# **Appendix A** Screening Report

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# 1 Introduction

### 1.1 Introduction

The Water Services Strategic Plan (WSSP) presents Uisce Éireann's objectives for the next 25 years and the means by which they will achieve them. It aligns to requirements set out in the Water Services (No. 2) Act 2013. Uisce Éireann published the first Water Services Strategic Plan in 2015 and are now undertaking the process to consult on a new Water Service Strategic Plan 2050 (WSSP 2050) which will replace the current plan. The new WSSP 2050 will be an important strategic document that will focus on the provision of safe drinking water and wastewater treatment. It is Uisce Éireann's responsibility to ensure that all their customers (households and businesses) receive a safe and secure supply of drinking water and have their wastewater collected, appropriately treated and returned safely to the environment.

Jacobs has been appointed by Uisce Éireann to prepare a Screening Report for Appropriate Assessment (AA) in relation to the WSSP 2050 in accordance with the requirements of Article 6 (3) of the European Union (EU) Habitats Directive (Directive 92/43/EEC) (the EU Habitats Directive). The Habitats Directive and the Birds Directive (2009/147/EC) are transposed in Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) hereafter referred to as the Habitat Regulations 2011, as amended, and by Part XAB of the Planning and Development Act, 2000, as amended.

# 1.2 Legislative Context

The EU Habitats Directive provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as the Natura 2000 network (hereafter referred to as European sites<sup>1</sup>). European sites comprise Special Areas of Conservation (SACs<sup>2</sup>) and Special Protection Areas (SPAs). SPAs are designated as a result of the implementation of the Birds Directive.

This report provides information in support of a screening for AA of the WSSP 2050 in line with the requirements of Article 6(3) of the EU Habitats Directive. AA is a process for undertaking a focused impact assessment of a plan or project, examining its implications, on its own or in combination with other plans and projects, on one or more European site (s) in view of the sites' conservation objectives, as referred to in Article 6(3) of the EU Habitats Directive.

Articles 6(3) and 6(4) of the EU Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites. The first step of the AA process is to carry out a Screening to establish whether, in relation to a particular plan or project, an AA is required.

Article 6(3) established the requirement for AA:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

<sup>&</sup>lt;sup>1</sup> "European site" replaced the term "Natura 2000 site" under the EU (Environmental Impact Assessment and Habitats) Regulations 2011 S.I. No. 473 of 2011.

<sup>&</sup>lt;sup>2</sup> cSACs are afforded the same protection as SACs. The process of making 'candidate' (cSAC) SACs by means of Statutory Instrument has begun. While this process is ongoing the term SAC will be used, in conformance with nomenclature used in NPWS databases.

## Article 6(4) states:

"If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted."

#### 1.3 Public Authorities and AA

The duties of public authorities in relation to nature conservation are laid out principally in Article 27 of the Habitats Regulations 2011. Uisce Éireann is defined as a 'public authority' for the purposes of the 2011 Regulations.

The first step of the AA process is to carry out a screening to establish whether, in relation to a particular plan or project, if there is potential for likely significant effects (LSEs) to any European site(s). Specifically, Regulation 42(1) states:

"A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site."

### Regulation 42(6) states that:

"The public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site"

In the context of Article 6(3), Uisce Éireann must carry out screening for AA of the WSSP 2050 to assess whether, on the basis of objective scientific information, the plan individually or in-combination with other plans or projects, is likely to have a significant effect on a European site. If this screening determines that it cannot be excluded, on the basis of objective scientific information, that the Plan, individually or in combination with other plans or projects, will have a significant effect on a European site, then Uisce Éireann must determine that an Appropriate Assessment of the plan is required.

To assist Uisce Éireann in carrying out any Appropriate Assessment that may be required following screening, Uisce Éireann must prepare a Natura Impact Statement (NIS), which is a report comprising the scientific examination of a plan or project and the relevant European site or European sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment.

In carrying out the full AA, the Habitats Regulations 2011 require Uisce Éireann to take into account:

- The NIS;
- Any other plans or projects that may, in combination with the plan or project under consideration, adversely affect the integrity of a European site;
- Any supplemental information furnished in relation to any such report or statement;
- If appropriate, any additional information furnished in relation to the NIS;

- Any information or advice obtained by Uisce Éireann;
- If appropriate, any written submissions or observations made to Uisce Éireann in relation to the application for consent for the Plan; and
- Any other relevant information.

Following the Appropriate Assessment process, Uisce Éireann must then only adopt the Plan after having determined that the Plan shall not adversely affect the integrity of any European site(s).

# 1.4 Overlap with Strategic Environmental Assessment (SEA)

The SEA Directive (2001/42/EC) set out a process for the environmental assessment of plans and programmes and aims to provide for a high level of protection of the environment and to promote sustainable development. It also sets out specific requirements with respect to the Habitats Directive (92/43/EEC) and Birds Directive (2009/42/EC).

The SEA Directive is implemented in Ireland via the European Communities (EC) (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by the EC (Environmental Assessment of Certain Plans and Programmes) (Amendments) Regulations 2011 (known as the 'SEA Regulations'). Under these regulations, qualifying plans such as the WSSP 2050 are required to be subject to SEA screening as a first step to determine if SEA is required. A screening review has been undertaken following the EPA 2021 screening guidance and this confirmed that the WSSP 2050 requires an SEA. The subsequent stages include scoping, assessment, public consultation and monitoring.

The aim is that the SEA process should influence and improve the plan. The process involves assessing the likely significant effects on the environment of implementing the plan and considering reasonable alternatives for achieving plan objectives. Combined and cumulative effects of the plan as a whole and with other plans and programmes are also included as part of the assessment. The SEA Regulations set out specific requirements for consultation with Environmental Authorities including transboundary environmental authorities, at the scoping stage and for public consultation on the draft plan and SEA Environmental Report. The SEA Environmental Report and consultation responses are also required to be taken into account in finalisation of the plan and for implementation monitoring.

There is a degree of overlap between the requirements of the SEA and AA (.1 overleaf) and in accordance with best practice, an integrated approach is being applied between the development of the WSSP 2050, the SEA and the AA, such as sharing of baseline data, cohesive assessment of the potential ecological effects of the WSSP 2050 on European sites and clarification on more technical aspects of the WSSP 2050. These processes together will inform and shape the development of the WSSP 2050.

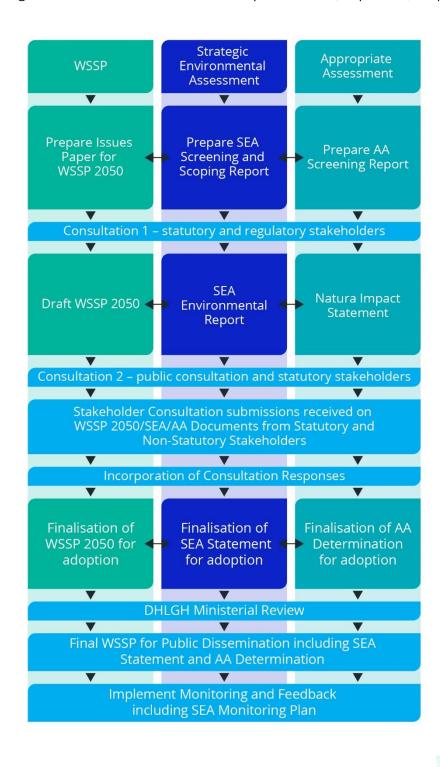
In-line with Article 9 (5) of the SEA Regulations (S.I. No. 435 of 2004), the SEA Scoping Report will be issued to the following statutory Environmental Authorities for their review and comment:

- The Environmental Protection Agency (EPA);
- The Department of Agriculture, Food and the Marine (DAFM);
- The Department of Housing, Local Government and Heritage (DHLGH) including the Development Applications Unit; and
- The Department of the Environment, Climate and Communications (DECC).

As there is the potential to interface with Northern Ireland and the possibility of transboundary impacts, the SEA Scoping Report will also be issued to Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) for consultation on transboundary environmental effects.

## 1.5 Consultation

The WSSP 2050 will be developed following two phases of consultation. An initial statutory consultation on the WSSP Issues Paper, SEA Scoping Report (as indicated above) and the AA Screening Report. For this period of consultation, Uisce Éireann will engage directly with key statutory and regulatory stakeholders. Feedback received on the Issues Paper and the SEA Scoping Report and the AA Screening Report, will be reviewed and taken into account as the draft WSSP 2050, SEA Environmental Report and NIS are prepared. As part of the second phase of consultation, Uisce Éireann will carry out a public consultation on the draft WSSP 2050 together with the SEA Environmental Report and NIS (AA process) in Spring 2024.



**Diagram 1.1: Project Deliverables and sequencing strategy** 

# 2 AA Methodology

# 2.1 Guidance Documents in Relation to AA

The AA requirements of Article 6 of the EU Habitats Directive (European Commission, 2021) follow a sequential approach as outlined in the following guidance documents and Departmental Circulars, namely:

#### **Guidance Documents**

The preparation of the screening for AA has taken account of guidance contained in the following documents:

- AA of Plans and Projects in Ireland: Guidance for Planning Authorities. DEHLG (2010).
- Assessment of plans and projects in relation to Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission (2021).
- Appropriate Assessment Screening for Development Management. OPR Practice Note PN01. (Office of the Planning Regulator, 2021).
- Communication from the Commission on the Precautionary Principle. European Commission (2000).
- Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the concepts
  of: Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures,
  Overall Coherence, Opinion of the Commission. European Commission (2007).
- Marine Natura Impacts Statements in Irish Special Areas of Conservation. A working Document. Department of Arts, Heritage & the Gaeltacht (DAHG) (2012).
- Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission (2018).

