

Belfast City Council

Report on Habitats Regulations Assessment Requirement

In accordance with The Conservation (Natural Habitats, etc.) Regulations
(Northern Ireland) 1995 (as amended)

for

East Bank Development Strategy

February 2018

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Non-technical Summary

Overview of East Bank Development Strategy

The East Bank refers to the area alongside the river Lagan which runs from the SSE Arena car park at its northern end to the Sirocco Works site to the south and is bounded by the Short Strand to the east. The overall area is approximately 28 hectares with a river frontage of 1.1 km.

Our vision is that

“By 2030, East Bank will be fully woven into the fabric of the city centre. It will be lively, diverse, accessible and well connected to the city core, the River Lagan and surrounding communities; providing places to live, work and socialise.”

The Strategy contains proposals for how the area might be developed and better connected to the city centre and the communities adjacent to it. Our aim is to inform planning and investment decisions that will impact the long-term development of this area.

Habitats Regulations Assessment

Habitats Regulations Assessment (HRA) is a provision of The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended). These Regulations require assessment of possible adverse effects on the integrity of sites (Special Areas of Conservation and Special Protection Areas) as a result of plans and policies, this is also carried out for Ramsar sites. The Regulations contribute to transposing the requirements of the Habitats and Birds Directives. This report has been prepared in support of the preparation of the East Bank Development Strategy to record the HRA.

Outcome of the Assessment

The first step was to identify whether the Strategy fell within the requirements of the Habitats Regulations. It was found that it is appropriate to assess the plan as it will promote development with potential to impact on designated sites. The assessment found that there are potential connections between the Strategy area and designated sites through the River Lagan linking to Belfast Lough. Marine mammals such as harbour porpoise and grey seal may also occur near the East Bank and be subject to disturbance.

Of the potential impacts that development may cause the following were identified as posing a risk to some designated sites or species associated with them. The historical use of the land means that there is a risk of release of contaminants during construction which could cause pollution to habitats and species. Piling may be required to provide secure foundations, the noise and vibration could disturb marine mammals and birds. The emphasis on the waterfront would increase recreational activity that may also disturb mammals and birds. Water based recreation might require additional dredging to the normal river maintenance. Finally the level of development could be greater than the capacity to treat wastewater and lead to a decline in water quality in some designated sites.

These impacts were examined in more detail to find out whether there are measures in place that would be sufficient to prevent adverse effects on designated sites or whether measures should be included in the East Bank Development Strategy to address potential impacts.

Approvals for any new construction projects and infrastructure will be subject to the Habitats Regulations and therefore may require HRA by the relevant competent authority. Disturbance and pollution arising during construction can be managed by conditions applied to planning permissions or controls applied through other regulations. These include risk and drainage assessments, construction method statements and construction environmental management plans. Likewise the issue of wastewater treatment can be assessed on a project by project basis and development would not be allowed to proceed unless there is sufficient treatment capacity. Wastewater treatment capacity will also be reflected at a strategic level through the Local Development Plan.

Conclusion

Having reviewed all proposals within the Strategy it was concluded that it promotes some additional development in the East Bank that could have a significant effect on designated sites and their selection features. Much of the residential and business development referred to in the Strategy is in the course of planning or has planning permission. That is therefore development that would progress irrespective of the Strategy and is not a result of it. It will be for the relevant competent authorities to ensure compliance with the Habitats Regulations.

Many elements of the Strategy relate to general principles of development, layout and design and will not increase the level of development. Those additional elements that could have an effect are largely subject to planning permission and other regulations for which the relevant competent authority will need to ensure compliance with the Habitats Regulations. For those projects with a potential effect there are accepted ways to enforce appropriate and well-tested measures to minimise impacts such that projects cannot have a significant effect alone or contribute to a significant effect in combination with other projects.

While there is a clear intention to increase recreation in and around the river there is too little detail to assess the potential impacts. There are existing constraints that will limit the level of disturbance that could arise. It is recommended that recreation in the area is considered in the context of recreation in the wider Lagan and Belfast Harbour area and any future recreation plan or strategy is assessed under the Habitats Regulations. Habitats Regulations Assessment was not progressed to Stage 2 Appropriate Assessment for the reasons above.

Recommendations

The requirements of the Habitats Regulations could be highlighted to relevant public and private partners so that the potential impacts of projects on designated sites can be considered at an early stage and mitigation incorporated in design and management where required.

All further proposals for recreation should be considered in the context of previous and future studies relating to the River Lagan. Any new strategy or plan relating to recreation on the river should be assessed to ensure that it meets the requirements of the Conservation Regulations.

1. The East Bank Development Strategy

Overview

The East Bank refers to the area alongside the river Lagan which runs from the SSE Arena car park at its northern end to the Sirocco Works site to the south and is bounded by the Short Strand to the east, Figure 1. The overall area is approximately 28 hectares with a river frontage of 1.1 km.

Our vision is that

“By 2030, East Bank will be fully woven into the fabric of the city centre. It will be lively, diverse, accessible and well connected to the city core, the River Lagan and surrounding communities; providing places to live, work and socialise.”

The Strategy contains proposals for how the area might be developed and better connected to the city centre and the communities adjacent to it. Our aim is to inform planning and investment decisions that will impact the long-term development of this area.

The spatial framework of the Strategy is based on four interlocking themes:

- Maximising the potential of development sites across the area
- Energising the River Lagan corridor
- A connected and legible East Bank
- Making streets and spaces for people

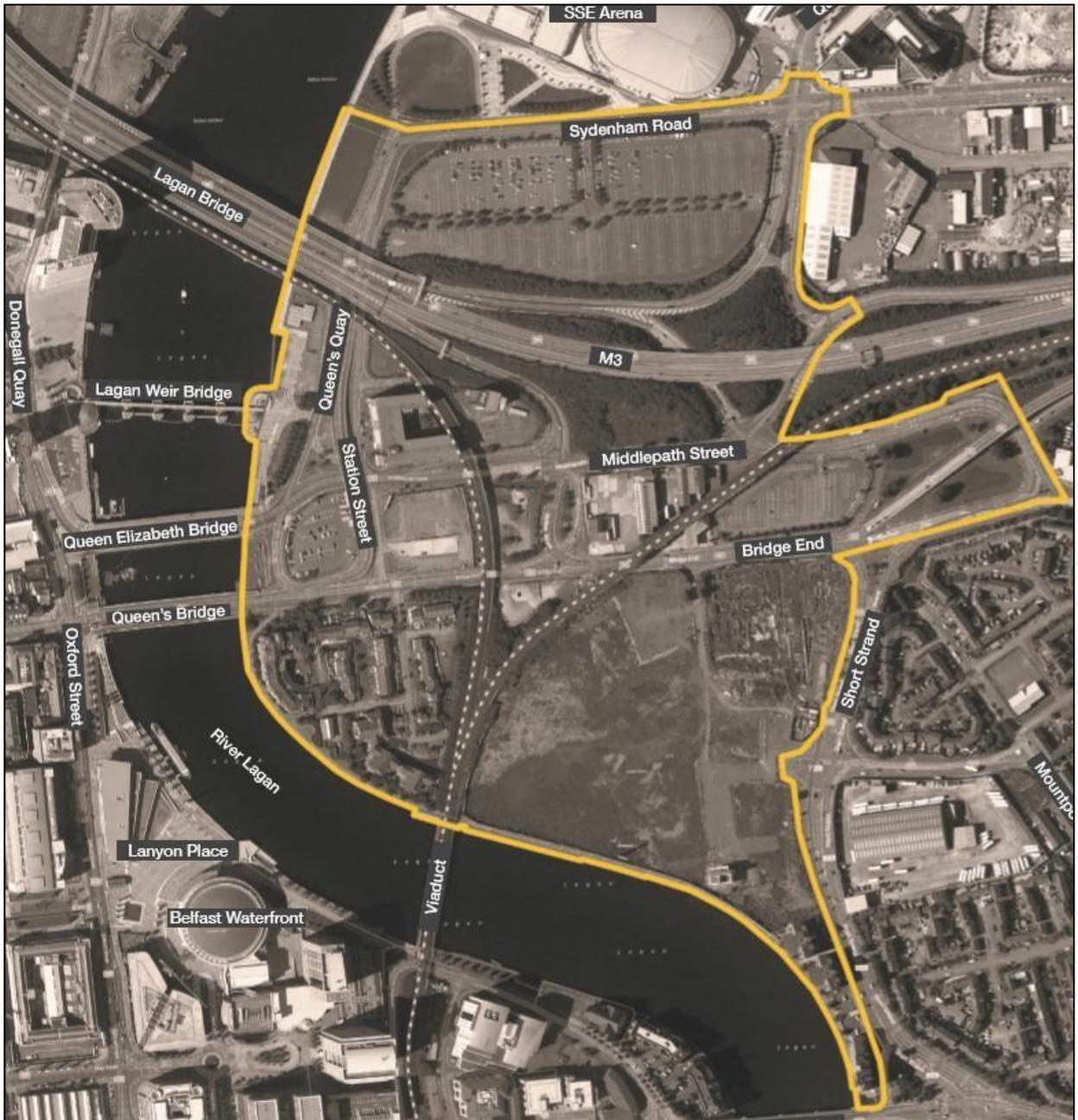
In the main, the East Bank Development Strategy seeks to environmentally improve the area and integrate this part of the City with the City Centre proper. It seeks to do this in a number of ways:

- Rationalising and reshaping the divisive impact of transport infrastructure to improve permeability and connectivity north-south and east-west;
- Enhancing linkages with the West Bank by the creation of pedestrian bridges;
- Energising the riverside via development of waterfront public realm space and civic-commercial use;
- Creating a key City Centre street in place of the Shatterzone (5.7 hectares) that characterises the central East-West spine of this area; and
- Providing key design principles for the development of sites.

The East Bank area has and is in receipt of major outline planning applications for mixed use development of land at the Odyssey Quays (6.9 hectares) and at the former Sirocco Works (6.5 hectares). Some roadworks associated with Odyssey Quays have been approved as reserved matters and work has commenced. The Department for Social Development also has Masterplan proposals for Queen’s Quay (1.3 hectares).

The Strategy presents a vision for the area so that a coordinated, joined up approach can be taken forward to deliver wider environmental, economic and social benefits for the area. The final Strategy will be used as a framework for development across the East Bank.

Figure 1: Area of East Bank Development Strategy



Context

City Centre Regeneration and Investment Strategy

In September 2015 we launched the City Centre Regeneration and Investment Strategy which outlines how we aim to grow and regenerate the city core and its surrounding areas to 2030. The strategy is based on several core principles. It will aim to:

- increase the employment population
- increase the residential population
- manage the retail offer
- maximise the tourism opportunity
- create a regional learning and innovation centre
- create a green centre, accessible to cyclists and walkers
- connect to the city around
- enhance shared space and social impact

The strategy identified five Special Action Areas one of which is Oxford Street and the Eastern Bank. The East Bank is being taken forward in its own right, however the emphasis remains to connect East Bank with the city centre across the Lagan for the benefit of both parts of the city. The East Bank Development Strategy is a key move towards implementation of the Special Action Area that has been identified in the Belfast City Centre Regeneration and Investment Strategy.

Belfast Metropolitan Area Plan

The Belfast Metropolitan Area Plan (BMAP) was a development plan prepared by the Department for the Environment for six of the former Council areas, Belfast City, Carrickfergus Borough, Castlereagh Borough, Lisburn City, Newtownabbey Borough and North Down Borough Council. BMAP was first developed as a concept in 2000. Preparation of the plan formally commenced in 2001 and an Issues Paper published for consultation. This led to the draft BMAP which was published in November 2004 for consultation. A Public Inquiry led by the Planning Appeals Commission took place in 2007/2008 with the reports released in stages until 2012.

The plan was adopted on 9 September 2014. It was however subject to legal challenge in 2014 the outcome of which went on to be appealed. In May 2017 the Court of Appeal ruled that it was *“no longer a matter of dispute by any principal, successor or notice party that the Minister’s decision to direct the formal adoption of BMAP was, for all the reasons clearly articulated by Treacy J, ultra vires. The purported adoption was accordingly of no force or effect; the draft BMAP remains in its entirety unadopted”*. The Department of Infrastructure is considering the Court of Appeal Judgment in relation to BMAP. The verdict means the Belfast Metropolitan Area Plan remains in draft form until any future government consensus is reached on its implementation. It is understood that the current position is that the Belfast Urban Area Plan 2001 is now the statutory development plan for the area with draft BMAP remaining a material consideration.

East Bank was identified in BMAP as an area for new growth in the city centre. The City Centre boundary designated in BMAP as identified on Map No. 2/001 – Belfast City Centre includes the east bank of the River Lagan between the Albert and Queen’s Bridges in order to integrate the River Lagan with the City Centre. The boundary also includes five strategic Development Opportunity Sites one of which is CC 020 - 6.14 ha Sirocco Works, Bridge End/Short Strand. Key site requirements for this include ‘A remediation scheme for the decontamination of the site shall be submitted to, and approved in writing by, the Department in consultation with the Health and Environmental Services Department at Belfast City Council’. Despite BMAP not being operational the HRA carried out in support of it is instructive in relation to the East Bank Development Strategy and is described in more detail in Appendix 5.

Preparation - the process, timetable and progress

The draft East Bank Development Strategy has been developed following extensive consultation and engagement with partners and stakeholders. To achieve this ambitions vision for East Bank, the implementation strategy will focus on collaboration with government departments and the private sector with future proofing to avoid compromising long term aspirations and forward planning. It is envisaged that changes to the road and rail infrastructure will be introduced in phases over time and each stage will require more detailed traffic modelling studies, on a localised and city-wide scale to understand the full impact of the change prior to its implementation.

