in for AA for the eleven European Sites identified from the Conwy RLDP:

Migneint-Arenig-Dduallt SAC/SPA

- Recreational disturbance arising from additional population using upland rights of way and tourism growth;
- Potential water-quality effects including nutrient enrichment and sediment mobilisation within connected catchments;
- Hydrological change linked to new development and associated infrastructure (e.g. drainage);
- Atmospheric pollution from traffic-related nitrogen deposition and construction emissions.

Lavan Sands SPA

- Increased coastal recreation pressure and dog-walking activity;
- Water-quality deterioration from surface runoff and wastewater inputs; and
- Atmospheric pollution from construction and increased traffic.

Liverpool Bay SPA

- Recreational pressure to coastal areas supporting bird species; and
- Disturbance to waterbirds affecting feeding, roosting and loafing behaviour.

Eryri SAC

- Atmospheric pollution – nitrogen deposition on sensitive upland habitats associated with growth along the A55 corridor; and

- Recreational pressure from increased access to woodland, heath and grassland.

Great Orme's Head SAC

- Disturbance to breeding and overwintering birds from nearby housing allocations; and
- Recreational pressure to limestone grassland and coastal habitats.

River Conwy SAC

- Water-quality and hydrological effects from potential wastewater loading within the River Conwy catchment; and
- Recreational disturbance to riparian corridors and freshwater features.

Creuddyn Peninsula Woods SAC

- Atmospheric pollution; and
- Recreational disturbance arising from additional population and tourism growth.

Coedydd Aber SAC

- Atmospheric pollution; and
- Recreational disturbance arising from additional population and tourism growth.

Elwy Valley Woods SAC

- Atmospheric pollution; and
- Recreational disturbance arising from additional population and tourism growth.

Menai Strait and Conwy Bay SAC

- Water quality impacts from surface-water and wastewater systems;
- Hydrological change influencing marine and estuarine features; and
- Recreational pressure (water-based activities).

In-combination Assessment

A review of regional and national plans and major projects identified national, regional and local plans that may result in AESI in combination with the RLDP, including:

- Future Wales: The National Plan 2040
- Anglesey & Gwynedd Joint Local Development Plan (LDP)
- Eryri National Park LDP
- Denbighshire LDP
- Conwy Destination Management Plan
- A55 Corridor Improvements

- Major tourism and renewable energy proposals

Given overlapping growth, tourism expansion, and transport improvements across North Wales, LSEs in combination could not be excluded for several pathways.

Conclusion of AA

The AA of the RLDP considered all the relevant impact pathways in relation to site sensitivities, vulnerabilities and Conservation Objectives of nearby European Sites. As the RLDP provides strategic framework only and does not itself authorize specific development, reliance is placed on strong embedded plan policies and statutory regulatory mechanisms. The AA concludes that the RLDP will not result in AESI either alone or in combination with other plans; however, individual projects arising from the RLDP are subject to project-level assessment.

Impact specific conclusions are as follows:

- Recreational pressure and disturbance: Increased population may elevate recreational use of coastal and intertidal areas with potential disturbance to SPA birds and trampling sensitive habitats; embedded RLDP policies on sustainable access, visitor management and green infrastructure will avoid AESI at plan level with subject to project-level confirmation.

- Air quality and nitrogen deposition (traffic emissions): Traffic growth may increase NOx and nitrogen inputs affecting upland and woodland SAC/SPA habitats; RLDP promotion of modal shift and NRW permitting and project air quality controls will prevent AESI at plan level.

- Hydrology and water quality: Development could increase surface run-off and wastewater generation leading to nutrient loading, turbidity or altered freshwater inputs; statutory Sustainable Drainage Solutions (SuDS) duties, wastewater and standard pollution prevention measures will avoid AESI at plan level.

- Functionally linked land for SPA birds: Supporting inland habitats for feeding and roosting birds cannot be mapped at the plan stage; RLDP biodiversity protection, retention of corridors, and project-stage ecological assessment will avoid AESI at plan level.

- Urbanisation – lighting and noise: Allocations may increase artificial lighting, noise and human activity with indirect effects on sensitive sites; RLDP requirements for sensitive lighting design and disturbance avoidance will prevent AESI at plan level.

Taking into account of Conservation Objectives, embedded protective RLDP policies and applicable statutory controls, the RLDP alone is not capable of undermining the integrity of any European Site. Hence, project-level assessment will examine AESI on a site-specific basis for each proposal.

- These pathways will need to be assessed within a project-level HRA, when greater clarity on site-specific locations, design detail, construction timing, drainage strategies, and traffic generation will be available.

- Overall, incorporation of avoidance/mitigation measures, and confirmation of development quantum and spatial distribution, it is expected that AESI can be addressed at project-level for any project arising from the RLDP and further assessed within a project-level HRA .

1. Introduction

1.1 Overview

1.1.1 Stantec has been commissioned by Conwy County Borough Council (CCBC) to undertake a Habitats Regulations Assessment (HRA) of the emerging Replacement Local Development Plan (RLDP) 2018-2033. The HRA forms part of the evidence base that supports the preparation of the RLDP alongside the Integrated Sustainability Appraisal (ISA) and Strategic Environmental Assessment (SEA).

1.1.2 The existing Conwy Local Development Plan (LDP 2007-2022) was adopted in 2013. Following a statutory review undertaken by CCBC in 2017 in line with the Welsh Government Development Plans Manual (Edition 3), it was concluded that a full RLDP was required. The RLDP will guide the scale, type, and distribution of development within the County Borough (excluding the area within Eryri National Park) up to 2033.

1.1.3 The purpose of the HRA is to determine whether the RLDP has the potential to result in Likely Significant Effects (LSEs) on any European Site (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar Sites), either alone or in combination with other plans and projects. Where LSEs cannot be ruled out, an Appropriate Assessment (AA) is required to assess potential effects on site integrity, in view of the relevant Conservation Objectives.

1.1.4 This HRA provides an assessment of the RLDP at Deposit Plan stage, including the Strategic Policies, detailed policies, and Allocated Sites. Earlier work undertaken at Preferred Strategy stage has been incorporated and updated where relevant.

1.1.5 The findings of this HRA will be used to inform ongoing revisions to the RLDP and future consultation with Natural Resources Wales (NRW). The conclusions of the HRA will contribute to ensuring that the RLDP is compliant with the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended) (hereafter the “Habitats Regulations”).

1.2 Terminology

1.2.1 For the avoidance of doubt, the following terminology will be used throughout the HRA Report:

- The Plan: the Conwy RLDP 2018-2033.
- The Strategic Policies: the twenty-five policies proposed for the RLDP (detailed in Table 3-1).
- Candidate Sites: sites submitted by owners/developers for potential development consideration during RLDP development, bearing no formal status during initial stages.
- Strategic Sites**:** Land parcels identified by CCBC for potential allocation within the RLDP and included within the Preferred Strategy.
- Allocated Sites: refined list within the Deposit Plan stage of the Candidate and Strategic sites deemed suitable and deliverable for development within the emerging RLDP. These sites have formed the basis of this assessment.
- RLDP Area: the area within the Conwy County Borough administrative boundary which is encompassed by the RLDP Strategic Policies. This does not include the area covered by Eryri National Park.

- European Sites: for the purposes of the HRA Report 'European Sites' relates to Special Areas of Conservation (SAC), Special Protection Areas (SPA) (both considered now to be part of the National Site Network), proposed SAC, (pSAC), potential SPA (pSPA), and Ramsar sites.

1.3 Plan Description

1.3.1 The RLDP (2018-2033) for Conwy County Borough sets out a vision, objectives and land-use strategy for managing growth, development and environmental protection within the RLDP Area.

1.3.2 The RLDP Deposit Plan stage identifies the level and broad spatial distribution of development required between 2018 and 2033. This includes revised growth levels, updated population projections, and a suite of Strategic Policies that respond to key local issues such as affordable housing provision, regeneration priorities, biodiversity enhancement, and the resilience of coastal and inland settlements.

1.3.3 The Deposit Plan stage of the RLDP also identified ten Allocated Sites which are intended to deliver a significant proportion of future growth in the RLDP area. These sites are considered within the screening stage of the HRA to determine whether they may give rise to impact pathways affecting European Sites.

1.4 Legislative Context

1.4.1 The Habitats Regulations transposed certain aspects of 'the Habitats Directive' (Council Directive 92/43/EEC) and 'the Wild Birds Directive' (Directive 2009/147/EC) (together known as the 'Nature Directives') (including various amendments) into domestic law.

1.4.2 To make such legislation operable following the UK departure from the European Union (i.e. from 1st January 2021), changes have been made to the Conservation of Habitats and Species Regulations 2017 (as amended) by the 'Conservation of Habitats and Species (Amendment) (EU Exit) Regulations, 2019'. Most of these changes relate to the transfer of functions from the European Commission to the relevant domestic authorities, with all other processes and terms remaining unchanged, such that the strict protection afforded to sites, habitats and species, including wild birds, continues through the Habitats Regulations.

1.4.3 The Habitats Regulations, with changes made by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations, 2019, provides for the designation and protection of important ecological sites already designated under the Nature Directives including SAC and SPA and any further sites designated under these Regulations (together forming a new 'National Site Network' in the UK), as well as Ramsar Sites (which do not form part of the National Site Network, but remain protected in the same way as SAC and SPA in accordance with national planning policy).

1.4.4 Where there is a risk of the Plan resulting in adverse effects on site integrity (AESI) of European Sites, there is also requirement (in accordance with Regulation 105 of the of the Habitats Regulations, for the plan-making authority (CCBC) to make an 'AA' of the Plan on a European Site, in view of that European Site's Conservation Objectives; i.e., to undertake a HRA. Regulation 105 goes on to say that 'the plan-making authority must give effect to the land-use plan only after having ascertained that it will not adversely affect the integrity of the European Site…'. The HRA process (as detailed within **Section 2**) involves the completion of an initial 'screening stage', followed by an 'AA' if the Plan is considered likely to have a significant impact on a European Site. Where it is not possible to identify suitable measures to address the LSE, or uncertainty remains, consideration of Stage 3 (Alternative Solutions) is required.

1.4.5 The HRA refers to the assessment of the potential effects of a development project on one or more European Sites, including SPAs and SACs. The Government also expects pSPAs, cSACs, and any confirmed HRA compensatory habitat to be considered in the same way.

1.4.6 For the purposes of this HRA Report and in accordance with the Habitats Regulations and Welsh Government Policy (Technical Advice Note 5, September 2009) 'European Sites' are defined as:

- SPAs are classified under the European Council Directive 'on the conservation of wild birds' (2009/147/EC) (the 'Wild Birds Directive') for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Directive, and migratory species).
- SACs are designated under the Habitats Directive (92/43/EEC) and target particular habitats and/or species identified as being of European importance (sites which are part of the Natura 2000 network or 'National Site Network');
  - cSACs proposed to the Commission by the Welsh Ministers or the Secretary of State under Article 4(1) of the Habitats Directive;
  - Sites of Community Importance (SCIs) adopted by the Commission under Article 4(2) of the EC Habitats Directive;
  - Sites hosting priority natural habitat types or priority species in respect of which consultation has been initiated under Article 5(1) of the Habitats Directive;
- Potential SPAs and possible SACs being considered by the Secretary of State for classification as a SPA/SAC;
- Ramsar Sites and proposed Ramsar Sites (Wetlands of International Importance listed under the Ramsar Convention 1971); and
- European offshore marine sites as defined in regulation 15 of the Offshore Marine Nature Conservation (Natural Habitats, &c.) Regulations 2007 (S.I. 2007/1842).

1.5 Purpose of HRA

1.5.1 As outlined in Section 1.4, in accordance with Regulation 105 of the Habitats Regulations, it is the responsibility of the plan-making authority (in this case CCBC) to determine whether the Plan will have a significant effect on a European Site (whether alone or in combination with other plans or projects), in view of that European Site's Conservation Objectives, i.e., to undertake a HRA. This report provides the Habitats Regulations Assessment of the Deposit RLDP, comprising Stage 1 screening and, where Likely Significant Effects cannot be excluded, Stage 2 Appropriate Assessment and an integrity test. The assessment is intended to inform CCBC's decision-making on the Deposit Plan and to demonstrate compliance with Regulation 105 at the plan-making stage.

1.5.2 The HRA will be kept under review as the RLDP progresses to Submission and Adoption and will be updated if material changes to the Plan arise. In addition, projects brought forward under the RLDP will remain subject to project-level HRA, where required, at the development management stage.

1.6 Quality Assurance

1.6.1 The HRA Report was completed, reviewed and authorised by experienced ecologists, all of whom are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and bound by the Code of Professional Conduct of CIEEM (CIEEM, 2023).

1.7 Consultation

1.7.1 At this stage, consultation has not been undertaken regarding this HRA report specifically; However, public consultation will be undertaken alongside the Preferred Strategy on the Integrated Sustainability Appraisal, Strategic Environmental Assessment, Candidate Sites Register and HRA for the RLDP.

2. Methodology

2.1 Overview

2.1.1 This assessment follows the staged approach defined in UK and Welsh Government guidance, the DTA HRA Handbook (DTA, 2023), and the principles established through relevant case law, including People Over Wind, Sweetman, and Holohan (see **Section 2.3**). The methodology is precautionary and proportionate to the strategic nature of the RLDP.

2.2 Guidance documents

2.2.1 The following guidance documents have been used to inform the HRA:

- DTA HRA Handbook (DTA, 2023)
- NRW Guidance on the Assessment of plans and projects under the Habitats Regulations
- Natura 2000 Standard Data Forms and NRW Conservation Objectives
- Welsh Government - Planning Policy Wales (Edition 12)
- Welsh Government HRA Guidance for Development Plans
- UK Government - HRA Guidance (post-Brexit retained law)

2.2.2 These documents collectively define the technical standards and procedural requirements for undertaking HRA screening and AA.

2.3 Case Law

2.3.1 The HRA has been undertaken with due regard to relevant European and domestic case law that defines the interpretation and application of Article 6(3) of the Habitats Directive and its transposition through the Conservation of Habitats and Species Regulations 2017 (as amended). In particular, the following key judgments have informed the assessment approach adopted in this report:

- People Over Wind and Sweetman v Coillte Teoranta (C-323/17) - confirms that mitigation measures intended to avoid or reduce harmful effects on European Sites cannot be taken into account at the screening stage of HRA;
- Holohan and Others v An Bord Pleanála (C-461/17) - clarifies the requirement to consider the implications of a plan or project for functionally linked land and to assess site vulnerabilities and pressures comprehensively;
- Sweetman and Others v An Bord Pleanála (C-258/11) - establishes the test for determining whether a plan or project would result in an AESI of a European Site, having regard to its Conservation Objectives.

2.4 HRA Stages

2.4.1 The HRA follows four stages as outlined below.

Stage 1: Screening for LSE

2.4.2 Identifies whether any element of the RLDP (Strategic Policies and/or development within Allocated Sites) has the potential to cause an LSE on a European Site, alone or in-combination with other plans/projects.

