

ENVIRONMENTAL REPORT

DRAFT STRATEGIC RIVERSIDE MASTER PLAN 2011

NON-TECHNICAL STATEMENT

Prepared By:



In Association With:

AECOM



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The purpose of the non-technical summary is to provide an accurate, non-technical synopsis of the information contained within the Environmental Report.

1.0 Background

Derry City Council in association with Ilex Urban Regeneration Company commissioned the preparation of a Strategic Riverside Masterplan (SRM) in May 2009. 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 EU Strategic Environmental Assessment (SEA) Directive (2001/42/EC) – referred to as ‘the Directive’ – provides requires the integration of environmental considerations into the preparation and adoption of land use plans with a view to promoting sustainable development within EU member states. The Directive is applied in Northern Ireland via The Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 – referred to as ‘the Regulations’. Given the strategic importance of the SRM and its potential environmental consequences, Derry City Council (the responsible authority) has opted to undertake an SEA for the SRM.

The findings of the SEA are set out in the Environmental Report which identifies, describes and evaluates the likely significant effects on the environment from implementation of the plan and reasonable alternatives. The Environmental Report is released alongside the draft SRM and is open for public review and comment. In addition, the plan also has the potential to impact upon a neighbouring EU Member State – namely the Republic of Ireland. As such, the responsible authority has made the relevant Department aware of the potential for significant environmental effects as a result of the SRM, in line with regulatory requirements.

The entire SEA process and methodology for its completion is based upon the aforementioned legislative documents and also the Government’s Practical Guide – ‘A Practical Guide to the Strategic Environmental Assessment Directive’. The following outlines the findings of the key stages of the Environmental Report.

2.0 Scoping

The screening and scoping stage of the SEA considered the environmental topics to be assessed and the level of detail required to be considered in order to ensure an effective SEA. A scoping report was produced for circulation which detailed the issues considered as part of the SEA in relation to the following topics:

- Air Quality
- Biodiversity, Flora and Fauna
- Climatic Factors
- Cultural Heritage
- Landscape
- Material Assets
- Noise
- Population and Human Health
- Soil
- Water and Flooding

The Scoping Report outlined the databases to be used to establish the environmental baseline of the study area, suggested SEA Objectives and provided an indication of how the potential impact of the SRM would be assessed. The report was put out to informal consultation to a number of selected bodies to obtain feedback on the scope of the SEA. The following table details responses received and comments provided, along with how these were considered.

Table 1.1 – Summary of Respondents to Scoping Report

Respondee	Comment	Consideration
Council for Nature Conservation and the Countryside (Advisory Council to DoE)	<ul style="list-style-type: none"> • Providing potential additional data sources. • Highlighted other relevant plans and programmes. 	<ul style="list-style-type: none"> • Additional data sources and relevant plans and programmes considered.
Veterinary Services (DARD)	<ul style="list-style-type: none"> • Advised no animal welfare issues. 	<ul style="list-style-type: none"> • Noted.
Forest Service (DARD)	<ul style="list-style-type: none"> • No comment. 	<ul style="list-style-type: none"> • Noted.
Fisheries Division (DARD)	<ul style="list-style-type: none"> • No comment. 	<ul style="list-style-type: none"> • Noted.
Countryside Management Branch (DARD)	<ul style="list-style-type: none"> • Areas within study area infested with Potato Cyst Nematode (PCN). 	<ul style="list-style-type: none"> • Noted – issue for project-level proposals.
SEA Team (NIEA)	<ul style="list-style-type: none"> • Detailed feedback on baseline information and methodology 	<ul style="list-style-type: none"> • Follow-up meeting with NIEA and incorporation of suggested amendments.
Dept. of Communications, Energy & Natural Resources (RoI)	<ul style="list-style-type: none"> • No comment. 	<ul style="list-style-type: none"> • Noted.
Waterways Ireland	<ul style="list-style-type: none"> • No comment. 	<ul style="list-style-type: none"> • Noted.
Biodiversity Officer (Derry City Council)	<ul style="list-style-type: none"> • Highlighted local action plans for biodiversity. • Suggested additional information for baseline section. 	<ul style="list-style-type: none"> • Local Action Plans considered. • Additional information added to baseline.
Inland Fisheries Group (DCAL)	<ul style="list-style-type: none"> • No comment. 	<ul style="list-style-type: none"> • Noted.
A5 Western Transport Corridor – Roads Service (DRD)	<ul style="list-style-type: none"> • No comment. 	<ul style="list-style-type: none"> • Noted.

In addition, two meetings with NIEA took place, one at the start of the scoping process and one following release of the Scoping Report, to agree the scope of the SEA and discuss potential assessment methods for potential impacts.

Feedback from all formal and informal consultations have been considered and incorporated into this Environmental Report, where appropriate. Following consideration of the Scoping Report, it was decided not to scope out any environmental topics from further consideration

3.0 Relationship with other Plans, Programs and Environmental Objectives

Preparation of the Strategic Riverside Masterplan (SRM) for the River Foyle cannot be undertaken in isolation. It is guided and influenced by a number of existing plans, programmes and strategies produced in both Northern Ireland and Republic of Ireland alike. These have been developed at the national, regional and local levels seeking to enhance and promote the economic, environmental, social and physical development of Derry–Londonderry and the surrounding region. The most influential of these are summarised on the following page in table 1.2. This table does not include Planning Policy Statements which are dealt with in more detail in the full ER.