2. Habitats Regulations Assessment: The Approach

Introduction

This chapter describes the overall approach taken to carry out Habitats Regulations Assessment for plans in general and how it has been applied to The East Bank Development Strategy. The tools for this assessment were developed in accordance with the Directives and Habitats Regulations described below and informed by the Habitats Regulations Handbook and further reference material (Appendix 1). Note that the guidance refers to European sites which is the same in meaning as designated sites as referred to in this report.

The Directives

These are Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora and Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. These Directives are referred to as the Habitats Directive and the Birds Directive respectively and together are called the Directives for the purposes of this report.

The overall aim of the Directives is to maintain or restore the favourable conservation status of habitats and species of community interest. Special Areas of Conservation and Special Protection Areas are designated to afford protection to habitats and species listed in the Habitats and Birds Directives. These designations form a suite of sites that are collectively known as the Natura 2000 network.

Habitats Regulations the Requirements

Habitats Regulations Assessment is a provision of Regulations 43 of The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended), hereafter referred to as the Habitats Regulations (Appendix 2). The Habitats Regulations require assessment of possible adverse effects on the integrity of European sites (Special Areas of Conservation and Special Protection Areas) as a result of plans and projects; this is also carried out for Ramsar sites. For the purposes of this report these are collectively referred to as designated sites.

Habitats Regulations Assessment – The Stages and Steps

Habitats Regulations Assessment (HRA) is normally described in four stages

- Stage 1: Screening for likely significant effects
- Stage 2: Appropriate Assessment and the Integrity Test
- Stage 3: Alternative Solutions
- Stage 4: Imperative reasons of overriding public interest and compensatory measures

The stages and steps for each are detailed in Appendix 3.

Stage 1 involves firstly deciding whether a plan or project should be subject to Habitats Regulations Assessment (Step 1). This involves reviewing the nature of the plan and its proposals to determine whether there is a requirement to carry out HRA. The following questions help determine whether the document being reviewed is a plan in the context of the Directives.

- Is the whole of the plan directly connected with or necessary to the management of a European site for nature conservation purposes?
- Is the plan a strategic development plan, local development plan, supplementary guidance?
- Is the plan a general statement of policy showing only the general political will or intention of the plan making body, and no effect on any particular European site can reasonably be predicted?
- Does the plan contain a programme, or policies, or proposals which could affect one or more particular European sites?

If through the review there is found to be a requirement for HRA those proposals with potential likely significant effects are identified along with the types of impact that they may have. Steps 2, identifying European sites, and 3, gathering information about those sites, help to identify the European sites which the plan may affect and compiles information about those sites. This information, in the form of baseline information for the council area, is included in Appendix 7.

Analysis of the information collated in steps 1 to 3 enables steps 4, discretionary discussion with the statutory nature conservation body, and 5, screening for likely significant effects on the selection features of European sites, to be carried out. If appropriate, steps 6, applying mitigation and 7, rescreening, are carried out and Stage 1, known as the test of likely significance, is completed. If on the other hand it is found that the plan is not subject to the Habitats Regulations then it is not necessary to progress beyond step 1.

A number of plans and projects closely related to the East Bank have previously been subject to Habitats Regulations Assessment. Although it is important to ensure that the current assessment uses the most recent information these HRAs can be informative and some are referred to in Appendix 5.

3. Stage 1 Screening for likely significant effects

Step 1: Deciding whether a plan should be subject to Habitats Regulations Assessment

Review of the Plan Proposals

The EC Guidance (reference in Appendix 1) does not specify the scope of a plan which should be subject to the Directive and related transposing legislation but does state that the key consideration is whether it is likely to have a significant effect. Guidance on application of HRA (reference in Appendix 1) recommends reviewing proposals against a number of criteria. These may lead to plans being exempted, eliminated or excluded from the need for HRA. The criteria are explained in more detail in Section 2 above and Appendix 4.

The nature of the East Bank Development Strategy and its proposals were therefore reviewed to determine whether there is a requirement to carry out a Habitats Regulations Assessment (HRA). The East Bank Development Strategy does not directly relate to the management of any designated site therefore it cannot be exempted from the requirement of the Habitats Regulations. The Strategy is not a strategic development plan, local development plan or supplementary guidance therefore HRA is not required on this account. The Strategy is however intended to inform planning and investment decisions that will impact the long-term development of this area and for this reason it is appropriate to carry out HRA.

The Placemaking Themes and proposed projects were reviewed to assess whether any could affect designated sites and features with the findings presented in Appendix 6. There is overlap between the themes and projects as would be expected.

The majority of the statements under the Placemaking Themes are general policy statements about design and layout. Some more specific proposals such as the way finding and information system and the 20 mph speed limit are of a type that cannot have an effect on designated sites. There are however several references to development in and around the river, for example the Lagan Loop including new footbridges and an activated waterspace. The Strategy therefore promotes new development in this area and this will be considered further.

Appendix 2 of the Stage 2 Report outlines 33 proposed projects, including sub-projects. The review was based on the comments in the table in Appendix 2 of the Stage 2 Report and on further detail elsewhere in that report. More than half of the projects are ones that are referred to but not proposed by the Strategy, for example the Odyssey Quays and Sirocco developments. There are also several proposals to rationalise transport to improve the environment which are to be subject to transport modelling. Most of the projects referred to have outline or full planning permission or are otherwise committed to or being led by other agencies such as DfI Roads (formerly Transport NI) or private developers. Some may have likely significant effects on designated sites however those will be assessed by the relevant competent authority for regulating those developments.

Some of the projects such as temporary and pop up uses on Queen's Quay and the Public Realm Design Guide and Manual will have no likely significant effect. The projects relating to the Central Spine sites are too general to assess at this stage. No effect on any designated site can reasonably be predicted for these proposals however development will require planning permission or other approvals and be subject to HRA at that stage.

There are two projects that are promoted by the Strategy which may have a likely significant effect on designated sites. These are Lagan River front Pedestrian Walkway at the Sirocco Quays to include a footbridge across the Lagan and the River Front Plaza which is linked to the wider walkway project. It is not clear whether these will be fully incorporated in the latest proposals for Sirocco which are subject to pre-application consultation at present. The revised plans do include a footbridge across the Lagan and public realm works. If they are included then the planning approval will be subject to HRA.

While there are many general statements and proposals that are too general to assess the Strategy does seek to facilitate a greater level of development that might otherwise occur and includes proposals to promote development in and around the river. The Strategy therefore does contain proposals that may affect one or more designated sites either alone or in combination with other plans or projects.

Step 2: Identifying the European sites that should be considered in the Appraisal

Baseline information on designated sites that are connected with the Belfast City Council Area is presented in the Interim Sustainability Appraisal Report accompanying the Preferred Options Paper for the Local Development Plan and included in Appendix 7 of this report. This includes sites within or adjacent to the council area, with an ecological connection such as a hydrological link, those within 15km as a precautionary approach and those that are connected by infrastructure, in particular water supply and wastewater treatment. The sites and pathways to them are detailed in Table A7.1 which provides a 'long list' of sites to be considered as follows:

- Antrim Hills SPA
- Aghnadarragh Lough SAC
- Belfast Lough Open Water SPA
- Belfast Lough Ramsar
- Belfast Lough SPA
- Copeland Islands SPA
- East Coast (Northern Ireland) Marine pSPA
- Eastern Mourne SAC
- Larne Lough SPA
- Lough Neagh and Lough Beg Ramsar
- Lough Neagh and Lough Beg SPA
- Murlough SAC
- North Channel cSAC
- Outer Ards Ramsar
- Outer Ards SPA
- Rea's Wood and Farr's Bay SAC
- Strangford Lough Ramsar
- Strangford Lough SAC
- Strangford Lough SPA
- The Maidens SAC

Step 3: Gathering information about the European sites

Information for each site on the long list identified at Step 2 was compiled in Table A7.4 to include the designation status, qualifying interests, conservation objectives and site condition. Available information on factors currently affecting sites which may be affected and vulnerabilities to potential effects of the plan is included.

Step 4: Discretionary discussions on the method and scope of the appraisal

NIEA has already provided input in relation to the Strategic Environmental Assessment and conservation objectives are published on its website therefore it was not considered necessary to consult NIEA further. NIEA comments on recent planning applications near the East Bank were also referred to on the NI Planning Portal¹.

In its response on 21 November 2017 to consultation on the SEA Screening Report for the East Bank Development Strategy NIEA provided the following advice in relation to designated sites.

Biodiversity, flora and fauna

The East Bank area is hydrologically connected to a number of European Designated Sites and will therefore require a Habitats Regulations Assessment (HRA) to be carried out alongside the SEA.

The Habitats Directive requires, inter alia, that plans and programmes undergo a HRA process to establish the likely or potential effects arising from implementation of the Plan. If the effects are deemed to be significant, potentially significant or uncertain then the plan must undergo Stage 2 Appropriate Assessment.

Marine Environment

Refers to sites already identified in the baseline environment (Belfast Lough SPA and Ramsar site and Belfast Lough Open Water SPA) and adds:

We would like to see other designated sites included here such as East Coast Marine pSPA, North Channel cSAC and The Maidens SAC.

Although the application site is not within close proximity to marine designated SAC sites, North Channel cSAC and The Maidens SAC it must be advised that these are SACs which have mobile species as a site selection feature which may be impacted. For example, seals are a site selection feature of The Maidens SAC. Seals are present in quite significant numbers within Belfast Lough and must therefore be assessed. Please note all SACs within 135km of the project/plan should be screened for Grey seals and all SACs within 50km of the project/plan should be screened for Harbour seals.

Step 5: Screening the draft / proposed plan for likely significant effects

Potential impacts and effects

Potential development impacts that could arise as a result of any plan or project which may need to be assessed in relation to designated sites and their features are listed in Table A7.2. These impacts were reviewed to determine which could arise from the Strategy. Impacts that could be a consequence of the East Bank Development Strategy are recorded and highlighted in bold on Table A7.2 and are discussed below.

In summary the potential impacts arising from the Strategy are:

- Construction: chemical impacts on water quality
- Construction: Sediment release
- Construction: noise and vibration from piling and construction
- Operation: disturbance due to increased activity
- Operation: Insufficient Wastewater treatment

Some impacts were discounted, for example aerial pollution is discounted as the Strategy in itself will not increase aerial emissions to the extent that designated sites, the nearest of which is 3.8 km, could be affected. Direct loss of habitat within designated sites will not arise nor will there be loss of supporting habitat for site selection features.

Sites and Features subject to impacts

These impacts were then reviewed in relation to the ‘long list’ of designated sites above. The findings are presented in Table A7.3. The outcome was that there is a potential pathway for impacts on the sites and features below. The conservation objectives for these sites were reviewed to assess whether these impacts could affect achievement of the conservation objectives. Links to the conservation objectives are provided in the footnotes, conservation objectives have not been published for Ramsars so the related SPA/SAC was referred to.

| | |
|---|------------------------------|
| Belfast Lough Open Water SPA ⁱⁱ | Bird features |
| Copeland Islands SPA ⁱⁱⁱ | Bird features |
| East Coast (Northern Ireland) Marine pSPA ^{iv} | Bird features |
| Larne Lough SPA ^v | Bird features |
| Outer Ards Ramsar | Bird features |
| Outer Ards SPA ^{vi} | Bird features |
| Strangford Lough Ramsar | Bird features |
| Strangford Lough SPA ^{vii} | Bird features |
| Belfast Lough Ramsar | Birds and supporting habitat |
| Belfast Lough SPA ^{viii} | Birds and supporting habitat |
| The Maidens SAC ^{ix} | Grey Seal |
| North Channel cSAC ^x | Harbour Porpoise |

There are several sites listed for bird features as Belfast Lough, which is to be subsumed in the East Coast (Northern Ireland) proposed Marine SPA, provides feeding and loafing areas for species from the other SPAs and Ramsars. Belfast Lough SPA and Ramsar include intertidal mudflats and an effect on birds and supporting habitats cannot be discounted.

Grey seals range over large distances and NIEA advised that sites within 135 km should be screened for impacts. The Maidens is 35 km away therefore potential impacts on grey seals are considered. The North Channel candidate SAC put forward to protect harbour porpoise is within 20 km of the East Bank. Harbour porpoise are known to be sighted inshore. The Inshore and Offshore Special Area of Conservation (SAC): North Channel SAC Selection Assessment Document^{xi} reports substantial groups of porpoise around the entrance of Belfast Lough between Whitehead and the Copeland Islands but does not record presence of significant numbers further into the Lough. However harbour porpoise can occur close to shore and in tidal rivers and the Ulster Wildlife Trust lists Belfast Harbour as a location to view the species. Therefore impacts on harbour porpoise are considered further.

The following discussion considers the potential effects identified on these sites and species, for each impact the finding at the end of the discussion is underlined. In the context of the Habitats Regulations a likely significant effect is an effect that cannot be ruled out on the basis of objective information. Likely in this context means there is a risk or possibility that an effect will be significant. An effect is significant if it would undermine a site’s conservation objectives.

Construction - disturbance

Noise or activity during construction and operational activities could have adverse impacts on sensitive species (marine mammals and birds in particular).

There will be developments in the East Bank that will require piling during construction which causes noise and vibration that may disturb and affect the behaviour of marine mammals and birds. The distance to bird features is over 3 km therefore they will not be affected. Although not commonly found in the area grey seal or harbour porpoise could be in the vicinity of construction.

