



# Strategic environmental assessment of aquaculture in the transitional waters of Ireland – NI/IE

## 1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Sharing sound use of resources and promoting their low(est) processes/products
- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment

## 2. Key approaches

- Integration
- Knowledge-based
- Ecosystems based
- Socio-economic

## 3. Experiences that can be exchanged

The development of the Strategy and undertaking of the SEA provided necessary understanding how the Strategy relates to the existing framework of international, European and domestic obligations and agreements that currently influence the use, and protection of, the marine and freshwater environments. It also enabled to consider the Strategy in the context of the emerging Ireland, UK and NI frameworks for the future management of the marine and coastal environment. This allows for conflicts or synergies between the draft Strategy and other plans and policies to be identified and, in the case of conflicts, resolved if needed. The SEA Directive and implementing legislation in Ireland and Northern Ireland require that an SEA take consideration of impacts to: a) population; b) human health; c) fauna and flora and biodiversity; d) soil; e) water; f) air; g) climatic factors; h) material assets; i) cultural heritage, including architectural and archaeological heritage ; j) landscape; and the inter-relationship between the issues. The positive experience of the SEA process is that through the scoping process it was decided to consider impacts on ALL these SEA topics. Each SEA topic encompasses a number of receptors and the assessment considered the potential effects on each of these.

## 4. Overview of the case

A Strategic Environmental Assessment (SEA) is required for the Strategy if:

- The Strategy will be prepared for fisheries-related development.
- The Strategy could contain policies and proposals that could contain area -specific allocations and could potentially give rise to significant environmental effects.
- The Strategy is being prepared for adoption at a regional, cross- border level.

This SEA has assessed the environmental impacts of the implementation of the draft Strategy on aquaculture and shellfisheries in Lough Foyle and Carlingford Lough as trans-boundary transitional water bodies. In addition to the SEA, a separate screening for Appropriate Assessment (AA) of the Strategy has been undertaken by the Loughs Agency to identify potential significant effects on 'Natura 2000' sites. This is required under the European Habitats Directive (92/43/EEC) to assess whether the draft Strategy is likely to have a significant adverse effect on Natura 2000 sites – Special Protection Area (SPA) and Special Area of Conservation (SAC). This SEA covers the full extent of the Lough Foyle and Carlingford Lough water catchments, including the terrestrial (freshwater) areas and the marine area to the 12nautical mile (nm) limit in Foyle and to the mouth of Carlingford Lough. It includes parts of both Ireland and Northern Ireland. In this way the SEA is inherently trans-boundary.

## 5. Context and Objectives

### a) Context

The Foyle, Carlingford and Irish Lights Commission (FCILC) is a North/South Implementation Body set up under The North/South Co-operation (Implementation Bodies) (Northern Ireland) Order 1999. The Department of Agriculture and Rural Development (DARD) is the sponsoring Department for the FCILC in Northern Ireland and the Department of Communications, Energy and Natural Resources (DCENR) is the sponsoring Department in Ireland. The Loughs Agency is an agency of the FCILC, and is responsible for exercising the functions of the FCILC in the Foyle and Carlingford Areas.

Under the EU SEA Directive (Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment), transposed into domestic legislation in the Republic of Ireland (referred to hereafter as Ireland) under the 'Planning and Development (Strategic Environmental Assessment) Regulations 2004 and the 'European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004' and in Northern Ireland through the 'Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004,'an SEA is required for plans and programmes which:

- Are likely to have **significant environmental effects**.
- Are prepared for agriculture, forestry, **fisheries**, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, and which sets the framework for future development consent of projects requiring an EIA or an 'appropriate assessment' in accordance to the Habitats Directive.
- Are subject to **preparation and/or adoption by an authority at national, regional or local level** or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and which are required by legislative, regulatory or administrative provisions.

