



Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

**Article 6 Assessment Report
(ToLS consultation draft - Regulation 64B (2))**

Strategic Riverside Masterplan

Prepared for:

Derry City Council / Ilex Urban Regeneration Company

11th May 2011

Author

Mr. Gareth E. Grindle B.Sc. (Hons.) M.Sc. MIEEM MIEEnvSc
Principal Environmental Consultant

Q/A Review

Dr. James K. O'Neill B.Sc. (Hons.) PhD MIEEM MSB
Managing Director

Status: Final

Corvus Consulting
Campbell House
83 Saintfield Rd
Belfast BT8 7HN

Tel: +44 (0) 28 90 794266

Corvus Consulting
Suite 9, Herbert Hall
16 Herbert Street
Dublin 2

Tel: +353 (0) 161 90278

Section	Page
Finding of No Significant Effects Report Matrix	3
Introduction	6
Legislative Context	6
The Natura 2000 Network	8
Competent Authorities	8
Methodology	9
Sources of Information	10
Assessment: Background Information	11
Screening of Natura 2000 Sites	11
Brief Description of the Project	12
Brief Description of the Natura 2000 Sites	14
Favourable Conservation Status	19
Potentially Implicated SAC, cSAC, SPA and Ramsar Selection Features	19
Species-Specific Considerations	21
Assessment Stage 1: Test of Likely Significance (TOLS)	23
In-Combination and Cumulative Impacts	23
Individual Elements likely to Impact Natura 2000 Sites	24
Likely Direct, Indirect or Secondary Impacts on the Natura 2000 Site	25
Likely Changes to the Natura 2000 Site as a result of the Project	30
Likely Impacts on the Natura 2000 Site as a Whole	32
Indication of Significance	33
Conclusions: Potential Significant Impacts	35
Recommendations	35

Finding of No Significant Effects Report Matrix

Name of Project or Plan	Strategic Riverside Masterplan (SRM)
Name and location of Natura 2000 site	<p>River Foyle & Tributaries SAC, Co. Londonderry Lough Foyle SPA, Co. Londonderry River Finn SAC, C. Donegal Lough Foyle SPA, Co. Donegal Lough Foyle Ramsar Site</p>
Description of the Project or Plan	<p>Derry City Council commissioned the preparation of a Strategic Riverside Masterplan (SRM), its purpose is to set out a framework for the next 10-15 years to help fully realise the potential of the River Foyle as a “sustainable resource for all” and to provide ideas, identify projects and set standards that will help regenerate the city and its waterfront and to create employment over the plan period and beyond. Its main aim therefore is to secure a spatial strategy together with recommendations and guidance for land-use and development along the river corridor within the study area and, in so doing, become a material consideration in the assessment of planning applications over this period. The SRM is presented in two main parts:</p> <p>Part I, the River Strategy:</p> <ul style="list-style-type: none"> • Divides the entire study area from Culmore Point to Newbuildings into 19 separate character areas. • Provides a series of high level objectives and recommendations for each consistent with a the aims and vision set out earlier in the plan. <p>Part II, the Urban Framework:</p> <ul style="list-style-type: none"> • Focuses in more detail upon urban waterfront areas located between the Foyle and Craigavon bridges. • Establishes a number of detailed urban design principles and site concepts to guide and inform future development proposals based on the objectives and recommendations set out in Part I.
Is the Project or Plan directly connected with or necessary to the management of the site (provide details)?	No

<p>Are there other projects or plans that together with the project of plan being assessed could affect the site (provide details)?</p>	<p>There are a number of existing plans, policies and strategies developed at the national, regional and local levels of relevance to the SRM which have guided and influenced its preparation. Details are provided within the report.</p>
<p>The Assessment of Significance of Effects</p>	
<p>Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site</p>	<p>The plan area does not encroach into the designated area of any Natura 2000 site; however, mobile qualifying feature species are known from within the plan area, as detailed above. Employing the source-pathway-receptor model, it is considered that the significant pathways for potential adverse indirect impacts on the identified Natura 2000 Sites are:</p> <ul style="list-style-type: none"> • Disturbances to the mobile feature species which are selection features of the upstream SAC/cSAC within the plan area; • Degradation of Atlantic salmon migration habitats within Lough Foyle and the tidal reaches of the River Foyle both within and upstream of the SRM plan area; • Degradation of environmental quality in the tidal areas of the upstream SAC/cSAC as a result of decreases in water quality within the SRM plan area, transferred by tidal action; • Disturbances to the species of bird which are selection features of the SPAs of the Foyle estuary, both within the SRM plan area and within the Foyle estuary generally; • Loss or degradation of areas of habitat which are utilised by SPA feature species within the SRM plan area; and • Degradation of estuarine habitats (Ramsar wetland habitats) on which SPA feature species rely as a result of decreases in water quality within the Foyle estuary generally, outside of the SRM plan area.
<p>Explain why these effects are not considered significant</p>	<p>A Stage 1 Test of Likely Significance has demonstrated that the implementation of the SRM:</p> <ul style="list-style-type: none"> • Will have no direct impacts upon the River Foyle & Tributaries SAC, Lough Foyle SPA (NI), Lough Foyle SPA (ROI) or River Finn SAC; and • Will not result in significant adverse indirect impacts upon the River Foyle & Tributaries SAC, Lough Foyle SPA (NI), Lough Foyle SPA (ROI) or River Finn SAC; <p>Provided:</p> <ul style="list-style-type: none"> • The recommendations detailed below are incorporated into the final plan.

<p>Recommendations</p>	<p>It is recommended that the following additional elements of design guidance are added to or reinforced within the finalised SRM:</p> <ol style="list-style-type: none"> 1. The ecological quality and continuity of all natural and semi-natural riparian vegetation is of particular importance to ecologically valuable and internationally protected wildlife; all proposals should seek to retain and enhance all such areas and replace any areas removed or compromised to facilitate development. 2. The Atlantic salmon and breeding and wintering waterfowl of the River Foyle and Lough Foyle are ecologically valuable and internationally protected; all proposals should seek to eliminate or minimise (to insignificant levels) any further disturbances to these species. 3. Environmental quality, particularly water quality within the River Foyle and Lough Foyle is of critical importance to ecologically valuable, internationally protected wildlife; all proposals should seek to eliminate both the discharge of polluting materials and the mobilisation of silts and sediments into the aquatic environment. 4. Atlantic salmon migrate through Lough Foyle and the tidal stretches of the River Foyle to and from breeding, nursery and recruitment habitats in the headwaters of the Foyle system during the night, and are known to be disrupted by high volumes of artificial light; all proposals should avoid direct nocturnal floodlighting of the aquatic environment for prolonged periods, particularly when salmon are known to be in migration.
<p>List of Agencies Consulted: Provide contact name and telephone or email address.</p>	<p>A list of formal consultees along with consultation responses will be included with the finalised assessment report following the consultation period.</p>
<p>Response to consultation</p>	

Introduction

This document reports the outcomes, conclusions and recommendations of a screening assessment (Test of Likely Significance, ToLS) undertaken pursuant to the requirements of Article 6(3) of the EU Habitats Directive to determine and assess the nature, and significance of potential impacts on Natura 2000 Sites likely to arise as a result of the implementation of the Strategic Riverside Masterplan (SRM).

Assessments pursuant to Article 6(3) have a narrow focus. They are protection-led, conducted with due regard to the Precautionary Principle and concerned exclusively with the maintenance of the integrity of Natura 2000 Sites, specifically assessment of the nature and significance of all potential effects on site selection features and conservation objectives of Natura 2000 sites concerned.

This report is published to accompany both the draft Strategic Riverside Masterplan and the accompanying Environmental Report produced in accordance with the requirements of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive).