Table 1.2 Summary of Plans and Programmes related to SRM

Level	Plan	Description
National	Northern Ireland Programme for Government 2008-2011	Sets the strategic priorities and key plans for the Northern Ireland Executive
	Everyone's Involved – Sustainable Development Strategy (May 2010)	A framework to support and inform the decisions and actions taken by individuals, groups and organisations in progressing the sustainability agenda in Northern Ireland

Level	Plan	Description
National (continued)	Focus on the Future – Sustainable Development Implementation Plan 2011-2014 (April 2011)	Sets out the NI Executive's delivery of the various actions, principles, priorities and objectives expressed in the Sustainable Development Strategy
	Regional Development Strategy for Northern Ireland 2025	The Overarching planning document in Northern Ireland, providing a strategic framework which addresses a range of social, economic, environmental and community issues for the future development of the nation until 2025
	Shaping Our Future – Adjustments to the Regional Development Strategy for Northern Ireland 2025 (2008)	Review of the above
	National Spatial Strategy 2002-2020 (Rol)	Equivalent to Northern Ireland's RDS, the National Spatial Strategy sets the Republic of Ireland's national strategic framework up to 2020
	Regional Transportation Strategy for Northern Ireland 2002 – 2012	Sets in place the overall transportation vision for Northern Ireland up 2012
	Northern Ireland Biodiversity Strategy 2002	Sets out the Northern Ireland's government's approach to arresting the decline of biodiversity across the nation by 2016
	National Biodiversity Plan, 2002 (Rol)	Seeks to secure the conservation, enhancement and sustainable use biological diversity in the Republic of Ireland
Regional	Sub-regional Transport Plan 2015	Focuses in more detail upon the transportation needs of areas within Northern Ireland outside Belfast and confirms a package of transport schemes consistent with the general principles and indicative levels of spend in the Regional Transport Strategy
	The Regional Strategic Transport Network Transport Plan	Based on guidance set out in the RDS and Regional Transportation Strategy, this Plan consists of proposals for the maintenance, management and development of this transport network up to the end of 2015
	A Planning Strategy for Rural Northern Ireland (1993)	Although largely superseded by Planning Policy Statement 21: Sustainable development in the Countryside this strategy sets out on a topic by topic basis the factors that the Department of the Environment takes into account when considering development proposals in rural areas.
	North West River Basin Management Plan, 2009	This plan provides a summary of the River Basin Management Plan for the Northern Ireland portion of the North Western International River Basin District.
	An Straitéis - Donegal County Strategy 2002 – 2012 (Rol)	An integrated strategy for social, cultural and economic development in Donegal County over plan period
	North West Waste Management Plan 2006	Sets out a framework for the management of controlled waste arising in the region up to 2020
Local	Derry Area Plan 2011	Statutory Development plan which sets planning policy
	Draft Integrated Transport Strategy and Implementation Plan for the Derry-Londonderry City Region	Identifies current issues relating to transport conditions within the city and region, giving direction on the types and location of schemes that should be pursued and phased against a long-term timeframe in order to alleviate current constraints and to facilitate regeneration
	Foyle Riverside Strategy (Atkins, 1997)	A strategic framework to guide regeneration along the Foyle River corridor up to 2011
	The Heart of the City Urban Design Strategy (Atkins, 2003)	Detailed urban design guidance to update and further inform future development of the key development initiatives identified in the 1997 Riverside Strategy. Also covers commercial core of city.

Level	Plan	Description
Local (continued)	Derry Public Realm Strategy 2004	Public Realm strategy for the area within the city walls and surrounding environment
	Regeneration Plan 2005 (Ilex)	Focuses on the riverside and wider Derry City Council area to provide a platform for critical economic and spatial interventions by the public, private and community/voluntary sectors to regenerate the city as a whole.
	Derry City Council Tourism Development Strategy 2009 – 2012	Tourism Strategy for DCC area and wider hinterland
	Derry–Londonderry Access Plan 2009-2014, Derry City Council	Informs the development of cycling and walking routes in both rural and urban areas by adopting a strategic approach to the planning, development and promotion of existing and future greenways over the period 2009-2014
	Wildlife Action in Derry–Londonderry (Local Biodiversity Action Plan) 2008-2013, Derry City Council	Highlights local threats to wildlife and identifies opportunities to protect and enhance the natural environment within the Derry City Council boundary over the plan period
	A Strategy and Action Plan for the Development of Marine Tourism and Leisure in Lough Foyle and Carlingford Lough Areas – March 200, Loughs Agency	Examines the development potential of marine-related tourism and recreational activities in Lough Foyle and Carlingford Lough areas over the next 10-15 years
	Derry City Walls Conservation and Management Plans 2007, DoE	Guide for the future development of Derry's City Walls, to ensure their continued use and survival, detailing the multi-agency responsibilities in regard to the Walls and sets out priorities for future development.

4.0 Baseline Data

Baseline data was gathered to establish the current condition of the environment within the study area. The data was collected for each of the environmental receptors set out in Schedule 2 of the Regulations. The data used was readily available at the time of assessment and any important information that was unavailable or not existent was highlighted and data gaps identified. The primary sources of data were existing international, national, regional or local databases and/or monitoring programmes. The main sources from the baseline study are set out in table 1.3 below under each environmental receptor.