Much of the residential and business development referred to in the Strategy is in the course of planning or has planning permission. That is therefore development that would progress irrespective of the Strategy and is not a result of it. It will be for the relevant competent authorities to ensure compliance with the Habitats Regulations.

The Strategy may facilitate additional development, particularly in the Central Spine area, by enabling greater utilisation of land and therefore it could increase the incidence of disturbance during construction. This is a temporary effect and there are accepted procedures to minimise disturbance to marine and bird species^{xiii} through the construction method and through observation of sensitive species. There is potential for cumulative effects if construction of more than one development occurs concurrently. This can be addressed through assessment of cumulative effects of projects in connection with planning permission.

Construction in or close to the River Lagan is proposed to facilitate year round activated waterspace through the introduction of moorings, leisure craft, canoes and water sports at a Riverfront plaza at the Sirocco site. Additional pedestrian space is proposed to be created in the form of extended boardwalks, projecting piers, pontoons, moorings and stepped seating areas to water. Two foot/cycle bridges across the Lagan are also proposed, one from Sirocco Quays to Lanyon Quay and one from Odyssey Quays across to City Quays development. There is also reference to provision of a water taxi service which will require landing stages. All these developments will require planning permissions and marine licencing if there are in river work and those will be assessed in relation to the Habitats Regulations.

Recreational activity on or beside the river facilitated by the above development could lead to disturbance of marine mammals. This is best considered under the following impact to avoid duplication.

It is not the place of the East Bank Development Strategy to stipulate planning conditions and there are ways to enforce accepted measures to minimise noise and vibration impacts through planning or other regulations. Cumulative effects of construction disturbance can be avoided and should be considered when assessing projects. Therefore the impact of disturbance during construction is not considered further in this assessment.

Operation - disturbance

Increased human activity, including recreation, close to sensitive habitats and species may cause disturbance that could impact negatively on these features and lead to displacement of species from certain locations.

The Strategy could conceivably result in disturbance in and beyond the East Bank with potential to impact on birds in Belfast Lough SPA and Ramsar and on grey seal or harbour porpoise. The harbour and inner Belfast Lough is a busy shipping and recreational area with people, traffic and industry on its shores therefore any of these features are likely to have a high tolerance of disturbance. It is advisable however to avoid significant additional disturbance as a result of the Strategy.

Bringing activity to the water space, waterside public spaces and waterside development is proposed to create a new city centre destination. The Lagan Loop concept promotes the creation of continuous walkway loop linking east and west banks, key attractions and new pedestrian and cycle bridges. The Strategy therefore seeks to make the river a focal point for leisure and recreation both along the riverbank and on the water. There is also reference to provision of a water taxi service. Therefore the Strategy will inevitably increase disturbance in and around the river however the location, nature and extent of this activity cannot be assessed at this early stage.

There are a number of other strategies and studies that also inform development in and around the Lagan. A Biodiversity Study for the Impounded River Lagan^{xiii} was published by the Department for Communities in 2013. The Council developed the 'Back to the River' strategy in 2014^{xiv} to set out management and development of the Lagan corridor as an environmental and community resource to help drive economic and social regeneration of the city and its rural hinterland. It sets out the vision for the area which refers to the East Bank and also includes 'greater recreational use of the river itself especially in the area from Abercorn Basin to the Lagan Gateway as port activities move downstream'. It identified areas of intervention to link up the Tow Path on the East Bank upstream of Albert Bridge and a water sports activity hub around Shaftesbury Community Recreation Centre.

The Belfast: Integrated Tourism Strategy 2015-2020^{xv} highlights opportunities for developing the River Lagan as a green artery and the Harbour and Lough and Belfast Hills for recreation. The Local Development Plan Topic Paper: Open Space, Sport & Outdoor Recreation^{xvi} recognises that the river has potential for angling, kayaking, canal barges, walking and cycling trails and also notes its importance as part of a network of blue and green infrastructure through the city.

There is a risk that water based recreation development will not progress in a coordinated way on both sides of the Lagan or take into account existing activities such as Bryson Water Sports just 100m upstream of the East Bank area, upstream initiatives such as the Lagan Gateway Project or downstream projects around Titanic Quarter. This could result in development that is not in optimal locations; provides an oversupply and therefore causes unnecessary development; or results in conflicts between current and new river users.

There are physical and regulatory controls on boating in place which can provide a framework for avoiding conflict with marine mammals. The Department of Communities is responsible for the impounded River Lagan between Stranmillis Weir and Lagan Weir. The River Lagan Tidal Navigation and General Bye-laws (Northern Ireland) 2007 specify a normal speed limit of 10 kilometers per hour (6.5 knots). Boats navigating the river must adhere to the Bye-Laws. Belfast Harbour Commissioners have responsibility for the area downstream of Lagan Weir and provide advisory guidance in the form of Notices to Mariners which apply to all users. The Wildlife and Natural Environment Act (Northern Ireland) 2011 specifically makes it an offence for any person to intentionally or recklessly disturb grey seals.

The Lagan Weir is only navigable through the designated navigation opening for about 2.5 hours either side of the high tide and only with the prior permission of weir control. During normal tidal and river conditions, the weir gates are raised on each falling tide to impound the river upstream. The gates are lowered again when the tide rises above the impounded control level for the river. This is a practical constraint on boating traffic that will reduce the potential for disturbance as a result of the Strategy to marine species downstream of the weir.

The existing constraints and controls on water based recreation act together to limit the potential for disturbance to marine species as a result of any increased level of activity on or beside the East Bank. As the Strategy states an aspiration to ‘energising the River Lagan corridor’ rather than providing specifics about the location, nature and extent of riverside development it cannot be further assessed at this time.

It is recommended that, as part of phased implementation, proposals for recreation should be considered in the context of previous and future studies relating to the River Lagan including those referred to above. Any new strategy or plan relating to recreation on the river should be assessed to ensure that it meets the requirements of the Conservation Regulations.

Construction – pollution of water

There is potential for an increased transport of chemical contaminants reaching the aquatic environment during the construction of development associated with the plan and causing pollution and deterioration of water quality.

Belfast Lough SPA and Ramsar include intertidal mudflats and an effect on birds and supporting habitats cannot be discounted. A major pollution incident could have a conceivable impact on bird habitat although this would be likely to be a short duration event rather than a persistent form of pollution. It is not considered that the construction impacts could affect bird features in the other SPAs or Ramsars as any impact would be temporary and de minimus taking account of distance to and the extent of the Lough. It is however advisable to avoid significant pollution as a result of projects referred to in the Strategy.

There has been significant former industrial activity on the East Bank including engineering works, chemical works, a coal yard and railway yard. There is potential for contaminants to become mobilised and a pathway to designated sites created during construction through excavation or piling. There are standard approaches that can be required by planning conditions for assessing the risk of contamination and carrying out remediation through Model Procedures for the Management of Land Contamination (CLR11) as advised by NIEA^{xvii}. An example of such conditions, required to protect human health and environmental receptors, can be found on the Decision Notice for Odyssey Quays Z/2009/1309/O. Conditions relating to contamination are only appropriate to apply at the planning application stage. It is therefore considered that the risk of contamination can be avoided on a case by case basis. Although the Strategy may increase the extent of development on the East Bank, providing that all proposals are subject to HRA and the requirement for risk assessment and remediation conditioned where applicable, then cumulative effects on designated sites cannot occur.

The construction element of the riverside works has potential for release of contaminated sediments. Any in river works would be subject to a marine licence under Part 4 (Marine Licensing) of the Marine and Coastal Access Act 2009. All riverside construction below the MHWST must apply for a Marine Construction Licence from the Marine Licensing Team, NIEA. This may result in the need for a preliminary risk assessment and drainage assessment to be provided in support of applications and the provision of a further assessments and a Construction Environmental Management plan in advance of construction according to the site-specific circumstances. The incorporation of Sustainable Urban Drainage systems (SUDs) within the storm drainage systems of new development is good practice where ground conditions are suitable but is not necessarily justified in as a requirement of Habitats Regulations Assessment.

It is not the place of the East Bank Development Strategy to stipulate planning conditions and there are accepted ways to enforce appropriate and well-tested measures to minimise chemical pollution impacts. Therefore the impact of chemical pollution arising during construction is not considered further in this assessment.

Construction and operation – sediment release

Surface run off and sediment release from construction works and operational activities associated with a plan or project can increase sediment deposition and turbidity within aquatic systems. This can adversely impact on associated wildlife by causing shading effects that can inhibit plant and algal growth and smother organisms thereby limiting productivity and survival.

A major sediment release could have a conceivable impact on bird habitat in Belfast Lough although this would be likely to be a short duration event and very small in terms of extent or severity. It is however advisable to avoid significant sediment release as a result of the Strategy.

The drive to promote riverside development means that there could be some disruption of river sediments if any underwater construction takes place. It is also possible that localised dredging of the river would be required to facilitate water-based recreation.

The Department for Communities has a statutory obligation to maintain a minimum navigable depth of 1.5m throughout the impounded River Lagan. A major dredging exercise took place between September 2010 and April 2011 and saw the removal of some 60,000 m³ of silt from the 4.5 km stretch of impoundment. The date of the next comprehensive dredging is anticipated in 10-15 years from the last exercise.

The need for dredging is unlikely and it has been established, through the Lagan dredging referred to above as well as dredging in Belfast Harbour, that dredging and offshore disposal of material can be managed so as to avoid adverse effects on designated sites. Given the uncertainty about whether the Strategy will necessitate any additional dredging over and above the current maintenance programme and that it would require a Marine Licence and be subject to HRA this impact is not considered further.

Operation – insufficient wastewater treatment capacity

Increased demands on wastewater treatment works could lead to increased nutrient enrichment of waterbodies which could change water quality and increase eutrophication. This in turn could have a harmful effect on the ecological functioning of these systems.

Belfast Lough provides feeding and loafing areas for species from the other SPAs therefore a number of sites are listed for this potential impact. The conservation objectives for SPAs do not rank the severity of impacts but the document for Belfast Lough cites a threat as 'Alteration of habitat quality through diminution of water quality or invasive species.' It also notes 'Historically impacted by industrial and sewerage effluent. Vulnerable to pollution incidents from both industry and shipping.' The Strategy will not increase industry or shipping.

The Sustainability Appraisal Scoping Report for the Belfast Preferred Options Paper^{xviii} suggests that there is conflicting information available about the capacity of wastewater treatment for Belfast and overall a concern that growth figures cannot be supported with current infrastructure. It reports that the Living With Water Programme states 'The main WWTW (Waste Water treatment works) serving Belfast is above its theoretical design capacity.' Elsewhere 'As regards Kinnegar, NI Water has indicated that it expects that the planned growth will be able to be accommodated (capacity confirmation awaited from PFI operator). NIEA are currently highlighting concerns regarding further connections to Belfast WWTW, in our planning responses.'

The Council's preferred option for growth took into account waste water treatment capacity but it concludes 'However, the significant future growth of the Plan area will require careful consideration and assessment to address potential capacity issues.' It goes on to say 'It is recognised investment/ alternative methods of treatment will be required during the plan period to support that level of growth projected. The ongoing engagement will ensure that the plan development is informed by the most up to date information as it becomes available and if appropriate, addressed through plan review and phasing.'

The approach taken in BMAP, in light of its HRA, noted that adequate WWTW was likely to be available but it included the proviso: 'If at any point during the Plan period it is deemed that WWTW capacity or associated infrastructure is not sufficient to cope with a proposed development at the time of a planning application or where unsatisfactory intermittent discharges have been identified, the developer will be required to ensure that there will be no adverse impact on any European Site as a result of a lack of waste water treatment provision at any stage of the development process.'

The Habitats Regulations Assessment for BMAP, Sustainability Appraisal for the Local Development Plan (LDP) and NI Water responses suggest that there is short-term capacity for wastewater treatment for new development. The LDP Plan Strategy, a draft of which is due for publication this year with a HRA, will need to address wastewater treatment capacity to ensure that no adverse effects on designated sites can arise from the plan.

It is not the place of the East Bank Development Strategy to stipulate requirements for Waste Water treatment. However all development must be within the levels set by extant or future adopted development plans. In addition NI Water is a statutory consultee for planning applications and NIEA is a statutory consultee for specified planning applications. This will ensure that development will not be permitted unless there is sufficient capacity. Therefore this impact will not be further considered in this assessment.

4. Findings of Habitats Regulations Assessment

Outcome of screening for likely significant effects

In summary the impacts that may arise as a result of projects identified in the East Bank Development Strategy are important to highlight. Disturbance and pollution arising during construction can be managed by conditions applied to planning permissions or controls applied through other regulations. Likewise the issue of waste water treatment can be addressed on a project by project basis and development would not be allowed to proceed unless there is sufficient treatment capacity. This will also be reflected at a strategic level through the LDP. The last potential impact identified is disturbance due to human activity that could lead to displacement of sensitive species from certain locations. As the Strategy states an aspiration rather than providing specifics about the location, nature and extent of riverside development it cannot be further assessed at this time however a recommendation is made to ensure that new development, in combination with other recreational development, does not have an adverse effect on designated sites.

Findings

The East Bank Development Strategy was reviewed in light of the assessment requirements of regulation 43 of The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 by Belfast City Council which is the body responsible for publishing the plan. Belfast City Council is also the competent authority responsible for any assessment of the East Bank Development Strategy as required by the Habitats Regulations.

Having reviewed all proposals within the Strategy it is concluded that it promotes some additional development in the East Bank that could have a significant effect on designated sites and their selection features. Much of the residential and business development referred to in the Strategy is in the course of planning or has planning permission. That is therefore development that would progress irrespective of the Strategy and is not a result of it. It will be for the relevant competent authorities to ensure compliance with the Habitats Regulations.