In addition to the SEA, a separate screening for Appropriate Assessment (AA) of the Strategy has been undertaken by the Loughs Agency to identify potential significant effects on 'Natura 2000' sites. This is required under the European Habitats Directive (92/43/EEC) to assess whether the draft Strategy is likely to have a significant adverse effect on Natura 2000 sites. The AA process is similar to the SEA process in terms of carrying out strategic level assessments. However Appropriate Assessment focuses specifically on the protection of European sites.

### b) Objectives

1. To assess and quantify, at a strategic level, the potential effects on the environment of the implementation of the aquaculture and fisheries elements of the Foyle and Carlingford Fisheries Order/Act 2009, as set out in the Aquaculture and Shellfisheries Management Strategy.
2. To inform the Loughs Agency's options for implementation.
3. To inform environmental consideration in future license determinations by the Loughs Agency.

## 6. Implementation of the ICZM Approach (i.e. management, tools, resources)

### a) Management

The focus of the Strategy is the management and development of freshwater and marine aquaculture and wild shellfisheries. In developing the Strategy and undertaking the SEA, it was thus necessary to understand how the Strategy will relate to the existing framework of international, European and domestic obligations and agreements that currently influence the use, and protection of, the marine and freshwater environments. It was also necessary to consider the Strategy in the context of the emerging Ireland, UK and NI frameworks for the future management of the marine and coastal environment. This allows for conflicts or synergies between the draft Strategy and other plans and policies to be identified and, in the case of conflicts, resolved if needed.

Environmental considerations are incorporated into the Strategy and the implementation of the regulations through the AA, SEA, and EIA processes. **SEA of Strategy** addresses environmental impacts of policy as set out in the draft Strategy-this is at a strategic level. **AA of Strategy** is to be done on all aquaculture license applications and for each wild shellfishery addressing impacts to designated Natura 2000 sites (SAC/SPA) at policy and at license levels. **EIA of Strategy** is required for license-specific applications with Salmonid or fixed structure applications. Louth Agency can ask for EIA if needed.

## b) ICZM tool

The conduction and management of SEA comprised the following milestones and tasks:

**Milestone I. Screening** completed in advance through consultation between the Loughs Agency, NIEA, and the EPA.

### Milestone II. Scoping:

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|----------|--|
| Task 2.1 | Determine the key elements of the implementation to be assessed.   |
| Task 2.2 | Determine the environmental issues to be assessed. To include consideration of: biodiversity; population; human health; fauna and flora (including habitats and fisheries, with identification of key species, location of designated and/or important habitats, measures that could impact on these habitats); soil; water; air; climatic factors; material assets; cultural heritage, including architectural and archaeological heritage (with reference to known sites, feature and areas of archaeological and/or heritage importance, with a zone of avoidance around known sites) ; landscape, and the inter-relationship between the issues.<br>This was undertaken with additional reference to:<br>- Fisheries and angling,<br>- Amenity, tourism and recreational use,<br>- Social or socio-economic issues |
| Task 2.3 | Collect and report on the relevant international, national and local plans, objectives and environmental standards (existing or emerging) that may influence or impact on the implementation and demonstrate identification of measurable parameters.  |
| Task 3.1 | Establish the baseline environment, including a desk review and preliminary site visits identifying constraints and issues associated with the introduction of the regulations. Consult on the scope of the SEA with the statutory consultation authorities identified in the SEA Regulations (Northern Ireland and Republic of Ireland). Consult on the scope of the SEA with all relevant stakeholders.  |

### Milestone III. Options Appraisal:

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|----------|--|
| Task 2.5 | Assist the Loughs Agency with the identification of reasonable alternative means of achieving the strategic goals of the implementation.   |
| Task 3.2 | Predict the effects of the implementation of various options, including the "Do Nothing" option.   |
| Task 3.3 | Evaluate the effects of the implementation of various alternatives, with reference to the types of effects under Task 3.2. Evaluation methodology was in line with the SEA Directive and the Guidance and primarily in the form of assessment matrixes. Comment was given on the most beneficial / least detrimental options from an environmental perspective and other environmental considerations. |
| Task 4.1 | Consult on the options for implementation with relevant stakeholders, including Public Information Days.<br>Review the consultation process, address any queries or issues arising; provide consultation report to Loughs Agency.<br>Provide Options Assessment Report to the Loughs Agency.   |