Table 1.3 Details of Data Sources

SEA Topic	Data Type and Source	Data Description
Air Quality	Air Quality Management Areas (AQMA) in the Derry City Council Area.	AQMAs are the result of data collation which has taken place to implement the Environment (Northern Ireland) Order 2002 – Local Air Quality Management.
	The United Kingdom Pollutant Release and Transfer Register (UK PRTR) website	The PRTR website documents the member states returns to the European Commission covering releases of key substances listed in Annex 1 of the Integrated Pollution and Control Directive.
Biodiversity, Flora and Fauna	RSPB Publication 'Biodiversity and SEA guidance for Practitioners'.	Publication that lists and describes areas with high biodiversity
	The Convention on the Conservation of European Wildlife and Natural Habitats (The Bern Convention).	Principle aim is to ensure conservation and protection of wild plant and animal species and their habitats. Adopted through Council Directives 2009/147/EC and 92/43/EEC. Given effect in NI primarily through the Conservation (Natural habitats &c.) Regulations (NI) (1995) and the Wildlife (NI) Order 1985
	The Convention on the Conservation of Migratory Species of Wild Animals (the CMS or Bonn Convention)	Aims to conserve terrestrial, marine and avian migratory species throughout their range. Adopted through Council Directives 2009/147/EC and 92/43/EEC. Given effect in NI primarily through the Wildlife (NI) Order 1985, and the Nature Conservation and Amenity Lands (NI) Order 1985.

SEA Topic	Data Type and Source	Data Description
Biodiversity, Flora and Fauna (continued)	The EU Habitats Directive (Council Directive 92/43/EEC)	Provides a framework for the conservation of habitats and species of European importance that require protection, including the establishment of SACs.
	The EU Birds Directive (Council Directive 2009/147/)	Provides a framework for the conservation and management of wild birds in Europe, including the establishment of SPAs.
	The Ramsar Convention	Designation of wetlands of international importance (i.e. Ramsar sites)
	The Freshwater Fish Directive (2006/44/EC)	Sets out physical and chemical water quality objectives for salmonid and cyprinid waters
	The Environment (NI) Order 2002	Designates Areas of Special Scientific Interest (ASSIs)
	The Conservation (Natural Habitats &c.) Regulations (NI) 1995	Gives effect in Northern Ireland to the Habitats Directive
	The Wildlife (NI) Order 1985	Provides for the protection of wildlife in Northern Ireland. Will be largely repealed and replaced by the Wildlife & Natural Environment (NI) Act 2011.
	European Plant Conservation Strategy	Outcome of the 2001 Planta Europa Conference, provides targets to halt the loss of plant diversity in Europe by 2007.
	The Convention on Biological Diversity (1992)	Provided three main objectives, leading to UK Biodiversity Action Plan
	NI Biodiversity Strategy	Sets out specific proposals and targets for the conservation of biological diversity
	Derry/L'Derry Local Biodiversity Action Plans	Provides framework of encouraging targeted action for biodiversity at local level.
	Planning Policy Statement 2: Planning and Nature Conservation	Outlines regional planning policy in respect of nature conservation for Northern Ireland.
Climatic Factors	State of the Environment	Report for Northern Ireland Details of emission targets for Northern Ireland.
	Measurement of Northern Ireland Greenhouse Gas and Carbon Dioxide Emissions: Final Report	The document includes calculations of greenhouse gas emission protections to 2025.
	End User GHG Inventories for England, Scotland, Wales and Northern Ireland:1990,2003 to 2007 (AEA)	This report presents estimates of end user greenhouse gas emission inventories for the constituent countries of the UK. Separate end user greenhouse gas emission inventories have been estimated for England, Scotland, Wales and Northern Ireland for the years 1990 and 2003 to 2007
	UK Climate Change Programme website	Local scale and regional projections of climate change can be generated using the UKCP09 UK Climate Projections User Interface
Cultural Heritage	Northern Ireland Sites and Monuments Record (NIEA)	The Northern Ireland Sites and Monuments Record database holds information on approximately 15,000 sites within Northern Ireland.
	Register of Historic Parks, Gardens and Demesnes	The data will provide details of where historic parks and gardens are in the study area.
	Derry Area Plan 2011	Sets boundary and policy in respect of Conservation Areas located both within and beyond the study area.
	Conservation Area Design Guides	Sets parameters for development within and affecting the Conservation Areas with Derry-Londonderry of Magee, Clarendon and the Historic City.
Landscape	NI Landscape Character Assessment 2001 (NILCA)	Provides description of landscape characteristics for all of NI.
	Derry Area Plan 2011	Land use plan for area, designates environmental zonings and landscape types
Material Assets	Draft Integrated Transport Strategy and Implementation plan for Derry-Londonderry (Colin Buchanan)	Draft ITS identifies current issues relating to transport conditions within the city and region, giving direction on the types and location of schemes that should be pursued and phased against a long-term timeframe in order to alleviate current constraints and to facilitate regeneration
	City of Derry Airport Passenger Statistics 2001-2008 (Airport website)	Details the total of number of passengers using the airport annually on the basis of destination.
	Access Plan Derry ~ Londonderry 2009 - 2014	Details of Greenway routes in the study area (cycle and pedestrian pathways).
	Tourism Development Strategy 2009 - 2012	This strategy provides a current state analysis of the recent development and growth of tourism in Derry. It includes inputs from Derry City Council, NITB, Ilex, other public sector stakeholders, the industry and local communities.