#### Departmental/National Parks and Wildlife Services (NPWS) Circulars

- AA under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 and PSSP 2/10.
- AA of Land Use Plans. Circular Letter SEA 1/08 & NPWS 1/08.
- Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites. Circular Letter PD 2/07 and NPWS 1/07.
- Guidance on Compliance with Regulation 23 of the Habitats Directive. Circular Letter NPWS 2/07.
- Water Services Investment and Rural Water Programmes Protection of Natural Heritage and National Monuments. Circular L8/08.

# **Data Sources Informing the AA Screening**

The following general sources of information have been consulted for background environmental information:

- Online data available on European sites as held by the NPWS from www.npws.ie including site synopsis, conservation objectives and other relevant supporting documentation.
- GIS data for European site boundaries obtained in digital format online from the NPWS (downloaded July, 2023).
- Favourable reference ranges and tabulated threats and pressures for QI species/habitats in the NPWS latest national conservation status assessments (NPWS, 2019a, 2019b).
- Northern Ireland Environment Agency online European site information <u>www.doeni.gov.uk</u>.

# 2.2 Stages of AA

In-line with EU guidance (EC, 2021), the AA process can be broken down into four stages:

- Stage 1: Screening for AA/Test of Likely Significant Effects.
- Stage 2: Appropriate Assessment.
- Stage 3: Alternative Solutions.
- Stage 4: Reasons of Overriding Public Interest (IROPI).

#### **Stage 1: Screening for AA/Test of Likely Significant Effects**

Stage 1 identifies whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site. If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). Screening should be undertaken without the inclusion of mitigation, unless potential impacts clearly can be avoided through the modification or redesign of the plan or project.

As the mere possibility of there being a significant effect on the site will trigger the need for an Appropriate Assessment, this decision can be taken either after a thorough examination of the plan or project, or on the basis of a simple analysis where it is already anticipated that there are likely to be significant effects (due to the type, size or scale of the plan or project, the characteristics of the European site or because of a high risk of combined effects with other plans or projects). This will enable the Appropriate Assessment to start as soon as possible (EC Guidance, 2021).

#### Stage 2: AA

Stage 2 assesses whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a European site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects.

## **Stage 3: Alternative Solutions**

Stage 3 examines any alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a European site.

## **Stage 4: Reasons of overriding public interest (IROPI)**

Stage 4 examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a European site to proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed, and the Commission must be informed of the compensatory measures. Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and they must be approved by the Minister.

Not all stages of the process will be required in all cases.

# 2.3 Conservation Objectives

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of annexed habitats and annexed species (Qualifying Interest) of community interest for which an SAC or SPA has been designated. The Conservation Objectives (COs) for a European site are set out to ensure that the Qualifying Interests (QIs) of that site are maintained or restored to a favourable conservation condition. Maintenance of favourable conservation condition of habitats and species at a site level in turn contributes to maintaining or restoring favourable conservation status of habitats and species at a national level and ultimately at the European site network level.

Detailed site synopses for each European site are available from the NPWS website. In Ireland 'generic' COs have been prepared for all European sites, while 'site specific' COs have been prepared for a number of individual sites to take account of the specific QIs of that site. Both the generic and the site-specific COs aim to define the favourable conservation condition for habitats and species at the site level<sup>3</sup>. Generic COs which have been developed by NPWS encompass the spirit of site-specific COs in the context of maintaining and restoring favourable conservation condition as follows:

- For SACs: 'To maintain or restore the favourable conservation condition of the Annex I habitats and/or Annex II species for which the SAC has been selected'.
- For SPAs: 'To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA'.

Following from this favourable conservation status (or condition, at a site level) of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing;
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- the conservation status of its typical species is "favourable".

The favourable conservation status (or condition, at a site level) of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a longterm basis as a viable component of its natural habitats; and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

A full list of the COs and QIs/SCIs that each European site is designated for, as well as the attributes and targets to maintain or restore the QIs/SCIs to a favourable conservation condition are available from the NPWS website<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> <u>https://www.npws.ie/protected-sites</u> [accessed August 2023]

<sup>&</sup>lt;sup>4</sup> https://www.npws.ie/protected-sites/conservation-management-planning/conservation-objectives [accessed August 2023]

# 3 Development of the Water Services Strategic Plan

# 3.1 Water Services Strategic Plan Requirements

Article 33 (4) of the Water Services (No. 2) Act 2013 requires that the WSSP will state the objectives of Uisce Éireann in relation to the provision by Uisce Éireann of water services and the means by which Uisce Éireann proposes to achieve those objectives. The Water Services Act also specifies the aspects of water services which we must address in the WSSP and are as follows:

- a) Drinking water quality;
- b) The prevention or abatement of risks to human health or the environment relating to the provision of water services;
- c) The existing and projected demand for water services;
- d) Existing and planned arrangements for the provision of water services by Uisce Éireann;
- e) Existing and reasonably foreseeable deficiencies in the provision of water services by Uisce Éireann;
- f) Existing and planned water conservation measures; and
- g) The management of the property of Uisce Éireann.

The WSSP sets the overarching framework for subsequent more detailed implementation plans including for example the National Water Resource Plan (NWRP) and National Sludge Strategy and programmes such as the Small towns & Villages Programme.

# 3.2 WSSP 2050 and Hierarchy of Plans

The **Water Framework Directive (WFD)** is the overarching Directive relating to water policy in the EU. Under this, the WSSP is one of a suite of plans guiding the delivery of water and wastewater services in Ireland as outlined below and in Figure 3.1.

- The **Water Services Policy Statement** (WSPS) provides the framework within which the funding and investment plans are agreed. It sets out the priorities of Government regarding the provision of water services during the period of a Strategic Funding Plan.
- The **Water Services Strategic Plan** (WSSP) sets out Uisce Éireann's objectives for the 25 years following the approval of the plan by the Minister and the means by which Uisce Éireann will achieve them.
- The **Strategic Funding Plan** (SFP) presents the arrangements that Uisce Éireann propose to make and the measures that are proposed, over a five-year period, to implement the objectives of the WSSP. The SFP is approved by the Minister for Housing, Local Government and Heritage. The current SFP covers the period from 2019 to 2024.
- Whilst the SFP sets out the planned level of operational and capital expenditure over this period, the
  actual allowed operational capital expenditure is decided on by the economic regulator, the
  Commission for Regulation of Utilities through the economic regulatory process.
- A variety of strategic implementation plans guide how Uisce Éireann deliver its work, beneath which
  sit their specific programmes and projects which they implement across the country.

This framework of strategies and plans creates a clear line of sight through Uisce Éireann, making it clear how a specific project can influence all tiers of the organisation, right through to the WSSP 2050 vision.



Figure 3.1: Interaction of plans and projects



# 3.3 Issues Paper for the WSSP 2050

An Issues Paper has been drafted to support the development of the WSSP 2050. It summarises the key issues influencing Uisce Éireann and the services it delivers from now to 2050. It is not intended to define solutions or strategies to address those issues. These will be presented in the Draft WSSP 2050 which will go out for public consultation in early 2024.

An issue is an opportunity or threat, now or in the future, which has the potential to significantly affect Uisce Éireann and the services it provides to its customers.

In 2022, Uisce Éireann commissioned Vision 2050, a study which included a systematic, in-depth horizon scan of issues that have the ability to significantly affect the Irish water sector in the period to 2050. Uisce Éireann worked with a range of stakeholders through interviews and workshops to identify and explore how issues could act and interact to influence scenarios of the future.

Using the feedback from stakeholders and outputs from Vision 2050 as a starting point Uisce Éireann has identified what it thinks are the most important issues likely to significantly affect Uisce Éireann over the period to 2050:

- Climate change
- Awareness and behaviours
- Circular economy
- Digitalisation, data and cyber
- Environment and biodiversity crises
- Legislation, policy and regulation
- Existing assets and new approaches to service delivery

To identify these key issues, Uisce Éireann considered six ways in which an issue might influence Uisce Éireann and in turn the services it delivers to our customers:

The extent to which an issue;

- 1. changes customer demand for existing services
- 2. creates new or changed customer and/or regulator expectations or requirements
- 3. significantly affects Uisce Éireann staff
- 4. significantly affects physical assets and systems
- 5. significantly affects the natural environment
- 6. significantly affects Uisce Éireann supplies or supply chain

## 3.3.1 Summary of the Seven Issues

Each of the seven issues is discussed further in the Issues Paper published for consultation and are summarised below.

#### **Issue 1 - Climate Change**

Climate change is acknowledged as a "climate crisis" that is a defining challenge today and for future generations. At current levels of global greenhouse gas emissions, the world remains on course to exceed the Paris Agreement's temperature thresholds of either 1.5°C or 2°C above pre-industrial levels. Ireland's climate is changing in a number of ways; annual precipitation is higher, sea levels have risen and river flows are generally increasing.

Changes in climate have direct and indirect influences on Uisce Éireann and the services it provides. For instance, increased demand for water, changes in water availability, increased fluvial and coastal flood and erosion risk.

#### Issue 2 - Awareness and Behaviours

The awareness that customers, stakeholders and the broader public have of issues can influence their behaviour and their acceptance of standards of service. Raising awareness about environmental, social and economic issues related to water and how the individual's behaviour influences this can therefore actively contribute to the protection and sustainable management of water.

There is a strong need to ensure water is part of this public call to action. With growing challenges of water shortages and sustainability, there is a need to create wider awareness around the value of water. Knowledge sharing, collaboration and coordination across stakeholders, in order to build meaningful engagement with society around the fundamental value of water can encourage behavioural change.

## **Issue 3 - Circular Economy**

The circular economy is a model of production and consumption which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. It applies at all scales, from local to global. The development of circular economy principles will affect all sectors of society and collaboration between stakeholders will be key to this transition in Ireland.