This ToLS report is therefore a consultation draft; representations received regarding scope, content, conclusions and recommendations will be given full consideration following the period of formal and public consultation before this assessment is finalised, particularly in relation to the requirements of Regulation 64B of the Conservation (Natural Habitats, etc.,) Regulations (Northern Ireland) 1995 (as amended), as detailed further below.

Legislative Context

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, commonly known as the Habitats Directive, is transposed into law in Northern Ireland by the Conservation (Natural Habitats, etc.,) Regulations (Northern Ireland) 1995 (as amended).

Article 6(3) of the Habitats Directive (transposed by Regulation 43) establishes the requirement that any plan or project likely to have a significant effect on any Natura 2000 Site(s) shall first be subject to an appropriate assessment of the implications for the site(s), and further that competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site(s) concerned:

“3. Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”

The 2007 amendment to the implementing Regulations in Northern Ireland¹ established the requirement that all land use plans must be subject to assessment pursuant to Article 6(3) prior to formal adoption.

Assessment of implications for European site

64B.—(1) Where a land use plan—

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

(b) is not directly connected with or necessary to the management of the site, the plan-making authority for that plan shall, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site’s conservation objectives.

(2) In relation to a European site in Northern Ireland, the plan-making authority, where it is other than the Department, shall for the purposes of—

(a) determining whether an assessment is required for a land use plan under paragraph (1); or

(b) the assessment under paragraph (1),

consult the Department and have regard to any representations made by it within such reasonable time as the plan-making authority may specify.

As the plan making authority in terms of the SRM is Derry City Council and not ‘the Department’ (defined at Regulation 2(2) as being the Department of the Environment), Regulation 64B(2) is triggered in terms of the requirement to consult with the Department. The publication of this draft ToLS Report in conjunction with the SRM and Environmental Assessment and the subsequent period for both formal and public consultation represents the mechanism by which it is proposed this consultation will take place:

- If, after consultation with the Department, it is considered that a Stage 2 Appropriate Assessment is necessary this will be conducted following the formal and public

¹ The Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007

consultation period as part of the plan finalisation and adoption procedure in the context of all representations received and any consequent amendments to the plan and/or the Environmental Report.

- If after consultation with the Department, it is considered that a Stage 2 Appropriate Assessment is not necessary, it is proposed that this ToLS Report will be revised and finalised following the formal and public consultation period as part of the plan finalisation and adoption procedure in the context of all representations received and any consequent amendments to the plan and/or the Environmental Report.

The Natura 2000 Network

The Natura 2000 network is comprised of sites designated, or in the latter stages of designation, under both the EU Birds Directive and EU Habitats Directive. Specifically:

- Special Areas of Conservation (SAC) designated under the EU Habitats Directive for flora, fauna and habitat interest which have been adopted by the EC and formally designated by the national government;
- Special Protection Areas (SPA) designated under the EU Birds Directive² for rare, vulnerable or migratory bird interest which have been adopted by the EC and formally designated by the national government;
- Candidate and proposed sites (cSAC and pSPA), being those that have been submitted to the EC but not yet formally adopted; and
- Sites of Community Importance (SCI), being those that have been adopted by the EC, but not yet formally designated by the national government.
- Ramsar Sites are listed under the International Convention on Wetlands of International Importance (the Ramsar Convention) and usually share boundaries with SACs and/or SPAs. In Northern Ireland it is established Government policy (PPS2) to afford to Ramsar Sites the same degree of protection as Natura 2000 sites.

Competent Authorities

The competent national authorities referred to in Article 6(3) are construed for the purposes of regulation in Northern Ireland in accordance with Regulation 5:

5.— For the purposes of these Regulations the expression "competent authority" includes government departments, district councils and statutory undertakers, and any trustees,

² 2009/147/EC on the conservation of wild birds (codified version of 79/409/EEC as amended)

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.

As the commissioning body, Derry City Council is considered to be the competent authority in relation to the SRM. It is also noted NIEA, Natural Heritage fulfils the role of competent authority in the determination of planning applications in Northern Ireland, while FCILC Loughs Agency retains a significant role as a competent authority in terms of the Atlantic salmon for which SACs of the Foyle catchment are designated.

Methodology

Assessments pursuant to the requirements of Article 6(3) of the Habitats Directive are completed in accordance with the European Commission recommended methodology, set out in the following documents:

- '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'³; and
- 'Managing Natura 2000 Sites, The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC'⁴.

The methodology recommends a four staged approach, where the results obtained upon completion of each stage determines the requirement for and scope of the subsequent stage:

Stage One: Screening or Test of Likely Significance: The process which identifies the likely impacts of a project or plan upon Natura 2000 sites, either alone or in combination with other projects or plans, and determines whether or not these impacts are likely to be significant.

Stage Two: Appropriate Assessment: The consideration of the impact on the integrity of Natura 2000 sites of the likely significant impacts of the plan or project identified in Stage 1. Impacts are assessed alone and in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

³ Available from: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

⁴ Available from: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf

Stages Three and Four are unlikely to be of relevance to the current assessment. They provide a methodology for the further assessment of plans or projects where likely significant effects cannot be excluded on the basis of the first two stages of assessment. These stages are concerned respectively with alternative methods of achieving the objectives of a plan or project which avoids adverse impacts and of assessing and designing compensatory measures for plans or projects which must progress, regardless of a negative assessment, or established Imperative Reasons of Overriding Public Interest.

Sources of Information

The data and information employed in the course of this assessment was sourced from documents and reports prepared during the course of the formulation of the SRM, the accompanying Environmental Report and the following, publically available sources:

- Northern Ireland Environment Agency (NIEA): www.ni-environment.gov.uk
- FCILC Loughs Agency: www.loughs-agency.org
- National Parks and Wildlife Service (NPWS): www.npws.ie
- Joint Nature Conservation Committee (JNCC): www.jncc.gov.uk
- European Commission (Environment): www.ec.europa.eu/environment/nature/natura2000
- NI Geohub: www.geohubni.osni.gov.uk
- National Biodiversity Data Centre (NBDC): www.biodiversityireland.ie

Assessment: Background Information

Screening of European Sites

The following Natura 2000 Sites were identified as potentially implicated, in terms of potential adverse impacts, both direct and in-direct, as a result of the implementation of the SRM:

- River Foyle & Tributaries SAC (Co. Tyrone)
- Lough Foyle SPA (Co. Londonderry)
- Lough Foyle SPA (Co. Donegal)
- River Finn SAC (Co. Donegal)
- Lough Foyle Ramsar Site

Rationale

As the plan area does not encroach within the designated boundaries of any Natura 2000 site it is considered that there will be no direct impacts on any Natura 2000 site as a result of the implementation of the SRM.

It is noted that mobile, feature species for which the above Natura 2000 sites are designated are known from the plan area; any direct impacts on these species when they occur within the SRM area must therefore be considered as indirect impacts on the Natura 2000 sites concerned.

Ecological impact assessment of potential indirect impacts on Natura 2000 sites is conducted utilising a standard source-pathway-receptor model, where in order for an indirect impact to be established all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential adverse impact is insignificant or irrelevant.

It is considered, as detailed subsequently that the significant pathways for potential adverse indirect impacts on Natura 2000 sites are:

- Disturbances to the mobile feature species which are selection features of the upstream SAC/cSAC within the plan area;
- Degradation of Atlantic salmon migration habitats within Lough Foyle and the tidal reaches of the River Foyle both within and upstream of the SRM plan area;

- Degradation of environmental quality in the tidal areas of the upstream SAC/cSAC as a result of decreases in water quality within the SRM plan area, transferred by tidal action;
- Disturbances to the species of bird which are selection features of the SPAs of the Foyle estuary, both within the SRM plan area and within the Foyle estuary generally;
- Loss or degradation of areas of habitat which are utilised by SPA feature species within the SRM plan area; and
- Degradation of estuarine habitats (Ramsar wetland habitats) on which SPA feature species rely as a result of decreases in water quality within the Foyle estuary generally, outside of the SRM plan area.