SEA Topic	Data Type and Source	Data Description
	Londonderry Port & Harbour Commissioners Annual Report	Details port's activities for the year past and sets out proposed activities and plans going forward.
Noise	The Noise Complaint Statistics for Northern Ireland 2008-2009 (DOE)	Information on noise nuisance complaints in the area from commercial and industrial sources.
	Environmental Noise Directive 2002/49/EC	This Directive aims to provide a common basis for tackling noise
	Roads Noise Action Plan (DOE)	This Action Plan describes how the Department for Regional Development (DRD), in conjunction with the Department of the Environment (DOE), proposes to deliver their obligations under the Environmental Noise Directive for road noise in Northern Ireland.
Population and Human Health	Northern Ireland Neighbourhood Information Service (NINIS) website.	Website data supplied by NI Statistics & Research Agency. Provides statistical facts and analysis using 2001 Census data. 2011 Census results not available at time of publication.
Soil	Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) SEA Guidance website for baseline data relating to soil	The SNIFFER SEA Guidance website, provides additional sources of information relating to soils, including the book, "Soil and Environment: Northern Ireland" which catalogues and explains soil types in Northern Ireland
	Agricultural Census Data in Northern Ireland Report 2008	This report provides an overview of agricultural practices in Northern Ireland, including geographic differences in practice
	Climate Change, Land Management and Erosion in the Organic and Organo-mineral Soils in Scotland and Northern Ireland	This report provides a critical analysis of the factors controlling the rate of physical and chemical degradation of soils in Scotland and Northern Ireland.
	ESCR Sites (NIEA)	The Earth Science Conservation Review (ESCR) is the means whereby geological sites in Northern Ireland are assessed to determine their importance to science and to earth science conservation
Water and Flooding	Rivers Agency Strategic likely flooding events.	The Strategic Flood Mapping provides information on predicted flood levels in Northern Ireland; the data gives an indication of any likely flooding events.
	Water Framework Directive (2000/60/EC) and implementing legislation	This Directive commits European Union member states to achieve good qualitative and quantitative status of all water bodies
	Bathing Water Directive 2006/7/EC	Provides a framework for effective management of bathing water quality.
	The Quality of Bathing Water Regulations (Northern Ireland)	Provides information on the microbiological criteria to be met in bathing waters
	North Western River Basin Management Plan	This plan provides a summary of the River Basin Management Plan for the Northern Ireland portion of the North Western International River Basin District.
	Birds Directive (79/409/EEC)(1) as amended by Directive 2009/147/EC	Places great emphasis on the protection of habitats for endangered as well as migratory species
	Habitats Directive	
	Environmental Impact Assessment 85/337/EEC	Regulated process by which information about the environmental effects of projects covered by the EIA legislation is collected and analysed for consideration by the local planning authority.
	Drinking Water Directive (80/778/EEC) as amended by 98/83/EC	This Directive concerns standards for water intended for human consumption
	Sewage Sludge Directive(86/278/EEC)	Regulate the use of sewage sludge in agriculture in such a way as to prevent harmful effects on soil, vegetation, animals and man, thereby encouraging the correct use of such sewage sludge.
	Urban Wastewater Treatment Directive(91/271/EEC);	Protect the environment from the adverse effects of urban waste water discharges and discharges from certain industrial sectors and concerns the collection, treatment and discharge of: domestic waste water; mixture of waste water and waste water from certain industrial sectors)
	Nitrates Directive(91/676/EEC);	Aims to protect water quality by preventing nitrates from agricultural sources polluting ground and surface waters and by promoting the use of good farming practices.
	Major Accidents Seveso) Directive (96/82/EC)	Intended to prevent major accidents involving dangerous substances and limit their consequences for man and the environment, with a view to ensuring high levels of protection throughout the Community.
	Plant Protection Products Directive(91/414/EEC	Concerns the authorization, placing on the market, use and control of plant protection products in commercial form within the Community. The Directive also concerns active substances intended for the use in plant protection products.

5.0 SEA Objectives

A number of SEA objectives were compiled with reference to the existing environmental problems, potential impacts from the master plan, the baseline data identified for the SEA and master plan objectives. These are set out in table 1.5 below.