Some examples of how the water sector may be changed by the progressive adoption of circular economy principles are as follows; embedding circular economy in design, encouraging the efficient use of water, reusing recovered water (treated wastewater), utilising resources in wastewater and sludge, minimising use of consumables, generating and using renewable energy, and protecting and regenerating nature.

### Issue 4 - Digitisation, Data and Cyber

The growth of solutions exploiting data and digitalisation, automation and robotics present huge opportunities for the water sector in terms of performance, efficiency, sustainability, cost, and engaging with customers. Aligning application of data and digital technologies and solutions across the water sector and beyond also presents a significant opportunity to achieve more than organisations can in isolation. This broad transformation which influences the whole economy also presents challenges in the form of cyber security and data integrity.

# **Issue 5 - Environment and Biodiversity Crises**

Although Ireland declared a climate and biodiversity emergency in 2019, the EPA believes many of Ireland's agreed environmental targets will not be met in the short term or will be delivered late. Despite progress in some areas, the EPA believes that the scale and speed of improvements being made are insufficient to meet long-term EU and national objectives for water quality, air quality, nature protection and emissions reduction.

The Irish Government has identified five main drivers of biodiversity loss in Ireland. These are intensive agricultural and forestry practices, overfishing, invasive species, changes in land use, and the overexploitation of resources such as peatland.

Agricultural runoff discharges fertilisers and pesticides into waterbodies, urban runoff discharging pollutants and sediments to the environment, and discharges of insufficiently treated wastewater to rivers has the potential to affect Uisce Éireann in a number of ways; water treatment, wastewater management and stormwater management.

#### Issue 6 - Legislation, Policy and Regulation

Future legislative, policy and regulatory change will significantly influence how Uisce Éireann delivers services. Changes will drive new expectations and requirements, and these are likely to have consequences for Uisce Éireann's physical assets, the aspects of the natural environment upon which Uisce Éireann depend and the supply chain of organisations that support them. Addressing this challenge will require a streamlined

approach which focuses on key issues, and a coordinated and collaborative approach across organisations and sectors.

Uisce Éireann aims to be a leader in developing a sustainable water sector and in doing so, ensuring that they are adaptive to changes in how the sector is regulated.

### Issue 7 - Existing Assets and New Approaches to Service Delivery

Uisce Éireann's existing water infrastructure is ageing and their assets need significant maintenance and/or replacement so that they can continue to deliver their services to an appropriate level. A large proportion of the water infrastructure in Ireland was installed decades ago and requires repair, replacement or upgrade.

At the same time, new integrated solutions such as blue/green infrastructure that harness and/or mimic natural processes, and new approaches to delivering solutions in partnership with multiple stakeholders, present opportunities to deliver Uisce Éireann's services in different ways that deliver wider benefits to society.

Sustainability requirements, evolving technology, population growth, climate change and regulation along with wider societal expectations will influence how Uisce Éireann adapts to deliver services in the future at acceptable costs.

# 3.3.2 Summary of the Four Themes

Uisce Éireann's initial thinking is that the **seven issues** can be addressed through the **four themes** presented in (Figure 3.2) and summarised below.

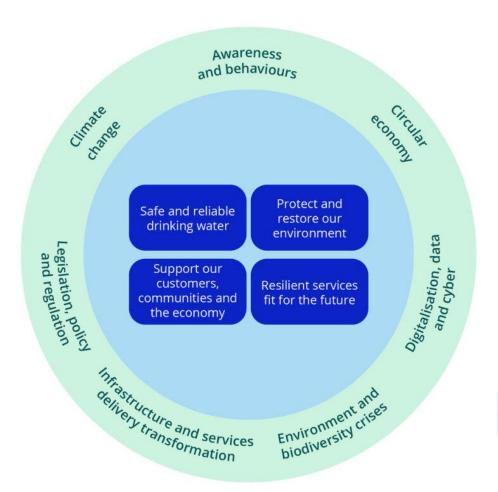


Figure 3.2 WSSP 2050 Issues Paper - four themes addressing the seven issues

## Theme 1 - Safe and reliable drinking water

Safe and reliable water supplies are essential to public health and to social and economic progress. The water needed must be abstracted from surface or groundwater sources and treated to a high standard before it is distributed through an extensive network of water mains to households and businesses. Ensuring the quality and reliability of water supplies is a primary requirement for Uisce Éireann.

## Theme 2 - Protect and restore our environment

Protecting and restoring the quality of the water environment is fundamental for providing safe water services and for the protection of human health and biodiversity. Ensuring an effective wastewater management system is also essential to protect the environment and public health.

By working with others to protect and restore the water environment, Uisce Éireann can reduce the requirement for water treatment and support recreational activities, biodiversity, tourism and the natural character of our countryside.

## Theme 3 - Support our customers, communities and the economy

Uisce Éireann must meet our customers' expectations through the provision of high quality, reliable water and wastewater services, delivered through resilient systems, in an economic and efficient manner, reflecting the service levels our customers expect. High-quality water and wastewater services are also important in maintaining Ireland's competitiveness for industry and commercial activity.

#### Theme 4 - Resilient services fit for the future

Uisce Éireann's approach to managing our assets aims to optimise the value obtained from them by optimising performance, risk and cost across the asset lifecycle. By improving the understanding of the health of assets and by exploiting new technologies, Uisce Éireann can better manage our existing assets and target investment in new assets where it is most needed.

# 4 Stage 1 Screening

This Screening for AA was informed by a desk study of all relevant environmental information and involved the following steps (broadly based on (European Commission, 2021)):

- Determined if the proposed plan is directly connected with or necessary to the management of the site;
- Description of the proposed plan;
- Identification of relevant European site(s);
- Assessment of likely effects on European sites; and
- Screening conclusion.

# 4.1 Is the WSSP 2050 Exempt from Assessment?

The WSSP 2050, whilst it will seek to protect the environment, is not a plan that is required for the management of any European site and therefore is not exempt from assessment under the Habitat Regulations, 2011.

# 4.2 Description of the WSSP 2050

An overview of the WSSP 2050 and its development is outlined in Section 3 above.

# 4.3 Identification of Relevant European Sites

### Natura 2000 Site Network in Ireland

Sites within the Natura 2000 network are referred to as European sites and comprise SACs and SPAs. SACs are designated for the conservation of Qualifying Interests (QI) Annex I habitats and Annex II species (other than birds). SPAs are designated for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The Natura 2000 site network in Ireland covers 125 species and 60 habitats. For 101 sites in the network there is only one feature being protected with 79 sites having more than 20 features.

There are over 430 SACs in Ireland covering an area 13,500km2 (see Figure 4.1 and the Screening Report, Appendix A). Approximately 53% is land, the remainder of sites being wholly aquatic or water-dependent (lakes, ponds, reservoirs, rivers, streams and wetlands). Aquatic species and habitats, and species that these features support, will be particularly relevant to the WSSP 2050. Over 150 SPAs (see Figure 4.1 and Appendix A) have been designated for the protection of bird species and their habitats encompassing over 570,000 hectares of marine and terrestrial habitats. Many of the sites designated as SPAs have associated aquatic supporting habitat.

Given the potential for transboundary impacts to SACs and SPAs in Northern Ireland these sites are also considered (see Figure 4.1 and Appendix A). Table 4.1 provides a breakdown of European sites in Ireland.

Table 4.1: Number of European Sites in Ireland and Northern Ireland

Ireland	Northern Ireland	
433 SACs + 6 offshore SACs	58 SACs	
166 SPAs	16 SPAs	

#### **Special Areas of Conservation**

SACs have been designated covering a variety of habitat types recognised in Annex I of the Directive, with 16 habitats designated as 'priority' habitats owing to their ecological vulnerability (NPWS, 2019a). In addition, the same Directive, recognises 26 Annex II species. Habitats for which SACs are designated include raised bogs, blanket bogs, turloughs, sand dunes, lakes, rivers, woodlands, estuaries etc. Some of the species for which SACs have been designated include but are not limited to Atlantic salmon (*Salmo salar*), otter (*Lutra lutra*), bottlenose dolphin (*Tursiops truncatus*), freshwater pearl mussel (*Margaritifera margaritifera*) and Killarney fern (*Trichomanes speciosum*).

The NPWS have identified 44 different water dependent habitat types and 22 water dependent species. Of these the freshwater pearl mussel is considered to be a highly sensitive surface water dependent species in Ireland, and is in decline (EPA, 2020). In Ireland 367 SACs have at least one water dependent Annex I listed habitat or Annex II listed species listed as a Qualifying Interest (Mayes, 2008).

# **Special Protection Areas**

The majority of the breeding seabirds and wintering water birds are considered to be regularly occurring migratory birds; over 60% of 25 Annex I listed species that occur in the Ireland on a regular basis belong to the breeding seabird and wintering water bird groups. This has in part led to the situation that the majority (>80%) of Ireland's SPAs are designated for these two bird groups (NPWS, n.d.<sup>5</sup>)

The marine areas within SPAs include some of the productive intertidal zones of bays and estuaries that provide vital food resources for several wintering wader species including dunlin (*Calidris alpina*), knot (*Calidris canutus*) and bar-tailed godwit (*Limosa lapponica*). Marine waters adjacent to the breeding seabird colonies and other important areas for seaducks, divers and grebes are also included in the SPA network.

The remaining SPAs include inland wetland sites important for wintering water birds and extensive areas of blanket bog and upland habitats that provide breeding and foraging resources for species including merlin (*Falco columbarius*) and golden plover (*Pluvialis apricaria*). Agricultural land represents a share of the SPA network ranging from the extensive farmland of upland areas where its hedgerows, wet grassland and scrub offer feeding and/or breeding opportunities for hen harrier (*Circus cyaneus*) to the intensively farmed coastal polderland where internationally important numbers of swans and geese occur.