Many elements of the Strategy relate to general principles of development, layout and design and will not increase the level of development. Those elements that could have an effect are largely subject to planning permission and other regulations for which the relevant competent authority will need to ensure compliance with the Habitats Regulations. For those impacts with a potential effect there are accepted ways to enforce appropriate and well-tested measures to minimise impacts such that they cannot have a significant effect or contribute to a significant effect in combination with other projects. While there is a clear intention to increase recreation in and around the river there is too little detail to assess the potential impacts. There are existing constraints that will limit the level of disturbance that could arise. The assessment is completed at this stage therefore stage 2 appropriate assessment is not required.

Recommendations

The requirements of the Habitats Regulations could be highlighted to relevant public and private partners so that the potential impacts of projects on designated sites can be considered at an early stage and mitigation incorporated in design and management where required. It is recommended that recreation in the area is considered in the context of recreation in the wider Lagan and Belfast Harbour area and any future recreation plan or strategy is assessed for compliance with the Habitats Regulations.

Glossary

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| Adverse effect on site integrity | An effect on the qualifying features of a European site which would undermine the achievement of the conservation objectives for that site and which would have a negative effect on the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitats, complex of habitats and/or the levels of populations of the species for which the site is or will be designated. |
| Competent Authority | For the purposes of the Habitats Regulations the expression “competent authority” includes government departments, district councils and statutory undertakers, and any trustees, commissioners, board or other persons who, as a public body and not for their own profit, act under any statutory provision for the improvement of any place or the production or supply of any commodity or service. |
| Designated site | Collective term for this report that includes SACs, SPAs, cSACs, pSPAs, SCIs and Ramsar sites. |
| The Directives | Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora and Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. These Directives are referred to as the Habitats Directive and the Birds Directive respectively and together are called ‘The Directives’ for the purposes of this report. |
| European sites | Collective term referred to in guidance that includes SACs, SPAs, cSACs, pSPAs, SCIs and Ramsar sites (although the latter is a wider international designation). |
| Favourable Conservation Status | In summary conservation status is favourable when conditions are right to sustain habitats and the population and range of species. This term is fully defined in the Habitats Directive. |
| Habitats Regulations | The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) |
| In combination | Refers to effects that may be likely significant effects when considered in combination with effects from other plans or projects. |
| Likely significant effect | An effect that cannot be ruled out on the basis of objective information. Likely in this context means there is a risk or possibility that an effect will be significant. An effect is significant if it would undermine a site’s conservation objectives. |
| Natura 2000 | The European network of special areas of conservation and special protection areas under the Wild Birds Directive, provided for by Article 3(1) of the Habitats Directive |
| Ramsar site | Sites listed under the Convention on Wetlands of International Importance adopted at Ramsar, Iran in 1971. As a matter of policy these sites are treated in the same way as European sites. |

Abbreviations

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| BMAP | Belfast Metropolitan Area Plan |
| cSAC | Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted. |
| DAERA | The Department of Agriculture, Environment and Rural Affairs |
| Dfi | Department for Infrastructure |
| DS | Key development site projects |
| HRA | Habitats Regulations Assessment |
| LDP | Local Development Plan |
| MHWST | Mean High Water Spring Tide |
| NIEA | Northern Ireland Environment Agency |
| PR | Key public realm projects |
| pSPA | Proposed SPA |
| SAC | Special Area of Conservation (Site that has been adopted by the European Commission and formally designated by the government of the country in whose territory the site lies.) |
| SCI | Site of Community Importance (Site that has been adopted by the European Commission but not yet formally designated by the government of the country.) There are none currently linked to Belfast. |
| SPA | Special Protection Area |
| T&M | Key transport and movement projects |
| TNI | Transport Northern Ireland (referred to in Stage 2 report, now Dfi Roads) |

Appendix 1: References

Further references are provided in the end notes.

In the absence of specific Northern Ireland guidance on carrying out Habitats Regulations Assessment for plans and programmes reference has been made to other sources of guidance and relevant documents including those listed below.

Habitats Regulations Appraisal of Plans Guidance for Plan-Making Bodies in Scotland Version 3.0, (2015) Scottish Natural Heritage (Initially Prepared by David Tyldesley and Associates)

Tyldesley, D., and Chapman, C., (2013) *The Habitats Regulations Assessment Handbook*, December 2017 edition UK: DTA Publications Ltd

JNCC Standard data forms (2015) generated from the Natura 2000 Database submitted to the European Commission on 22/12/2015. jncc.defra.gov.uk/page-0

NIEA Conservation Objectives www.daera-ni.gov.uk/topics/biodiversity-land-and-landscapes/protected-areas

Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2001), European Commission Environment DG

Belfast Metropolitan Plan Habitats Regulations Assessment, (2015), Department of the Environment Northern Ireland
www.planningni.gov.uk/index/policy/development_plans/devplans_az/bmap_2015.htm

Appendix 2: The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended), Regulation 43

Assessment of implications for European site

43.—(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—

(a) is likely to have a significant effect on a European site in Northern Ireland (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of the site,

shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives.

(2) A person applying for any such consent, permission or other authorisation shall provide such information as the competent authority may reasonably require for the purposes of the assessment.

(3) The competent authority shall for the purposes of the assessment consult the Department and have regard to any representations made by it within such reasonable time as the authority may specify.

(4) The competent authority shall, if it considers it appropriate, take such steps as it considers necessary to obtain the opinion of the general public.

(5) In the light of the conclusions of the assessment, and subject to regulation 44, the authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site.

(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority shall have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposed that the consent, permission or other authorisation should be given.

(7) This regulation does not apply in relation to a site which is a European site by reason only of regulation 9(1)(c) (site protected in accordance with Article 5(4)).

Appendix 3: The Approach to Habitats Regulations Assessment for Plans

Stage 1: Screening for likely significant effects

Step 1: Deciding whether a plan should be subject to Habitats Regulations Assessment

This involves considering the nature of the plan and its proposals to determine whether there is a requirement to carry out a HRA. If in the review there is found to be a requirement for HRA those proposals with potential likely significant effects are identified along with the types of impact that they may have. If on the otherhand it is found that the plan is not subject to HRA then it is not necessary to progress beyond this step.

Step 2: Identifying the European sites that should be considered in the Appraisal

European sites that are within the plan area, within a zone of influence beyond the plan area or connected to the plan area though ecology or infrastructure are identified creating a long list of sites. This is presented in Appendix 7 for the East Bank Development Strategy area.

Step 3: Gathering information about the European sites

Information for each site on the long list identified at Step 2 is compiled to include the designation status, qualifying interests, conservation objectives and site condition. Available information on factors currently affecting sites which may be affected and vulnerabilities to potential effects of the plan is included.

Step 4: Discretionary discussions on the method and scope of the appraisal

The Statutory Nature Conservation Body, represented by the Northern Ireland Environment Agency (NIEA) of the Department of Agriculture, the Environment and Rural Affairs (DAERA) may be consulted informally to ensure that the information at Step 3 is up to date and reflects known issues for the European sites. This provides the opportunity to invite comment on the scope of the HRA and potential in-combination considerations.

Step 5: Screening the draft / proposed plan for likely significant effects

This step is divided into a higher level review of proposals against sites followed by a detailed assessment of proposals and their potential impacts against site qualifying features. Presentation of this step may vary according to the complexity and spatial scale of the plan under consideration.

5a. Those proposals identified at Step 1 as having potential likely significant effects are assessed in relation to the long list of sites from Step 2. This is presented as a matrix of potential impacts against sites in which impacts are categorised as having no likely significant effect, a likely significant effect or an uncertain effect. Some of the potential effects identified at Step 1 may be discounted at this stage if there is no pathway by which they could impact on a European site or its selection features or because the location or scale is such that any effect would be de minimus. The outcome of this part is a short list of proposals and a short list of sites for which more detailed assessment is required.

5b. A detailed assessment considers the potential modes of impacts against all site selection features for short listed sites. This identifies whether there are likely significant effects and whether, taking account of existing mitigation, residual effects are removed, minor and insignificant, or significant.

Step 6: Applying mitigation measures at screening stage to avoid likely significant effects

Plan preparation and Habitats Regulations Assessment are normally iterative processes allowing for the incorporation of mitigation to avoid likely significant effects. Where appropriate mitigation can be identified at this stage and specified in the plan.

Step 7: Rescreen the plan and decide on the need for appropriate assessment

Step 5b is updated to reflect any additional mitigation and the residual effects. If it is found that there are no residual effects for any qualifying feature in any site then the HRA may be concluded allowing a Statement of Finding of No Likely Significant Effects under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended).

If there are residual likely significant effects, either alone or in-combination, then the sites and features which may be affected and potential impacts should be summarised in preparation for Stage 2.

Stage 2: Appropriate Assessment and the Integrity Test

Step 8: The appropriate assessment

The summary from Step 7 is the starting point for the appropriate assessment. Step 8 assesses whether any likely significant effect could lead to an adverse effect on site integrity for each site. Where it is found that there could be such an adverse effect then measures are identified to remove any potential for adverse effects. This may include case-specific policy restrictions or caveats; adding mitigation in a further plan that will deliver the current plan; removing proposals that could have an adverse effect on site integrity; specific mitigation plans or a large scale mitigation strategy which includes measures to mitigate adverse effects of the current plan.

Step 9: Amending the plan until there would be no adverse effects on site integrity

Any mitigation identified in Step 8 is incorporated in the plan.

Step 10: Preparing a draft of the Habitats Regulations Assessment Record

This is a draft report which records the HRA and supporting evidence.

Step 11: Consultation

If the HRA is concluded at Step 1 then a record of the review of the need for HRA is prepared which states whether the plan has been eliminated, excluded or exempted from the need for further assessment under the Habitats Regulations. Consultation is not required on the record in these circumstances. If a draft plan is subject to consultation then a draft of this review may be included in the consultation with a note that it will be updated to take account of any changes in the proposals or European sites before the plan is finalised.

If the HRA is concluded at Step 7 the HRA Report with a Statement of Finding of No Likely Significant Effects is published. Consultation is not required on this Stage 1 Test of Likely Significance in these circumstances however it is recommended that the record is published as a supporting document for the plan. If the draft plan is subject to consultation a draft Stage 1 HRA Report may be included in the consultation with a note that it will be updated to take account of any changes in the proposals or European sites before the plan is finalised.

If the HRA progresses to Step 10 then NIEA must be consulted on a draft Stage 2 HRA Report (also known as an Appropriate Assessment). Other stakeholders such as managers of European sites should be consulted where appropriate. Public consultation is not required on the draft Stage 2 HRA Report however it may be included as a supporting document for any public consultation on the draft plan with a note that it will be updated to take account of any changes in the proposals or European sites before the plan is finalised.

Step 12: Proposed modifications

Representations by NIEA and other consultees are recorded with a note on if and how they have been addressed. Further mitigation identified in Step 11 is incorporated in the plan.

Step 13: Modifying and completing the appraisal record

Steps 8 – 10 are updated to reflect any additional mitigation and adverse effects reviewed. If it is found that there are no adverse effects on site integrity then the HRA may be concluded and a Stage 2 HRA Report published to include a Record of No Adverse Effect on the Integrity of Any European Site under the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended).

Stage 3: Alternative Solutions

If Stage 2 Appropriate Assessment finds that there would be an adverse effect on site integrity then alternative solutions which are financially, legally and technically feasible need to be considered further.

Alternative solutions are already considered in preparation of many plans, for example through the Preferred Options Paper for Local Development Plans and in carrying out Strategic Environment Assessment which requires consideration of reasonable alternatives. Compliance with regional policies and strategies also means that environmental effects will have been taken into account. It is therefore rare for HRAs for plans to progress beyond Stage 2.

Stage 4: Imperative reasons of overriding public interest and compensatory measures

In the event that there is an imperative reason of public interest which overrides the risk and harm to sites, and priority features where appropriate, then compensatory measures to protect the overall coherence of the Natura 2000 network must be identified, delivery detailed and the government notified. As already noted it is rare for HRAs for plans to progress beyond Stage 2.

Appendix 4: Criteria for assessing whether a plan is subject to the Habitats Regulations

1. General Policy Statements

These include:

- General strategic and political aspirations (often includes plan objectives)
- Ambitions which state a direction without details
- General criteria based policies, for example relating to design, social considerations, public safety, which do not relate to measures that may protect or affect European sites.

If the whole plan falls into this category and does not include detail about how it will be delivered then it is reasonable to record that it would not be likely to have a significant effect and not to assess it any further under the Habitats Regulations.

2. Plans or projects referred to but not proposed

- Existing projects or plans that will support delivery of the current plan (may include infrastructure plans which have a bearing on the current plan but are not delivered by it)
- Projects or plans in preparation or proposed to be prepared to support the current plan but which are not included within it (these should be considered under the Habitats Regulations by the relevant competent authority)
- Existing projects, plans or programmes which are referenced in the current plan but which do not necessarily support its delivery
- Plans or projects that would be likely to proceed under another plan irrespective of the current plan.

If the current plan will influence other projects or plans, for example by adding detail, then further consideration is required. Development that is an inevitable consequence of the current plan also requires further consideration although this may not be necessary if it has been or will be subject to HRA.

3. No likely significant effect

- a. The proposal or policy is intended to protect the environment and in doing so will not be likely to have a significant negative effect.
- b. Proposals or policies that will not lead to development or other change or include a presumption against effects on European sites.
- c. Proposals which may bring about change but could have no conceivable effect for example as there is no pathway to a European site or effects are likely to be positive and could not undermine conservation objectives. Baseline information about European sites such as that in Appendix 7 should be taken into account to ensure all pathways and links with qualifying features have been considered.