2.4.3 If it cannot be excluded that an LSE may occur, the policy or site must proceed to Stage 2.

Stage 2: AA and the Integrity Test

2.4.4 If Stage 1 identifies potential LSEs, Stage 2 assesses:

- Impact pathways;
- European Site vulnerabilities (including threats and pressures);
- Whether the plan would undermine site Conservation Objectives; and
- Whether embedded policy safeguards provide sufficient protection

2.4.5 If AESI cannot be excluded, even with mitigation, the plan proceeds to Stage 3.

Stage 3: Assessment of Alternative Solutions

2.4.6 If an AESI remains, consider whether alternative Strategic Policies exist that avoid the impact (e.g., alternative spatial strategies, different site allocations).

Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)

2.4.7 Only applied in exceptional circumstances when:

- No alternative solutions exist, and
- The plan must proceed for imperative public interest reasons (e.g., public safety, environmental protection, beneficial socio-economic outcomes)

This stage rarely applies to Local Development Plans and is not expected to be required for the RLDP.

2.5 Assessment Approach

2.5.1 The methodology used for the RLDP HRA includes:

Identification of European Sites

2.5.2 European Sites within 15 km of the RLDP boundary were identified, with extended areas considered where:

- Hydrological connectivity exists
- Highly mobile species (e.g., birds, bats) are present
- Air quality pathways extend beyond 15 km

2.5.3 A map of the European Sites within 15km of the RLDP is presented in Appendix A .

Assessment of Qualifying Features and Conservation Objectives

2.5.4 For each site, the following documents were reviewed:

- NRW Conservation Objectives
- Natura 2000 Site Information
- NRW Site Improvement Plans (SIPs)
- NRW/Joint Nature Conservation Committee (JNCC) vulnerability assessments

Identification of Impact Pathways

2.5.5 Potential sources of impact from the RLDP were mapped against site sensitivities with only realistic pathways being taken forward. Potential pathways include:

- Recreational pressure
- Atmospheric pollution
- Water quality and hydrology
- Water resource demand
- Habitat loss / fragmentation
- Noise, light, or disturbance impacts

Policy Review

2.5.6 All Strategic Policies (PL1-PL21) were reviewed to determine:

- Whether they enable development
- Whether they include environmental safeguards
- Whether they introduce pathways for LSE

Site Review

2.5.7 Allocated Sites were screened using:

- Distance to European Sites
- Functional linkages
- Sensitivity of features
- Presence of hydrological or recreational pathways

2.6 Screening Categories

2.6.1 Screening followed categories outlined in the DTA HRA Handbook:

- **Category A:** Policy unrelated to European Sites; no LSE.

- **Category B:** High-level or aspirational policy lacking spatial or enabling effect; no LSE.
- **Category C:** Policy includes inherent protection for European Sites (not later-stage mitigation).
- **Category D:** LSE cannot be excluded; the element proceeds to AA.

2.6.2 These categories are applied consistently to each policy and site.

2.7 Data sources

2.7.1 To inform this assessment a review was completed on available data, reports and studies deemed relevant to the CBCC RLDP study area. This information was used to determine whether LSE or whether potential AESI may arise from the CBCC RLDP. The data sources include:

- National Resource Wales - Protected site information[1]
- Multi Agency Geographic Information for the Countryside (MAGIC)[2]
- Information on SACs and SPAs from the JNCC website[3]
- DataMapWales[4]
- In-combination assessment sources detailed in Section 8.

2.8 Assumptions and Limitations

2.8.1 The assessment is based on currently available evidence. Key limitations include:

- The RLDP is at Deposit Plan Stage; site boundaries may change once design details relating to projects arising from the plan are available which will be further assessed at project-level stage.
- Detailed site layouts, drainage strategies, and project-level mitigation are not yet available.
- Hydrological modelling and air quality modelling will need review for each project arising from the RLDP at project-level stage.
- Some NRW datasets may not reflect recent site changes or management updates.

[1] https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land-and-seas/find-protected-areas-of-land-and-sea/?lang=en

[2] www.magic.gov.uk

[3] https://sac.jncc.gov.uk/site/

[4] https://datamap.gov.wales/

3. Description of the RLDP

3.1 RLDP Vision

3.1.1 The RLDP sets out a long-term spatial vision for how sustainable development will be delivered across the Conwy County Borough. Full details of the Deposit Plan RLDP can be read in full at Conwy County Borough Council website5. The vision aims to support thriving, resilient, low-carbon communities, a strong and diverse economy, high-quality places, and the protection and enhancement of Conwy's exceptional natural environment.

3.1.2 The vision reflects the principles of the Well-being of Future Generations (Wales) Act, emphasising placemaking, sustainable growth, climate resilience, biodiversity recovery, and high-quality infrastructure that supports healthy communities.

3.1.3 The RLDP vision underpins the Strategic Objectives and Strategic Policies that guide future development, ensuring that growth is planned responsibly and in a way that safeguards the area's environmental assets, including internationally designated sites.

3.2 Strategic Objectives

3.2.1 The RLDP Strategic Objectives translate vision into targeted spatial outcomes. They collectively aim to:

- **Support sustainable spatial growth:** focusing development in accessible locations that reduce the need to travel and support climate mitigation.
- **Provide a balanced supply of housing:** including affordable homes that meet the needs of Conwy's communities.
- **Promote a diverse and resilient economy:** providing employment land and supporting key economic sectors.
- **Deliver high-quality placemaking:** healthy environments, and well-designed development.
- **Protect and enhance biodiversity:** ecosystem resilience, and natural resources, responding to the nature emergency.
- **Promote sustainable transport and active travel:** reducing car dependency and improving air quality.
- **Strengthen climate adaptation and flood resilience:** ensuring development avoids high-risk locations.
- **Protect the cultural, historic and Welsh-language identity of Conwy:** integrating local character into development.
- **Safeguard landscape, coast and countryside:** including nationally and internationally designated habitats.
- **Deliver a green, low-carbon economy:** supporting renewable energy generation and decarbonisation.

[5] https://www.conwy.gov.uk/en/Resident/Planning-Building-Control-and-Conservation/Replacement-LDP/Replacement-Local-Development-Plan.aspx

3.2.2 These objectives form the basis for the policy framework within the RLDP and are directly relevant to HRA as they influence spatial distribution, scale of development, infrastructure needs, and potential environmental pressures on European Sites.

3.3 Summary of Strategic Policies (PL1-PL25)

3.3.1 The RLDP includes twenty-five Strategic Policies. Each policy contributes differently to development outcomes and therefore has varying relevance to HRA screening and AA (Table 3-1)Table 3-1 summarises the Strategic and site-specific policies of the RLDP that formed part of the Deposit Plan stage evidence base at the time this HRA was undertaken.

3.3.2 The RLDP is an evolving document, and subsequent iterations progressing towards Deposit Plan stage may include additional policies, renumbered policies, or expanded thematic groupings.

3.3.3 For the purposes of this HRA, policies PL1-PL16 are assessed at a strategic level. Site-specific policies PL17-PL25 have been reviewed as part of the screening process and are addressed proportionately within the HRA, with those policies where LSEs cannot be excluded taken forward for further assessment, and others screened out.

Table 3-1: Summary of Strategic Policies (PL1-PL25)

Policy Reference	Policy Name	Summary of Policy
PL1	Sustainable Development Principles	High-level principles for sustainable growth, climate mitigation and placemaking. Does not allocate land or enable development. No direct mechanism for effects on European Sites.
PL2	Spatial Strategy	Defines settlement hierarchy and broad distribution of growth. Potential relevance to HRA depends on the scale and location of subsequent site allocations.
PL3	Placemaking	Design-led policy promoting high-quality, sustainable development. No direct enabling effect and no standalone pathway to European Sites.
PL4	Climate Change and Resilience	Promotes adaptation, carbon reduction and resilient infrastructure. Protective in nature and not expected to give rise to effects on European Sites.
PL5	Green Infrastructure	Protects and enhances green networks, biodiversity and ecosystem resilience. Protective policy with no pathway for LSEs.
PL6	Delivering High-Quality Homes	Sets overall housing requirement and delivery mechanisms. Potential relevance to HRA considered through the location and nature of site-specific allocations.
PL7	Sustainable Economy	Supports economic development in appropriate locations. High-level and criteria-based; potential effects depend on site-specific proposals.
PL8	Sustainable Transport	Promotes modal shift and reduced car dependency. Does not allocate land or define specific schemes at this stage.
PL9	Sustainable Infrastructure	Sets principles for infrastructure provision. Indirectly supports growth but lacks spatial specificity at this stage.
PL10	Natural Environment	Provides protection for designated sites, biodiversity and ecological networks. Protective policy.

Policy Reference	Policy Name	Summary of Policy
PL11	Water Resources and Flood Risk	Requires sustainable water management and flood risk avoidance. Protective policy reducing risk to European Sites.
PL12	Renewable and Low Carbon Energy	Supports renewable energy development in principle. Potential relevance to HRA depends on scale and location of future proposals.
PL13	Sustainable Waste Management	Procedural policy supporting the waste hierarchy. No pathway for effects on European Sites.
PL14	Welsh Language and Culture	Cultural and linguistic policy with no ecological pathway.
PL15	Infrastructure Delivery and Planning Obligations	Procedural and administrative policy. No pathway for effects on European Sites.
PL16	Monitoring Framework	Monitoring of RLDP implementation. Administrative policy with no environmental pathway.
PL17	Site 157 - Caeffynnon, Llanfairfechan	Mixed-use housing and education allocation. Coastal location where potential recreational, hydrological and water quality pathways to European Sites require consideration.
PL18	Site 91 - Pentywyn Road, Deganwy / Llanrhos	Residential allocation. Potential for recreational pressure, disturbance to SPA birds and functional linkage to coastal European Sites.
PL19	Site 68 - Peulwys Farm, Old Colwyn	Residential allocation. Potential relevance to HRA due to possible air quality, recreational and hydrological pathways.
PL20	Site 56 - Penloyn, Llanrwst	Residential allocation within an existing settlement. Potential relevance to HRA to be considered through screening, having regard to location and absence of obvious pathways.
PL21	Site 203 - Queen's Road, Llandudno	Residential allocation close to the coast. Potential for recreational disturbance, urban edge effects and hydrological pathways.
PL22	Site 115 - Llanddulas Quarry	Employment and renewable energy allocation. Potential relevance to HRA dependent on scale, nature and location of future development proposals.
PL23	Site 103 - Bryniau, Llandudno	Employment allocation within an existing urban area. Potential relevance to HRA to be considered through screening.
PL24	Site 206 - Nant y Coed, Llandudno Junction	Residential allocation for 100% affordable housing within a small settlement. While the policy allocates land and enables development, the scale and location of the site mean that no feasible pathways to European Sites are identified. Potential effects are localised and controlled through standard planning and environmental regulations.
PL25	Site 132 - Dinerth Road, Rhos on Sea	Residential allocation for 100% affordable housing within an existing coastal settlement. Due to the site's location within the Conwy Bay coastal zone, the allocation has potential pathways relating to recreational pressure, disturbance to SPA bird features, hydrology and water quality, and urban edge effects. Likely Significant Effects cannot be excluded at the screening stage.

3.4 Allocated Sites

3.4.1 The RLDP identifies ten Allocated Sites within the Deposit Plan stage that are critical to delivering the Plan's housing and employment land requirements (Table 3-2). A map of the Allocated Sites in relation to the European Sites is illustrated in Appendix B . These Allocated Sites require assessment within HRA considering they involve:

- a defined quantum of development;
- a fixed geographic location;
- associated infrastructure requirements; and
- the potential for increased population or economic activity.

3.4.2 Due to their scale and location, these Allocated Sites have a greater potential to interact with European Sites through pathways such as recreational disturbance, air quality effects and hydrological change. A full list of the Allocated Sites considered at the Deposit Plan Stage and their spatial relationship to European Sites is detailed further in Appendix C **Error! Reference source not found.**.

3.5 Spatial Strategy Context

3.5.1 Conwy's spatial strategy directs the majority of development towards:

- the main urban settlements (Llandudno, Colwyn Bay and Llandudno Junction);
- key hubs with existing infrastructure capacity; and
- regeneration locations.

3.5.2 This approach aims to support sustainable travel patterns, reduce out-migration, encourage economic regeneration and minimise dispersed rural development. However, the spatial distribution of growth also influences:

- where recreational pressure may increase;
- where traffic emissions may rise;
- where water demand or wastewater loading may change;
- where hydrological connectivity may influence European Sites; and
- where tourism-related growth could interact with coastal habitats.

3.5.3 Accordingly, the spatial strategy forms a key underpinning element of the HRA and provides the context for the identification of potential impact pathways and the assessment of LSEs at screening stage and, where required, AA.

Table 3-2: Allocated Site names, descriptions and relevant policy references.

Policy Reference	Site Name	Land Use	Site Description Summary
PL/17	Site 157 - Caeffynnon, Llanfairfechan	Mixed-use housing and education	A mixed-use allocation comprising residential development and associated educational facilities within Llanfairfechan. The site contributes to local housing delivery and community infrastructure in accordance with the settlement hierarchy.
PL/18	Site 91 - Pentywyn Road, Deganwy / Llanrhos	Housing	A residential allocation located in the Deganwy / Llanrhos area, supporting housing growth within an accessible urban fringe location close to services, active travel routes and community facilities.
PL/19	Site 68 - Peulwys Farm, Old Colwyn	Housing	A residential allocation at Old Colwyn intended to support housing supply, regeneration and connectivity within the eastern urban area.
PL/21	Site 203 - Queen's Road, Llandudno	Housing	A residential allocation within the main urban settlement of Llandudno, supporting compact urban growth and regeneration objectives.
PL/16, PL/20	Site 56 - Land to the East of the A470, Llanrwst	Housing	Residential allocation of 100 dwellings as specified in the Deposit RLDP site policy, with associated infrastructure, active travel routes and community facilities.
PL/23	Site 103 - Land at Bryniau between Wormhout Way and Conwy Road, Llandudno	Employment	Employment allocation at Bryniau measuring 3.85 ha requiring Traffic Impact Assessment, Sustainable Drainage Solutions (SuDS) - informed Flood Consequences Assessment, retention and integration of boundary hedgerows and mature trees, active travel links via Conwy Road (B5115), and protection of the registered historic landscape and Welsh Language Sensitive Area.
PL/22	Site 115 - Llanddulas Quarry, Areas 1, 2 and 3	Employment	Llanddulas Quarry comprises four development areas: 0.8 ha (Area 1) and 4 ha each (Areas 2 & 3) for B1/B2/B8 employment, and 18 ha (Area 4) for renewable solar energy, with phasing linked to employment build-out and requiring groundwater protection in respect of a principal aquifer, FCA and hydraulic modelling assessments at application stage.
PL/16, PL/25,	Site 132 - Dinerth Road, Rhos on Sea	Housing	Residential allocation for 100% affordable housing (50 dwellings).
PL/22	Site 204 - Llanddulas Quarry - Area 4	Solar	Strategic Policy PL/22 allocates Area 4 (18 ha) at Llanddulas Quarry for renewable energy (solar). The success of the solar allocation is subject to variability in phasing and individual proposals must demonstrate FCA, hydraulic modelling, and groundwater protection in respect of a principal aquifer
PL/16, PL/24	Site 206 - Nant y Coed, Llandudno Junction	Housing	Affordable housing allocation (50 residential units) within an existing settlement boundary on a brownfield former school site

4. European Sites in Scope

4.1 Identification of European Sites

4.1.1 In accordance with Welsh Government guidance and the DTA HRA Handbook (2023 update), European Sites were identified using:

- A 15 km buffer from the Conwy County Borough boundary (Appendix A);
- Additional sites outside 15 km where functional connectivity exists (e.g. mobile species, hydrology, air quality);
- NRW Conservation Objectives and Standard Data Forms; and
- NRW SIPs and site condition information.