Activities proposed within the SRM and the effects on the environment which may arise as a result of the implementation of the SRM can be considered to represent sources of potential adverse impacts on the feature interest of Natura 2000 sites. The site selection features of the River Foyle & Tributaries SAC, Lough Foyle SPA (NI), Lough Foyle SPA (ROI) and River Finn SAC and the related conservation objectives therefore represent valuable ecological receptors.

It has been concluded that the source-pathway-receptor mechanism cannot be established for any additional Natura 2000 sites. Other nearby Natura 2000 sites, such as Magilligan SAC, River Faughan & Tributaries SAC, Lough Swilly SAC, Lough Swilly SPA and Binevenagh SAC have therefore been screened out and the above are the only Natura 2000 Sites which require assessment in relation to the implementation of the SRM.

Brief Description of the Project

Recognising the River Foyle as one of the region's key assets, Derry City Council in association with Ilex Urban Regeneration Company have commissioned the preparation of a Strategic Riverside Masterplan (SRM). Its purpose is to set out a framework for the next 10-15 years to help fully realise the potential of the River Foyle as a "sustainable resource for all" and to provide ideas, identify projects and set standards that will help regenerate the city and its waterfront and to create employment over the plan period and beyond. Its main aim therefore is to secure a spatial strategy together with recommendations and guidance for land-use and development along the river corridor within the study area and, in so doing, become a material consideration in the assessment of planning applications over this period.

The SRM is presented in two main parts:

- Part I, the River Strategy, divides the entire study area from Culmore Point to Newbuildings into 19 separate character areas, providing a series of high level

objectives and recommendations for each consistent with a the aims and vision set out earlier in the plan.

- Part II, the Urban Framework, focuses in more detail upon urban waterfront areas located between the Foyle and Craigavon bridges, establishing a number of detailed urban design principles and site concepts to guide and inform future development proposals located within this area based on the objectives and recommendations set out in Part I of the plan.

In combination, the River Strategy and Urban Framework are to be used as a tool to guide policy makers and decision makers as well as developers and other interested stakeholders concerned with the use and regeneration along the River Foyle in Derry~Londonderry through until 2025. In its final form the SRM will sit alongside existing and emerging land-use plans to assist with guiding development within the study area in the future.

The SRM contains policies and proposals related to the protection and enhancement of the natural environment generally and the protection of Natura 2000 Sites specifically. These are also reflected within the SEA Objectives assessed within the Environmental Report. Additionally, the need to consider the protection of Natura 2000 Sites and the likelihood that assessment pursuant to Article 6 of the Habitats Directive will be required has been highlighted in relation to the following major SRM proposals within the Environmental Report:

Table 1: Proposals identified within the SRM / ER as likely to require Article 6 Assessment

Character Area	Proposal
CA1: Culmore	Develop a major recreation/landscape attraction at the former landfill site north of Culmore.
	Improvements to existing slipway, parking area and boat storage, allowing greater formal access to the water.
	Support extension of boat berthing and visitor moorings at Culmore.
CA2: Culmore to Boom Hall	Provision of public slipways at suitable locations and maintain the existing slipways.
CA6: Bay Road Park Local Nature Reserve, Pennyburn Industrial Estate and Fort George	Develop public slipway upstream of Madam's Bank on Bay Park Road, Pennyburn Industrial Estate.
	Development of a formal berthing project upstream of Madam's Bank to operate in association with the proposed slipway and marine service activities.
	Seek early development of the riverside Greenway route over the Pennyburn with a new bridge thus physically tying the Fort George site with the Bay Road Industrial site and park.
CA7: City Centre	Establish larger, open areas of public realm space at separate locations of Queens Quay Roundabout and adjacent to Rock Mills to act as nodal points of connectivity between riverside communities and the urban waterfront. Use of these nodes to accommodate civic or public buildings should be considered.

	Development of a new pedestrian & cycle bridge from the area of the current Duke Street roundabout on Waterside to a point generally in line with the southern extent of the Foyleside Shopping Centre and including a new waterfront public space at each landing point.
CA11: Waterside	Development of a new pedestrian and cycle bridge from the area of the current Duke Street roundabout on Waterside to a point generally in line with the southern extent of the Foyleside Shopping Centre and including a new waterfront public space at each landing point.
	Creation of large open public realm space and associated civic/public building in vicinity of Duke St roundabout
CA12: Foyle Road	Develop a major waterside recreational amenity at Daisyfield such as an schools boathouse or National Centre for Excellence in water-sports (possibly linked to Magee campus, UU).
	Develop a new footbridge between Daisyfield and Prehen in the long term to link boating amenities (and establish further loop to riverside Greenways). This bridge would give a cross-river boating centre highly accessible to communities and capable of hosting major regatta type events. The bridge could have the capacity to support the weight of spectators.
CA15: Prehen Playing Fields	Develop a new footbridge between Daisyfield and Prehen in the long term to link boating amenities (and establish further loop to riverside Greenways). This bridge would give a cross-river boating centre highly accessible to communities and capable of hosting major regatta type events. The bridge could have the capacity to support the weight of spectators.

Brief Description of the Natura 2000 Sites

River Foyle & Tributaries SAC

The River Foyle and Tributaries is a large, cross-border salmonid river system in the north-west of the island of Ireland. It was declared as an Area of Special Scientific Interest (ASSI) on 31st March 2003 and confirmed on 31st October 2003. It was submitted to the European Commission as a new cSAC as part of Tranche 32 on 30th July 2004 (EU Site Code UK0030320). The current status of the site is a fully designated SAC.

The river is notable for the physical diversity and naturalness of the banks and channels, especially in the upper reaches, and the richness and naturalness of its plant and animal communities. The river has the largest population of Atlantic salmon *Salmo salar* in Northern Ireland, with around 15% of the estimated spawning numbers. The majority of the salmon returning are grilse (single wintering salmon), with a smaller but important number of spring salmon (multi-wintering salmon) also occurring. Research has indicated that individual sub-catchments within the system support genetically distinct salmon populations.

River Foyle & Tributaries SAC contains and supports habitat types and species identified respectively on Annexes I and II of the Habitats Directive as being of Community interest and whose conservation requires the designation of SACs.

The site is a candidate SAC selected for the following habitats listed on Annex I of the Habitats Directive:

- 91A0 - Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

The site is also selected as a candidate SAC for the following species listed on Annex II of the Habitats Directive:

- 1209 - Freshwater pearl mussel *Margaritifera margaritifera*
- 1106 - Atlantic salmon *Salmo salar*
- 1355 - Otter *Lutra lutra*
- 1095/1099/1096 - *Lamprey spp.*

Table 2: River Foyle & Tributaries SAC Qualifying Features and Conservation Objectives

Qualifying Feature	Representativity ⁵	Relative Surface ⁶	Conservation Status ⁷	Global Assessment ⁸	Description
91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	B	C	B	B	16.44% Cover
	Population ⁹	Isolation ¹⁰	Conservation ¹¹	Global ¹²	
1209 Freshwater pearl mussel <i>Margaritifera margaritifera</i>	D	-	-	-	Present
1106 Atlantic Salmon <i>Salmo salar</i>	B	C	B	B	1001 – 10,000
1355 Otter <i>Lutra lutra</i>	C	C	B	C	Common
1095 1099 1096 <i>Lamprey spp.</i>	D	-	-	-	Present
Conservation Objectives					
91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Maintain and where feasible expand the extent of existing oak woodland but not at the expense of other SAC features (there are areas of degraded heath, wetland and damp grassland which have the potential to develop into oak woodland).				
	Maintain and enhance oak woodland species diversity and structural diversity.				
	Maintain the diversity and quality of habitats associated with the oak woodland e.g. fen, swamp, grassland, scrub, especially where these exhibit natural transition to oak woodland.				
	Seek nature conservation management over adjacent forested areas outside the ASSI where there may be potential for woodland rehabilitation.				
1106	Maintain and if possible expand existing population numbers and distribution (preferably through				

⁵ Degree of representativity of the natural habitat type: A (excellent), B (good), C (significant), D (non-significant).