4. Proposals too general to assess

- The effect cannot be predicted because the policy is too general and, for example, how and where it will be implemented is unknown.
- Broad proposals where the implementation will be detailed and can be assessed at a later stage

These do not apply if the scale of the proposal or constraints mean it will be difficult to accommodate development without impacting a European site.

5. Potential minor effects

- Proposals which may bring about change but that change would be insignificant on its own for example due to distance, duration or scale. These will be reviewed for potential in combination effects.
6. Potential significant effects
- Potential negative effects that cannot be confirmed to be insignificant on the basis of objective information without mitigation.

Appendix 5: Habitats Regulations Assessment – The Belfast Context

The East Bank Development Strategy sits in the context of other plans including the Regional Development Strategy 2035 and the Belfast Metropolitan Area Plan (BMAP) 2015. While the previously adopted BMAP does not have any legal force as described in Section 1 it is the only plan for the area which has been subject to Habitats Regulations Assessment. The HRA was not published alongside or reflected in the draft BMAP. It was however published alongside BMAP and its findings were incorporated in the previously adopted BMAP. Despite BMAP not being operational the HRA is instructive in relation to East Bank Development Strategy.

BMAP, covered six council areas and therefore is much more extensive than the Belfast City Council or the East Bank. However the HRA did consider urban development the nature of which is comparable to that proposed for the area of the Strategy.

The BMAP HRA identified that the following impacts could have a potential adverse effect on site integrity of one or more designated sites.

- Aerial pollution
- Cumulative impact of increased boating activity
- Increased disturbance levels
- Loss of suitable foraging / feeding / roosting habitat
- Water quality
- Settlement Limits

The sites identified as potentially being adversely affected by one or more of these impacts were

- Antrim Hills SPA
- Belfast Lough SPA
- Belfast Lough Ramsar
- Belfast Lough Open Water SPA
- Copeland Islands SPA
- Larne Lough SPA
- Larne Lough Ramsar
- Lough Neagh and Lough Beg SPA
- Lough Neagh and Lough Beg Ramsar
- Montiaghs Moss SAC
- Outer Ards SPA / Ramsar
- Strangford Lough SAC
- Strangford Lough SPA
- Strangford Lough Ramsar

Further sites have been proposed or designated since the HRA was completed.

The Belfast Local Development Plan (LDP) will be subject to HRA. A draft Plan Strategy will be prepared taking account of representations on the POP and any further studies. Following further consultation and assessment, including Habitats Regulations Assessment, and Independent Examination the Plan Strategy will be finalised and adopted. This will be assessed in the HRA for the Plan Strategy.

HRAs for a number of projects related to the East Bank were referred to and informed this assessment. Examples are for the Lagan Gateway Project (LA04/2016/0041/F), construction of a containment bund for the disposal of marine TBT contaminated silt from Belfast Harbour (LA04/2015/0190/F) and Belfast Power Station (LA04/2017/0878/F).

Appendix 6: Detailed Review of East Bank Development Strategy Proposals

Table A6.1 Assessment of Placemaking Themes

Note more than one category may apply, not all have been listed

| Theme delivery | Category | HRA Finding |
|--|--|---|
| Maximising the potential of development sites across the area | | |
| Ensure mixed use development including offices, residential, leisure, bars, restaurants | 1. General Policy Statement | This informs the composition rather than the quantity of development. |
| Active ground floor building & destination uses | 1. General Policy Statement | This informs design and composition rather than the quantity of development. |
| Secure high quality urban design & architecture including taller buildings in appropriate locations | 6. Potential significant effects | This largely informs the composition rather than the quantity of development. The promotion of taller building could exacerbate the requirement for piling and associated disturbance. |
| Proactively guide and shape proposals for Queen's Quay & Sirocco Quays sites | 1. General Policy Statement | This informs design and composition rather than the quantity of development. |
| Create a range of employment opportunities which attract people and investment to the area | 1. General Policy Statement | This informs design and composition rather than the quantity of development. |
| Provide a diverse range of housing tenures and types to attract people to live in the city centre and contribute to its vitality | 1. General Policy Statement | This informs design and composition rather than the quantity of development. |
| Design outdoor streets, walkways and spaces so that they can host a range of activities during the day and into the evening | 1. General Policy Statement | This informs design and composition rather than the quantity of development. |
| Ensure continuity of building frontage along all key routes and streets | 1. General Policy Statement | This informs design and composition rather than the quantity of development. |
| Promote development density given walking, cycling and public transport connectivity | 6. Potential significant effects | This partly informs design and composition. It could also lead to a greater level of development than currently planned by enabling better utilisation of land. |
| Energising the River Lagan corridor | | |
| Promote the Lagan Loop – a continuous pedestrian walkway linking east and west banks, new and existing destinations and attractions | 6. Potential significant effects. | This will have the potential for impacts from pollution and disturbance during construction and may cause disturbance in use. |
| Introduce temporary, pop up and permanent uses to bring activity to the walkway at key locations | 3. No likely significant effect | Unlikely to lead to construction or additional disturbance to an extent that would affect marine mammals. |
| Facilitate year round activated waterspace via the introduction of moorings, leisure craft, canoes and water sports | 6. Potential significant effects | This may increase the level of water sports in this area with potential for longer term disturbance affecting the behaviour of marine mammals. |
| Water taxi service with multiple landing stages | 6. Potential significant effects | This may increase the level disturbance and affect the behaviour of marine mammals. |
| Ensure high quality frontage development and public realm | 1. General Policy Statement | This informs design and composition rather than the quantity of development. |

| Theme delivery | Category | HRA Finding |
|--|------------------------------------|--|
| Provide additional pedestrian space via extended board walks, projecting piers, pontoons, moorings and stepped seating areas to water | 6. Potential significant effects | This may increase the level of water sports in this area with potential for longer term disturbance affecting the behaviour of marine mammals. |
| A connected and legible east bank | | |
| Establish a coherent and high quality north – south pedestrian link from Sirocco riverfront to the Titanic Quarter. | 6. Potential significant effects | Potential for impacts from pollution and disturbance during construction of the associated development at Sirocco Quays and may cause disturbance in use. |
| Relocate the Titanic Quarter station to a more central and accessible location. | 4. Proposals too general to assess | This is subject to transport modelling therefore the viability of this project and extent and impact of development cannot be assessed at this stage. |
| Improve east-west pedestrian and cycle links to riverside and city centre including new bridge links. | 6. Potential significant effects | This will have the potential for impacts from pollution and disturbance during construction and may cause disturbance in use. |
| Extend wayfinding and information system provision along primary pedestrian routes, at bus stops and water taxi landing stages. | 3. No likely significant effect | This is not likely to require substantive construction although there may need to be some provision of servicing if a power supply connection is required. |
| Facilitate a creative approach to lighting the public realm, bridges and other structures, and buildings to create a more welcoming image to first time or occasional visitors and help people to find their way around more easily. | 3. No likely significant effect | This is not likely to require substantive construction although there may need to be some provision of servicing if a power supply connection is required. There is no reported evidence of seals being deterred by artificial light and any impact would be likely to be de minimus in the context of the number of individuals affected. |
| Making streets and spaces for people | | |
| Rationalise & rebalance highway infrastructure enabling strategic access but transforming the pedestrian, cycle and public transport experience. | 4. Proposals too general to assess | This is not likely to have a long term effect but, depending on the location and nature of the rationalisation, there could be some new infrastructure construction. |
| Promote pedestrian first routes through key development sites and reduce the detrimental impacts of the vehicular traffic passing through the area or accessing it. | 1. General Policy Statement | This informs design and layout rather than the quantity of development. |
| Provide high quality public realm, active ground floor building uses. | 3. No likely significant effect | This informs design and layout rather than the quantity of development. |
| Introduce 20mph speed limits across the area and implement two way routing to help reduce vehicular speeds and create more civilised street environments. | 3. No likely significant effect | This informs road layout rather than the quantity of development. |
| Open up opportunities for recreational and sporting use of the river. | 6. Potential significant effects | This will have the potential for impacts from pollution and disturbance during construction and may cause disturbance in use. |

Table A6.2 Assessment of Key Projects in East Bank Development Strategy Appendix 2

| No. | Project | Phasing | Delivery | Comments | Category | HRA Finding |
|---|--|---------|---|---|---|--|
| Note: S=Short Term, M=Medium Term, L=Long Term, T&M=Transport and movement projects, KS = Key Development Sites, KR=Key Public Realm Projects, DfI Roads replaces TNI | | | | | | |
| Key Transport and Movement Projects | | | | | | |
| T&M1. | Integrated multi modal transport modelling, business case and funding bids preparation | S | Belfast City Council Department for Infrastructure Roads | Refinement of integrated scenarios and their detailed testing. Selection and development of preferred option, development of business case and funding bids, detailed design of construction phases | 2. Plans or projects referred to but not proposed | This project may lead to the alteration of existing transport infrastructure or the construction of new infrastructure however this is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. |
| T&M 2. | Introduction of a new car parking standard for all new development in the East Bank area | S | Belfast City Council | In partnership with Department for Infrastructure Roads the development and adoption of a new car parking standard as part of the Local Plan Framework | 1. General Policy Statement | No effect on designated sites. |
| T&M 3. | Middlepath Cycle path | S | Department for Infrastructure | Implementation of proposed cycle path | 2. Plans or projects referred to but not proposed | Modifications to road to facilitate pedestrian movements and control the speed of traffic in conjunction with the Middlepath, Belfast cycle facilities. Has planning permission therefore not appropriate to consider in this HRA. |
| T&M 4. | Bus Rapid Transport Network | S | Department for Infrastructure | Implementation of the BRT network in the area linking SSE Arena, Titanic Visitor Centre and NI Science Park to the city centre | 2. Plans or projects referred to but not proposed | This project is in the process of delivery with a target of becoming operational in late 2018. |
| T&M 5. | Odyssey Quays development | S/M | The Odyssey Trust Company/Odyssey Millennium Ltd | Impact of access to and from 2,700 car parking spaces to be considered in light of additional car parking provision at Queen's Quay and Sirocco Quays | 2. Plans or projects referred to but not proposed | Planning permission granted |
| T&M 6. | Queen's Quay development | S/M | Department for Communities/Private development Partner | Removal of Station Street flyover | 2. Plans or projects referred to but not proposed | The Station Street element has planning permission. |
| T&M 7. | Sirocco Quays | S/M | Sirocco Quays development | Improvements to Short Strand and Bridge End including contributions to the realisation of Boulevard concept, improved pedestrian crossings to Short Strand community area | 2. Plans or projects referred to but not proposed | Outline planning permission granted therefore the principle of development has been established. New masterplan consultation currently in progress. Remediation works have taken place. |

Table A6.2 Assessment of Key Projects in East Bank Development Strategy Appendix 2

| No. | Project | Phasing | Delivery | Comments | Category | HRA Finding |
|---|--|---------|--|---|---|--|
| Note: S=Short Term, M=Medium Term, L=Long Term, T&M=Transport and movement projects, KS = Key Development Sites, KR=Key Public Realm Projects, Dfl Roads replaces TNI | | | | | | |
| T&M 8. | Bridge End/Middlepath Street/Dalton Street | M/L | Department for Infrastructure Roads | Implementation of new road hierarchy and allocation of road space, removal of A2 flyover, introduction of two way routing, enhanced bus access and improved pedestrian and cycle environment subject to 1. above | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Approvals for construction will be subject to HRA. |
| T&M 9. | Rationalisation of A2 flyover | M/L | Department for Infrastructure Roads | In partnership with Belfast City Council, Dfl and TNI. Subject to 1. above | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Approvals for construction will be subject to HRA |
| T&M 10. | North-south pedestrian link | M/L | Department for Infrastructure Roads | In partnership with Belfast City Council, Dfl and TNI. Subject to 1. above | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Approvals for construction will be subject to HRA |
| T&M 11. | Relocation of Titanic Rail Station | M/L | Department for Infrastructure Roads | In partnership with Belfast City Council, Dfl and TNI. Subject to 1. above | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Approvals for construction will be subject to HRA |
| T&M 12. | Relocation of Eastside Park and Ride site | M | Department for Infrastructure Roads | Closure of the existing car park creating a development site and the re-provision of car parking in an outer location | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. The location of the new parking site is unknown therefore cannot be assessed. The new location will require planning permission. |
| Key Development Sites Projects | | | | | | |
| DS1. | Odyssey Quays | S/M | The Odyssey Trust Company/Odyssey Millennium Ltd | Area: 6.9 hectares, 17 acres Height: 5 to 29 storeys Size: 158,000 sqm, 1.7m sqft Uses: apartments, hotels, retail, offices, cafés, bars, restaurants, community uses, car parking (2,700 spaces) Planning approval granted | 2. Plans or projects referred to but not proposed | Has outline planning permission therefore the principle of development has been established. The decision notice includes conditions relating to assessment and remediation of contamination. |