4.1.2 This approach ensures that all sites which could be affected by the RLDP, either directly or indirectly, are included within the scope of the screening assessment. Full details of threats and pressures relating to European Sites presented in Appendix D .

4.1.3 Based on this process, eleven European Sites are identified as relevant to the HRA screening and potential Appropriate Assessment. A summary of these sites and their relevance to the RLDP is provided in Table 4.1.

Table 4-1: Details relating to European Sites relevant to the RLDP and their interaction with Allocated Sites (further details relating to interaction of Allocated Sites and specific European Sites are provided in Appendix C).

Site Code	European Site Name	Designation	Area (ha)	Within / Outwith Conwy	Relevant to Allocated Site(s)s? (Y/N)	Relevant to RLDP Area?
UK00330161	Migneint-Arenig-Dduallt	SAC	19,968	Partly within RLDP area/Eryri NPA	Yes (<15 km; hydrological & air-quality linkages)	Yes
UK9013131	Migneint-Arenig-Dduallt	SPA	19,968	As above	Yes	Yes
UK9013031	Lavan Sands, Conwy Bay	SPA	2,703	Shared with Gwynedd	Yes (coastal & recreation pathways)	Yes
UK9020294	Liverpool Bay	SPA	252,177	Outwith Conwy but closely associated with coastal settlements	Yes (coastal bird disturbance pathways)	Yes
UK0030146	Elwy Valley Woods	SAC	81	Outwith Conwy; adjacent in Denbighshire	No (>15 km; no functional link)	Yes (air-quality linkage only)
UK0030124	Creuddyn Peninsula Woods	SAC	118	Within Conwy	Yes	Yes
UK0030118	Coedydd Aber	SAC	346	Spans Conwy & Eryri NPA	Yes	Yes
UK0012946	Eryri	SAC	19,736	Adjacent to Conwy	Yes (air-quality & hydrological linkages)	Yes
UK0014788	Great Orme's Head	SAC	302	Within Conwy	Yes	Yes
UK0030161	Gwydyr Forest Mines	SAC	39	Spans Conwy & Eryri NPA	Yes (water-quality & hydrological pathways)	Yes
UK0030202	Menai Strait and Conwy Bay	SAC	26,502	Adjacent to Conwy	Yes (coastal & water-quality pathways)	Yes
UK9020285	Puffin Island	SPA	31.32	Outwith Conwy	No (eastern extent of site is approx. 15 km away from western extent of RLDP area)	No

Site Code	European Site Name	Designation	Area (ha)	Within / Outwith Conwy	Relevant to Allocated Site(s)s? (Y/N)	Relevant to RLDP Area?
UK9013061	Anglesey Terns	SPA	10,1931	Outwith Conwy	No (eastern extent of site is approx. 15 km away from western extent of RLDP area)	No
UK0030046	Afon Gwyrfai a Llyn Cwellyn	SAC	111.6	Outwith Conwy	No (>15 km & unconnected)	No
UK0012945	Rhinog	SAC	3,144	Outwith Conwy	No	No
UK0030075	Afon Eden-Cors Goch Trawsfynydd	SAC	284.6	Outwith Conwy	No	No
UK0030131	Dee Estuary	SAC	15,805	Outwith Conwy	No (>15 km; not linked)	No
UK0030252	River Dee and Bala Lake	SAC	1,271	Outwith Conwy	No	No
UK9013111	Berwyn	SPA	24,268	Outwith Conwy	No (>15 km; not linked)	No
UK0014783	Tanat & Vyrnwy Bat Sites	SAC	11.55	Outwith Conwy	No	No
UK0012926	Berwyn and South Clwyd Mountains	SAC	27,208	Outwith Conwy	No	No
UK0030163	Halkyn Mountain	SAC	604	Outwith Conwy	No	No
UK0030185	Llwyn	SAC	21.9	Outwith Conwy	No	No

4.2 European Sites Scoped into Assessment

4.2.1 The Conwy County Borough area comprises a diverse range of high-value terrestrial, woodland, coastal, and marine habitats. Its location between coast and upland creates a complex ecological network highly sensitive to:

- hydrological changes,
- recreational disturbance,
- air-quality impacts,
- urban expansion and associated edge effects, and
- coastal processes.

4.2.2 Several European Sites lie within or adjacent to the County, including (but not limited to):

- Great Orme's Head SAC (on the peninsula);
- Creuddyn Peninsula Woods SAC (within the Plan Area);
- Coedydd Aber SAC (shared with Eryri National Park Authority);
- Menai Strait and Conwy Bay SAC (coastal and hydrological connectivity).

4.2.3 Others lie just outside Conwy but have functional connectivity via:

- river systems (upland SACs),
- coastal bird distributions (Lavan Sands SPA),
- air-shed overlap (Eryri SAC, Elwy Valley Woods SAC),
- recreational access from Conwy communities.

4.2.4 The RLDP Deposit Plan stage has the potential to influence these sites through several pathways, including:

- Increased recreation from housing allocations
- Atmospheric pollution from traffic growth
- Increased wastewater generation
- Stormwater run-off and surface water management
- Disturbance to SPA bird features
- Demand for supporting infrastructure

This section sets out the European Sites, their qualifying features, sensitivities, and the specific pathways relevant to the RLDP. A summary of the impact pathways identified for each European Site is presented in

4.2.5 Table 4-2. AA sum

Table 4-2: Summary of impact pathways screened in for each European Sites (full details provided in Appendix F).

European Site	Designation	Reason for Inclusion	Primary Impact Pathways
Migneint-Arenig-Dduallt	SAC	Upland blanket bog and heath habitats highly sensitive to nitrogen deposition. Within regional air-shed influenced by RLDP traffic emissions.	Air quality (NOx & N deposition)
Migneint-Arenig-Dduallt	SPA	Supports merlin and hen harrier; species potentially sensitive to indirect habitat change from air-quality pressures.	Air quality; functional linkage (foraging ranges)
Lavan Sands	SPA	Internationally important assemblages of waterbirds, potentially sensitive to disturbance from coastal recreation.	Recreation pressure; disturbance; functional linkage
Liverpool Bay	SPA	Marine bird species potentially sensitive to disturbance from increased boating/coastal activity driven by population growth.	Coastal/marine disturbance; recreation
Creuddyn Peninsula Woods	SAC	Ancient coastal oak woodland within the RLDP boundary; potentially sensitive to nitrogen deposition.	Air quality
Coedydd Aber	SAC	Woodland gorge system partly within Conwy catchments potentially sensitive to air-quality change and hydrological alterations.	Air quality; hydrology
Eryri	SAC	Upland habitats potentially vulnerable to atmospheric nitrogen; within wider air-shed associated with plan area.	Air quality
Great Orme's Head	SAC	Limestone grassland, sea cliffs and maritime habitats; high recreational sensitivity, especially near Strategic Site PL/21	Recreation; disturbance; hydrology (localised)
Gwydyr Forest Mines	SAC	Metalliferous flushes potentially sensitive to water-quality and hydrological change within wider catchment.	Hydrology; water quality (indirect)
Menai Strait and Conwy Bay	SAC	Hydrologically connected to coastal settlements; potentially vulnerable to wastewater loading, sediment and disturbance.	Hydrology; water quality; disturbance
Elwy Valley Woods	SAC	Outside RLDP area but could be sensitive to elevated NOx and nitrogen deposition from regional traffic growth associated with the RLDP and in-combination plans and projects.	Air quality only

5. HRA Screening (Stage 1)

5.1 Overview

5.1.1 The purpose of HRA screening is to determine whether any policy or proposal within the Conwy RLDP may result in a LSE, either alone or in combination with other plans or projects, on the qualifying features of any European Site identified in Section 4.

5.1.2 This assessment:

- follows Welsh Government guidance (2023 update) and NRW Methodology;
- applies the precautionary principle;
- considers all relevant impact pathways (air quality, hydrology, disturbance, recreation, functional habitat loss, coastal processes).

5.1.3 Policies are screened using a structured screening matrix which identifies:

- the type of policy (protective / criteria-based / enabling / allocation);
- the presence or absence of impact pathways;
- whether LSEs can be excluded;
- whether AA is required.

5.1.4 Where a policy has no mechanism for environmental impact (e.g., procedural, monitoring or administrative policies), LSE can be excluded without the need for further assessment.

5.1.5 Where a policy or site allocation could enable development, or creates uncertainty over the location, scale or nature of development, LSE cannot be ruled out, and the policy is screened in for AA (Section 9).

5.2 Screening Categories

5.2.1 The following categories are applied consistently to all Strategic Policies and Allocated Sites:

Category	Definition	Outcome
A	Policy/proposal that will not lead to development or has no conceivable pathway for effect.	Screened out (no LSE).
B	Policy that directly protects European Sites or prevents LSE.	Screened out (beneficial/protective).
C	Policy that could lead to development but is not directly connected to European Sites and has no identified pathway.	Screened out (no LSE).
D	Policy or allocation likely to enable development and where significant effects cannot be excluded.	Screened in → AA required.

5.3 Policies within Assessment

5.3.1 The screening assessment covers all components of the RLDP that have the potential to influence European Sites. In line with Welsh Government and NRW guidance, the following elements are included:

Strategic Policies (PL1-PL25)

5.3.2 Each Strategic Policy has been reviewed to determine:

- Whether it enables development (e.g., housing, infrastructure, employment)
- Whether it is criteria-based, providing a framework but not permitting development itself
- Whether it is predominantly protective, with no development mechanism
- Whether the wording creates ambiguity that could lead to development effects indirectly

5.3.3 Policies that do not have any enabling mechanism, are purely administrative, or strengthen environmental protection, can be confidently screened out.

5.3.4 Policies that support growth, allocate sites, or relate to transport and infrastructure delivery, require closer scrutiny to establish whether they may result in pathways for LSEs.

Allocated Sites

5.3.5 The following Allocated Sites are included within the screening assessment:

- Site 56 - Land to the East of the A470, Llanrwst (Housing)
- Site 68 - Peulwys Farm, Old Colwyn (Housing)
- Site 91 - Llanrhos (Housing)
- Site 103 - Land at Bryniau between Wormhout Way and Conwy Road, Llandudno (Employment)
- Site 115 - Llanddulas Quarry, Areas 1, 2 and 3 (Employment)
- Site 132 - Dinerth Road, Rhos on Sea (Housing)
- Site 157 - Llanfairfechan (Mixed Use – housing and education)
- Site 203 - Queen’s Road, Llandudno (Housing)
- Site 204 - Llanddulas Quarry - Area 4 (Solar)
- Site 206 - Nant y Coed, Llandudno Junction (Housing)

5.3.6 Because these sites introduce spatially defined growth, they have greater potential to create direct impact pathways, including:

- Increased recreational use of coastal areas
- Noise and visual disturbance to SPA birds
- Increases in vehicle emissions affecting upland and woodland SACs

- Hydrological pathways linking to coastal waters
- Loss or degradation of terrestrial functional habitat used by mobile SPA species

5.3.7 As such, these allocations require detailed screening and, where LSE cannot be excluded, AA.

Thematic Policies

5.3.8 Policies relating to transport, infrastructure delivery, renewable energy, and economy may contribute indirectly to cumulative effects due to:

- Traffic growth
- Landscape-scale hydrological or hydrochemical changes
- Cumulative recreational pressure

5.3.9 These policies are considered in screening even where they do not identify specific development sites.

5.4 Approach to the In-combination Assessment

Purpose of In-Combination Assessment

5.4.1 Under Article 6(3) of the Habitats Directive, screening must consider whether policies or allocations may result in LSE alone or in combination with other plans or projects. The in-combination assessment evaluates whether the RLDP contribution to an impact pathway (e.g., recreation, air quality, wastewater), when combined with similar pressures from neighbouring authorities and national strategies, may result in a cumulative risk to the integrity of European Sites.

Sources Used in In-Combination Assessment

5.4.2 The assessment considers the following:

- Adopted and emerging LDPs in Gwynedd, Denbighshire, Eryri National Park;
- Regional transport strategies (including highway upgrades);
- Tourism strategies affecting coastal recreation;
- Strategic housing and employment growth across North Wales;
- Environmental management plans relating to the Menai Strait, Conwy Bay, and Liverpool Bay; and
- Major infrastructure projects, where relevant.

5.5 In-Combination Assessment Method

5.5.1 The in-combination assessment involves the following:

1. Identifying European Sites with shared sensitivity to cumulative pressures (e.g., Lavan Sands SPA, Liverpool Bay SPA, Eryri SAC).
2. Reviewing baseline condition and vulnerabilities, including NRW SIPs.

3. Assessing potential RLDP contributions relative to other plans

4. Determining whether the RLDP, alone or cumulatively, gives rise to a pathway requiring AA

5.5.2 If uncertainty remains regarding the cumulative effect, the policy or site must proceed to AA.

5.6 Screening Method and Key Considerations

5.6.1 The HRA screening follows Welsh Government and NRW guidance and applies the precautionary principle: where uncertainty exists, potential effects are treated as a risk rather than absence of effect.

Mechanism for Effect

5.6.2 The screening assessment identifies whether a policy or allocation:

- Enables new development;
- Influences the location, scale or timing of development;
- Could increase population, traffic, drainage demand or recreation; and
- May alter environmental pressures (e.g., flood risk, water quality).

Treatment of Uncertainty

5.6.3 Where information is incomplete, the assessment adopts a precautionary approach and treats uncertainty as a potential risk. This applies particularly where:

- The quantum of development;
- The delivery mechanism;
- The precise location;
- The nature of infrastructure; and/or
- Functional connectivity with European Sites.

Exclusion of Mitigation at the Screening Stage

5.6.4 In accordance with People Over Wind v Coillte Teoranta (C-323/17), mitigation measures cannot be relied upon at the screening stage unless they are:

- They are truly “embedded” in the plan or project; and
- They are not introduced specifically for ecological protection.

5.6.5 Therefore, policies cannot be screened out on the basis of mitigation that will be developed at project level or through subsequent planning conditions. Where mitigation is relied upon, it must progress through to the AA stage.

Functional Linkages and mobile species

5.6.6 Many European Sites designated for mobile species (particularly SPAs for wading birds and seabirds) are functionally linked to inland foraging and roosting habitat beyond the site boundary. Therefore, screening considers:

- Distances up to 15 km from the RLDP boundary for mobile species, in addition to the standard 15 km buffer around site boundaries.