⁶ Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within the national territory: A (100% >= p > 15%), B (15% >= p > 2%), C (2% >= p > 0%).

⁷ Degree of conservation of the structure and functions of the natural habitat type concerned, including restoration possibilities: A (excellent), B (good), C (average or reduced).

⁸ Global assessment of value of site for the conservation of the natural habitat type: A (excellent), B (good), C (significant).

⁹ Size and density of the population of the species present on the site in relation to the populations present within national territory: A (100% >= p > 15%), B (15% >= p > 2%), C (2% >= p > 0%), D (non-significant population).

¹⁰ Degree of isolation of the population present on the site in relation to the natural range of the species: A (isolated or almost isolated), B (not-isolated, but on margins of area of distribution), C (not-isolated within extended distribution range).

¹¹ Degree of conservation of the features of the habitat which are important for the species concerned, including possibilities for restoration: A (excellent), B (good), C (average or reduced).

¹² Global assessment of the value of the site for conservation of the species: A (excellent), B (good), C (significant).

Atlantic Salmon <i>Salmo salar</i>	natural recruitment), and improve age structure of population. Maintain and if possible enhance the extent and quality of suitable salmon habitat – particularly the chemical and biological quality of the water and the condition of the river channel and substrate.
1355 Otter <i>Lutra lutra</i>	Maintain and if possible increase population numbers and distribution. Maintain the extent and quality of suitable Otter habitat, in particular the chemical and biological quality of the water and all associated wetland habitats

Table 1 above (reproduced from the Natura 2000 Standard Data Form) details the SCI qualifying features and summarises the conservation objectives. It is noted that no conservation objectives have been published for features 1095 1099 1096 *Lamprey spp.* and 1209 *Margaritifera margaritifera* as the resident populations within the SAC have been assessed as non-significant.

River Finn cSAC

River Finn cSAC (EU Site Code ROI002301) is situated within Co. Donegal and comprises almost the entire freshwater element of the River Finn and its tributaries, essentially representing that part of the Foyle catchment which lies within the Republic of Ireland. The designated area also includes Lough Finn, where the river rises. The site supports important populations of a number of species listed on Annex II of the EU Habitats Directive, and several habitats listed on Annex I of this directive, as well as examples of other important habitats.

The site is a candidate SAC selected for the following habitats listed on Annex I of the Habitats Directive:

- 7130 - Active blanket bog (Annex I Priority)
- 3110 - Lowland oligotrophic lakes
- 4010/4020 - Wet heaths
- 7140 - Transition mires

The site is also selected as a candidate SAC for the following species listed on Annex II of the Habitats Directive:

- 1106 - Atlantic salmon *Salmo salar*
- 1355 - Otter *Lutra lutra*

The Finn system is one of Ireland’s premier Atlantic salmon *Salmo salar* waters, important in an international context in that its populations of spring salmon appear to be stable while declining in many areas of Ireland and Europe.

Lough Foyle SPA (NI)

Lough Foyle is a large, shallow estuarine sea-lough in the north-west of the island of Ireland. It was declared as an Area of Special Scientific Interest (ASSI) on 20th July 1998 and confirmed on

22nd January 1999. It was submitted to the European Commission as a classified SPA on 2nd February 1999 (EU Site Code UK9020031). The current status of the site is a fully designated SPA.

Covering an area of approximately 2204 hectares the designated site includes the estuaries of the rivers Foyle, Faughan and Roe. The site contains extensive intertidal areas of mudflats and sandflats, saltmarsh and associated brackish ditches. The SPA includes the whole of Lough Foyle ASSI and the intertidal area of Magilligan ASSI in Lough Foyle extending south of Magilligan Point. The boundary of the Special Protection Area is entirely coincident with that of the Lough Foyle Ramsar site and overlaps with Magilligan cSAC.

The site qualifies under Article 4.1 of Directive 2009/147/EC by regularly supporting, in winter, internationally important numbers of:

- A046b - Light-bellied brent goose *Branta bericula hrota*
- A038 - Whooper swan *Cygnus cygnus*
- A157 - Bar-tailed godwit *Limosa lapponica*

Table 3: Lough Foyle SPA Qualifying Features and Conservation Objectives

Qualifying Feature	Site Assessment				Population		
	Population ¹³	Isolation ¹⁴	Conservation ¹⁵	Global ¹⁶	Breed	Winter	Stage
A046b Light-bellied brent goose <i>Branta bericula hrota</i>	A	C				3730	
A038 Whooper swan <i>Cygnus cygnus</i>	B	C				890	
A157 Bar-tailed godwit <i>Limosa lapponica</i>	B	C				1896	
Conservation Objectives							
Overall Objective	Favourable Conservation Status (To protect and where necessary, improve the water or water dependent environment to the extent necessary to achieve favourable conservation status for all the water dependent features for which the protected area is designated.)						
A046b Light-bellied brent goose <i>Branta bericula hrota</i>	No significant decrease in population against national trends, caused by on-site factors						
A038 Whooper swan <i>Cygnus cygnus</i>	No significant decrease in population against national trends, caused by on-site factors						
A157 Bar-tailed godwit <i>Limosa lapponica</i>	No significant decrease in population against national trends, caused by on-site factors						
	No significant decrease in population against national trends, caused by on-site factors						

¹³ Size and density of the population of the species present on the site in relation to the populations present within national territory: A (100% \geq p > 15%), B (15% \geq p > 2%), C (2% \geq p > 0%), D (non-significant population).

¹⁴ Degree of isolation of the population present on the site in relation to the natural range of the species: A (isolated or almost isolated), B (not-isolated, but on margins of area of distribution), C (not-isolated within extended distribution range).

¹⁵ Degree of conservation of the features of the habitat which are important for the species concerned, including possibilities for restoration: A (excellent), B (good), C (average or reduced).

¹⁶ Global assessment of the value of the site for conservation of the species: A (excellent), B (good), C (significant).

Table 2 above (reproduced from the Natura 2000 Standard Data Form) details the SPA qualifying features and summarises the conservation objectives.

The site also qualifies under Article 4.2 of Directive 2009/147/EC by supporting over 20,000 migratory waterfowl. This total includes both the internationally important species listed above and the following waterfowl species which are nationally important in an all-Ireland context: Red-throated diver *Gavia stellata*, Great crested grebe *Podiceps cristatus*, Mute swan *Cygnus olor*, Bewick's swan *Cygnus colombianus*, Greylag goose *Anser anser*, Shelduck *Tadorna tadorna*, Teal *Anas crecca*, Mallard *Anas platyrhynchos*, Wigeon *Anas penelope*, Eider *Somateria mollissima*, Red-breasted merganser *Mergus serrator*, Oystercatcher *Haematopus ostralegus*, Golden plover *Pluvialis apricaria*, Grey plover *Pluvialis squatarola*, Lapwing *Vanellus vanellus*, Knot *Calidris canuta*, Dunlin *Calidris alpina*, Curlew *Calidris ferruginea*, Redshank *Tringa tetanus* and Greenshank *Tringa nebularia*.

Lough Foyle SPA (ROI)

Lough Foyle SPA (EU Site Code ROI004087) is situated within Co. Donegal and comprises a section of the western shore of Lough Foyle between Muff and White Castle, essentially representing Lough Foyle coastal habitat which lies within the Republic of Ireland. This site is a relatively small part of the Lough Foyle estuarine complex, which itself is a site of high ornithological importance.