Table A6.2 Assessment of Key Projects in East Bank Development Strategy Appendix 2

| No. | Project | Phasing | Delivery | Comments | Category | HRA Finding |
|---|--|---------|--|---|---|---|
| Note: S=Short Term, M=Medium Term, L=Long Term, T&M=Transport and movement projects, KS = Key Development Sites, KR=Key Public Realm Projects, DfI Roads replaces TNI | | | | | | |
| DS2. | Queen's Quay | S/M | Department for Communities/Private development Partner | Area: 1.3 hectares, 3.2 acres Uses: mix to be determined Removal of Station Street flyover and Handy Park surface car park facilitates a larger development site opportunity Viability testing ongoing | 2. Plans or projects referred to but not proposed | Subject to a masterplan being led by the Department for Communities. This can be expected to quite specific and may be subject to HRA. |
| DS3. | Sirocco Quays | S/M | Swinford (Sirocco) Ltd (part owned by St. Francis Group) | Area: 6.5 hectares, 16 acres Uses: offices, housing, hotel, apartment hotel, restaurant, cafe, local retail, multi-storey car park, new pedestrian bridge across the River Lagan Current scheme subject of public and stakeholder consultation until May 2017 | 2. Plans or projects referred to but not proposed | Has outline planning permission (known as the Carville consent) which established the principle of development on this site. |
| DS4. | Central Spine sites | S/M | Belfast City Council Private Developers | Multiple sites requiring land assembly Potential for significant development density and creation of enclosing building frontages | See sub-projects | By taking a strategic approach to development of the East Bank there is scope for a net increase in development by enabling greater utilisation of land. This may lead to a greater density of development in this location. However it is impossible to say at this time if and how this area will be developed in the future. Any future development will be governed by the planning policy and process at the time, it is reasonable to assume that the Belfast Plan Strategy, which will be subject to HRA will be in place before any development in this area takes place. |
| DS4a. | a. Station Street to Dalton Street (West) | S/M | Belfast City Council Private Developers | Requires removal of Queen's Bridge (East) Handy Park surface car park, adjacent surface car park and rationalisation of Dalton Street | 4. Proposals too general to assess | |
| DS4b. | b. Dalton Street (East) to elevated railway line | M/L | Belfast City Council Private Developers | Requires land assembly of existing employment space | 4. Proposals too general to assess | |
| DS4c. | c. Elevated Railway Line to Middlepath Street/Newtownards Road | M/L | Belfast City Council Private Developers | Requires land assembly, removal of M3 off ramp, removal of park and ride site and new rationalised road layout. Inclusion of existing petrol filling station subject to feasibility | 4. Proposals too general to assess | |
| DS4d. | d. Scrabo Street/Middlepath Street (North) | M/L | Belfast City Council Private Developers | Land assembly and rationalisation of M3 slip road required | 4. Proposals too general to assess | |

| No. | Project | Phasing | Delivery | Comments | Category | HRA Finding |
|---|--|---------|--|--|---------------------------------|---|
| Note: S=Short Term, M=Medium Term, L=Long Term, T&M=Transport and movement projects, KS = Key Development Sites, KR=Key Public Realm Projects | | | | | | |
| Key Public Realm Projects | | | | | | |
| PR1. | East Bank Public Realm Design Guide and Manual | S | Belfast City Council | The guide will ensure the co-ordinated design of the public realm identifying key design principles and parameters, street furniture and materials palette, temporary, event and pop up uses, public art and lighting, management and maintenance, procurement | 3. No likely significant effect | No effect |
| PR2. | Lagan River front Pedestrian Walkway | S/M/L | Belfast City Council | The co-ordinated design and delivery of the Lagan Loop concept | See sub-projects | The Lagan Loop concept promotes the creation of continuous walkway loop linking east and west banks, key attractions and new pedestrian and cycle bridges. This will have the potential for impacts from pollution and disturbance during construction and may cause disturbance in use. |
| PR2a. | Section a - SSE to Queen's Bridge | S/M | Odyssey Quays and Queen's Quays developments | The potential for temporary and pop up uses to draw visitors into the area should be considered at an early stage. Queen's Quay to deliver major facelift and improvement of existing walkway spaces | 3. No likely significant effect | This will involve enhancement of existing walkways therefore will not require construction. |
| PR2b. | Section b - Queen's Bridge to Lagan Viaduct | S/M | Belfast City Council | Upgrade of existing walkway | 3. No likely significant effect | This will involve enhancement of existing walkways therefore will not require construction. Seals have been known to swim through Lagan Weir and beyond Stranmillis therefore there is a small chance of seals being present however it is concluded that any disturbance effect would be de minimus, given that seals are rarely recorded in this stretch of river and that they would have to swim through waters with significant levels of disturbance. |

| No. | Project | Phasing | Delivery | Comments | Category | HRA Finding |
|---|--|---------|---------------------------|---|----------------------------------|--|
| Note: S=Short Term, M=Medium Term, L=Long Term, T&M=Transport and movement projects, KS = Key Development Sites, KR=Key Public Realm Projects | | | | | | |
| PR2c. | Section c - Lagan Viaduct to Albert Bridge | S/M | Sirocco Quays development | To include new footbridge linking Sirocco Quays to Lanyon Quay and Belfast Waterfront, River front Plaza and new extended board walk, piers, pontoons and moorings | 6. Potential significant effects | This will involve enhancement of existing walkways therefore will not require construction. Seals have been known to swim through Lagan Weir and beyond Stranmillis therefore there is a chance of seals being present. There is recognised mitigation that can be implemented to minimise the risk of impacts during construction. This development may increase the level of water sports in this area with potential for longer term disturbance affecting the behaviour of marine mammals. |
| PR3. | Odyssey Quays Plaza | S/M | Odyssey Quays development | Explore opportunities for alignment with the East Bank Strategy at an early stage | 3. No likely significant effect | This project already has outline planning permission therefore the principle of planning is established. This proposal seeks to better connect the Odyssey Quays development with the wider East Bank. |
| PR4. | Sirocco Quays | | Sirocco Quays development | Major public realm improvements are required of this development | See sub-projects | See sub-projects |
| PR4a. | a. River front Plaza | S/M | Sirocco Quays development | River front plaza design to fully integrate with transformed river front walkway spaces including extended board walk, view points, piers, pontoons, moorings | 6. Potential significant effects | This will involve enhancement of existing walkways therefore will not require construction. Seals have been known to swim through Lagan Weir and beyond Stranmillis therefore there is a chance of seals being present. There is recognised mitigation that can be implemented to minimise the risk of impacts during construction. This development may increase the level of water sports in this area with potential for longer term disturbance affecting the behaviour of marine mammals. |
| PR4b. | b. Internal spaces e.g.. Bridge End Square, public court yards | M | Sirocco Quays development | The Spatial Framework Plan promotes a network of connected courtyard spaces within major street blocks and the creation of a space facilitating access to the relocated rail station and into the site. | 3. No likely significant effect | This is a design consideration. It may influence the layout of development and building design but in itself will not cause impacts. |
| PR4c. | c. Key internal streets | M | Sirocco Quays development | To include a clear a hierarchy of streets, paths and walkways | 3. No likely significant effect | This is a design consideration. It may influence the layout of development and building design but in itself will not cause impacts. |

| No. | Project | Phasing | Delivery | Comments | Category | HRA Finding |
|---|--|---------|-------------------------------------|--|---|--|
| Note: S=Short Term, M=Medium Term, L=Long Term, T&M=Transport and movement projects, KS = Key Development Sites, KR=Key Public Realm Projects | | | | | | |
| PR4d. | d. Key external streets interface - Short Strand, Bridge End | M | Sirocco Quays development | The scheme must contribute to the creation of a consistent building line and frontage along Bridge End and Short Strand and the realisation of the Bridge End Boulevard concept. | 3. No likely significant effect | This is a design consideration. It may influence the layout of development and building design but in itself will not cause impacts. |
| PR5. | Key mixed use streets | M/L | Department for Infrastructure Roads | In partnership with Translink, DfI Roads and Belfast City Council | See sub-projects | See sub-projects |
| PR5a. | a. Station Street | M | Department for Infrastructure Roads | As above. Linked to the delivery of Bus Rapid Transit and the Queen's Quay development. | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Approvals for construction will be subject to HRA. |
| PR5b. | b. Sydenham Road | M | Department for Infrastructure Roads | Linked to the Odyssey Quays development | 2. Plans or projects referred to but not proposed | Some roadworks associated with Odyssey Quays have been approved as reserved matters and work has commenced. |
| PR5c. | c. Middlepath Street | M/L | Department for Infrastructure Roads | As above. Feasibility study/traffic modelling required short term to determine possible interventions. Financial contributions from frontage sites required. | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Public realm works however are likely to be small in scale with no adverse impacts during operation. |
| PR5d. | d. Bridge End | M/L | As above, Sirocco development | As above. Key bus, cycle and walking route, Boulevard Concept to be further developed. Financial contributions from frontage sites required. | 2. Plans or projects referred to but not proposed | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Public realm works however are likely to be small in scale with no adverse impacts during operation. |
| PR5e. | e. Short Strand | M/L | As above, Sirocco development | As above. Improved pedestrian crossings to be included. | 4. Proposals too general to assess | This is subject to transport modelling therefore the extent and impact of development cannot be assessed at this stage. Public realm works however are likely to be small in scale with no adverse impacts during operation. |

Appendix 7: Baseline Information for Designated Sites Connected with the East Bank Development Strategy Area

Adapted from Report prepared by Shared Environmental Service to inform sustainability appraisal of Belfast LDP. This information may need to be updated if the status of sites and features changes and therefore it should not be relied on for future plans or projects.

Introduction

This appendix provides a long list of sites against which effects of plans and projects can be reviewed. These are described in terms of how they are connected with the Belfast City Council area, their selection features and potential effects of plans and projects.

This list takes a precautionary approach. There will be no conceivable effect from plans or projects on many of the long listed sites, for example on those that are over 10km away and have no ecological or infrastructure connection. None or only a few of the potential impacts may arise depending on the nature of the project or plan. Measures to avoid, reduce or mitigate for impacts may be incorporated in plans or projects where necessary and feasible or proposals amended to avoid adverse effects on site integrity.

Projects and plans should be assessed to determine whether any of the potential impacts could occur. This involves consideration of the nature of the plan or project, sources of potential impacts, any pathways to European sites and whether the impact could have a significant effect on site selection features, their conservation objectives and site integrity alone or in combination.

Overview

This is a summary of the long list of sites, how they are connected to the council area and potential issues. The sites listed are those for which there is a potential pathway allowing a connection with the plan area. Sites within 15km of the council area have been considered and any distances listed are to the nearest 0.5km. The sites are listed in Table A7.1. Definitions of each type of connection follow.

Within or Adjacent: All or part of the European or Ramsar Site is within or directly adjacent to the plan area.

Ecological: The European or Ramsar Site is ecologically connected to the plan area. Ecological connections include linkages by ecological corridors such as river systems; hydrological links between the council area and peatland or wetland sites; known areas of land in the council area which are regularly used by birds which also use a SPA; and sites that form part of the coastal ecosystem to which the council area is connected.

Within 15km: The European or Ramsar Site is within 15km of the council area (potential for aerial pollution).

By Infrastructure: The European or Ramsar Site is connected by infrastructure with the plan area. Infrastructural connectivity is related to the potential linkage of sites to the council area by infrastructure services such as water abstraction or waste water discharges. Water supply for the council area comes from Lough Neagh and from the Mourne therefore this brings Eastern Mourne SAC into consideration as well. Waste water treatment works ultimately discharge to a number of designated areas therefore the influence of plans or projects on this infrastructure may need to be considered.

Table A7.1: Potential Connections between Belfast City Council area and European Sites

| European Site Name | Connection with Belfast City Council area | | | |
|---|---|------------|-------------|-------------------|
| | Within or Adjacent | Ecological | Within 15km | By Infrastructure |
| Belfast Lough SPA | • | • | • | • |
| Belfast Lough Ramsar | • | • | • | • |
| Belfast Lough Open Water SPA | • | • | • | • |
| East Coast (Northern Ireland) Marine pSPA | • | • | • | • |
| North Channel cSAC | | • | • | • |
| Outer Ards SPA | | • | • | • |
| Outer Ards Ramsar | | • | • | • |
| Lough Neagh and Lough Beg SPA | | | | • |
| Lough Neagh and Lough Beg Ramsar | | | | • |
| Strangford Lough SPA | | • | • | |
| Strangford Lough SAC | | • | • | |
| Strangford Lough Ramsar | | • | • | |
| Larne Lough SPA | | • | | |
| Copeland Islands SPA | | • | | |
| The Maidens SAC | | • | | |
| Murlough SAC | | • | | |
| Aughnadarragh Lough SAC | | | • | |
| Eastern Mourne SAC | | | | • |
| Antrim Hills SPA | | | | • |
| Rea's Wood and Farr's Bay SAC | | | | • |

Table A7.4 presents more information about each of these sites describing how they relate to the East Bank Development Strategy area, qualifying interests, conservation objectives and threats to site integrity. This however is a summary of information and www.daera-ni.gov.uk/topics/biodiversity-land-and-landscapes/protected-areas may be referred to for more detailed information about each site.

Overall Potential Impacts

More detailed description follows in Table A7.2 of all the potential development impacts that could arise as a result of plans or projects which may need to be assessed in relation to European sites and their features with a comment on if or how they may arise as a result of the East Bank Development Strategy. Note that this is a full list and some of the effects listed may not apply to the selection features of sites connected with the council area.