#### **Water Framework Directive**

There is some overlap with the Birds Directive, the EU Habitats Directive and the Water Framework Directive (WFD) in relation to the protection of water dependent habitats and species. Under the WFD areas are designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection, including relevant European sites. The linkages between the Habitats and Birds Directive and the WFD were discussed in a document published by the European Commission (2011) which states:

"Any Natura 2000 site with water-dependent (ground- and/or surface water) Annex I habitat types or Annex II species under the Habitats Directive or with water-dependent bird species of Annex I or migratory bird species of the Birds Directive, and, where the presence of these species or habitats has been the reason for the designation of that protected area, has to be considered for the register of protected areas under WFD Art. 6. These areas are summarised as "water-dependent Natura 2000 sites". For these Natura 2000 sites, the objectives of BHD and WFD apply".

<sup>&</sup>lt;sup>5</sup> https://www.npws.ie/protected-sites [accessed August 2023]

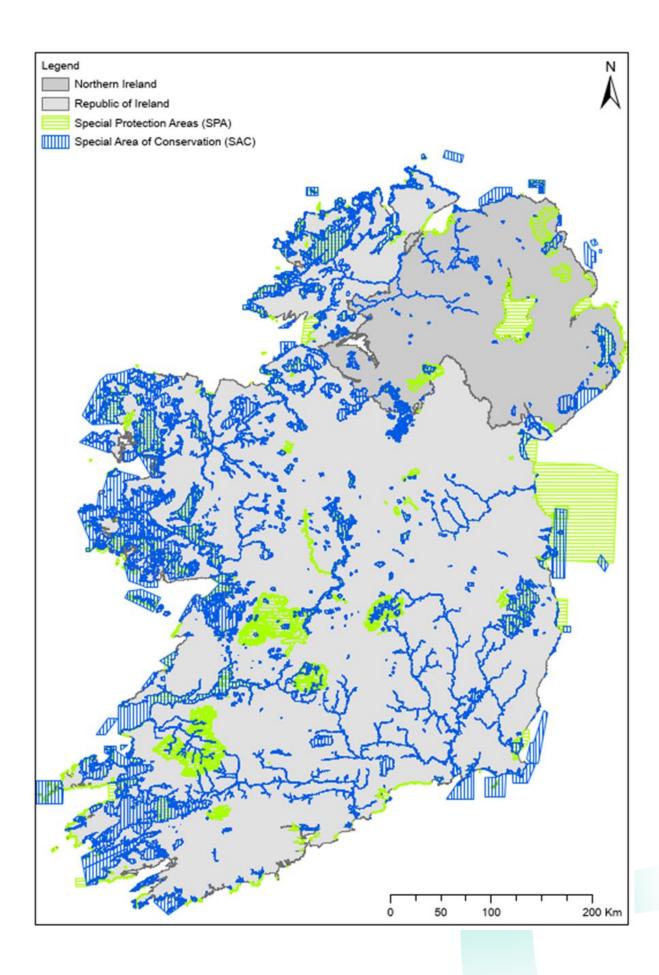


Figure 4.1: Distribution of European Sites on the Island of Ireland

# 4.4 Elements of the WSSP 2050 with Potential for Likely Significant Effects

The WSSP 2050 is a high-level plan for the development of water services in Ireland. It is a national strategy that does not refer to specific geographic locations or individual projects. However, the WSSP 2050 will provide an indication of the types of infrastructural requirements likely to arise in the future through the implementation of subsequent more detailed plans including for example the National Water Resource Plan and National Sludge Strategy and any specific programmes and projects which are progressed as part of these plans. It will also provide an indicative overview of the general objectives for Uisce Éireann over a 25-year period.

Whilst the WSSP 2050 may not itself, being a high-level plan, result in likely significant effects (LSEs) on European sites, the types of activities that Uisce Éireann will be responsible for during and resulting from the implementation of the WSSP 2050 may do. These activities can be categorised into two broad groups, relating to either water supply or wastewater treatment (Table 4.2). Other activities with potential for impacts include water conservation and demand management, catchment management and other supporting or associated measures as well as property management.

**Table 4.2: General Activities of Uisce Éireann** 

General Activity	pecific Activities	
	(Raw) Water abstraction (from surface or groundwater).	
	Treatment of raw water to a potable water standard (the level of treatment required will depend on the quality of raw water abstracted).	
Water Supply	Storage of raw and treated water.	
	Distribute treated water to customers through a pipe network.	
	Water treatment residuals management.	
	Construction, operation, maintenance and management of the above.	
	Collection of wastewater from customers connected to the public wastewater sewer network.	
	<ul> <li>Collection and treatment of surface water where surface water drains are currently connected to the public sewer network.</li> </ul>	
Wastewater Treatment	<ul> <li>Treatment of wastewater to an acceptable standard set by legislation (the level of treatment required will depend on the type of receiving water and its assimilative capacity).</li> </ul>	
	<ul> <li>Discharging treated wastewater to surface or groundwater under licence/certification.</li> </ul>	
	Wastewater sludge management.	
	Construction, operation, maintenance and management of the above.	

Table 4.3 outlines the possible likely significant effects associated with the WSSP 2050. The implementation of the WSSP 2050 may give rise to measures, in the absence of mitigation, that could result in a variety of possible effect pathways through, but not limited to:

- species mortality;
- habitat loss and/or fragmentation;
- barriers to species movement;

- disturbance (noise, vibration, movement, lighting);
- changes in water quality;
- changes in hydrology; and
- · transfer of non-native species,

Impacts may be short-term or long-term and, in some cases, short-term impacts may have long term effects on a qualifying interest.

More information on possible effects pathways and impacts is provided below. A summary of impacts and potential LSEs is presented in Table 4.3.

#### **Species Mortality**

Species mortality may occur during infrastructure construction activities or as a result in changes to water quality. Mortality may also occur as a result of the loss of prey species or through the fragmentation of habitats resulting in barriers to species movement.

## **Habitat Loss/Fragmentation and Barriers to Movement**

New infrastructure may result in the loss and/or fragmentation of habitat (including habitat that supports qualifying interests). It may also create barriers to movement of species, such as salmon, resulting in loss or changes to populations. These impacts may also affect the prey species of qualifying interests.

New or increased water abstraction may also result in the loss and/or fragmentation of habitats.

#### **Disturbance**

The construction of new infrastructure may lead to the disturbance of species altering their populations and/or distribution. Disturbance may take the form of, for example, noise and vibration, lighting and movement. This disturbance could affect terrestrial or aquatic animal species across a range of habitats and locations. Depending on the type of infrastructure, disturbance could be short-term or long-term.

## **Changes in Water Quality**

Changes in water quality may occur for a variety of reasons including spillages and run-off, sedimentation and wastewater discharges. These changes may occur during construction of new infrastructure or as a result of changes in water flows (pathways). Changes in water quality may result in the mortality of qualifying species and/or their prey. It may also result in the loss of qualifying or supporting habitats.

#### **Changes in Hydrology**

Hydrological changes may directly affect aquatic habitats changing the ecological functionality of systems and the species they support. Hydrological changes may also alter the distribution of habitats thus affecting the distribution and population of species. Hydrological changes may result from new or enhanced abstractions, or from new infrastructure.

# **Transfer of Non-Native Species**

The distribution and transfer of water and the collection, treatment and discharge of wastewater may lead to the transfer of non-native species. If invasive, these species may alter habitats or displace species. These changes may affect directly qualifying habitats and species or the ecological functionality of systems.

Table 4.3: Potential Impacts and LSEs resulting from Typical Activities associated with WSSP 2050

WSSP Related Activity	Potential Impacts	Potential LSE and Pathways
New or enhanced water abstraction <sup>12</sup> from surface water or groundwater locations.	Reduction of habitat area including complete loss as well as habitat change.  Reduction in species population (including prey species) altering distribution or complete loss.	Where new abstractions are required there is potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs in the absence of mitigation. Aquatic and water dependent receptors would be most at risk. Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests.  All sites which contain surface and/or groundwater dependent habitats and species that are hydrologically linked to abstractions would be potentially affected.
Development of new water services infrastructure including reservoirs, pipelines and wastewater treatment plants.	Species mortality (including prey species).  Loss/change in habitat area.  Disturbance (short-term or long-term) to species.  Habitat fragmentation including barrier effects to species movement.  Hydrological changes to aquatic environments.  Transfer of invasive non-native species.	Changes in hydrology potentially altering the aquatic environment and impacting on aquatic receptors.  Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests.  Invasive non-native species may result in habitat and/or species replacement altering ecological functionality of sites.  Potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs in the absence of mitigation.
Discharge of treated wastewater	Reduction of habitat area. Reduction in species density. Habitat fragmentation.	There is potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs that contain water dependent habitats and species which are hydrologically linked to wastewater treatment plants (WwTPs).  Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests. Aquatic and water dependent receptors would be most at risk.  Potential for direct, indirect, operational and cumulative effects on SACs and SPAs in the absence of mitigation.

<sup>&</sup>lt;sup>12</sup> At the end of 2022, the government passed the Water Environment (Abstractions and Associated Impoundments) Act, 2022 (the Abstractions Act), which will ensure that national abstractions align with the requirements of the Water Framework Directive. The Abstractions Act has not yet commenced and the associated regulations and guidelines which will further detail the types of assessment and national methodology to be used are not yet published or in place.