- The presence of species such as oystercatcher *Haematopus ostralegus*, curlew *Numenius arquata*, redshank *Tringa totanus,* which regularly move between coastal roosts and inland feeding areas.

- The Allocated Sites (and any future allocations in apparently inland locations) may impact these species through habitat loss, disturbance, or changes in hydrological or feeding conditions.

5.6.7 Even where an allocation is located some distance from a designated SPA, loss or degradation of functionally linked habitat is treated as a potential LSE pathway

5.7 Summary of Screening

5.7.1 The screening assessment has evaluated all Strategic Policies (PL1-PL25) and the ten Allocated Sites included within the RLDP Deposit Plan stage. Each has been assessed against the identified impact pathways and the sensitivities of the eleven European Sites considered in this HRA. This section provides a clear summary of the outcomes and the rationale for progressing certain elements of the plan to AA. Table 5.1 provides details of the screening matrix.

Table 5-1: Screening matrix of Strategic Policies and Allocated Sites.

Strategic Policy & Allocated Site	Policy Summary	Potential Impact Pathways	European Sites Potentially Affected	Screening Category	Justification
PL1 - Sustainable Development Principles	Overarching sustainability principles; no land allocation.	None – overarching policy.	None.	A - No LSE	Strategic and aspirational policy; does not enable development.
PL2 - Spatial Strategy	Settlement hierarchy and broad growth distribution.	None – overarching policy.	None.	C - No LSE	High-level strategy; does not enable development.
PL3 - Placemaking	Design-led quality and sustainability principles.	None – overarching policy.	None.	A - No LSE	Improves environmental outcomes; does not enable development.
PL4 - Climate Change & Resilience	Climate adaptation and carbon reduction.	None - protective.	None.	B - Protective; No LSE	Enhances environmental resilience; does not enable development.
PL5 - Green Infrastructure	Protects and enhances GI networks.	None - protective.	None.	B - Protective; No LSE	Strengthens ecological safeguarding.
PL6 - Delivering High-Quality Homes	Sets overall housing requirement.	None – overarching policy.	None.	C - No LSE	High-level strategy; does not enable development.
PL7 - Sustainable Economy	Supports economic growth without spatial definition.	None – overarching policy.	None.	C - No LSE	High-level strategy; does not enable development.
PL8 - Sustainable Transport	Promotes modal shift and active travel.	None – overarching policy.	None.	C - No LSE	High-level strategy; does not enable development.

Strategic Policy & Allocated Site	Policy Summary	Potential Impact Pathways	European Sites Potentially Affected	Screening Category	Justification
PL9 - Sustainable Infrastructure	Infrastructure principles; no development allocations.	None – overarching policy.	None.	C - No LSE	High-level strategy; does not enable development.
PL10 - Natural Environment	Protects designated sites and biodiversity.	None - protective.	None.	B - Protective; No LSE	Strengthens Habitats Regulations compliance.
PL11 - Water Resources & Flood Risk	Requires SuDS and flood avoidance.	None - protective.	None.	B - Protective; No LSE	High-level strategy; does not enable development.
PL12 - Renewable & Low-Carbon Energy	Supports renewables in principle.	None - protective.	None	C - No LSE	High-level strategy; does not enable development.
PL13 - Sustainable Waste Management	Procedural waste hierarchy policy.	None.	None.	A - No LSE	High-level strategy; does not enable development.
PL14 - Welsh Language & Culture	Cultural protection.	None.	None.	A - No LSE	High-level strategy; does not enable development.
PL15 - Infrastructure Delivery & Obligations	Procedural framework for funding and delivery.	None.	None.	A - No LSE	High-level strategy; does not enable development.
PL16 - Monitoring Framework	Monitoring of plan performance.	None.	None.	A - No LSE	Administrative only; does not enable development.
PL17 - Site 157 Llanfairfechan (Mixed Use)	Coastal mixed-use allocation.	Recreation; SPA bird disturbance; habitat loss; air quality.	Lavan Sands SPA; Liverpool Bay SPA; Great Orme's Head SAC; Menai Strait & Conwy Bay SAC; Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.	D - LSE cannot be excluded; Screened in for AA	Coastal location within recreational and functional linkage zone.

Strategic Policy & Allocated Site	Policy Summary	Potential Impact Pathways	European Sites Potentially Affected	Screening Category	Justification
PL18 - Site 91 Llanrhos (Housing)	Residential allocation.	Recreation; functional habitat loss; hydrology; urban edge effects.	Great Orme's Head SAC; Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.	D - LSE cannot be excluded; Screened in for AA	Within functional linkage zone for SPA birds.
PL19 - Site 68 Peulwys Farm (Housing)	Large residential allocation.	Traffic-related air quality; recreation; hydrology; habitat loss.	Elwy Valley Woods SAC (air); Eryri SAC; Lavan Sands SPA; Liverpool Bay SPA; Great Orme's Head SAC; Menai Strait & Conwy Bay SAC; and Creuddyn Peninsula Woods SAC.	D - LSE cannot be excluded; Screened in for AA	Scale and location create multiple impact pathways.
PL20 – Site 56 - Land to the East of the A470, Llanrwst	Residential allocation and associated infrastructure.	High recreation pressure; SPA disturbance; hydrology; noise/light disturbance; habitat loss.	Migneint-Arenig-Dduallt SPA/SAC; Gwydyr Forest Mines SAC; Eryri SAC; and Coedydd Aber SAC.	D - LSE cannot be excluded; Screened in for AA	Enables development of residential use and associated infrastructure.
PL21 – Site 203 Queen's Road, Llandudno (Housing)	Coastal residential allocation.	High recreation pressure; SPA disturbance; hydrology; noise/light; habitat loss.	Lavan Sands SPA; Liverpool Bay SPA; Great Orme's Head SAC; Menai Strait & Conwy Bay SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.	D - LSE cannot be excluded; Screened in for AA	Closest allocation to internationally designated coastline.
PL22 – Site 115 - Llanddulas Quarry, Areas 1, 2 and 3; Site 204 - Llanddulas Quarry (Employment / Renewables)	Employment and renewable energy allocation.	Noise/light disturbance; hydrology; habitat loss;air quality.	Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Great Orme's Head SAC; Creuddyn Peninsula Woods SAC; and Elwy Valley Woods SAC.	D - LSE cannot be excluded; Screened in for AA	Scale and impacts uncertain; assessed at project-level.
PL23 – Site 103 - Bryniau, Llandudno (Employment)	Employment allocation within urban area.	Noise/light disturbance; hydrology; air quality.	Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Great Orme's Head SAC;	D - LSE cannot be excluded; Screened in for AA	Scale and impacts uncertain; assessed at project-level.

Strategic Policy & Allocated Site	Policy Summary	Potential Impact Pathways	European Sites Potentially Affected	Screening Category	Justification
			Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.		
PL24 – Site 206 - Nant y Coed, Llandudno Junction (Affordable Housing)	Small-scale residential allocation (100% affordable housing) within the existing settlement	Noise/light disturbance; hydrology; habitat loss; recreational pressure.	Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Great Orme's Head SAC; Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.	D - LSE cannot be excluded; Screened in for AA	Scale and impacts uncertain; assessed at project-level.
PL25 – Site 132 - Dinerth Road, Rhos on Sea (Affordable Housing)	Small-scale residential allocation (100% affordable housing) within an established settlement boundary.	High recreation pressure; noise/light disturbance; hydrology.	Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Bay SPA; Menai Strait and Conwy Bay SAC; Great Orme's Head SAC; Eryri SAC; and Creuddyn Peninsula Woods SAC.	D - LSE cannot be excluded; Screened in for AA	Scale and impacts uncertain; assessed at project-level.

5.8 Policies Screened Out (Categories A-C)

5.8.1 The majority of Strategic Policies (PL1-PL16) do not give rise to LSE, either alone or in combination, for one or more of the following reasons:

- No mechanism for environmental impact (Category A):
- Policies that are procedural, administrative, or relate to the operation of the planning system. These policies do not enable development or alter environmental receptors; For example:
  - Monitoring requirements;
  - Place-making principles; and/or
  - Welsh language and community policies.
- Policies that enhance protection of European Sites (Category B)
- Criteria-based policies without spatial allocation (Category C)

5.8.2 Policies such as PL10 - Natural Environment and PL5 - Green Infrastructure provide explicit protective frameworks that reduce the potential for LSEs. These strengthen ecological safeguards and cannot give rise to LSEs.

5.8.3 Some policies guide future development but do not specify its location, quantum, timing, or nature (e.g., renewable energy, sustainable transport, sustainable economy). Because they lack spatial expression, and no realistic impact pathways can be identified at plan-level, LSE can be excluded. Policies PL1–PL16 are screened out, as they do not enable development that would affect European Sites and therefore do not require AA.

5.9 Policies and Allocated Sites Screened In (Category D)

5.9.1 Strategic Policies that identify specific development sites or enable spatially defined growth present potential impact pathways and therefore cannot be excluded from further assessment.

5.9.2 The Strategic Policies PL17-PL25 are screened in based on Category D (see impact pathways detailed in Table 5-1):

5.10 Summary

5.10.1 As LSE cannot be excluded based on the aforementioned impact pathways for these Strategic Policies and Allocated Sites, they must progress to AA (Section 9).

5.11 In-Combination Effects

5.11.1 Even where policies are screened out alone, cumulative pressures may arise when considered:

- with neighbouring authorities' LDP growth;
- regional transport infrastructure;
- tourism expansion; and
- NRW Site Improvement Plan identified pressures.

5.11.2 For example:

- **Coastal recreation pressure** is influenced by combined housing growth across Conwy, Denbighshire and Gwynedd.
- **Air quality impacts** may arise cumulatively from increased road use across North Wales.
- **Water quality and hydrology** could be affected by multiple wastewater treatment works serving the wider region.

5.11.3 The in-combination assessment identifies that only the nine Strategic Policies (PL17-PL25) have potential pathways that could contribute cumulatively to LSEs. These are therefore taken forward to AA.

5.12 Overall HRA Screening Conclusion

- PL1-PL16 are screened out; No LSEs.
- PL17-PL25 are screened in as LSEs cannot be excluded; therefore, AA is required.
- All eleven European Sites identified in Section 4 remain screened in for further assessment due to one or more identified impact pathways.

6. Detailed Screening of LSEs by Impact Pathway

6.1 Overview

6.1.1 This section provides a detailed assessment of the LSEs that may arise from the implementation of the Conwy RLDP. The analysis builds upon the findings of the screening stage and focuses specifically on those Strategic Policies and Allocated Sites where a pathway for impact on a European Site could not be ruled out on the basis of objective information. In line with Article 6(3) of the Habitats Directive and established case law, the assessment applies the precautionary principle throughout, ensuring that any uncertainty regarding potential effects results in progression to the AA.

6.1.2 The LSE assessment considers the intrinsic characteristics, spatial distribution, proximity to European Sites, and ecological sensitivities relevant to each impact pathway. It further recognises that many of the effects arising from Local Development Plans are indirect, cumulative and long-term, often relating to population growth, increased recreational pressure, and wider urbanisation processes. The narrative below sets out the rationale for determining which elements of the RLDP may give rise to significant effects and therefore require progression to AA.

6.2 Strategic Policies

6.2.1 The majority of the RLDP's Strategic Policies (PL1-PL16) are high-level, thematic statements that guide the overarching approach to development, sustainability, climate adaptation, placemaking and environmental protection. By their nature, these policies do not allocate land for development, nor do they define specific quantum or spatial extents that could generate a measurable environmental impact on European Sites. Many of these policies reinforce existing protective measures, such as those relating to biodiversity enhancement, green infrastructure, landscape protection, water resource management and sustainable transport.

6.2.2 Given the absence of spatial allocation or defined development quantum, and applying a precautionary yet evidence-based judgment, no realistic impact pathway exists linking these strategic policies to the qualifying features of any European Site. Accordingly, the assessment concludes that none of the Strategic Policies generate the potential for LSE, either alone or in-combination, and therefore they do not require progression to AA.

6.3 LSE Assessment of Allocated Sites

6.3.1 The Allocated Sites (Table 3-2) introduce defined areas of growth, each of which has the potential to influence nearby or functionally linked European Sites through one or more of the impact pathways identified in Table 5-1. Unlike the strategic policies, these sites have clear locational boundaries, lie within established recreational catchments, or connect hydrologically or atmospherically to sensitive designated habitats. For this reason, each allocation is capable of generating environmental changes, whether through disturbance, increased visitor numbers, air-quality effects, hydrological alterations or loss of supporting habitat, that could feasibly result in LSEs on one or more European Site.

6.4 Recreation Pressure and Disturbance

6.4.1 One of the most prominent pathways for potential LSE relates to increased recreational activity along Conwy's coastline and intertidal environments. Development in Llanfairfechan, Llandudno, Llanrhos and Old Colwyn is likely to contribute to population growth and associated visitor pressure at accessible coastal designations, including Lavan Sands SPA, Liverpool Bay SPA, Menai Strait and Conwy Bay SAC, and Pen y Gogarth / Great Orme's Head SAC.

6.4.2 These sites support internationally important assemblages of waders, wildfowl and seabirds that are highly sensitive to both visual and noise disturbance. Even modest increases in dog walking, paddleboarding, kayaking or general shoreline use can reduce feeding time, cause repeated flushing events, or displace species from preferred roosting habitats particularly when considered in combination with wider housing growth across the region. Given the proximity of Allocated Sites to established recreational routes and beach access points, it cannot be confidently concluded that significant recreational effects would not arise. An LSE cannot be excluded for this pathway.

6.5 Air Quality (NOx and Nitrogen Deposition)

6.5.1 Air-quality impacts represent another key pathway. Several of the relevant European Sites contain upland, woodland or montane habitats that are highly sensitive to atmospheric nitrogen inputs - most notably Migneint-Arenig-Dduallt SAC/SPA, Eryri SAC, Creuddyn Peninsula Woods SAC, Coedydd Aber SAC, and Elwy Valley Woods SAC.

6.5.2 While the RLDP does not set traffic volumes, the Allocated Sites will inevitably result in additional vehicle trips, particularly along the A55 corridor. Nitrogen deposition from increased traffic emissions can alter soil chemistry, suppress characteristic species, and lead to long-term habitat degradation. Even small incremental increases are considered significant for nitrogen-sensitive habitats under the precautionary principle. As such, LSEs related to air quality cannot be discounted for PL17, PL18, and PL19, and potentially for other allocations depending on traffic distribution and site-specific modelling.

6.6 Hydrology and Water Quality

6.6.1 Hydrological connectivity is also a relevant consideration. Although none of the Allocated Sites lie immediately adjacent to designated watercourses, several fall within surface water catchments draining to Conwy Bay, the Menai Strait, or downstream river systems feeding into designated SACs.

6.6.2 Increases in impervious surfaces, urban drainage and potential wastewater loading may influence water quality parameters including nutrient concentrations (nitrogen and phosphorus), turbidity, and priority contaminants within hydrologically connected European Sites. In coastal SACs, even small changes in salinity, sedimentation or water chemistry can affect estuarine habitats used by qualifying features. As detailed hydrological and wastewater capacity modelling is not available at this plan-level and recognising the uncertainties in predicting cumulative loading across multiple allocations, this pathway results in an LSE that cannot be excluded and requires progression to AA.