It is almost entirely comprised of intertidal mudflat, but does include small areas of sand and shingle. The Lough Foyle SPA provides feeding habitat for a range of wintering waterfowl species. Species using the site include Great crested grebe *Podiceps cristatus*, Cormorant *Phalacrocorax carbo*, Brent Goose *Branta bericula hrota*, Shelduck *Tadorna tadorna*, Wigeon *Anas penelope*, Mallard *Anas platyrhynchos*, Red-breasted merganser *Mergus serrator*, Oystercatcher *Haematopus ostralegus*, Ringed Plover *Charadrius hiaticula*, Knot *Calidris canuta*, Curlew *Calidris ferruginea*, Redshank *Tringa tetanus*, Turnstone *Arenaria interpres*, and Greenshank *Tringa nebularia*. Gulls are also regular visitors to the site and include such species as Black-headed gull *Larus ridibundus*, Common gull *Larus canus*, Herring gull *Larus argentatus* and Great black-backed gull *Larus marinus*.

Lough Foyle Ramsar Site

Lough Foyle Ramsar Site was designated on 2nd February 1999. Covering an area of approximately 2159 hectares it includes the whole of the Lough Foyle ASSI, the intertidal area of

the Magilligan ASSI in Lough Foyle extending south of Magilligan Point and all of Lough Foyle Special Protection Area. The site is comprised of a large shallow sea lough which includes the estuaries of the rivers Foyle, Faughan and Roe and contains extensive intertidal mudflats and sandflats, and associated brackish ditches.

The site qualifies under Criterion 1a of the Ramsar Convention by being a particularly good representative example of a wetland complex including intertidal sand and mudflats with extensive seagrass beds, saltmarsh, estuaries and associated brackish ditches.

The site also qualifies under Criterion 1c by being a particularly good representative example of a wetland, which plays a substantial hydrological, biological and ecological system role in the natural functioning of a major river basin which is located in a trans-border position.

Favourable Conservation Status

The purpose of designating and managing SACs and SPAs is to maintain at, or restore to, 'favourable conservation status' the habitats and species listed within the Directives for which the sites are notified.

The conservation status of a species may be taken as favourable when:

- Population data indicate that the species is maintaining itself on a long-term basis as a viable component of its natural habitats.
- The species' natural range is neither being reduced nor is likely to be reduced for the foreseeable future.
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.
- The conservation status of a species or habitat has thus to be assessed across its entire natural range within the European Union, in both protected sites and the wider countryside, and over the long term.

Potentially Implicated SAC, cSAC, SPA and Ramsar Selection Features

River Foyle & Tributaries SAC and River Finn cSAC

The designated boundaries of both the River Finn cSAC and River Foyle & Tributaries SAC are located upstream of the SRM plan area; as such it is considered that the extents of the Annex I habitat types for which both are notified and the (non-significant) population of *Margaritifera margaritifera* for which the SAC is notified are located upstream of the SRM area. Consequently,

it can reasonably be concluded that the implementation of the SRM will have no direct or indirect adverse impacts on these selection features and supporting features as no source-pathway-receptor mechanism can be established.

The River Foyle below Strabane is slow-flowing and is influenced by a tidal regime, rising and falling with the tidal cycle; this area includes a significant stretch of the River Foyle which is within the designated boundary of both the River Foyle & Tributaries SAC and River Finn cSAC. As such it is considered that there may be potential for adverse impact on the general environmental quality of these sections of the SAC / cSAC through the mobilisation of sediments and other water borne pollutants upstream as a result of tidal action. However, the critical supporting *Salmo salar* holding, spawning and nursery habitats are not implicated in this manner as the extent of these habitats is limited to the clear, fast-flowing, freshwater areas of the upper reaches and headwaters of the river system.

The mobile species for which both the River Finn cSAC and River Foyle & Tributaries SAC are noted, specifically *Salmo salar* and *Lutra lutra* are known to occur within the plan area; as such any impacts upon these species within the plan area must be considered as indirect impacts upon the SAC / cSAC, which cannot be screened out at this stage. The (non-significant) populations of *Lamprey spp.* for which the SAC is also noted can, however, be screened out at this stage as it is considered that the assessment of impacts on water quality with regard to *Salmo salar* will be sufficient to address any potential adverse impacts on the non-significant lamprey populations.

Lough Foyle SPA (NI), Lough Foyle SPA (ROI) and Lough Foyle Ramsar Site

Feature species of bird are known from areas of suitable habitat both within the plan area and within the Foyle estuary generally. Any direct or indirect disturbances to these species or loss or degradation of areas of wetland habitats on which they rely must be considered as impacts on the designated sites, whether the birds and habitats are located within the designated boundaries or not.

In the context of the current assessment, where potential indirect adverse impacts are indicated as a result of disturbance, habitat loss and habitat degradation via the transfer of waterborne pollutants, no SPA or Ramsar features can be screened out at this stage.

SAC, cSAC, SPA and Ramsar Selection Features which require Consideration

It is considered therefore that the following features require further consideration:

- SAC & cSAC Feature Species:
 - 1106 Atlantic salmon *Salmo salar*
 - 1355 Otter *Lutra lutra*
- SPA Feature Species:
 - A046b Light-bellied brent goose *Branta bericula hrota*
 - A038 Whooper swan *Cygnus Cygnus*
 - A157 Bar-tailed godwit *Limosa lapponica*
 - Migratory & Wintering Bird Assemblages
- Ramsar Wetland Habitats

Species-Specific Considerations

Atlantic salmon *Salmo salar*

Atlantic salmon utilise rivers for the reproductive and nursery phases, and the marine environment for adult development and growth phases, migrating from the Atlantic Ocean to spawn in freshwater reaches of rivers with clean gravel. Salmon spawn in autumn or winter (mid October to February) in excavated depressions in the river substrate called 'redds'. On completion of spawning, females drop downstream, while males may remain to spawn with further females. After hatching, the young fish develop in fresh water for two to four years before migrating to the sea to mature.

The estuarine and tidal reaches of Lough Foyle and River Foyle systems are therefore critical. In estuaries migration is still primarily nocturnal and associated with a tidal component to direction; movement riverwards and seawards occurs on flow and ebb tides during the hours of darkness. It is estimated that the number of returning salmon entering the River Foyle system is in excess of 40,000, making the Foyle one of the most important salmon rivers in the British Isles.

These salmon regularly migrate to the upper reaches of the Foyle / Finn system via the Lough Foyle estuary and the tidal stretches of the river within the SRM plan area. Any environmental impacts which reduced the habitat quality or suitability of these areas or affect the ability of salmon to migrate naturally must be considered as significant adverse impacts on the SAC and cSAC.

Water quality is of critical importance; siltation and pollution as a result of anthropogenic inputs into the river system or disturbances to the river banks can seriously impact salmon, particularly during the migration and spawning season. Temporary or permanent barriers to passage within

the river channel and nocturnal floodlighting of the river or riverside structures can impede upstream and downstream migration.

Otter *Lutra lutra*

The maintenance of water quality is critical for otters, in terms of the maintenance of food supply. Otters also require continuity and coherence of marginal riparian terrestrial habitats for cover and the maintenance of passage both within the river channel and via adjacent riparian commuting and foraging habitats.

SPA Feature Bird Species

The maintenance of the extent and quality of existing wetland and estuarine habitat, both within and outside of designated sites is critical for all SPA feature species, as is the maintenance of water quality and general environmental quality within the River Foyle and Lough Foyle to ensure food supply is maintained. It is also of critical importance that areas of habitat utilised by these species, particularly within the designated boundaries, are not subject to significant increases in the level of anthropogenic disturbance.