# 4.5 In-Combination Effects

Under Article 6(3) of the EU Habitats Directive an assessment of in-combination effects of the WSSP 2050 with other plans and projects is considered. Consideration has been given, at this stage of the WSSP 2050, to other relevant plans on a similarly strategic level that have clear potential to have an in-combination effect upon European Sites. These plans include the following:

- Ag Climatise A Roadmap towards Climate Neutrality (DAFM).
- Catchment Flood Risk Assessment and Management (CFRAM) Programme.
- Climate Action Plan 2023 (Department of the Environment, Climate and Communications (DECC)).
- Forestry Programme 2023-2027 (DAFM).
- National Adaptation Framework (NAF) (DECC).
- National Biodiversity Action Plan 2017-2021 (NPWS).
- National Development Plan 2021-2030 (Department of Public Expenditure, NDP Delivery and Reform).
- National Marine Planning Framework (Department of Housing, Planning and Local Government (DHPLG)).
- National Peatlands Strategy 2015 (NPWS).
- National Planning Framework, Project Ireland 2040 (DHPLG).
- River Basin Management Plan 2018-2021 and Draft River Basin Management Plan 2022-2027 (DHPLG).
- Waste Action Plan for a Circular Economy 2020 (DECC).
- Water Quality and Water Services Infrastructure, Climate Change Sectoral Adaptation Plan (DHLGH),

Given the level of detail that is available for the WSSP 2050 and the potential for likely significant effects (Table 4-3), in-combination effects as a result of implementation of the WSSP 2050 cannot currently be ruled out. Furthermore, some plans, such as the Draft River Basin Management Plan 2022-2027, are in the process of being developed and additional information may become available at a later stage.

The following Northern Ireland and UK plans will also be included in the in-combination assessment:

- Draft Environment Strategy.
- NI Water (2020) Our Strategy 2021-2046.
- NI Water (2020) Water Resource and Supply Resilience Plan.
- Sustainable Water A Long term water strategy for Northern Ireland (2015 –2040).
- Draft Flood Risk Management Plan 2021-2027 (NI).
- UK Marine Policy Statement.
- Draft 3rd cycle River Basin Management Plan 2021-2027 (NI).

Uisce Éireann's own plans and programmes will be reviewed to align with the WSSP 2050 as they are implemented and updated going forward and are therefore considered generally in terms of intra-Plan assessment.

# 5 Screening Conclusion

Stage 1 of the AA process (Screening for AA) described herein relates to the WSSP 2050.

Uisce Éireann as a public authority under the Habitat Regulations are required to screen all of their plans and projects. The WSSP 2050 was therefore subject to the requirements of the Regulations and as such Uisce Éireann were required to assess the implications of the WSSP 2050 on European sites in view of the sites' conservation objectives.

The WSSP 2050 is not directly connected to or necessary to the management of any European site.

Given the strategic nature of the WSSP 2050 and the current stage of preparation, it is concluded that there is potential for likely significant effects on one or more European sites, in view of the sites' conservation objectives. At this stage of the AA process all European sites across Ireland and Northern Ireland are screened in.

In the absence of more detailed information on the WSSP 2050 the precautionary principle must be applied. Therefore, in accordance with Article 6(3) of the Habitats Directive, Stage 2 AA of the WSSP 2050 is required. This will be presented in a NIS to fully inform the AA to be undertaken by Uisce Éireann.



# 6 References

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# Appendix A: Special Areas of Conservation in Ireland

Site Code	Site Name
IE0000191	St. John's Point
IE0000194	Tranarossan and Melmore Lough
IE0000197	West of Ardara/Maas Road
IE0000199	Baldoyle Bay
IE0000202	Howth Head
IE0000204	Lambay Island
IE0000205	Malahide Estuary
IE0000206	North Dublin Bay
IE0000208	Rogerstown Estuary
IE0000210	South Dublin Bay
IE0000212	Inishmaan Island
IE0000213	Inishmore Island
IE0000216	River Shannon Callows
IE0000218	Coolcam Turlough
IE0000231	Barroughter Bog
IE0000238	Caherglassaun Turlough
IE0000242	Castletaylor Complex
IE0000248	Cloonmoylan Bog
IE0000252	Coole-Garryland Complex
IE0000255	Croaghill Turlough
IE0000261	Derrycrag Wood Nature Reserve
IE0000268	Galway Bay Complex
IE0000278	Inishbofin and Inishshark
IE0000285	Kilsallagh Bog
IE0000286	Kiltartan Cave (Coole)
IE0000295	Levally Lough
IE0000296	Lisnageeragh Bog and Ballinastack Turlough
IE0000297	Lough Corrib
IE0000299	Lough Cutra
IE0000301	Lough Lurgeen Bog/Glenamaddy Turlough
IE0000304	Lough Rea
IE0000308	Loughatorick South Bog
IE0000318	Peterswell Turlough
IE0000319	Pollnaknockaun Wood Nature Reserve
IE0000322	Rahasane Turlough
IE0000324	Rosroe Bog
IE0000326	Shankill West Bog
IE0000328	Slyne Head Islands
IE0000330	Tully Mountain
IE0000332	Akeragh, Banna and Barrow Harbour
IE0000335	Ballinskelligs Bay and Inny Estuary
IE0000343	Castlemaine Harbour
IE0000353	Old Domestic Building, Dromore Wood
IE0000364	Kilgarvan Ice House
IE0000365	Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment
IE0000370	Lough Yganavan and Lough Nambrackdarrig
IE0000375	Mount Brandon
IE0000382	Sheheree (Ardagh) Bog

Site Code	Site Name
IE0000391	Ballynafagh Bog
IE0000396	Pollardstown Fen
IE0000397	Red Bog, Kildare
IE0000404	Hugginstown Fen
IE0000407	The Loughans
IE0000412	Slieve Bloom Mountains
IE0000428	Lough Melvin
IE0000432	Barrigone
IE0000439	Tory Hill
IE0000440	Lough Ree
IE0000448	Fortwilliam Turlough
IE0000453	Carlingford Mountain
IE0000455	Dundalk Bay
IE0000458	Killala Bay/Moy Estuary
IE0000461	Ardkill Turlough
IE0000463	Balla Turlough
IE0000466	Bellacorick Iron Flush
IE0000470	Mullet/Blacksod Bay Complex
IE0000471	Brackloon Woods
IE0000472	Broadhaven Bay
IE0000474	Ballymaglancy Cave, Cong
IE0000475	Carrowkeel Turlough
IE0000476	Carrowmore Lake Complex
IE0000479	Cloughmoyne
IE0000480	Clyard Kettle-holes
IE0000484	Cross Lough (Killadoon)
IE0000485	Corraun Plateau
IE0000492	Doocastle Turlough
IE0000495	Duvillaun Islands
IE0000497	Flughany Bog
IE0000500	Glenamoy Bog Complex
IE0000503	Greaghans Turlough
IE0000504	Kilglassan/Caheravoostia Turlough Complex
IE0000507	Inishkea Islands
IE0000516	Lackan Saltmarsh and Kilcummin Head
IE0000522	Lough Gall Bog
IE0000525	Shrule Turlough
IE0000527	Moore Hall (Lough Carra)
IE0000532	Oldhead Wood
IE0000534	Owenduff/Nephin Complex
IE0000541	Skealoghan Turlough
IE0000542	Slieve Fyagh Bog
IE0000566	All Saints Bog and Esker
IE0000571	Charleville Wood
IE0000572	Clara Bog
IE0000575	Ferbane Bog
IE0000576	Fin Lough (Offaly)
IE0000580	Mongan Bog

Site Code	Site Name
IE0000581	Moyclare Bog
IE0000582	Raheenmore Bog
IE0000584	Cuilcagh - Anierin Uplands
IE0000585	Sharavogue Bog
IE0000588	Ballinturly Turlough
IE0000592	Bellanagare Bog
IE0000595	Callow Bog
IE0000597	Carrowbehy/Caher Bog
IE0000600	Cloonchambers Bog
IE0000604	Derrinea Bog
IE0000606	Lough Fingall Complex
IE0000607	Errit Lough
IE0000609	Lisduff Turlough
IE0000610	Lough Croan Turlough
IE0000611	Lough Funshinagh
IE0000612	Mullygollan Turlough
IE0000614	Cloonshanville Bog
IE0000622	Ballysadare Bay
IE0000623	Ben Bulben, Gleniff and Glenade Complex
IE0000625	Bunduff Lough and Machair/Trawalua/Mullaghmore
IE0000627	Cummeen Strand/Drumcliff Bay (Sligo Bay)
IE0000633	Lough Hoe Bog
IE0000634	Lough Nabrickkeagh Bog
IE0000636	Templehouse and Cloonacleigha Loughs
IE0000637	Turloughmore (Sligo)
IE0000638	Union Wood
IE0000641	Ballyduff/Clonfinane Bog
IE0000646	Galtee Mountains
IE0000647	Kilcarren-Firville Bog
IE0000665	Helvick Head
IE0000668	Nier Valley Woodlands
IE0000671	Tramore Dunes and Backstrand
IE0000679	Garriskil Bog
IE0000685	Lough Ennell
IE0000688	Lough Owel
IE0000692	Scragh Bog
IE0000696	Ballyteige Burrow
IE0000697	Bannow Bay
IE0000700	Cahore Polders and Dunes
IE0000704	Lady's Island Lake
IE0000707	Saltee Islands
IE0000708	Screen Hills
IE0000709	Tacumshin Lake
IE0000710	Raven Point Nature Reserve
IE0000713	Ballyman Glen
IE0000714	Bray Head
IE0000716	Carriggower Bog
IE0000717	Deputy's Pass Nature Reserve