6.7 Functionally linked land for Birds associated with SPA

6.7.1 A further pathway concerns the potential loss of functionally linked terrestrial habitat used by mobile SPA bird species. Areas within or adjacent to Allocated Sites in Llandudno, Llanrhos and Llanfairfechan (including agricultural fields, improved grassland and open land) are known or suspected to provide roosting, loafing or foraging opportunities for species associated with Lavan Sands SPA and Liverpool Bay SPA.

6.7.2 Development at PL17, PL18 and PL21 may remove or disturb land that contributes to the ecological function of these SPAs, even if such land is outside the formal designation boundary. Given the difficulty in conclusively determining the extent of functional dependence at plan level and acknowledging that displacement effects may interact with recreational pressures, significant effects on the integrity of the relevant SPAs cannot be excluded.

6.8 Urbanisation, Light and Noise Effects

6.8.1 Urban expansion produces secondary effects beyond direct habitat loss, including artificial lighting, noise, introduction of domestic pets, and general urban activity. These changes may

affect European Sites indirectly, particularly Great Orme's Head SAC, which contains sensitive vegetation communities and species vulnerable to disturbance, and coastal SPAs whose bird populations respond strongly to lighting and noise exposure.

6.8.2 Although the magnitude of these effects will depend on detailed design and site-specific mitigation measures, which are not available at plan level, uncertainties remain regarding potential LSEs. Accordingly, this pathway must be carried forward to AA.

6.9 Screening Conclusions

6.9.1 Taking into account all impact pathways identified in Table 5-1 and the interaction with European Site receptors presented in Appendix E , it is concluded that LSEs cannot be excluded for the following RLDP Strategic Policies and Allocated Sites:

- PL17 – Site 157 Llanfairfechan (Llanfairfechan) (Mixed-Use Housing & Education);
- PL18 – Site 91 Llanrhos (Llanrhos) (Housing);
- PL19 – Site 68 Peulwys Farm, Old Colwyn (Old Colwyn) (Housing);
- PL20 – Site 56, Land to the East of the A470, Llanrwst * PL20 – Site 56, Land to the East of the A470, Llanrwst (Housing)
- PL21 – Site 203 Queen's Road, Llandudno (Llandudno) (Housing);
- PL22 – Sites 115 & 204, Llanddulas Quarry (Employment & Solar);
- PL23 – Site 103, Bryniau, Llandudno (Employment);
- PL24 – Site 206, Nant y Coed, Llandudno Junction (Affordable Housing); and
- PL25 – Site 132, Dinerth Road, Rhos on Sea (Affordable Housing).

6.9.2 Collectively, these allocations may affect up to eleven European Sites through hydrological and water-quality pressures, traffic-related NOx and nitrogen deposition within the wider air-shed, increased recreation and disturbance to SPA bird features, functional habitat loss, and urban edge effects including lighting and noise. Accordingly, the Plan requires further assessment and therefore must proceed to Stage 2, AA.

7. Scope of AA

7.1 Overview

7.1.1 Following the conclusions of the screening stage, ten Allocated Sites and corresponding nine Strategic Policies (PL17-PL25) within the RLDP were identified as having potential pathways for LSEs on European Sites. As LSEs could not be excluded on the basis of objective information and in the absence of mitigation, these policies require progression to Stage 2 AA under Habitats Regulations.

7.1.2 The purpose of the AA is to determine whether the RLDP, either alone or in combination with other plans or projects, will result in an adverse effect on the integrity (AESI) of any European Site in view of that Site's Conservation Objectives (Appendix E). The AA must be based on the best scientific evidence available and must apply the precautionary principle throughout.

7.2 Elements Progressing to AA

7.2.1 The nine allocation policies (PL17–PL25) introduce spatially defined growth in locations where one or more identified pathways to European Sites exist, including recreation, disturbance, hydrology, water quality, air-quality emissions and loss of supporting habitat.

7.3 European Sites Requiring AA

7.3.1 Each site will be assessed in relation to:

- its key threats and pressures and Site Improvement Plan actions (Appendix D);
- its Conservation Objectives (Appendix E);
- the nature of impact pathways arising from the RLDP; and
- whether effects may compromise the ecological structure, function, or condition of qualifying features.

7.3.2 Based on the screening conclusions, the AA considered AESI on the following eleven European Sites:

1. Migneint-Arenig-Ddualllt SAC
2. Migneint-Arenig-Ddualllt SPA
3. Lavan Sands SPA
4. Liverpool Bay SPA
5. Creuddyn Peninsula Woods SAC
6. Coedydd Aber SAC
7. Eryri SAC
8. Great Orme’s Head SAC
9. Gwydyr Forest Mines SAC
10. Menai Strait and Conwy Bay SAC

11. Elwy Valley Woods SAC (air-quality pathway)

7.4 Impact Pathways Requiring Assessment

7.4.1 The AA will examine the following impact pathways identified as potentially linking the Allocated Sites to European Sites.

Recreational Pressure and Disturbance

7.4.2 Developments at Llanfairfechan, Llandudno, Llanrhos and Old Colwyn may increase recreational use of Lavan Sands SPA, Liverpool Bay SPA, Great Orme's Head SAC, and Menai Strait and Conwy Bay SAC.

7.4.3 Potential impacts include:

- disturbance to SPA waterbirds
- trampling of sensitive intertidal habitats
- dog-walking pressure
- displacement from feeding or roosting areas

Hydrology and Water Quality

7.4.4 Surface water and wastewater pathways may influence Menai Strait & Conwy Bay SAC, Lavan Sands SPA, and Gwydyr Forest Mines SAC (indirect catchment effects).

7.4.5 Potential issues include:

- increased nutrient loading
- changes to salinity gradients
- sedimentation effects
- localised discharge of urban run-off

Air Quality (NOx and Nitrogen Deposition)

7.4.6 Traffic growth from new development may affect Migneint-Arenig-Dduallt SAC/SPA, Eryri SAC, Creuddyn Peninsula Woods SAC, and Elwy Valley Woods SAC. Upland and woodland communities in these sites are highly sensitive to nitrogen deposition and acidification.

Functional Habitat Loss for Mobile Species

7.4.7 The inland areas of Llanrhos, Llandudno and Llanfairfechan may function as high-tide roosting habitat, feeding grounds and commuting corridorsfor waterbirds associated with Lavan Sands SPA and Liverpool Bay SPA. Loss of these supporting habitats may affect the ecological function of the SPAs.

7.5 Assessment Approach

7.5.1 The AA will:

1. Evaluate each pathway individually and collectively.

2. Assess effects alone and in combination with other plans and projects (Section 8).
3. Examine whether effects will compromise Conservation Objectives.
4. Identify embedded measures that form part of the policy or site design.
5. Recommend additional mitigation where needed.
6. Reach a conclusion on whether the RLDP could result in an AESI.

7.5.2 Mitigation will only be applied in AA, not screening, in accordance with People Over Wind ruling (2018).

7.6 Outcomes of AA

7.6.1 The conclusions of the AA will be used to:

- confirm whether AESI of each relevant European Site can be ruled out;
- determine whether modifications to Strategic Policies or Allocated Sites are required;
- identify any Plan-level mitigation necessary to ensure compliance; and
- provide clear recommendations to the Competent Authority (CCBC).

8. In-Combination Assessment

8.1 Overview

8.1.1 The Habitats Regulations require consideration of the potential for the Conwy RLDP to give rise to significant effects in combination with other relevant plans and projects. This stage recognises that European Sites may experience cumulative pressures from multiple sources, and that even if the RLDP alone may not result in AESI, its contribution alongside other plans must be assessed.

8.1.2 The in-combination assessment therefore examines whether the RLDP, together with other plans and projects operating within the same geographical and ecological context, could lead to additive, synergistic or sequential effects that may result in AESI of European Sites.

8.2 Approach to Identifying Relevant Plans and Projects

8.2.1 In line with Welsh Government guidance, the assessment focuses on plans and projects that:

- Operate within the same functional ecological zones (e.g., the A55 corridor, Conwy Bay, Menai Strait, upland SAC catchments).
- Influence the same environmental factors (e.g., air quality, recreation, hydrology) that underpin the sensitivities of the European Sites in scope.
- Have the potential to result in cumulative effects with the growth proposed in the RLDP.

8.2.2 The plans considered include:

- Adjacent Local Development Plans
- Regional transport and infrastructure strategies
- Marine and coastal management plans
- Water resource and wastewater investment plans
- Tourism and visitor management initiatives
- Strategic regeneration programmes

8.2.3 Only those plans with overlapping impact pathways and geographical relevance are taken forward for more detailed consideration in the narrative below.

8.3 Local Development Plans in Surrounding Areas

8.3.1 Given the interconnected nature of ecological networks across North Wales, the LDPs for neighbouring authorities represent the most significant potential contributors to cumulative effects. These include:

- Anglesey & Gwynedd Joint LDP
- Eryri National Park LDP
- Denbighshire LDP
- Flintshire LDP

8.3.2 Each of these plans contains housing, employment and infrastructure allocations that could contribute to:

- Increased recreational pressure along the North Wales coast
- Additional traffic along the A55 and associated nitrogen deposition
- Growing local populations that may increase the use of coastal habitats associated with Lavan Sands SPA, Liverpool Bay SPA and the Menai Strait SAC

8.3.3 Although the magnitude of these effects varies between authorities, the combined influence of multiple LDPs is a relevant consideration within the AA.

8.4 Tourism and Visitor Management Strategies

8.4.1 North Wales attracts significant numbers of visitors due to its coastline, beaches, and access to Eryri National Park. Visitor pressure is a known contributor to disturbance at:

- Lavan Sands SPA
- Liverpool Bay SPA
- Great Orme's Head SAC
- Menai Strait & Conwy Bay SAC

8.4.2 Local and regional tourism strategies aim to promote year-round recreation, which carries inherent risks of increased disturbance to designated species and habitats. When considered alongside new development in the RLDP, these strategies may amplify recreational impacts, although several include measures to improve sustainable visitor management.

8.5 Transport and Road Infrastructure Plans

8.5.1 Regional transport schemes, including improvements to the A55 and local highway networks, may lead to increased traffic and consequently higher nitrogen emissions within the vicinity of nitrogen-sensitive SACs.

8.5.2 The RLDP will also contribute to traffic growth, particularly from residential allocations. While each source may be modest individually, their cumulative effect is relevant for sites such as:

- Migneint-Arenig-Dduallt SAC
- Coedydd Aber SAC
- Penrhyn Creuddyn SAC
- Elwy Valley Woods SAC

8.5.3 The in-combination assessment therefore acknowledges a cumulative air-quality risk that requires further evaluation in the AA.

8.6 Water Resource Management and Wastewater Plans

8.6.1 Investment programmes prepared by Dŵr Cymru Welsh Water, including Drainage and Wastewater Management Plans (DWMPs), provide the strategic framework for accommodating population growth.

8.6.2 Although these programmes generally strengthen environmental protection, increases in wastewater loading associated with growth across North Wales could, in combination with the RLDP, affect:

- Estuarine water quality in Conwy Bay and Menai Strait
- Salinity and turbidity levels affecting SAC features
- Coastal eutrophication risks

8.6.3 The scale and distribution of new development across multiple authorities means wastewater effects must be assessed cumulatively within the AA.

8.7 Major Projects and Regeneration Initiatives

8.7.1 Relevant programmes such as coastal flood protection schemes, harbour redevelopment, and strategic transport hubs were reviewed. These projects typically include embedded mitigation, Environmental Impact Assessments, and regulatory controls that limit their contribution to AESI of European Sites.

8.7.2 However, where such projects interact with the same coastal or catchment systems as the RLDP, their residual effects have been considered cumulatively.

8.7.3 Table 8-1 summarises the plans and projects identified as relevant to the in-combination assessment. These represent current or emerging strategies, programmes and developments operating within the wider ecological and administrative context of the RLDP, and which may contribute cumulatively to the impact pathways identified at screening. Only plans and projects capable of interacting with the same European Sites, or influencing the same environmental pressures, have been included.

Table 8-1: Summary of plans and projects assessed in combination with RLDP.

Plan / Project	Summary Information	Possible Impact Pathways
Future Wales - The National Plan 2040	National spatial strategy guiding the distribution of growth, infrastructure, transport, renewable energy and major development across Wales. The RLDP must be in general conformity with this plan.	Potential cumulative increases in traffic, air emissions, strategic tourism movements and land-take; possible in-combination effects on air quality, recreation, water quality and hydrology. LSE in combination cannot be excluded.
Wales Transport Strategy / National Transport Delivery Plan	National framework for transport investment, including upgrades to strategic road and rail networks (A55 corridor) and promotion of modal shift.	Potential for increased traffic volumes and emissions; improved connectivity leading to increased tourism; temporary construction disturbance. Some elements are beneficial, but LSE in combination cannot be excluded.
Welsh National Marine Plan	Policy framework for sustainable development in Welsh marine waters, including ports, shipping, cables, fisheries and renewables.	Potential interactions with coastal SAC/SPA sites through changes in marine activity, disturbance, water quality and sediment processes. LSE cannot be excluded.
NRW North Wales Area Statement	Identifies regional priorities for nature recovery, climate resilience and sustainable resource use.	Primarily protective; expected to support European Site resilience, likely resulting in a net positive effect for nature. No AESI

Plan / Project	Summary Information	Possible Impact Pathways
		anticipated; likely to act as a mitigating influence.
Conwy County Borough Council Corporate Plan	Strategic direction for service delivery, infrastructure, environment, community and economic development.	Could support regeneration, infrastructure and tourism growth, contributing to air-quality, recreation and hydrological pathways. Effects mediated through the RLDP; LSE cannot be excluded.
Conwy Destination Management Plan	Framework for managing and enhancing the visitor economy across Conwy, including Llandudno and coastal areas.	May increase recreational pressure on coastal/intertidal habitats and disturbance to SPA birds. LSE in combination cannot be excluded.
Conwy Biodiversity Duty / Nature Recovery Plan	Identifies actions to enhance biodiversity under the Environment (Wales) Act.	Primarily protective; likely to reduce impacts. No adverse LSE anticipated in combination.
Conwy & Denbighshire PSB Well-being Plan	Long-term objectives for environment, climate, economy, health and community well-being.	May indirectly increase tourism and economic activity; minor contributions to recreation/air quality pathways. Overall LSE cannot be entirely excluded.
Eryri National Park LDP	Spatial planning framework for Eryri, adjoining Conwy and overlapping several SACs.	Growth/tourism in Eryri could reinforce recreational pressure, air-quality effects and hydrological changes affecting shared European Sites. LSE cannot be excluded.
Anglesey & Gwynedd Joint LDP	LDP covering coastal and upland areas immediately west of Conwy.	May increase traffic, coastal recreation and tourism; potential in-combination effects on Lavan Sands SPA, Liverpool Bay SPA and adjacent SACs. LSE cannot be excluded.
Denbighshire LDP	LDP for neighbouring county to the east of Conwy.	Regional growth could contribute to increased A55 traffic and recreational use of coastal/upland sites. LSE cannot be excluded.
Flintshire LDP	Strategic allocations for housing, employment and infrastructure further east in the North Wales coastal corridor.	Could cumulatively increase traffic and recreational movements relevant to Liverpool Bay SPA and air-quality pathways. LSE cannot be excluded.
Adventure Parc Snowdonia (and associated expansions)	Major inland adventure tourism facility with potential expansion.	May increase recreation in valley/upland habitats and contribute to local emissions and infrastructure use. LSE cannot be excluded.
Llandudno and Conwy coastal regeneration projects	Ongoing improvements to promenade, public realm, tourism infrastructure and waterfront areas.	May increase visitor numbers and shore-based activity affecting SPA/SAC features. LSE cannot be excluded.