Assessment Stage 1: Test of Likely Significance (TOLS)

In-Combination and Cumulative Impacts

As detailed within both the SRM and the Environmental Report, there are a number of existing policies and strategies developed at the national, regional and local levels of relevance to the SRM which have guided and influenced its preparation. These include:

- *The Regional Development Strategy for Northern Ireland 2025
- Regional Transportation Strategy for Northern Ireland 2002 – 2012
- *National Spatial Strategy (Republic of Ireland, 2002)
- *Northern Ireland Biodiversity Strategy 2002
- *National Biodiversity Plan, 2002 (RoI)
- *North Western River Basement Management Plan, December 2009, NIEA
- *A Sustainable Development Strategy for Northern Ireland, 2006
- *Wildlife Action in Derry~Londonderry 2008-2013, Derry City Council
- *Derry Area Plan (DoE, 2011);
- Foyle Riverside Strategy (Atkins 1997);
- Derry Public Realm Strategy 2004;
- Derry~Londonderry Regeneration Plan 2005 (Ilex)
- Derry~Londonderry Regeneration Plan Mark II
- Integrated Transport Strategy for the Derry~Londonderry region (Draft, January 2009)
- 'Focus on the Future' Tourism Development Strategy 2009 – 2012 Derry~Londonderry, Derry City Council
- *A Strategy and Action Plan for the Development of Marine Tourism and Leisure in Lough Foyle and Carlingford Lough Areas – Loughs Agency, March 2007
- Derry~Londonderry Access Plan 2009-2014, Derry City Council

Plans and policies in the above list marked * encapsulate a high level of strategic and/or specific protection to the identified Natura 2000 sites and their specific feature interest. As such, these plans and policies are considered likely to act in-combination with the SRM, to reinforce the protection of Natura 2000 sites.

It is considered that the remaining plans and policies, or any others not listed above, are not likely to result in significant adverse effects on the identified Natura 2000 sites, in terms of any cumulative or in-combination actions or other synergistic effects resulting from the implementation of the SRM.

Section 6.2 of the Environmental Report provides an analysis of the potential cumulative effects of the SRM policies and proposals over the course of the plan. Cumulative effects on biodiversity, flora & fauna generally were assessed in terms of potential rather than likelihood, particularly where likely adverse effects on Natura 2000 Sites were indicated.

As is detailed both within the Environmental Report and at Table 1, above, the need to consider the protection of Natura 2000 Sites and the likelihood that assessment pursuant to Article 6 of the Habitats Directive will be required has been highlighted in relation to the major SRM proposals. However, as is detailed further subsequently, the cumulative impact of a general increase in riverside development, river access, river-based activity, small-scale riverside construction and on-water activity during the SRM plan period may result, cumulatively and in combination, in significant adverse impacts if each individual small project is not conducted sensitively and with appropriate mitigation measures incorporated.

Individual Elements of the SRM likely to Impact Natura 2000 Sites

This section outlines and describes the individual elements of the SRM which, either alone or in combination with other plans or projects, are likely to give rise to impacts on the Natura 2000 Sites.

The plan area does not encroach into the designated area of any Natura 2000 site; however, mobile qualifying feature species are known from within the plan area. Employing the source-pathway-receptor model, it is considered that the significant pathways for potential adverse indirect impacts on the identified Natura 2000 Sites are:

- Disturbances to the mobile feature species which are selection features of the upstream SAC/cSAC within the plan area;
- Degradation of Atlantic salmon migration habitats within Lough Foyle and the tidal reaches of the River Foyle both within and upstream of the SRM plan area;
- Degradation of environmental quality in the tidal areas of the upstream SAC/cSAC as a result of decreases in water quality within the SRM plan area, transferred by tidal action;
- Disturbances to the species of bird which are selection features of the SPAs of the Foyle estuary, both within the SRM plan area and within the Foyle estuary generally;
- Loss or degradation of areas of habitat which are utilised by SPA feature species within the SRM plan area; and

- Degradation of estuarine habitats (Ramsar wetland habitats) on which SPA feature species rely as a result of decreases in water quality within the Foyle estuary generally, outside of the SRM plan area.

The SRM, comprising the River Strategy and Urban Framework are intended to be used as a tool to guide policy makers/decision makers as well as developers and other interested stakeholders concerned with the regeneration of the River Foyle in Derry~Londonderry through until 2025. In its final form the SRM will sit alongside existing and emerging land-use plans to assist with guiding development within the study area in the future.

The implementation of the SRM will not, in isolation, result in the consenting, construction, operation or decommissioning of any proposal or activity outside of established assessment, consenting and regulatory processes, such as Planning Approval, Environmental Impact Assessment (EIA), Integrated Pollution Prevention and Control (IPPC), Strategic Environmental Assessment (SEA), Appropriate Assessment (AA), FEPA Licensing, Discharge Consenting and the various requirements of the Water Framework Directive and Freshwater Fish Directive.

Likely Direct, Indirect or Secondary Impacts on the Natura 2000 Site

This section outlines and describes the direct, indirect or secondary impacts which are likely to arise, either alone or in combination with other plans or projects, on the Natura 2000 Sites as a result of the implementation of the SRM by virtue of:

- Size and Scale;
- Land-take;
- Distance from the Natura 2000 Site;
- Distance from Key Features of the Natura 2000 Site;
- Resource Requirements (water abstraction etc);
- Emissions (disposals to land, water or air);
- Excavation Requirements;
- Transportation Requirements;
- Duration of Construction, Operation, De-Commissioning etc; and
- Other Project-Specific Factors.

Size and Scale:

- The SRM plan area encompasses the currently built-up Foyle riverside, reaches of River Foyle and Lough Foyle within the city and some marginal areas of currently undeveloped riverside, particularly to the south of the city.

- As detailed, the SRM is to be used as a tool to guide the use and regeneration of the plan area in conjunction with current and forthcoming land-use plans, policies and regulatory regimes.
- The SRM also encompasses guidance and policy for the protection and enhancement of the environment generally and of Natura 2000 Sites specifically.
- As such it is considered that the implementation of the SRM will not, by virtue of size, scale or scope, result directly or indirectly in adverse impacts on the feature interest of the identified Natura 2000 Sites.
- Potential adverse impacts on Natura 2000 feature interest and conservation objectives which may arise as a result of individual elements of the SRM are detailed and considered further below.

Land-take:

- The implementation of the SRM will not require, permit or promote the development of or permit the change of use of any area of terrestrial, wetland, riparian or aquatic habitat from within the designated boundaries of any Natura 2000 Site.

Distance from the Natura 2000 Site:

- The formal boundaries of the SRM plan area, at closest point, the following distances from the designated boundaries of the potentially implicated Natura 2000 sites:
 - Lough Foyle SPA (NI): Immediately adjacent at both north-eastern and north-western extents (SRM plan area) and south-western and south-eastern extents (SPA designated boundary);
 - Lough Foyle SPA (ROI): 300m at north-western extent (SRM plan area) and southern extent (SPA designated boundary);
 - Lough Foyle Ramsar Site: Immediately adjacent at both north-eastern and north-western extents (SRM plan area) and south-western and south-eastern extents (SPA designated boundary);
 - River Foyle & Tributaries SAC: 600m at southern extent (SRM plan area) and northern extent (SAC designated boundary);
 - River Finn cSAC: 600m at southern extent (SRM plan area) and northern extent (SAC designated boundary);
- Lough Foyle SPA (NI) and Lough Foyle SPA (ROI) form a continuous designated area extending across the international frontier. In effect, the SRM plan area is also immediately adjacent to Lough Foyle SPA (ROI).
- In terms of River Foyle & Tributaries SAC and River Finn cSAC, the international frontier runs along the centre line of the River Foyle; the SAC and cSAC therefore also form a continuous designated area extending across the international frontier.