Table 1.5 – SEA Objectives

SEA Topic	SEA Objective
Air Quality	<ul style="list-style-type: none"> Protect, maintain and, if possible, improve air quality. Promote river corridor as resource for good air quality where possible.
Biodiversity, Flora & Fauna	<ul style="list-style-type: none"> Protect internationally and nationally designated sites. Protect, maintain and, if possible, improve linkages between existing green spaces to allow for ecological connectivity. Protect, maintain and, if possible, improve existing habitats and native species of flora and fauna.
Climatic Factors	<ul style="list-style-type: none"> Consider implications of climate change for master plan and attempt to address climate change through promotion of carbon neutral building materials and design, and reduction in private transport use.
Cultural Heritage	<ul style="list-style-type: none"> Protect, maintain and, where appropriate, enhance setting and views to cultural heritage features and sites. Maintain and, where appropriate, enhance opportunities for the public to interact with cultural heritage sites in study area (listed buildings, maritime history, historic parks, gardens and demesnes, archaeological sites etc). Protect, maintain and, where appropriate, enhance connectivity of the numerous cultural heritage sites along river.
Landscape	<ul style="list-style-type: none"> Protect, maintain and, where possible, enhance identified landscapes of value (i.e. AHSVs). Manage and maintain landscape features that contribute to the landscape characteristics of the study area.
Material Assets	<ul style="list-style-type: none"> Maintain and, where appropriate, enhance water based tourism facilities and foot and cycle paths. Maintain and, where appropriate, enhance amenity of sites and quality of built development along river. Maintain and, where appropriate, enhance existing material assets along river (foot bridge etc).
Noise	<ul style="list-style-type: none"> Protect and if possible reduce noise levels.
Population and Human Health	<ul style="list-style-type: none"> Protect, maintain and, where appropriate, enhance opportunities for local community engagement with the river asset in terms of employment, recreation and leisure. Consider future population growth in relation to infrastructure and service provision.
Soil	<ul style="list-style-type: none"> Manage and, where appropriate, reduce contaminated land and sedimentation issues.
Water & Flooding	<ul style="list-style-type: none"> Maintain compliance with requirements arising from the implementation of the Water Framework Directive and improve water quality if at all possible. Redevelopment not to increase the risk of flooding with the study area or elsewhere.

6.0 Consideration of Alternatives

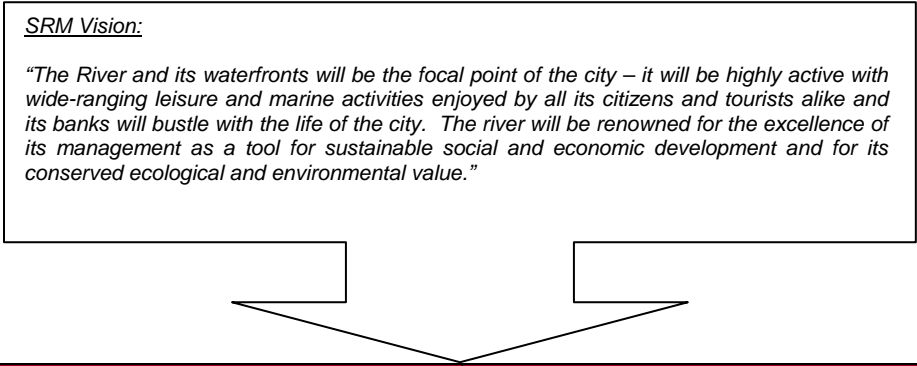
Seven broad SRM objectives were formulated by the masterplan team taking into consideration issues raised through an assessment of baseline conditions within the study area together with the plans overall vision. To identify whether there was any conflict between the different objectives developed for the SRM, each was considered independently against one another to ensure compatibility. No conflicts were identified.

To further refine and inform the strategic objectives developed for the SRM, an additional comparison was made between the SRM objectives and the SEA objectives set out in table 1.5 above. This process highlighted the potential of some SRM objectives to impact upon certain environmental receptors. Taking this analysis into account, a number of alternative options were considered to achieve each of the seven SRM objectives, including the 'do nothing' scenario (i.e. relying upon the existing assortment of plans, programs and strategies).

The assessment of alternative options identified that relying on the existing plans, programs and strategies in isolation will continue to see waterfront development and use of the river carried forward in an unintegrated and uncoordinated manner with no common vision or aim. Whilst this approach is not

considered to result in any significant negative environmental impacts, it will fail to fully realise those positive environmental effects identified in the assessment particularly in the areas of (but not restricted to) population and human health, material assets, cultural heritage and landscape which have the opportunity to accrue through the various alternatives developed, which are summarised below.

Table 1.6 - Summary of Preferred Options



Strategic Objective	Preferred Option
1. To develop the river as a broadly based, water related, leisure, recreation and sports resource with a focus upon the creation of more opportunities for formal and informal river access operated to ensure use by all sections of the population	Upgrade existing river access points and sporting/recreation facilities and Encourage additional informal access points and sporting/recreation facilities in appropriate location
2. The provision high quality, safe and accessible public realms on the riverside in the city centre	Upgrade, improve and extend existing riverside public realm
3. Improved physical access both to and along the river as a means of connecting communities with the city centre, countryside, and places of social amenity and economic activity	Improve and extend connectivity and permeability of existing network
4. To grow the river economy with an emphasis on leisure and tourism to create sustainable river-based employment	Consolidate and encourage existing river-based commercial activity and Encourage and develop additional water-based economic opportunities
5. To integrate management of the river and its waterfront to actively drive the development of new socio-economic and economic uses which contribute to the wider regeneration of Derry~Londonderry.	Creation of a new body made up of statutory and non statutory members tasked with the sustainable management and facilitation socio-economic projects related to the river
6. To overcome the physical inadequacies of the urban riverfront and enable the use of the river as a key element in the regeneration of the waterfront and wider city-region	Introduction of urban waterfront development framework and design guidance in key waterfront locations to promote redevelopment which engages with riverfront and city centre context and Development of alternative solutions to address relationship between transport infrastructure and riverside use/development
7. To balance use and development of the riverine against the need to enhance and where necessary protect the natural and built environments	Introduction of additional mechanisms within plan to ensure that that protection and enhancement of the natural and built environments is at the forefront of plan proposals

7.0 Assessment & Evaluation of Impacts on Environmental Receptors

All likely environmental impacts arising from the recommendations and proposals set out in the River Strategy section of the SRM were assessed against each environmental receptor. The results of this assessment are presented in the full Environmental Report as a matrix for each individual character area which identifies positive, negative and neutral impacts of plan proposals. The cumulative impact of proposals upon each environmental receptor was considered as part of this assessment. The outcome of this process is summarised below in table 1.7.