Site Code	Site Name
IE0000719	Glen of the Downs
IE0000725	Knocksink Wood
IE0000729	Buckroney-Brittas Dunes and Fen
IE0000733	Vale of Clara (Rathdrum Wood)
IE0000764	Hook Head
IE0000770	Blackstairs Mountains
IE0000781	Slaney River Valley
IE0000831	Cullahill Mountain
IE0000849	Spahill and Clomantagh Hill
IE0000859	Clonaslee Eskers and Derry Bog
IE0000869	Lisbigney Bog
IE0000919	Ridge Road, SW of Rapemills
IE0000925	The Long Derries, Edenderry
IE0000930	Clare Glen
IE0000934	Kilduff, Devilsbit Mountain
IE0000939	Silvermine Mountains
IE0000979	Corratirrim
IE0000994	Ballyteige (Clare)
IE0000996	Ballyvaughan Turlough
IE0001013	Glenomra Wood
IE0001021	Carrowmore Point to Spanish Point and Islands
IE0001040	Barley Cove to Ballyrisode Point
IE0001043	Cleanderry Wood
IE0001058	Great Island Channel
IE0001061	Kilkeran Lake and Castlefreke Dunes
IE0001070	Myross Wood
IE0001090	Ballyness Bay
IE0001107	Coolvoy Bog
IE0001125	Dunragh Loughs/Pettigo Plateau
IE0001141	Gweedore Bay and Islands
IE0001151	Kindrum Lough
IE0001179	Muckish Mountain
IE0001190	Sheephaven
IE0001195	Termon Strand
IE0001197	Keeper Hill
IE0001209	Glenasmole Valley
IE0001228	Aughrusbeg Machair and Lake
IE0001230	Courtmacsherry Estuary
IE0001242	Carrownagappul Bog
IE0001251	Cregduff Lough
IE0001257	Dog's Bay
IE0001271	Gortnandarragh Limestone Pavement
IE0001275	Inisheer Island
IE0001285	Kiltiernan Turlough
IE0001309	Omey Island Machair
IE0001311	Rusheenduff Lough
IE0001312	Ross Lake and Woods
IE0001313	Rosturra Wood

Site Code	Site Name
IE0001321	Termon Lough
IE0001342	Cloonee and Inchiquin Loughs, Uragh Wood
IE0001371	Mucksna Wood
IE0001387	Ballynafagh Lake
IE0001398	Rye Water Valley/Carton
IE0001403	Arroo Mountain
IE0001430	Glen Bog
IE0001432	Glenstal Wood
IE0001459	Clogher Head
IE0001482	Clew Bay Complex
IE0001497	Doogort Machair/Lough Doo
IE0001501	Erris Head
IE0001513	Keel Machair/Menaun Cliffs
IE0001529	Lough Cahasy, Lough Baun and Roonah Lough
IE0001536	Mocorha Lough
IE0001547	Castletownshend
IE0001571	Urlaur Lakes
IE0001625	Castlesampson Esker
IE0001626	Annaghmore Lough (Roscommon)
IE0001637	Four Roads Turlough
IE0001656	Bricklieve Mountains and Keishcorran
IE0001669	Knockalongy and Knockachree Cliffs
IE0001673	Lough Arrow
IE0001680	Streedagh Point Dunes
IE0001683	Liskeenan Fen
IE0001741	Kilmuckridge-Tinnaberna Sandhills
IE0001742	Kilpatrick Sandhills
IE0001757	Holdenstown Bog
IE0001766	Magherabeg Dunes
IE0001774	Lough Carra/Mask Complex
IE0001776	Pilgrim's Road Esker
IE0001786	Kilroosky Lough Cluster
IE0001810	White Lough, Ben Loughs and Lough Doo
IE0001818	Lough Forbes Complex
IE0001831	Split Hills and Long Hill Esker
IE0001847	Philipston Marsh
IE0001858	Galmoy Fen
IE0001873	Derryclogher (Knockboy) Bog
IE0001879	Glanmore Bog
IE0001880	Meenaguse Scragh
IE0001881	Maulagowna Bog
IE0001890	Mullaghanish Bog
IE0001898	Unshin River
IE0001899	Cloonakillina Lough
IE0001912	Glendree Bog
IE0001913	Sonnagh Bog
IE0001919	Glenade Lough
IE0001922	Bellacorick Bog Complex

Site Code	Site Name
IE0001926	East Burren Complex
IE0001932	Mweelrea/Sheeffry/Erriff Complex
IE0001952	Comeragh Mountains
IE0001955	Croaghaun/Slievemore
IE0001957	Boyne Coast and Estuary
IE0001975	Ballyhoorisky Point to Fanad Head
IE0001976	Lough Gill
IE0001992	Tamur Bog
IE0002005	Bellacragher Saltmarsh
IE0002006	Ox Mountains Bogs
IE0002008	Maumturk Mountains
IE0002010	Old Domestic Building (Keevagh)
IE0002012	North Inishowen Coast
IE0002031	The Twelve Bens/Garraun Complex
IE0002032	Boleybrack Mountain
IE0002034	Connemara Bog Complex
IE0002036	Ballyhoura Mountains
IE0002037	Carrigeenamronety Hill
IE0002041	Old Domestic Building, Curraglass Wood
IE0002047	Cloghernagore Bog and Glenveagh National Park
IE0002070	Tralee Bay and Magharees Peninsula, West to Cloghane
IE0002074	Slyne Head Peninsula
IE0002081	Ballinafad
IE0002091	Newhall and Edenvale Complex
IE0002098	Old Domestic Building, Askive Wood
IE0002110	Corliskea/Trien/Cloonfelliv Bog
IE0002111	Kilkieran Bay and Islands
IE0002112	Ballyseedy Wood
IE0002117	Lough Coy
IE0002118	Barnahallia Lough
IE0002119	Lough Nageeron
IE0002120	Lough Bane and Lough Glass
IE0002121	Lough Lene
IE0002122	Wicklow Mountains
IE0002123	Ardmore Head
IE0002124	Bolingbrook Hill
IE0002125	Anglesey Road
IE0002126	Pollagoona Bog
IE0002129	Murvey Machair
IE0002130	Tully Lough
IE0002135	Lough Nageage
IE0002137	Lower River Suir
IE0002141	Mountmellick
IE0002144	Newport River
IE0002147	Lisduff Fen
IE0002157	Newgrove House
IE0002158	Kenmare River
IE0002159	Mulroy Bay

Site Code	Site Name
IE0002161	Long Bank
IE0002162	River Barrow and River Nore
IE0002164	Lough Golagh and Breesy Hill
IE0002165	Lower River Shannon
IE0002170	Blackwater River (Cork/Waterford)
IE0002171	Bandon River
IE0002172	Blasket Islands
IE0002173	Blackwater River (Kerry)
IE0002176	Leannan River
IE0002177	Lough Dahybaun
IE0002179	Towerhill House
IE0002180	Gortacarnaun Wood
IE0002181	Drummin Wood
IE0002185	Slieve Mish Mountains
IE0002187	Drongawn Lough
IE0002189	Farranamanagh Lough
IE0002193	Ireland's Eye
IE0002197	Derrinlough (Cloonkeenleananode) Bog
IE0002199	Ballygar (Aghrane) Bog
IE0002200	Aughrim (Aghrane) Bog
IE0002201	Derragh Bog
IE0002202	Mount Jessop Bog
IE0002203	Girley (Drewstown) Bog
IE0002205	Wooddown Bog
IE0002206	Scohaboy (Sopwell) Bog
IE0002207	Arragh More (Derrybreen) Bog
IE0002213	Glenloughaun Esker
IE0002214	Killeglan Grassland
IE0002236	Island Fen
IE0002241	Lough Derg, North-east Shore
IE0002243	Clare Island Cliffs
IE0002244	Ardrahan Grassland
IE0002245	Old Farm Buildings, Ballymacrogan
IE0002246	Ballycullinan, Old Domestic Building
IE0002247	Toonagh Estate
IE0002249	The Murrough Wetlands
IE0002250	Carrowmore Dunes
IE0002252	Thomastown Quarry
IE0002256	Ballyprior Grassland
IE0002257	Moanour Mountain
IE0002258	Silvermines Mountains West
IE0002259	Tory Island Coast
IE0002261	Magharee Islands
IE0002262	Valencia Harbour/Portmagee Channel
IE0002263	Kerry Head Shoal
IE0002264	Kilkee Reefs
IE0002265	Kingstown Bay
	, .

Site Code	Site Name	
IE0002268	Achill Head	
IE0002269	Carnsore Point	
IE0002274	Wicklow Reef	
IE0002278	Southern Canyons	
IE0002279	Askeaton Fen Complex	
IE0002280	Dunbeacon Shingle	
IE0002281	Reen Point Shingle	
IE0002283	Rutland Island and Sound	
IE0002287	Lough Swilly	
IE0002293	Carrowbaun, Newhall and Ballylee Turloughs	
IE0002294	Cahermore Turlough	
IE0002295	Ballinduff Turlough	
IE0002296	Williamstown Turloughs	
IE0002298	River Moy	
IE0002299	River Boyne and River Blackwater	
IE0002301	River Finn	
IE0002303	Dunmuckrum Turloughs	
IE0002306	Carlingford Shore	
IE0002312	Slieve Bernagh Bog	
IE0002313	Ballymore Fen	
IE0002314	Old Domestic Buildings, Rylane	
IE0002315	Glanlough Woods	
IE0002316	Ratty River Cave	
IE0002317	Cregg House Stables, Crusheen	
IE0002318	Knockanira House	
IE0002319	Kilkishen House	
IE0002320	Kildun Souterrain	
IE0002324	Glendine Wood	
IE0002327	Belgica Mound Province	
IE0002328	Hovland Mound Province	
IE0002329	South-west Porcupine Bank	
IE0002330	North-west Porcupine Bank	
IE0002331	Mouds Bog	
IE0002332	Coolrain Bog	
IE0002333	Knockacoller Bog	
IE0002336	Carn Park Bog	
IE0002337	Crosswood Bog	
IE0002338	Drumalough Bog	
IE0002339	Ballynamona Bog and Corkip Lough	
IE0002340	Moneybeg and Clareisland Bogs	
IE0002341	Ardagullion Bog	
IE0002342	Mount Hevey Bog	
IE0002343	Tullaher Lough and Bog	
IE0002346	Brown Bog	
IE0002347	Camderry Bog	
IE0002348	Clooneen Bog	
IE0002349	Corbo Bog	
IE0002350	Curraghlehanagh Bog	

Site Code	Site Name
IE0002351	Moanveanlagh Bog
IE0002352	Monivea Bog
IE0002353	Redwood Bog
IE0002354	Tullaghanrock Bog
IE0002356	Ardgraigue Bog
IE0002953	Blackwater Bank
IE0002998	West Connacht Coast
IE0002999	Hempton's Turbot Bank
IE0003000	Rockabill to Dalkey Island
IE0003001	Porcupine Bank Canyon
IE0003002	South-east Rockall Bank
IE0003015	Codling Fault Zone



# Appendix B: Special Protection Areas in Ireland

Sites marked \* are stated as being sites where the presence of wetlands has contributed to their selection as SPAs.