- The Lough Foyle Ramsar Site boundary is coherent with the Lough Foyle SPA (NI) boundary.
- In terms of proximity, therefore, activities proposed within character areas CA1 (Culmore) and CA3 (Lisahally Port/Industrial Area) particularly have the potential to adversely impact Lough Foyle SPA (NI), Lough Foyle SPA (ROI) and Lough Foyle Ramsar Site in terms of direct disturbances to feature species and habitat degradation.
- The SRM does not contain any specific proposals in regard to CA3 (Lisahally Port/Industrial Area).
- Proposals within the SRM in relation to CA1 (Culmore), particularly the proposed reclamation of the former Culmore landfill site, have the potential to steer development towards Lough Foyle SPA. It must be noted that this area is not currently in a natural or semi-natural state and has been the subject of anthropogenic intervention for many years. Additionally, as indicated within the ER, any such proposals will be the subject of individual assessment pursuant to Article 6.
- In terms of proximity, it is not expected that activities proposed or promoted within the SRM will adversely impact River Foyle & Tributaries SAC or River Finn cSAC, in terms of the implementation of the SRM.

Distance from Key Features of the Natura 2000 Site:

- The SRM plan area is close to and immediately adjacent to the identified Natura 2000 Sites as detailed above.
- Additionally, mobile feature species which are selection features of the identified Natura 2000 Sites, specifically Atlantic salmon *Salmo salar*, Otter *Lutra lutra* and the breeding and wintering bird assemblages of the SPAs are known from the River Foyle and suitable areas of marginal riparian and estuarine habitat within the SRM plan area.
- While the requirement to address potential adverse impacts on Natura 2000 Sites and site selection features has been highlighted within the SRM in relation to major development proposals, there is also a need to consider adverse impacts in terms of potential cumulative effects which may arise as a result of the range of SRM proposals which may, in-combination over the lifetime of the plan, give rise to disturbance or disruption impacts (Section 6.2, Environmental Report).
- Cumulative and in-combination effects may arise as a result of:
 - A cumulative loss of riparian vegetation or habitat connectivity as a result of individually minor riverside projects may adversely impact otter and birds.
 - A cumulative increase in boating activity and use of the river may result in a significant increase in disturbance to salmon and feature species of bird.
 - Various minor riverside construction projects may, in-combination, result in significant mobilisation of sediment and other pollutants into the River Foyle.

- Increases in nocturnal lighting of the River Foyle may, cumulatively, adversely impact the ability of salmon to migrate.
- As such, a precautionary approach must be adopted and the following additional elements of design guidance added to the finalised SRM:
 - The ecological quality and continuity of all natural and semi-natural riparian vegetation is of particular importance to ecologically valuable and internationally protected wildlife; all proposals should seek to retain, replace and enhance such areas.
 - The Atlantic salmon and breeding and wintering waterfowl of the River Foyle and Lough Foyle are ecologically valuable and internationally protected; all proposals should seek to eliminate or minimise any further disturbances to these species.
 - Environmental quality, particularly water quality within the River Foyle and Lough Foyle is of critical importance to ecologically valuable, internationally protected wildlife; all proposals should seek to eliminate both the discharge of polluting materials and the mobilisation of silts and sediments into the aquatic environment.
 - Atlantic salmon migrate through Lough Foyle and the tidal stretches of the River Foyle to and from breeding, nursery and recruitment habitats in the headwaters of the Foyle system during the night, and are known to be disrupted by high volumes of artificial light; all proposals should avoid direct nocturnal floodlighting of the aquatic environment for prolonged periods, particularly when salmon are known to be in migration.

Resource Requirements:

- The implementation of the SRM will not require, permit or promote any development or activities which require any resources to be sourced from any of the Natura 2000 Sites identified.

Emissions:

- The implementation of the SRM may promote development or other activities which incorporate excavation requirements, earthworks and/or other disturbances to land surfaces or aquatic areas which may have the potential to adversely impact the identified Natura 2000 Sites in terms of the release of silts, sediments or other pollutants to the River Foyle and their onward transfer.
- While any specific projects brought forward as a result of the implementation of the SRM will themselves be subject to individual consenting regimes, adverse impacts in terms of potential cumulative effects which may arise as a result of the range of SRM proposals may, in-combination over the lifetime of the plan, give rise to indirect adverse

- impacts and changes to key elements of the identified Natura 2000 Sites via the release of silts, sediments or other pollutants to the River Foyle and their onward transfer.
- As such, a precautionary approach must be adopted and the following additional elements of design guidance added to and/or reinforced within the finalised SRM:
 - Environmental quality, particularly water quality within the River Foyle and Lough Foyle is of critical importance to ecologically valuable, internationally protected wildlife; all proposals should seek to eliminate both the discharge of polluting materials and the mobilisation of silts, sediments and other pollutants into the aquatic environment.

Excavation Requirements:

- The implementation of the SRM will not require, permit or promote any activities associated with excavations within any of the Natura 2000 Sites identified.
- Other than as detailed under 'Emissions' above, it is not expected that activities proposed or promoted within the SRM will adversely impact the identified Natura 2000 sites in terms of any excavation requirements.

Transportation Requirements:

- Transport and infrastructure links within the SRM plan area are well established; as such transport requirements for the implementation of the SRM are not expected to present any implication for the identified Natura 2000 Sites.
- However, the SRM contains specific policies and proposals related to transport:
 - River's edge walking & cycling routes;
 - Greenway proposals;
 - Proposals for new bridges;
 - Proposals for new slipways, jetties or improvements to existing facilities;
 - Proposals promoting greater use of River Foyle, particularly for boating;
 - Proposals promoting greater access to banks of River Foyle;
- While the requirement to consider impacts on Natura 2000 Sites and the likelihood that Article 6 Assessment will be required for individual projects has been highlighted within the ER in relation to the proposals for new bridges, slipways, jetties and other major projects, there is also a need to consider potential adverse cumulative impacts which may arise as a result of the range of individually minor SRM proposals over the lifetime of the plan.
- The potential cumulative impact of transport related proposals such as the general increase in riverside access and activity the general increase in boating and related on-water activity which may arise during the plan period as a result of the implementation of the SRM require to be addressed.

- As such, a precautionary approach must be adopted and the following additional elements of design guidance added to and/or reinforced within the finalised SRM:
 - The Atlantic salmon and breeding and wintering waterfowl of the River Foyle and Lough Foyle are ecologically valuable and internationally protected; all proposals should seek to eliminate or minimise any further disturbances to these species.

Duration of Construction, Operation, Decommissioning etc:

- The SRM comprising the River Strategy (Part I) and Urban Framework (Part II) is proposed to be utilised as a tool to guide policy makers, decision makers, developers and stakeholders concerned with regeneration along the River Foyle through until 2025.
- As such, it will sit alongside existing and emerging land-use plans and will integrate into the existing legislative and policy frameworks for the determination of planning applications and other activities which require assessment, regulation and consent.
- Both the River Strategy and the Urban Framework encapsulate guidance, high level objectives, visions, aims and recommendations which require and promote the protection and enhancement of the environment in general and Natura 2000 Sites specifically.
- The proximity of Natura 2000 Sites has been highlighted within appropriate individual character area descriptions.
- Individual proposals promoted within the SRM which will require a high level of environmental assessment have been identified within the accompanying Environmental Report and the need for individual assessment pursuant to Article 6 of the Habitats Directive has been highlighted to inform potential developers.
- The implementation of the SRM will not, in isolation, result in the construction, operation or decommissioning of any proposal or activity outside of the established assessment, consenting and regulatory regime.