Plan / Project	Summary Information	Possible Impact Pathways
A55 North Wales Corridor improvement schemes	Upgrades to the trunk road for capacity, resilience and safety.	Construction and operational impacts could cumulatively contribute to disturbance, hydrology and air-quality effects. LSE cannot be excluded.
Strategic renewable energy projects (North Wales)	Large-scale wind, solar and grid upgrades progressing under national policy.	Collision/disturbance risk for mobile species; hydrological changes; increased construction activity. LSE cannot be excluded.
Major strategic housing allocations in neighbouring LDPs	Housing growth across North Wales reinforcing population and visitor pressures.	Could cumulatively increase coastal recreation, wastewater loading and traffic emissions. LSE cannot be excluded.

8.8 In-Combination Assessment Conclusion

8.8.1 The in-combination assessment has identified a number of impact pathways (particularly recreational pressure, air quality and hydrology) where the RLDP may interact cumulatively with other plans and projects. These pathways are therefore assessed further in the AA to determine whether, alone or in combination, they could give rise to an AESI of European Sites, having regard to their Conservation Objectives.

9. Appropriate Assessment (AA)

9.1 Overview

9.1.1 This section presents the AA of the Conwy RLDP. The assessment follows the screening conclusions (Section 5), which identified nine Strategic Policies (PL17-PL25) as having progressed to AA following identification of LSEs at the screening stage, and are therefore assessed here to determine whether they could result in an AESI of European Sites.

9.1.2 The AA determines whether these allocations could result in an AESI of any European Site, having regard to the Conservation Objectives of that site.

9.1.3 The AA evaluates the following impact pathways for each relevant European Site:

- Recreational pressure and disturbance
- Air-quality impacts (NOx, nitrogen deposition)
- Hydrology and water quality
- loss of functionally linked terrestrial habitat for mobile species;
- Urbanisation, lighting and noise effects
- in-combination effects with other plans and projects (Section 8).

9.1.4 For each pathway, potential effects are assessed for each relevant European Site, followed by mitigation considerations and conclusions on site integrity.

9.1.5 The AA is based on best available scientific evidence, NRW Conservation Objectives, SIPs, published data and professional judgement. The precautionary principle is applied throughout. A summary of the AA of AA of Strategic Policies is presented in Table 9-1.

Table 9-1: Summary of AA of RLDP Strategic Policies Against Relevant European Sites.

Impact Pathway	European Sites Potentially Affected	Assessment of Effects (Plan-Level)	AA Conclusion
Recreational pressure and disturbance	Lavan Sands SPA; Liverpool Bay SPA; Menai Strait & Conwy Bay SAC; Great Orme's Head SAC	Increased population associated with RLDP allocations may increase recreational use of coastal and intertidal environments, with potential disturbance to SPA bird features and trampling of sensitive habitats.	The RLDP will not result in AESI of European Sites, subject to embedded plan policies promoting sustainable access, visitor management, green infrastructure, and protection of designated sites. Therefore, this would need to be assessed at included at project-level for any projects arising from the RLDP.
Air quality (NOx and nitrogen deposition)	Migneint–Arenig–Dduallt SAC/SPA; Eryri SAC; Creuddyn Peninsula Woods SAC; Coedydd Aber SAC; Elwy Valley Woods SAC	RLDP-related traffic growth may contribute to increased NOx emissions along key corridors. Sensitive upland and woodland habitats are vulnerable to nitrogen deposition.	The RLDP will not result in AESI of European Sites, subject to plan-level sustainable transport policies, modal shift, NRW air quality permitting, and project-level assessment where required. Therefore, this would need to be assessed at included at project-level for any projects arising from the RLDP.
Hydrology and water quality	Menai Strait & Conwy Bay SAC; Lavan Sands SAC; Gwydyr Forest Mines SAC	Development could increase surface water run-off and wastewater discharges affecting downstream European Sites if unmanaged.	The RLDP will not result in AESI of European Sites, subject to compliance with statutory SuDS requirements, NRW discharge permitting, and plan-level water management policies. Therefore, this would need to be assessed at included at project-level for any projects arising from the RLDP.
Loss of functionally linked habitat	Lavan Sands SPA; Liverpool Bay SPA	Inland sites may function as supporting habitat for SPA bird species for roosting or foraging. Loss or disturbance could affect SPA function.	The RLDP will not result in AESI of SPA sites, subject to avoidance of key supporting habitat, project-level ecological assessment, and retention of green corridors. Therefore, this would need to be assessed at included at project-level for any projects arising from the RLDP.
Urbanisation, lighting and noise effects	Great Orme's Head SAC; Lavan Sands SPA; Liverpool Bay SPA	Increased lighting, noise and general urban disturbance could indirectly affect sensitive habitats and species.	The RLDP will not result in AESI of European Sites, subject to sensitive design, lighting controls, biodiversity protection measures and project-level mitigation. Therefore, this would need to be assessed at included at project-level for any projects arising from the RLDP.

9.2 Detailed Assessment by Pathway

Recreational Pressure and Disturbance

9.2.1 The RLDP allocations at Llanfairfechan (PL17), Llanrhos (PL18), Old Colwyn (PL19) and Llandudno (PL21) will increase local population levels and may contribute to increased recreational use of coastal and intertidal environments. European Sites potentially affected include Lavan Sands SPA, Liverpool Bay SPA, Menai Strait & Conwy Bay SAC, and Great Orme's Head SAC.

9.2.2 Increased recreational activity has the potential to result in disturbance to qualifying SPA bird features through visual presence, noise, dog walking, and displacement from feeding or roosting areas, as well as trampling of sensitive intertidal habitats.

9.2.3 However, the RLDP includes embedded strategic policies relating to green infrastructure provision, sustainable access, visitor management, protection of designated sites, and avoidance of adverse effects on internationally designated habitats. In addition, site-specific impacts will be subject to further assessment and control at the project-level.

9.2.4 Taking account of the embedded plan-level safeguards, the RLDP will not result in AESI in relation to recreational pressure and disturbance; however, this would need to be assessed at included at project-level for any projects arising from the RLDP.

Air Quality (Traffic Emissions and Nitrogen Deposition)

9.2.5 Traffic growth associated with RLDP allocations, particularly PL18 (Llanrhos) and to a lesser extent PL17 (Llanfairfechan), may contribute to increased NOx emissions along key transport corridors. European Sites sensitive to nitrogen deposition include Migneint–Arenig–Dduallt SAC/SPA, Eryri SAC, Creuddyn Peninsula Woods SAC, Coedydd Aber SAC, and Elwy Valley Woods SAC.

9.2.6 These upland and woodland habitats are vulnerable to nitrogen enrichment and acidification. However, at plan level, the RLDP promotes sustainable transport, modal shift, and reduced reliance on private vehicles. Furthermore, any development likely to generate significant traffic effects will be subject to project-level air quality assessment and regulation through NRW permitting mechanisms.

9.2.7 With embedded transport and environmental policies in place, and regulatory control at project-level, the RLDP will not result in AESI in relation to air quality and nitrogen deposition; however, this would need to be assessed at included at project-level for any projects arising from the RLDP.

Hydrology and Water Quality

9.2.8 Development associated with RLDP allocations could increase surface water run-off and wastewater generation, potentially affecting downstream European Sites including Menai Strait & Conwy Bay SAC, Lavan Sands SPA, and Gwydyr Forest Mines SAC.

9.2.9 Potential effects include increased nutrient loading, altered freshwater inputs, and changes to sediment or turbidity regimes. The RLDP requires compliance with statutory Sustainable Drainage Systems (SuDS), NRW wastewater permitting, and water management policies designed to prevent deterioration of hydrological and water quality conditions.

9.2.10 Subject to statutory controls, standard project-level pollution prevention measures and embedded plan-level policies, the RLDP will not result in AESI in relation to hydrology and water quality; however, this would need to be assessed at included at project-level for any projects arising from the RLDP.

Functional Linked Land for Birds that are qualifying features of SPA

9.2.11 Inland areas around Llanfairfechan, Llanrhos, and Llandudno may function as supporting habitat for SPA bird species associated with Lavan Sands SPA and Liverpool Bay SPA, including feeding, roosting, and commuting areas. Any residual effects will need to be assessed and mitigated through project-level design and environmental controls.

9.2.12 At plan-level, the precise extent of functionally linked land cannot be mapped. However, the RLDP includes strong biodiversity protection policies, requirements for ecological assessment at project stage, and retention of green corridors and open space where required.

9.2.13 With these safeguards in place, the RLDP will not result in AESI in relation to loss of functionally linked land; however, this would need to be assessed at included at project-level for any projects arising from the RLDP.

Urbanisation, Lighting and Noise

9.2.14 Urbanisation associated with RLDP allocations, particularly PL18 and PL21, may increase artificial lighting, noise, and general human activity. These effects could indirectly affect sensitive habitats and species within Great Orme's Head SAC, Lavan Sands SPA, and Liverpool Bay SPA.

9.2.15 The RLDP includes policies requiring sensitive lighting design, biodiversity protection, and avoidance of disturbance to European Sites. Any residual effects will be assessed and mitigated through project-level design and environmental controls.

9.2.16 Taking account of embedded plan policies and project-level controls, the RLDP will not result in AESI in relation to urbanisation, lighting, and noise effects; however, this would need to be assessed at included at project-level for any projects arising from the RLDP.

9.3 Overall Integrity Test for Each European Site

9.3.1 The AA concludes that, having regard to the Conservation Objectives of the European Sites, and taking account of the embedded protective policies of the RLDP and applicable statutory controls, the RLDP will not result in AESI in relation to hydrology and water quality; however, this would need to be assessed at included at project-level for any projects arising from the RLDP alone and/or in combination with other plans and projects.

9.3.2 Considering project-level assessment would be required in each case which would assess AESI on a project-level, site-specific basis, once detailed construction and operational information is available. Therefore, it has been concluded that the RLDP may proceed to adoption under Article 6(3).

10. Conclusions

10.1.1 This HRA has assessed the Conwy RLDP in accordance with the requirements of Article 6(3) of the Habitats Directive and the Conservation of Habitats and Species Regulations 2017 (as amended). The assessment has determined whether the RLDP, either alone or in combination with other plans and projects, would be likely to have significant effects on any European Site, and where such effects could not be ruled out, whether the Plan would result in an adverse effect on the integrity of those sites in view of their Conservation Objectives.

Screening Stage findings

10.1.2 The screening stage identified that, at the strategic plan level, the RLDP has the potential to give rise to impact pathways associated with growth and land-use change. These pathways include:

- Increased recreational pressure on sensitive coastal, estuarine and upland European Sites;
- Changes in air quality arising from additional road traffic on key transport corridors;
- Hydrological and water-quality effects linked to surface water drainage, wastewater management and land-take;
- Disturbance (noise, lighting and visual presence) associated with expansion of settlements and tourism infrastructure;
- Potential loss or disturbance of functionally linked land used by mobile species associated with SPAs; and

10.1.3 Based on these pathways, eleven European Sites were taken forward for detailed screening and AA (where LSEs could not be excluded).

AA Findings

10.1.4 The AA examined each relevant impact pathway in relation to site-specific vulnerabilities, Conservation Objectives and available scientific evidence. The assessment concluded that:

- The RLDP does not itself authorise development but provides the strategic planning framework for development and does not prescribe the precise location, scale or nature of individual projects;
- All development delivered under the RLDP will be subject to planning controls, HRA at project-level, SuDS legislation, NRW permitting, and environmental regulatory mechanisms which provide enforceable safeguards;
- The RLDP contains robust protective policies, including SP3 (Nature Emergency and Biodiversity), SP16 (Green Infrastructure), SP17 (Countryside, Landscapes and Undeveloped Coast), SP18 (Environmental Protection) and associated Development Policies, which collectively ensure that development will only proceed where adverse effects on European Sites can be avoided; and
- Where uncertainties remain at plan level, the regulatory framework and project-level assessment requirements provide an appropriate mechanism for avoiding impacts prior to consent being granted.

10.1.5 Taking these matters into account, the AA concludes that subject to the implementation of the RLDP's policy safeguards, the operation of existing environmental legislation, and project-level

assessment, the RLDP will not result in an adverse effect on the integrity of any European Site, either alone or in combination with other plans and projects.

10.1.6 This conclusion reflects the strategic nature of the RLDP and the need for more detailed assessment at the planning application stage, where site-specific design, mitigation and avoidance measures can be fully defined and assessed. The findings of this HRA should therefore guide both plan implementation and future decision-making to ensure continued compliance with the Habitats Regulations.