Table 1.7 Assessment and Evaluation of Impacts on Environmental Receptors

Environmental Receptor	Summary of Effect	Significant Negative Effect
Air Quality	Short term negative impacts associated with construction. Long term positive impacts associated with the reduction in the demand upon private vehicle trips.	No
Biodiversity, Flora and Fauna	Significant cumulative negative impacts associated with the projects proposed by the SRM along the riverbank.	Yes
Climate	Long term small positive impacts associated with the reduction in demand upon private vehicle trips.	No
Cultural Heritage	Long term positive impacts associated with the conservation of views of historic buildings and landscape features. Long term positive impacts associated with the reuse of historic buildings and landscape features for tourism and recreation.	No
Landscape	Long term positive impacts from the conservation of views into the historic core of the city and its conservation areas. Long term positive impacts resulting from the regeneration of the urban landscape setting. Long term negative localised views resulting from topographical changes proposed to include infrastructure in two locations (Boom Hall and Thronhill College)	No
Material Assets	Long term positive impacts relating to the relocation, expansion and redevelopment of the riverfront.	No
Noise	Short term negative impact resulting from construction. Long term positive impacts associated with the reduction in traffic noise.	No
Population and Human Health	Long term positive impact associated with improvements to air quality and noise and opportunities to engage with the riparian environment.	No
Soil	Long term positive impact associated with the decontamination of soils resulting from construction. Long term negative impact associated with erosion from pleasure craft and its interaction with climate induced sea level change.	No
Water Quality and Flooding	Short term negative impacts associated with construction. Long term negative impacts associated with littering the water body. Significant cumulative negative impacts associated with the projects proposed by the SRM along the riverbank.	Yes

7.0 Mitigation

Following consideration of likely impacts, consideration was given as to whether such impacts were of sufficient scale to warrant specific mitigation measures. It was decided that mitigation could take place at two main levels:

- Plan level mitigation – measures which have been identified through this SEA for reducing or avoiding adverse effects which would be integrated directly into the SRM – at the strategic level.
- Project level mitigation – mitigation measures which have been identified through this SEA which would be implemented through appropriate mechanisms which are already in place (e.g. conditions on planning permissions, operating licenses or discharge consents).

Please note that the NTS only includes the mitigation for the significant negative impacts, other mitigation information is included in the ER.

7.1 Air Quality

The impact of the SRM on Air Quality is considered to be positive over the long term. The improvements to air quality are will be the result of greenway extensions and upgrades across the entire SRMM area to prove a viable commuting alternative to the private car and the reconfigured road network and quality bus corridor proposals along Queens Quay, Foyle Embankment and Craigavon Bridges. It is considered that there will be localised short term negative air quality impacts as a result of the construction of the greenways, however the mitigation for this will be provided during the existing planning process and be project specific.

Concept Development Mitigation

- Development proposals must demonstrate how they contribute to a reduced demand on the private car (General Design Guidance).

Construction Phase Mitigation

- No additional measures are proposed which are currently provided for under existing government legislation and policy.

Operational Phase Mitigation

- No measures are proposed.

7.2 Biodiversity, Flora & Fauna

The level of assessment and protection afforded to biodiversity and flora & fauna by existing legislation and government policy is such that the major potential source of adverse impact on ecological receptors has been demonstrated to arise as a result of the cumulative effect of numerous individually small initiatives promoted by the SRM. These are considered to be likely to give rise to minor or insignificant ecological impacts in isolation such as the creation of river's edge walking and cycling routes, major development near the Foyle riverside, new bridges and new or improved slipways or jetties but cumulatively have the potential to significantly impact Biodiversity, Flora & Fauna.

Concept Development Mitigation

- Balancing use and development of the river environment against the need to enhance and where necessary protect the natural environment, including the enhancement and protection of river-related habitats and wildlife (SRM Strategic Objective 7);
- Development of a Sustainability Strategy within the SRM to encapsulate the environmental and ecological sensitivity of the internationally important River Foyle at the core of plans proposals, ensuring that the nationally and internationally important designated sites and priority species are afforded the highest level of protection;
- Consolidate and enhance the ecological and nature conservation value of seven Areas of High Ecological Value (AHEV) within the SRM study area; development proposals within these areas should, at worst, not detract from their ecological value and should ideally seek to consolidate and enhance the ecological and nature conservation value of these important areas (Sustainability strategy);
- Construction proposals which involve building within the river itself, and major riverside construction projects, have the potential to cause major negative impacts upon aquatic biodiversity, flora and fauna. Impact elimination and mitigation measures should be employed. The requirement to

consider the potential ecological impacts for these proposals has been highlighted, as has the likelihood the assessment pursuant to Article 6 of the Habitats Directive (Character Description, Local Policy Objectives, and Recommendations & Proposals).

Construction Phase Mitigation

A Stage 1 Test of Likely Significance, conducted pursuant to Article 6 of the Habitats Directive, has demonstrated that the implementation of the SRM will not result in any significant adverse direct or indirect impacts upon Natura 2000 sites concerned, specifically the River Foyle & Tributaries SAC, Lough Foyle SPA (NI), Lough Foyle SPA (ROI) or River Finn SAC. The assessment highlighted the following mitigation to be implemented generally at a project level:

- 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.
- 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.
- 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.