Site Code	Site Name	
IE0004002	Saltee Islands	
IE0004003	Puffin Island	
IE0004004	Inishkea Islands	
IE0004005	Cliffs of Moher	
IE0004006	North Bull Island*	
IE0004007	Skelligs	
IE0004008	Blasket Islands	
IE0004009	Lady's Island Lake*	
IE0004013	Drumcliff Bay*	
IE0004014	Rockabill	
IE0004015	Rogerstown Estuary*	
IE0004016	Baldoyle Bay*	
IE0004017	Mongan Bog	
IE0004019	The Raven*	
IE0004020	Ballyteige Burrow*	
IE0004021	Old Head of Kinsale	
IE0004022	Ballycotton Bay*	
IE0004023	Ballymacoda Bay*	
IE0004024	South Dublin Bay and River Tolka Estuary*	
IE0004025	Malahide Estuary*	
IE0004026	Dundalk Bay*	
IE0004027	Tramore Back Strand*	
IE0004028	Blackwater Estuary*	
IE0004029	Castlemaine Harbour*	
IE0004030	Cork Harbour*	
IE0004031	Inner Galway Bay*	
IE0004032	Dungarvan Harbour*	
IE0004033	Bannow Bay*	
IE0004034	Trawbreaga Bay*	
IE0004035	Cummeen Strand*	
IE0004036	Killala Bay/Moy Estuary*	
IE0004037	Blacksod Bay/Broad Haven*	
IE0004038	Killarney National Park	
IE0004039	Derryveagh and Glendowan Mountains	
IE0004040	Wicklow Mountains	
IE0004041	Ballyallia Lough*	
IE0004042	Lough Corrib*	
IE0004043	Lough Derravaragh*	
IE0004044	Lough Ennell*	
IE0004045	Glen Lough	
IE0004046	Lough Iron*	
IE0004047	Lough Owel*	
IE0004048	Lough Gara	
IE0004049	Lough Oughter Complex*	

Site Code	Site Name	
IE0004050	Lough Arrow*	
IE0004051	Lough Carra	
IE0004052	Carrowmore Lake	
IE0004056	Lough Cutra	
IE0004057	Lough Derg (Donegal)	
IE0004058	Lough Derg (Shannon)*	
IE0004060	Lough Fern*	
IE0004061	Lough Kinale and Derragh Lough*	
IE0004062	Lough Mask*	
IE0004063	Poulaphouca Reservoir SPA	
IE0004064	Lough Ree*	
IE0004065	Lough Sheelin*	
IE0004066	The Bull and The Cow Rocks	
IE0004068	Inishmurray	
IE0004069	Lambay Island	
IE0004072	Stags of Broad Haven	
IE0004073	Tory Island	
IE0004074	Illanmaster	
IE0004075	Lough Swilly*	
IE0004076	Wexford Harbour and Slobs*	
IE0004077	River Shannon and River Fergus Estuaries*	
IE0004078	Carlingford Lough*	
IE0004080	Boyne Estuary*	
IE0004081	Clonakilty Bay*	
IE0004082	Greers Isle	
IE0004083	Inishbofin, Inishdooey and Inishbeg	
IE0004084	Inishglora and Inishkeeragh	
IE0004086	River Little Brosna Callows*	
IE0004087	Lough Foyle*	
IE0004089	Rahasane Turlough*	
IE0004090	Sheskinmore Lough	
IE0004091	Stabannan-Braganstown	
IE0004092	Tacumshin Lake*	
IE0004093	Termoncarragh Lake and Annagh Machair*	
IE0004094	Blackwater Callows*	
IE0004095	Kilcolman Bog*	
IE0004096	Middle Shannon Callows*	
IE0004097	River Suck Callows*	
IE0004098	Owenduff/Nephin Complex	
IE0004099	Pettigo Plateau Nature Reserve	
IE0004100	Inishtrahull	
IE0004101	Ballykenny-Fisherstown Bog	
IE0004102	Garriskil Bog	
IE0004103	All Saints Bog	
IE0004105	Bellanagare Bog	
IE0004107	Coole-Garryland	
IE0004108	Eirk Bog	
IE0004109	The Gearagh*	

Site Code	Site Name	
IE0004110	Lough Nillan Bog	
IE0004111	Duvillaun Islands	
IE0004113	Howth Head Coast	
IE0004114	Illaunonearaun	
IE0004115	Inishduff	
IE0004116	Inishkeel	
IE0004117	Ireland's Eye	
IE0004118	Keeragh Islands	
IE0004119	Loop Head	
IE0004120	Rathlin O'Birne Island	
IE0004121	Roaninish	
IE0004122	Skerries Islands	
IE0004124	Sovereign Islands	
IE0004125	Magharee Islands	
IE0004127	Wicklow Head	
IE0004129	Ballysadare Bay*	
IE0004132	Illancrone and Inishkeeragh	
IE0004133	Aughris Head	
IE0004134	Lough Rea*	
IE0004135	Ardboline Island and Horse Island	
IE0004136	Clare Island	
IE0004137	Dovegrove Callows	
IE0004139	Lough Croan Turlough*	
IE0004140	Four Roads Turlough*	
IE0004142	Cregganna Marsh	
IE0004143	Cahore Marshes*	
IE0004144	High Island, Inishshark and Davillaun	
IE0004145	Durnesh Lough	
IE0004146	Malin Head	
IE0004148	Fanad Head	
IE0004149	Falcarragh to Meenlaragh	
IE0004150	West Donegal Coast	
IE0004151	Donegal Bay*	
IE0004152	Inishmore	
IE0004153	Dingle Peninsula	
IE0004154	Iveragh Peninsula	
IE0004155	Beara Peninsula	
IE0004156	Sheep's Head to Toe Head SPA	
IE0004158	River Nanny Estuary and Shore*	
IE0004159	Slyne Head to Ardmore Point Islands	
IE0004160	Slieve Bloom Mountains	
IE0004161	Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle	
IE0004162	Mullaghanish to Musheramore Mountains	
IE0004165	Slievefelim to Silvermines Mountains	
IE0004167	Slieve Beagh	
IE0004168	Slieve Aughty Mountains	
IE0004170	Cruagh Island	
IE0004172	Dalkey Islands	

Site Code	Site Name	
IE0004175	Deenish Island and Scariff Island	
IE0004177	Bills Rocks	
IE0004181	Connemara Bog Complex	
IE0004182	Mid-Clare Coast*	
IE0004186	The Murrough*	
IE0004187	Sligo/Leitrim Uplands	
IE0004188	Tralee Bay Complex*	
IE0004189	Kerry Head	
IE0004190	Galley Head to Duneen Point	
IE0004191	Seven Heads	
IE0004192	Helvick Head to Ballyquin	
IE0004193	Mid-Waterford Coast	
IE0004194	Horn Head to Fanad Head	
IE0004212	Cross Lough (Killadoon)	
IE0004219	Courtmacsherry Bay	
IE0004220	Corofin Wetlands*	
IE0004221	Illaunnanoon	
IE0004227	Mullet Peninsula	
IE0004228	Lough Conn and Lough Cullin*	
IE0004230	West Donegal Islands	
IE0004231	Inishbofin, Omey Island and Turbot Island	
IE0004232	River Boyne and River Blackwater	
IE0004233	River Nore	
IE0004234	Ballintemple and Ballygilgan	
IE0004235	Doogort Machair	
IE0004236	North-west Irish Sea	

# Appendix C: European Sites in Northern Ireland

Special Areas of Conservation	
Site Code	Site Name
UK0030318	Aughnadarragh Lough
UK0030319	Ballykilbeg
UK0016599	Ballynahone Bog
UK0030083	Banagher Glen
UK0030084	Bann Estuary
UK0030089	Binevenagh
UK0016609	Black Bog
UK0030097	Breen Wood
UK0030110	Carn-Glenshane Pass
UK0030116	Cladagh (Swanlinbar) River
UK0030321	Cranny Bogs
UK0016603	Cuilcagh Mountain
UK0030322	Curran Bog
UK0030321	Dead Island Bog
UK0030324	Deroran Bog
UK0016620	Derryleckagh
UK0016615	Eastern Mournes
UK0016611	Fairy Water Bogs
UK0030068	Fardrum and Roosky Turloughs
UK0016606	Garron Plateau
UK0016610	Garry Bog
UK0030169	Hollymount
UK0030045	Largalinny
UK0030180	Lecale Fens
UK0030047	Lough Melvin
UK0016621	Magheraveely Marl Loughs
UK0016613	Magilligan
UK0030199	Main Valley Bogs
UK0016619	Monawilkin
UK0030211	Moneygal Bog
UK0030212	Moninea Bog
UK0030214	Montiaghs Moss
UK0016612	Murlough
UK0030224	North Antrim Coast
UK0030399	North Channel
UK0030233	Owenkillew River
UK0030236	Peatlands Park
UK0016607	Pettigoe Plateau
UK0030055	Rathlin Island
UK0030244	Rea's Wood and Farr's Bay
UK0030365	Red Bay SAC
UK0030361	River Faughan and Tributaries
UK0030320	River Foyle and Tributaries