Table A7.2: Potential development impacts in relation to designated sites

| Potential Impacts | Activities arising from the implementation of plan or project | Relevance to Strategy |
|---|--|--|
| Loss, fragmentation, damage of habitats and / or species: | <p>Construction activities associated with plan or project could lead to the loss, fragmentation (or obstruction of movement) or damage of habitats and / or species through:</p> <ul style="list-style-type: none"> • Direct land take and / or land clearance and the use of machinery/materials. • Direct and indirect impacts resulting from the construction and operation of built development and required infrastructure. • Impacts caused during repair and maintenance activities for built development and required infrastructure. • Direct impacts associated with mineral development in the plan area. • Removal, fragmentation or physical changes to important connectivity features could create barrier effects to species, alter habitat availability or ecological functioning or result in changes in breeding, roosting, commuting and foraging behaviour. | <p>See below</p> <p>Not applicable as not in/adjacent to designated areas</p> <p>Not applicable</p> <p>De minimus effect</p> <p>Not applicable</p> <p>There will be no physical effects that could result in these changes.</p> |
| Disturbance: physical, noise, lighting | <p>Noise or activity during construction and operational activities could have adverse impacts on sensitive species (marine mammals and birds in particular).</p> | <p>There will be developments in the East Bank that will require piling during construction. The distance to bird features is over 3 km therefore they will not be affected. Marine mammals could however be in the vicinity of development.</p> |
| | <p>Increased lighting from construction or additional built development could: create barrier effects to species; result in changes in species breeding, roosting, commuting and foraging behaviour; or increase predation.</p> | <p>There is no reported evidence of seals being deterred by artificial light and any impact would be de minimus in the context of the number of individuals affected.</p> |
| Biological Disturbance: invasive species, human disturbance | <p>Sensitive habitats and species may experience adverse impacts from the introduction of invasive species, non-native, competitive or predatory species through construction activities and associated machinery, movement of soils and waste or from garden escapes.</p> | <p>Standard good practice in cleaning machinery can be applied to avoid transfer of species to or from the Strategy area.</p> |
| | <p>Increased human activity (including recreation; increase in pet ownership; increased incidence in fires) close to sensitive habitats and species may cause disturbance that could impact negatively on these features and lead to displacement of sensitive species from certain locations.</p> | <p>The level of human activity is likely to increase and is discussed further in Section 3.</p> |
| Contamination of land | <p>Waste arising from the operation of developments associated with plan or project could cause contamination of land which could have a direct detrimental impact on sensitive habitats or species or indirect impacts if subsequent emissions to water occur.</p> | <p>There are strict controls on the disposal of contaminated waste therefore there is no risk of impacts on designated sites.</p> |

Table A7.2: Potential development impacts in relation to designated sites

| Potential Impacts | Activities arising from the implementation of plan or project | Relevance to Strategy |
|---|---|--|
| Emissions by air | The construction and operation of developments associated with plan or project (in particular industrial developments) have the potential to generate chemical and dust emissions and could make a contribution to acid rain or nutrient deposition resulting in significant adverse impacts to animals and sensitive habitats for example they could cause localised smothering of vegetation or potential health issues in animals e.g. birds. | Aerial pollution is discounted as the Strategy does not promote industrial development. |
| | Increased traffic generation could lead to increased air pollution and greenhouse gas emissions which could have localized impacts on sensitive habitats or species. | Aerial pollution is discounted as the Strategy in itself will not increase aerial emissions from traffic that could affect designated sites, the nearest of which is 3.8km. It is intended to create the conditions to encourage a modal shift from private car to public transport and may have a long term positive effect. |
| Emissions by water and changes to hydrology | There is potential for an increased transport of chemical contaminants reaching the aquatic environment during the construction and operation of development associated with the plan or project. This could range from transportation of fuels to cleaning or waste water treatment materials and associated drainage and discharges into watercourses. Changes to water quality can have harmful effects on fish, invertebrates, and vegetation, e.g. as a result of lowered oxygen levels. | The historical use of the land means that there is a risk of release of contaminants during construction which could cause pollution. Piling may be required to provide secure foundations and that or excavation could create pathways for contaminants to reach designated sites. |
| | Surface run off and sediment release from construction works and operational activities associated with plan or project can increase sediment deposition and turbidity within aquatic systems. This can adversely impact on associated wildlife by causing shading effects that can inhibit plant and algal growth and smother organisms thereby limiting productivity and survival. | There could be some disruption of river sediments if any underwater construction takes place. Given that dredging in Belfast Harbour was not considered to have a significant effect, subject to a construction method statement, then the scale of any sediment release at this location further away from Belfast Lough would not be significant. It is possible although unlikely that dredging of the river would be required to facilitate recreational use. This would require a Marine licence and be subject to HRA. |

Table A7.2: Potential development impacts in relation to designated sites

| Potential Impacts | Activities arising from the implementation of plan or project | Relevance to Strategy |
|-------------------|--|---|
| | Water abstraction from streams or lakes required for construction and operation of developments associated with plan or project could have physical impacts on water levels, fish species at intakes, affect populations of fish or alter the configuration or availability of breeding gravels. | The Strategy may increase the level of e.g. residential development in the East Bank however this will be within the planning context at the time, it is reasonable to assume that the Belfast Plan Strategy, which will be subject to HRA will be in place before any substantial development in this area takes place. Any development will be dependent on water supply not being a limiting factor. |
| | Construction and operation of development could alter the hydrology of sensitive habitats and species by either increasing or decreasing runoff or water percolation into aquifers. | The extent of the coastal and marine designated sites is such that any effect would be de minimus. |
| | Increased demands on waste water treatment works or for septic tanks could lead to increased nutrient enrichment of waterbodies which could change water quality and increase eutrophication. This in turn could have a harmful effect on the ecological functioning of these systems. | It is acknowledged that waste water treatment capacity may be a constraint on overall development for the city. This is discussed further in Section 3. |

Table A7.3: Potential Connections between East Bank Development Strategy Impacts and Designated Sites and Features

| Designated Site Name | Construction: chemical impacts on water quality | Construction: Sediment release | Construction: noise and vibration from piling and construction | Operation: disturbance due to increased activity | Operation: Insufficient Wastewater treatment | Rationale | Features subject to likely significant effect |
|---|---|--------------------------------|--|--|--|--|---|
| Belfast Lough SPA | • | • | | • | • | Major pollution incident could have conceivable impact on bird habitat although this would be likely to be a short duration event rather than a persistent form of pollution. Too far away from the East Bank for any perceptible disturbance during construction. | Birds and supporting habitat |
| Belfast Lough Ramsar | • | • | | • | • | Major pollution incident could have conceivable impact on bird habitat. | Birds and supporting habitat |
| Belfast Lough Open Water SPA | | | | | • | Overall deterioration in water quality due to inadequate wastewater treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site features or their habitats would be de minimis. | Bird features |
| East Coast (Northern Ireland) Marine pSPA | | | | | • | Overall deterioration in water quality due to inadequate waste water treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site features or their habitats would be de minimis. | Bird features |
| North Channel cSAC | | | • | • | | There is a possibility that harbour porpoise from the cSAC could be within range of the development area and subject to disturbance. | Harbour porpoise |
| Outer Ards SPA | | | | | • | Overall deterioration in water quality due to inadequate waste water treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site | Bird features |

| Designated Site Name | Construction: chemical impacts on water quality | Construction: Sediment release | Construction: noise and vibration from piling and construction | Operation: disturbance due to increased activity | Operation: Insufficient Wastewater treatment | Rationale | Features subject to likely significant effect |
|----------------------------------|---|--------------------------------|--|--|--|--|---|
| | | | | | | features or their habitats would be de minimis. | |
| Outer Ards Ramsar | | | | | • | Overall deterioration in water quality due to inadequate waste water treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site features or their habitats would be de minimis. | Bird features |
| Lough Neagh and Lough Beg SPA | | | | | | No impact as any development will be dependant on water supply not being a limiting factor. | None |
| Lough Neagh and Lough Beg Ramsar | | | | | | No impact as any development will be dependant on water supply not being a limiting factor. | None |
| Strangford Lough SPA | | | | | • | Overall deterioration in water quality due to inadequate waste water treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site features or their habitats would be de minimis. | Bird features |
| Strangford Lough SAC | | | | | | Too far away for Common Seal as feature of SAC to be impacted. | None |
| Strangford Lough Ramsar | | | | | • | Overall deterioration in water quality due to inadequate waste water treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site features or their habitats would be de minimis. Too far away for Common Seal as feature of Ramsar to be impacted. Grey Seal from Strangford expected to be few if any but will be considered under The Maidens SAC. | Bird features |

| Designated Site Name | Construction: chemical impacts on water quality | Construction: Sediment release | Construction: noise and vibration from piling and construction | Operation: disturbance due to increased activity | Operation: Insufficient Wastewater treatment | Rationale | Features subject to likely significant effect |
|-------------------------------|---|--------------------------------|--|--|--|--|---|
| Larne Lough SPA | | | | | • | Overall deterioration in water quality due to inadequate waste water treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site features or their habitats would be de minimis. | Bird features |
| Copeland Islands SPA | | | | | • | Overall deterioration in water quality due to inadequate waste water treatment could impact on features. Otherwise, given the distance to and extent of open water habitat, any impact on site features or their habitats would be de minimis. | Bird features |
| The Maidens SAC | | | • | • | | There is a possibility that grey seal from the SAC could be within range of the development area and subject to disturbance. | Seals |
| Murlough SAC | | | | | | Too far away for Common Seal as feature of SAC to be impacted. | None |
| Aughnadarragh Lough SAC | | | | | | The only pathway would be aerial and industrial use is not planned. | None |
| Eastern Mourne SAC | | | | | | No impact as any development will be dependant on water supply not being a limiting factor. | None |
| Antrim Hills SPA | | | | | | No impact as any development will be dependant on water supply not being a limiting factor and the East Bank is also beyond the range of site selection features. | None |
| Rea's Wood and Farr's Bay SAC | | | | | | No impact as any development will be dependant on water supply not being a limiting factor and will not have such a demand as to affect water levels at this site. | None |

Table A7.4: Details of Designated Sites Connected with Belfast City Council Area

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|-------------------------------------|---|---|--|---------------------|---|
| Belfast Lough SPA | Ecologically connected. Belfast Lough is situated at the mouth of the River Lagan on the east coast of Northern Ireland. The inner part of the lough, part of which is within the Belfast City Council area, comprises a series of mudflats and lagoons. The brackish lagoon at the Harbour Estate (D2) together with the tidal channel at Dargan Road are included. The SPA is also designated as ASSI but excludes some areas within the immediate harbour area where permitted port related development and landfill has taken place. Some open grassland areas in parks and schools are important as high water roost sites for redshank. | Site selection features are wintering Redshank, Black-tailed Godwit and Bar-tailed Godwit and Breeding Common Tern and Arctic Tern. | The overall site objective is to maintain each feature in favourable condition. The features objectives are: To maintain or enhance the population of the qualifying species. To maintain or enhance the range of habitats utilised by the qualifying species. To ensure that the integrity of the site is maintained. To ensure there is no significant disturbance of the species and to ensure that the following are maintained in the long term: Population of the species as a viable component of the site; Distribution of the species within site; Distribution and extent of habitats supporting the species; Structure, function and supporting processes of habitats supporting the species. | Unfavourable | Negative impacts and activities on the site are High: Shipping lanes, ports, marine constructions; Marine water pollution; Changes in abiotic conditions (relating to physical conditions); Medium: Fishing and harvesting aquatic resources; Pollution to surface waters (limnic & terrestrial, marine & brackish); Changes in biotic conditions (relating to other species) and LOW: Outdoor sports and leisure activities, recreational activities. The features already experience significant levels of disturbance within the Harbour area. The use of piling during construction may cause an additional disturbance factor but is one that is short lived and can be timed to avoid affecting bird features. There are many potential pollution sources, those that require the most careful attention are wastewater treatment works, landfill sites, large developments incorporating on site wastewater treatment; storage of chemicals and fuels; contaminated land if pollutants could be mobilised. |
| Belfast Lough Ramsar | Ecologically connected. The boundary is entirely the same as that for Belfast Lough SPA. | Common redshank , Black-tailed godwit | Ramsar conservation objectives are not published however they can be assumed to be the same as those for Belfast Lough SPA. | Not applicable | Same as for Belfast Lough SPA |
| Belfast Lough Open Water SPA | Ecologically connected. Will be subsumed by East Coast (Northern Ireland) Marine Proposed SPA and therefore considerations for that site address all considerations for Belfast Lough Open Water SPA | Wintering populations of Great Crested Grebe | Same as for Belfast Lough SPA. | Favourable | Same as for Belfast Lough SPA |

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|--|--|--|--|---------------------|--|
| East Coast (Northern Ireland) Marine SPA (Proposed) | Public consultation on the proposed East Coast (Northern Ireland) Marine Special Protection Area took place in early 2016. The proposed SPA is ecologically connected. It would subsume Belfast Lough Open Water SPA and includes coastal and near shore waters from Ringfad near Carnlough, Co. Antrim in the north, the marine area of Larne Lough, the marine area of Belfast Lough, waters around the Copleand Islands and offshore of the Ards Peninsula to Cloghan Head, near Ardglass in the south. | Wintering populations of Great Crested Grebe, Red-throated Diver and Eider Duck; Rafting Manx Shearwater in the breeding season originating from an adjoining colony; Foraging Sandwich, Common and Arctic Tern in the breeding season originating from adjoining tern colonies. | Same as for Belfast Lough SPA. | Not applicable | Same as for Belfast Lough SPA |
| North Channel cSAC | Submitted to the EC as a candidate SAC January 2017. Connected via marine waters, small proportion within 15km of council area. The northern part of the site would include the mouth of Belfast Lough the western boundary is about 15.5km from the council area running approximately from the south of Whitehead to Orlock Point. Harbour porpoise are found all around the coast of Ireland including the Skerries near Portrush, Maidens (off Islandmagee), Belfast harbour and Strangford Lough. They may therefore venture into Belfast Lough, Belfast Harbour and the tidal Lagan. | Harbour porpoise <i>Phocoena phocoena</i> | To avoid deterioration of the habitats of the harbour porpoise or significant disturbance to the harbour porpoise, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to maintaining Favourable Conservation Status (FCS) for the UK harbour porpoise. To ensure for harbour porpoise that, subject to natural change, the following attributes are maintained or restored in the long term: 1. The species is a viable component of the site; 2. There is no significant disturbance of the species; 3. The supporting habitats and processes relevant to harbour porpoises and their prey are maintained. | Not applicable | The potential for disturbance and injury impacting on harbour porpoise populations needs to be considered. Disturbance during construction can normally be addressed through mitigation measures applied as conditions of planning permission such as requiring the use of marine mammal observers. As harbour porpoise are not frequently observed in Belfast Lough they are unlikely to be adversely affected by new or changed levels of recreational activities or boat traffic. |