It is noted that light pollution can represent a significant adverse impact on roosting, breeding, foraging and commuting bats; direct nocturnal floodlighting of the aquatic environment must be avoided for this reason also.

Operational Phase Mitigation

- No additional measures are proposed which are not currently provided for under existing government legislation and policy.

7.3 Climate

The impact of the SRM on climate is considered to be positive because the SRM proposed to enhance opportunities for walking, cycling or public transportation, as alternatives to private transport.

Concept Development Mitigation

- Development proposals must demonstrate how they contribute to a reduced demand on the private car (General Design Guidance).

Operational Phase Mitigation

- No additional measures are proposed which are not currently provided for under existing government legislation and policy.

Construction Phase Mitigation

- No measures are proposed.

7.4 Cultural Heritage

The overall impact of the SRM upon Cultural Heritage is considered positive. The SRM recognises the abundance of cultural heritage assets either within or directly adjacent to the plan area. It is also acknowledged that cultural heritage assets are afforded a significant amount of protection under existing

government legislation and policy. To ensure that the protection and integration of these assets is properly considered through all stages of the SRM implementation, the following mitigation measures have been incorporated in the strategic objectives and Urban Waterfront Framework Design Guidance of the SRM to complement existing measures which can be implemented at consent stage through government policy and legislation:

Concept Development Mitigation

- Balancing use and development of the river against the need to enhance and where necessary protect historic features and their settings (Strategic Objective 7)
- The promotion of waterfront land uses which promote higher and further education and arts (General Design Guidance)
- The submission of design concept statements for development proposals within the Urban Waterfront Framework area to demonstrate how the heritage implications of such proposals have been considered in terms of their overall city-wide and waterfront context (General Design Guidance)
- The scale and character of development within the study area should not impact upon important historic and landscape views throughout the city and its environs (General and Character Area Design Guidance)
- Carrying out of detailed visual impact and landscape assessments to ensure appropriate massing, scaling and building height of gateway development proposals at Fort George (Character Area Design Guidance).

Construction Phase Mitigation

- No additional measures are proposed which are not currently provided for under existing government legislation and policy.

Operational Phase Mitigation

- No measures are proposed

7.5 Landscape

The overall impact of the SRM upon the landscape setting of the study area is judged to be positive. It recognises that development along the river corridor may have the potential to impact upon areas of existing sensitive landscape, particularly in areas with steep topography and upon key views into and out of the river corridor.

Consequently the SRM reinforces existing policy guidance relating to landscape protection contained with the Derry Area Plan 2011 and Conservation Area Guidance. The following mitigation measures to ensure landscape protection have been included in the strategic objectives and Urban Waterfront Framework Design Guidance of the SRM to complement existing government policy:

Concept Development Mitigation

- Protection of the landscape setting of the river corridor and of key views into and out of the river environment (Strategic Objective 7).
- The submission of design concept statements for development proposals within the Urban Waterfront Framework area to demonstrate proper consideration of the landscape implications of development proposals in their overall city-wide and waterfront context (General Design Guidance).
- Carrying out of detailed visual impact and landscape assessments to ensure appropriate massing, scaling and building height of gateway development proposals at Fort George (Character Area Design Guidance).

Construction Phase Mitigation

- Any impacts temporary, no specific mitigation proposed

Operational Phase Mitigation

- No mitigation proposed

7.6 Material Assets

Overall, the impact of the SRM upon material assets is considered significantly positive. Strategically, the SRM seeks to secure and improve leisure, tourism and recreational infrastructure along the entire length of the riverine environment within the plan area. Central to this is improving accessibility to the waterfront which is presently severed in many areas through existing road and rail infrastructure. Given the potential magnitude of change to the existing waterfront infrastructure over the plan period, an integrated approach to ensure co-ordination and phasing of projects is necessary to ensure that the city is able to continue to function effectively and efficiently during this time.

The following mitigation measures to ensure the coherent and co-ordinated development of material assets over the plan period have been integrated into the strategic objectives of the SRM:

Concept Development Mitigation

- Establishment of a management body to drive and co-ordinate the development of leisure, recreation and tourism infrastructure along the city's waterfront (Strategic Objective 5).

Construction Phase Mitigation

- As above

Operational Phase Mitigation

- As above

7.7 Noise

The impact of the SRM on noise will be long term beneficial, because it aims to reduce the amount of traffic in the study area and thereby result in a reduction in traffic noise. However it is accepted that the construction which will result from the projects proposed in the SRM will cause short term noise impact. These impacts will be addressed during the planning process and the existing system will not be influenced by the SRM. The following strategic policies and design guidance have been included in the SRM to complement existing measures.

Concept Development Mitigation

- Development proposals must demonstrate how they contribute to a reduced demand on the private car (General Design Guidance).

Operational Phase Mitigation

- No additional measures are proposed which are not currently provided for under existing government legislation and policy.

Construction Phase Mitigation

- No measures are proposed.

7.8 Population and Human Health

The impact of the SRM upon Population and Human Health is significantly positive. Strategically, the SRM promotes increased access and use of the river and waterfront by the local community for recreation, sport and leisure purposes through a variety of initiatives at varying levels. It also seeks to grow the river economy and create sustainable river based employment opportunities for the local population. The river is also recognised as a natural corridor to connect communities with the waterfront and ultimately to the city centre.