Likely Changes to the Natura 2000 Site as a result of the Plan

This section outlines and describes the changes which are likely to arise in the Natura 2000 Site(s) as a result of:

- Reduction of Habitat Area;
- Disturbance to Key Species;
- Habitat or Species Fragmentation;
- Reduction in Species Density;
- Changes in Key Indicators of Conservation Value (water quality etc)

Reduction and/ or Fragmentation of Habitat Area:

- Although in close proximity and/or immediately adjacent to the designated boundaries of the identified Natura 2000 Sites the SRM plan area does not encroach into these designated boundaries, and will not therefore result in any loss, reduction or fragmentation of habitat or habitat extent within the designated areas.
- Both the River Strategy and Urban Framework components of the SRM identify and encapsulate policies and proposals for the protection of areas of valuable habitats within the plan area which are of known utility to mobile feature species of the identified Natura 2000 Sites.
- It is considered that the cumulative impact of numerous small scale riverside proposals does have the potential to give rise to a significant loss of the marginal riparian, wetland and estuarine habitats within the SRM plan area which provide cover and foraging opportunities for otter and birds.
- A precautionary approach must therefore be adopted and the following additional elements of design guidance added to and/or reinforced within the finalised SRM:
 - The ecological quality and continuity of all natural and semi-natural riparian vegetation is of particular importance to ecologically valuable and internationally protected wildlife; all proposals should seek to retain and enhance such areas and replace any such habitats lost or compromised as a result of development.
 - Environmental quality, particularly water quality within the River Foyle and Lough Foyle is of critical importance to ecologically valuable, internationally protected wildlife; all proposals should seek to eliminate both the discharge of polluting materials and the mobilisation silts and sediments into the aquatic environment.

Disturbance and/or Fragmentation to Key Species:

- Although in close proximity and/or immediately adjacent to the designated boundaries of the identified Natura 2000 Sites the SRM plan area does not encroach into these designated boundaries, and will not therefore result in any direct disturbance or fragmentation to species within the designated areas.
- Both the River Strategy and Urban Framework components of the SRM identify and encapsulate policies and proposals for the protection of the valuable mobile feature species of the identified Natura 2000 Sites.
- It is also considered that the cumulative impact of large riverside projects may result in a significant disturbance to migrating salmon as a result of increased artificial lighting of the river generally.
- A precautionary approach must therefore be adopted and the following additional elements of design guidance added to and/or reinforced within the finalised SRM:

- Atlantic salmon migrate through Lough Foyle and the tidal stretches of the River Foyle to and from breeding, nursery and recruitment habitats in the headwaters of the Foyle system during the night, and are known to be disrupted by high volumes of artificial light; all proposals should avoid direct nocturnal floodlighting of the aquatic environment for prolonged periods, particularly when salmon are known to be in migration.
- It is also considered that the cumulative impact of increased access to the riverside and increased use of the River Foyle for boating and leisure may result in significant increases in disturbance to feature SPA species, outside the designated boundaries but within the SRM plan area.
- A precautionary approach must therefore be adopted and the following additional elements of design guidance added to and/or reinforced within the finalised SRM:
 - The Atlantic salmon and breeding and wintering waterfowl of the River Foyle and Lough Foyle are ecologically valuable and internationally protected; all proposals should seek to eliminate or minimise any further disturbances to these species.

Reduction in Species Density:

- Habitat loss, fragmentation, degradation and increased disturbances (as detailed above) have the potential to result in reductions in species densities outside the designated boundaries of the identified Natura 2000 sites but within the SRM plan area.
- A number of measures are recommended for incorporation and/or reinforcement within the finalised SRM to address these issues.
- It is considered, as detailed above, that the implementation of the SRM will not result in any reductions in species densities within the designated boundaries of the identified Natura 2000 sites.

Changes in Key Indicators of Conservation Value:

- The key indicators potentially adversely impacted by the proposed development as established above are:
 - Water quality within the River Foyle and Lough Foyle;
 - Wetland and estuarine habitat quality and extent;
 - Ability of Atlantic salmon *Salmo salar* to successfully migrate within Lough Foyle and the tidal reaches of the River Foyle;
 - Suitability and continuity of semi-natural riparian habitat within the plan area for Otter *Lutra lutra*;
 - Maintenance of general environmental quality within the SRM plan area specifically and Lough Foyle and the tidal reaches of River Foyle generally and the maintenance of food supply for SAC, cSAC, SPA and Ramsar feature species;

Likely Impacts on the Natura 2000 Site as a Whole

This section outlines and describes the impacts which are likely to arise on the Natura 2000 Site as a whole, in terms of:

- Interference with the Key Relationships that Define the Structure of the Natura 2000 Site; and
- Interference with Key Relationships that Define the Function of the Natura 2000 Site.

Due to the high level of protection afforded to Natura 2000 sites at a strategic level within the SRM, the requirement to consider the protection of Natura 2000 Sites highlighted within the SRM in relation to major proposals and the recommendations detailed above and summarised subsequently to address potential cumulative and in-combination effects, it is not expected that the implementation of the SRM will result in any significant interference with the key relationships that define the structure and function of the identified Natura 2000 sites.

Indication of Significance

This section provides an analysis and indication of the significance of the potential impacts on the Natura 2000 Site(s) which may result from the effects identified and detailed in set out above, in terms of:

- Loss;
- Fragmentation;
- Disruption;
- Disturbance;
- Changes to Key Elements of the Natura 2000 Site (water quality etc.).

It is considered, as detailed above, that the cumulative impact of a range of individually smaller SRM proposals may, over the course of the plan period, give rise to disturbance or disruption impacts such as a loss of riparian vegetation or habitat connectivity, disturbance and disruption as a result of increased boating and on-river activities, mobilisation of sediment and other pollutants into the River Foyle and increased nocturnal lighting of the River Foyle.

However, adopting a precautionary approach, it is recommended as detailed above and summarised below, that a number of additional elements of design guidance are added to or reinforced within the finalised SRM to address these issues.

It is not expected that the implementation of the SRM will lead to any loss or fragmentation of Natura 2000 feature habitats or species within the designated boundaries of the sites identified.

Due to the high level of protection afforded to environment generally and Natura 2000 sites specifically at a strategic level within the SRM, the specific policies and proposals relating to the protection and enhancement of areas of high ecological value and the requirement to consider the protection of Natura 2000 Sites, highlighted in relation to the major SRM proposals, it is not expected that the implementation of the SRM will result in any significant disruption or disturbance to Natura 2000 feature habitats or species within the SRM plan area or within the wider area generally.

It is not expected that the implementation of the SRM will result in any adverse changes to the key elements of the identified Natura 2000 sites.

Conclusions: Potential Significant Impacts

A Stage 1 Test of Likely Significance has demonstrated that the implementation of the SRM:

- Will have no direct impacts upon the River Foyle & Tributaries SAC, Lough Foyle SPA (NI), Lough Foyle SPA (ROI) or River Finn SAC; and
- Will not result in significant adverse indirect impacts upon the River Foyle & Tributaries SAC, Lough Foyle SPA (NI), Lough Foyle SPA (ROI) or River Finn SAC;

Provided:

- The recommendations detailed below are incorporated into the finalised SRM.

Recommendations

It is recommended that the following additional elements of design guidance are added to or reinforced within the finalised SRM:

1. The ecological quality and continuity of all natural and semi-natural riparian vegetation is of particular importance to ecologically valuable and internationally protected wildlife; all proposals should seek to retain and enhance all such areas and replace any areas removed or compromised to facilitate development.
2. The Atlantic salmon and breeding and wintering waterfowl of the River Foyle and Lough Foyle are ecologically valuable and internationally protected; all proposals should seek to eliminate or minimise (to insignificant levels) any further disturbances to these species.
3. Environmental quality, particularly water quality within the River Foyle and Lough Foyle is of critical importance to ecologically valuable, internationally protected wildlife; all proposals should seek to eliminate both the discharge of polluting materials and the mobilisation of silts and sediments into the aquatic environment.
4. Atlantic salmon migrate through Lough Foyle and the tidal stretches of the River Foyle to and from breeding, nursery and recruitment habitats in the headwaters of the Foyle system during the night, and are known to be disrupted by high volumes of artificial light; all proposals should avoid direct nocturnal floodlighting of the aquatic environment for prolonged periods, particularly when salmon are known to be in migration.