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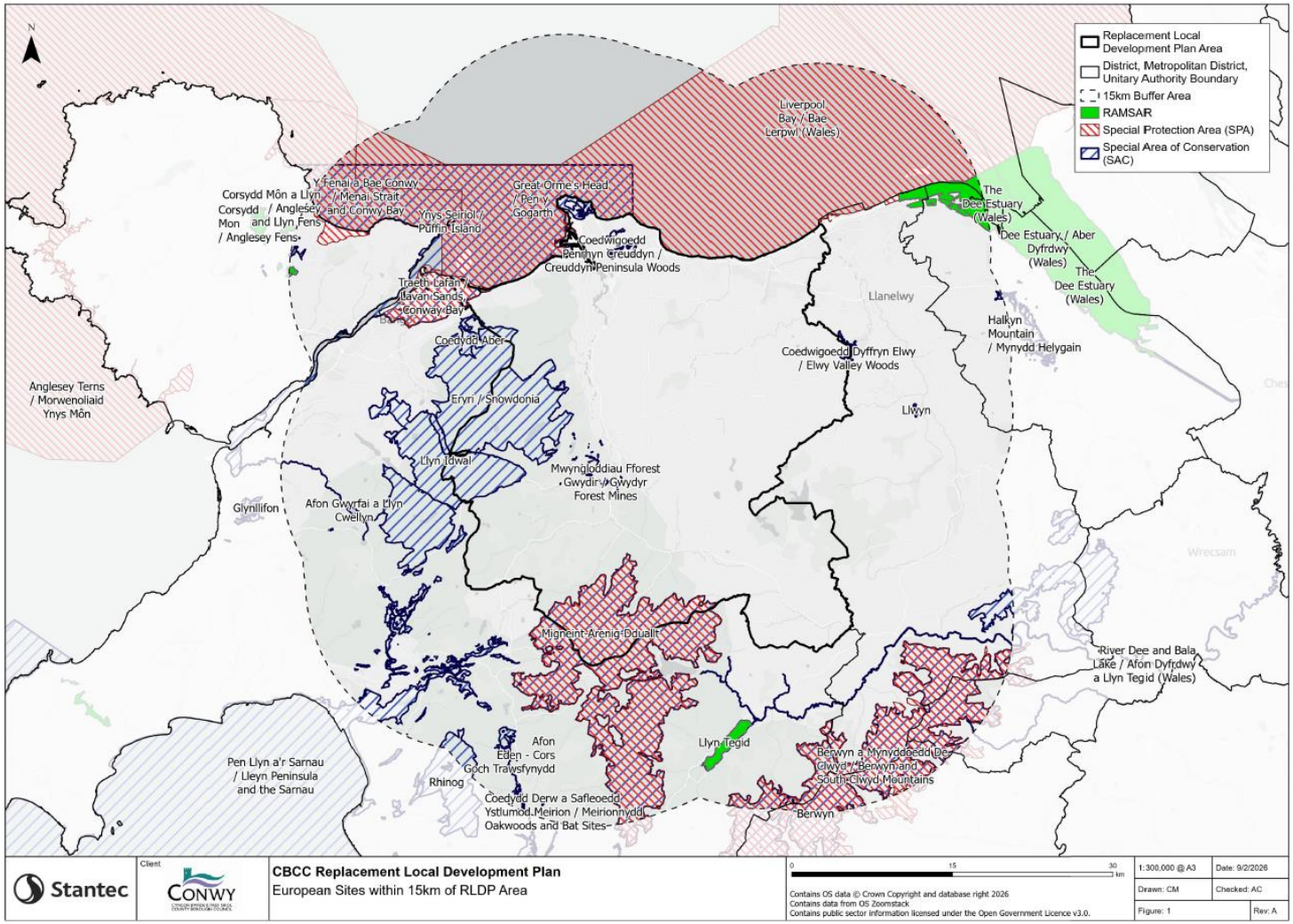
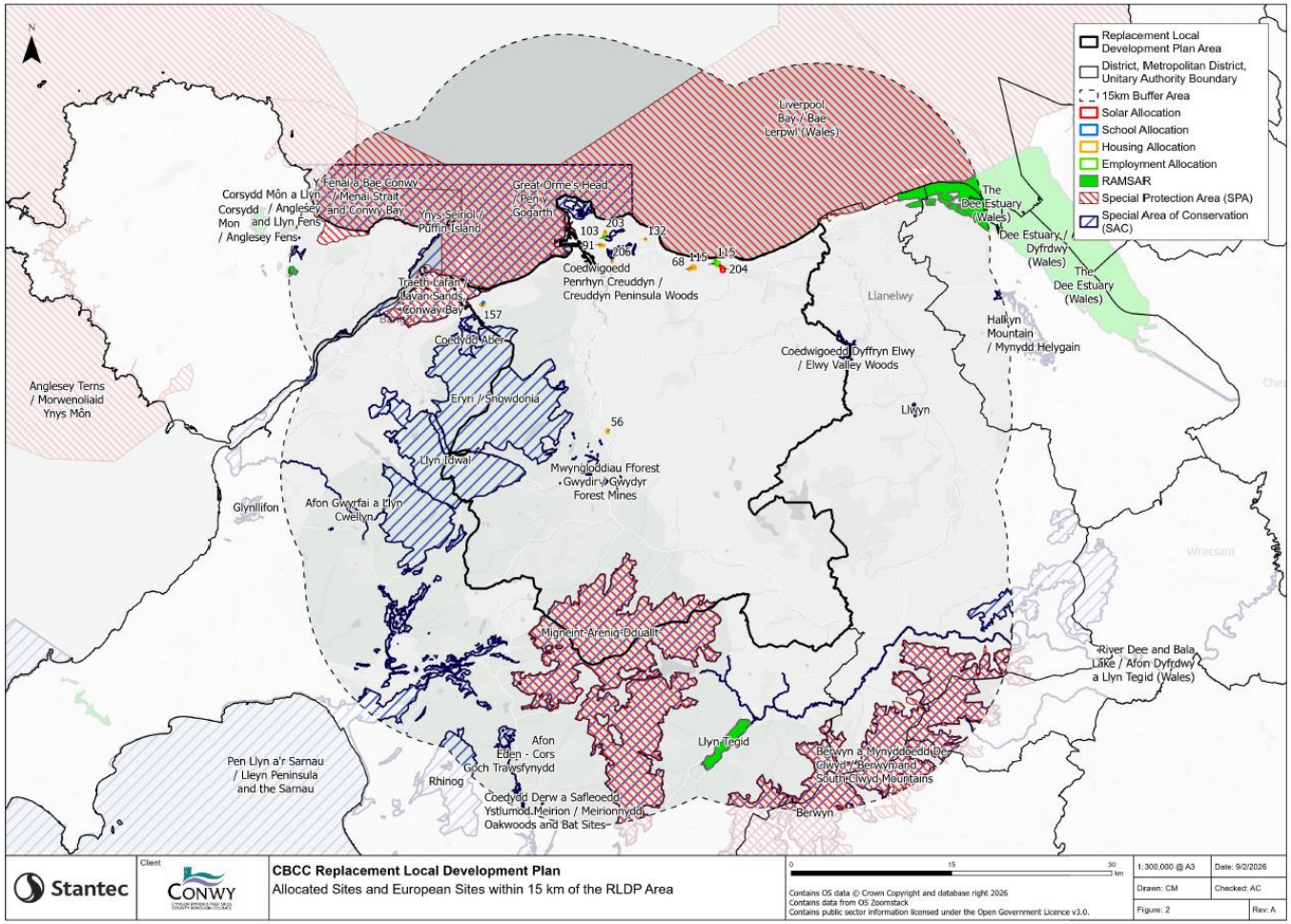
Appendix A Map of European Sites within 15 km of the RLDP Area



Appendix B Map of the Allocated Sites and European Sites within 15 km of the RLDP Area



Appendix C Detail of Allocated Sites in relation to European Sites

Table C-1:1 Summary table of the European Sites within 15 km of the Allocated Sites within the emerging RLDP.

Site Reference	Allocated Site	Type of Use	European Sites ≤ 15 km
56	Land to the East of the A470, Llanrwst	Housing allocation (approx. 100 dwellings)	Migneint-Arenig-Dduallt SPA/SAC; Gwydyr Forest Mines SAC; Eryri SAC; and Coedydd Aber SAC.
68	Peulwys Farm, Peulwys Lane, Old Colwyn (Site 2)	Housing allocation (approx. 250 dwellings)	Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Great Orme's Head SAC; Creuddyn Peninsula Woods SAC; and Elwy Valley Woods SAC.
91	Land off Pentwyn Road (South of St Anne's Gardens), Llanrhos, Llandudno	Housing allocation (approx.140 dwellings)	Anglesey Terns SPA; Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Puffin Island SPA; Great Orme's Head SAC; Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.
103	Land at Bryniau between Wormhout Way and Conwy Road, Llandudno	Employment allocation	Anglesey Terns SPA; Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Puffin Island SPA; Great Orme's Head SAC; Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.
115	Llanddulas Quarry, Areas 1, 2 and 3	Employment allocation	Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Great Orme's Head SAC; Creuddyn Peninsula Woods SAC; and Elwy Valley Woods SAC.
132	Dinerth Road, Rhos on Sea	Housing allocation (approx. 50 dwellings)	Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Bay SPA; Menai Strait and Conwy Bay SAC; Puffin Island SPA; Great Orme's Head SAC; Eryri SAC; and Creuddyn Peninsula Woods SAC.
157	Land south of Aber Road (Site 2), Llanfairfechan	Housing and education allocation (approx.145 dwellings and school allocation)	Anglesey Terns SPA; Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Puffin Island; Gwydyr Forest

Site Reference	Allocated Site	Type of Use	European Sites ≤ 15 km
			Mines SAC; Great Orme's Head SAC; Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.
203	Land at Queens Road, Llandudno (site 2)	Housing allocation (approx.70 dwellings)	Anglesey Terns SPA; Lavan Sands SPA; Liverpool Bay SPA; Puffin Island SPA; Great Orme's Head SAC; Eryri SAC; Menai Strait and Conwy Bay SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.
204	Llanddulas Quarry - Area 4	Solar allocation	Liverpool Bay SPA; Menai Strait and Conwy Bay; Great Orme's Head SAC; Creuddyn Peninsula Woods SAC; and Elwy Valley Woods SAC.
206	Nant y Coed, Llandudno Junction	Housing allocation (approx. 50 dwellings)	Anglesey Terns SPA; Lavan Sands SPA; Liverpool Bay SPA; Menai Strait and Conwy Bay SAC; Puffin Island SPA; Great Orme's Head SAC; Eryri SAC; Coedydd Aber SAC; and Creuddyn Peninsula Woods SAC.

Appendix D Threats and pressures of European Sites

Table D-2: 2Screening matrix of threats and pressures of European Sites screened in for AA ['x' denotes screening in].

Threat Code	Description of Threat / Pressure	Migneint–Arenig–Dduallt SAC / SPA	Traeth Lafan SAC / SPA	Liverpool Bay SPA	Menai Strait & Conwy Bay SAC	Coedydd Penrhyn Creuddyn SAC	Coedydd Aber SAC	Eryri / Snowdonia SAC	Pen y Gogarth / Great Orme SAC	Gwydyr Forest Mines SAC	Elwy Valley Woods SAC
D01	Roads, motorways and traffic (NOx, access)	X		X	X			X	X		X
D02	Railways (minor contribution)			X							
D03	Shipping lanes, ports, marine works		X	X	X						
E01	Urban areas & human habitation		X	X	X	X	X		X		
E06	Urban edge effects (noise, lighting, activity)		X	X	X	X	X		X		
G01	Outdoor recreation activities		X	X	X				X		

Threat Code	Description of Threat / Pressure	Migneint–Arenig–Dduallt SAC / SPA	Traeth Lafan SAC / SPA	Liverpool Bay SPA	Menai Strait & Conwy Bay SAC	Coedydd Penrhyn Creuddyn SAC	Coedydd Aber SAC	Eryri / Snowdonia SAC	Pen y Gogarth / Great Orme SAC	Gwydyr Forest Mines SAC	Elwy Valley Woods SAC
G02	Walking, dog-walking, trampling		X	X	X				X		
G05	Other human disturbance		X	X	X				X		
G06	Coastal & marine recreational disturbance		X	X	X						
H01	Pollution to surface waters		X		X					X	
H02	Pollution to groundwater				X					X	X
H04	Point source pollution (wastewater)		X		X					X	
H05	Diffuse pollution (urban runoff)		X		X					X	X

Appendix E Conservation Objectives of European Sites

Table E-1: Conservation Objectives of European Sites.

Site	Designation	Qualifying Features	Conservation Objectives
Cefn Cribwr Grasslands	SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (6210)	Conservation Objective for Semi-natural dry grassland and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (EU Habitat Code: 6210). The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The calcareous grassland will maintain its current extent, as limited by underlying geology, and an increase will be sought into areas that have shrubs. • The grassland will be a rich mix of herbs and grasses reflecting the calcareous grassland community present, with a high broadleaved herb component. • Terricolous lichens and acrocarpous mosses are present in any CG1 community. • Species indicative of agricultural improvements will be rare or absent. • Scrub species and bracken will be rare or absent. • Introduced species such as cotoneaster will be absent. All factors affecting the achievement of these conditions are under control.
Creuddyn Peninsula Woods	SAC	Tilio-Acerion forests of slopes, screes and ravines (EU Habitat code 9180); Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (EU code 6210); *Taxus baccata* woods of the British Isles (EU code 91J0)	Conservation Objective for Tilio-acerion forests of slopes, screes and ravines (EU Habitat code: 9180). The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The area of Tilio-acerion woodland is stable or increasing, at the expense of areas of non-native trees, including beech. • The woodland is maintained as far as possible by natural processes. Ash is the main native tree species. The rest of the canopy should be formed of locally native broadleaved species such as oak, lime, downy birch and hazel. Sycamore may be present but will not become dominant in the canopy or the under-storey. • Beech and non-native conifers will be largely absent from the canopy, under-storey and woodland as a whole. • The field and ground layers will contain species such as dog's mercury and spurge laurel will be abundant across the majority of the woodland, with ferns, in particular hart's tongue fern also being common. • The site supports the present or greater abundance and diversity of vascular plants and lower plants (mosses, liverworts, lichens, fungi and slime moulds) and invertebrates typical of Tilio-acerion woodland.

Site	Designation	Qualifying Features	Conservation Objectives
			• The abundance and distribution of rare or scarce plant and animal species of Tilio-acerion woodland is maintained or increased and they are able to sustain or reproduce themselves. • The woodlands have a diverse structure with all stages of woodland growth and decay, including mature and ancient trees, standing and fallen deadwood, natural regeneration of native tree and shrub species and canopy gaps. All factors affecting the achievement of the above conditions are under control. Conservation Objective for Semi-natural dry grassland and scrubland facies: on calcareous substrates (Festuco-brometalia) (EU Habitat Code: 6210). The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The calcareous grassland will maintain its current extent, as limited by underlying geology, and an increase will be sought into areas that have shrubs. • The grassland will be a rich mix of herbs and grasses reflecting the calcareous grassland community present, with a high broadleaved herb component. • Terricolous lichens and acrocarpous mosses are present in any CG1 community. Species indicative of agricultural improvements will be rare or absent. • Scrub species and bracken will be rare or absent. Introduced species such as cotoneaster will be absent. All factors affecting the achievement of these conditions are under control. Conservation Objective for *Taxus baccata* woods of the British Isles (EU Habitat Code: 91J0). The vision for this feature is for it to be in favourable conservation status, where all of the following conditions are satisfied: • *Taxus baccata* woodland continues to be present in Woods that contribute to the Creuddyn Peninsula Woods SAC. • The woodland is maintained as far as possible by natural processes. • The location of open glades varies over time. • Trees and shrubs are dominated by yew, with abundance and density of individual native species varying across the site. • Trees and shrubs of a wide range of ages and sizes are present. • Tree seedlings are plentiful throughout the site. • The woodlands have a diverse structure with all stages of woodland growth and decay, including mature and ancient trees, standing and fallen dead wood, natural regeneration of native tree and shrub species, especially Yew (*Taxus baccata*) and canopy gaps. • Dead wood dependent species of moss, liverwort, fungi and specialised invertebrates are present, in spatially and temporally variable abundance, throughout the site. All factors affecting the achievement of these conditions are under control.