All of the mitigation measures proposed in this section for each environmental receptor are relevant to the local population. In addition to these, the following mitigation measure is proposed to ensure that the positive impacts of implementing the SRM upon Population and Human Health are fully realised:

Concept Development Mitigation

- Establishment of a co-ordinated management body to drive and co-ordinate the development of leisure, recreation and tourism infrastructure along the city's waterfront in a sustainable and environmentally sensitive manner (Strategic Objective 5).

- Development proposals must demonstrate how they contribute to a reduced demand on the private car (General Design Guidance).

Construction Phase Mitigation

- As per first bullet point above

Operational Phase Mitigation

- As per first bullet point above

7.9 Soil

It is considered that the redevelopment of the SRM study area will have a long term positive impact on soil quality because it will result in the remediation of existing contaminated land. It is also accepted that with the increase in water usage by pleasure craft, there is a potential long term negative impact in relation to erosion. The following mitigation measures are proposed to ensure that the positive impacts of implementing the SRM on Soil are fully realised.

Concept Development Mitigation

- Establishment of a co-ordinated management body to drive and co-ordinate the development of leisure, recreation and tourism infrastructure along the city's waterfront in a sustainable and environmentally sensitive manner (Strategic Objective)

Construction Phase Mitigation

- No additional measures are proposed which are not currently provided for under existing government legislation and policy.

Operational Phase Mitigation

- No measures are proposed.

7.10 Water and Flooding

The impact of the SRM upon water and flooding is considered to be significant negative because of the cumulative impacts associated with the redevelopment of the shores of both the River and Lough Foyle. In terms of water quality, these matters have already been considered to some degree under the Biodiversity, Flora and fauna receptor. It is also important to note that a large portion of the area covered by the SRM is located within the floodplain.

Concept Development Mitigation

- To balance the use and development of the river environment against the need to enhance and where necessary protect the natural and built environments (Strategic Objective 7).
- Secure river ecology and built heritage educational and training opportunities (Strategic Objective 7).
- Enhancement and protection of river-related habitats and wildlife (Strategic Objective 7).
- Development proposals must maintain, and where possible enhance the ecological value of Pennyburn Estuary and the River Foyle in this location (Character Area Design Guidance).
- Establishment of co-ordinated management body (possibly to include Loughs Agency, Londonderry Port, Rivers Agency, Crown Estate Commissioners and Derry City Council) to manage the environmental implications of development, to recommend appropriate concept design, construction and operation practices (Strategic Objective 5).
- The remit of the Foyle Initiative should be extended to include a coordinated approach to flood risk management within the study area.
- To overcome the physical inadequacies of the urban riverfront and enable the use of the river as a key element in the sustainable regeneration of the waterfront and wider city-region (Strategic Objective 6).

Construction Phase Mitigation

- No additional measures are proposed which are not currently provided for under existing government legislation and policy.

Operational Phase Mitigation

- No measures are proposed.

8.0 Monitoring

It is a requirement of the Directive that the responsible authority for a plan continues to monitor the significant effects of implementation of a plan. A monitoring framework has been identified that allows appropriate monitoring of the implementation of the SRM. This includes the monitoring of plan level mitigation measures and also the monitoring of individual projects to identify unforeseen effects.

Monitoring not only provides baseline information for future updates to the SRM but it enables Derry City Council to understand whether the SRM is performing as expected in environmental terms. The majority of the monitoring related to this SEA is from data already collected by other organisations and Derry City Council. Monitoring proposals and related timescales are presented below in table 8.1.

Table 8.1: Monitoring Framework

Monitoring Proposal	Relevant SEA Topic	Frequency	Data Source
Review river water quality	Water	Annual	NIEA
Achievement of Water Framework Directive objectives	Water	By first target date of 2015.	NIEA
Salmon surveys	Biodiversity, flora and fauna	Annual	Loughs Agency
Review strategic flood map (NI) Rivers and the Sea	Water	Annual	DARD Rivers Agency
Review ASSI quality	Biodiversity, flora and fauna	- Rolling 5-6 year condition assessment program	NIEA
Review SAC quality	Biodiversity, flora and fauna	Rolling 5-6 year SAC (ASSI) condition assessment; annual surveillance of salmon migration	NIEA Loughs Agency
Review SPA quality	Biodiversity, flora and fauna	Rolling 5-6 year SPA (ASSI) condition assessment; regular counts of bird numbers each winter	NIEA
Review habitat creation proposals	Biodiversity, flora and fauna	Annual	Derry City Council
Review invasive species control projects	Biodiversity, flora and fauna	Annual	Derry City Council
Review the management plans for the Local Nature Reserves (LNR)	Biodiversity, flora and fauna	Annual	Derry City Council
Review the results of the Biodiversity Awareness Survey	Biodiversity, flora and fauna	Annual	Derry City Council

9.0 Summary

The overall SEA process has identified that with appropriate concept planning as prescribed in the SRM and project level mitigation, together with existing legislative measures, the likely significant negative impacts of implementing the SRM can be reduced, remedied and controlled to an acceptable level resulting in a plan which on balance will positively impact upon the riverine environment. Continual monitoring will allow unforeseen adverse effects to be identified and remedied if necessary.