**Milestone IV. SEA Report and SEA Statement:**

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| Task 3.5           | The Loughs Agency selected the preferred options and incorporated them into the draft Strategy. This was done with consideration of the SEA Options Appraisal Report and consultation responses received from the options consultation. Reasons were provided by the Loughs Agency on why options were selected; this is contained in Annex E. |
| Task 3.2           | Predict the effects of the implementation of the draft Strategy.   |
| Task 3.3           | Evaluate the effects of the implementation of the draft Strategy. Evaluation methodology was in line with the Directive and the Guidance and primarily in the form of assessment matrixes.   |
| Task 3.4           | Mitigate significant impacts and provide assessment of any residual impacts. Prepare monitoring programme.   |
| Task 3.5           | Present results in an Environmental Report - this report.  |
| Task 3.6           | Quality Review of the draft environmental report was conducted internally by AECOM and externally by the Loughs Agency.  |
| Task 4.1           | Consult on the draft Strategy and final Environmental Report with the statutory consultation authorities identified in the SEA Regulations (Northern Ireland and Republic of Ireland); and with all relevant stakeholders.   |
| Task 4.2           | Review the consultation process; address any queries or issues arising.<br>Produce SEA Statement including a summary of this exercise, and provide information on any changes required to the SEA Report.  |
| Task 4.3 (Partial) | Provide monitoring framework to the Loughs Agency  |

**7. Cost and resources**

Complete costing is not available

**8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)**

The effectiveness of the Strategy and implementation of SEA is very much relying on the fact, that The 2007 Order/Act provides for the FCILC to become the sole joint trans-boundary licensing authority for land based and marine fish farms located in the Foyle and Carlingford Areas. The Strategy implements a new trans-boundary aquaculture and wild shellfisheries regulatory system in both parts of the trans-boundary transitional water bodies of Ireland.

This system will cover the following:

- aquaculture in Lough Foyle;
- aquaculture in Carlingford Lough;
- wild shellfisheries in Lough Foyle and Carlingford Lough;
- freshwater aquaculture in the Foyle and Carlingford areas.

**9. Success and Fail factors****a) Success factors**

1. Potential environmental effects have been identified and assessed at a strategic level arising from the content of the draft Strategy.
2. The SEA provided existing baseline information pertinent to the strategic issues associated with the implementation of the draft Strategy. As is good practice the level of detail in the SEA is commensurate with the level of detail in the draft Strategy.
3. The SEA helped identify implementation options which presented opportunities for, or environmental constraints against, the development of aquaculture and wild shellfisheries.
4. The SEA assessed the impacts of implementing the draft Strategy.

## **b) Fail factors**

1. The SEA does not replace the need for the collection of detailed environmental data, including the further development of existing carrying capacity models and licence-specific baseline data.
2. The SEA did not conduct detailed surveys or develop a carrying capacity model and did not examine the commercial viability of development or provide cost benefit analysis.
3. Where there are various permutations in the possible implementation of policy, the SEA did not determine how these different management approaches will be implemented.

## **10. Unforeseen outcomes**

None as yet

## **11. Prepared by**

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## **12. Verified by**

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## **13. Sources**

SEA (2010). Strategic Environmental Assessment (SEA) of the Aquaculture and Shellfisheries Management Strategy. Environmental Report, Loughs Agency, 92 p.

SEA Directive (2001). Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment Official Journal of the European Communities, 21.7.2001; L 197/30-37. Retrieved from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:197:0030:0037:EN:PDF>

## **14. Relevance for cross-border management of transitional waters**

SEA for economic activities in both trans-boundary transitional bodies of Ireland provides a good example how to comply with EU regulation in a cross-border framework. Therefore this case study is of high relevance for cross-border management of transitional waters of Europe.