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|---|--|--|--|---------------------|--|
| Outer Ards SPA | Connected via marine waters, small proportion within 15km of council area. 9km from council area to nearest point. | Breeding Arctic Tern; Wintering Golden Plover, Light-bellied Brent Goose, Ringed Plover, Turnstone | Same as for Belfast Lough SPA. | Favourable | The site selection features most likely to be affected are those for which East Coast (Northern Ireland) Marine SPA (Proposed) has been designated to protect the foraging area of species from these sites therefore the threats to Belfast Lough SPA also apply to this site. |
| Outer Ards Ramsar | Connected via marine waters, small proportion within 15km of council area. 9km from council area to nearest point. | Wintering Golden Plover, Light-bellied Brent Goose, Ringed Plover, Turnstone | Ramsar conservation objectives are not published however they can be assumed to be the same as those for Belfast Lough SPA. | Not applicable | The site selection features most likely to be affected are those for which East Coast (Northern Ireland) Marine SPA (Proposed) has been designated to protect the foraging area of species from these sites therefore the threats to Belfast Lough SPA also apply to this site. |
| Lough Neagh and Lough Beg SPA | A source for water supply. | Breeding Common Tern and Great Crested Grebe; Wintering Bewick's Swan, Golden Plover, Whooper Swan, Great Crested Grebe, Goldeneye, Pochard, Scaup, Tufted Duck; Passage Crested Grebe | Same as for Belfast Lough SPA. | Unfavourable | Impacts that should be considered are development growth in the plan area to the extent that abstraction for water supply needs to be significantly increased such that water levels in Lough Neagh are impacted. |
| Lough Neagh and Lough Beg Ramsar | A source for water supply. | Wetlands; rare plant and animal species; waterfowl populations as for SPA, pollan. | Ramsar conservation objectives are not published however they can be assumed to be the same as those for Lough Neagh and Lough Beg SPA | Not applicable | Impacts that should be considered are those from a major development such as landfill or quarrying within the Lough Neagh catchment or development growth to the extent that abstraction for water supply needs to be significantly increased. |
| Strangford Lough SPA | Ecological connection | Breeding Arctic Tern, Common Tern and Sandwich Tern; Wintering Bar-tailed Godwit | Same as for Belfast Lough SPA. | Favourable | The site selection features most likely to be affected are those for which East Coast (Northern Ireland) Marine SPA (Proposed) has been designated to protect the foraging area of species from these sites therefore the threats to that site also apply to this site. Otherwise only major developments in the catchment of the Enler River with substantial impacts during construction or long term emissions could have any impact. |

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|--------------------------------|---|---|--|---------------------|---|
| Strangford Lough SAC | Strangford Lough is 66 km away via marine waters. Common (Harbour) Seal is a mobile species and a significant colony has become established in recent years at the Musgrave Channel on the shore of East Twin Island. Peak counts of as many as 50 adults are reported and there was an estimated 20-25 pups in 2015. NIEA has advised that the screening distance for Common Seal is 50km. Therefore it is reasonable to assume that the Belfast Lough population does not represent part of the population of Common Seal for which Strangford Lough SAC is designated. | Large shallow inlet and bay; Coastal lagoons; Mudflats and sandflats not covered by sea water at low tide; Reefs; Annual vegetation of drift lines; Atlantic salt meadows (Glauco-Puccinellietalia maritimae); Perennial vegetation of stony banks; Common (Harbour) Seal <i>Phoca vitulina</i> | To maintain (or restore where appropriate) the site selection features to favourable condition. | Unfavourable | The potential for disturbance and injury impacting on seal populations needs to be considered. Disturbance during construction can normally be addressed through mitigation measures applied as conditions of planning permission such as requiring the use of marine mammal observers. While seals are coexisting with people in an urban area there may be certain forms of disturbance, for example from speed boats that could cause a significant adverse effect on seals therefore there may need to be limitations on some types of development. Otherwise only a major development in the catchment of the Enler River with long term emissions is likely to have any impact. |
| Strangford Lough Ramsar | 7km in direct line and 66 km away via marine waters. Although seals are one of the designation criteria it is reasonable to assume that the Belfast Lough population of Common Seals does not represent part of the population of Common Seal for which Strangford Lough Ramsar is designated. There is limited information about the status of Grey Seal in Strangford Lough and they are not a SAC feature. Consideration of impacts on Grey Seal from the Maiden's will address any potential impact on Strangford Lough Grey Seals. | Wetland features including fringing saltmarsh; vulnerable and endangered wetland plants and animals including seals; Eel grass beds on the mudflats; waterfowl, wintering and breeding birds including those listed for the SPA. | Ramsar conservation objectives are not published however they can be assumed to be the same as those for Strangford Lough SPA and SAC. | Not applicable | The threats are as for Strangford Lough SPA for birds; as for Strangford Lough SAC for Common Seal. Otherwise only major developments in the catchment of the Enler River with substantial impacts during construction or long term emissions could have any impact. |

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|-----------------------------|---|--|---|---------------------|--|
| Larne Lough SPA | More than 15km from the council area however some birds that are site selection features forage or loaf in the East Coast (Northern Ireland) Marine pSPA. | Breeding Common Tern, Roseate Tern, Sandwich Tern and Mediterranean Gull | Same as for Belfast Lough SPA. | Favourable | The site selection features most likely to be affected are ones for which East Coast (Northern Ireland) Marine SPA (Proposed) and Belfast Lough SPA have been proposed/designated to protect the foraging area of species from these sites. Therefore the threats for Belfast Lough SPA also apply to this site. |
| Copeland Islands SPA | More than 15km from the council area however some birds that are site selection features forage or loaf in the East Coast (Northern Ireland) Marine pSPA | Breeding Arctic tern and Manx Shearwater | Same as for Belfast Lough SPA. | Favourable | The site selection features most likely to be affected are ones for which East Coast (Northern Ireland) Marine SPA (Proposed) and Belfast Lough SPA have been proposed/designated to protect the foraging area of species from these sites. Therefore the threats for Belfast Lough SPA also apply to this site. |
| The Maidens SAC | 30km via marine waters. A few Grey Seals are reported to occur within the Belfast Harbour area. | Grey Seal <i>Halichoerus grypus</i> | To avoid deterioration of the qualifying habitats and species thus ensuring that the integrity of the site is maintained and the site makes and appropriate contribution to achieving favourable conservation status for the qualifying interest. To ensure for the qualifying habitats that the following are maintained in the long term, subject to natural change: Extent of the habitats on site; Distribution of the habitats within the site; Structure and function of the habitats; Processes supporting the habitats; Distribution of typical species of the habitats; Viability of typical species as components of the habitat; No disturbance of typical species of the habitat. | Favourable | The potential for disturbance and injury impacting on seal populations needs to be considered. Disturbance during construction can normally be addressed through mitigation measures applied as conditions of planning permission such as requiring the use of marine mammal observers. While seals are coexisting with people in an urban area there may be certain forms of disturbance, for example from speed boats that could cause a significant adverse effect on seals therefore there may need to be limitations on certain types of development. |

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|--------------------------------|---|---|---|---------------------|---|
| Murlough SAC | 77km via marine waters to the council area. Common (Harbour) Seal is a mobile species and a significant colony has become established in recent years at the Musgrave Channel on the shore of East Twin Island. Peak counts of as many as 50 adults are reported and there was an estimated 20-25 pups in 2015. NIEA has advised that the screening distance for Common Seal is 50km. Therefore it is reasonable to assume that the Belfast Lough population does not represent part of the population of Common Seal for which Murlough SAC is designated. | Common (Harbour) Seal <i>Phoca vitulina</i> | To maintain (or restore where appropriate) the Common Seal <i>Phoca vitulina</i> to favourable condition. Maintain (and if feasible enhance) population numbers and distribution of Common Seal. Maintain and enhance, as appropriate, physical features used by Common Seals within the site. | Unfavourable | The potential for disturbance and injury impacting on seal populations needs to be considered. Disturbance during construction can normally be addressed through mitigation measures applied as conditions of planning permission such as requiring the use of marine mammal observers. While seals are coexisting with people in an urban area there may be certain forms of disturbance, for example from speed boats that could cause a significant adverse effect on seals therefore there may need to be limitations on some types of development. |
| Aughnadarragh Lough SAC | 12.5km to council area therefore need to consider aerial emissions, no hydrological connection | Marsh fritillary butterfly | To maintain (or restore where appropriate) the Marsh Fritillary Butterfly population to favourable condition. Maintain (and if feasible enhance) population numbers and distribution. Maintain (and if feasible enhance) the extent and quality of suitable Marsh Fritillary breeding habitat, particularly suitable rosettes of the larval food plant <i>Succisa pratensis</i> | Favourable | The sensitivity of Devil's Bit Scabious to aerial deposition is uncertain therefore cumulative impacts from development within and beyond the plan area need to be considered further. |

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|----------------------------|--|---|---|---------------------|---|
| Eastern Mournes SAC | Water supply source | European dry heaths; Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Active blanket bogs; Alpine and boreal heaths; Siliceous alpine and boreal grasslands; Siliceous rocky slopes with chasmophytic vegetation; Siliceous scree of the montane to snow levels. | To maintain (or restore where appropriate) the site selection features to favourable condition. | Unfavourable | The only conceivable impact would be if development growth in the plan area is to such an extent that abstraction for water supply needs to be significantly increased in the Mournes resulting to habitat damage in the course of constructing new infrastructure. |
| Antrim Hills SPA | Just over 15km away from council area. Water supply source. While the site selection features may range well beyond the site boundary the plan area would not make up a significant part of their range. | Merlin and Hen Harrier | Same as for Belfast Lough SPA. | Favourable | The only conceivable impact would be if development growth in the plan area is to such an extent that abstraction for water supply needs to be significantly increased resulting to habitat damage in the course of constructing new infrastructure. |

| Site name | Location relative to East Bank | Qualifying interests | Conservation objectives | 2014 Site Condition | Potential Impacts |
|---|---|---|--|---------------------|---|
| <p>Rea's Wood and Farr's Bay SAC</p> | <p>On shore of Lough Neagh which is a water source for the plan area.</p> | <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion alvae)</p> | <p>To maintain (or restore where appropriate) the Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion alvae) to favourable condition. Maintain and expand the extent of existing swamp woodland. (There is an area of wetland and damp grassland which have the potential to develop into carr woodland); Maintain and enhance swamp woodland species diversity and structural diversity; Maintain the diversity and quality of habitats associated with the swamp woodland, e.g. fen, swamp, especially where these exhibit natural transition to swamp woodland; Seek nature conservation management over adjacent forested areas outside the ASSI where there may be potential for woodland rehabilitation; Seek nature conservation management over suitable areas immediately outside the ASSI where there may be potential for woodland expansion.</p> | <p>Unfavourable</p> | <p>Just over 15km away. This is too far away for there to be aerial impacts. While there is a hydrological connection via the Six Mile Water and Lough Neagh this could not result in a significant effect on the alluvial forest site selection feature of this SAC.</p> |

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- i <http://epicpublic.planningni.gov.uk>
- ii <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/belfast-lough-open-water-spa-conservation-objectives-2015.pdf>
- iii <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/copeland-islands-SPA-conservation-objectives-2015.pdf>
- iv <https://www.daera-ni.gov.uk/sites/default/files/consultations/doe/east-coast-%28northern-ireland%29-marine-proposed-special-protection-area-conservation-objectives.pdf>
- v <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/larne-lough-spa-conservation-objectives-2015.pdf>
- vi <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/outer-ards-spa-conservation-objectives-2015.pdf>
- vii <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/strangford-lough-spa-conservation-objectives-2015.pdf>
- viii <https://www.daera-ni.gov.uk/sites/default/files/publications/doe/belfast-lough-spa-conservation-objectives-2015.pdf>
- ix <https://www.daera-ni.gov.uk/sites/default/files/publications/daera/The%20Maidens%20SAC%20Conservation%20Objectives%202017.PDF>
- x <http://jncc.defra.gov.uk/pdf/NorthChannelConservationObjectivesAndAdviceOnActivities.pdf>
- xi <http://jncc.defra.gov.uk/PDF/NorthChannelSelectionAssessmentDocument.pdf>
- xii http://jncc.defra.gov.uk/pdf/jncc_guidelines_piling%20protocol_august%202010.pdf
- xiii <https://www.communities-ni.gov.uk/articles/biodiversity-river-lagan>
- xiv [Back to the River: A Feasibility Study for the Lagan Corridor January 2014.](#)
- xv <http://www.belfastcity.gov.uk/tourism-venues/tourism/tourismstrategy.aspx>
- xvi <http://www.belfastcity.gov.uk/buildingcontrol-environment/Planning/pop.aspx>
- xvii <https://www.daera-ni.gov.uk/publications/model-procedures-management-land-contamination>
- xviii <http://www.belfastcity.gov.uk/buildingcontrol-environment/Planning/pop.aspx>