Special Areas of Conservation	
Site Code	Site Name
UK0030360	River Roe and Tributaries
UK0030268	Rostrevor Wood
UK0030383	Skerries and Causeway
UK0016622	Slieve Beagh
UK0030277	Slieve Gullion
UK0016618	Strangford Lough
UK0016608	Teal Lough
UK0030384	The Maidens
UK0030325	Tonnagh Beg Bog
UK0030326	Tully Bog
UK0030291	Turmennan
UK0030296	Upper Ballinderry River
UK0016614	Upper Lough Erne
UK0030300	West Fermanagh Scarplands
UK0030303	Wolf Island Bog

Special Protection Areas	
Site Code	Site Name
UK9020301	Antrim Hills
UK9020290	Belfast Lough Open Water
UK9020101	Belfast Lough
UK9020161	Carlingford Lough
UK9020291	Copeland Island
UK9020291	Killough Bay
UK9020042	Larne Lough
UK9020031	Lough Foyle
UK9020091	Lough Neagh and Lough Beg
UK9020271	Outer Ards
UK9020051	Pettigoe Plateau
UK9020011	Rathlin Island
UK9020021	Sheep Island
UK9020302	Slieve Beagh – Mullaghfad – Lisnaskea
UK9020111	Strangford Lough
UK9020071	Upper Lough Erne
-	East Coast Marine*
-	Carlingford Marine*

<sup>\*</sup>East Coast Marine and Carlingford Marine are proposed SPAs and UK site codes have not been confirmed. The sites were not included in the original Screening Report.

# **Appendix B Consultation Responses**

# Responses from the first consultation phase

Organisation	Responses Relating to the AA
Bord lascaigh Mhara (BIM)	No comments regarding the screening report.
Commission for Regulation of Utilities (CRU)	No comments regarding the screening report.
Department of Agriculture, Food and the Marine	No comments regarding the screening report.
Department of Housing, Local Government and Heritage: Archaeology	No comments regarding the screening report.
Department of the	No specific comments regarding the screening report.
Environment, Climate and Communications: Geological Survey	Recommended various databases including groundwater maps
Eastern and Midland Regional Assembly	No comments regarding the screening report.
Environment Protection Agency	All recommendations from the SEA and AA processes, including mitigation measures and monitoring proposals, should be integrated into the plan.
Inland Fisheries Ireland / Iascach Intíre Éireann	Some general issues and likely significant effects that IFI has highlighted in respect of the interaction between water services planning and the inland fisheries resource in the past and which are now rightly identified in the SEA scoping and AA Screening reports for the WSSP 2050 include:
	<b>Species Mortality</b> Species mortality may occur during infrastructure construction activities or as a result in changes to water quality. Mortality may also occur as a result of the loss of prey species or through the fragmentation of habitats resulting in barriers to species movement.
	Habitat Loss/Fragmentation and Barriers to Movement New infrastructure may result in the loss and/or fragmentation of habitat (including habitat that supports qualifying interests). It may also create barriers to movement of species, such as salmon, resulting in loss or changes to populations. These impacts may also affect the prey species of qualifying interests. New or increased water abstraction may also result in the loss and/or fragmentation of habitats.
	<b>Disturbance</b> The construction of new infrastructure may lead to the disturbance of species altering their populations and/or distribution. Disturbance may take the form of, for example, noise and vibration, lighting, and movement. This disturbance could affect terrestrial or aquatic animal species across a range of habitats and locations. Depending on the type of infrastructure, disturbance could be short-term or long-term.
	<b>Changes in Water Quality</b> Changes in water quality may occur for a variety of reasons including spillages and run-off, sedimentation, and wastewater discharges. These changes may occur during construction of new infrastructure or because of changes in water flows (pathways). Changes in water quality may

Organisation	Responses Relating to the AA
Organisation	result in the mortality of qualifying species and/or their prey. It may also result in the loss of qualifying or supporting habitats.
	<b>Changes in Hydrology</b> Hydrological changes may directly affect aquatic habitats changing the ecological functionality of systems and the species they support.
	<b>Hydrological</b> changes may also alter the distribution of habitats thus affecting the distribution and population of species. Hydrological changes may result from new or enhanced abstractions, or from new infrastructure.
	<b>Transfer of Non-Native Species</b> The distribution and transfer of water and the collection, treatment and discharge of wastewater may lead to the transfer of non-native species. If invasive, these species may alter habitats or displace species. These changes may affect directly qualifying habitats and species or the ecological functionality of systems.
Meath County Council	No comments regarding the screening report.
NI – Department for Communities: Historic Environment Division	No comments regarding the screening report.
NI – Northern Ireland Environment Agency (NIEA): Natural Environment Division (NED) response	NED welcome the recognition of the potential for transboundary effects on NI designated sites within the AA screening document and that these will be assessed within the AA. NED welcome the opportunity to comment on this as it is developed.
J. W. S. G. W. C. S. G.	Please note following the decision of the United Kingdom to leave the European Union, the collective term of "Natura 2000" sites, the network of European protected sites, are now known as "National Site Network" sites within the United Kingdom, including Northern Ireland.
	It may be worth including in your considerations the following:
	• The Wildlife (NI) Order 1985 (as amended)
	Wildlife and Natural Environment Act (NI) 2011
	The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended)
	The Environment (NI) Order 2002
	• The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017
	The Strategic Planning Policy Statement (SPPS) for Northern Ireland
	• Planning Policy Statements (PPS – in particular PPS2). It should be noted that the PPS's will be superseded by Local Development Plans when they are adopted.
	Biodiversity Strategy for NI to 2020 https://www.daera- ni.gov.uk/publications/biodiversity-strategy-northern-ireland-2020-0
	Draft Environment Strategy
	The Draft NI peatland policy: https://www.daera-ni.gov.uk/consultations/nipeatland-strategy-consultation.

Organisation	Responses Relating to the AA
<u> </u>	• The Draft Green Growth Strategy Consultation on the draft Green Growth Strategy for Northern Ireland   Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk)
	Northern Ireland Energy Strategy 2050 Northern Ireland Energy Strategy 2050   Department for the Economy (economy-ni.gov.uk)
	A number of useful information sources that highlight the current state of the environment in Northern Ireland at a regional level and which could be referenced are:
	Northern Ireland State of the Environment Reports: https://www.daera- ni.gov.uk/publications/state-environment-report-2013
	Northern Ireland Environmental Statistics Reports: https://www.daera- ni.gov.uk/articles/northern-ireland-environmental-statistics-report
	Other relevant web-links are;
	Designated Scientific Sites: www.daera-ni.gov.uk/landing-pages/protected- areas
	Regional Landscape Character Map viewer: <a href="https://www.daera-ni.gov.uk/services/regional-landscape-character-areas-map-viewer">https://www.daera-ni.gov.uk/services/regional-landscape-character-areas-map-viewer</a>
	DAERA have a map browser for NI protected sites and known priority habitat:  www.daera-ni.gov.uk/services/natural-environment-map-viewer
	Our natural environment datasets are available at the link below: <a href="https://www.daera-ni.gov.uk/articles/download-digital-datasets">www.daera-ni.gov.uk/articles/download-digital-datasets</a>
	Appropriate Assessments should refer to the status of habitats and species in the relevant reports available on the JNCC website as follows: UK Article 17 report for the Habitats Directive <a href="https://jncc.gov.uk/our-work/article-17-habitats-directive-report-2019/">https://jncc.gov.uk/our-work/article-17-habitats-directive-report-2019/</a> and the UK Article 12 report for the Birds Directive <a href="https://jncc.gov.uk/our-work/european-reporting/#birds-directive-reporting">https://jncc.gov.uk/our-work/european-reporting/#birds-directive-reporting</a>
Inland Fisheries Response	In relation to transboundary catchments Inland fisheries would recommend that any SEA/AA be cognisant of the North Atlantic Salmon Conservation Organisation (NASCO), Convention for the Conservation of Salmon in the North Atlantic Implementation Plan for the period 2019 – 2024, this an international commitment for Northern Ireland (as part of the UK; ROI through the EU is also a signatory) and should be included in any policy has the potential to impact this species and the goals of this plan.
Marine Conservation Branch Response	<ul> <li>In Section 2.1, we advise using the DAERA Marine Map Viewer</li> <li>In Section 3.3.1 – Issue 5 – Environment and Biodiversity Crises, we advise ensuring that marine environments and marine species are also considered.</li> </ul>

Organisation	Responses Relating to the AA
	• In Table 4.1, there are 18 SPAs in Northern Ireland (the East Coast Marine pSPA and Carlingford Marine pSPA also need to be considered).
	• In Section 4.4, we advise that changes in hydrology can change the movement of sediment, therefore, potentially change coastal processes which could impact reliant habitats and species. In addition, we advise also considering how the introduction and spread of invasive non-native species can be prevented/minimised. Furthermore, we advise that extreme noise disturbance can also cause species mortality.
	• In Section 4.5, we advise also considering the Living With Water Programme – Derry/Londonderry Sustainable Drainage Infrastructure Plan.
	• In Section 5, we agree with the following statement: 'At this stage of the AA process all European Sites across Ireland and Northern Ireland are screened in.'
	• In Appendix C, we advise including East Coast Marine pSPA and Carlingford Marine pSPA.
The Water Forum / An Fórum Uisce	No comments regarding the screening report.