Site	Designation	Qualifying Features	Conservation Objectives
Coedydd Aber	SAC	Old sessile oak woods with *Ilex* and Blechnum in the British Isles (91A0); Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno – Padion, Alnion incanae, Salicion albae) (91E0)	The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The woodland is maintained as far as possible by natural processes. • The location of open glades or gaps varies over time. • Trees and shrubs are locally native, and neither beech nor conifers are dominant anywhere in the canopy or understorey. • Trees and shrubs of a wide range of ages and sizes are present. • Tree seedlings are plentiful throughout the site and where occurring in open glades develop into viable saplings. • Field and ground layers are a patchwork of various vegetation communities characteristic of local soil and humidity conditions. • There are abundant dead and dying trees (with holes and hollows, rot columns, torn off limbs and rotten branches) with associated dead wood dependent species present. • Humidity levels are high enough to favour the presence of ferns, mosses and liverworts. • The woodland continues to support populations of birds and mammals. All factors affecting the achievement of these conditions are under control. Performance indicators and factor operational limits are provided in the Core Management Plan (CCW/NRW) for Coedydd Aber.
Elwy Valley Woods	SAC	Tilio-Acerion forests of slopes, screes and ravines (9180)	Conservation Objective for Feature 1: Tilio-Acerion forests of slopes, screes and ravines (EU Habitat code: 9180). The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The area of Tilio-Acerion woodland is stable or increasing, at the expense of areas of non-native trees, including beech. • The woodland is maintained as far as possible by natural processes. • The following canopy species Ash, field maple, rowan, Wych elm and small leaved lime should be present throughout. • Trees and shrubs are mainly locally native broadleaved species. • The abundance and density of individual native species varies across the site. • Trees and shrubs of a wide range of ages and sizes are present. • Tree seedlings are plentiful throughout the site. • Other canopy forming species including conifers (except yew Taxus baccata which is native), beech, hornbeam and sycamore will be discouraged. • Deadwood, standing or fallen, will be retained to provide habitat for invertebrates, fungi and other woodland species. • Field and ground layers are well developed with a patchwork of vegetation communities characteristic of local soil and humidity conditions. All factors affecting the achievement of these conditions are under control.

Site	Designation	Qualifying Features	Conservation Objectives
Eryri/Snowdonia	SAC	Siliceous alpine and boreal grasslands (6150); Blanket bogs; Petrifying springs with tufa formation (Cratoneurion); Species-rich Nardus grassland on siliceous substrates; Alpine and subalpine calcareous grasslands (6170); Calcareous rocky slopes with chasmophytic vegetation (8210); Depressions on peat substrates of the Rhynchosporion; Drepanocladus (Hamatocaulis) vernicosus; European dry heaths; Floating water-plantain (Luronium natans); Northern Atlantic wet heaths with Erica tetralix; Old sessile oak woods with Ilex and Blechnum; Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea; Siliceous scree (8110)	Conservation Objective for Siliceous alpine and boreal grasslands (EU Habitat Code: 6150). The vision for qualifying habitats is for them to be in a favourable conservation status, where all of the following conditions are satisfied: • The high summits of the Carneddau and Glyderau should each support summit heath vegetation which does not show signs of heavy modification by grazing and/or heavy trampling. • There should be no further loss of summit heath on Yr Wyddfa; the extent of the habitat at Crib y Ddysgl and Garnedd Uchaf should be retained as an absolute minimum and there should be no loss of quality. • The vegetation should be dominated by species typical of summit heath such as *Racomitrium lanuginosum, Carex bigelowii*, dwarf shrubs such as *Vaccinium myrtillus* and *Salix herbacea*, lichens and montane bryophytes. Grasses should not comprise a significant proportion of the vegetation. All factors affecting the achievement of these conditions are under control. Conservation Objective for Alpine and Boreal Heaths (EU code 4060): Alpine and Boreal heath habitat
Gwydyr Forest Mines	SAC	Calaminarian grasslands of the *Violetalia calaminariae* (6130)	Conservation Objective for Feature 1: Calaminarian grasslands of the *Violetalia calaminariae* (6130). The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The extent and distribution of the calaminarian grassland feature is maintained or increased where appropriate. • The characteristic metal-tolerant plant communities (including *Viola calaminaria* and other associated species) are present and frequent across the feature.

Site	Designation	Qualifying Features	Conservation Objectives
			• Successional processes that would lead to loss of the metal-tolerant assemblage (for example scrub encroachment) are prevented or reversed. • The mosaic of microhabitats associated with mine spoil and workings (bare ground, spoil, rock faces, and shallow soils) is maintained, including the disturbance regimes that create and sustain these microhabitats. • Invasive non-native species are absent or controlled to levels that do not adversely affect the feature. • All factors affecting the achievement of these conditions are under control.
Liverpool Bay	SPA	Little Tern (*Sterna albifrons*); Common Tern (*Sterna hirundo*); Red-throated diver (*Gavia stellata*); Little Gull *(Hydrocoloeus minutus*); Common Scoter (*Melanitta nigra*); Waterbird assemblage (non-breeding assemblage >20,000 waterbirds)	The interest feature red-throated diver will be considered to be in favourable condition only when both of the following two conditions are met: i. The size of the red-throated diver population is at or shows only non-significant fluctuation around the mean population at the time of designation of the SPA to account for natural change. ii. The extent of the supporting habitat within the site is maintained. The interest feature common scoter will be considered to be in favourable condition only when each of the following two conditions is met: i. The size of the common scoter population is at or shows only non-significant fluctuation around the mean population at the time of designation of the SPA to account for natural change. ii. The extent of the supporting habitat within the site is maintained. The interest feature waterbird assemblage will be considered to be in favourable condition only when each of the following two conditions is met: i. The size of the waterbird assemblage population shows only non-significant fluctuation around the mean at the time of designation to allow for natural change. ii. (The extent of the waterbird assemblage supporting habitat within the site is maintained.
Menai Strait & Conwy Bay	SAC	Mudflats and sandflats not covered by seawater at low tide; Reefs; Sandbanks which are slightly covered by seawater all the time; Large shallow inlets and bays; Submerged or partially submerged sea caves	The conservation objectives for the Menai Strait and Conwy Bay SAC are to ensure that each designated habitat feature is maintained or restored to favourable condition. • For mudflats and sandflats, the objective is that the feature should continue to comprise an array of sediment habitats and associated biological communities ranging from wave-exposed sands through sheltered muds to tide-swept muddy gravels, and that the extent, distribution and community composition are maintained or restored subject to natural change. • For reefs the objective is that the feature should continue to comprise a variety of habitats and associated biological communities on hard substrates of different types throughout the site and that areas expected to improve under appropriate management do so. • For subtidal sandbanks the objective is that mobile or highly mobile sediment habitats and associated communities are maintained as part of a dynamic mosaic.

Site	Designation	Qualifying Features	Conservation Objectives
			• For large shallow inlets and bays the objective is that a variety of sediment and hard substrate habitats and associated communities are maintained as a dynamic mosaic and continue to provide feeding and breeding areas for fish and other species. • For submerged/partially submerged sea caves the objective is that intertidal and subtidal caves, clefts, crevices and tunnels in limestone continue to be present with their characteristic communities. All objectives note that feature health is inter-related and that factors affecting achievement of these conditions are under control.
Migneint-Arenig-Dduallt	SAC	Blanket bog; European dry heath; Natural dystrophic lakes and ponds; Northern Atlantic wet heaths with *Erica tetralix*; Old sessile oak woods with Ilex and Blechnum in the British Isles; Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: • The total location, distribution and extent of qualifying habitats, including those areas that are considered unfavourable or currently degraded is maintained at the area present or expanded as a result of habitat restoration. • The degraded areas and currently unfavourable blanket bog are managed under a restoration programme so that the area and distribution of favourable blanket bog is increasing. • The typical species of the vegetation communities comprising the SAC qualifying habitats are frequent. • The abundance and distribution of uncommon plants is maintained or increased. • The structure of the qualifying habitats is maintained and restored. • Invasive non-native species such as conifers, rhododendron, Japanese knotweed, Himalayan balsam and bridewort (Spiraea) are not present within the SAC and a species specific buffer area. • The blanket bog and heath is free from all trees. • The percentage cover of the tree canopy within qualifying woodland habitats shall be no less than 85% (excepting natural catastrophic events). • The woodland canopy and shrub layer comprises locally native species, typical of this upland woodland which is less oak and more birch dominated than more lowland examples of this SAC feature. • There shall be sufficient natural regeneration of locally native trees and shrubs to maintain the woodland canopy and shrub layer, by filling gaps and allowing the recruitment of young trees and encouraging a varied age structure. • There will be a defined number of mature trees per hectare within the existing tree canopy on a unit basis. This will need to be defined by diameter for the upland situation where comparable trees at lower altitude are of c60cm diameter plus for oak and ash and/or with signs of decay, holes etc. • Dead wood will be present and consist of a mixture of fallen trees (minimum 1 per hectare), broken branches, dead branches on live trees, and standing dead trees (minimum 1 per hectare).

Site	Designation	Qualifying Features	Conservation Objectives
			Volumes of deadwood are currently at relatively low levels because the woodlands, in general, have an even-age structure and lack mature trees. Some lower plants are dead wood specialists, but these woodlands tend to lack the rare dead wood invertebrate assemblage found in other parts of the UK. • The size of the population of qualifying bird species is to be maintained (i.e. the number of breeding pairs) and preferably increasing. • Qualifying bird species nesting distribution within the site is maintained or expanded, so that breeding occurs in all appropriate habitats. • Qualifying bird species breeding success is at least one young fledged per nest. • There is sufficient nesting and roosting habitat to support the qualifying bird species population in the long-term. • There is sufficient hunting habitat, often in mosaic and including areas of grassland, bogs, flushes, short heath and bracken with low trees/scrub present. There is an adequate supply of prey species in the form of small birds and small mammals to maintain successful breeding. All factors affecting the achievement of these conditions are under control.
Great Orme's Head	SAC	European dry heaths (4030); Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) (6210); Vegetated sea cliffs of the Atlantic and Baltic coasts (1230)	The vision for these features is for them to be in a favourable conservation status, where all of the following conditions are satisfied: • For European dry heath: The dry heath occupies at least 25% of the total site area; the dry heath is given the opportunity to expand at the expense of bracken and gorse but not at the expense of semi-natural dry grassland; the dry heath is co-dominated by heather, bell heather and western gorse; at least 33% of the dry heath is species-rich with specified indicator plants; pioneer and building phases of heath vegetation are present; competitive species indicative of lack of management are kept in check; all factors affecting achievement of these conditions are under control. • For semi-natural dry grasslands: the grasslands occupy at least 35% of the site; they are species-rich with specified herbs and grasses; terricolous lichens and acrocarpous mosses and bare rock/soil are present in open short turf; species indicative of agricultural improvement are rare or absent; shrubs, trees and invasive non-native species are absent; all factors affecting achievement of these conditions are under control. • For vegetated sea cliffs: extent and condition targets are set to maintain cliff ledge and maritime turf communities, native cliff plants present, invasive climbers discouraged, and all factors affecting achievement of these conditions are under control.
Lavan Sands	SPA	Haematopus ostralegus (Oystercatcher); *Numenius arquata* (Curlew); *Tringa totanus* (Redshank);	The conservation objectives for the Lavan Sands SPA are to maintain or restore the populations and supporting habitats for the qualifying bird features. • For Oystercatcher the vision is that the 5-year mean peak wintering population is maintained at or above the SPA reference (5,500 individuals) and that the abundance and distribution of cockles

Site	Designation	Qualifying Features	Conservation Objectives
		Mergus serrator (Red-breasted Merganser); *Podiceps cristatus* (Great Crested Grebe)	and other suitable food are maintained at levels sufficient to support that population; oystercatchers are not subject to significant disturbance preventing adequate feeding; roost sites including high-tide roosts remain suitable and undisturbed; and management and control of activities likely to adversely affect oystercatchers is appropriate and secure in the long term. • Equivalent site-specific objectives and attribute targets are set for Curlew, Redshank, Red-breasted Merganser and Great Crested Grebe (including moult-roost requirements), with the requirement that all factors affecting achievement of these conditions are under control.

Appendix F Screening Matrix of Impact Pathways of European Sites

Table F-1: The HRA screening matrix of impact pathways from the RLDP to European Sites.

European Site	Qualifying Feature	Vulnerable to the following impact pathways	Assessment of LSE	Impact Pathways screened in
Migneint–Arenig–Ddualllt SAC	Annex I upland habitats including blanket bog and heath	Air quality (NOx and nitrogen deposition)	Nitrogen-sensitive upland habitats may be affected by cumulative traffic-related emissions within the regional air-shed associated with RLDP growth. At plan level, spatial uncertainty remains and effects cannot be excluded.	Air quality
Migneint–Arenig–Ddualllt SPA	Annex I upland bird species	Air quality (NOx and nitrogen deposition)	The SPA supports bird species dependent on nitrogen-sensitive habitats. Traffic emissions associated with RLDP growth may contribute cumulatively within the air-shed. Effects cannot be ruled out at plan-level.	Air quality
Lavan Sands SPA	Annex I and migratory waterbirds	Recreational disturbance; functional habitat loss; hydrology	Increased population and visitor pressure may cause disturbance and displacement of SPA birds and affect supporting habitats beyond the designated boundary. Functional linkage uncertainty remains at plan level.	Recreation; functional habitat; hydrology
Liverpool Bay SPA	Annex I marine and estuarine bird species	Recreational disturbance; functional habitat loss	Coastal recreation and population growth associated with the RLDP may increase disturbance and pressure on supporting habitats used by SPA birds. Effects cannot be excluded at plan level.	Recreation; functional habitat
Coedwigedd Penrhyn Creuddyn SAC	Annex I woodland habitats	Air quality (NOx and nitrogen deposition)	The woodland habitats are sensitive to nitrogen deposition. Traffic growth associated with RLDP allocations may contribute cumulatively to air quality impacts. LSE cannot be ruled out.	Air quality
Coedydd Aber SAC	Annex I woodland habitats	Air quality; hydrology	The SAC lies within the wider air-shed and catchment influenced by RLDP growth. Increased traffic emissions and surface water changes may indirectly affect site integrity.	Air quality; hydrology
Eryri SAC	Annex I upland habitats	Air quality (NOx and nitrogen deposition)	Nitrogen-sensitive upland habitats may be affected by cumulative traffic emissions from RLDP growth along strategic routes. Effects cannot be excluded at plan level.	Air quality

European Site	Qualifying Feature	Vulnerable to the following impact pathways	Assessment of LSE	Impact Pathways screened in
Great Orme's Head SAC	Annex I limestone grassland and cliff habitats	Recreational disturbance; urbanisation, lighting and noise	Proximity to urban areas means RLDP growth may increase recreational use, lighting and general disturbance affecting sensitive habitats. LSE cannot be excluded.	Recreation; urbanisation
Gwydyr Forest Mines SAC	Annex I metalliferous mine habitats	Hydrology; water quality	The SAC is sensitive to changes in water quality and hydrology within the wider catchment. Increased runoff and wastewater discharges associated with RLDP growth may contribute cumulatively.	Hydrology; water quality
Menai Strait and Conwy Bay SAC	Annex I estuarine and coastal habitats	Hydrology; water quality	Hydrological connectivity to coastal settlements means increased wastewater loading and surface water runoff from RLDP growth may affect estuarine processes. In-combination effects cannot be excluded.	Hydrology; water quality
Elwy Valley Woods SAC	Annex I woodland habitats	Air quality (NOx and nitrogen deposition)	Woodland habitats sensitive to nitrogen deposition may be affected by cumulative traffic-related emissions associated with RLDP allocations.	Air quality